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Oslo

IMSF

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The State of the Tanker Industry

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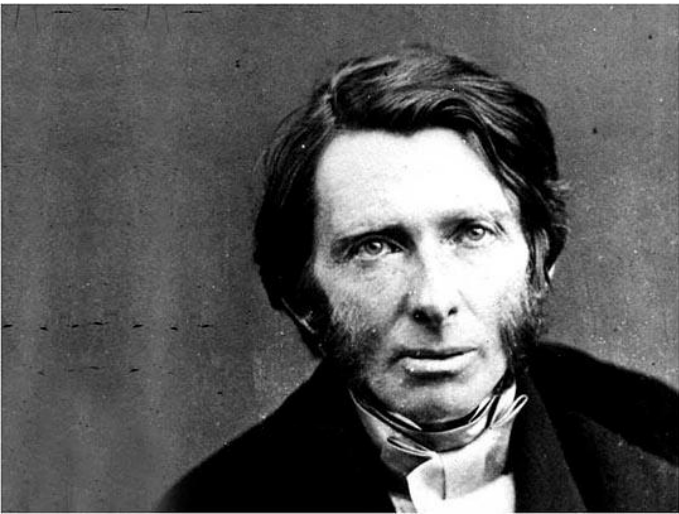


The Common Law of Business Balance

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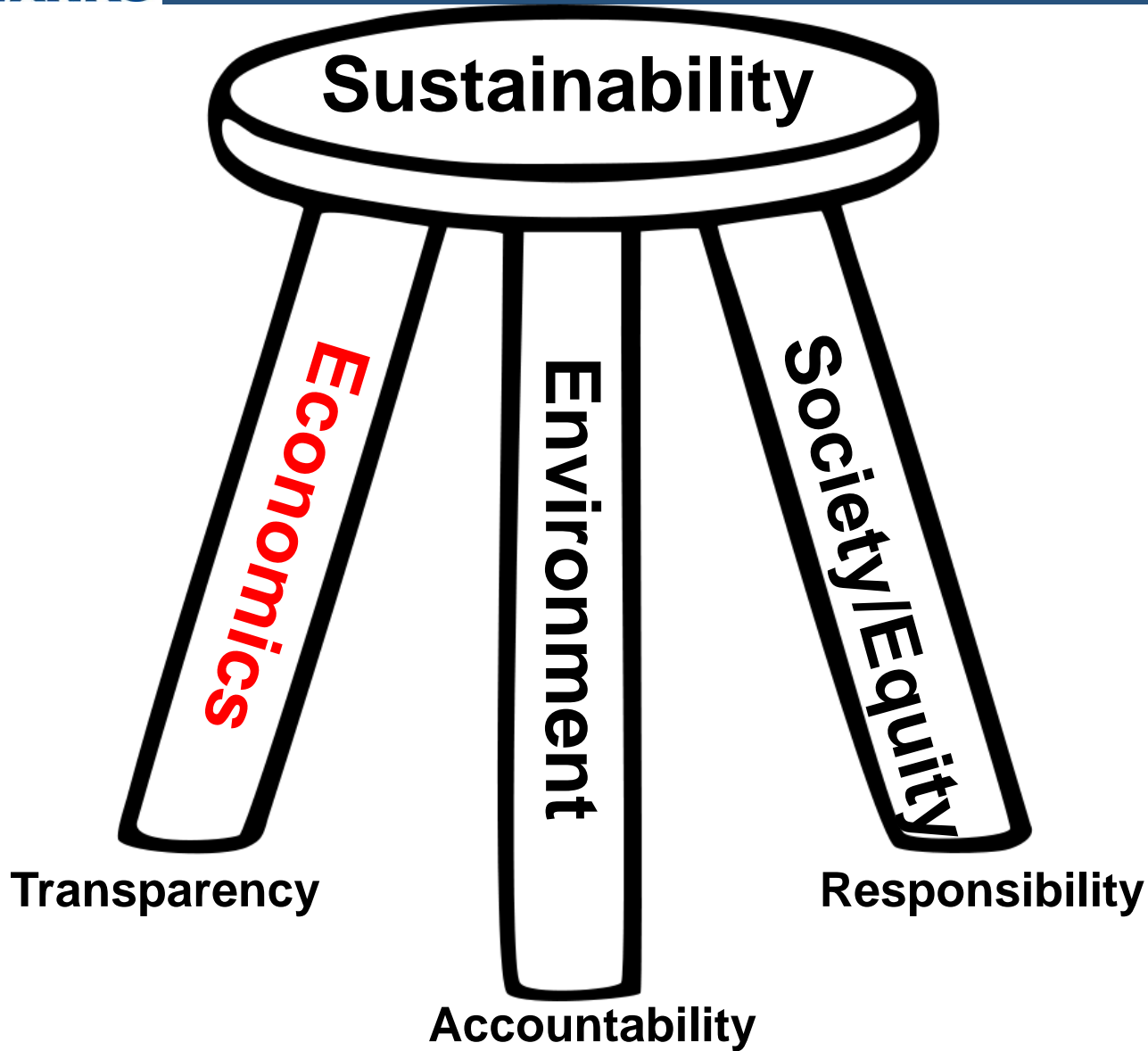
It's unwise to pay too much, but it's worse to pay too little. When you pay too much, you lose a little money — that is all. When you pay too little, you sometimes lose everything, because the thing you bought was incapable of doing the thing it was bought to do. The common law of business balance prohibits paying a little and getting a lot — it can't be done. If you deal with the lowest bidder, it is well to

add something for the risk you run, and if you do that you will have enough to pay for something better.



John Ruskin (1819-1900)

Leading the way; making a difference

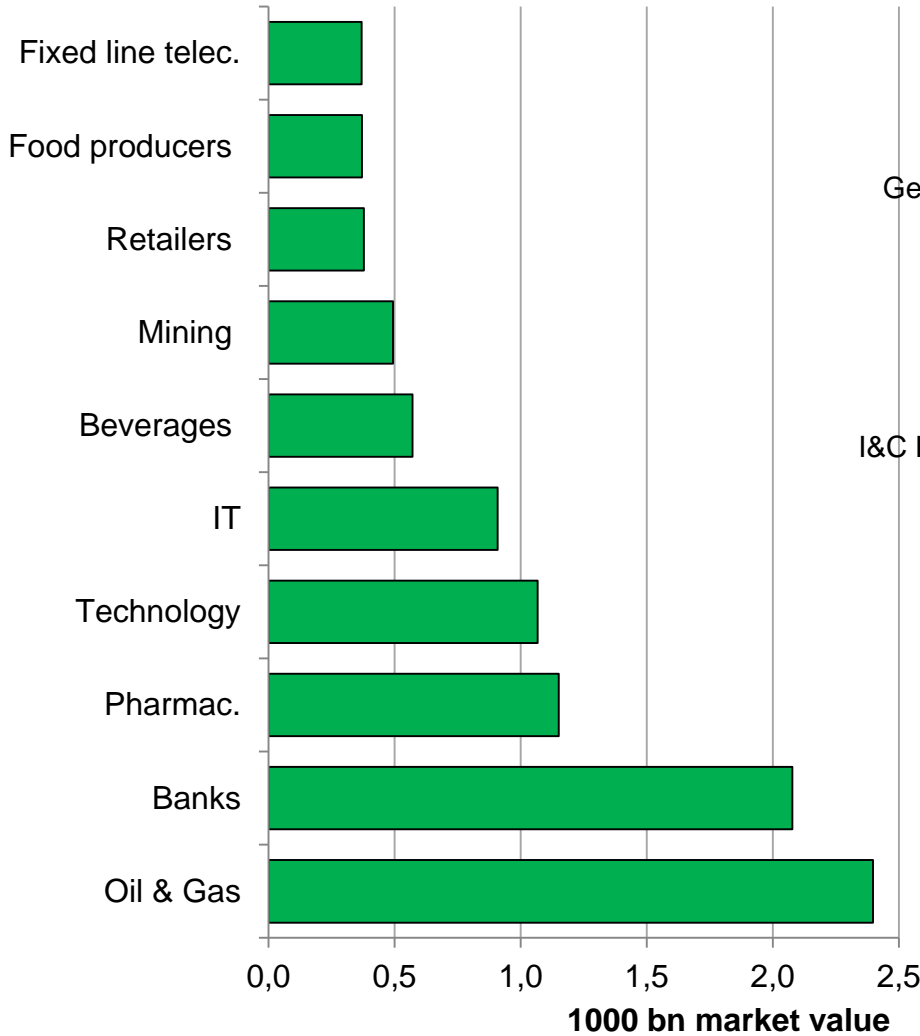




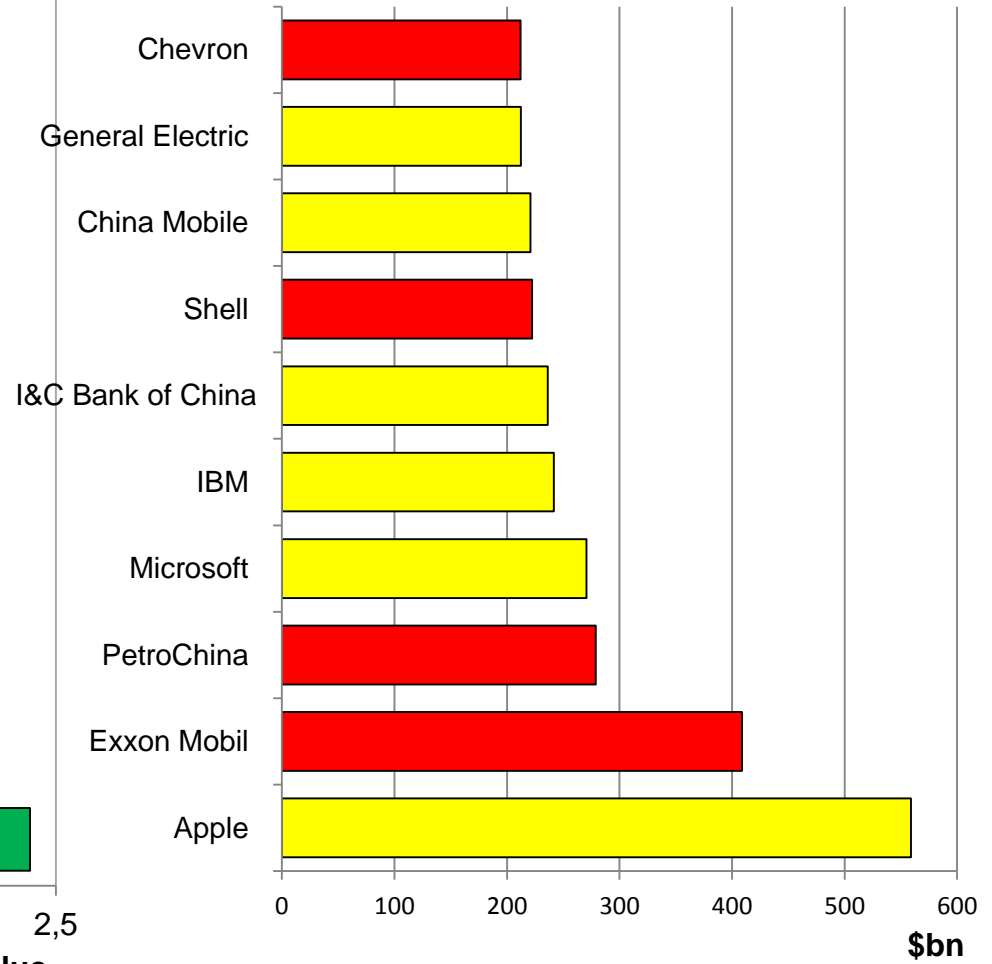
Tankers serve the oil industry

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FT 100

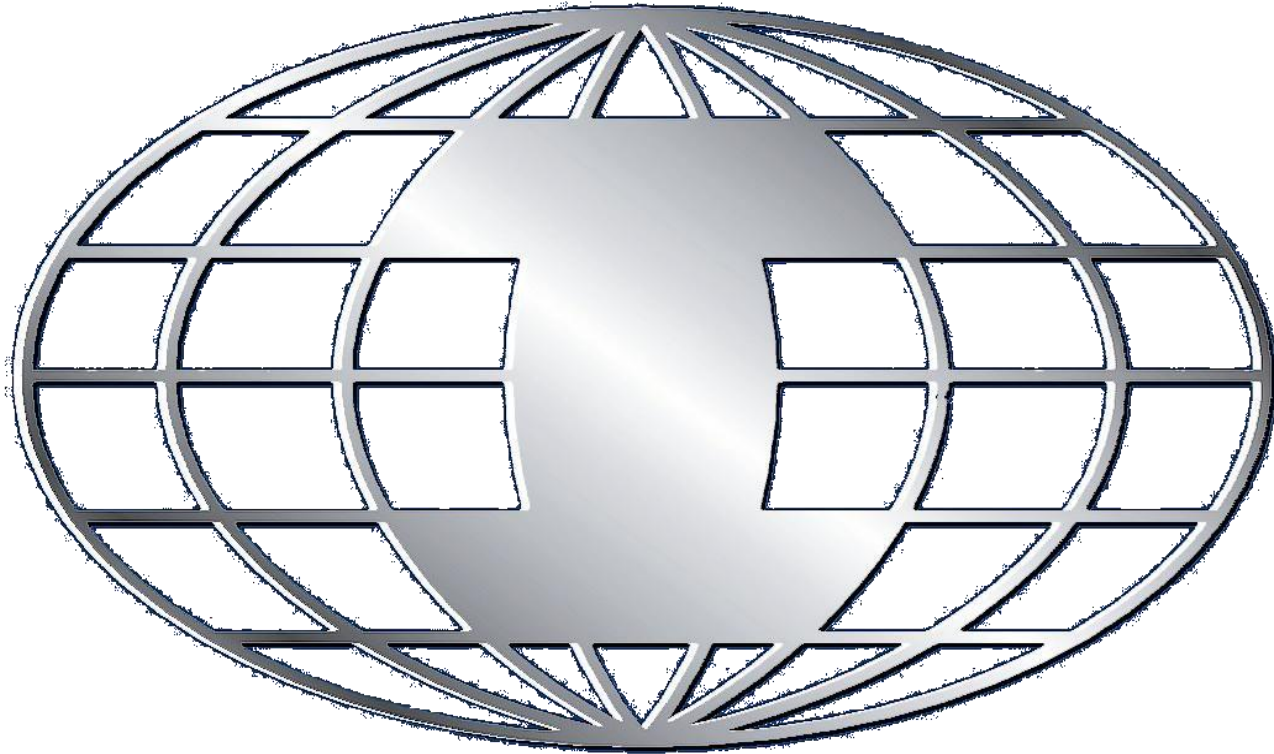


Market value (\$m) 10 largest March 2012





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Safety & the environment

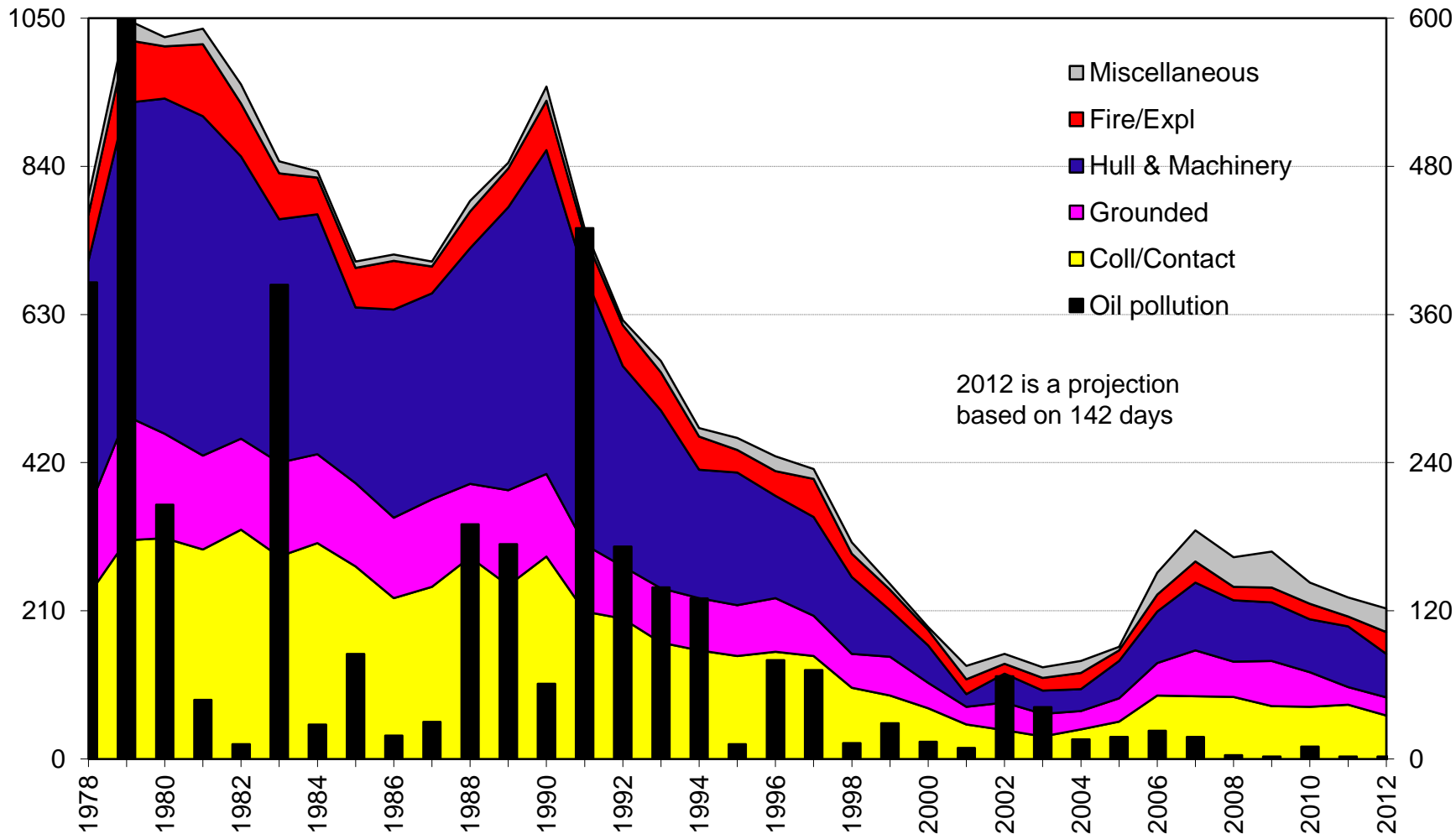


Tanker incidents - all tanker types and sizes

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Number incidents

1,000 ts oil spilt



Source: INTERTANKO, based on incident reports from LMIU and pollution figures from ITOPIF

Leading the way; making a difference

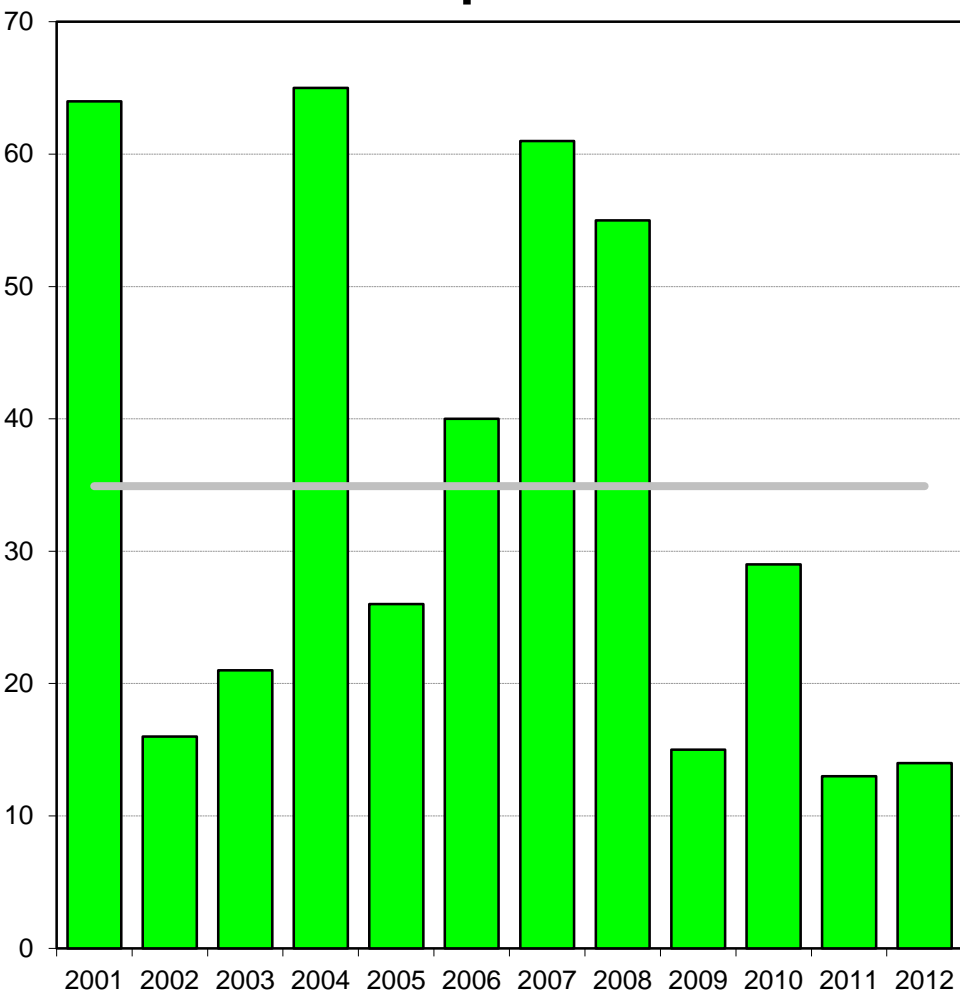
Accidental oil pollution from tankers was record low in 2011 and again in 2012



Safety

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Number reported fatalities



- Accident rate highest for highest for ships built in 2000s, lowest for pre 1980s built tankers
- Accident rate highest for tankers 10-29,000 dwt, lowest for the VLCCs
- Engine failure the biggest hull & machinery type of incidents (many un-reported?)
- Reduced pollution to a little extent related to double hulls



The environment

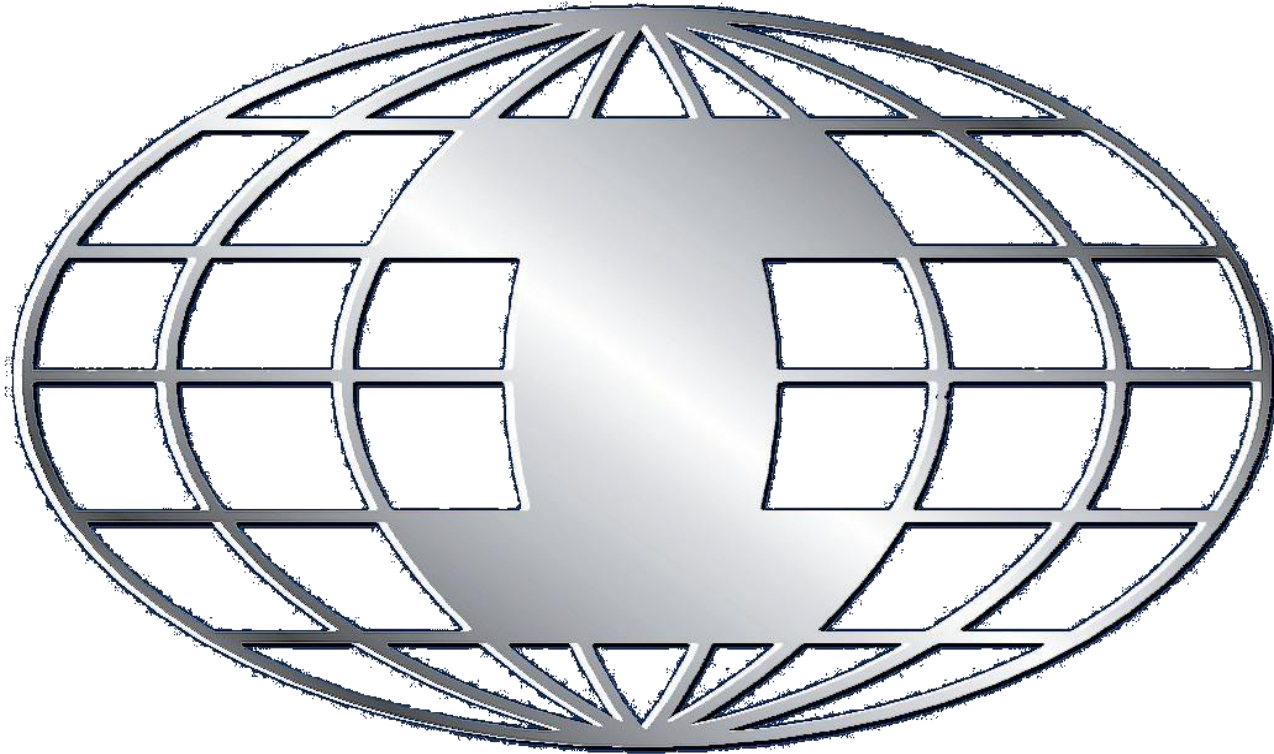
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- Emission from shipping is dirty and harmful for the health and the environment – MARPOL **Annex Vi** - sox/nox
- **GHGs** emission from shipping is not directly regulated under the Kyoto protocol
 - EEDI
 - SEEMP
 - MBMs
- **Ballast** water





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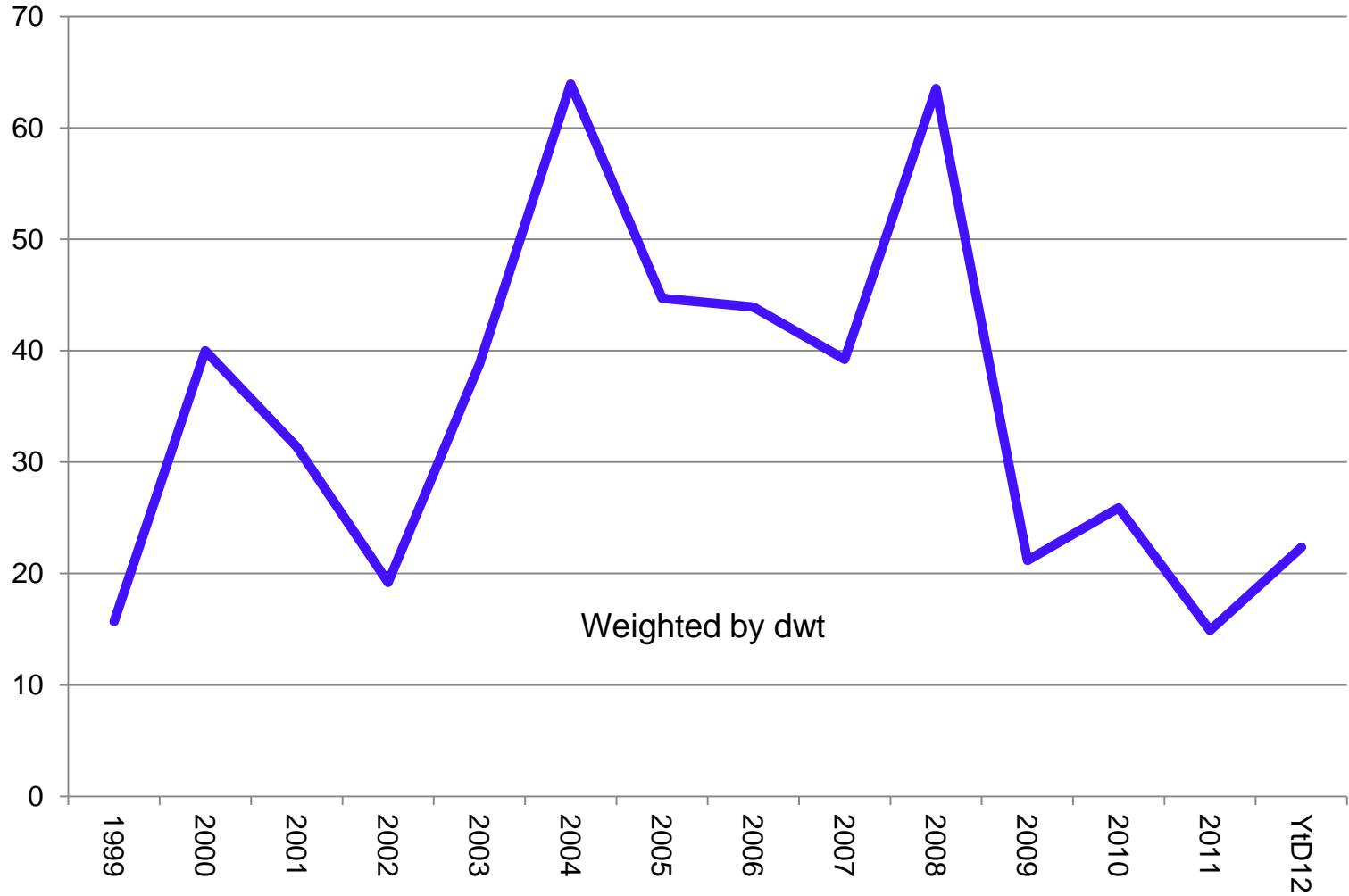
Tanker market



Tanker market index

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\$ 1,000 per day



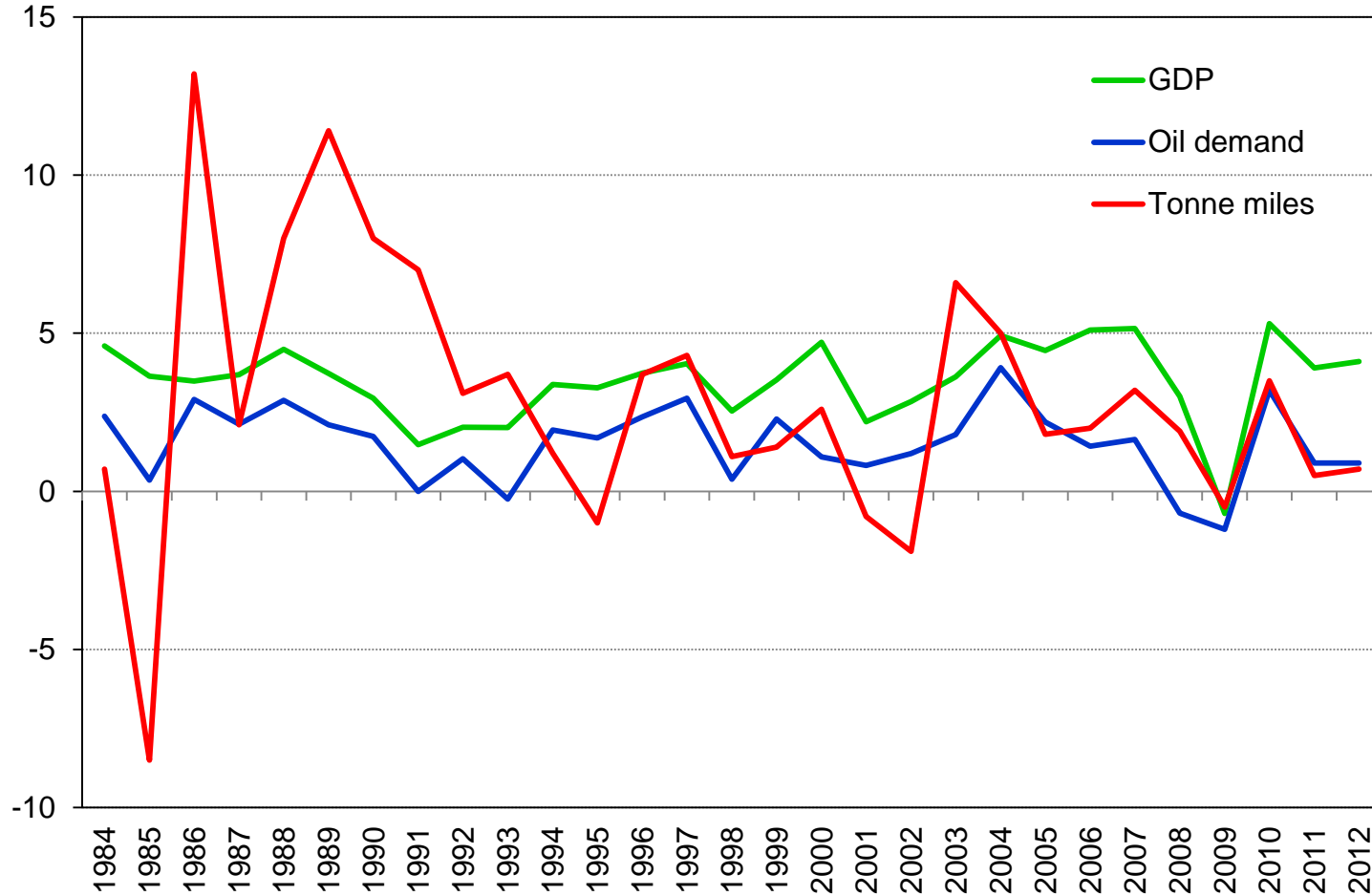
Source: RS Platou



World GDP. Oil demand and seaborne trade growth

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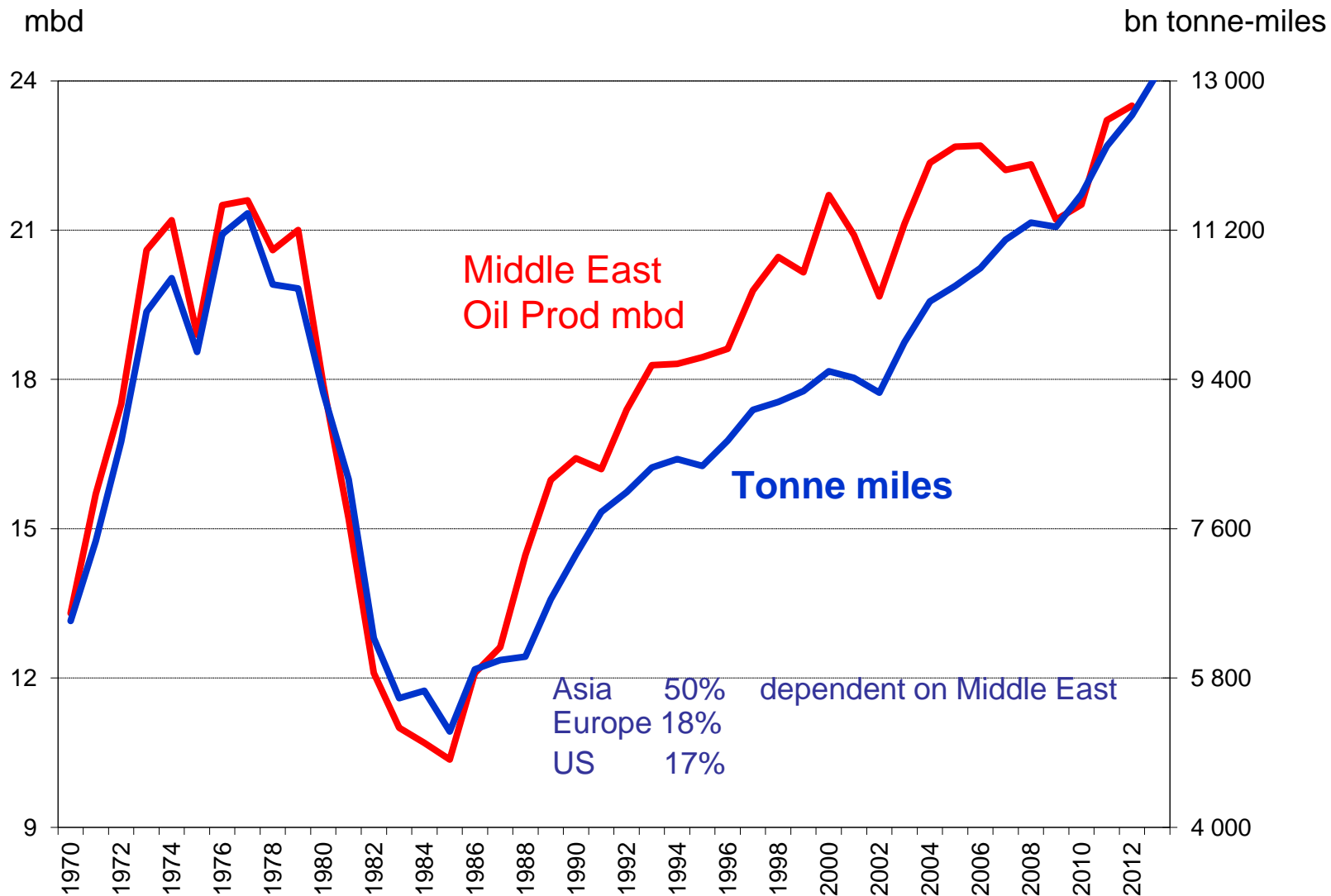
% growth





World GDP. Oil demand and seaborne trade growth

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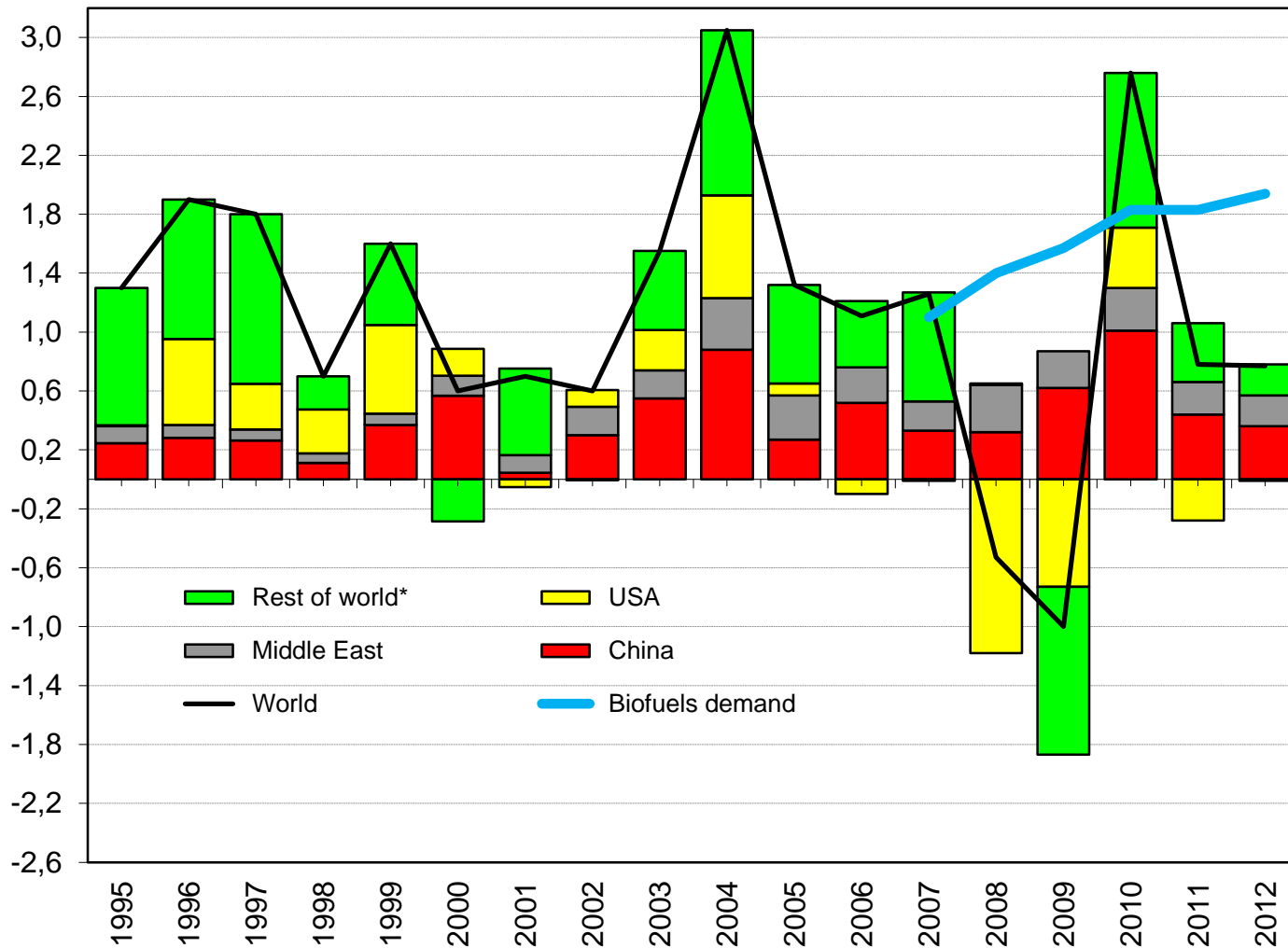




World increase in oil demand China, Middle East, USA, ROW* and increase in world bio-fuel production

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mbd



Main Changes:

Area	mbd
Other Asia:	0.24
L America:	0.17
Africa:	0.16
FSU	0.13
Mexico/Canada	-0.22
Europe	-0.33
Middle East	0.21
USA	-0.01
China	0.36
Others:	0.06
Total	0.77

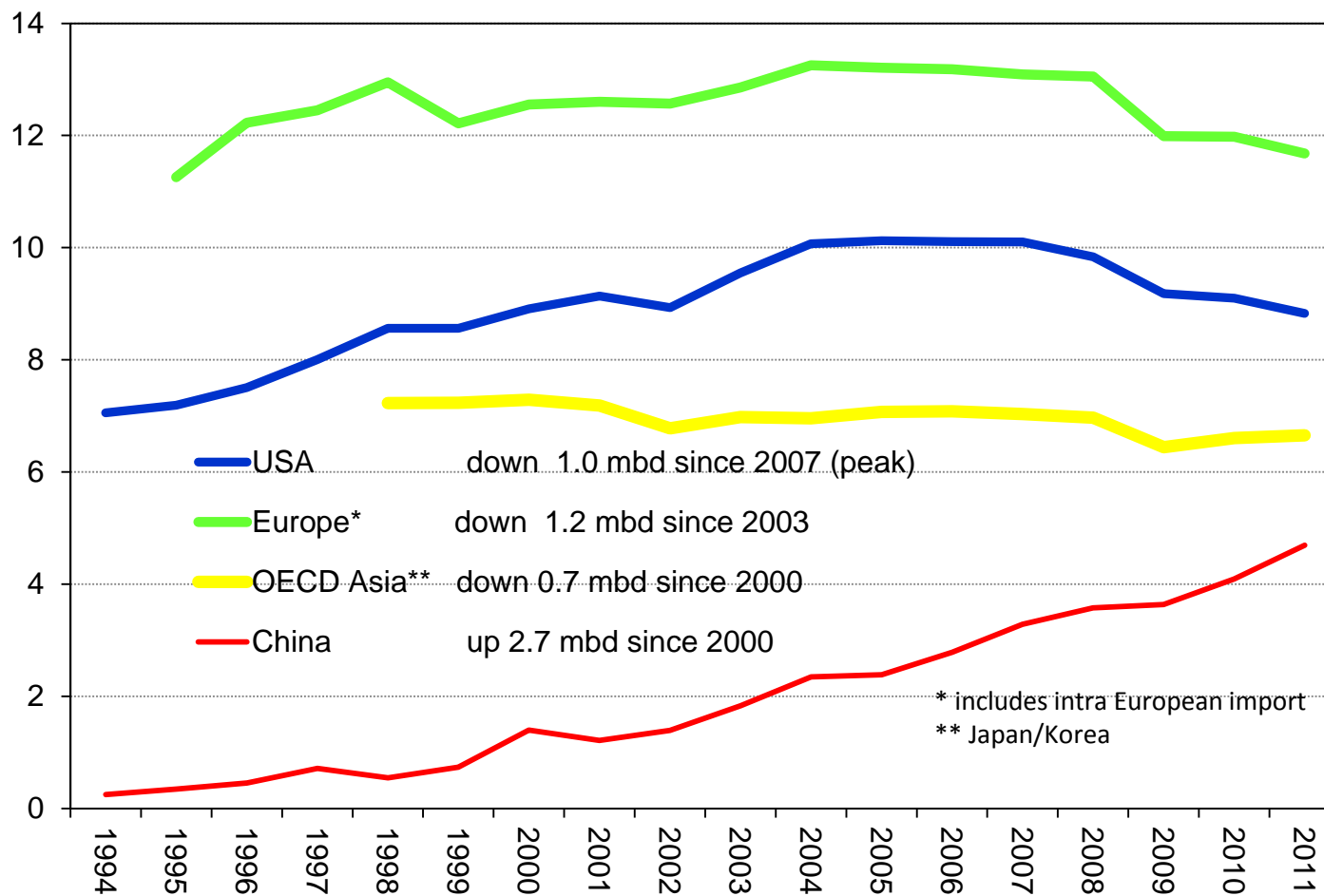
Leading the way; making a difference



Oil import to selected areas

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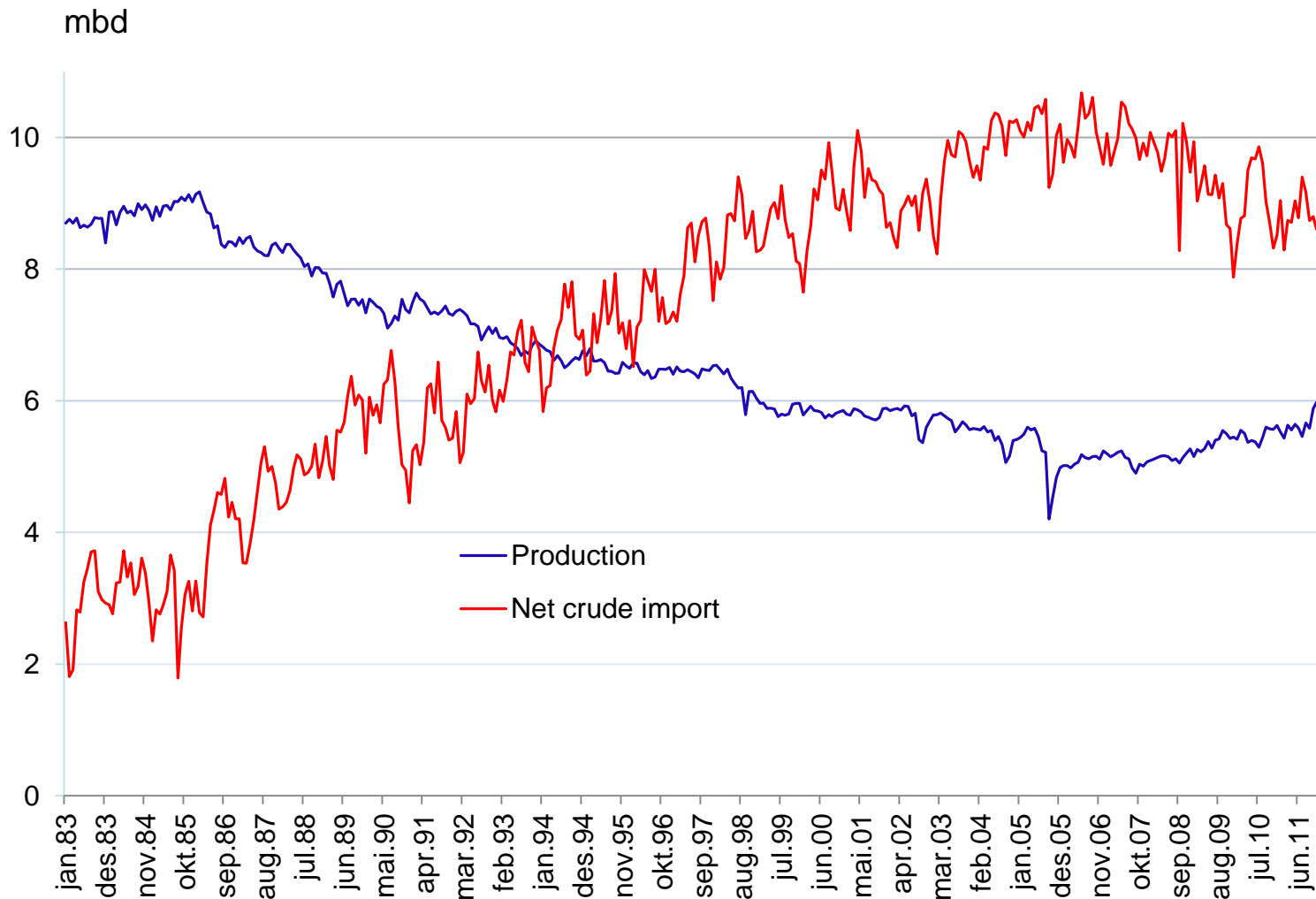
mbd





US net crude oil import and production Jan 83 - Feb 12

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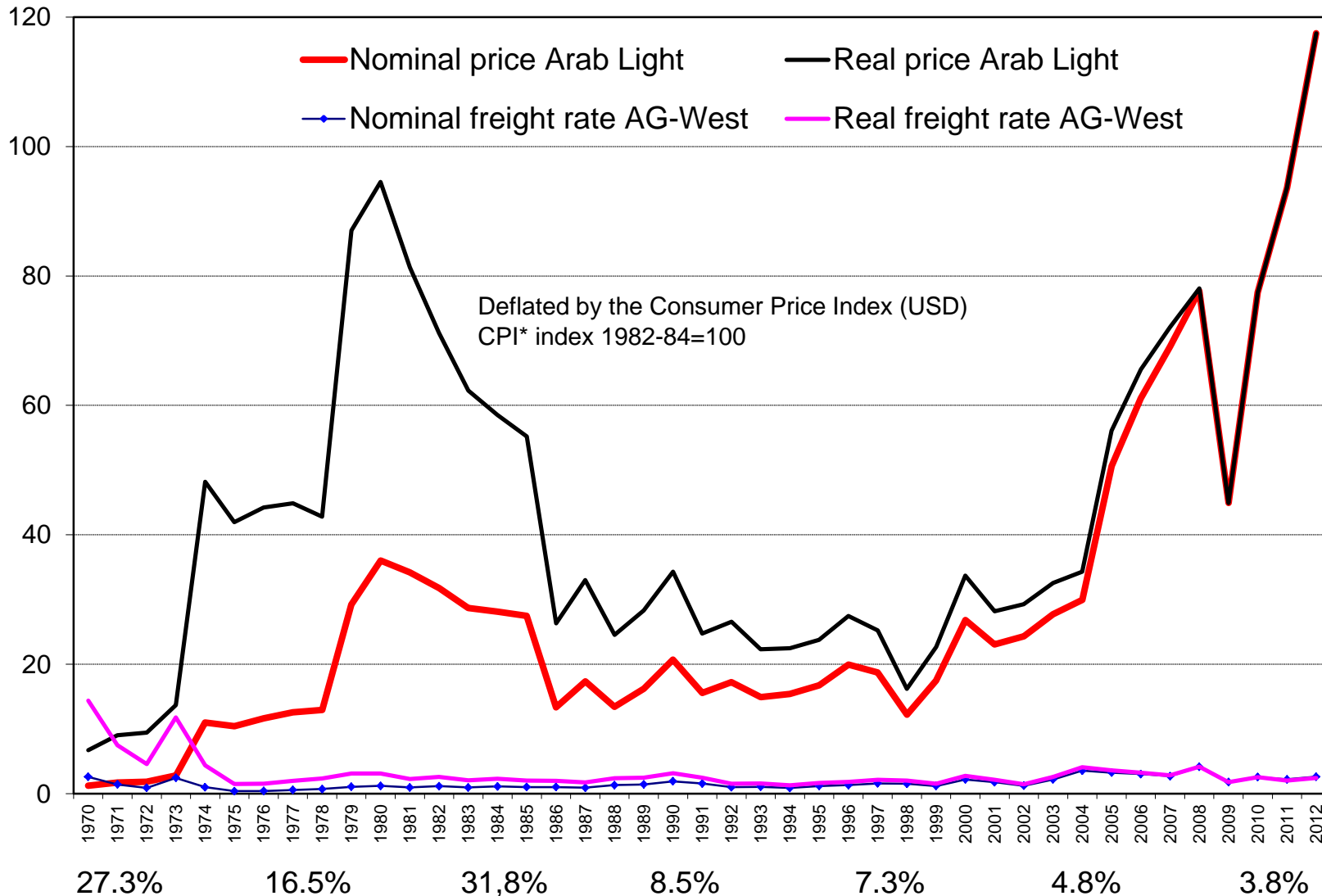
N American oil production +1.1 mbd 2010 - 2012 – demand declined 0.5 mbd



Oil price and freight rate

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mbd





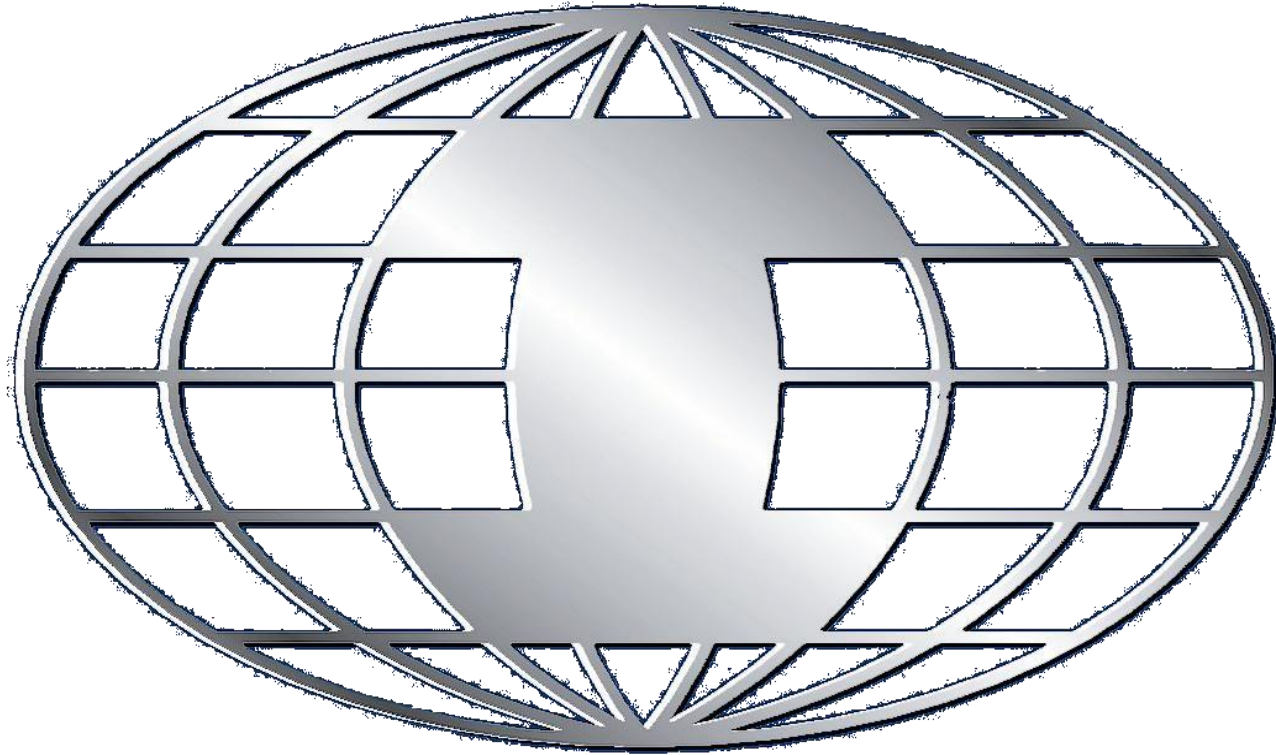
Oil market highlights

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- Arab light oil price 1990-2004 \$20.0 per barrel
- 2005-2012 \$73.0 per barrel
- 18 May \$105.0 per barrel
- Energy efficiency measures accelerated
- Oil is in the process of losing its almost total domination as a transportation fuel
- The US oil import the lowest since 1998
- China's growth rate curbed
- New Middle East export refineries
- New Abu Dhabi oil pipeline by-pass Hormuz
- Increased dependency on the Middle East
- Strong stock building beginning 2012
- Tension in the market – Iranian sanctions
- Still – positive growth? and



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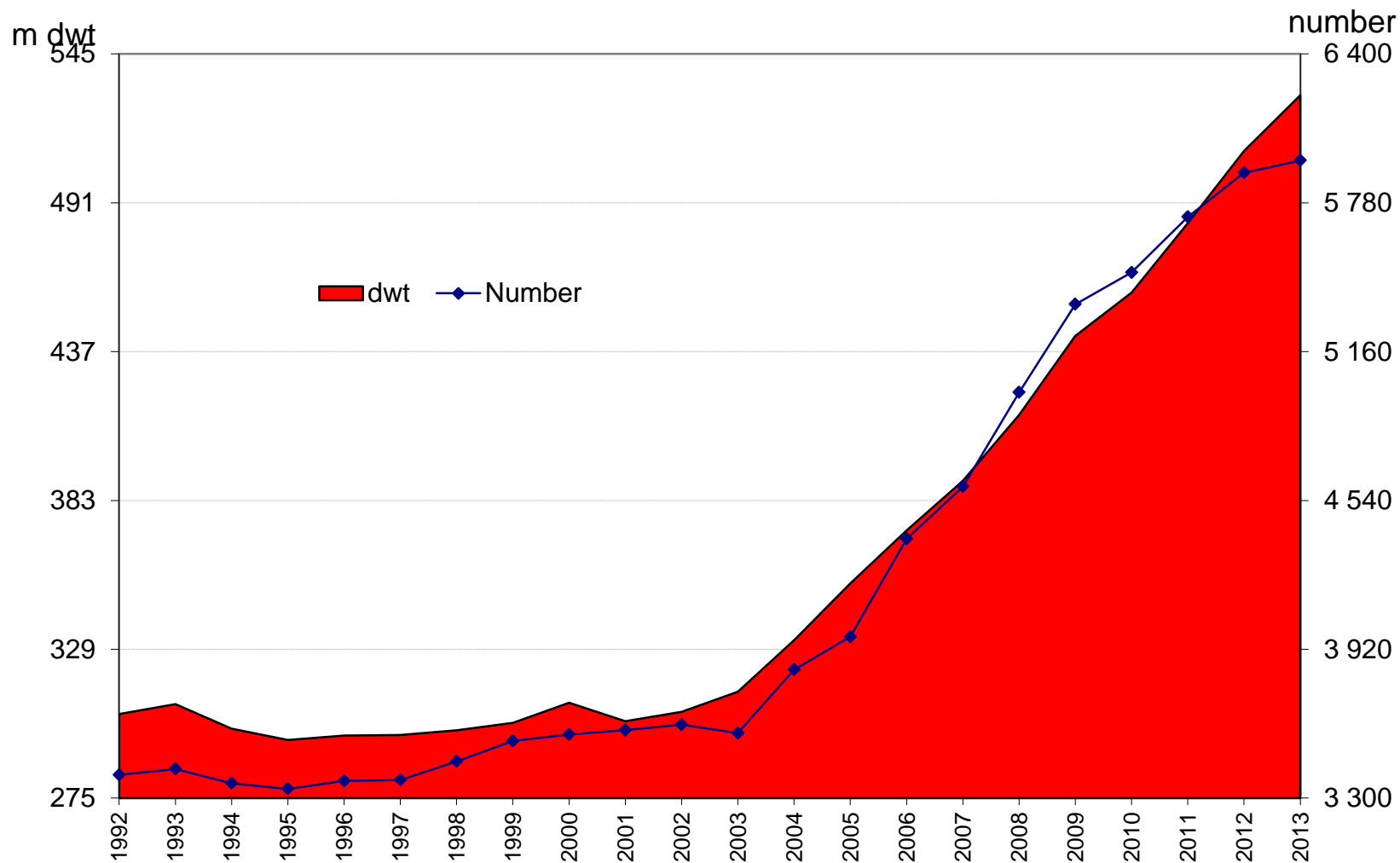


Tanker Supply



Projected Tanker Fleet Development 1992-2013

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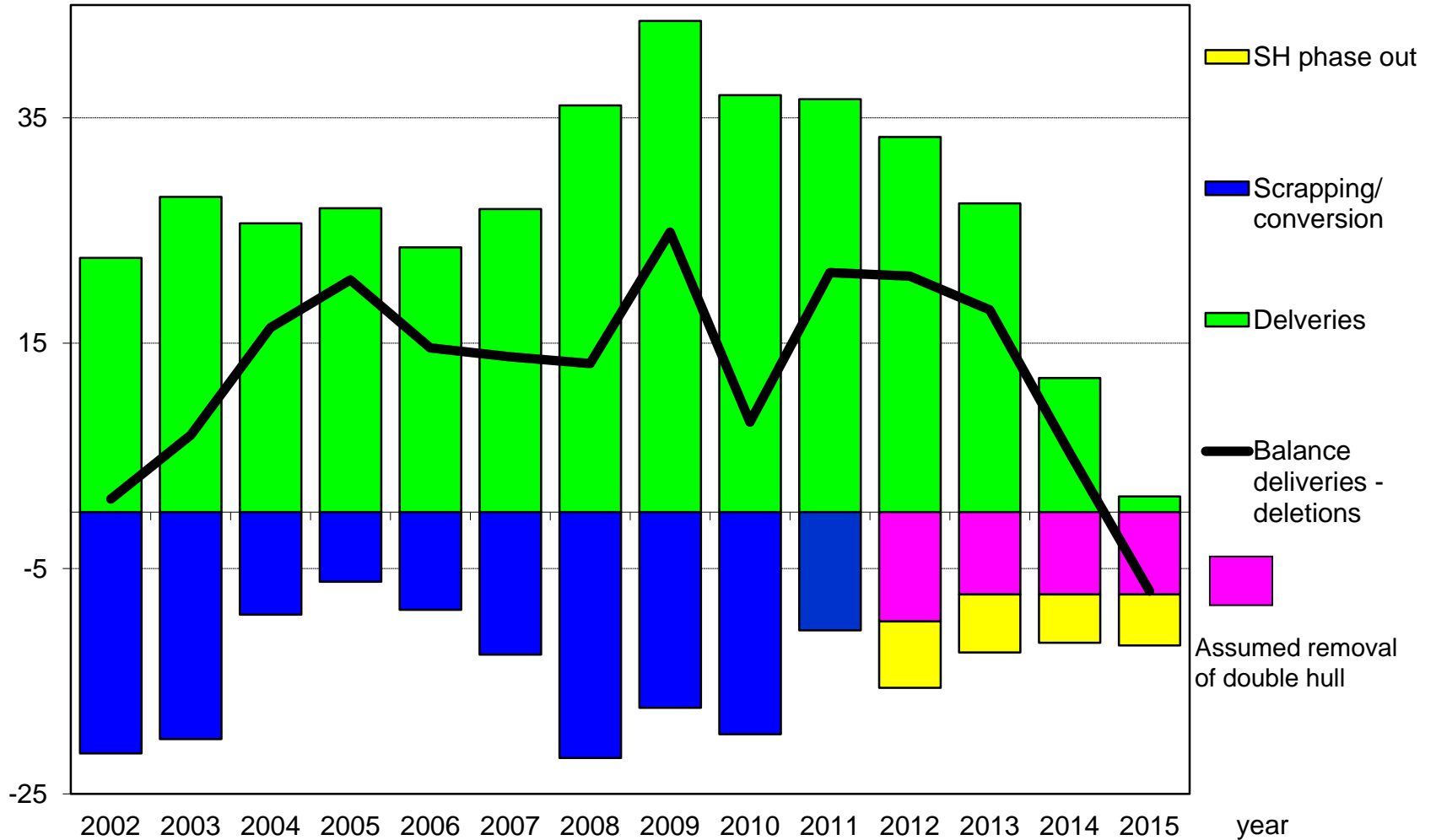




Tanker deliveries and removals

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m dwt

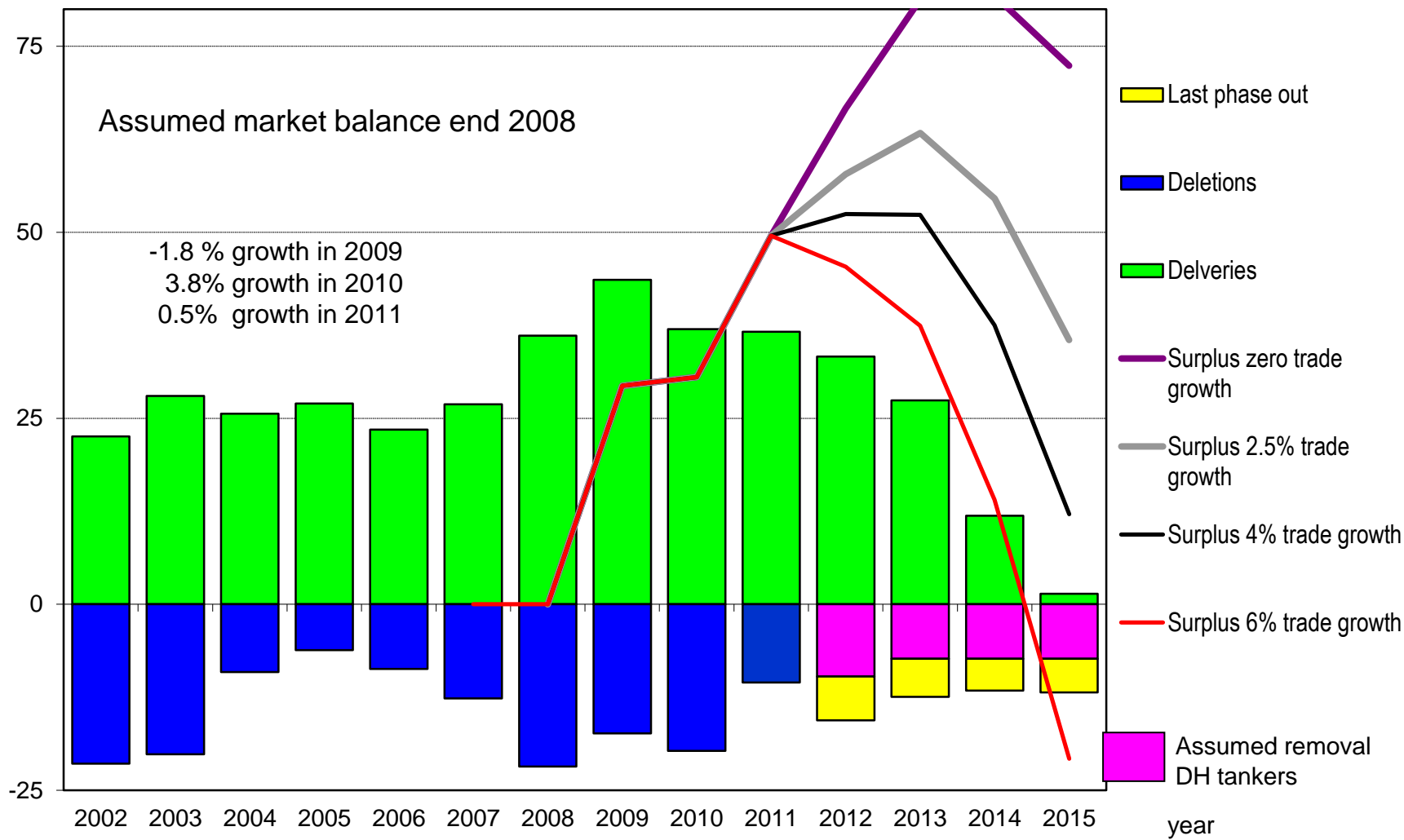




Tanker phase out, deliveries, scrapping tankers 10,000 dwt + balance(surplus) assuming various demand increases

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m dwt



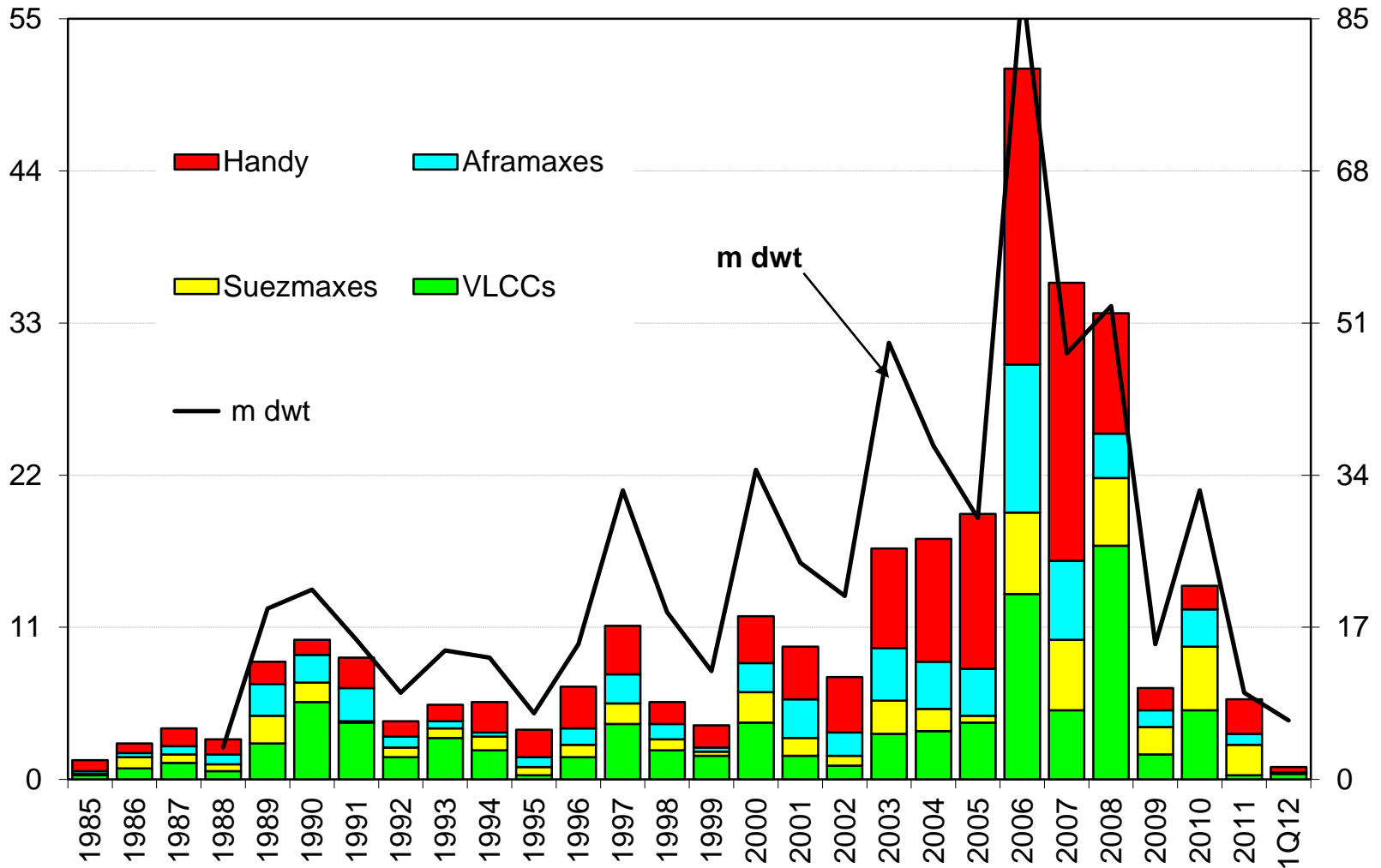


Tanker contracting by segment in bn USD and m dwt

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\$ bn

m dwt



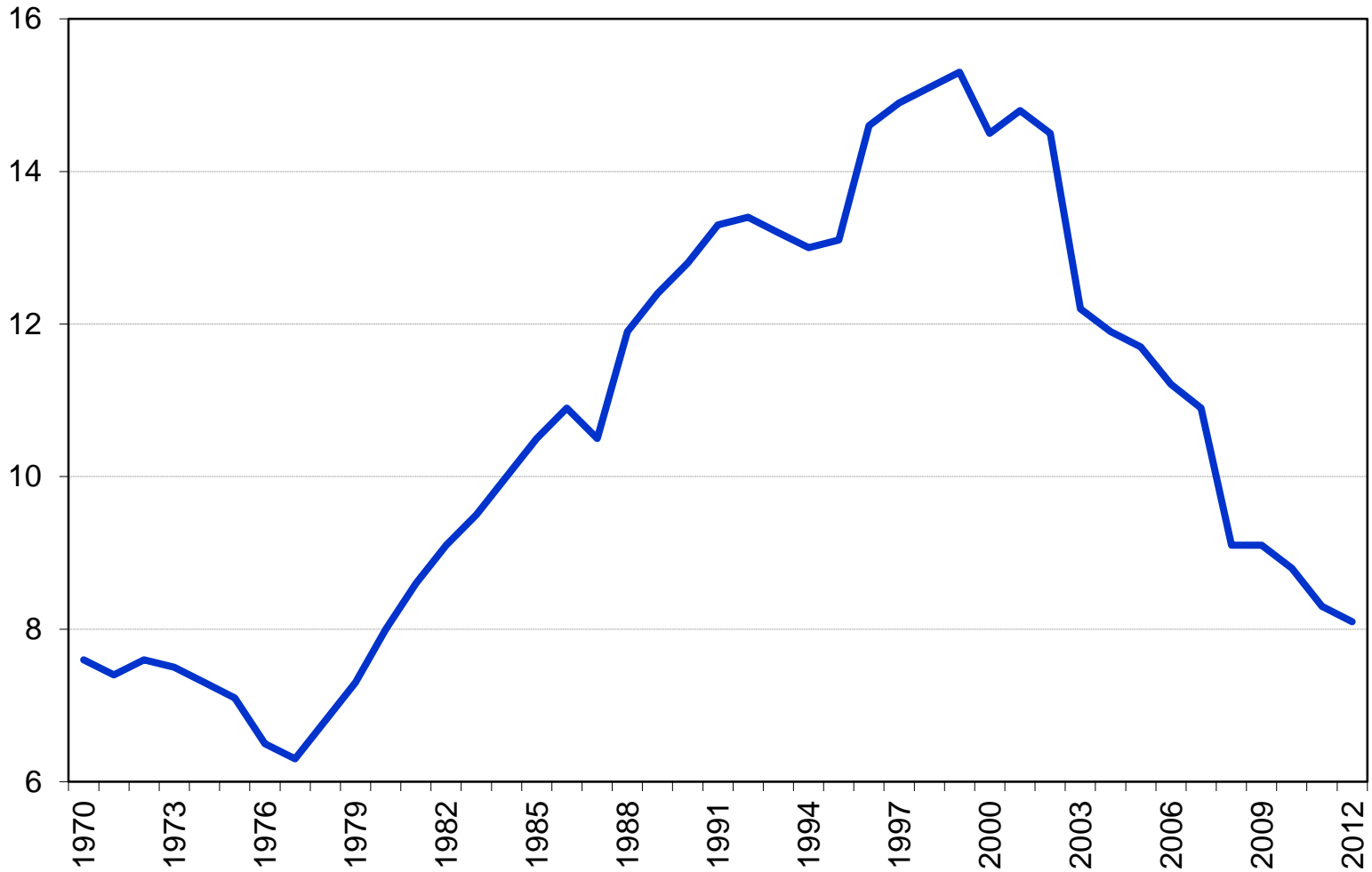
Leading the way; making a difference



Average age tanker fleet

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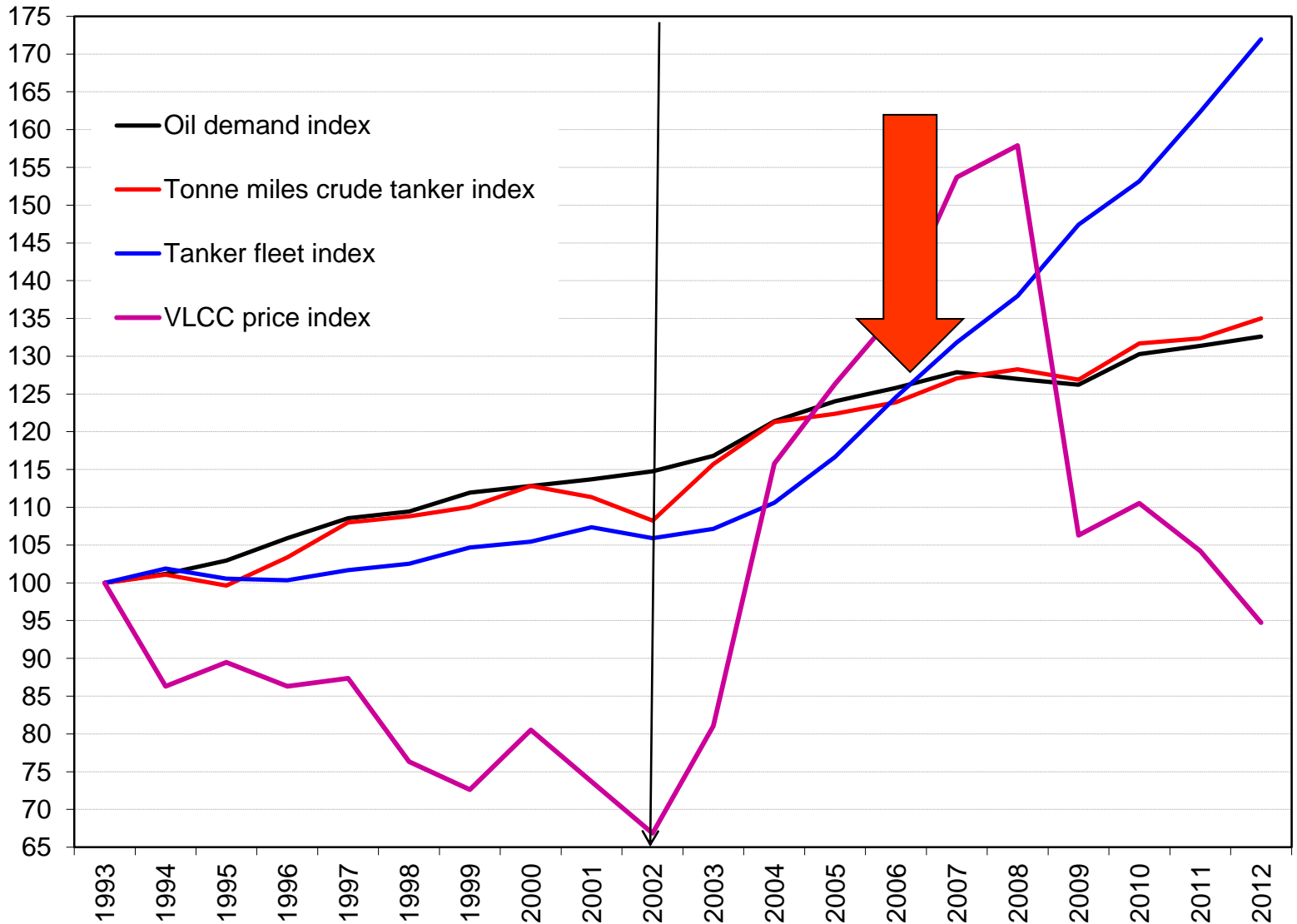
Years





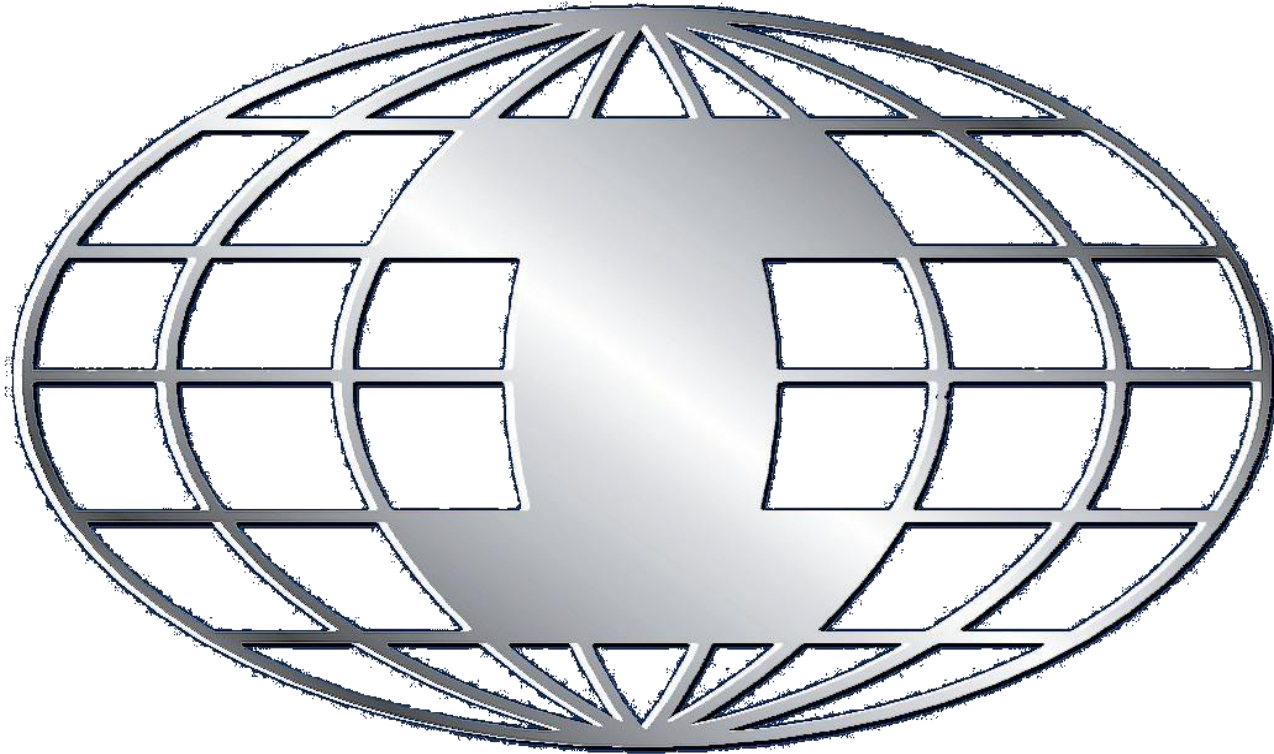
Tanker trends - fleet, VLCC price, oil demand, and tonne-miles indices

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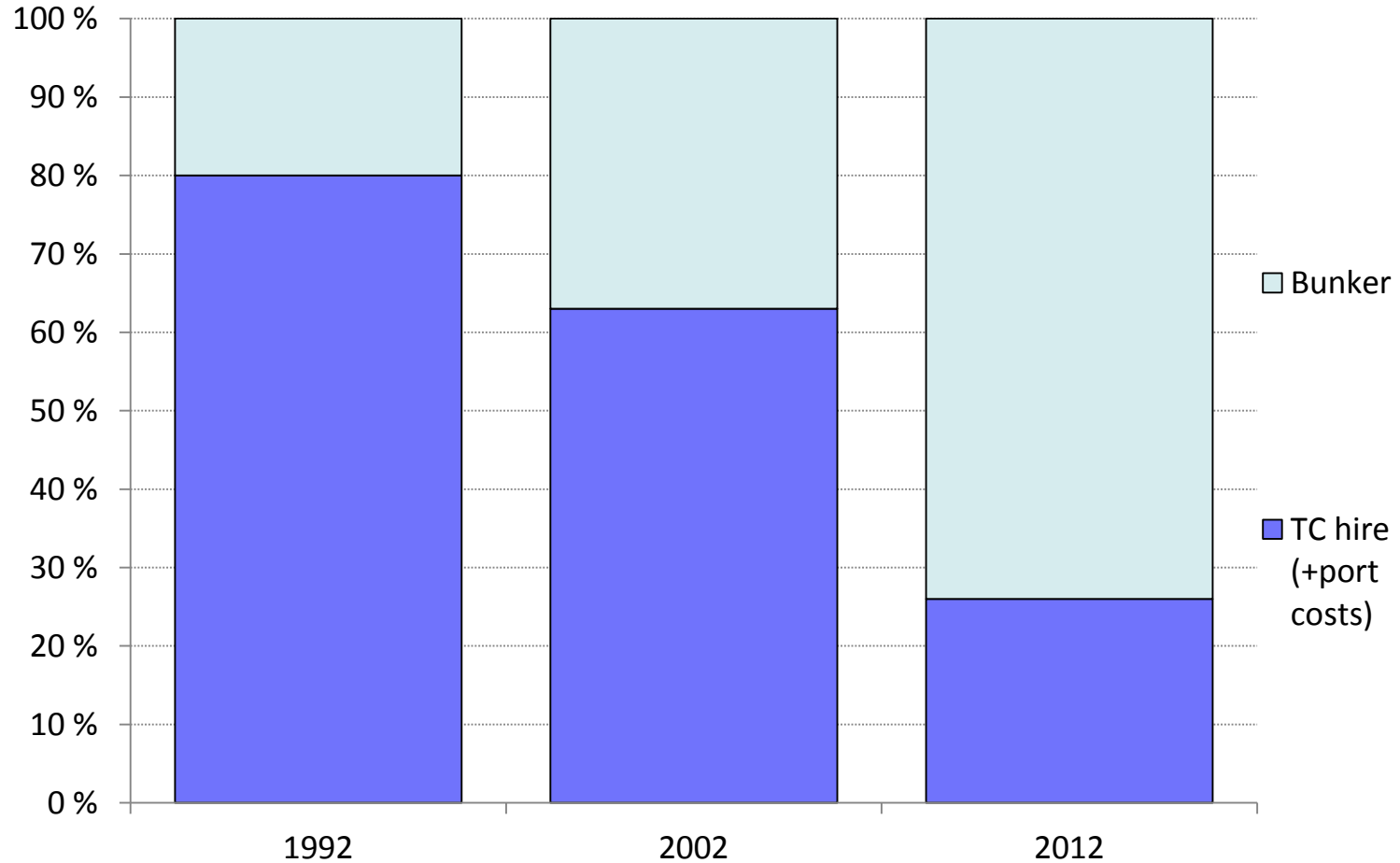


Economics changed



Historical VLCC hire and bunker costs

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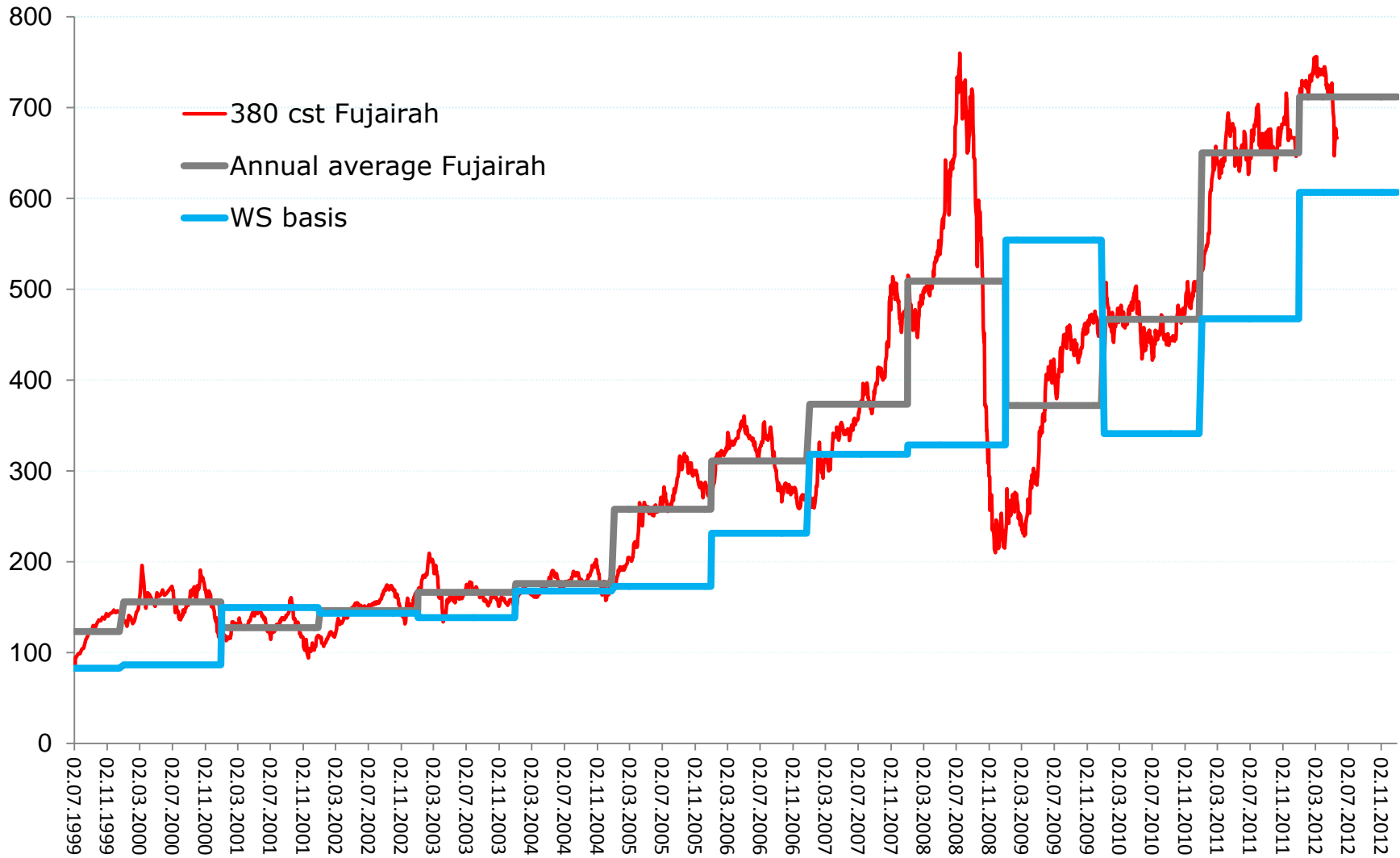




Bunker price Fujairah and basis bunker price WS 380 Cst

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\$/tonne





The combination of low freight rates and high fuel prices since 1973 has made it abundantly clear that one can no longer assume constant vessel speed when analysing shipping markets.

Professor Victor Normann/Research Associate Tor Wergeland - *Norwegian School of Economics* 1977.



High fuel oil price change economics in shipping

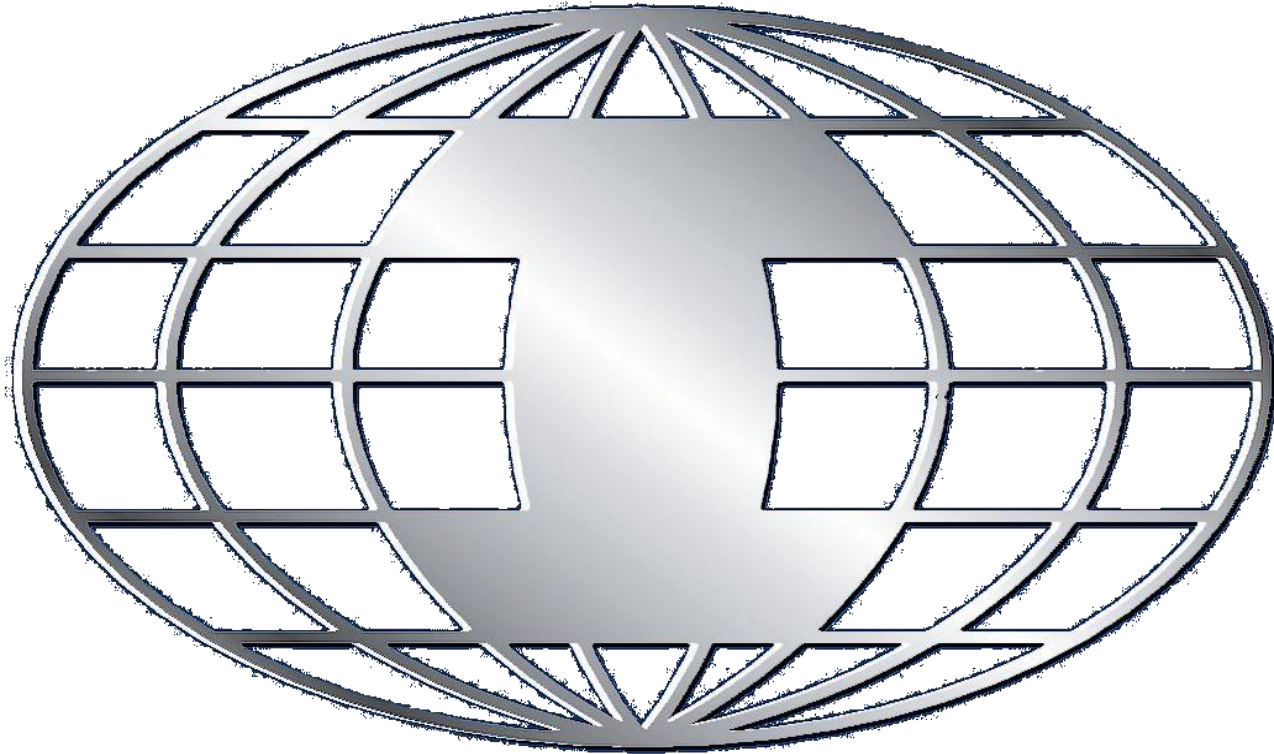
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- Real fuel prices **virtually** all time high
- Fuel costs increased from 20% of freight to 70% of freight in 20 years
- Reduced speed periodically equilibrate the VLCC market
- Optimum speed for each ship depend only on the ratio of the freight rate to the price of fuel
- Consumption profile can vary strongly from ship to ship

- High pressure on the industry to reduce CO₂ emission
-
- High oil prices has a negative effect on demand



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Conclusion



Strategic consideration

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- World economy, “The **risks** remain high - the situation fragile” IMF boss Ms. Lagarde
- High **oil prices** despite weakening demand
- High **bunker prices** change economics in shipping
- **Age** >15 years becoming an issue
- Will energy efficiency create multi-tier market
EEDI -10% 1 Jan 2015 / -20% 1 Jan 2020 / -30% 1 Jan 2025
- **Shipbuilding** over-capacity - - further pressure on prices
- **Oil demand** North America retracting/Asia expanding
- Some risks and opportunities cannot easily neither be quantified nor identified - markets are never completely rational nor efficient – success requires the use of sound reasoning and trusting your gut feeling
- The only predictable thing about futures tanker market is its unpredictability



Q&A

You have

Questions

We have

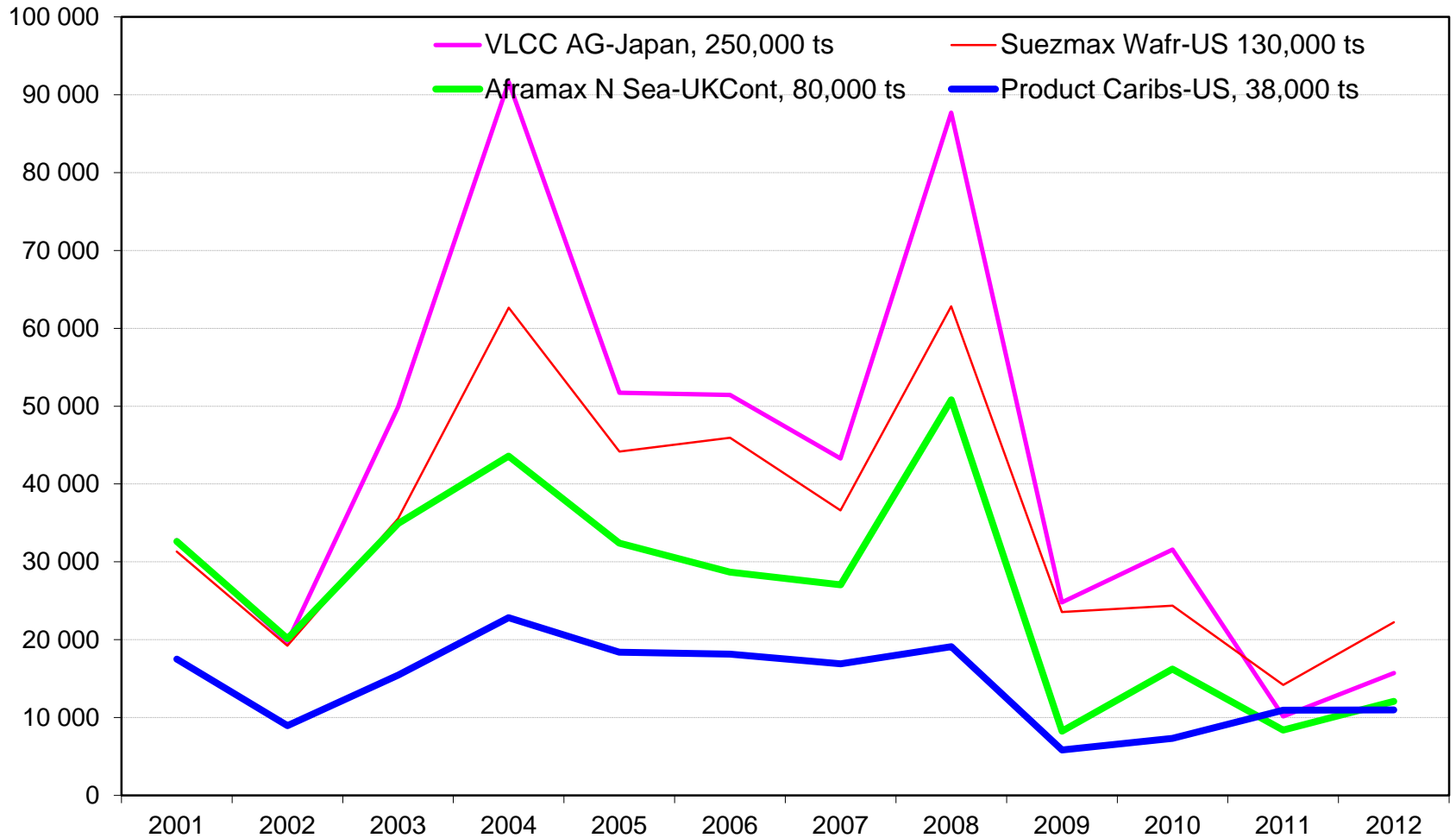
Answers



Indicative tanker freight rates

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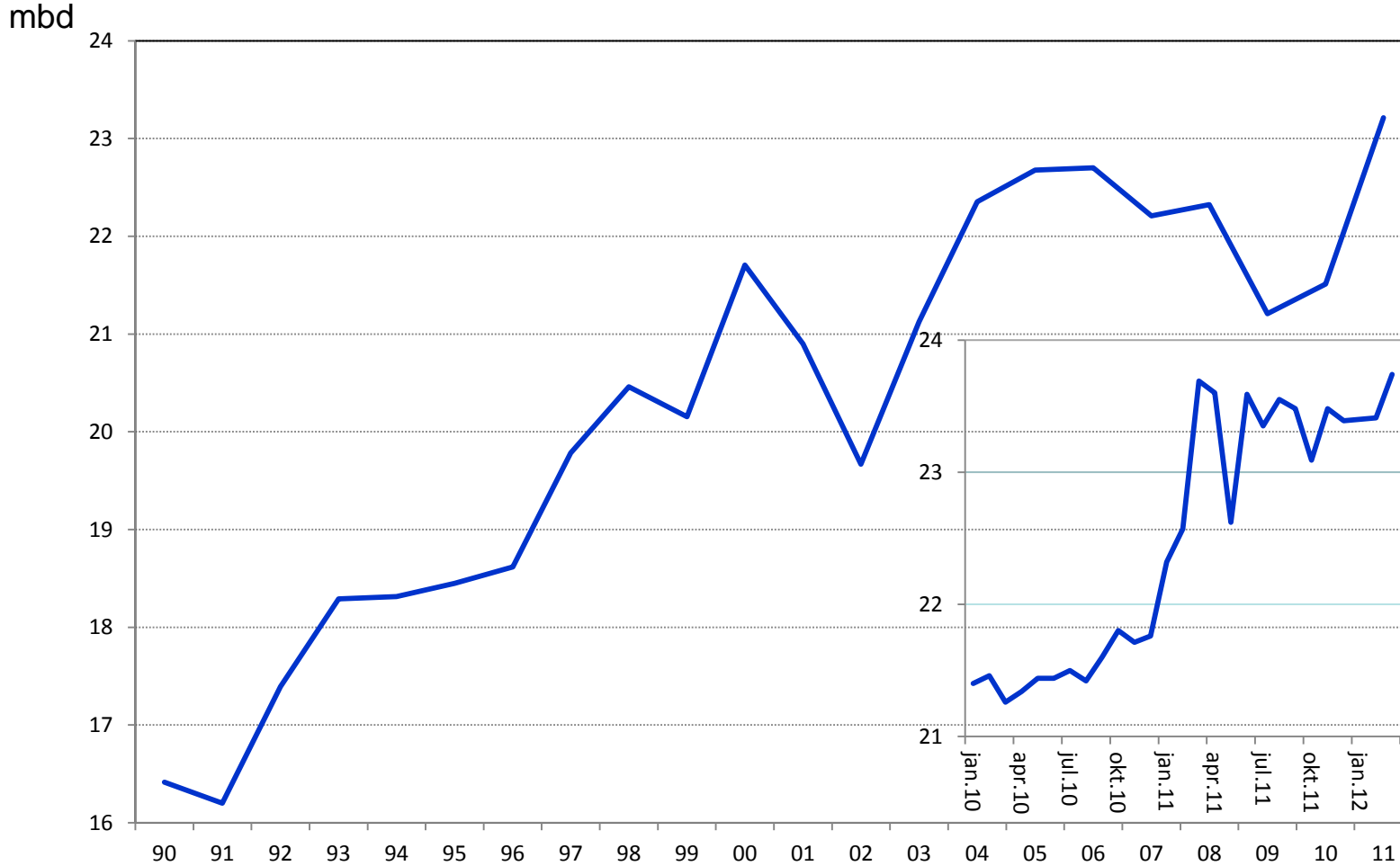
\$/day





Middle East oil production

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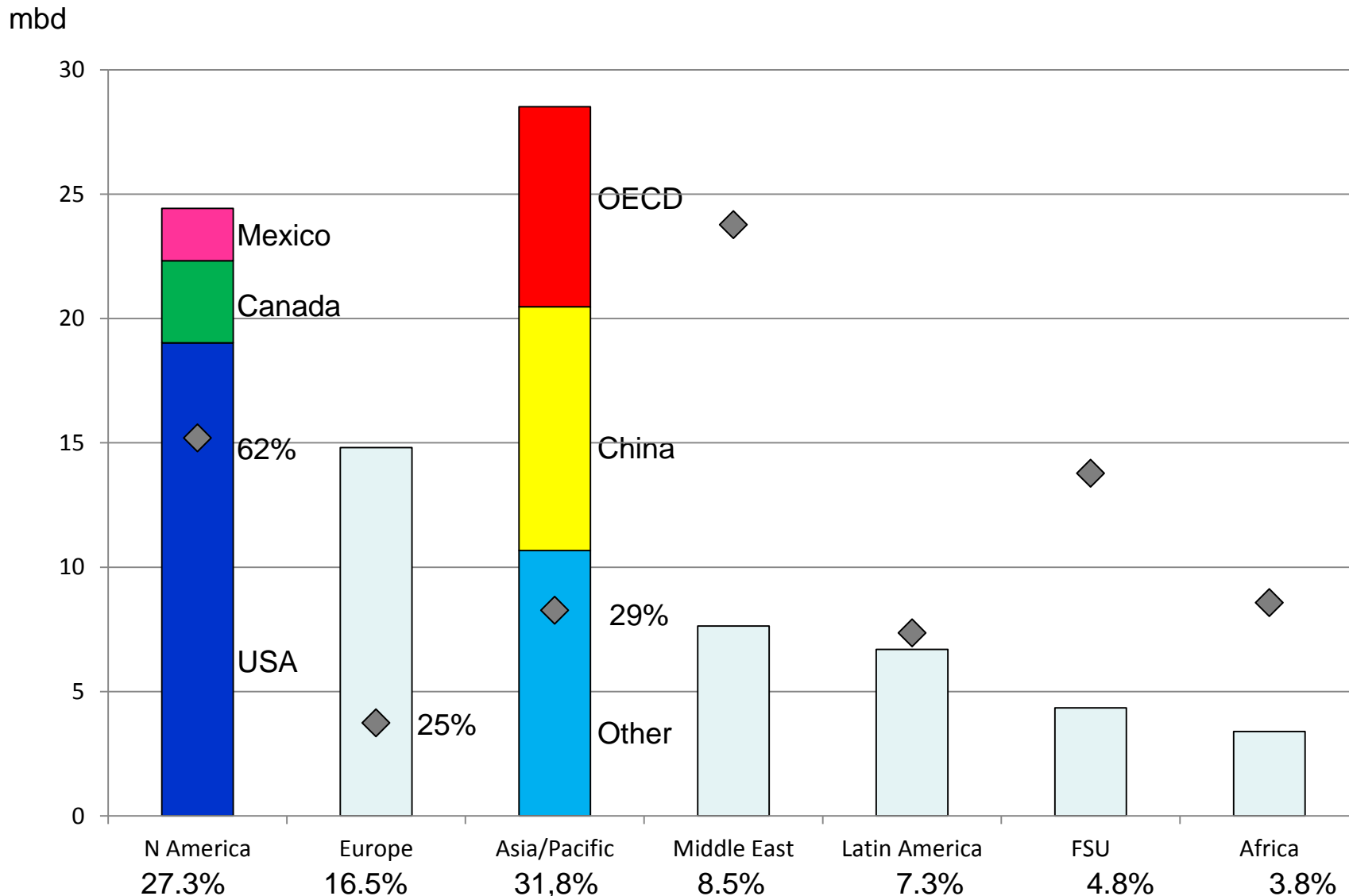


OPEC production Mar 2012	31.43 mbd
OPEC production sustainable production capacity:	34.91 mbd
OPEC spare production capacity Feb. 2012	3.48 mbd
Of which Saudi Arabia spare production capacity	1.88 mbd, Nigeria 2 nd biggest 0.50 mbd



World oil demand 2012

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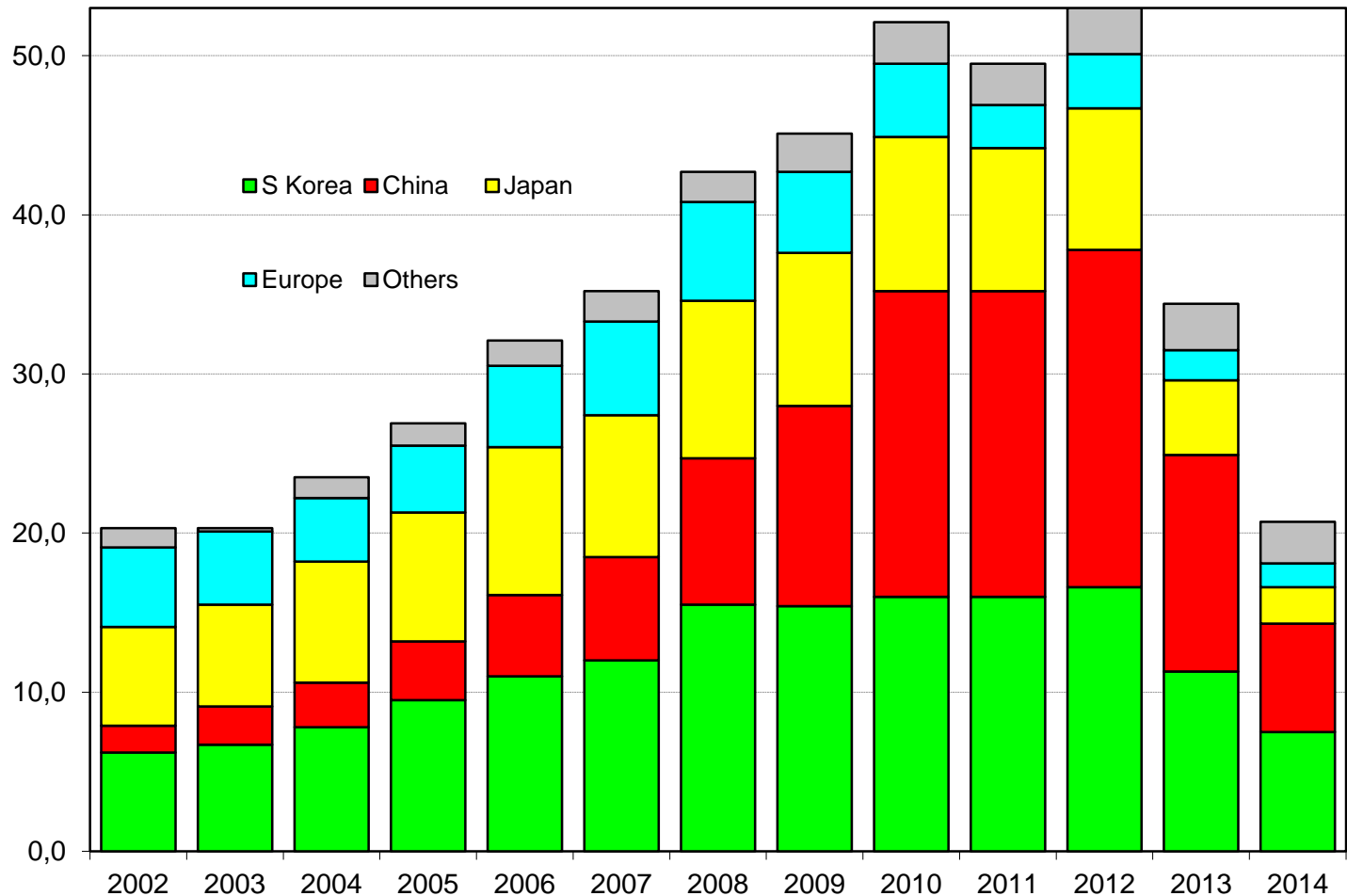




Ship deliveries - m cgt

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m cgt



Source: Clarkson World Shipyard Monitor

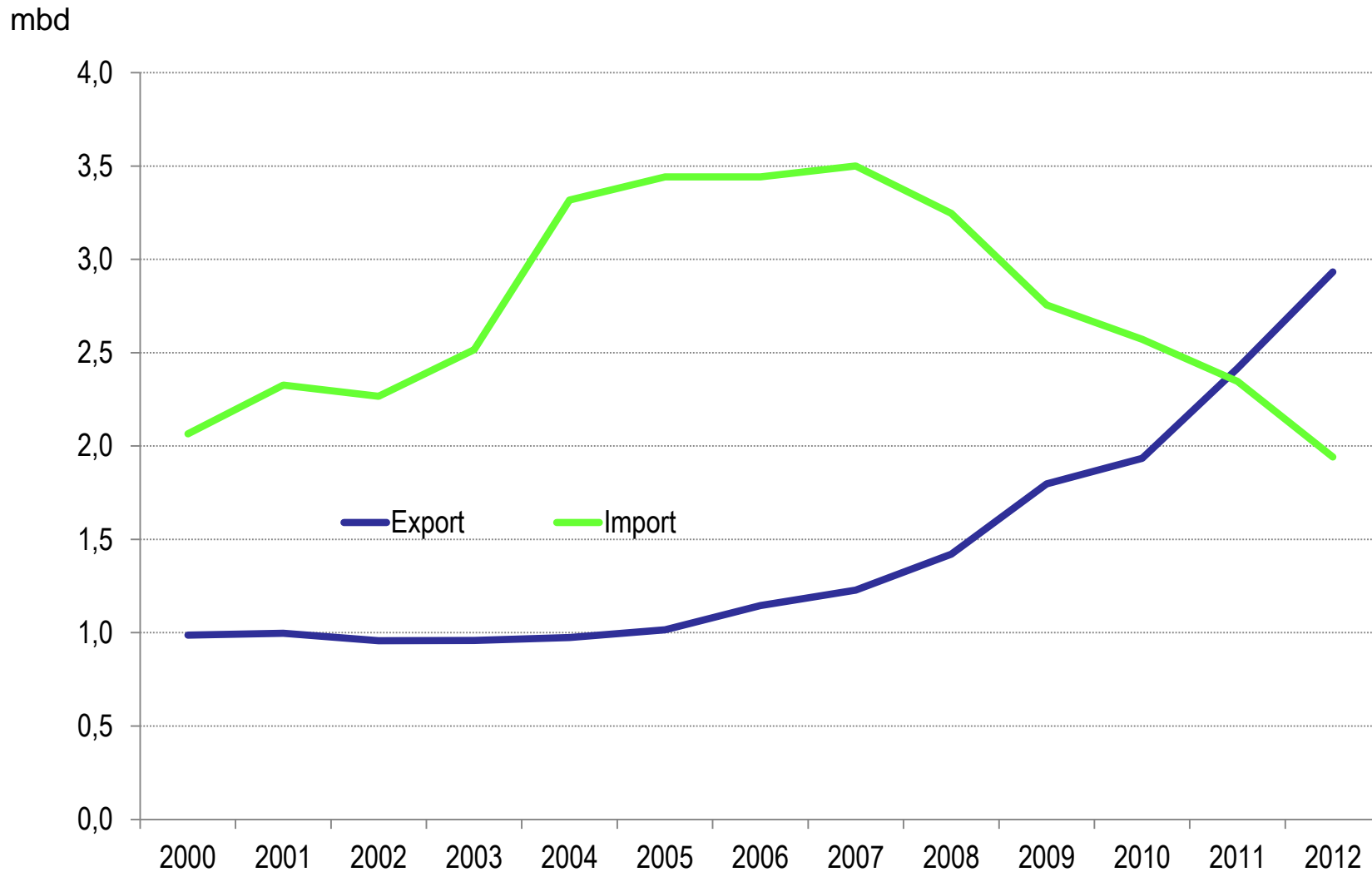
Average 30 m cgt





US product import and export

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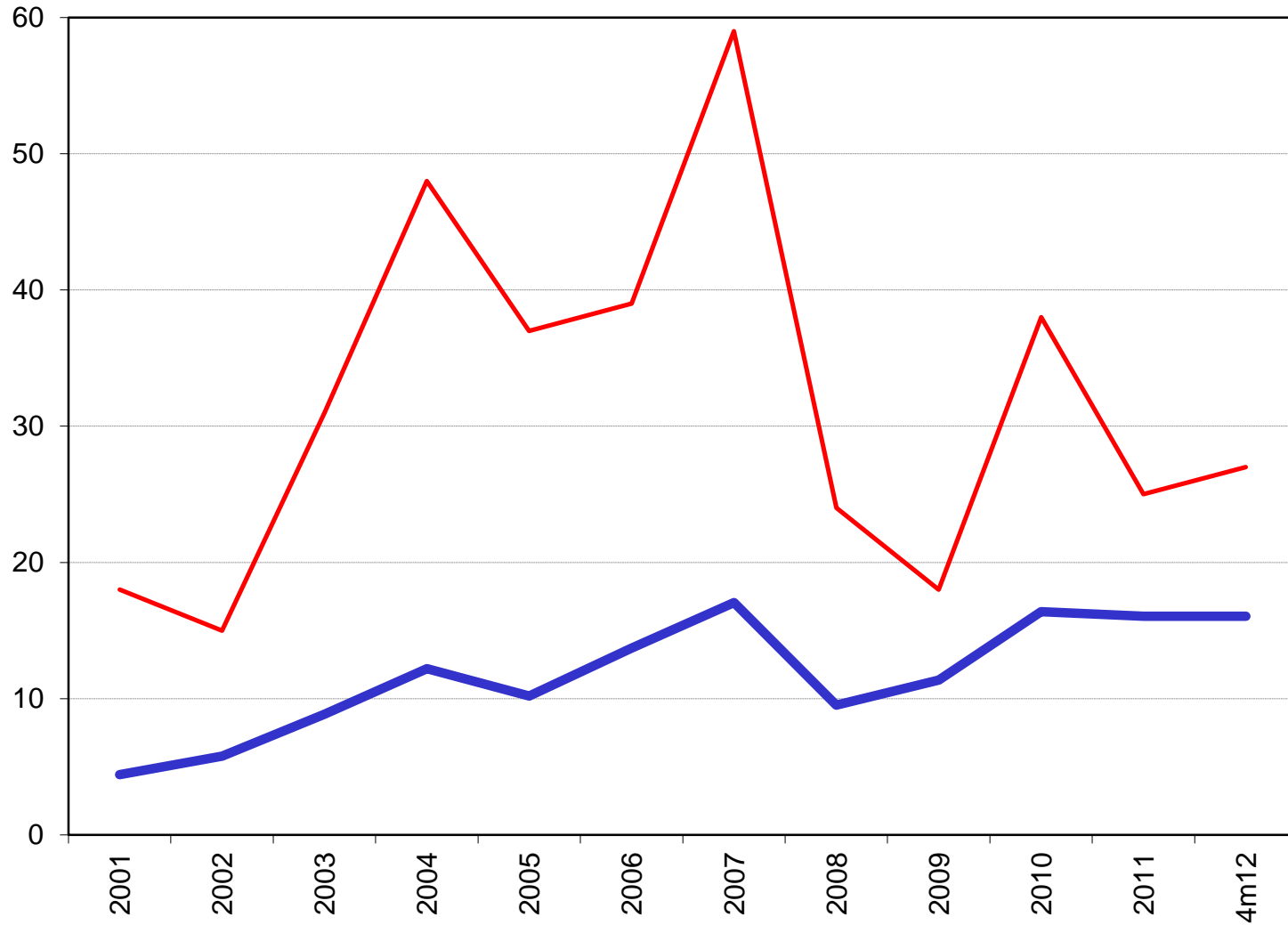
Trade: 2000 3.0 mbd – 2006 4.5 mbd – 2012 4.9 mbd



VLCC - 15 years old and scrap value

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m \$



Leading the way; making a difference



Contracting by Country/Region (all types of ships)

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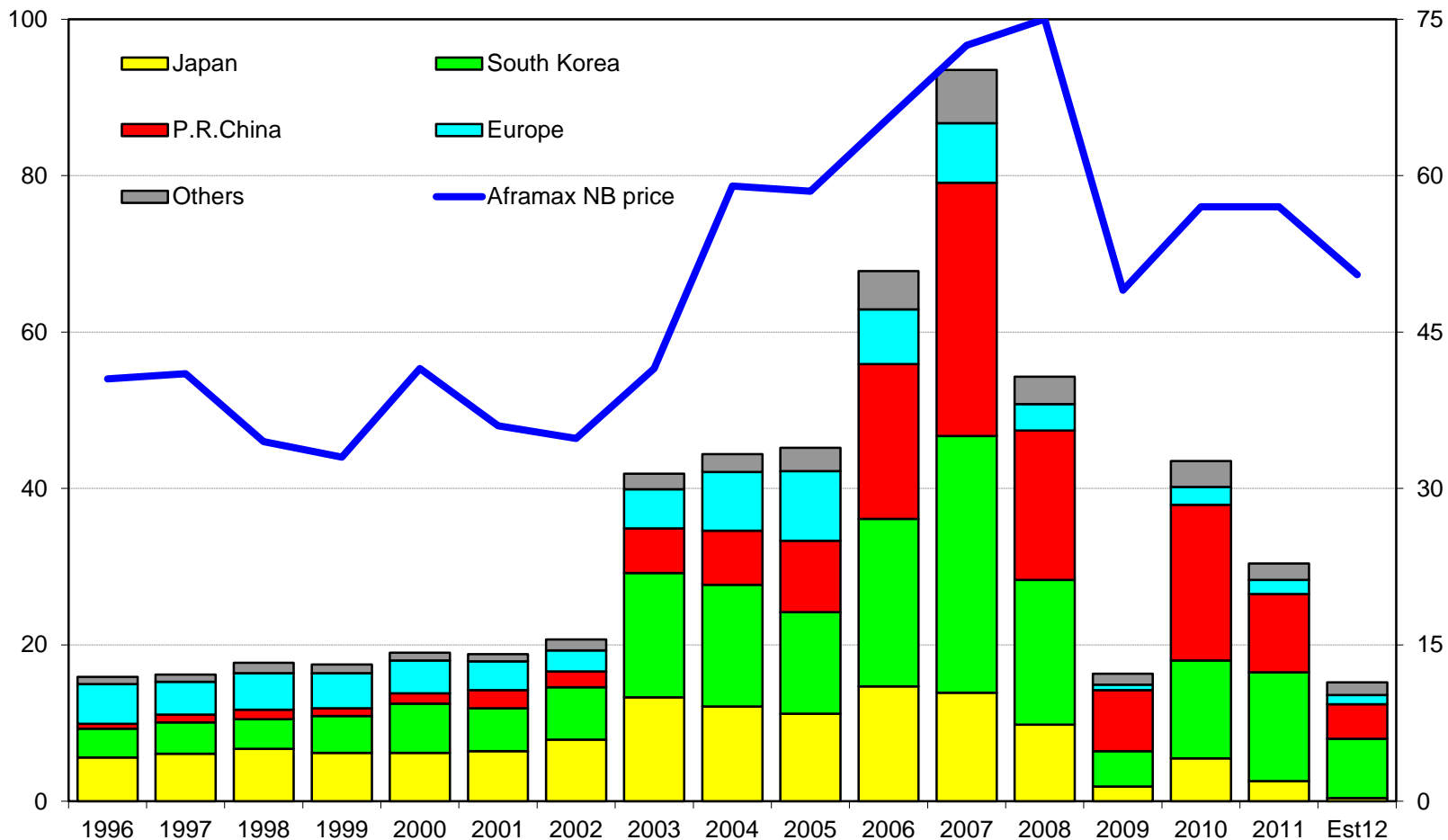
m cgt contracting

\$ m Aframax price

cgt

Contracting by Country/Region (all types of ships)

\$ m price



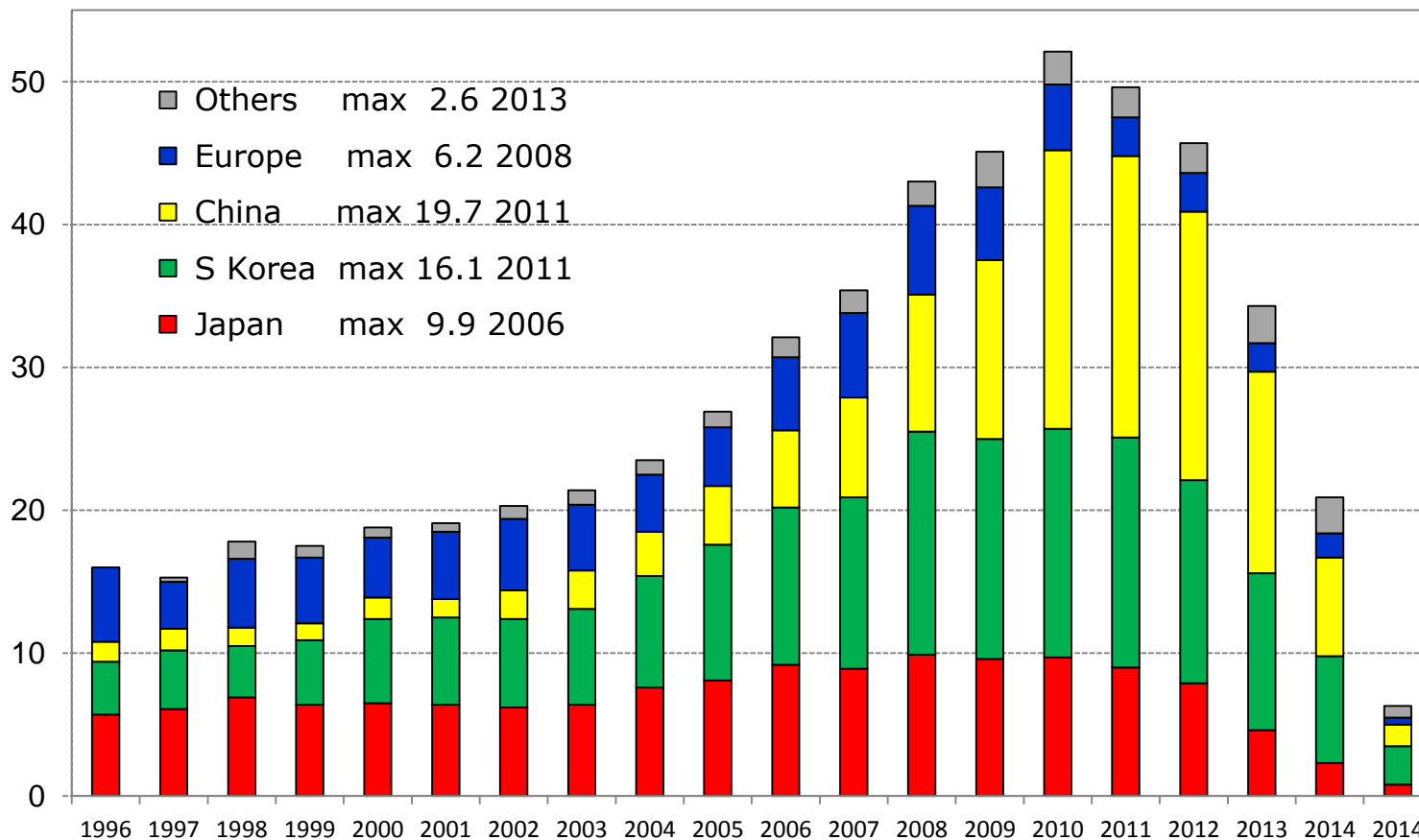
← Average 18 m cgt → ← Average 58 m cgt → ← Average 30 m cgt →



Deliveries by Country/Region (all types of ships)

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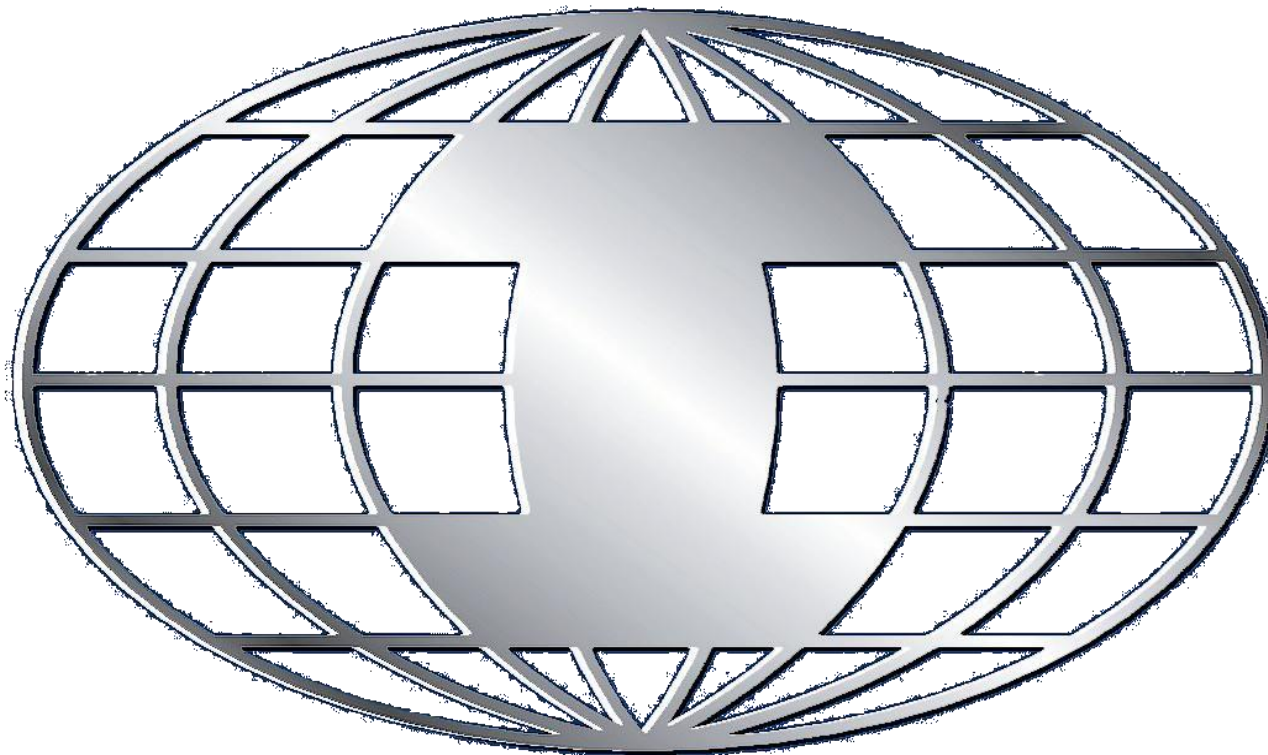
m cgt contracting



← Average 18.3 m cgt >> ← Average 38.8 m cgt >> 13.6 m cgt



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Worldscale **A chartering tool**



Purpose of Worldscale

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To enable a tanker to obtain the same net return per day at the same WS percentage regardless of the voyage actually undertaken.



Why use a freight scale?

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- Ease of conducting business
- Standard of reference
- Faster response to quotations
- Facilitates competition
- Geographical options included



Freight Scales – History

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- Originally, tanker fixtures had several pages of freight rates covering many optional ports
- Freight scales developed by UK and US government during World War II
- Basic principle: owners should receive the same net daily revenue irrespective of voyage performed



WS – Organisation

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- Produced by two non-profit making organisations in London/New York aiming at independence from external bias and narrow market views
- Financed on subscription basis
- Boards, major shipbrokers in London and New York



WS – Basic

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- An Index of Reference Rates with common calculation factors
- Flat rate expressed in USD per tonne of cargo carried
- Market rates are expressed as a percentage of the published flat rates
- Amended yearly for changes to bunker prices, port charges and exchange rates
- Issued early January
- WS book contains 73,000 rates, web-site has over 500,000 rates
- Further rates available from the WS Associations
- Rates for particular ports may be corrected over the year if substantial changes – WS circular issued
- Available on annual subscription basis only



WS – Basis for calculation

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- Tanker size 75,000 dwt
- Average speed 14.5 knots
- Bunker consumption
 - Steaming 55 ts per day
 - 100 ts per round voyage for other than steaming
 - 5 ts for each port
- Port time, 4 days from one loading to one discharge port, +12 per extra port
- Fixed hire element: \$12,000 per day
- Bunker price 380 cst (606.56 per tonne 2012)
- Ports costs based on specific exchange rates
- Canal transit times:
 - 24 hours for Panama Canal
 - 30 hours for Suez Canal



Conclusion

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- China still the driving force
- Scrapping of first generation of double hull tankers started
- Age becoming an issue
- Shipbuilding over-capacity, but perhaps also
- Limited access to capital
- Some risks and opportunities cannot easily neither be quantified nor identified - markets are never completely rational nor efficient – success requires the use of sound reasoning and trusting your gut feeling
- Global economy is certainly not yet in rude health. In Ms Lagarde's words: "The risks remain high; the situation fragile."
- The only predictable thing about futures tanker market is its unpredictability



Core activities

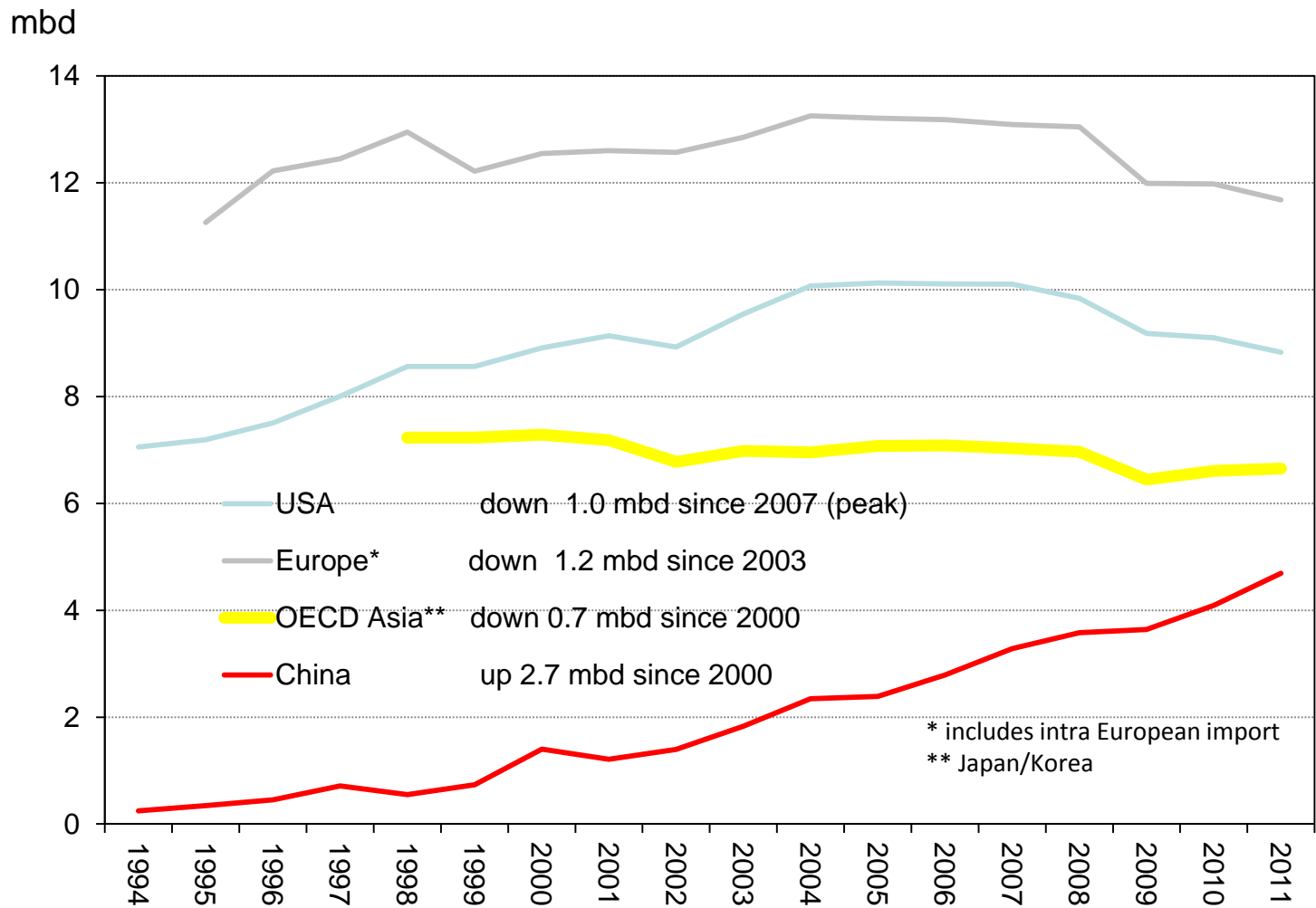
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- 2006/2007 US oil import peak 13.7 mbd
2011 11.4 mbd
- Safety/technical
- Security/piracy
- Regulatory/Legal
- Tanker Information



Oil import to selected areas

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2006

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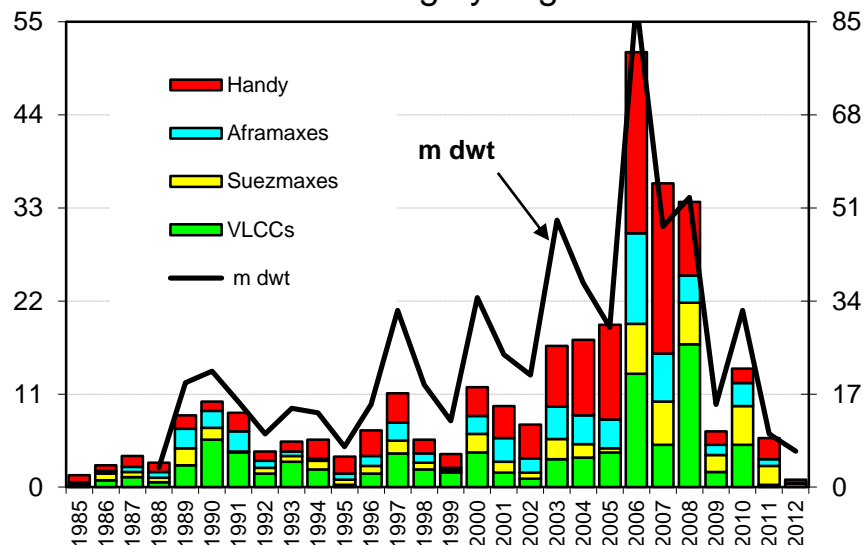
2006

- 7% increase in the tanker fleet
- Record ordering \$64 bn/69 m dwt
- Iran used tankers for temporary floating storage
- Start of slow steaming

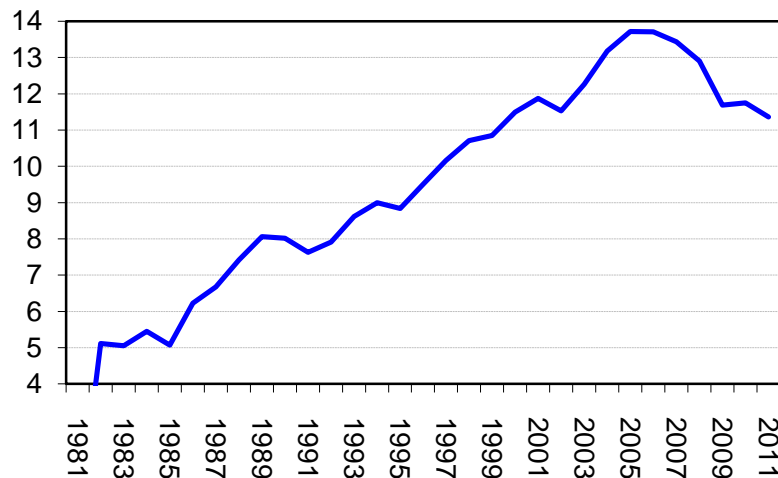
2007

- Peak US oil import
- Record ordering
- Hebei Spirit accident 7 December 2007: charterers reluctant to take SH tankers
-

Tanker contracting by segment - m dwt



Total US oil import - crude and products - mbd





2008

- Oil price peaks July 3, 2008, at \$145.3/bbl
- Primo 2008, low oil stocks,
- 8 m dwt tankers sold for conversion
4 m scrapped

2009

- Deliveries of tankers 10-6,000 dwt
peak at 11 m dwt
- Storage on tankers peak Dec at 154 m barrels



2010

- Strong reduction in floating storage
- Many tankers sold for conversion
 - 8 m dwt sold for conversion
 - 4 m scrapped

2011

- Deliveries of tankers 10-60,000 dwt
 - peak at 11 m dwt
- Storage on tankers peak Dec at 154 m barrels