# Baltics Trade Bared

PFI Baltics Conference

Gail Bradford

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# Introduction

- Trends in unitised trade
- Medium term forecasts
- Trends in ship deployment - roro
- Trends in ship deployment - lolo
- Changes in deep sea service patterns
- The 18,000 TEU ship?

*“Neither a borrower nor a lender be”*

*Hamlet, Act 1*

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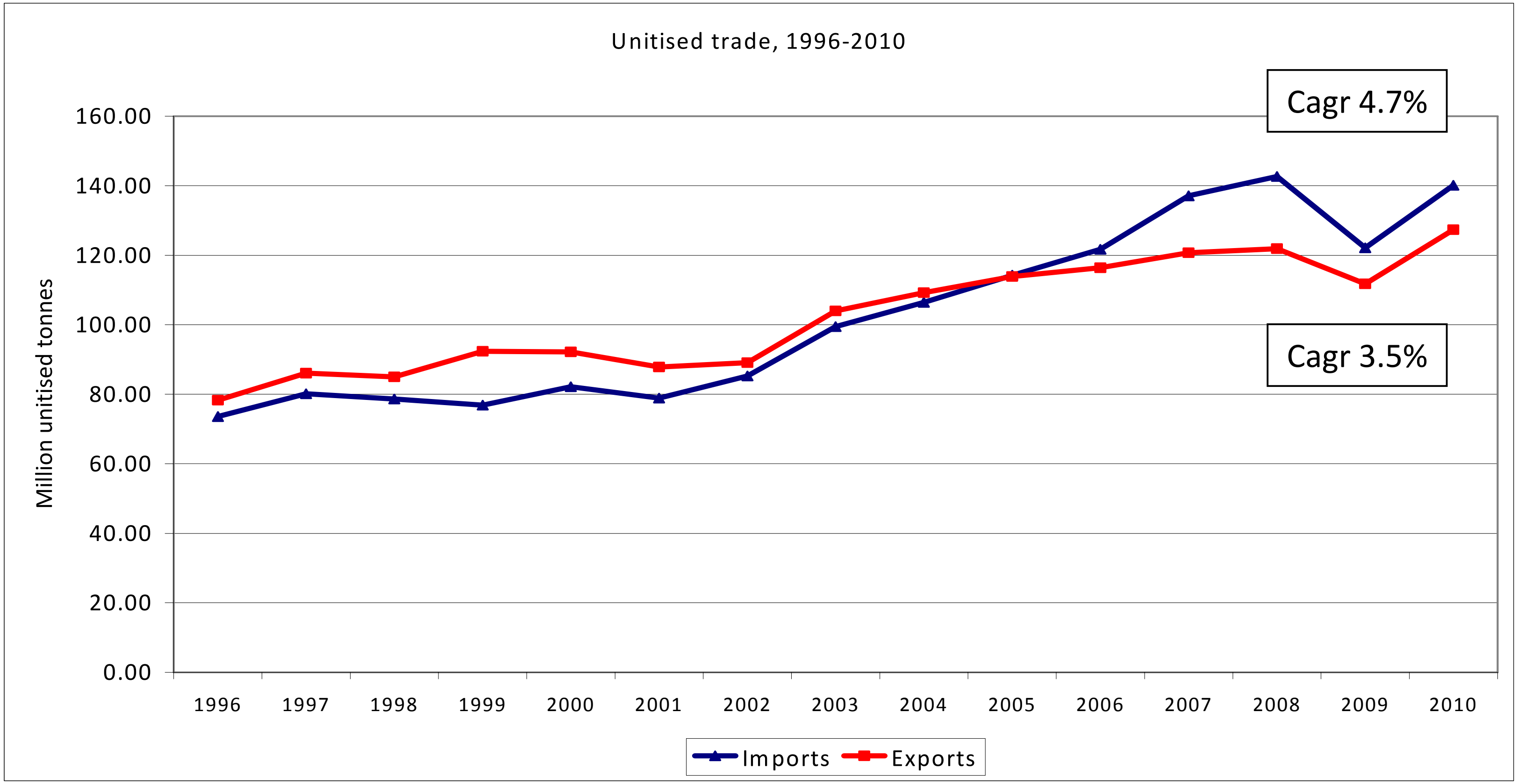
# Understanding the market

## Baltic/Scandinavia unitised trade




- The basics, the foundation of regional unit load maritime trade
- Growth trend in imports surpassing growth in exports

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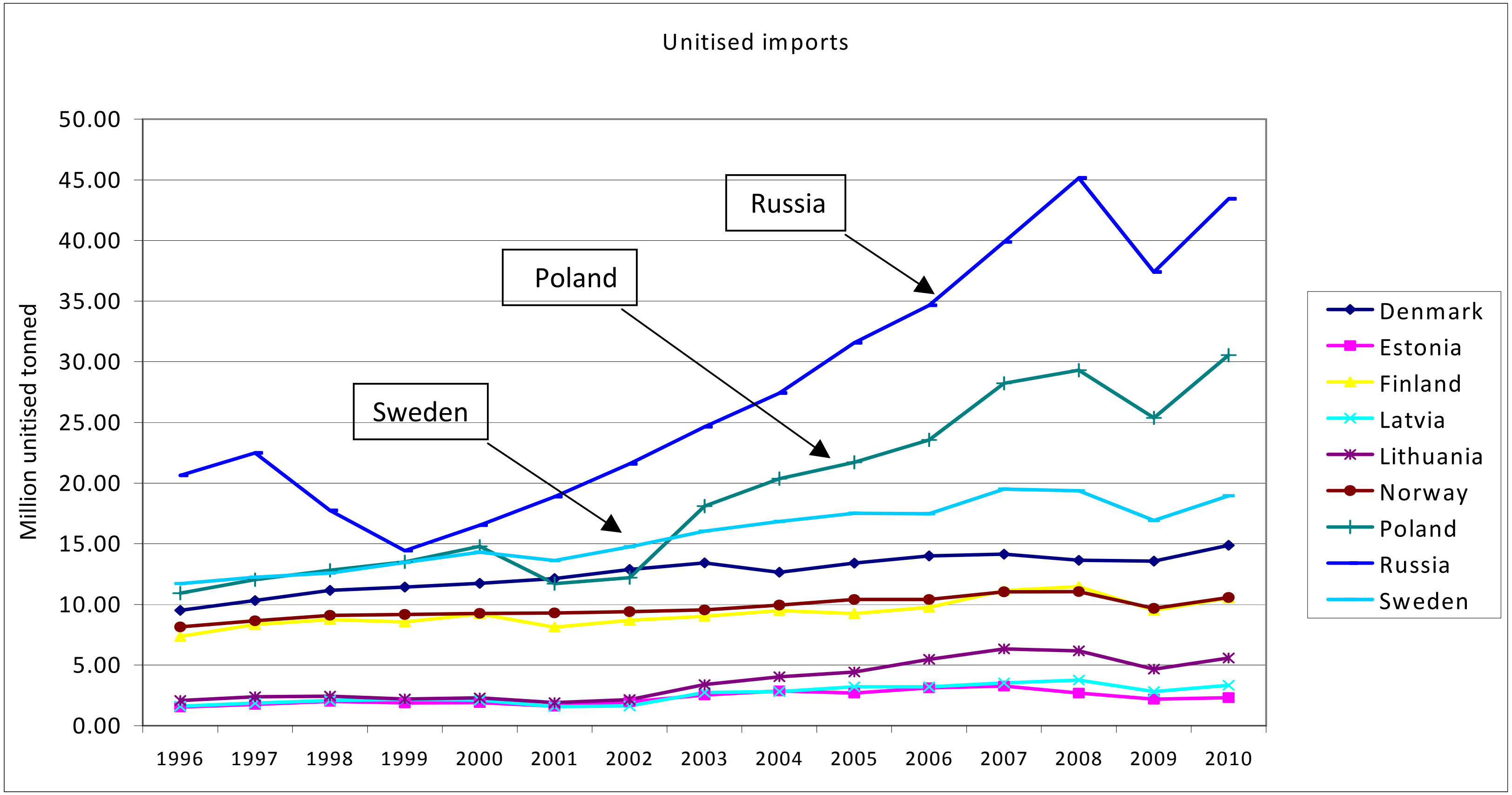
# Unitised imports by country




- A stable market, recent growth driven by 3 economies
- 2003 was the first year for data for Poland via Eurostat. They joined the EU in 2004. A change in collection methodology may explain some of the differences.

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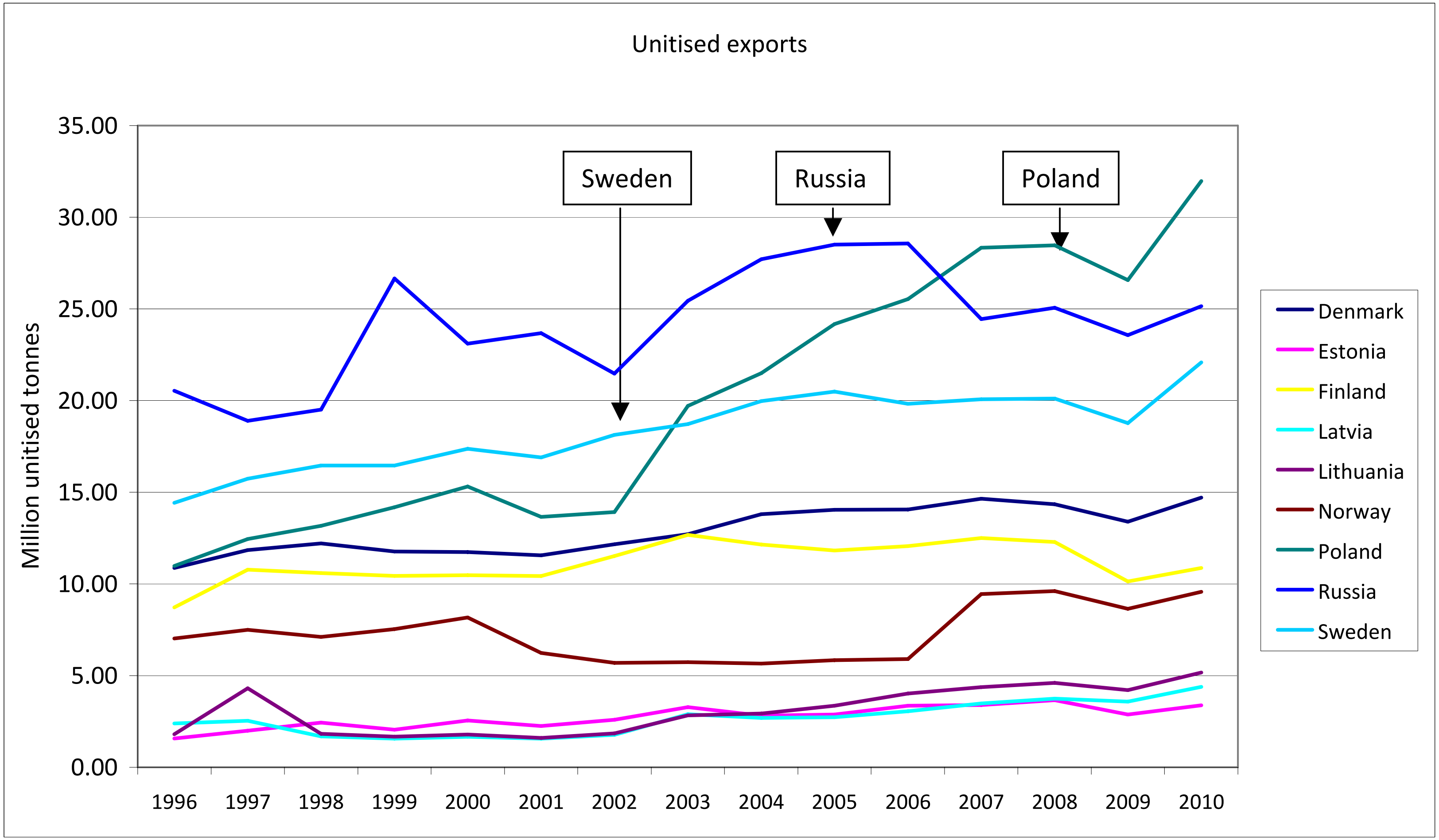
# Unitised exports by country

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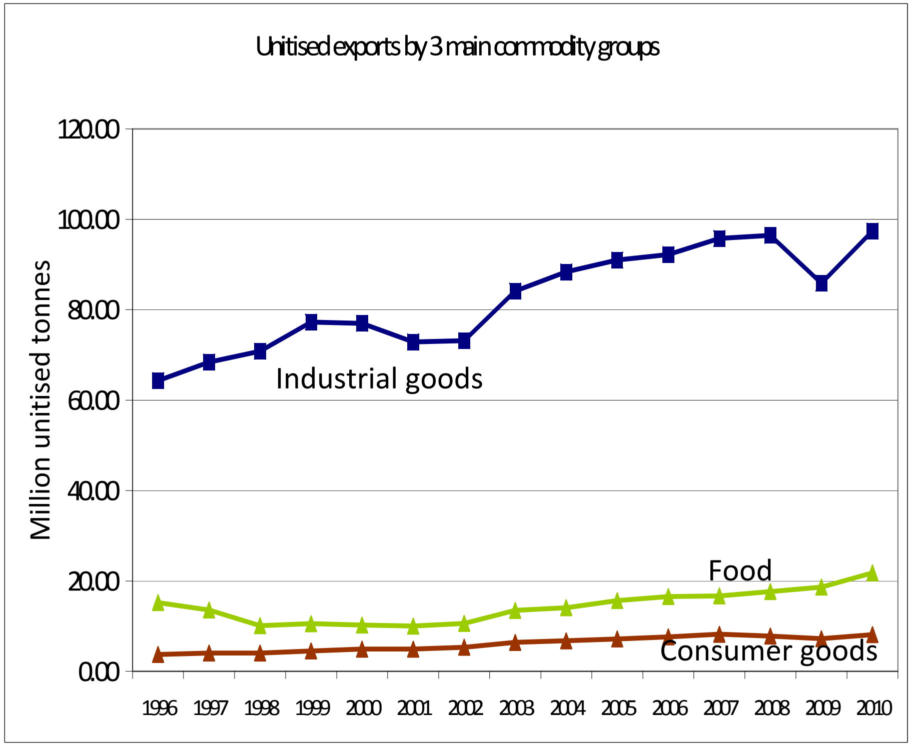
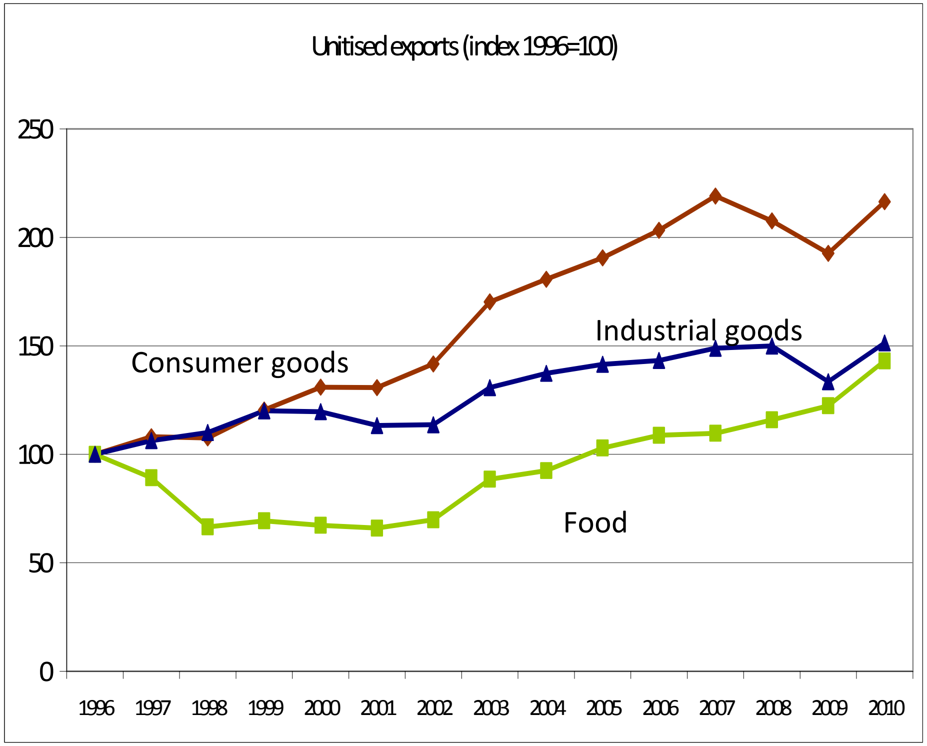
# Unitised exports by commodity group




- Industrial goods dominate in volume terms
- Growth in all commodity groups, strongest in consumer goods
- Food exports kept growing, even in recession
- all groups back to pre-crisis levels

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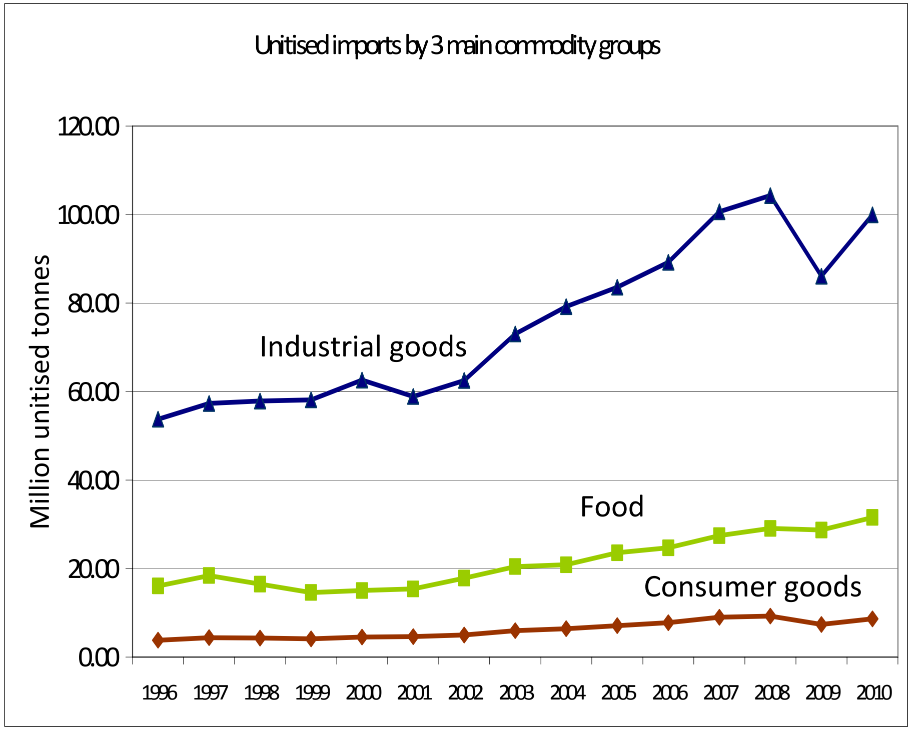
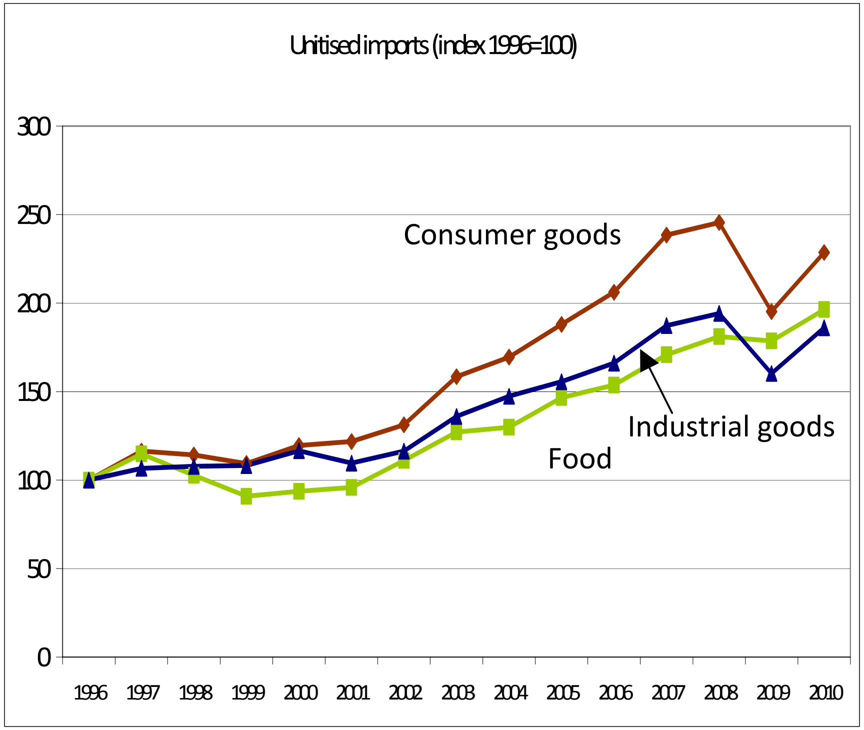
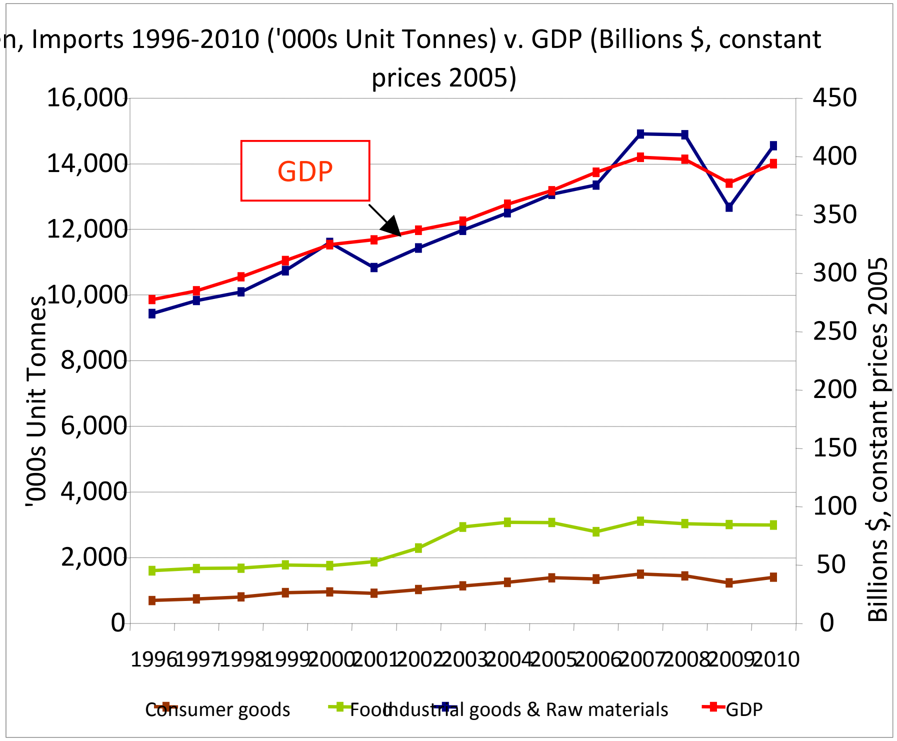
# Unitised imports by commodity group

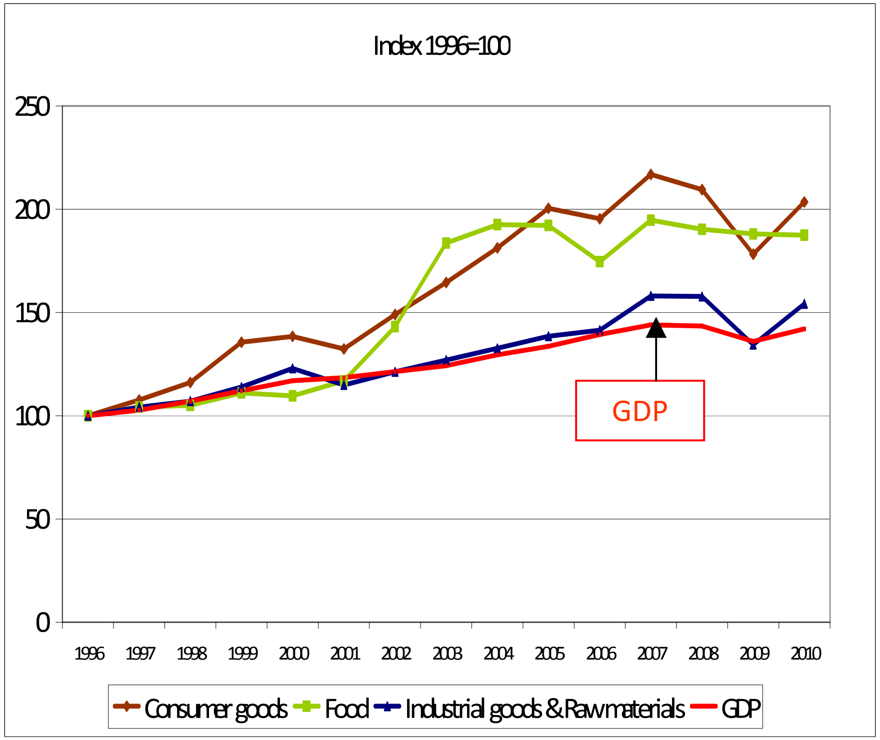



- Imports in all sectors increasing, with food exceeding pre-crisis levels
- Consumer goods imports rising rapidly

# Case study - Sweden




Goods (tonnes) compared with GDP ($ value)

Goods index compared with GDP index

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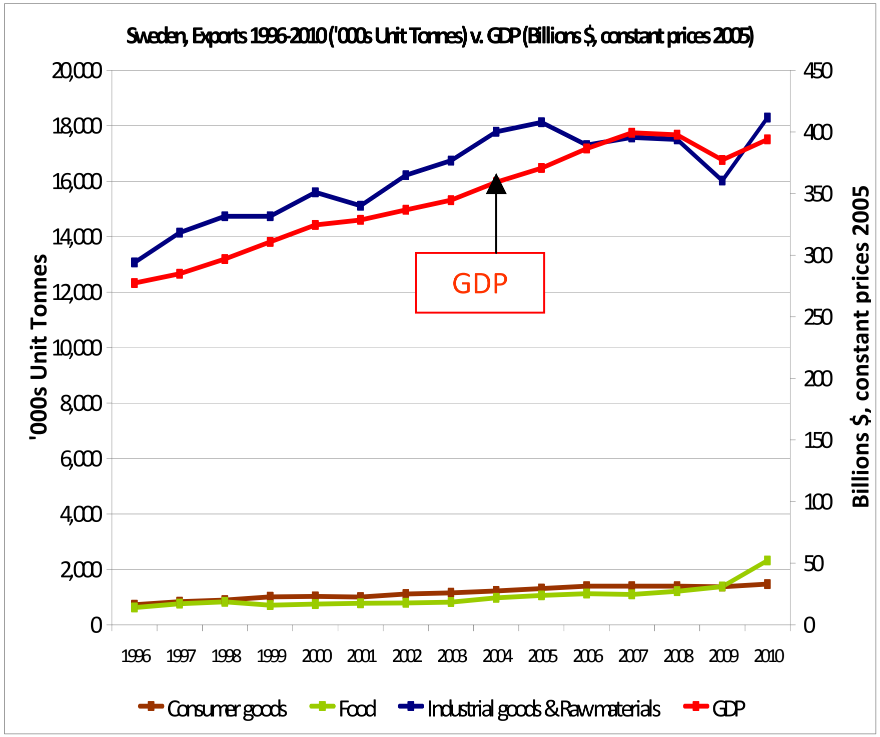
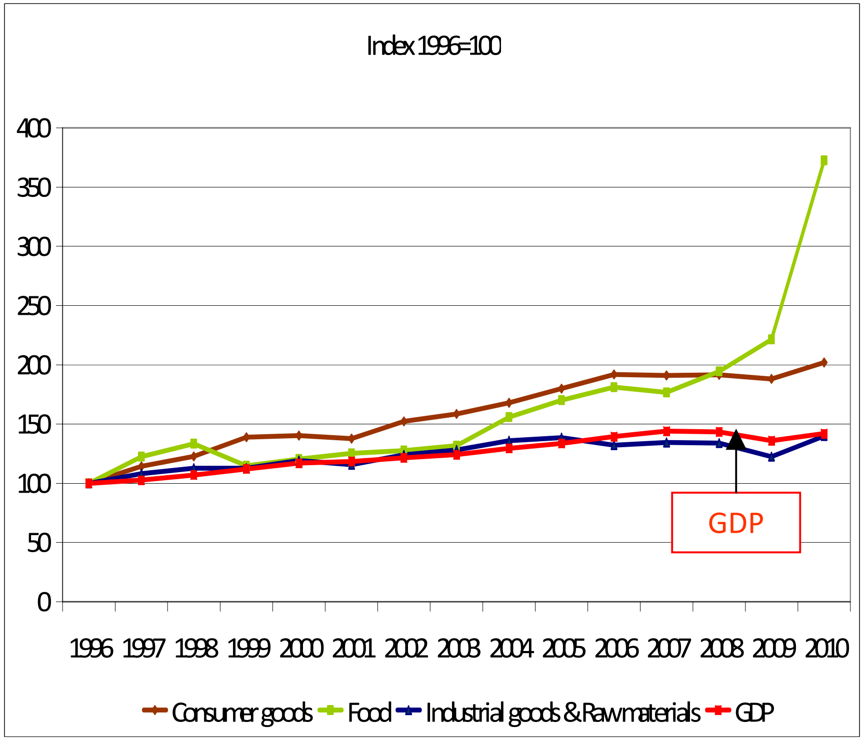
# Sweden case study - exports

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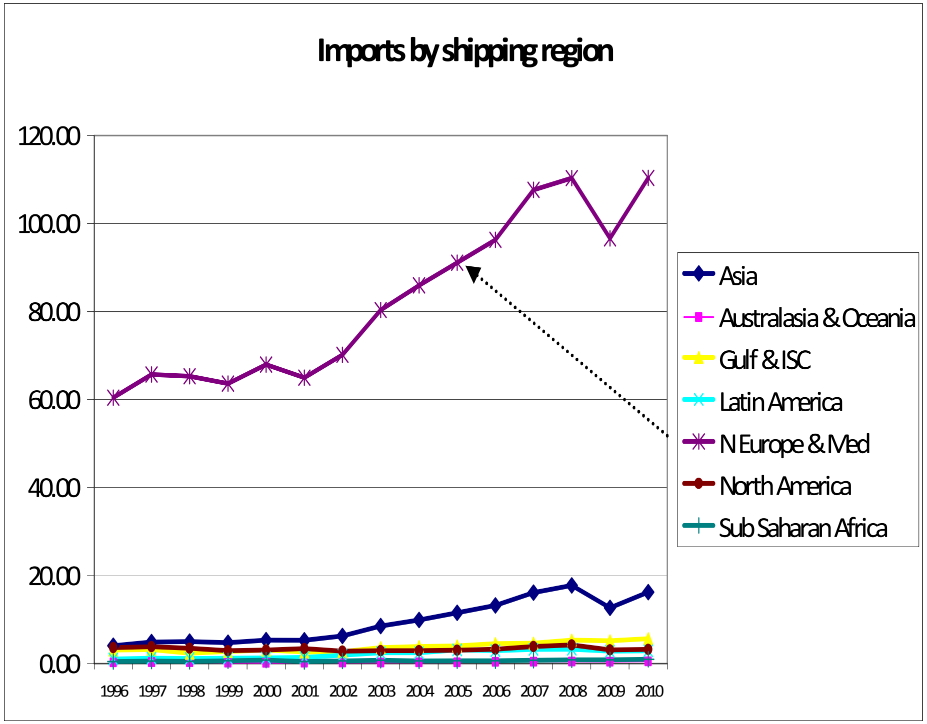
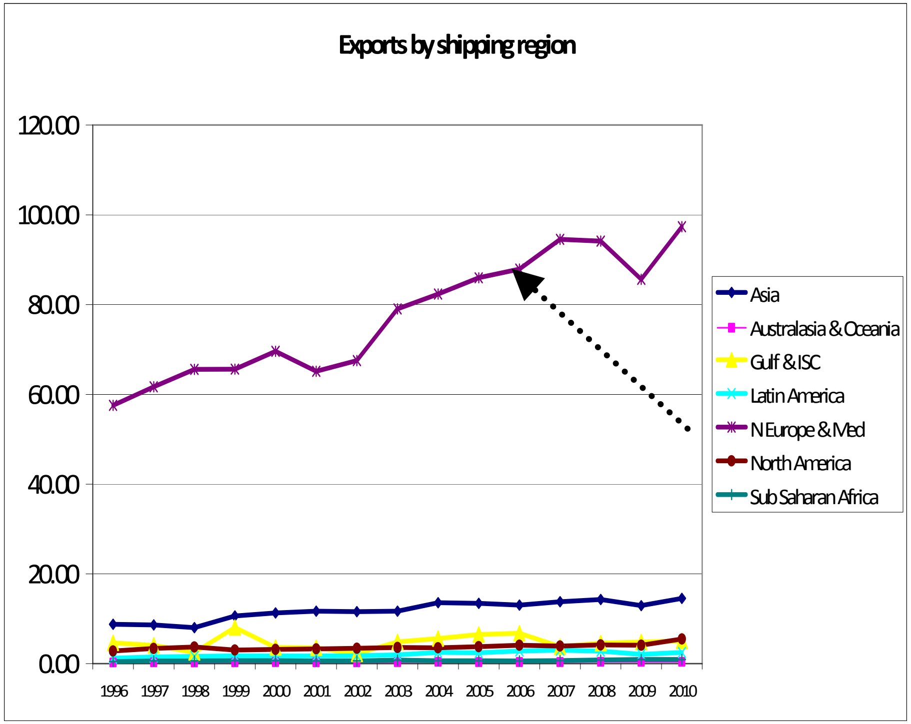
# Unitised trade by region




- Intra European trade dominates the Baltic trades and will continue to do so,
- though import substitution from Asia increasing

# Overall Intra European RoRo demand based on trade data

Growth indices by RoRo corridors (1996 = 100)

| | 2007 | 2008 | 2009 | 2010 | *m tonnes 2010* |
|---|---|---|---|---|---|
| Intra Baltic | 476 | 459 | 374 | 427 | *2.57* |
| Baltic – N.Sea | 223 | 223 | 193 | 236 | *6.02* |
| Trans Kattegat/Skagerak | 143 | 142 | 130 | 142 | *9.09* |
| Scandinavia – UK | 93 | 89 | 80 | 86 | *5.82* |

Skagerrak and Kattegat

- Evidence of recovery in underlying demand in 2010
- Scandinavia – UK still struggling

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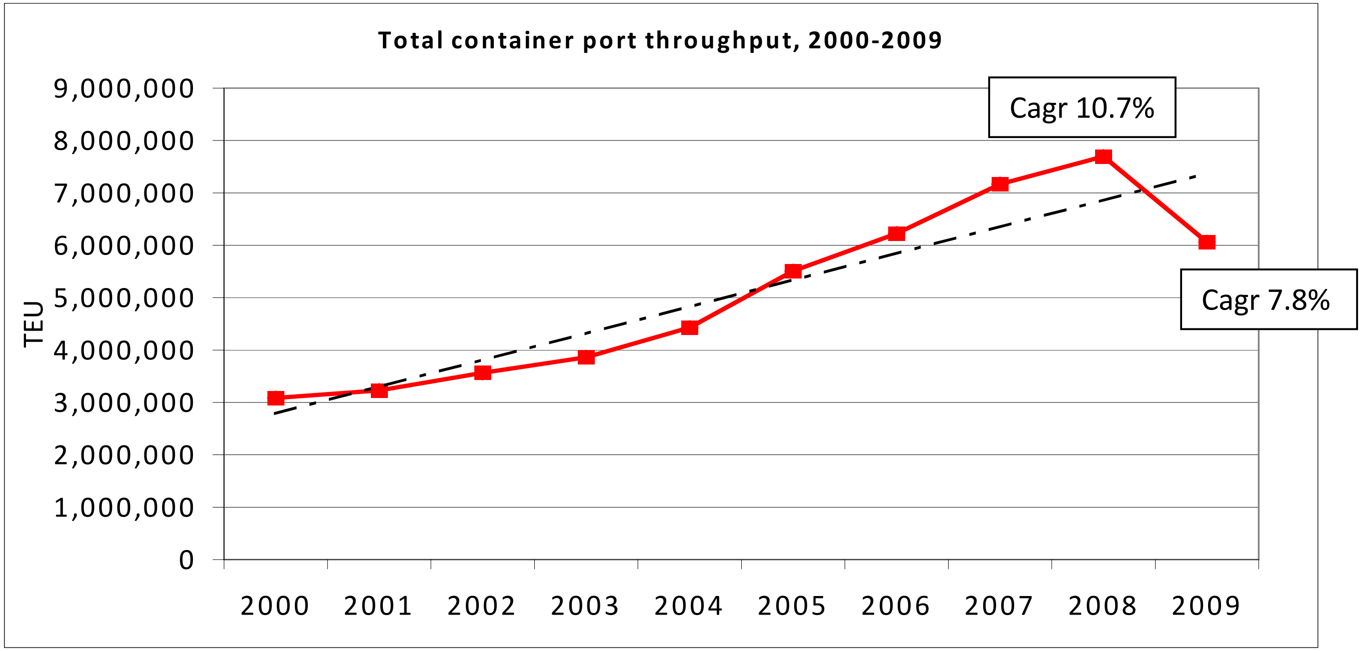
# Scandinavia/Baltic Container port throughput




Total of 38 ports

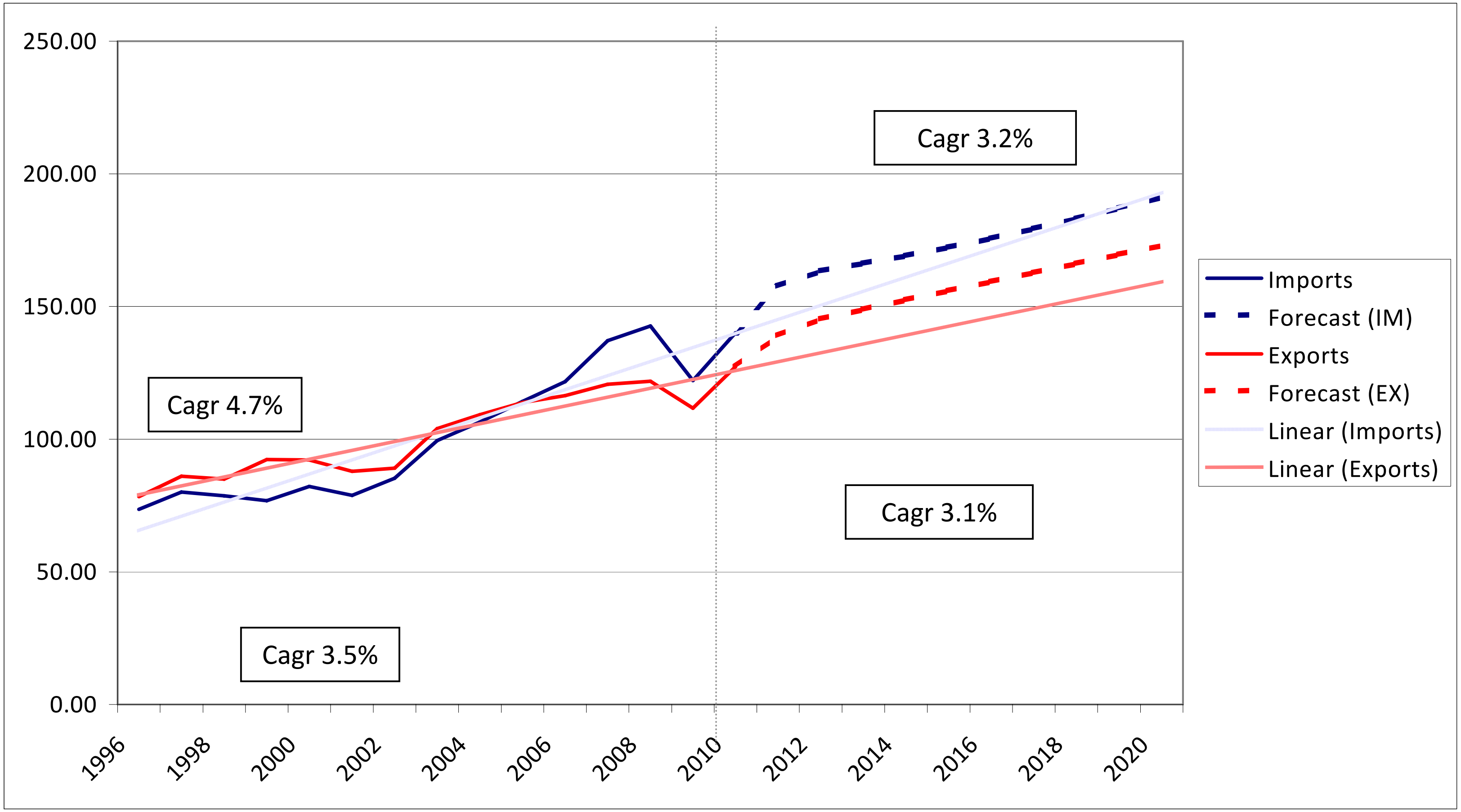
Port traffic growing at a faster rate than trade

| | 2000 | 2007 | 2008 | 2009 | 2010 | CAGR |
|---|---|---|---|---|---|---|
| **ST PETERSBURG** | 195,601 | 1,697,720 | 1,983,110 | 1,341,850 | 1,931,000 | 25.7% |
| Gothenburg | 685,000 | 840,550 | 862,595 | 817,616 | 880,000 | 2.0% |
| Gdansk | 18,037 | 96,873 | 185,661 | 240,623 | 511,876 | 39.7% |
| **Gdynia** | 188,272 | 614,373 | 610,767 | 378,340 | 485,255 | 9.9% |
| Helsinki | 376,340 | 431,406 | 419,809 | 357,204 | 400,290 | 0.6% |
| Kotka | 192,108 | 570,881 | 666,356 | 345,939 | 394,814 | 7.5% |
| Aarhus | 293,000 | 504,000 | 458,000 | 385,000 | | 3.1% |
| Helsingborg | 77,900 | 240,000 | 250,000 | 260,500 | | 14.4% |
| Klaipeda | 39,955 | 321,432 | 373,263 | 247,982 | 295,000 | 22.1% |
| Copenhagen/Malmo | 129,500 | 192,000 | 194,000 | | 190,000 | 3.9% |
| Riga | 84,818 | 211,840 | 207,122 | 182,980 | 254,475 | 11.6% |
| Tallinn | 76,692 | 180,911 | 180,927 | 130,939 | 151,956 | 7.1% |

*“Tomorrow, and tomorrow, and tomorrow”*

*Macbeth, Act 5*

# Medium term forecasts




- Cagrs for 1996-2010 and 2010-2020
- Imports have become the headhaul trade flow
- = more empties?

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# Forecast imports by region of origin

| | 2010 | 2020 | Absolute growth | % change 2010-2020 | CAGR |
|---|---|---|---|---|---|
| | Million tonnes | | | | |
| Asia | 16.24 | 24.66 | 8.42 | 52% | 4.3% |
| Australasia & Oceania | 0.52 | 0.62 | 0.10 | 19% | 1.8% |
| Gulf & ISC | 5.67 | 7.29 | 1.62 | 29% | 2.6% |
| Latin America | 2.90 | 3.78 | 0.88 | 30% | 2.7% |
| N Europe & Med | 110.38 | 148.43 | 38.05 | 34% | 3.0% |
| North America | 3.24 | 4.84 | 1.61 | 50% | 4.1% |
| Sub Saharan Africa | 0.98 | 1.41 | 0.43 | 43% | 3.7% |
| Total | 140.12 | 191.40 | 51.28 | 37% | 3.2% |

- Main emphasis is in the short sea trades
- Growth in most deep sea markets is unremarkable, except from Asia
- Ports need to prepare for this demand on capacity
- Shipping lines think strategically about placement of tonnage

# The GDP debate

- GDP describes, but does not explain trends
- Cause or effect?

- Overall trade volumes in unitised goods grows with GDP

  - but not necessarily at the same rate
  - growth lower where markets mature/economies small and saturated
  - short run fluctuations affected by credit conditions and even house prices (influencing consumer lending and borrowing)

- GDP forecasts are not totally reliable!

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*"On such a full sea are we now afloat"*

*Julius Caesar, Act 4*

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# Global RoRo Fleet Deployment by Continent 2011

‘000s lane metres

| | N. Europe | Med | Far East | Other | Total |
|---|---|---|---|---|---|
| Freight & ro-pax | 386 | 220 | 43 | 300 | 949 |
| Passenger ferries | 225 | 240 | 73 | 44 | 582 |
| Total | 611 | 460 | 116 | 344 | 1531 |

- 70% of deployment in Europe/Mediterranean
- 41% freight/ro-pax capacity in North Europe

# European Freight Fleet Development: 2004 - 2011

’000s lane metres

| | 2004 | 2011 | |
|---|---|---|---|
| North Europe | 322 | 385 | +20% |
| Mediterranean | 183 | 219 | +20% |
| | **505** | **604** | **+20%** |

- Growth in freight vessel lane metre capacity +20%

  - growth in supply similar for N. Europe & Mediterranean

# RoRo fleet deployment by trade lane

Million lane metres p.a.

| | 2004 | 2008 | 2011 | % increase ’04 – ’11 |
|---|---|---|---|---|
| Intra Scandinavia/Baltic | 36.4 | 44.0 | 49.5 | +36% |
| Scandinavia/Baltic – Continental mainland | 29.1 | 34.4 | 30.2 | +4% |
| Scandinavia/Baltic – British Isles | 3.5 | 3.4 | 3.1 | -9% |

- **Capacity offered expanded to 2008 to meet demand**
  - increasing reliance on larger vessels to reduce unit costs
  - service frequencies remaining stable, some rationalisation/consolidation

- **Capacity fell in 2009 but now rising on intraregional routes**

# Ship deployment – Baltic short sea lolo

| | Services | Ships | Ave TEU | Annual TEU (000) deploy |
|---|---|---|---|---|
| **2000** | | | | |
| NW Europe/Scand | 29 | 44 | 229 | 386.6 |
| NW Europe/Baltic | 46 | 71 | 364 | 919.9 |
| NW Europe/Scand & Baltic | 1 | 1 | 174 | 9.0 |
| | **76** | **116** | | **1315.5** |
| **2004** | | | | |
| NW Europe/Scand | 29 | 41 | 305 | 554.9 |
| NW Europe/Baltic | 55 | 88 | 482 | 1461.7 |
| NW Europe/Scand & Baltic | 2 | 2 | 461 | 28.5 |
| Scand/Baltic coastal | 1 | 1 | 150 | 3.9 |
| | **87** | **132** | | **2049.0** |
| **2008** | | | | |
| NW Europe/Scand | 46 | 59 | 475 | 1372.3 |
| NW Europe/Baltic | 84 | 142 | 750 | 3601.6 |
| NW Europe/Scand & Baltic | 3 | 4 | 613 | 127.5 |
| Scand/Baltic coastal | 2 | 2 | 556 | 77.5 |
| | **135** | **207** | | **5178.9** |
| **2011** | | | | |
| NW Europe/Scand | 34 | 37 | 592 | 1062.4 |
| NW Europe/Baltic | 48 | 87 | 935 | 2179.9 |
| NW Europe/Scand & Baltic | 12 | 29 | 959 | 576.1 |
| Scand/Baltic coastal | 5 | 7 | 672 | 234.4 |
| | **99** | **160** | | **4052.8** |

- a more balanced picture emerging post recession
- number of services including Scandinavia + Baltic rotations increasing

NW Europe - France, Belgium, Netherlands, Germany, UK, Ireland

Scandinavia - Denmark, Norway, Sweden

Baltic - Poland, Finland, Estonia, Latvia, Lithuania, Russia

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# Ship deployment – Baltic deep sea lolo

**2000** – 5 services, 37 ships

| Carrier/service | Frequency | Ships | Ave TEU | Annual TEU (000) deploy | |
|---|---|---|---|---|---|
| **a) Europe/Mediterranean** | | | | | |
| MAERSK LINE - EUROMED | 52 | 4 | 3004 | 156.2 | Gothenburg, Aarhus |
| **b) Europe/Far East** | | | | | |
| MAERSK SEALAND - AE5 | 52 | 13 | 6400 | 332.8 | Gothenburg |
| CHIPOLBROK | 36 | 12 | 867 | 31.2 | Gdynia |
| **c) Europe/West Coast South America** | | | | | |
| HAMBURG-SUD - MULTIPURPOSE | 12 | 3 | 703 | 8.4 | Gothenburg |
| **d) Europe/East Coast North America** | | | | | |
| ACL | 52 | 5 | 3100 | 161.2 | Gothenburg |

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# Ship deployment – Baltic deep sea lolo

**2008** – 4 services, 32 ships

| Carrier/service | Frequency | Ships | Ave TEU | Annual TEU (000) deploy | |
|---|---|---|---|---|---|
| **a) Europe/Mediterranean** | | | | | |
| MAERSK LINE/JMA - SCANMED/NORTH | 52 | 4 | 2320 | 120.6 | Gothenburg |
| **b) Europe/Far East** | | | | | |
| MAERSK SEALAND - AE1 | 45 | 9 | 6978 | 314.0 | Gothenburg, Aarhus |
| CHIPOLBROK | 48 | 14 | 1015 | 48.7 | Gdynia |
| **c) Europe/East Coast North America** | | | | | |
| ACL | 52 | 5 | 3100 | 161.2 | Gothenburg |

- Hamburg Sud dropped WCSA service

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# Ship deployment – Baltic deep sea lolo

2011 – 7 services, 53 ships

| Carrier/service | Frequency | Ships | Ave TEU | Annual TEU (000) deploy | |
|---|---|---|---|---|---|
| **a) Europe/Mediterranean** | | | | | |
| CMA-CGM - FEMEX | 52 | 6 | 1760 | 91.5 | Gothenburg, Helsingborg, Aarhus |
| MAERSK LINE - SCANMED | 52 | 5 | 2502 | 130.1 | Gothenburg, Aarhus |
| MAERSK LINE - MARUS EXPRESS | 52 | 3 | 868 | 45.1 | St Petersburg |
| **TOTAL** | | **14** | **1834** | **266.8** | |
| **b) Europe/Far East** | | | | | |
| MAERSK LINE - AE1/AE10 | 52 | **21** | **8132** | **422.9** | Gdansk, Gothenburg, Aarhus |
| **c) Europe/West Coast South America** | | | | | |
| MAERSK LINE - ECUBEX | 52 | **7** | **2555** | **132.9** | St Petersburg |
| **d) Europe/East Coast North America** | | | | | |
| ACL | 52 | **5** | **3100** | **161.2** | Gothenburg |
| **e) US Gulf Coast/Europe/Far East** | | | | | |
| CHIPOLBROK - 1 | 12 | **6** | **1636** | **19.6** | Gdynia |

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# Changes ahead

- Currently Maersk Line is reorganising its Eur/FE service network. The AE1/AE10 butterfly service, using 21 x c 8000 TEU ships, will be disconnected into two separate strings.

- Ships currently deployed on the AE7 string will switch to AE10 - 10 ships consisting of 8 x E class (15500 TEU) plus 2 x 13090 TEU chartered newbuilds, covering Gdansk, Gothenburg and Aarhus, plus Rotterdam and Bremerhaven, to Ningbo, Shanghai, Yantian and Port Tanjung Pelepas only.

- The remaining 13090 TEU newbuilds will be deployed on the AE2 string with existing c 8000 TEU ships.

# Maersk's new rotations

| AE1 | AE2 | AE7 | AE10 |
|---|---|---|---|
| Felixstowe | Bremerhaven | Bremerhaven | Rotterdam |
| Rotterdam | Hamburg | Felixstowe | Bremerhaven |
| Bremerhaven | Rotterdam | Zeebrugee | **Gdansk** |
| | Felixstowe | Bremerhaven | **Aarhus** |
| Tanger Med | Antwerp | | **Gothenburg** |
| | | Malaga | Bremerhaven |
| Ningbo | Singapore | | Rotterdam |
| Kobe | Busan | Ningbo | |
| Nagoya | Hakata | Shanghai | Hong Kong |
| Yokahama | Xingang | Xiamen | Ningbo |
| Ningbo | Dalian | Yantian | Shanghai |
| Shanghai | Qingdao | Tanjung Pelepas | Yantian |
| Hong Kong | Kwangyang | | Tanjung Pelepas |
| Yantian | Shanghai | Algeciras | |
| Tanjung Pelepas | | | Rotterdam |
| | Bremerhaven | Bremerhaven | |
| Felixstowe | | | |

*"There are more things in heaven and earth…than are dreamt of in your philosophy"*

*Hamlet, Act 1*

# The 18,000 TEU ship

- The Malacca max 18,000 TEU ships planned by Daewoo report to be:

  470m loa,

  60m beam

  15.7m draught.

- The biggest ships at the moment, Maersk's "E" ships at 14,800+ TEU, are 398m loa, 56.4 beam, and 16m draught (and thus "Post New Panamax" 2014)

- Not sure about plans for the 18000 TEU newbuilds. Having decided to deploy the 15550 TEU ships in the Baltic, it is not much of a step to 18000 TEU ships, but Maersk may decide to deploy them on a more conventional rotation (including Felixstowe and Antwerp)

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# Challenges to face, Lessons to learn

- The market is dynamic!

- Forecasting should be by commodity AND industrial sector because
  - trades react differently
  - level of market penetration (and scope for growth) varies by commodity

- Demand likely to grow by 3% p.a. in medium term (+ any conversions from bulk sector) – growth will continue to reflect long term decisions on industrial location and investments

- Port traffic grows at a faster rate than GDP and trade, but falls harder too!

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# Thank you

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