

October 6th, 2005
Artimino, Florence - Italy



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PET Purchasing Strategies

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Agenda

- ❑ *The impact of today's PET Price volatility on preforms and bottles*
- ❑ *Is it possible to forecast the PET Price movements?*
- ❑ *PET Supply and Demand*
- ❑ *Major factors influencing PET Price*
- ❑ *Pet purchasing strategies - how to manage the PET Price volatility*
- ❑ *Conclusion*



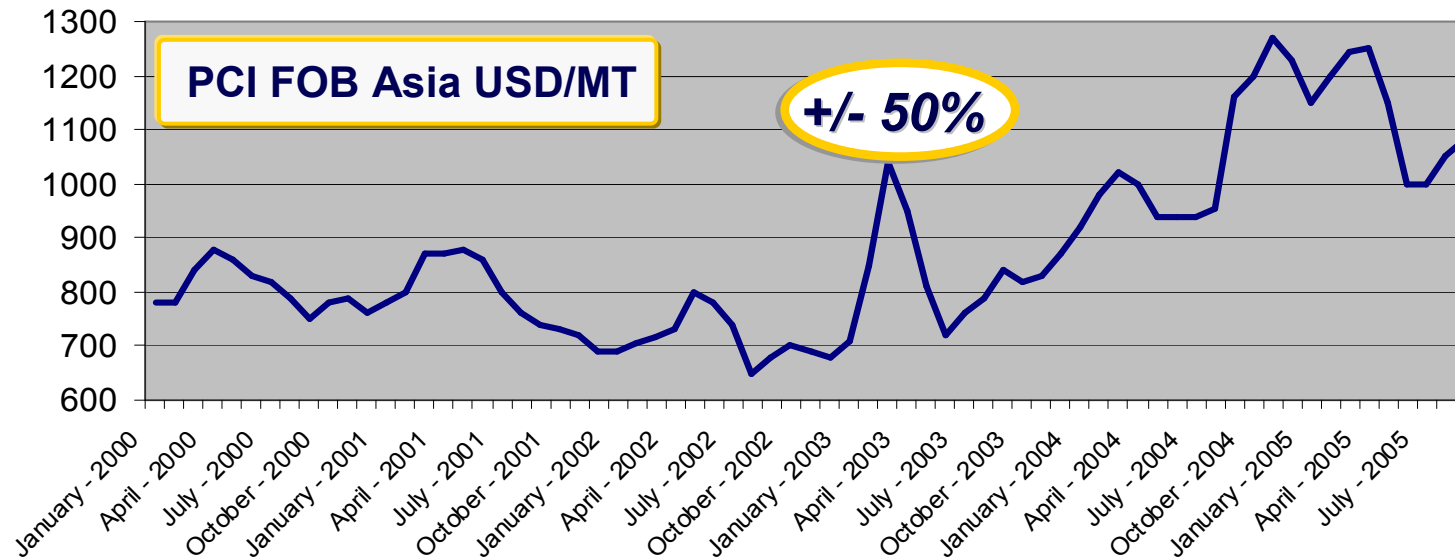
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***The impact of today's PET Price
volatility on preforms and bottles***

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PET Price volatility



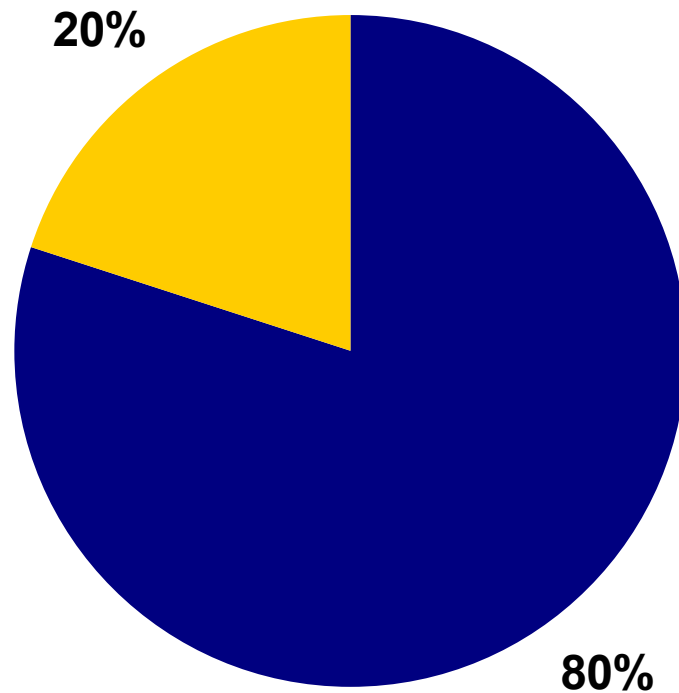
Volatility = Risk = Opportunity



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The impact of PET price volatility on Preforms



- PET Resin
- Assets & Process



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The impact of PET price volatility on Preforms

Incidence of PET Cost on Preform = 80%

In case of a 15% PET Price Increase

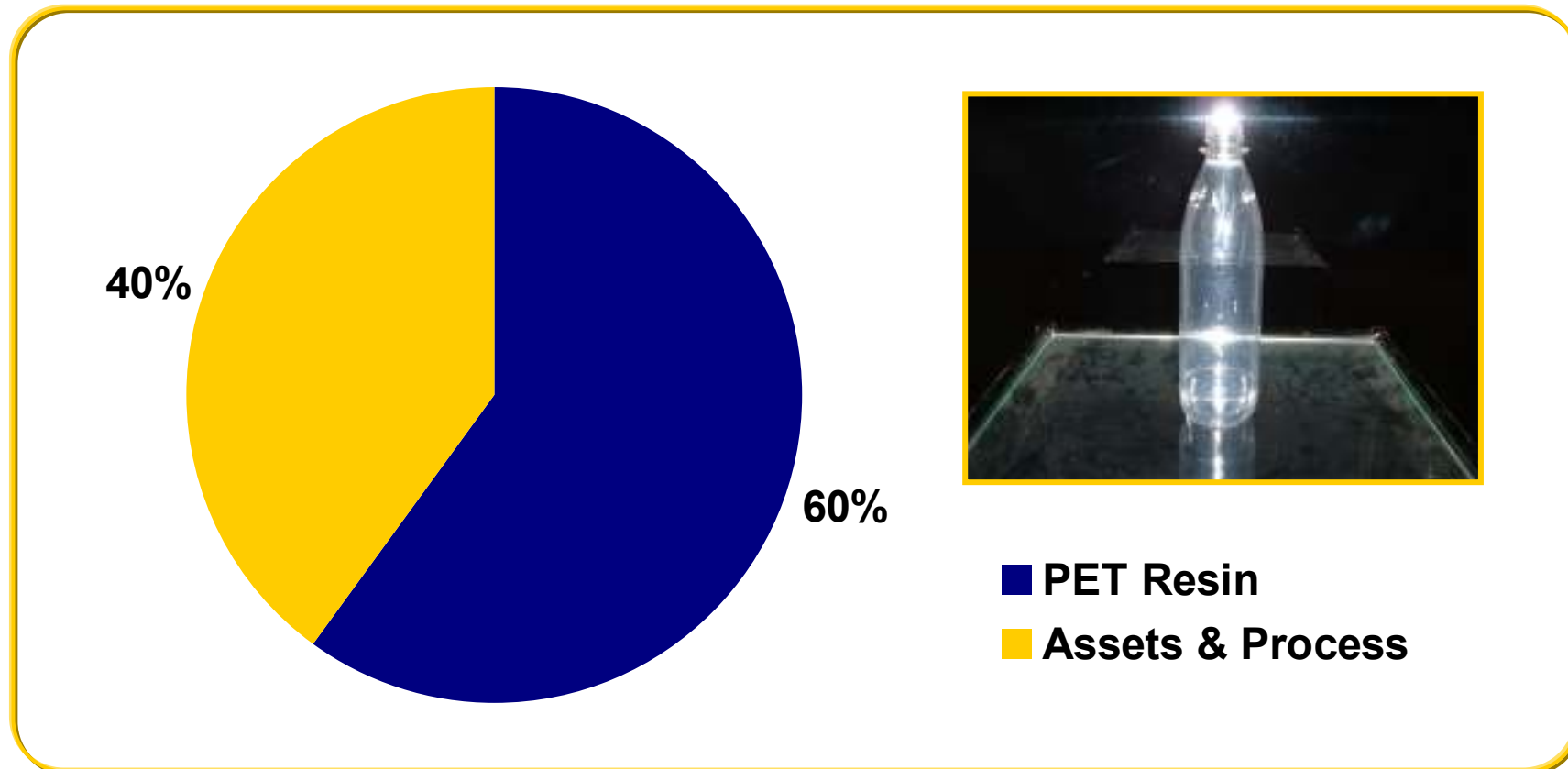
Increase % on Preform Cost = + 12%



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The impact of PET price volatility on Bottles



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The impact of PET price volatility on Bottles

Incidence of PET Cost on Bottle = 60%

In case of PET Price Increase of 15%:

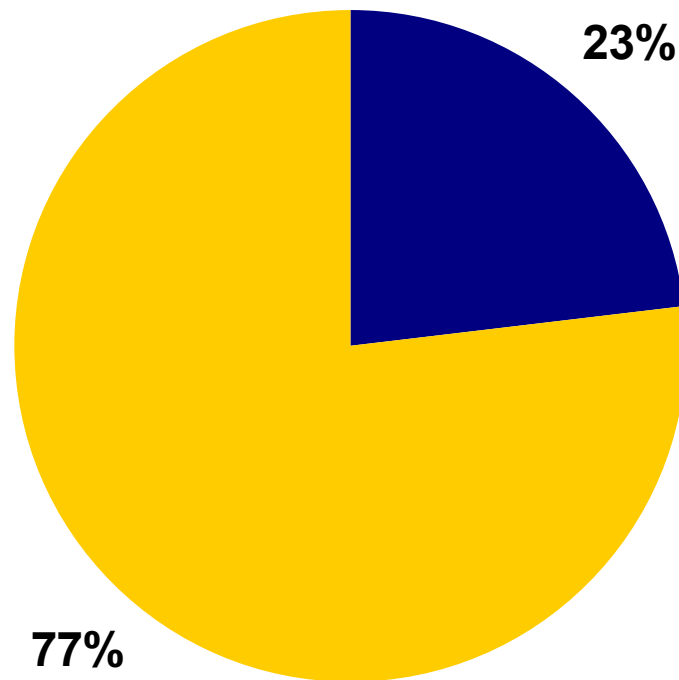
Increase % on Bottle Cost = + 9%



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The impact of PET price volatility on Bottles to the final Customer



- PET Resin
- Assets & Process



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The impact of PET price volatility on Bottles to the final Customer

LA SUA SPESA	
ACQUA NAT.	EURO 0,99
TOTALE EURO	0,99
PAGAMENTO SCONTO EURO	0,04
PAGAMENTO CONTANTI	5,00
RESTO	4,05
LIRE:	1.917
RESTO LIRE:	7.842

6 Bottles (2 Lt) Price = 0,99 EUR
Bottle Price = 0,165 EUR



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The impact of PET price volatility on Bottles to the final Customer

Incidence of PET Cost on Bottle for the final Customer = 23%

In case of PET Price Increase of 15%:

Increase % on the final Bottle Price = 3,4%



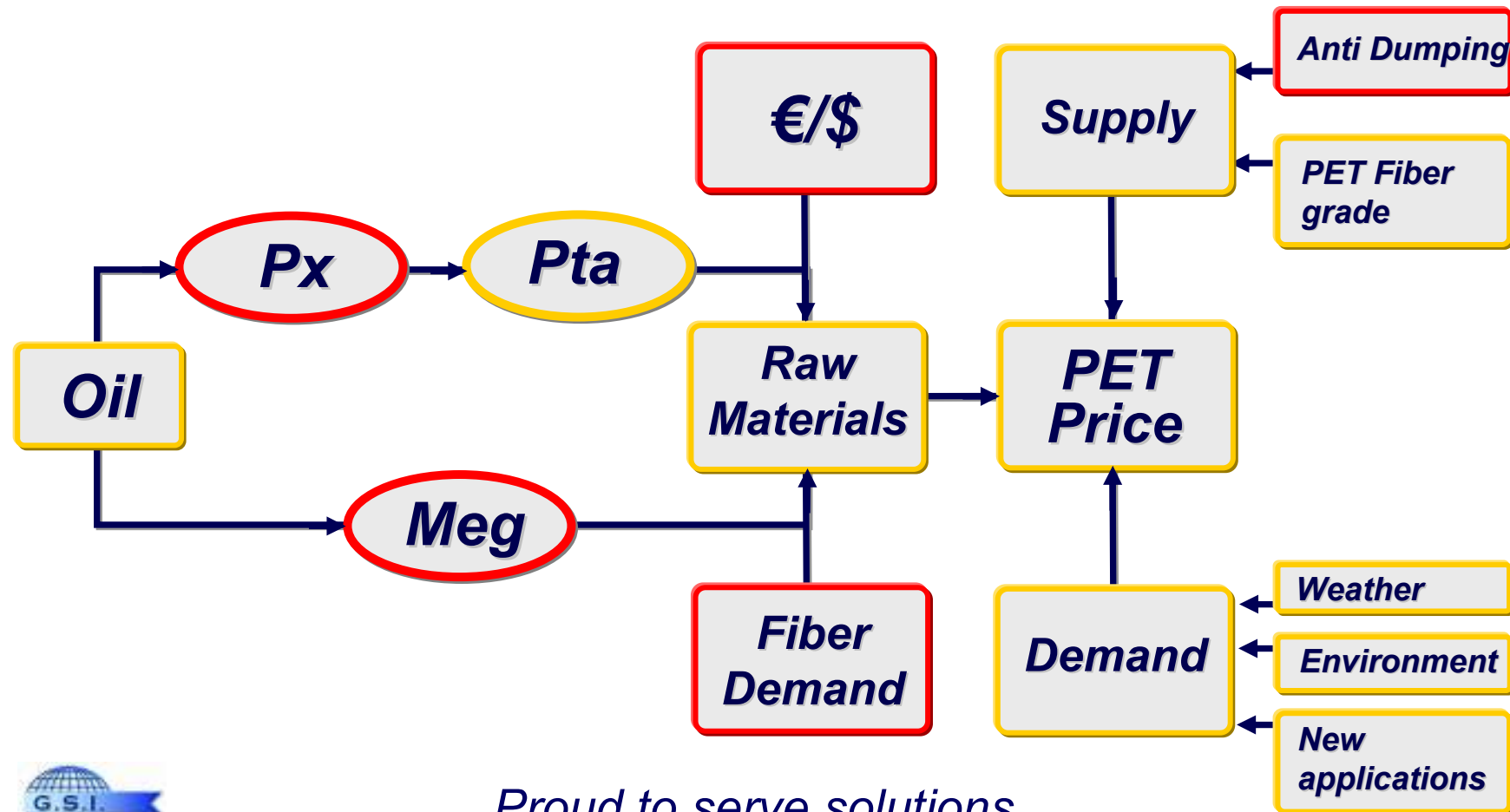
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***Is it possible to forecast the PET
Price movements?***

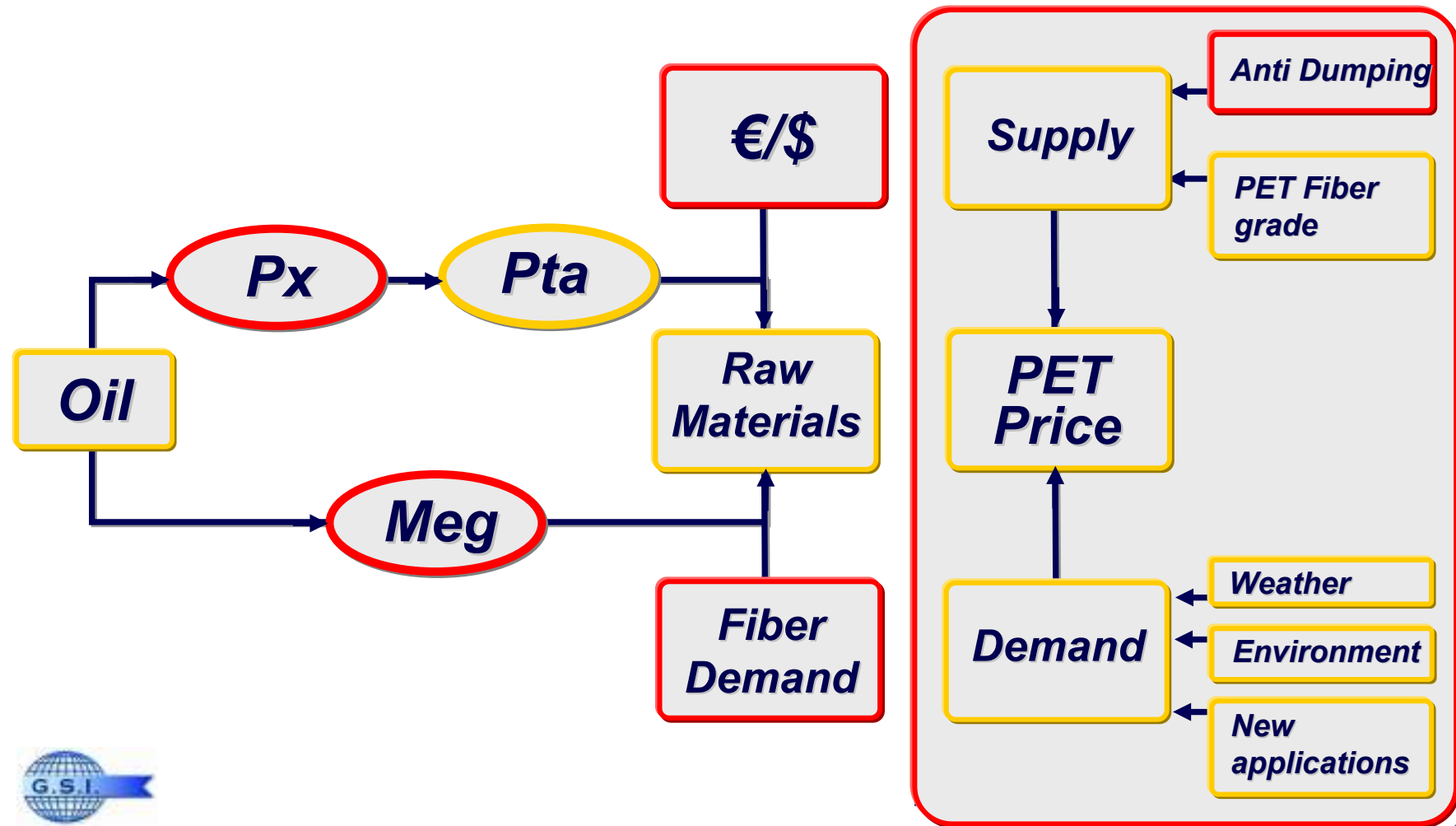
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What influences the PET Price? A simplified model



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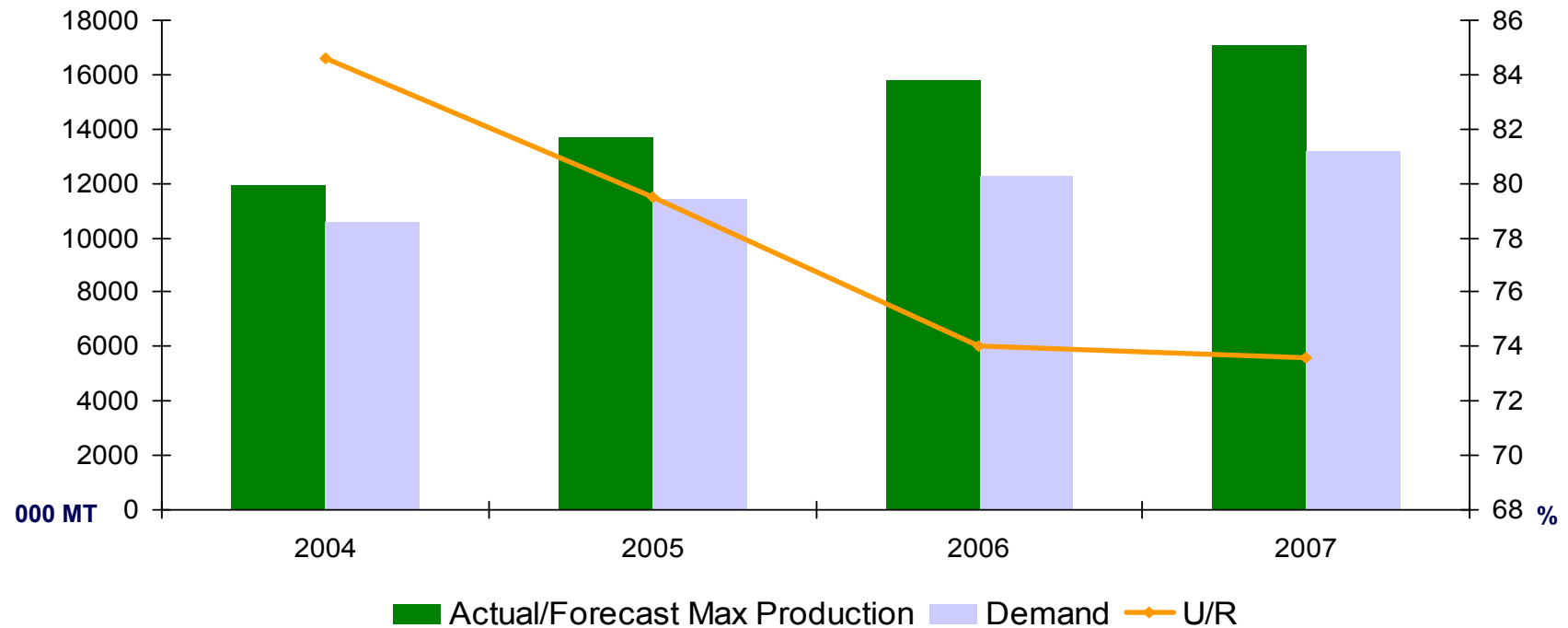
What influences the PET Price? A simplified model



PET Supply and Demand

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Global PET Supply and Demand balance



PET is and will remain for the coming year in an over capacity situation

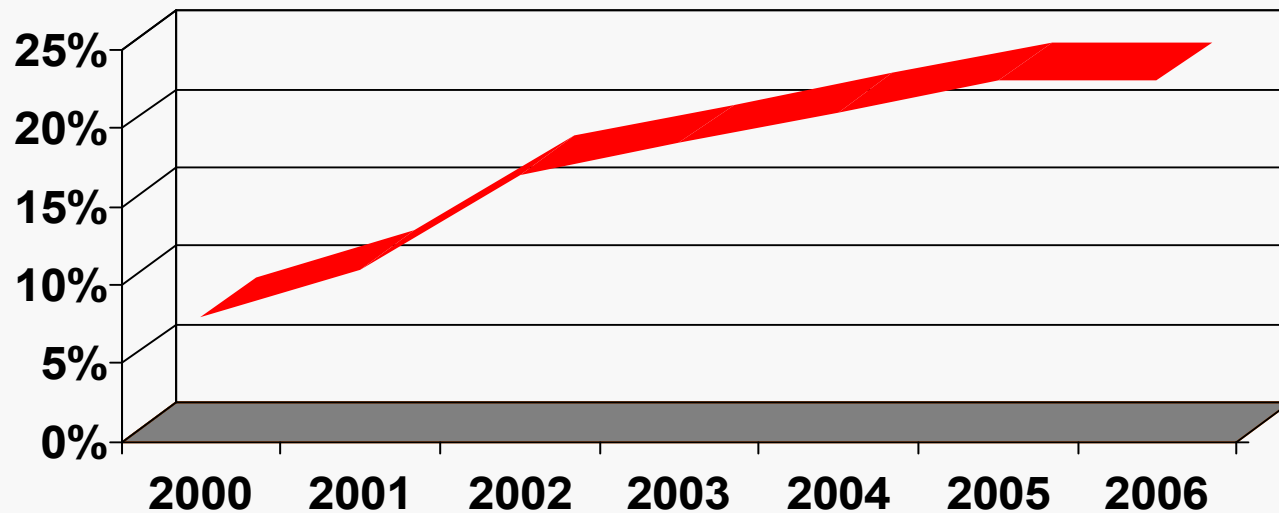


Source: PCI

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The PRC % of World PET productions Capacity



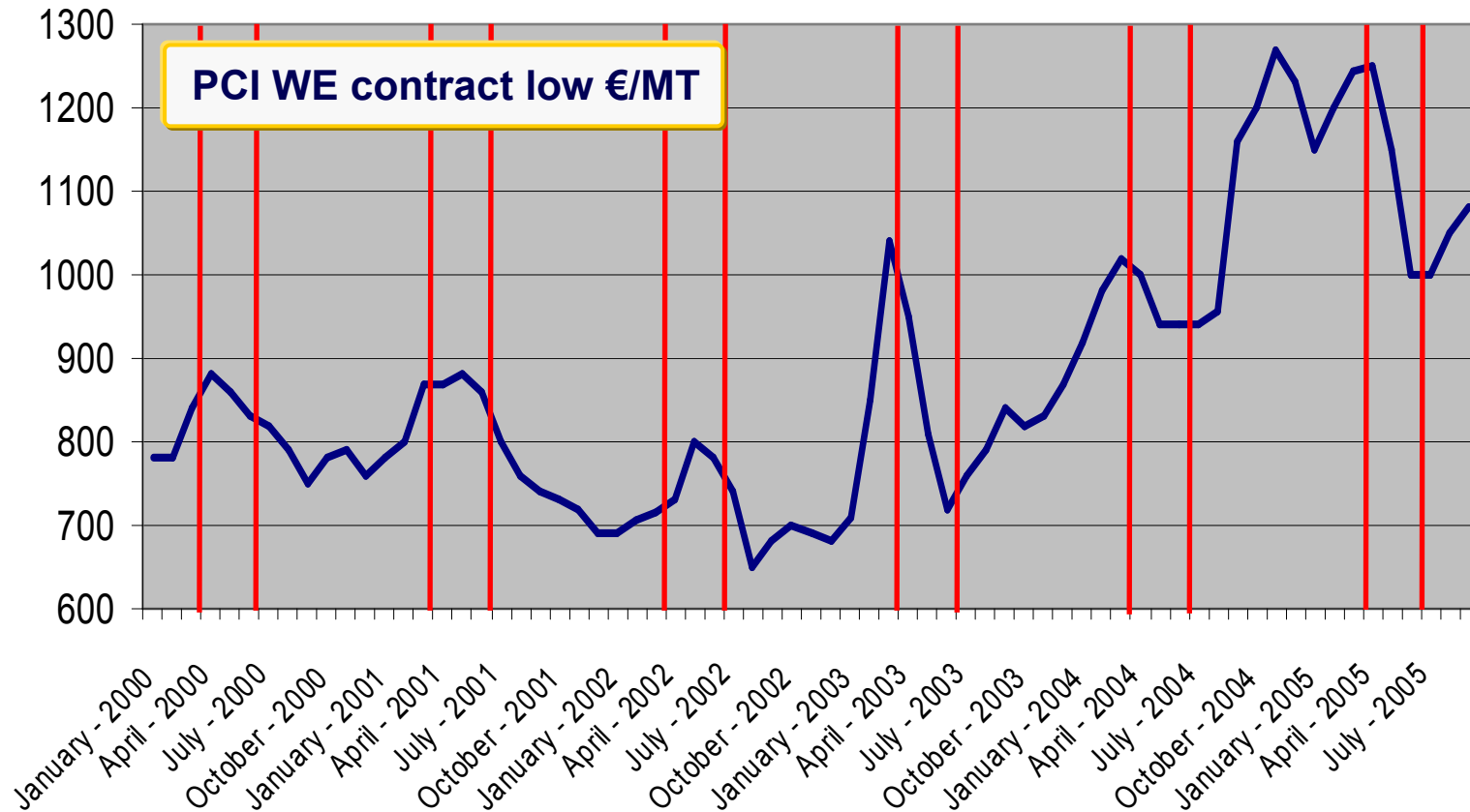
The PRC more than tripled its share of the Global PET Production Capacity in 5 years reaching an installed capacity of 4 mln MT/Year in 2006 against 17,5 mln MT World



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High season influence on PET Price



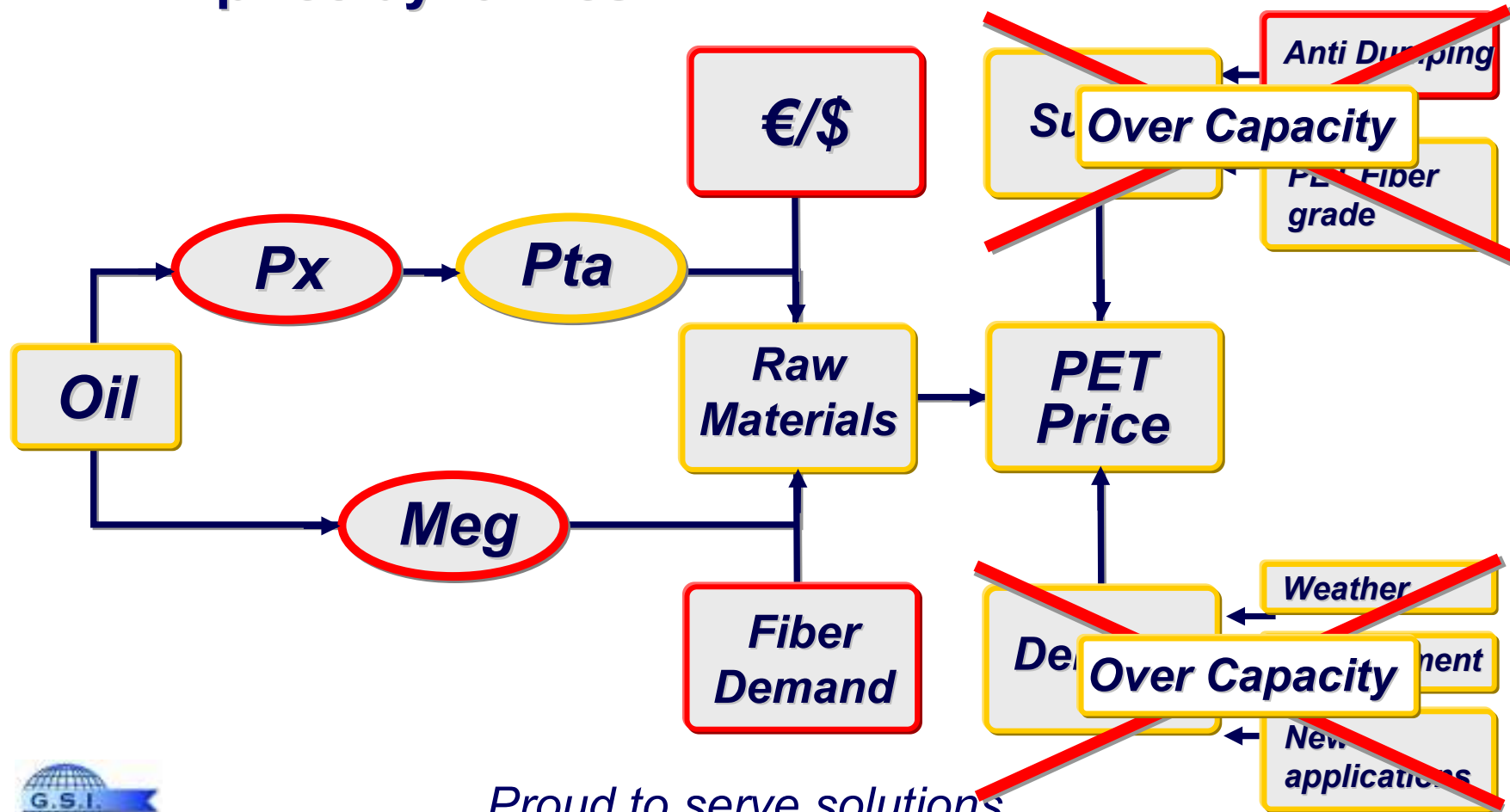
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Major factors influencing PET Price

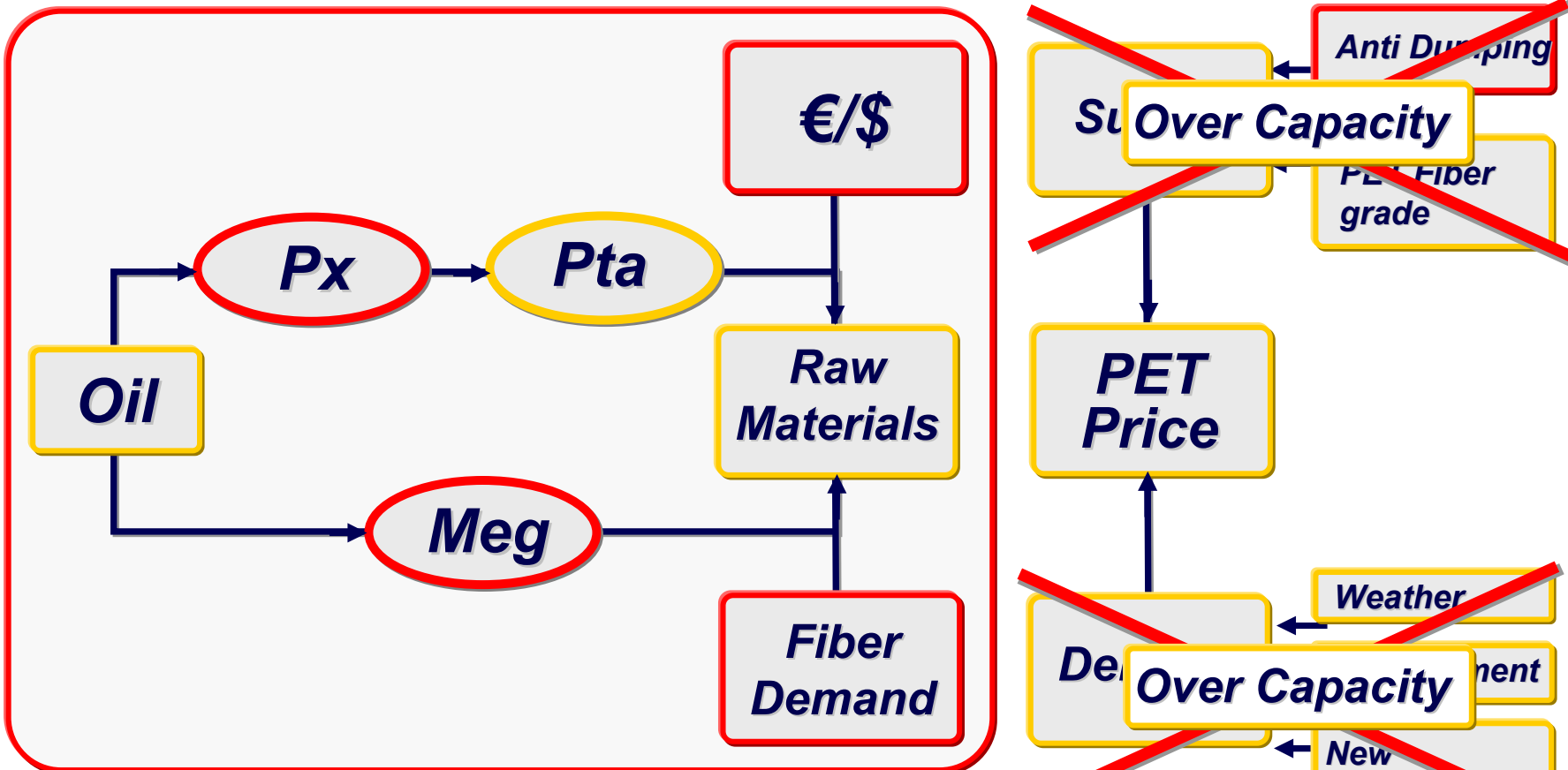
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PET demand will have a limited impact on the PET price dynamics



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What influences the PET Price?



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Is it possible to forecast the PET Price movements?

Short/Medium term (3-4 months): *Yes*

But:

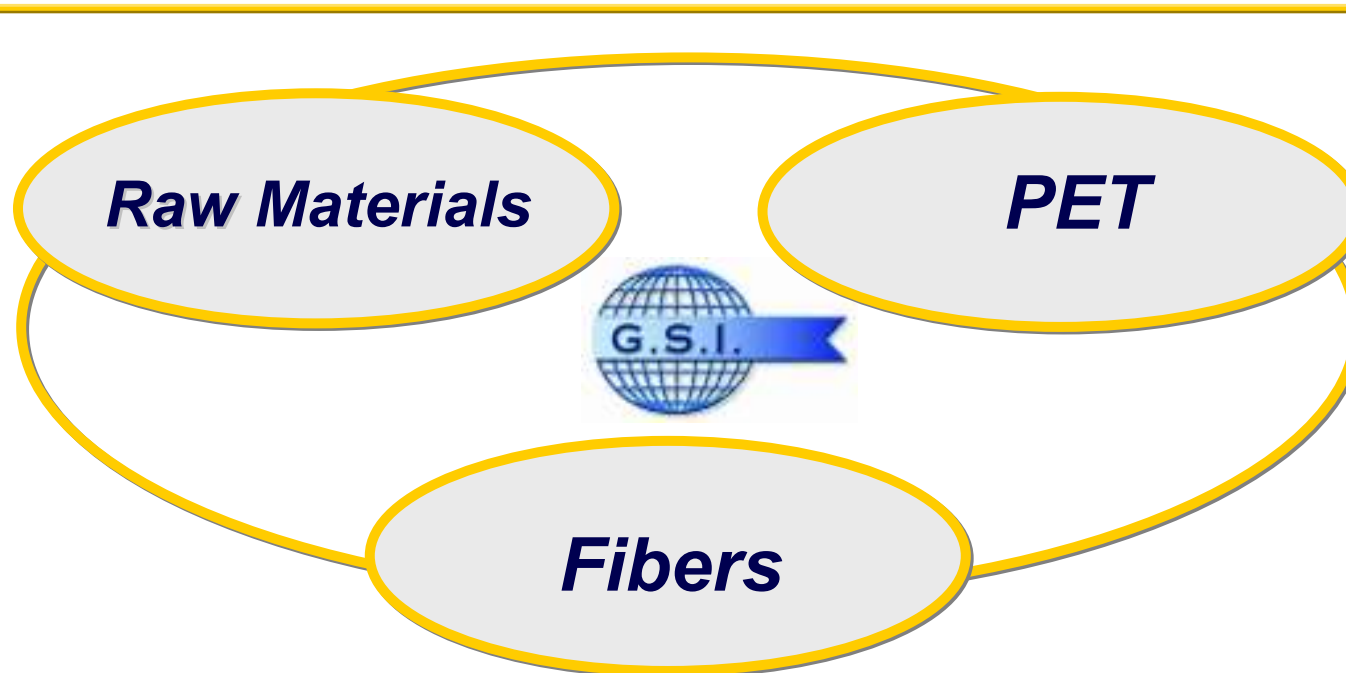
- A) a minor percentage of risk, linked to Oil, exchange rate and unpredictable events, will remain to be managed***
- B) professional knowledge of Px, PTA, MEG and fiber business is required***



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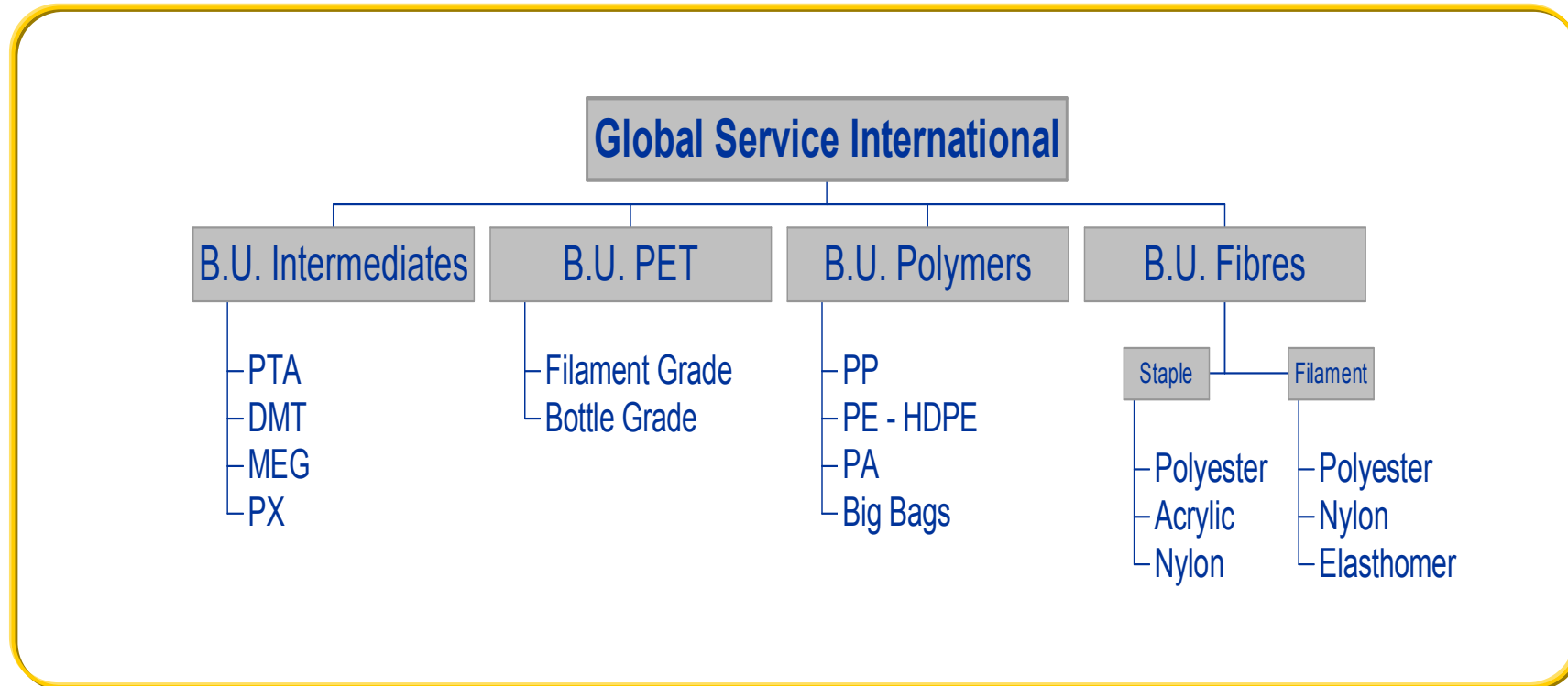


Polyester Business - GSI's Global view



The long lasting business relationships developed during these years allow GSI to have updated information throughout the Polyester chain

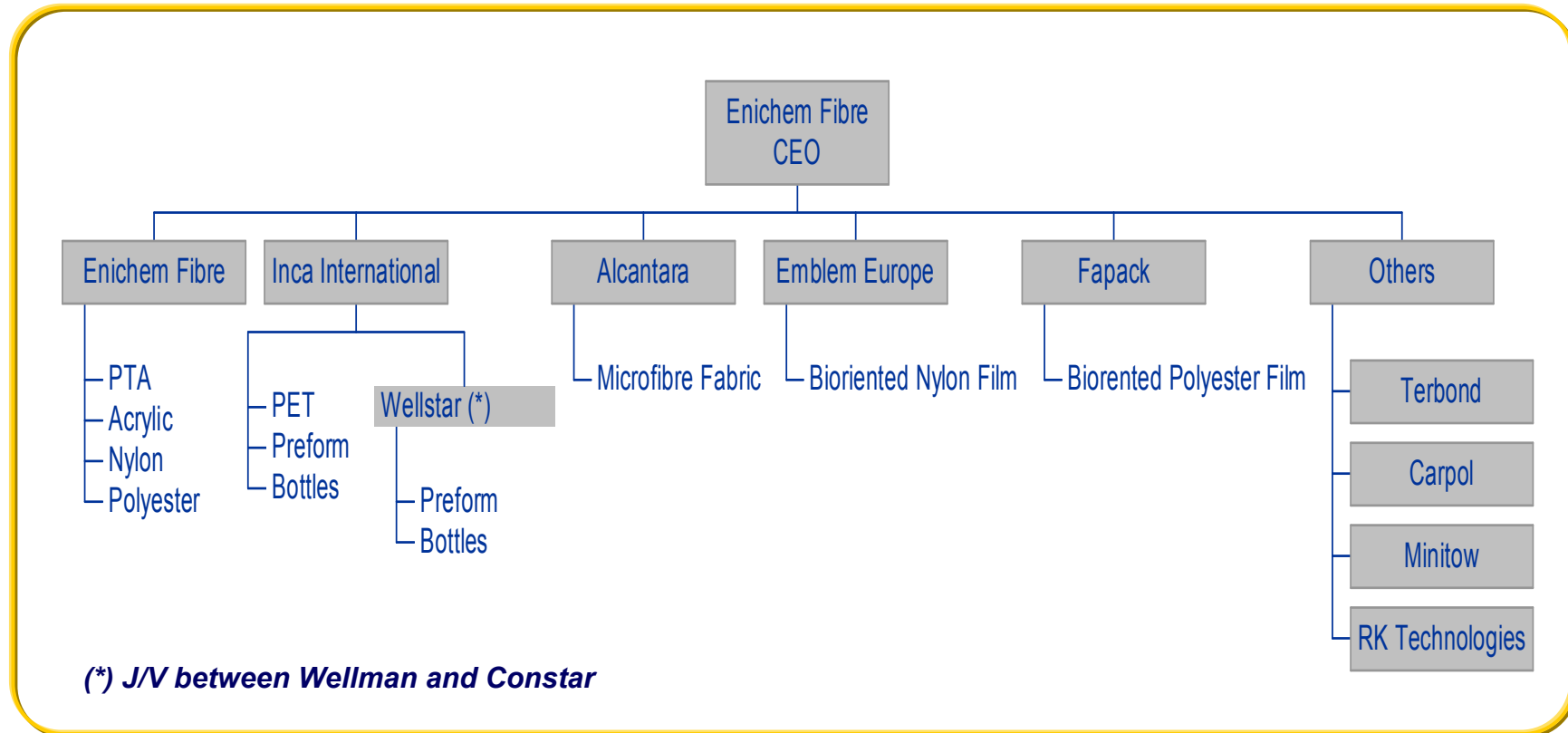
GSI - Organisation



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GSI - Focus on CEO's experiences in 80s'



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GSI - The Network

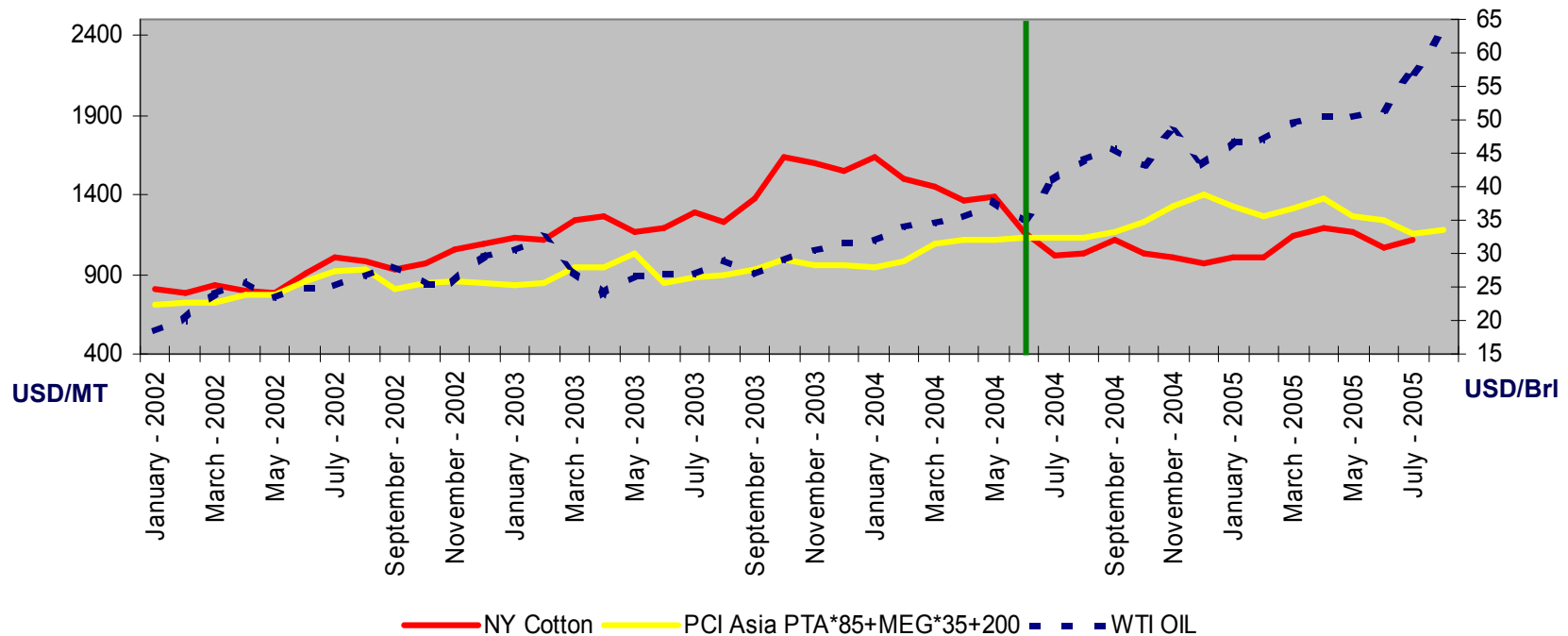


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Polyester vs cotton vs Oil Price

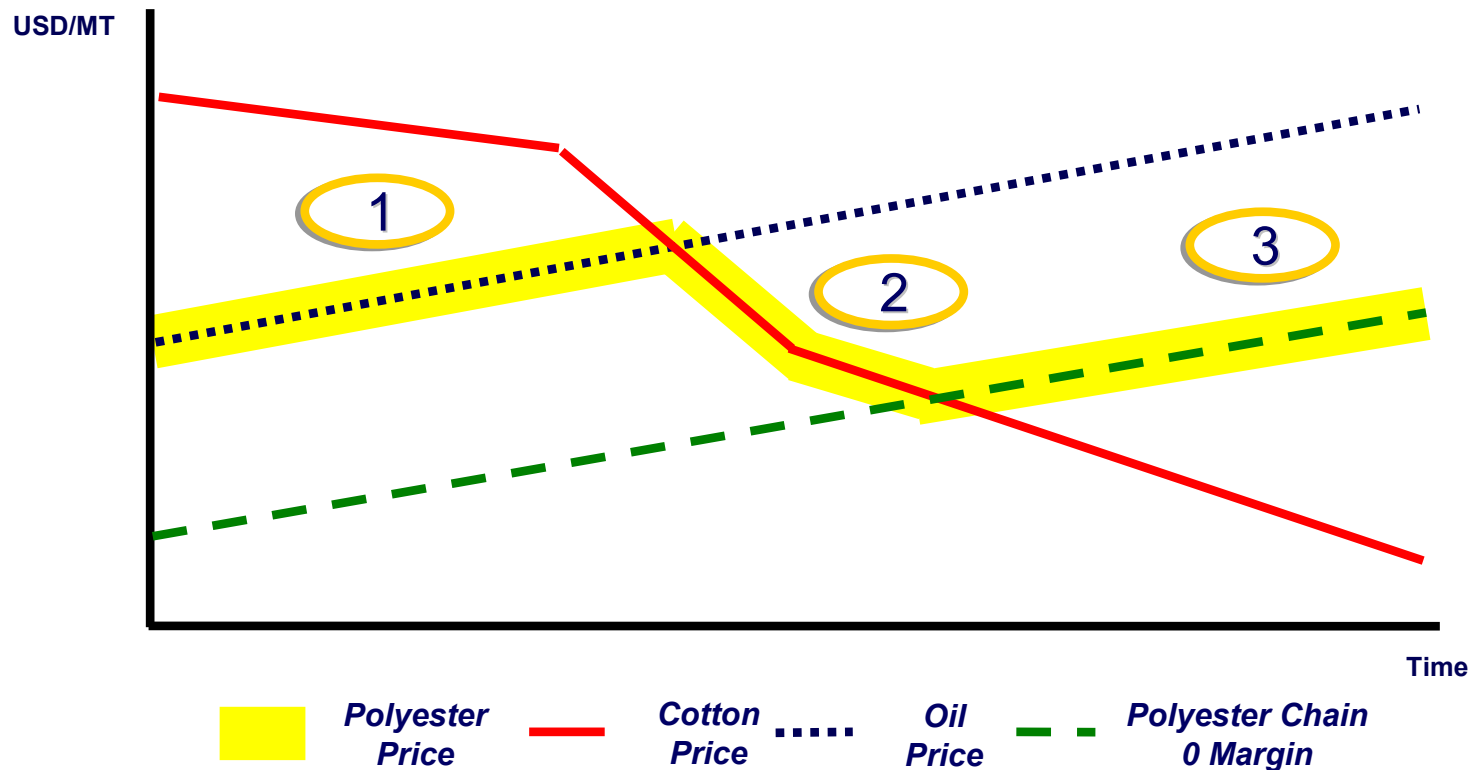
Polyester Prices: once Oil driven, since mid '04 Cotton driven



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How long can Polyester follow cotton with a rocketing Oil Price? A simplified model



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Is it possible to forecast the PET Price movements?

Long term: **No**

But:






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PET Purchasing strategies
How to manage PET Price volatility

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Three concrete examples

-  Mathematic model
-  Low risk model
-  Speculative model

The described model are simplified examples of real successful cases existing in the market. Specific model must be studied in accordance with the Customer needs



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How to decide which strategy use

A purchasing strategy has to be tailored considering:

- A) risk aversion*
- B) financial availability*
- C) storage capability*
- D) specific needs*



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Mathematic model

Target: to have a speculative stock with a average Price lower than the Market

Mechanism: to take advantage from PET Price trends

Buyer Purchasing strategy:

- to make frequent auctions, not less than 24 in 1 year
- to increase the purchasing frequency/volumes when the Price is moving in the up trend
- stock level floor and cap defined in accordance with the Customer risk aversion

Characteristics:

- low risk
- good financial and storage availability needed



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Mathematic model - simplified scheme

A

Actual Auction Price > Previous Auction Price:

Purchasing strategy:

- to increase the frequency and volumes of the auctions
- to add to the operative purchase the speculative volumes
- to move the speculative stock up to the cap level

B

Actual Auction Price = Previous Auction Price:

Purchasing strategy:

- to position the speculative stock level between the cap and the floor levels



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Mathematic model - simplified scheme

C

Actual Auction Price < Previous Auction Price:

Purchasing strategy:

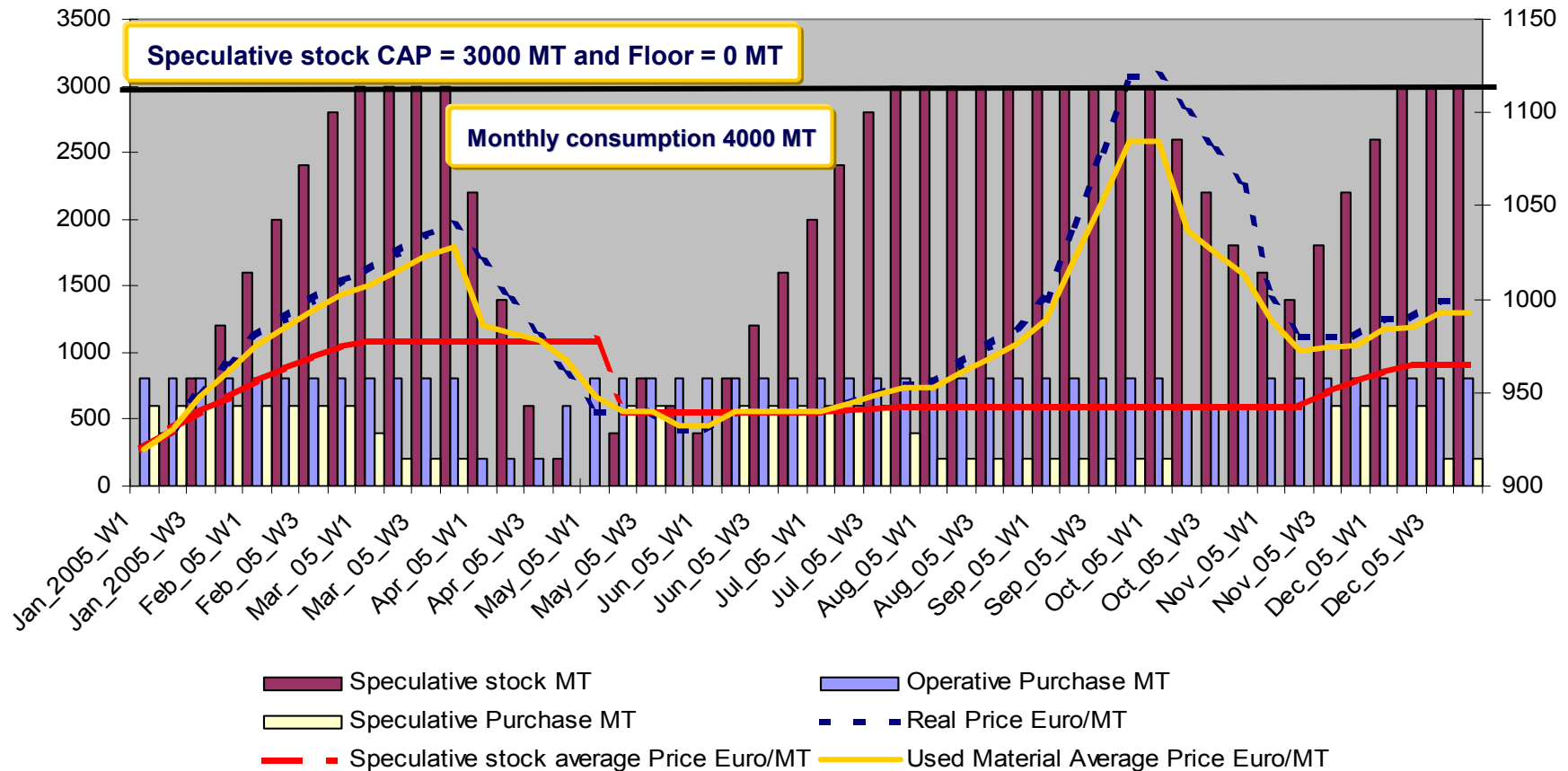
- to reduce the purchased volumes and frequency
- to reduce the speculative stock to the floor level



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Mathematic model - simplified scheme



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Low Risk model

Target: to reduce the risk keeping an acceptable Price advantage

Mechanism: to diversify the Suppliers portfolio pondering the risk

Purchasing strategy:

- to increase the Suppliers number
- to allocate volumes with yearly contracts and call frequent auctions for not contracted volumes
- to associate a risk value to the different sources, allocate small portion of the purchased volumes to high risk sources

Characteristics:

- low risk
- medium financial availability and low storage availability



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Law risk model

The risk factor is linked to:

- the delta between the time PET is purchased and the time PET is used to produce preforms or bottles
- quality
- logistic service

Assumptions:

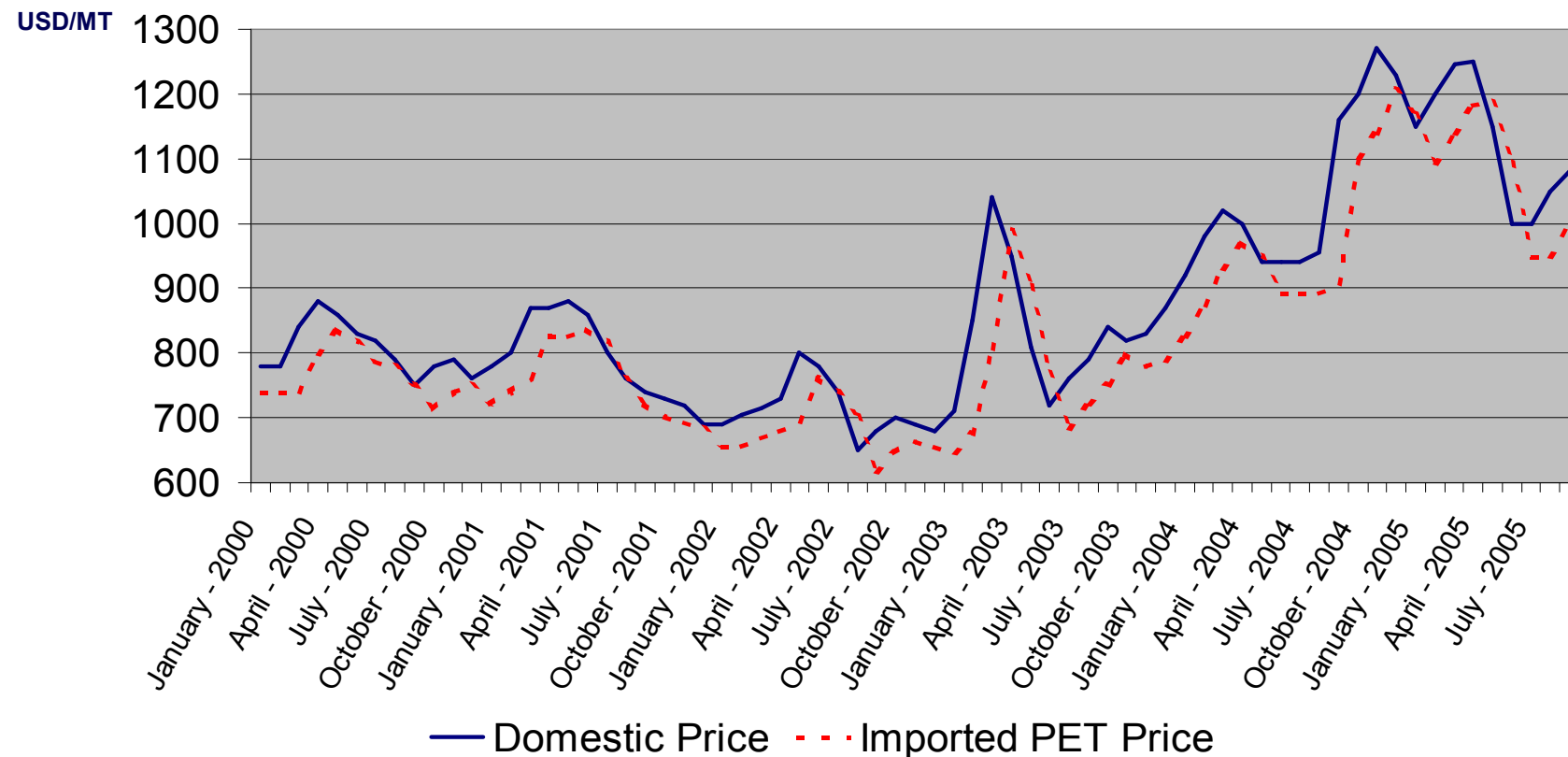
- PET producers with an associated high level of risk must be more competitive than a low risk PET producer
- Diversifying the Suppliers portfolio the total level of risk reduce



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Law risk model - imported material component



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Speculative model

Target: to anticipate the PET price movements

Mechanism: to place important deal in the low side of the Price cycle

Purchasing strategy:

- limited number of auctions
- increase the number of approved materials
- develop specific financial resources and skills

Characteristics:

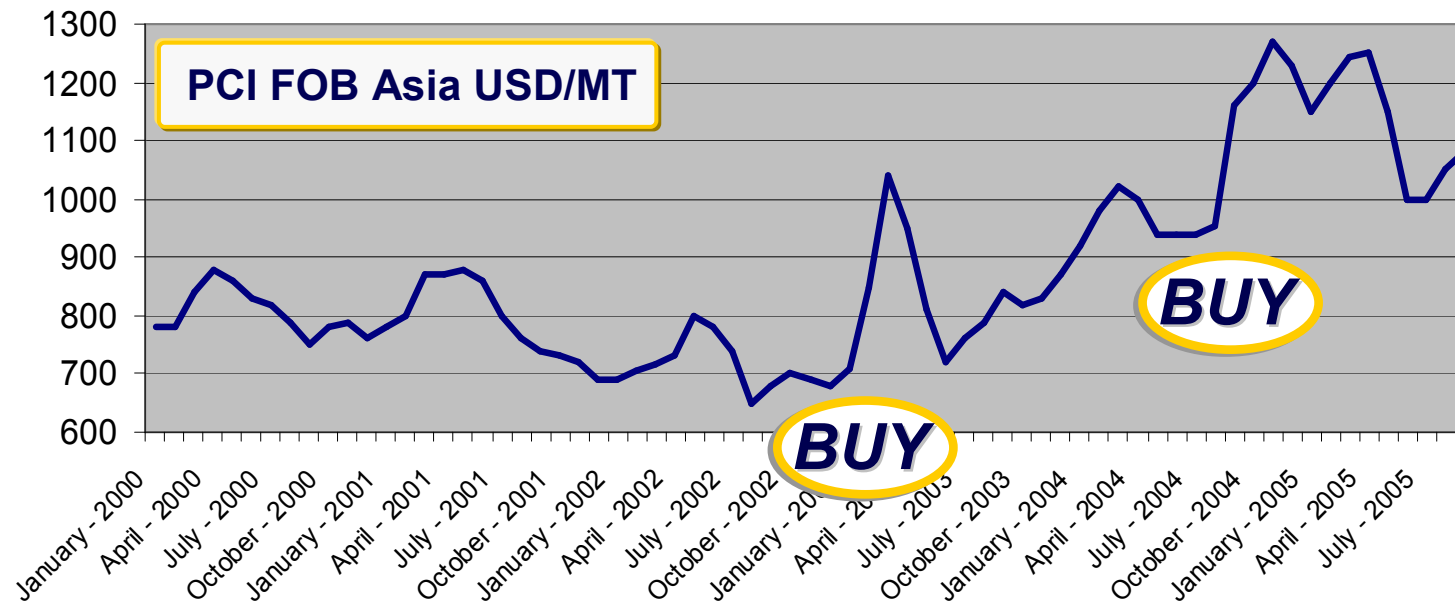
- professional knowledge of Oil, intermediates and polyester business
- high risk
- high financial and storage availability needed



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Speculative model



Volatility = Risk = Opportunity







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Conclusions

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GSI Conclusions

-  ***PET is and will remain, for the coming years, in an over capacity situation, PET demand has a limited impact on PET Price dynamics***
-  ***In the short term PET trend can be understood but a professional knowledge of Px, PTA, MEG and fiber business is required***
-  ***In the long term the risk linked to the PET Price dynamics can be limited with specific instruments***
-  ***Developed PET purchasing strategies together with a professional knowledge of the elements influencing the PET Price can help PET Buyers to manage the PET Price volatility***



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