

*8th International Aluminum Extrusion Technology Seminar
ET'04 May 18-21, 2004 • Orlando, Florida*

The Effects of Globalization on the Aluminum Extrusion Industry

Part 1: Theoretical Considerations

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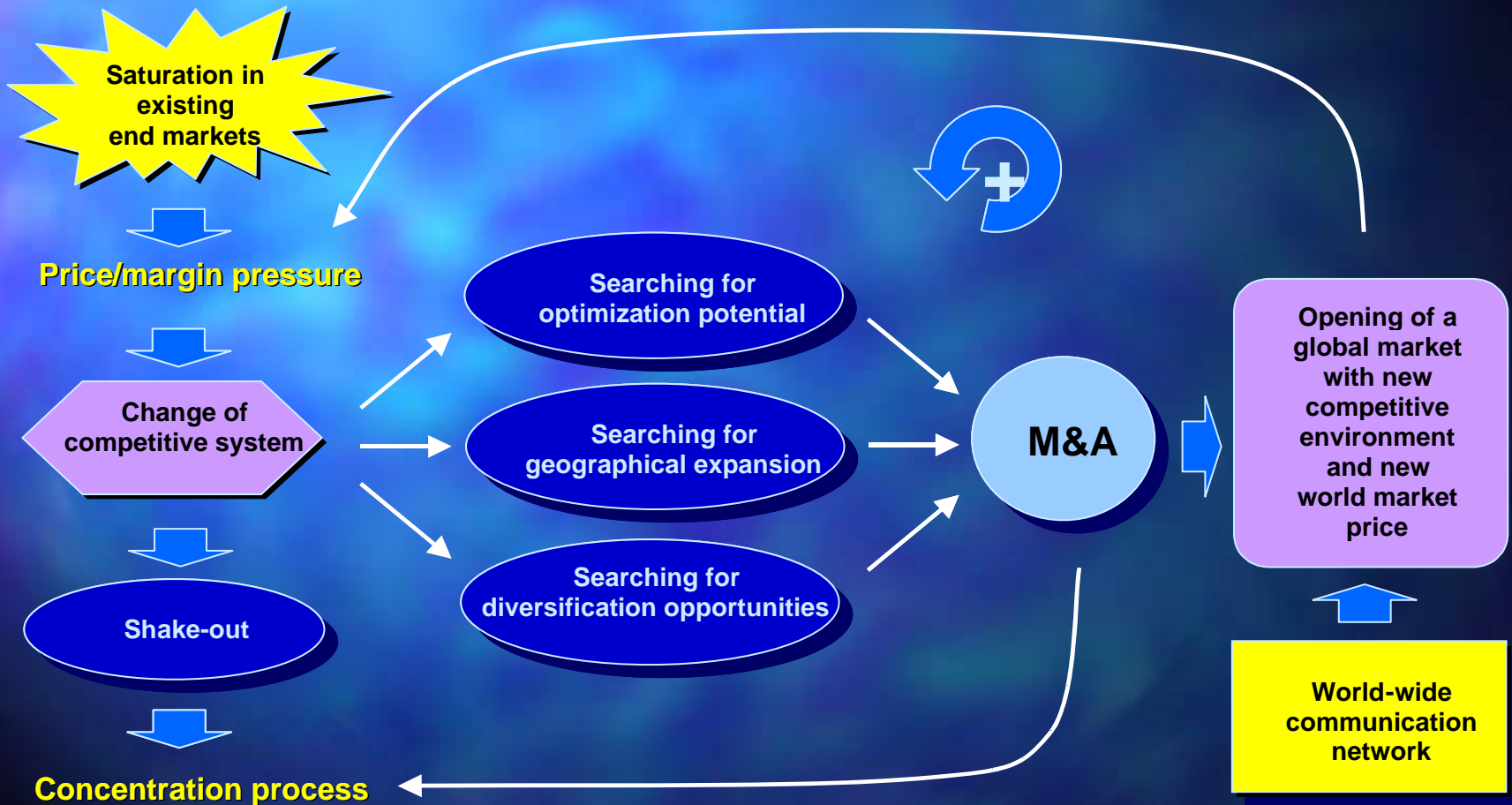
CONTENT

Part 1 (Technical Session): Theoretical considerations

- *The Phenomenon of Globalization*
- *Deriving Typologies of Globalization*
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- *Outlook Part 2: Implications*

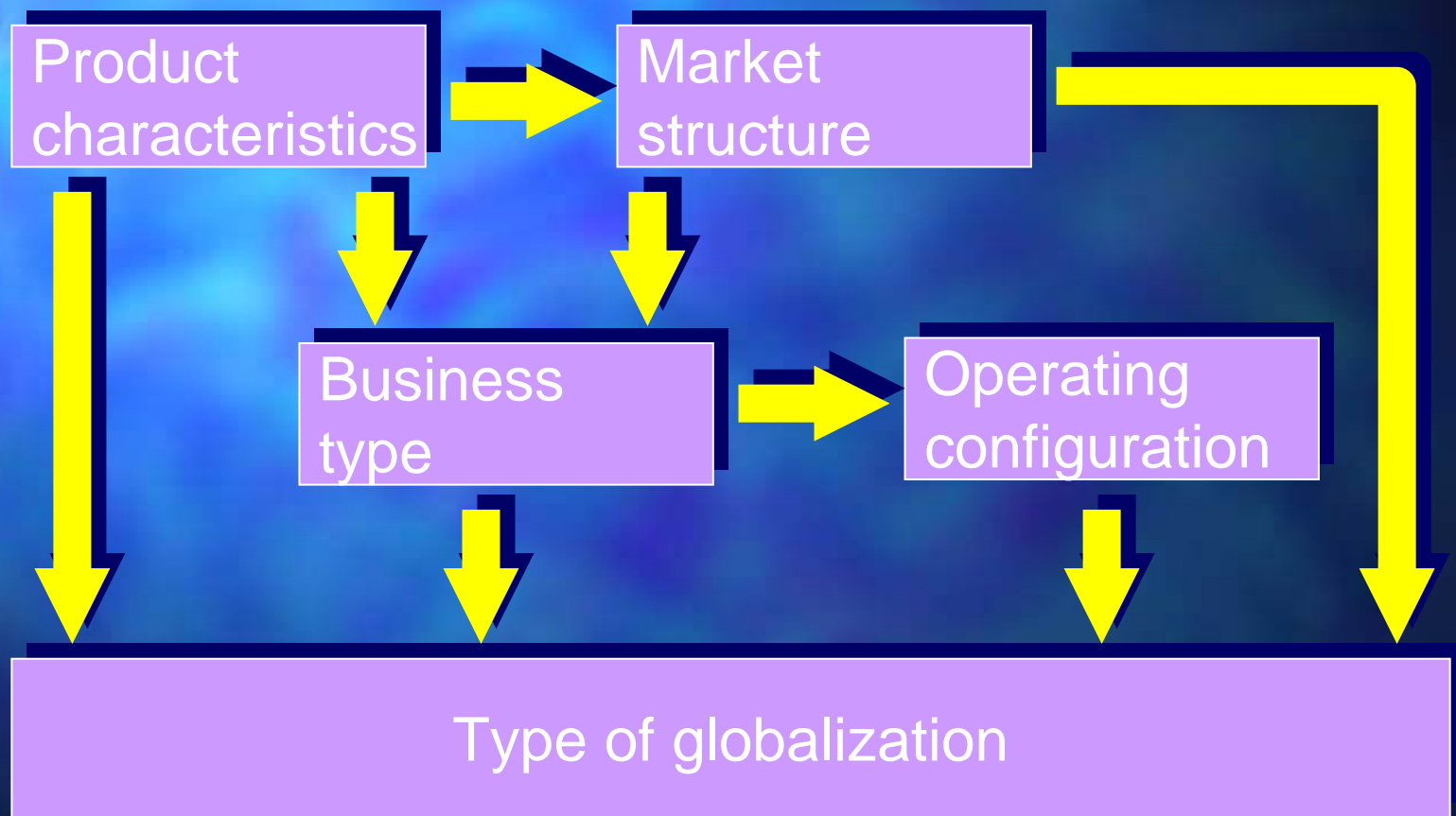
The Phenomenon of Globalization

Main drivers



Deriving Typologies of Globalization

Framework and determinants



Deriving Typologies of Globalization

The characteristics of extrusion business

Product characteristics:

In general:

- determined by the value and uniqueness of product
- competitive intensity given by the differentiation degree

For extrusions:

- customer-designed semi-finished product
- virtually sold is the capacity
- the transaction object is a service

Deriving Typologies of Globalization

The characteristics of extrusion business

Market structure:

In general:

- sets the competitive nature of the business
- given by concentration curve of supply and demand

For extrusions:

- fragmented (polypolistic) competition structure
- relative low entry barriers
- reproducible know-how
- limited geographic scope of action (soft alloys)

Deriving Typologies of Globalization

The characteristics of extrusion business

Operating configuration:

In general:

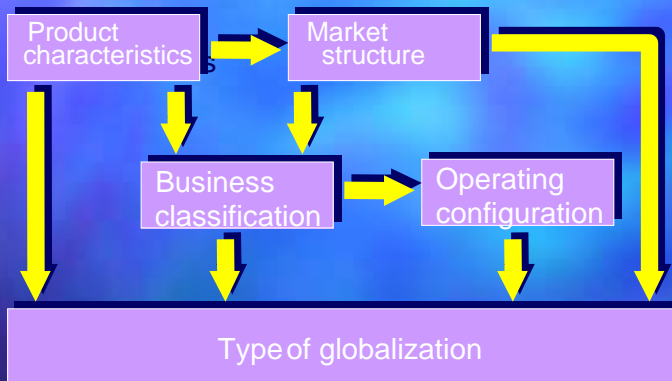
- depends on product characteristics (value, customization, durability)
- determined by product-value/transport-cost ratio

For extrusions:

- multiplant configuration with strategy of adding geographical market share - typical for a fragmented business

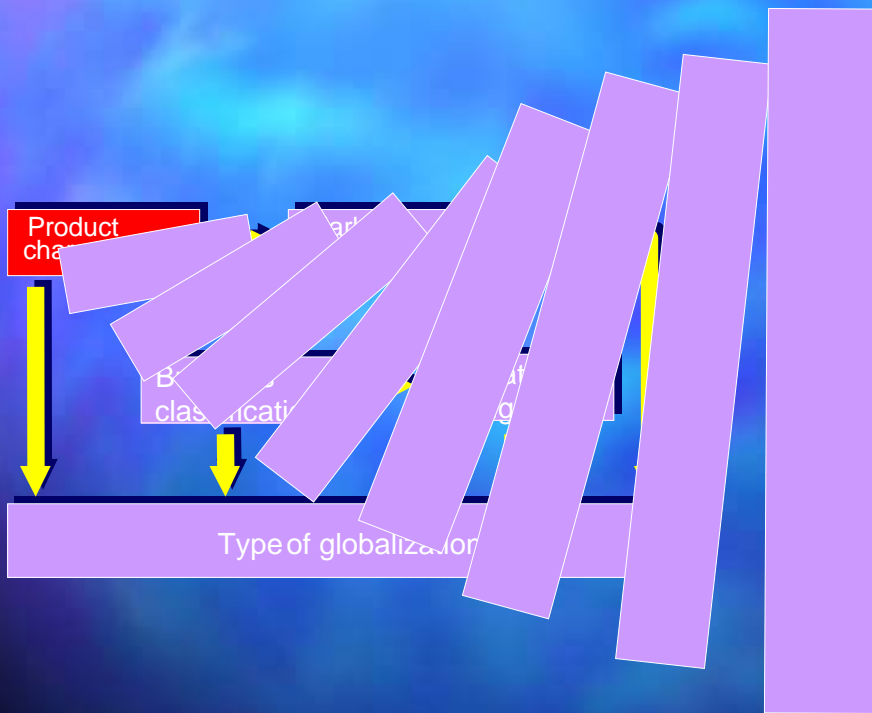
Deriving Typologies of Globalization

Basic classification of business types



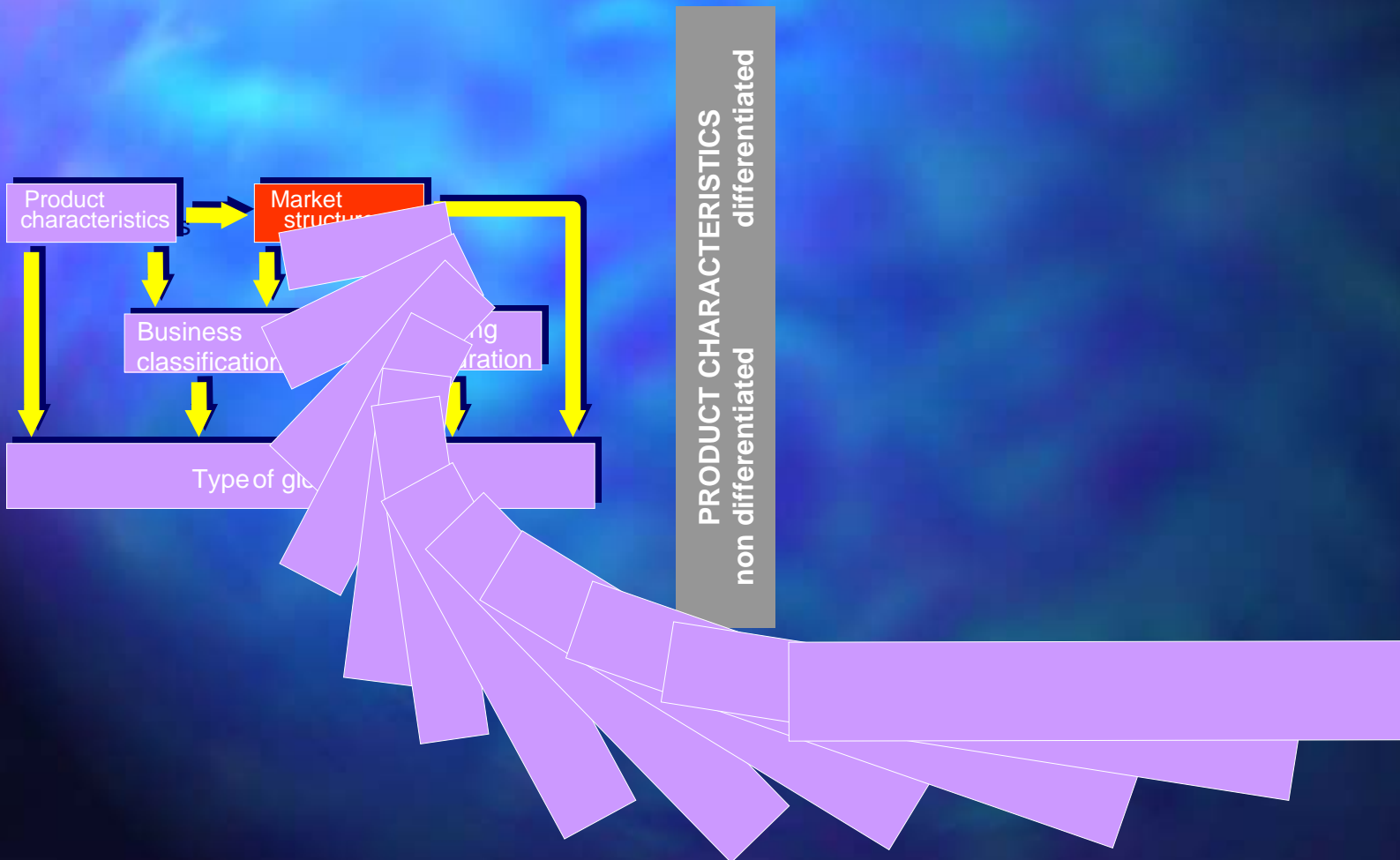
Deriving Typologies of Globalization

Basic classification of business types



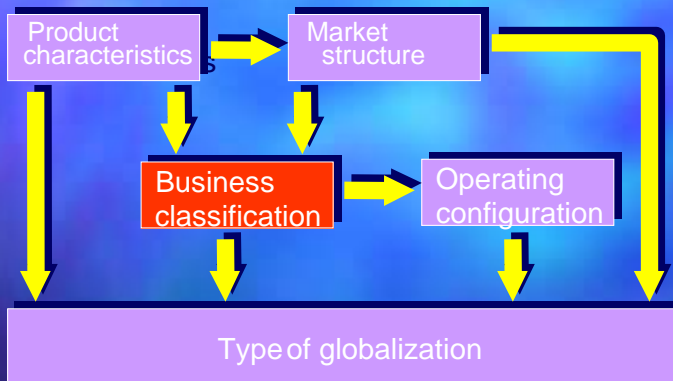
Deriving Typologies of Globalization


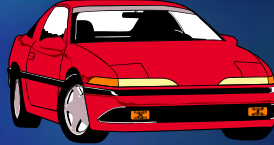


Basic classification of business types



Deriving Typologies of Globalization

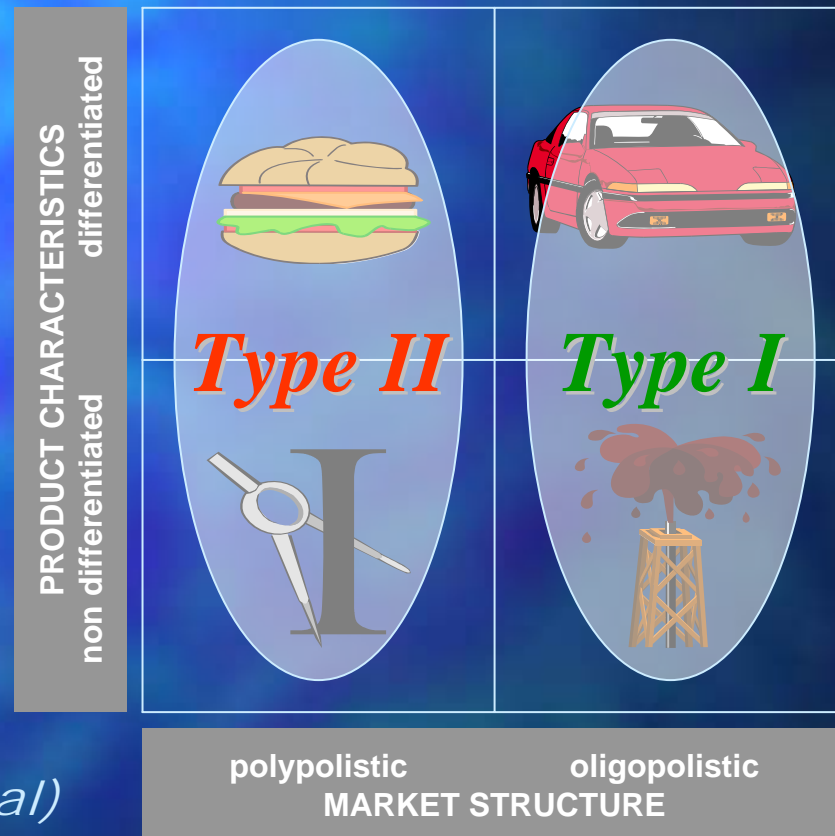
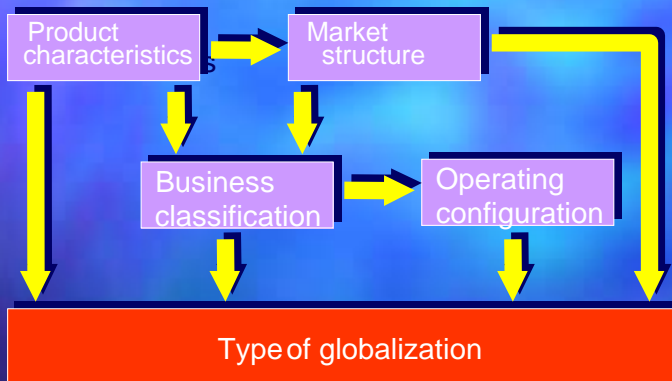
Basic classification of business types



| | | |
|--|---|--|
| PRODUCT CHARACTERISTICS differentiated non differentiated |  Convenience |  Speciality |
| |  Standards |  Commodity |
| | polypolistic MARKET STRUCTURE | oligopolistic |

Deriving Typologies of Globalization

2 main types

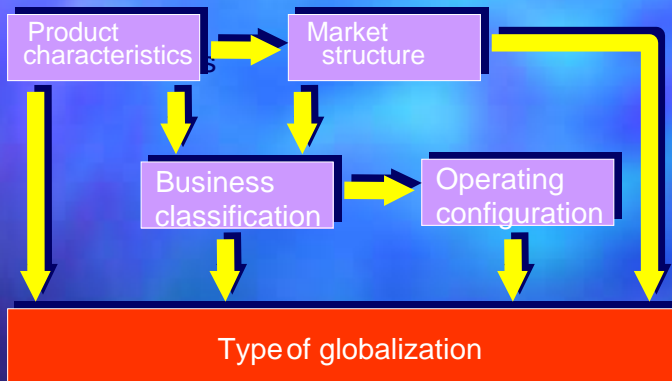






Type 1: material G. (physical)

Type 2: immaterial G. (financial)

Deriving Typologies of Globalization

2 main types



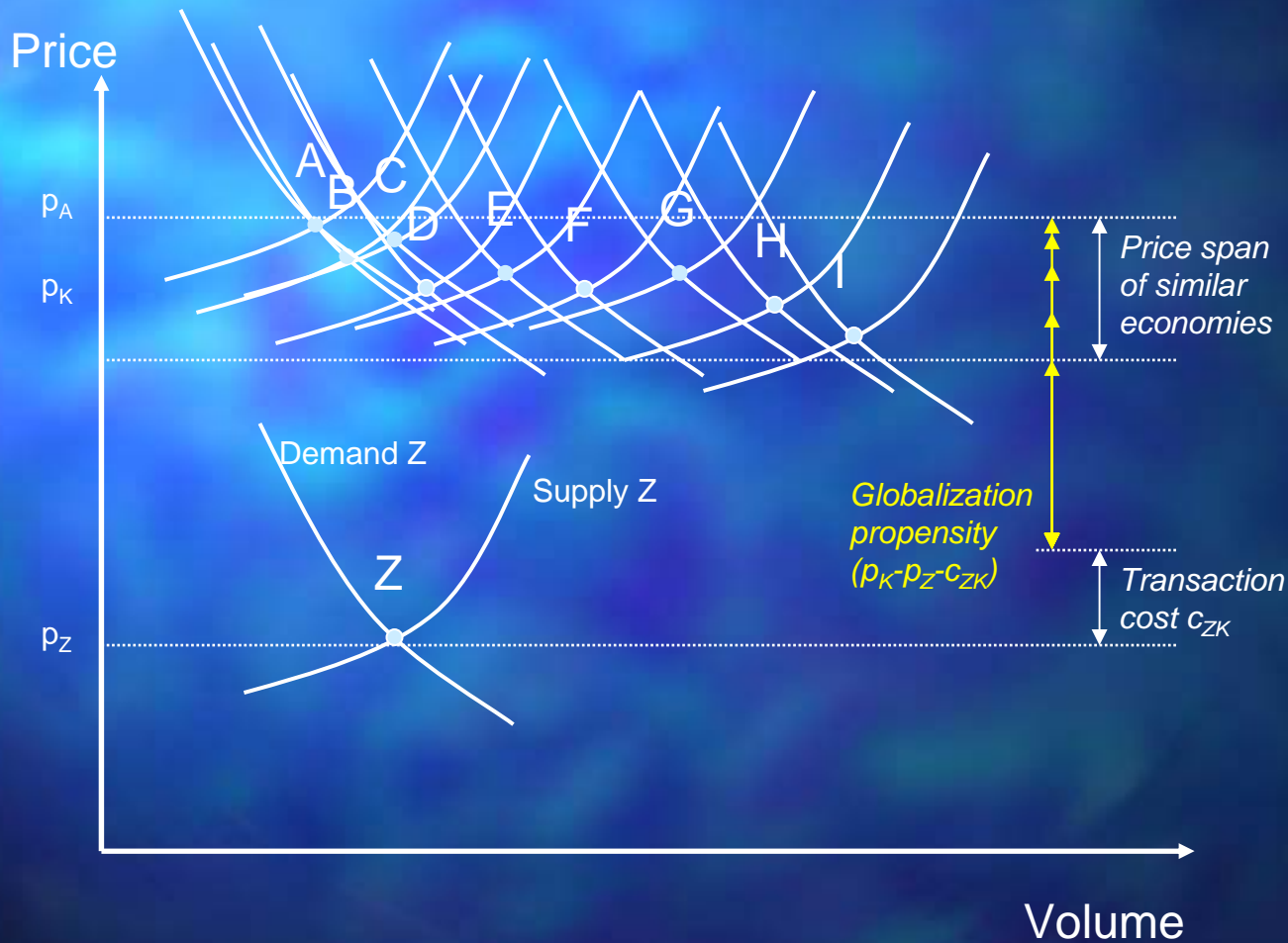
| | | | |
|-------------------------|--------------------|---|--|
| PRODUCT CHARACTERISTICS | differentiated |  |  <i>Type Ib</i> |
| | non differentiated |  <i>Type II</i> |  <i>Type Ia</i> |
| | | polypolistic | oligopolistic |
| | | MARKET STRUCTURE | |

Type 1: material G. (physical)

Type 2: immaterial G. (financial)

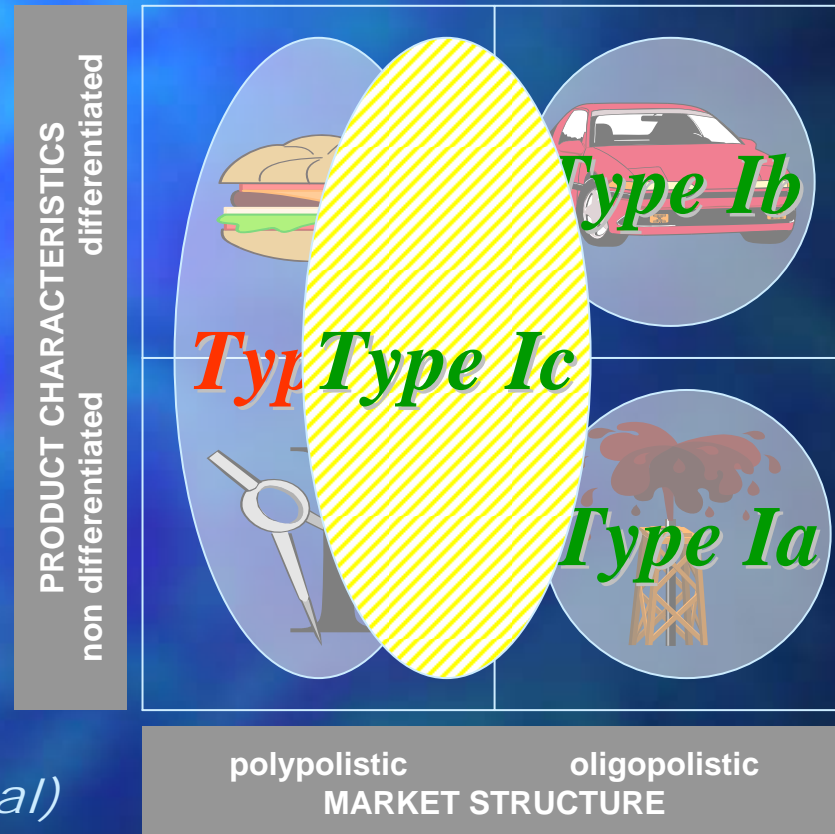
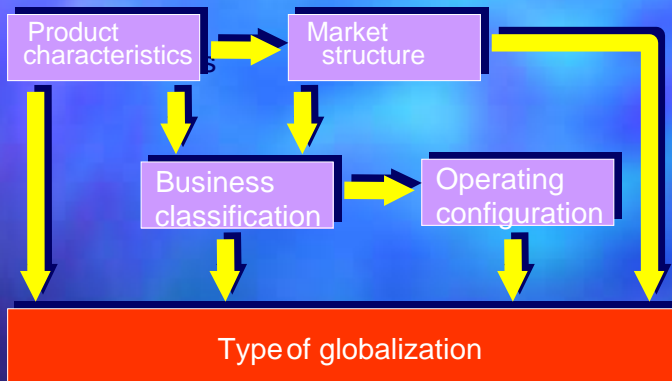
Quantitative Modelling

Price discrepancy within different economies and corresponding propensity for globalization



Deriving Typologies of Globalization

... An additional subtype is emerging

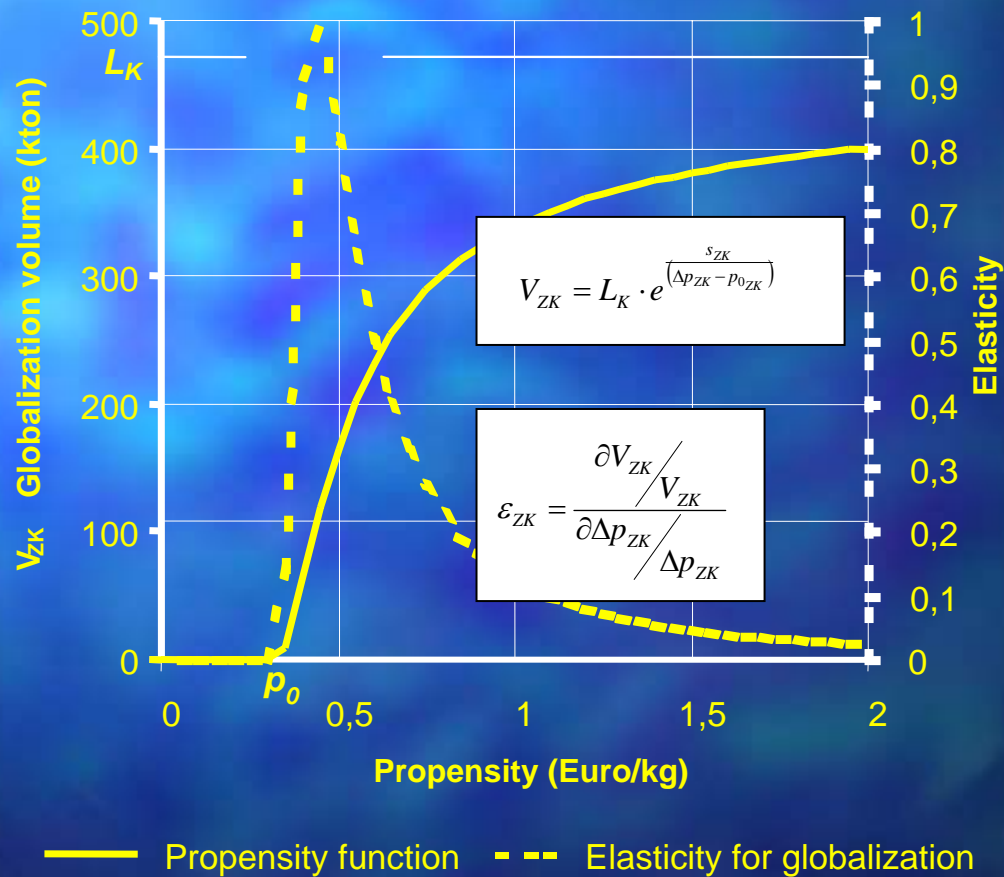


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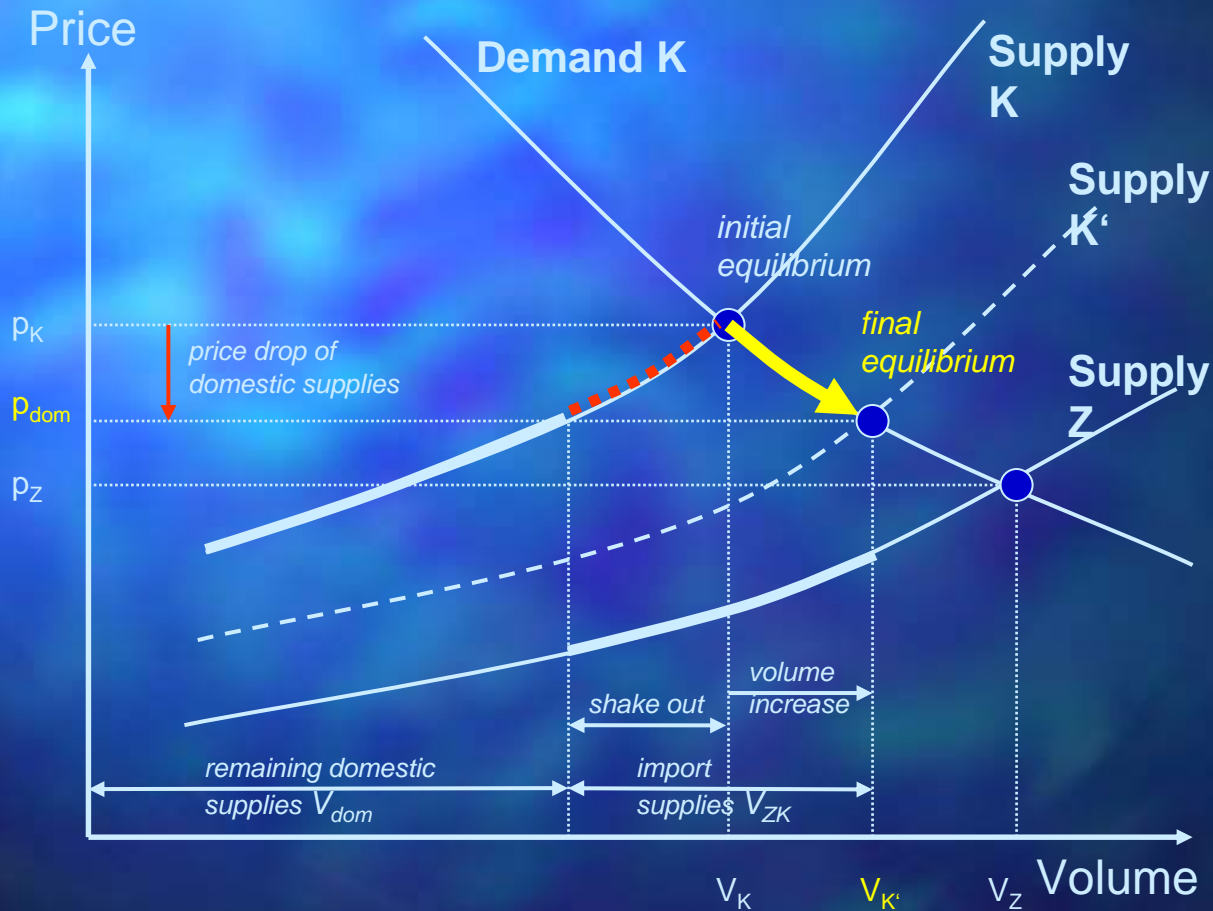
Quantitative Modelling

Propensity function and corresponding elasticity for globalization



Theoretical Considerations

Price drop and shake-out in economy K due to globalization



What does that mean?

Analyzing the impact on the extrusion industry

Outlook part 2: Implications

- *Will a world market price establish?*
- *Do we have to expect structural changes?*
- *Is a new business paradigm crystallizing?*
- *What is the extent of globalization in extrusions?*
- *How can we respond to this challenge?*

*Thank you for your attention and
see you tomorrow in the General Session
for:*

*Part 2: **The Implications***

