

Morgan Stanley

An Introduction to How Airlines Manage Commodity Price Risk

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Agenda

- Historical context
- A look at the “risk”
- The basics of risk management
- The Aer Lingus approach
- Alternative approaches
- Some observations

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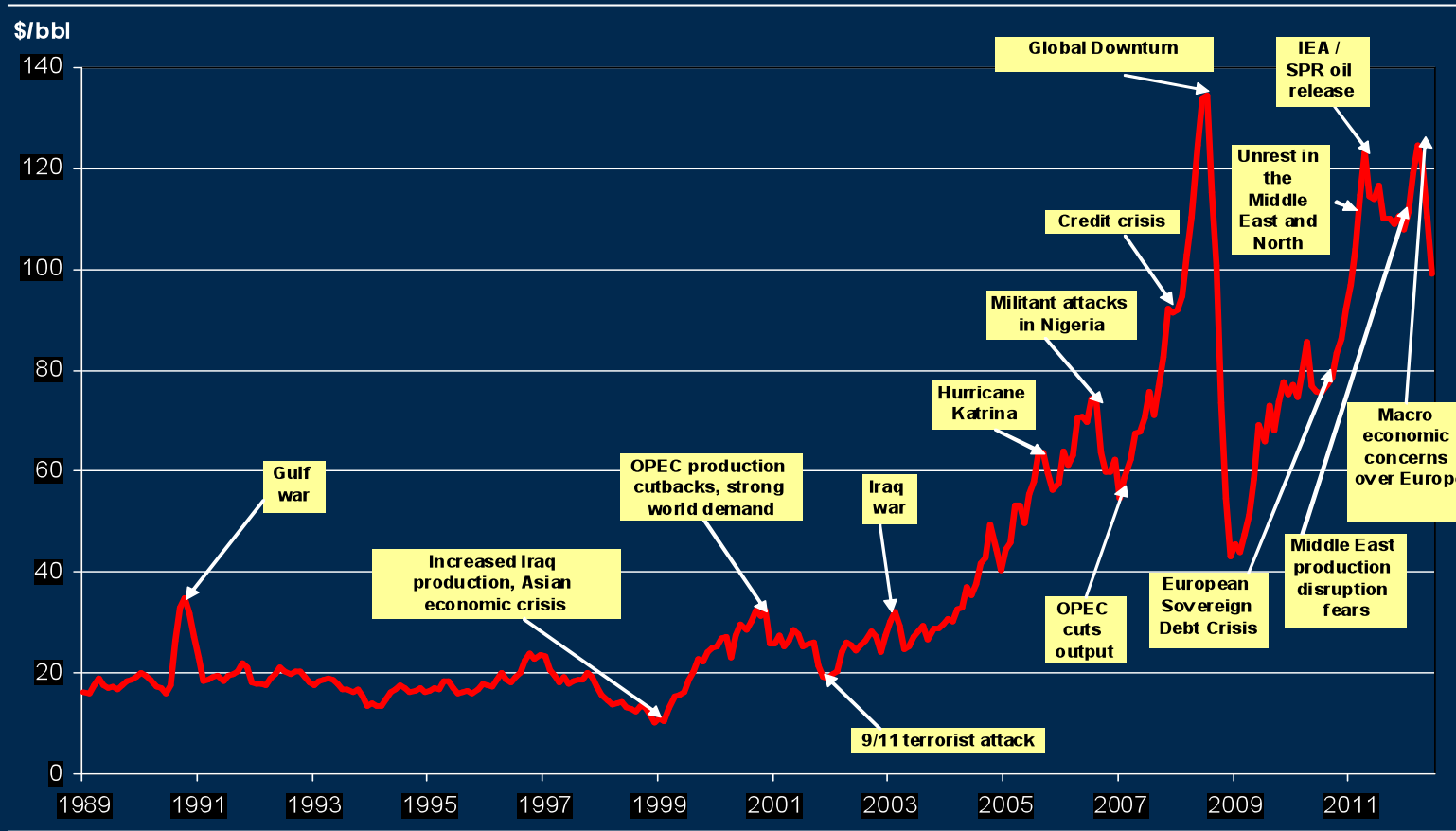
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A History of Airlines & Jet Fuel Risk Management

Historical Price Evolution of ICE Brent



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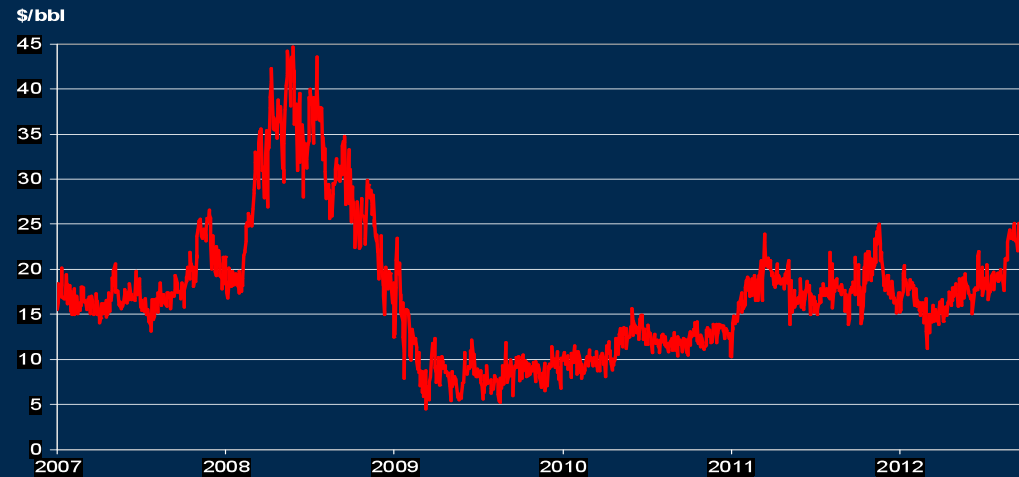
What is the "Risk" Being Managed?

Relating the Headline Price of Crude Oil to an Airline's Real Exposure

Crude Oil (Brent)



Jet vs. Brent "Crack" Spread



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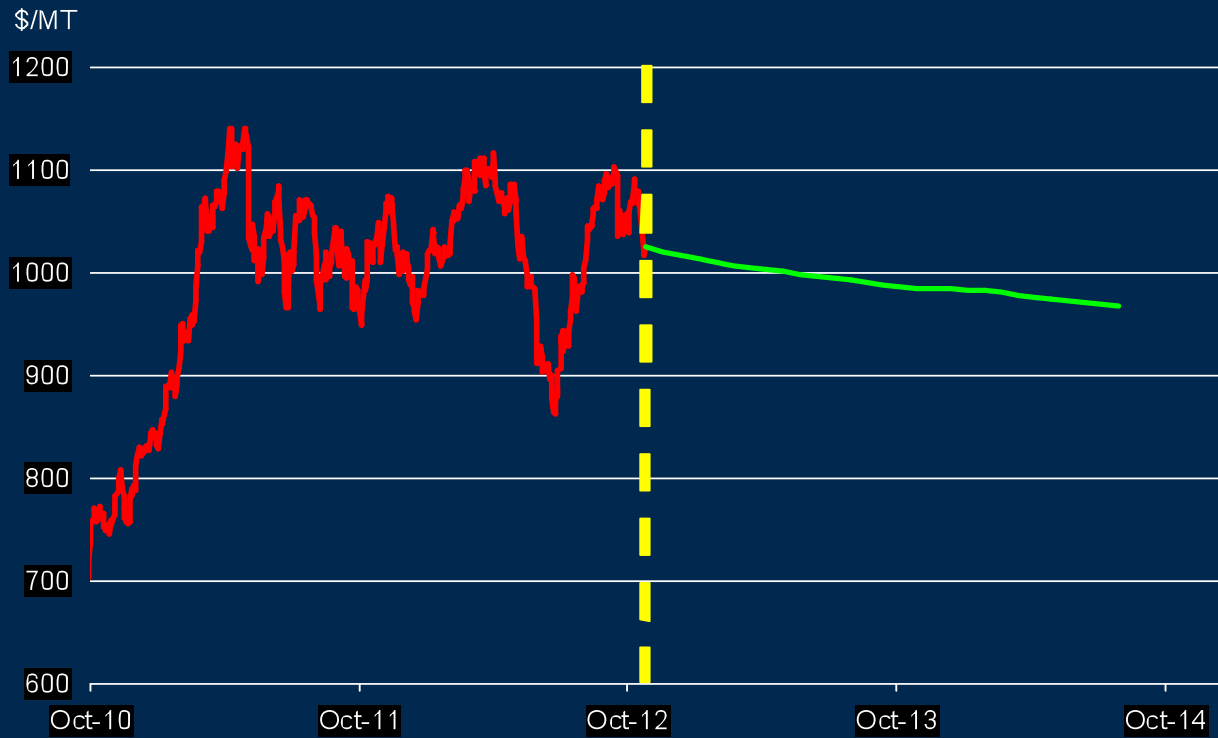
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The Forward Curve

The Physical Market & The Forward Derivative Market

Historical Price Evolution with Current Forward Curve:
Jet NWE CIF Cargoes



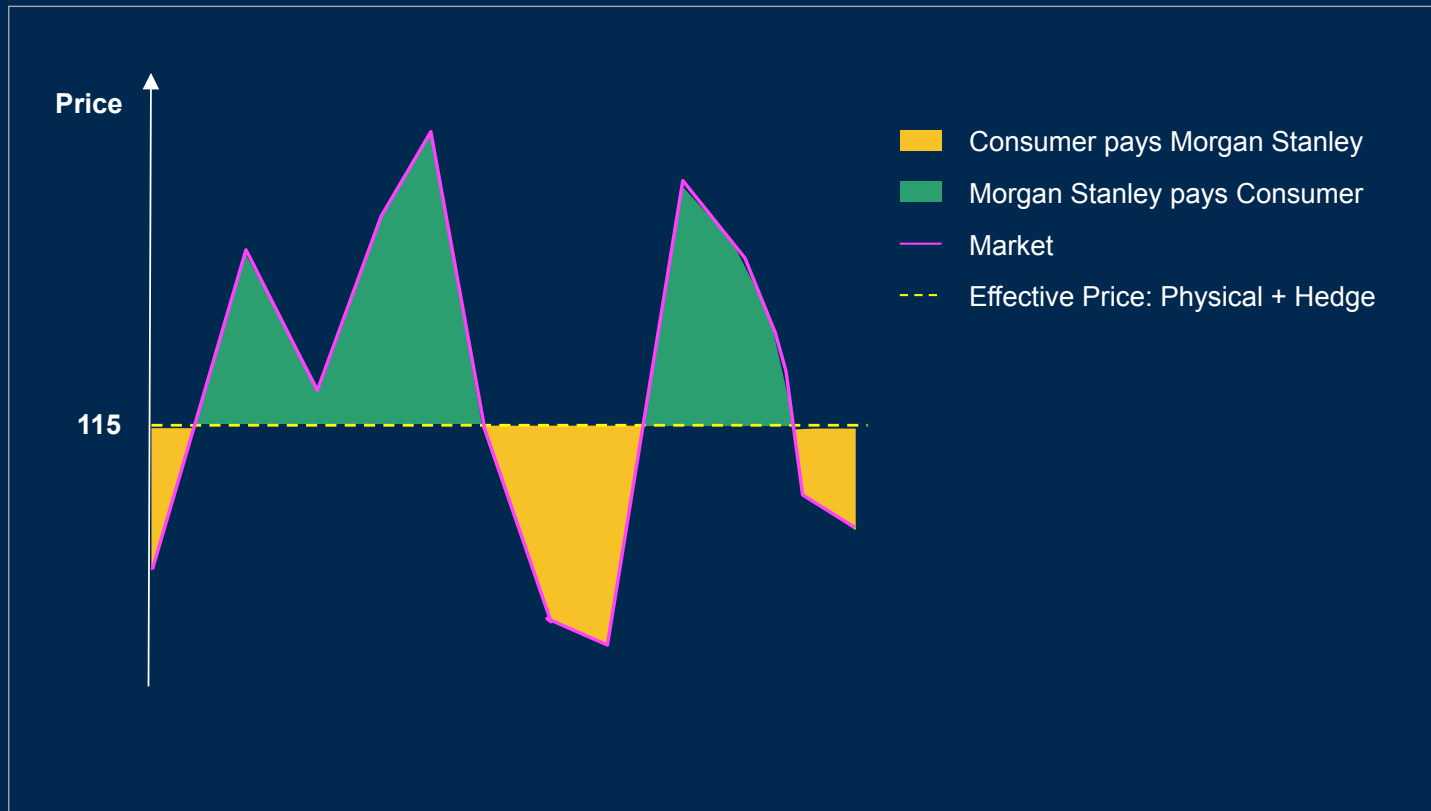
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Basics of a Financial Derivative

The swap is the backbone of the derivative market and is a simple cashflow instrument



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The Aer Lingus Approach

History and identification of actual risk to be hedged

- Identification of risk was the easy part
- Component part of our delivered Jetfuel:-
 - circa 23% of our cost base
 - Jetfuel (hedge-able)
 - “Into plane” cost (negotiable)
- Treasury responsibility is for **hedge-able** cost
 - Hedging is **not** the same as fixing the price with suppliers
- Competitive market-place with limited ability to pass fuel price increases on to passengers
- Many airlines, including Aer Lingus, have been hedging fuel costs since the 1980’s

The Aer Lingus Approach

Hedging product depends on target result

Target result	Hedge product	Advantages	Disadvantages
Lock-in forward prices	Vanilla swap	Protected against rising prices	Lost benefit from fall in prices
Limit worst case price	Purchased call	Protected against rising prices Benefit from fall in prices	Option premium payable
Limit downside but forego some potential upside	Zero cost collar	Protected against Rising prices	Lost benefit from fall in prices
Limit worst case price up to a threshold level	Two-way, Three-way, Four-way	"Money off" discount	Exposed above threshold Potential loss of upside from price falls

The Aer Lingus Approach

Policy and Strategy

- Reduce the volatility and increase the predictability of Jet fuel costs
 - Risk managed
 - Cost effective
- Systematic, rolling, fuel hedging policy
 - Ranges from 90% in month 1 to 5% in month 24
 - Results in average, known, cover levels:
 - approximately 60% for next 12 months (rolling year 1)
 - Approximately 15% for second 12 months (rolling year)
- Derogation permitted in the event of unusual market conditions

The Aer Lingus Approach

Other matters

- Key is to keep Board appraised of market movements and hedge positions
- Information is key to hedge decisions
 - Live access to prices, news stories and research on Bloomberg
 - Regular contact with industry experts
- IFRS Accounting
 - Hedge accounting achievable, but close liaison with external auditors is important
 - Hedge documentation and effectiveness testing to achieve desired accounting result
 - Avoids volatility in Reported Earnings

Other Approaches

The approach taken by different airlines tends to be a function of a variety of influences:

- Size
 - Large vs Small
- Ownership
 - Private vs Listed/Public
- Organisational culture
 - Dynamic vs Systematic

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Common Pitfalls

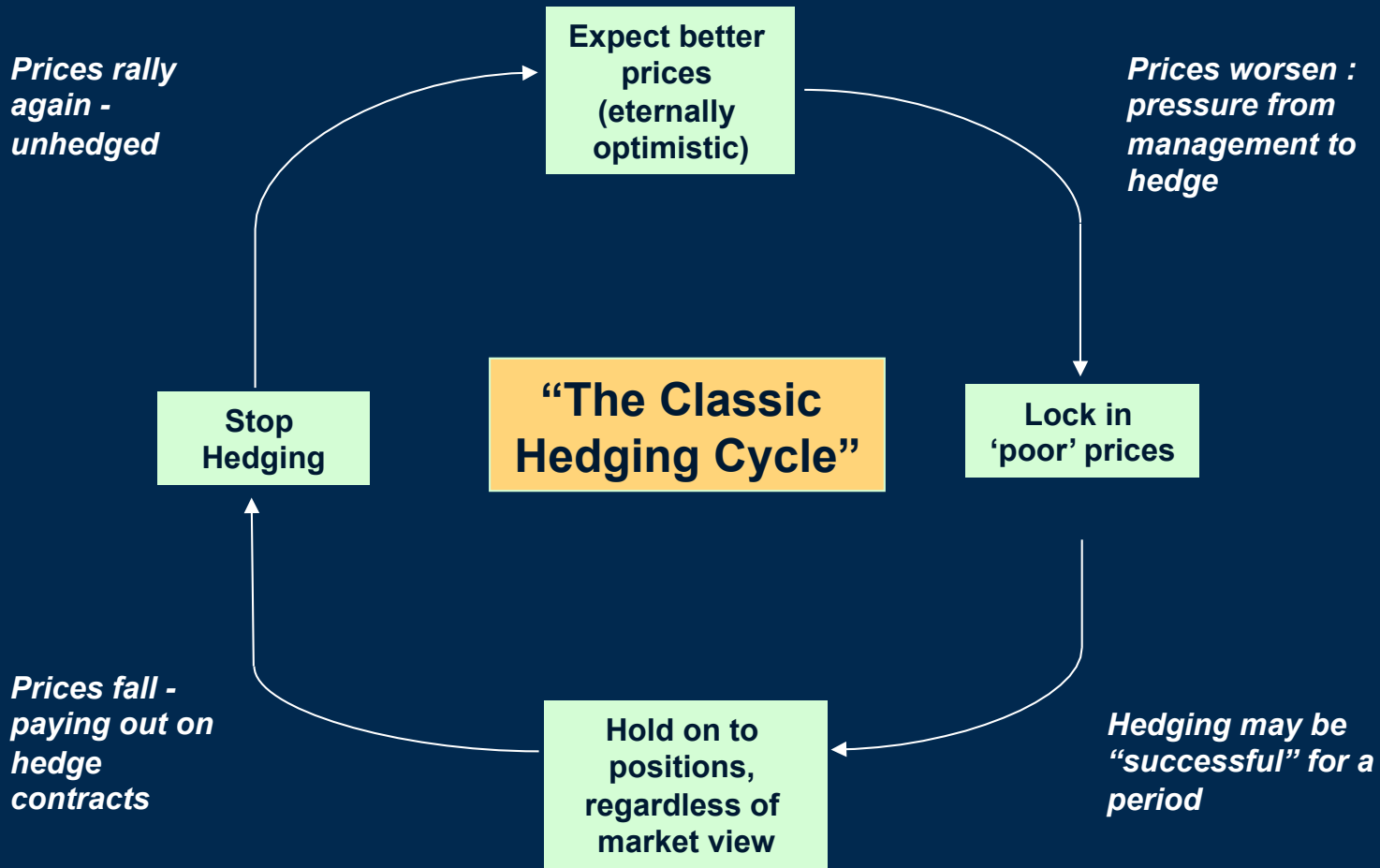
Dealing with a worldwide client base airlines we see familiar patterns of behaviour

- Risk management policy: design & execution
 - “What if....” analysis
 - Maintaining the pace
 - The downside trap
 - Value vs Risk
 - Budget vs Risk
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“Prices might improve if we wait”



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Q&A

Thank-you for your time today

We would be happy to answer any questions you may have

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