

An Eye on Cruises

Cruise Market Overview 2012

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University of the Aegean – Chios 13.09.2012

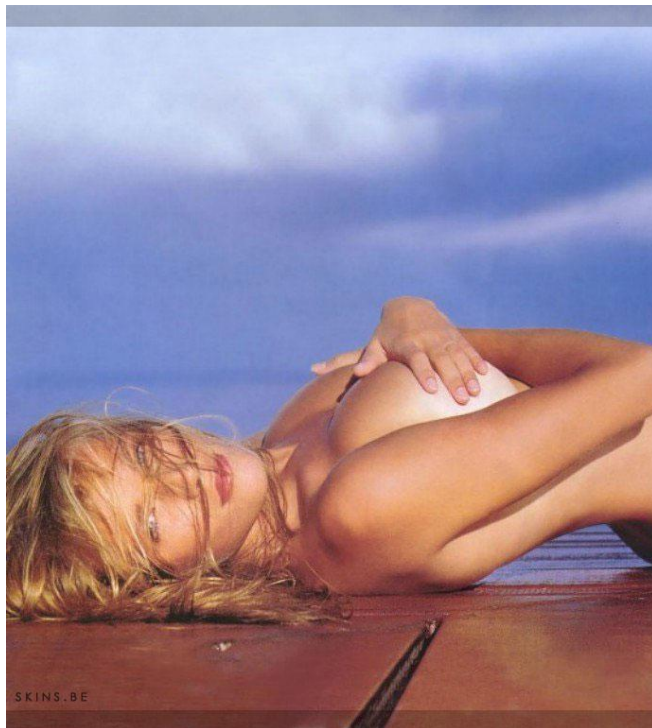


Cruise Research Society

What is your image of the typical cruiser? This...



... Or this?!!



Carnival Cruises' Boobiedecks May or May Not Disappoint

February 1, 2007 at 11:52 AM | by [djk](#) | [Comments \(2\)](#)



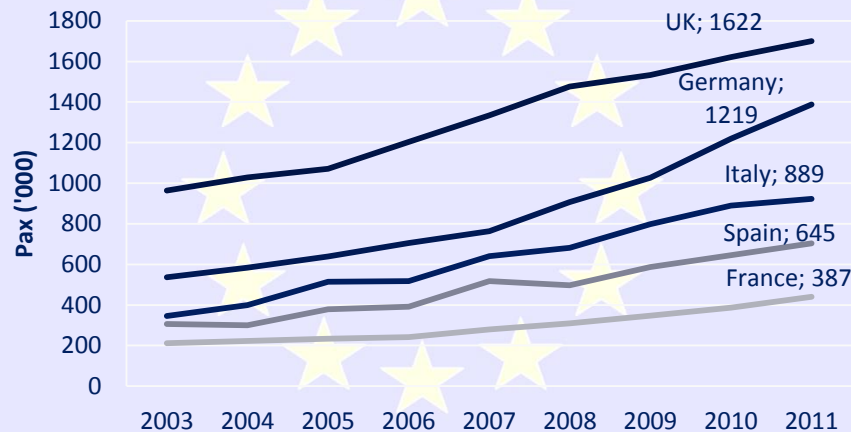
Cruises are becoming more
differentiated, appealing
to a **wider population** of
holiday makers

Source Market Perspective:

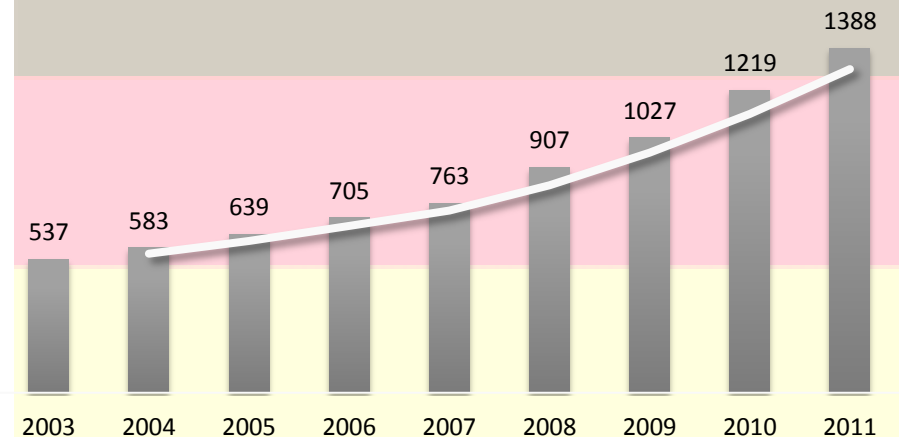
Cruise Sector Growth & Pax Developments

**Top 5 Source Markets = 83%
of Total EU**

European Pax Development



German Pax Development ('000)



European Average Growth Rate

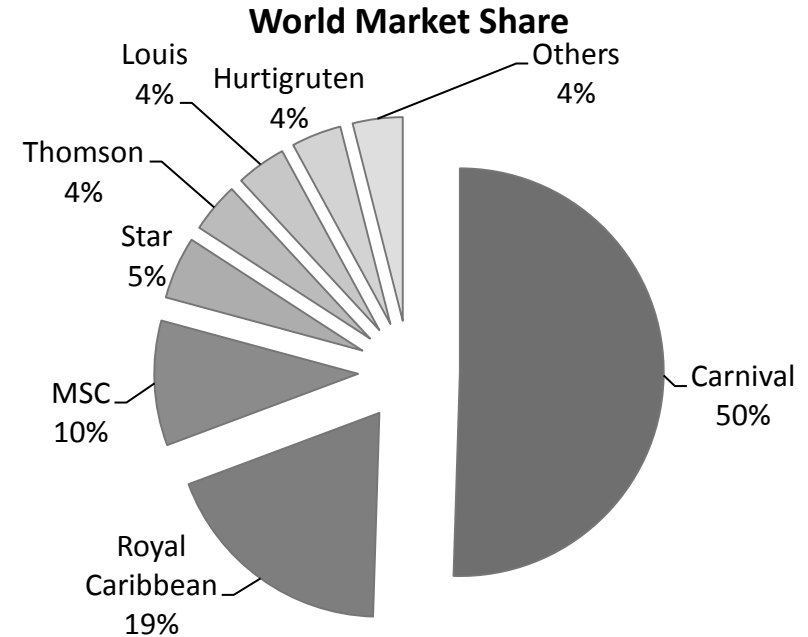
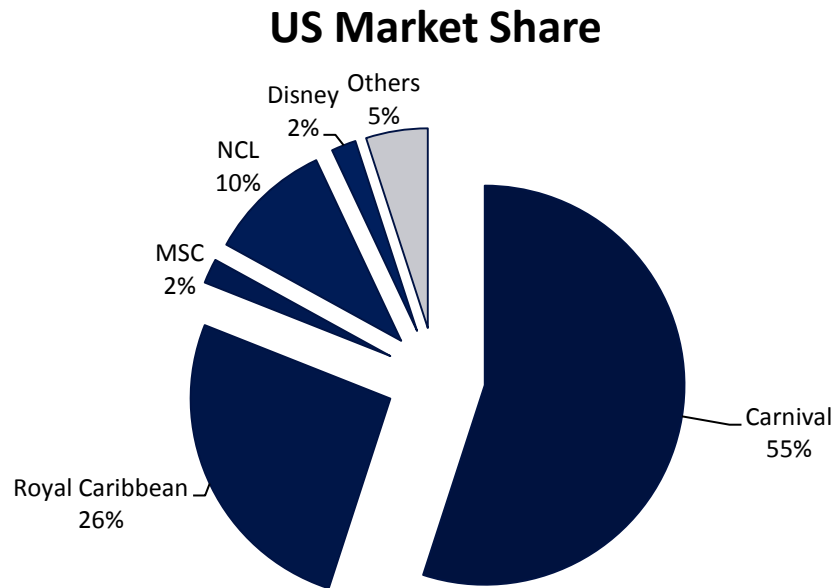
- 2008-2011 = 11.8%
- 2010-2011 = 13%

German Average Growth Rate

- 2006-2010 = 15.2%
- 2010-2011 = 14%

Concentration through M&A

“Cruise Sector Duopoly?”



- ▶ Leverage over suppliers & destinations
- ▶ Economies of scale
- ▶ Risk-spreading & financial reserves
- ▶ Difficult for new entrants due to shipbuilding sector concentration

Capacity Development

Mega-Ship Trend... Why?

► 2010*:

- Global cruise fleet 298 vessels amounting > 400,000 berths
- About half operate in Europe

► 2012-2016**:

- Total Ships: 20
- Total Berths: 57,751
- Total Order Book Value: \$13,468,000,000.00
- Average Price Per Berth: \$273,183



Cruises equal a licence
to print money!

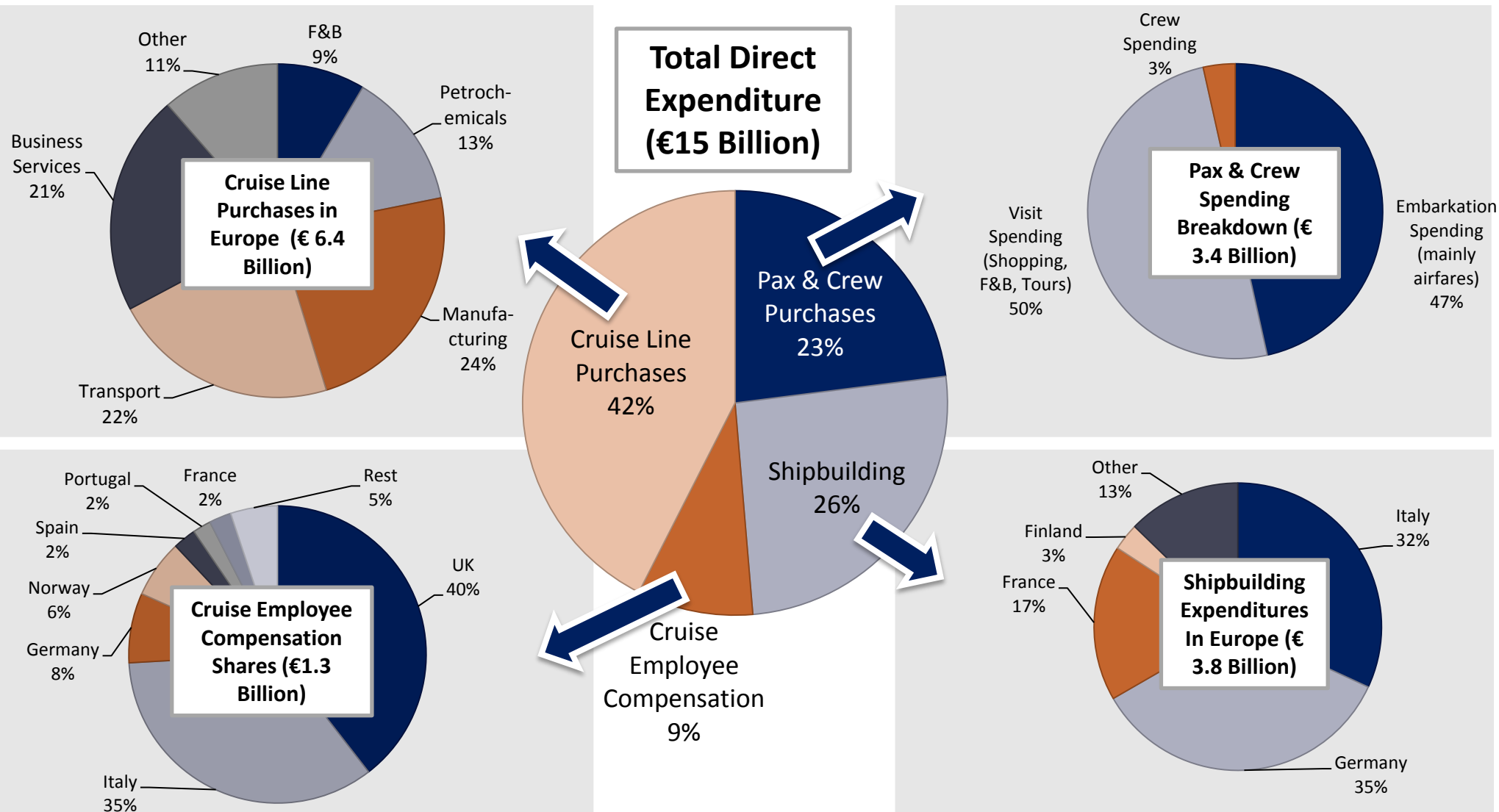
“Evil - Eye” belief, that a a ‘look of envy’ can cause misfortune to the fortunate ones



Let's put the cruise sector to the test!

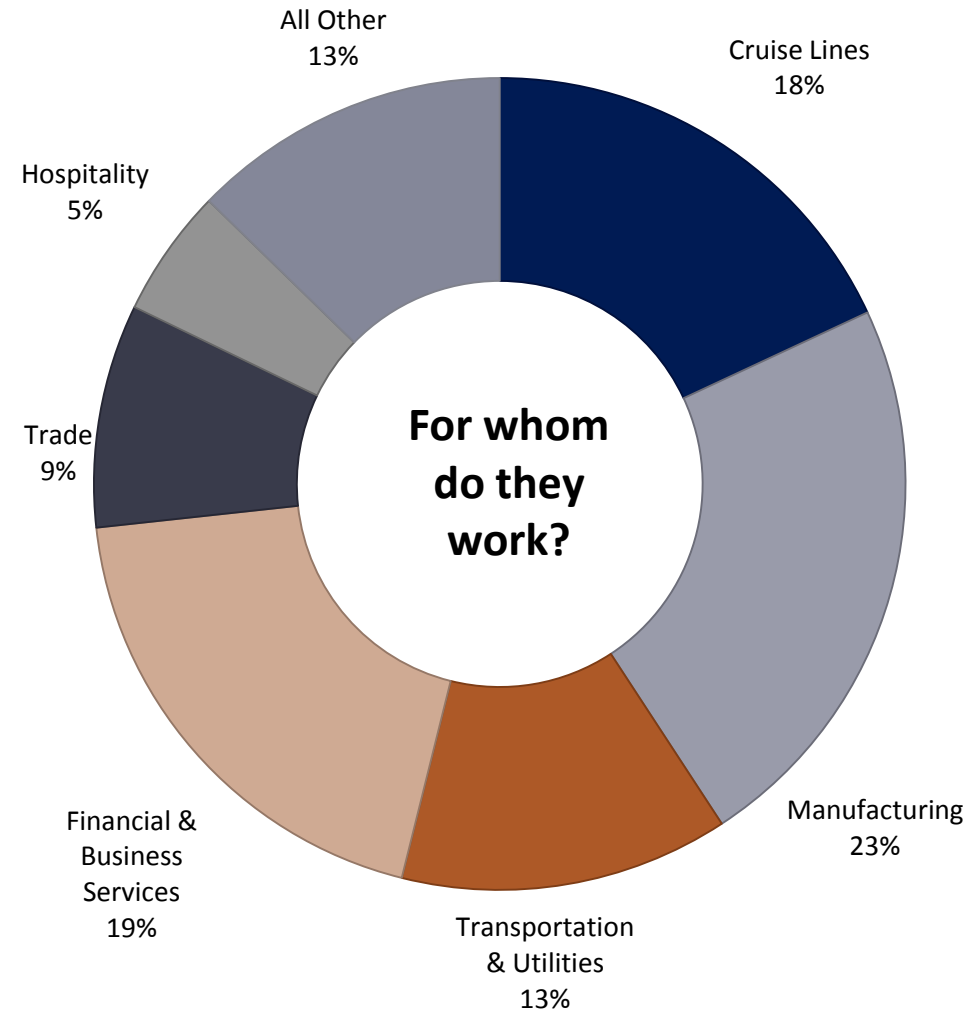
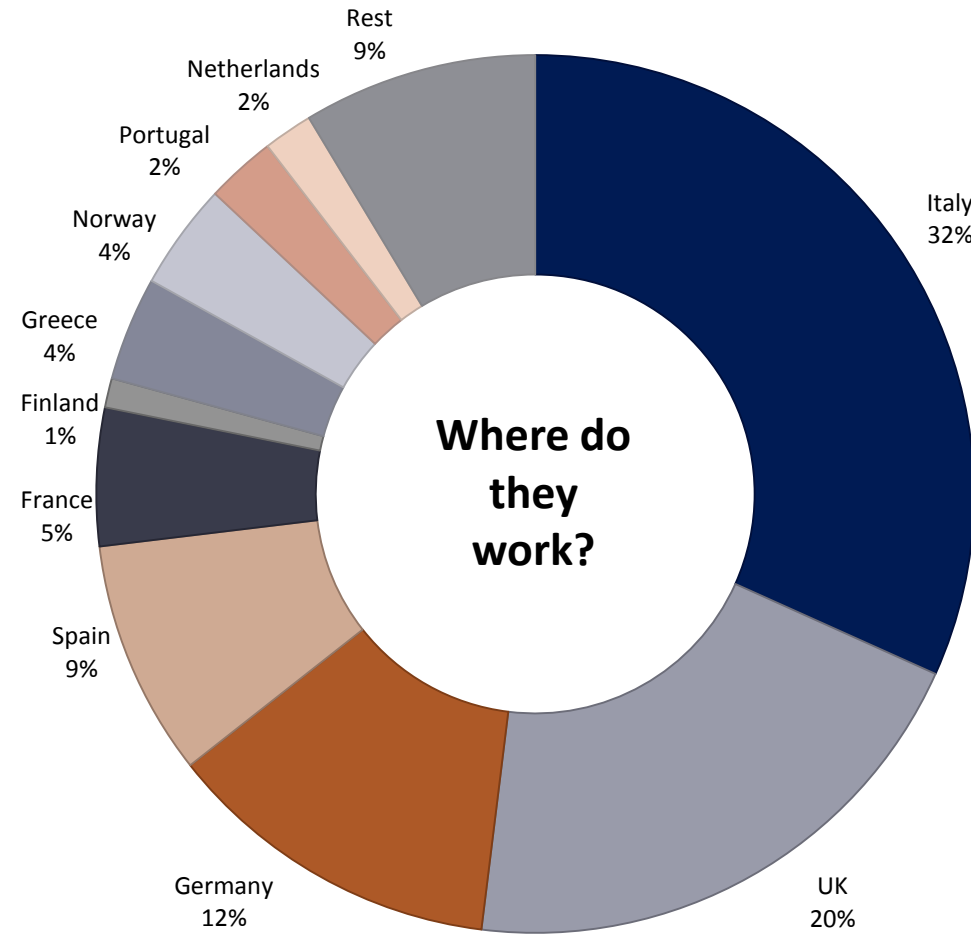
The Cruise Economy 2012:

Direct Economic Impact of Cruise Tourism in Europe



The Cruise Economy 2012:

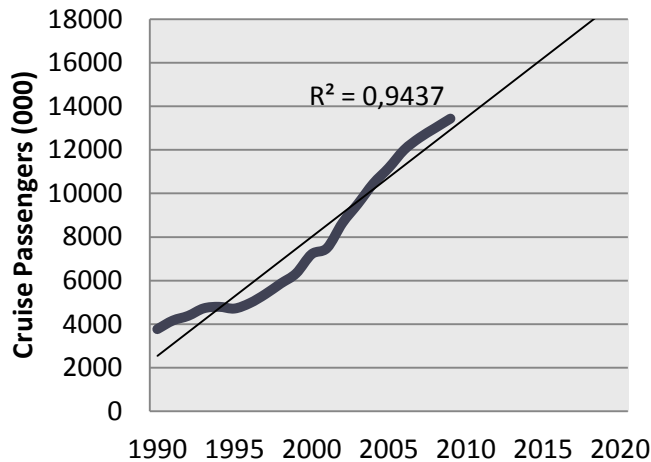
Total Cruise Employment In Europe (315,500 Employees)



Cruise **Income** is primarily
created by **production** at
the **source markets**; not
by consumption at the ports!

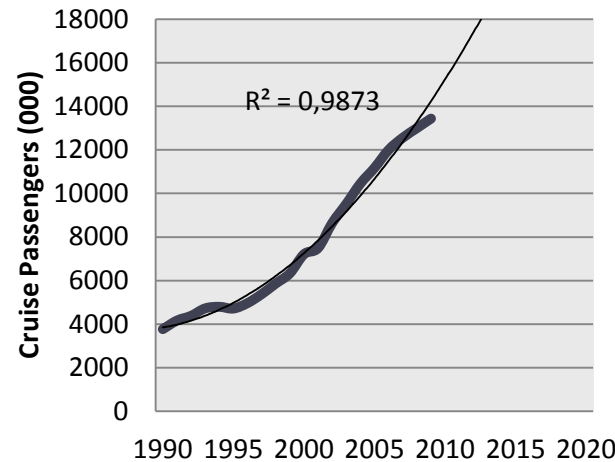
A Critical View on Growth: Extrapolation of Historical Data

Linear Extrapolation



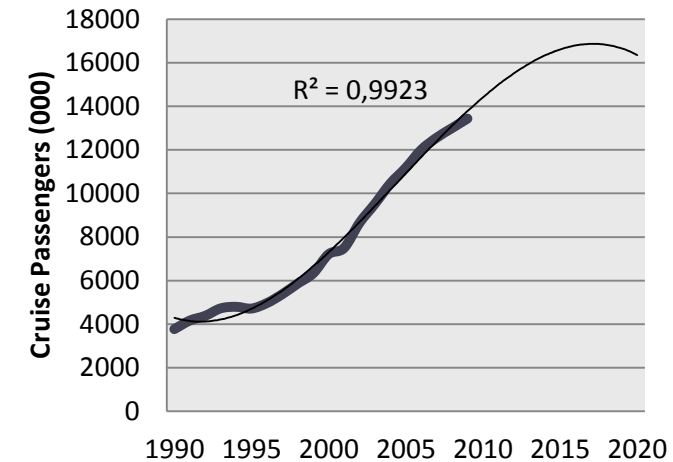
- ▶ Least data fit ($R^2 = 94\%$)
- ▶ 30 Million Pax by 2041
- ▶ Indefinite growth assumption

Quadratic Extrapolation



- ▶ Second best data fit ($R^2 = 98\%$)
- ▶ 69 Million Pax by 2041
- ▶ Indefinite growth assumption

Cubic Extrapolation (S-Shaped Curve)



- ▶ Best data fit ($R^2 = 99\%$)
- ▶ Compatible with the Product Life Cycle concept
 - ▶ Historically applicable for tourist destinations (Butler 1980, 2006) and
 - ▶ Tourism segments (Zimmermann 1997)

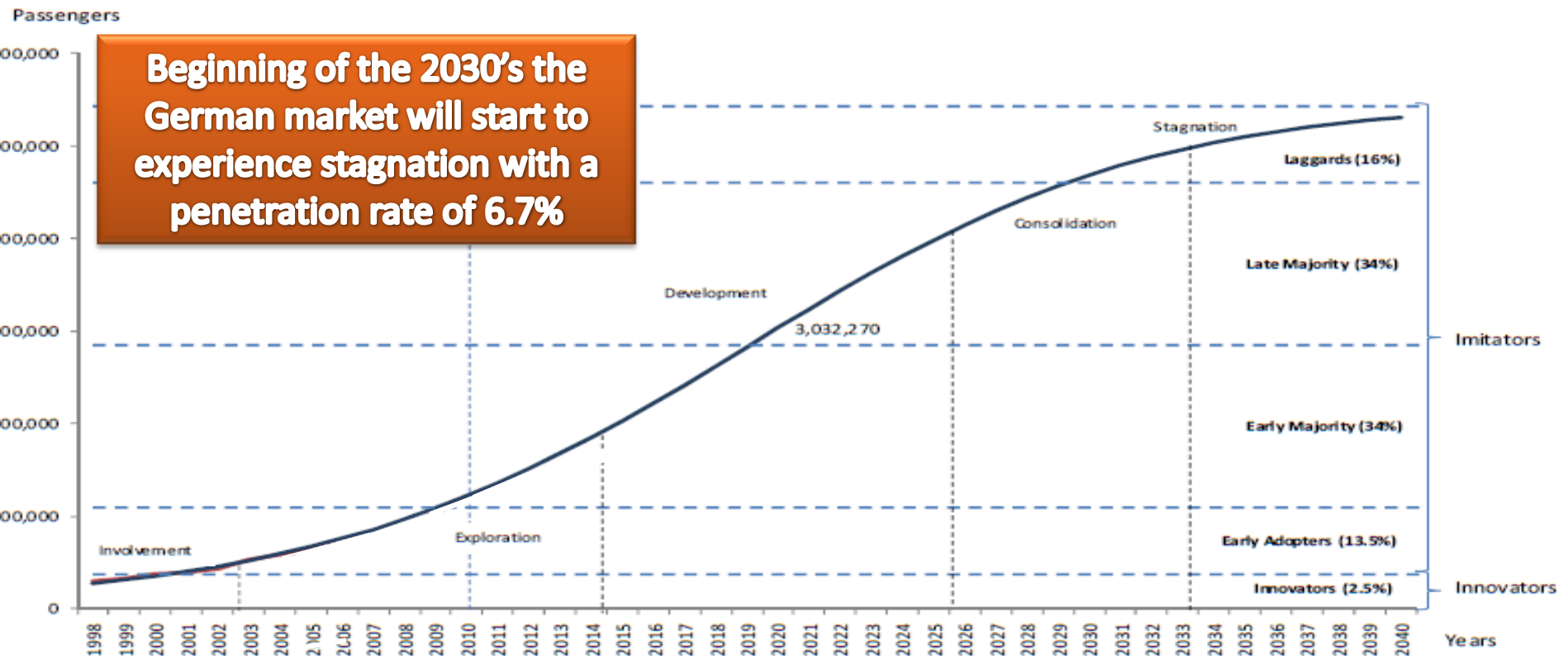
Forecast Implications?

Weak signals (e.g. ticket price reductions; mega-ships / onboard revenue)

Validity of forecasting demand on the basis of supply

Another Forecast

A PLC-Based Forecasting Model



- Bass Diffusion Model (1968):
 - Represents an S curve – Just like the Product- or Destination- Life Cycle
 - Can be used for forecasting the slope of the S curve, on the basis of the market potential and the degree of imitation and innovation

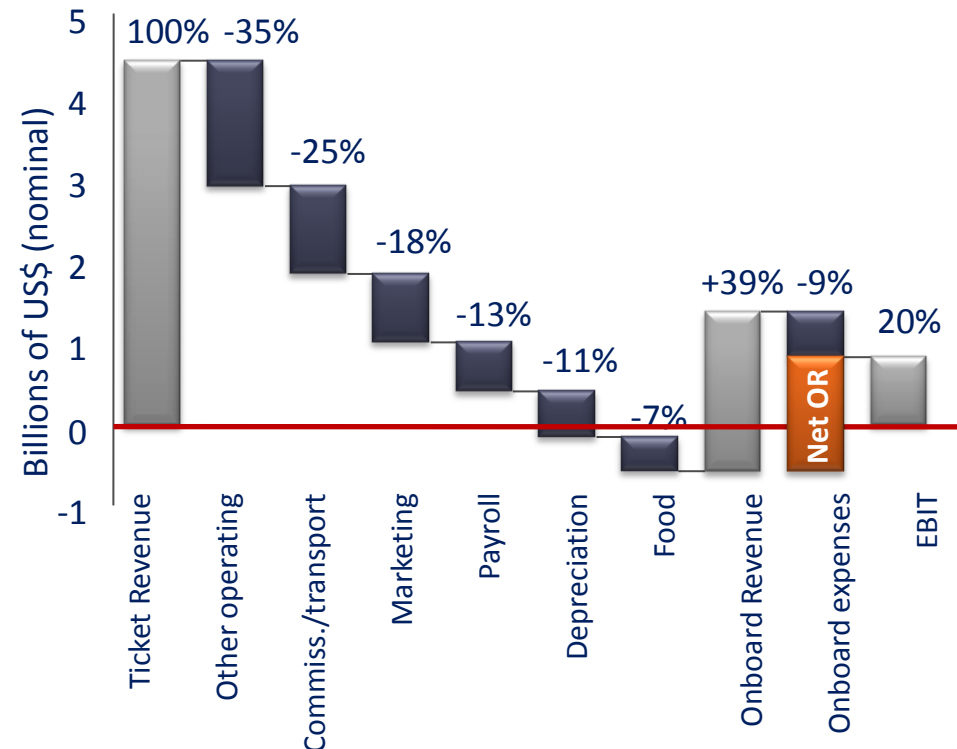
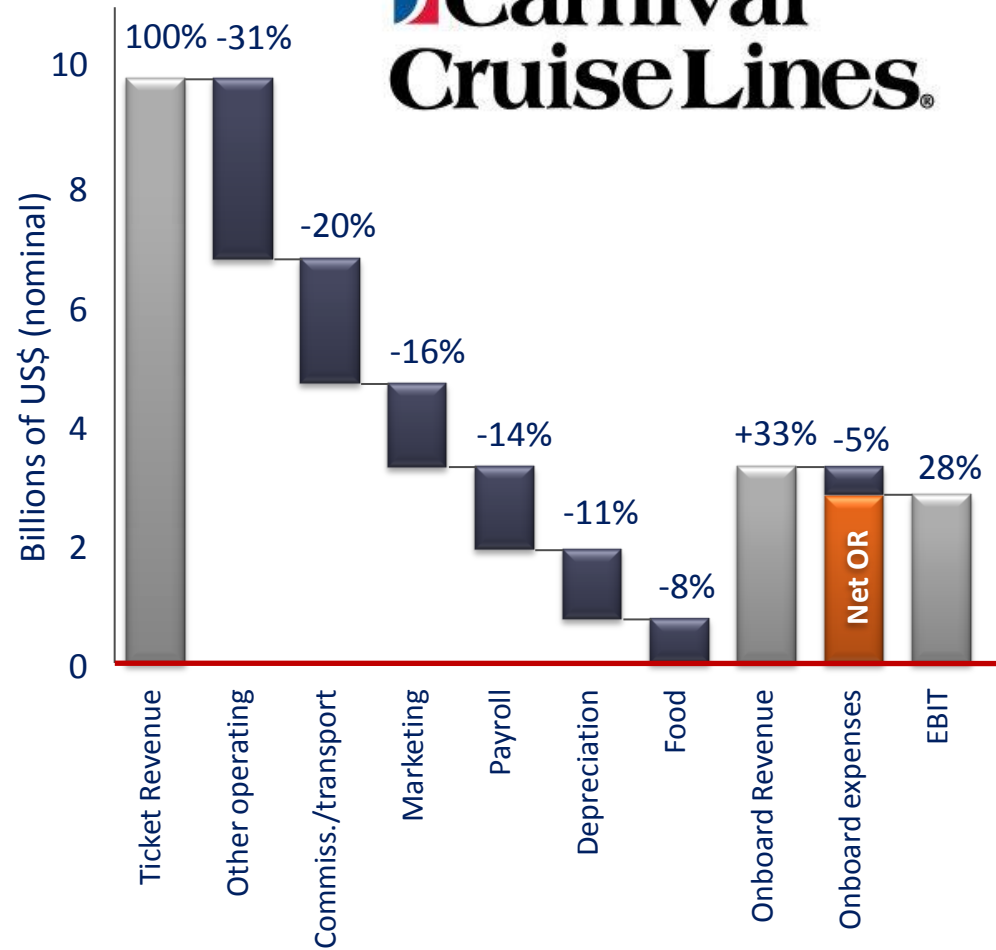
- Assumptions:
 - Market Potential in Germany approx. 5 million
 - Travellers spending more than €1700 on a vacation
 - Demographic structure remains the same
 - Innovation and imitation coefficients are calculated from the historical data (currently demand is determined by imitators – cruise market has left the introduction phase)

The only form of
continuous **growth** is
taxation... but not for
cruises!

Balance Sheet Analyses (RCL & Carnival) 2007*

Dependence on Onboard Revenue

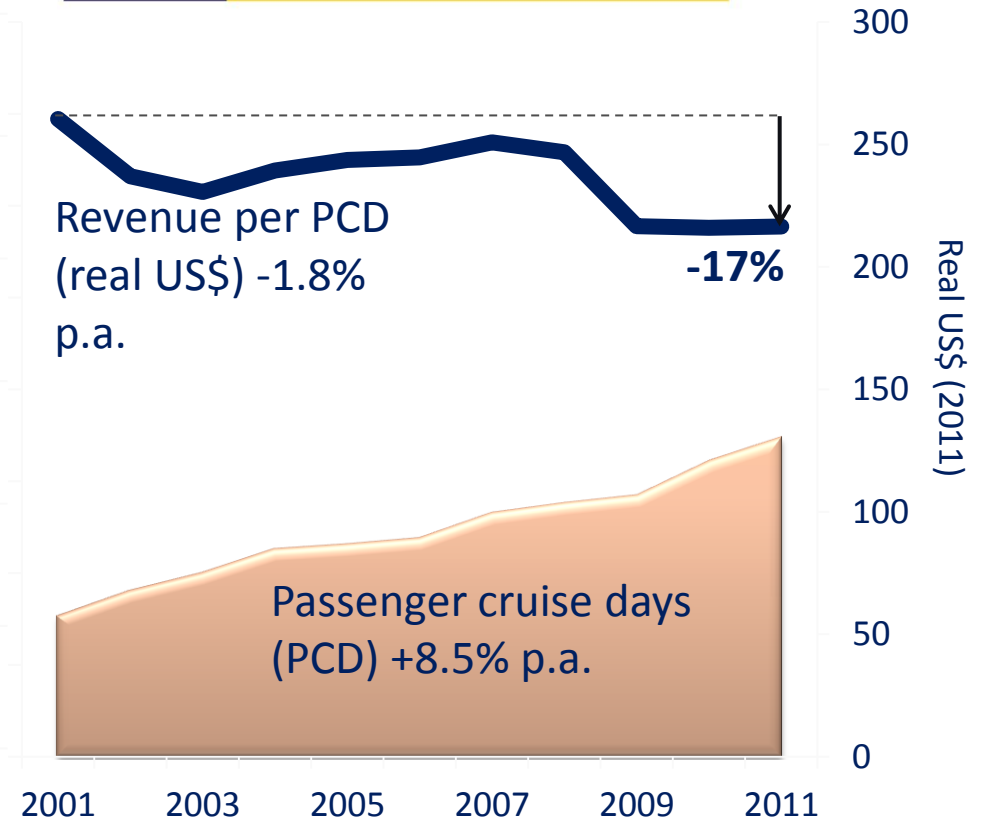
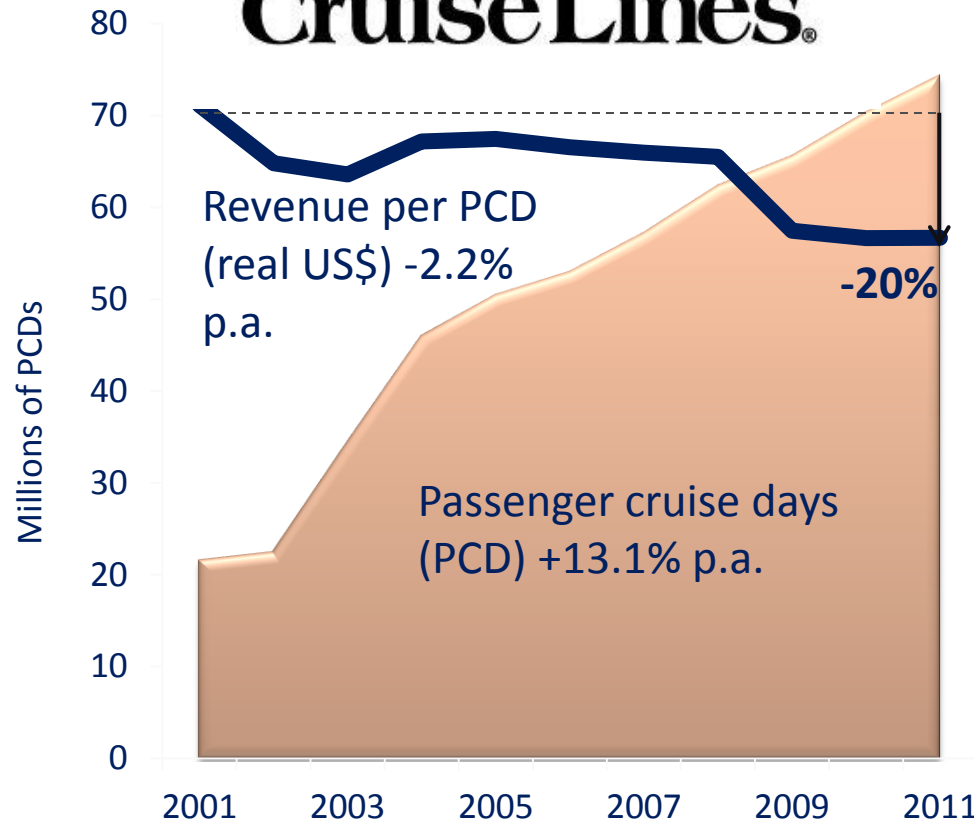
**Carnival
Cruise Lines®**



Competition on land monopoly at sea

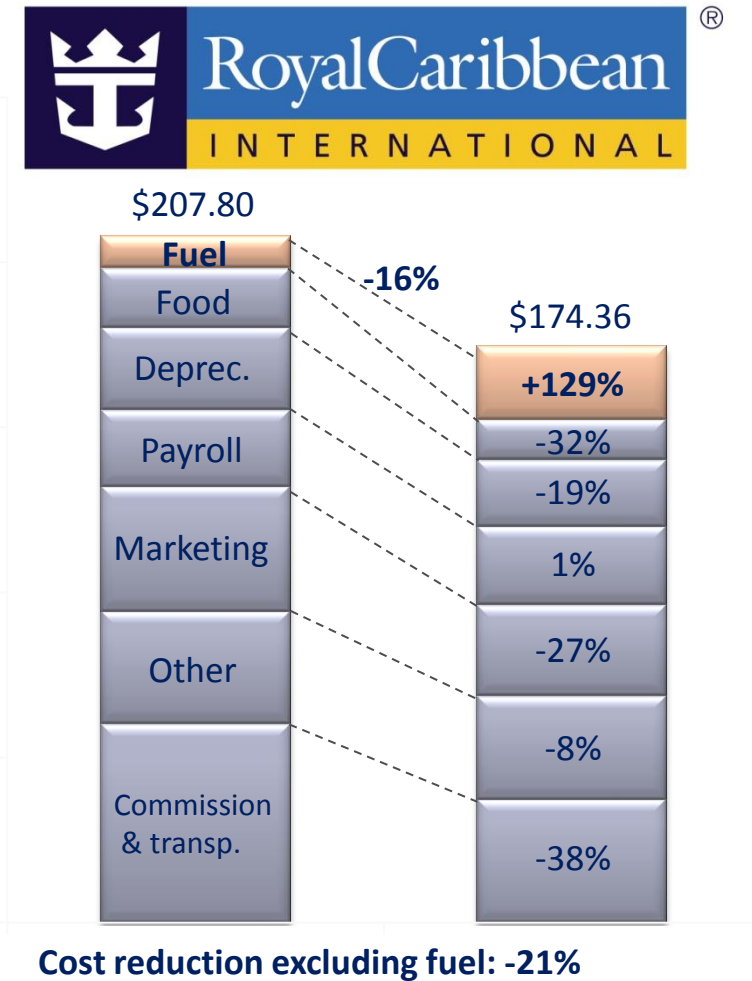
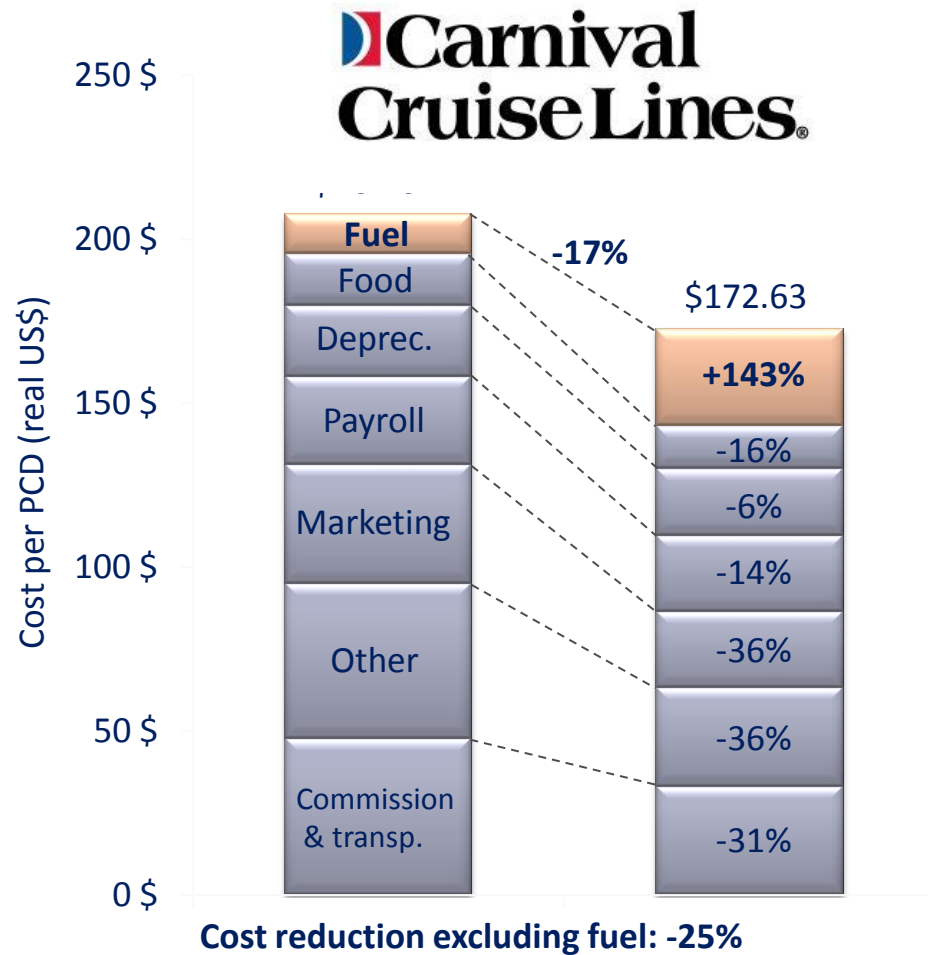
Balance Sheet Analyses (RCL & Carnival) 2011*

Dependence on Onboard Revenue



Balance Sheet Analyses (RCL & Carnival) 2011*

Cost-Saving Pressures?!



Costs per PCD 2001 vs. 2011 excluding cost of onboard sales

Profit margins have
decreased by approx. **4%**
over the last decade and
are following a downward
trend

“Barbarians at the Gate(ways)”

The Price of Cost-Cutting & Profitability

Environment

- Image issue ('From Paper to Practice')
 - Friends of the Earth Scorecard
- Cruise Operators' sustainability reports
- Integration of new technologies on existing fleets

Overcrowding & Itineraries

- Customer satisfaction deterioration
- Relationship between locals & tourists (Antagonism)
- Destination limitations (Seasonal, infrastructural)

Cost Pressures & Competition

- Rising fuel prices
 - Safety & security regulations
 - Personnel costs
- Fusion packaged tourism – cruise tourism (extended competitive scope)

Social Responsibility

- Tax avoidance – Flags of convenience
 - Image issue ('Sweatships')
- Intl Transport Workers' Federation (ITF)
- International Labour Organisation (ILO)
- Crew living & employment conditions
- Criminality on board (Balancing security with recreation)

The age of online
transparency has
arrived...What happens
at sea does not stay at
sea anymore!

Perhaps the 'evil eye' is not a superstition...



... But a metaphor for the inevitability of systemic laws in the age of a technological diffusion and digital democracy!

Thank You for your Attention



► Research Functions:

- Founder & Chairman of the **Cruise Research Society**
(<http://www.cruiseresearchsociety.com>)
- Co-Director of the **Institute for Maritime Tourism (IMT)**
(<http://www.imt.hs-bremerhaven.de/>)
- Editorial Board Member of the Journal of the European Journal of Tourism, Hospitality and Recreation (EJTHR) –
(<http://www.ejthr.com/>)
- Reviewer of the Tourism Management Journal
(<http://journals.elsevier.com/02615177/tourism-management/>)

► Administrative Functions:

- Dean of Studies – Faculty of Business & Economics
- Chairman of the CIM Examinations Committee
- Member of the CIM Study Affairs Committee

BACKUPS

- *Clean Ships?*
- *Sweatships?*
- *Friends of the Earth Scorecard*
- *References*

Cruise Sector and the Environment

"Clean Ships?"

Main Sources:

- Incinerators
- Engines

An average cruise ship's daily emissions

- = 12.000 automobiles

401g of CO2 is emitted per Cruise Pax / Km

- 36 times more than a Eurostar Pax / Km
- 3 times more than a Boeing 747 Pax / Km
- An estimated 60,000 people die worldwide each year as a result of under-regulated shipping air emissions
- This estimated to grow by 40 percent by 2012

Black Water:

- Human Waste (Toilets, Medical Facilities)
- 30 Litres per Cruise Pax / day

Gray Water:

- Wastewater from sinks, showers, galleys, laundry, and cleaning activities
- 340 Litres per Cruise Pax / Day

Solid Waste:

- Plastic, paper, wood, cardboard, food waste, cans, glass, etc.
- 1990s: 3.5 Kg per Cruise Pax / Day
- 2010: 1.7 Kg per Cruise Pax / Day

Oily Bilge Water

- Water containing fuel, oil, wastewater from engines and other machinery
- Average cruise ship produces 8 tons in 24 hours of operation

Ballast Water:

- To stabilize the vessel during transport
- Often taken on in one location after a ship discharges wastewater or unloads cargo and then discharged at the next port of call
- Contains a variety of biological materials, including non-native plants, animals, viruses and bacteria

Cruise Employment

"24/7 for 500 Dollars a month!?"



Costs of getting a

Cruise Job*

Applicants from poor countries (Philippines, Indonesia, India)
 Between \$1500-2000 to get the job
 Job start with a credit
 Money sent home = \$300 / month (7 months' work + 2-3 months' lay-off)

Indicative Wage levels**

F&B: Low paid, non-customer facing staff = \$350-500 / month
 Housekeeping: Low paid, non-customer facing staff = \$600-800 / month
 Cruise staff: Staff organising activities for passengers = \$1800-2100 / month

Working Conditions:

Long-working hours

- ... But tax free income!?

Private quarters & crew facilities – quality of life

- ... But no extra living costs (accomm & catering)

Long absence from family & friends

Friends of the Earth: 2010 Cruise Ship Report Card*

Cruise Lines	Sewage Treatment	Air Pollution Reduction	Water Quality Compliance	Web Enviro Info*	Change From 2009	2010 Final Grade
Holland America Line	B+	C-	B+	✓	↓	B-
Norwegian Cruise Lines	A	C-	C+	✓	↔	B-
Princess Cruises	C+	A-	D+	✗	↓	C+
Cunard Cruise Line	A	F	no Alaska voyages	✗	↔	C-
Disney Cruise Line	A	F	no Alaska voyages	✗	↑ Most Improved	C-
Regent Seven Seas Cruises	C+	F	A	✗	↔	C-
Celebrity Cruises	A	F	n/a	✓	↔	D+
Royal Caribbean Int'l	D+	F	A-	✓	↑	D+
Carnival Cruise Lines	F	F	A	✗	↔	D-
Silversea Cruises	F	F	B-	✗	↔	D-
Crystal Cruises	F	F	no Alaska voyages	✗	n/a	F

Whether a cruise line has installed the most advanced sewage and wastewater treatment systems available instead of dumping raw or minimally treated sewage directly into the water

Whether a cruise line has retrofitted its ships to "plug in" to available shore-side electrical grids instead of running polluting engines when docked

To what degree cruise ships violated 2009 water pollution standards designed to better protect the Alaskan coast

How easy the cruise lines have made it for the average consumer to find information on their websites about cruise industry environmental practices and technology

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