Cross-Border Cooperation Boosts Innovation

Insights from the ETC AT/SK-Projects

DUONET, DUO**STARS & Smart>Net

Open Days 2012

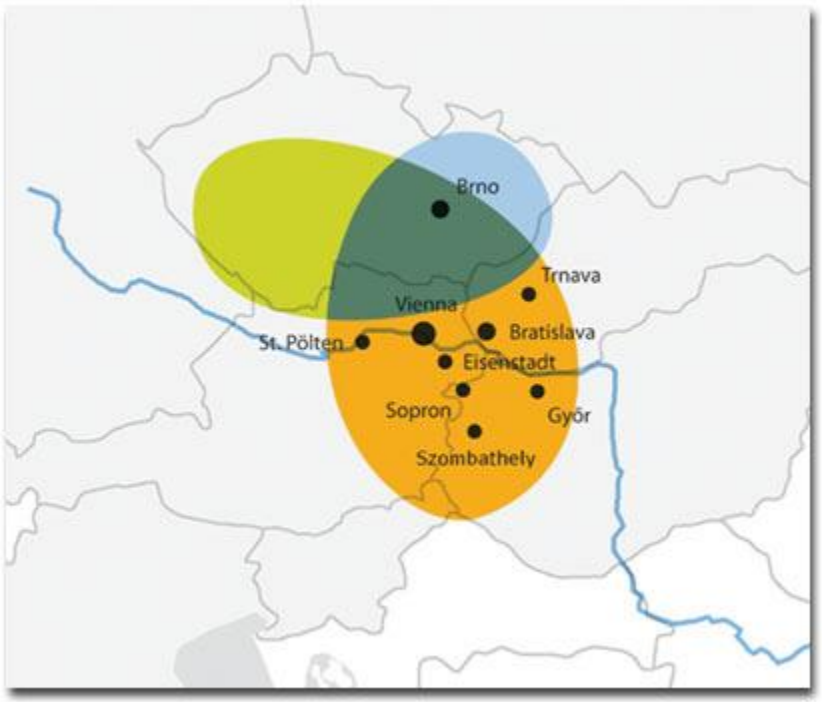
Christian Helmenstein

Cross-Border Cooperation

A Threefold Cliff

ETC AT/SK Cooperation Area

Eastern Austria/Western Slovakia



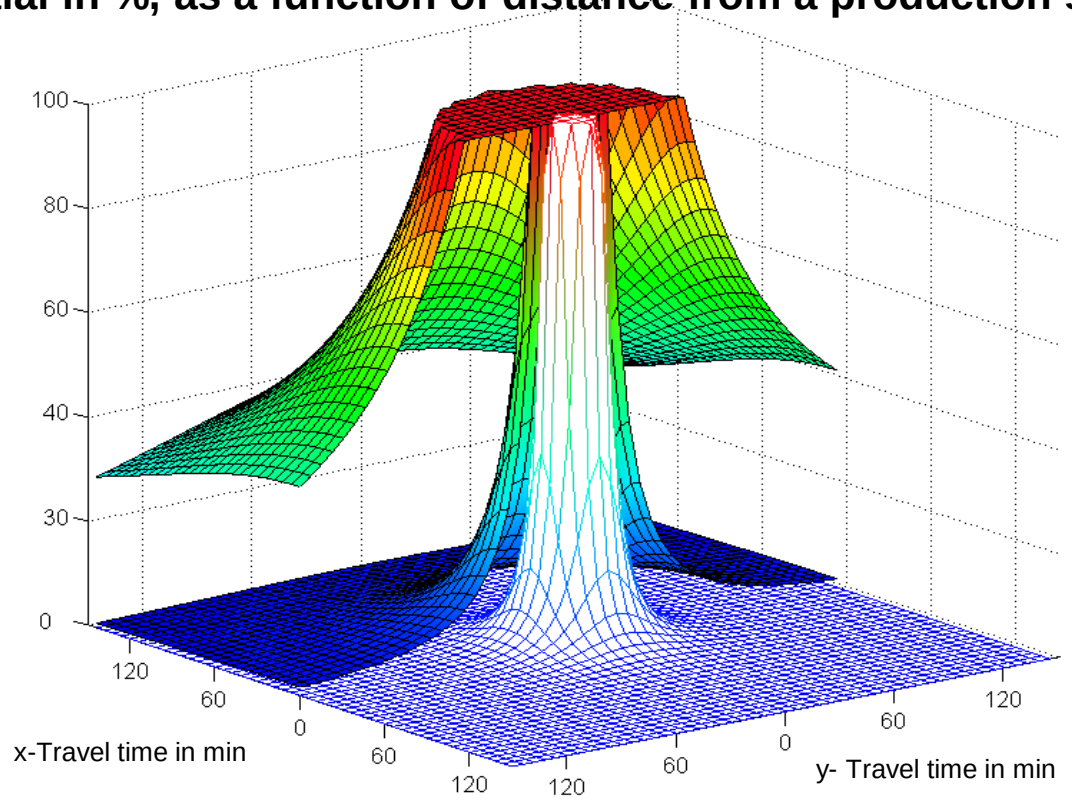
First Cliff

Cross-border Trade Integration

Gravity Model: Supply Radiuses

Hierarchical Dependency

Delivery potential in %, as a function of distance from a production site

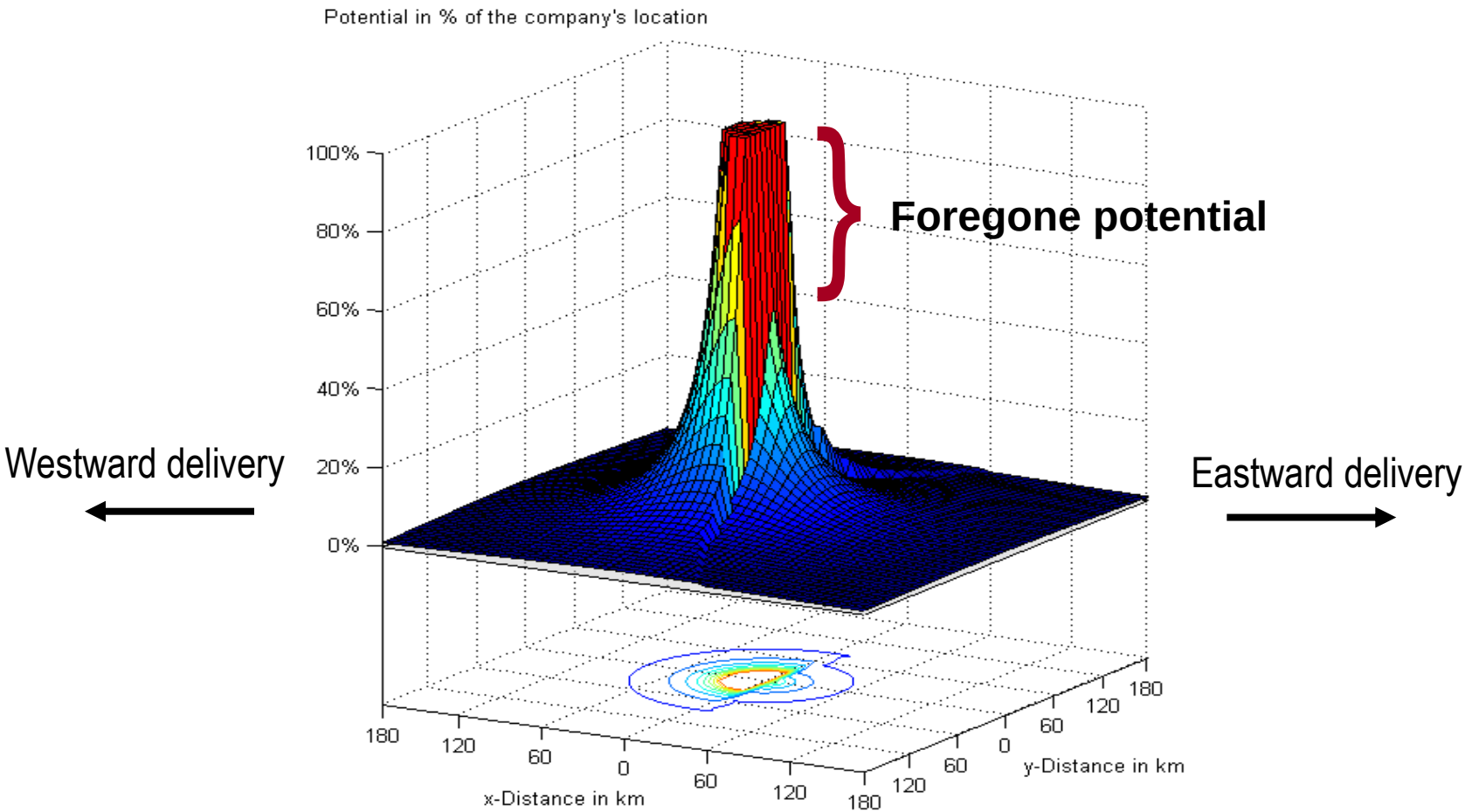


Tier 1-, Tier-2, and Tier-3 multi-layer structure from above.

Source: ESCE Economic & Social Research Center, Economica Institute.

Border Effect on Trade

Lower Austria/West Slovakia



Source: ESCE Economic & Social Research Center, Economica Institute.

Border Effect on Trade

Conclusions

- Distinguish between **access barriers** (action field 1) and **market structure weaknesses** (action field 2) in economic strategy design
- Action field 1 **(integration target)**: **reduce the cone asymmetry** between the West and East European markets
- Action field 2 **(innovation target)**: **broaden the base cone**
- Formulate a **dual strategy!**

Source: ESCE Economic & Social Research Center, Economica Institute.

Border Effect on Trade

Action Field 1: Recommendations

- **Objective**: Improve market access, combined with an accelerated re-orientation of supplier relationships.

- **Action field 1: Access barriers**
  - Expand infrastructure (transnational and interregional)
  - Improve language skills
  - Install a cross-border networking coach (for bilateral match-making; to support individual/pooled electronic procurement)
  - Speed-up/remove border controls
  - Reduce over-regulation (e.g. night driving bans)

Border Effect on Trade

Action Field 2: Recommendations

Objective: Level-up supplier relationships in the value chain **through innovation**

Action field 2: Structural weaknesses of supply

- Pursue tailor-made acquisition strategies of Tier 1 manufacturers as lead companies
- Set up highly focused programmes to support company growth (in terms of value-added growth), both internally and externally.
- Give priority for product innovation over process innovation (e.g. multi-use products, auto/aero)

Second Cliff

Cross-Border R&D Integration

Virtual Lab ➲ SmartLabs (I)

*The DUO**STARS Virtual Lab*

- ***Temporary** virtual research **consortium***
- *Thematically highly focussed: **single task lab***
- *Encompassing small/medium-sized enterprises **and** large companies, university and non-university research institutes*
- ***Real** (non-virtual) joint **development** unit*

Virtual Lab ➲ SmartLabs (II)

The DUO**STARS Virtual Lab on RTM Technology

Participants (European and non-European):
30 participants >12 institutions: Airbus (EADS), Audi, BMW, c2i, RWTH Aachen, Voith, …

ETC Cost (input): approx. EUR 50K
Additional Turnover (outcome): EUR 5M

Factor: x100!

Virtual Lab ➲ SmartLabs (III)

Envisaged Themes within the Smart>Net Project

Transformation within the ETC Project Smart>Net

Pilot Application ➲ Scalable Technology Platform

Objective: Establish both „maxi labs“ and „mini labs“, inter alia on

- *RTM technology*
- *Aluminium/magnesium foams*
- *Joining technologies*
- *Diffusion resistant paper*
- *…*

Third Cliff

Cross-Border Training Integration

Best Heads and Best Hands

*DUO**STARS Summer Academy*

Temporary Activity ➲ Permanent institution

Objective: Organise a resident academy

Smart>Net Cross-Border TtT-Scheme

Cooperation nuclei ➲ Cross-border aerospace vocational training programme in aerospace

Objective: Implement train-the-trainer schemes
Arrange AT/SK dual education programme

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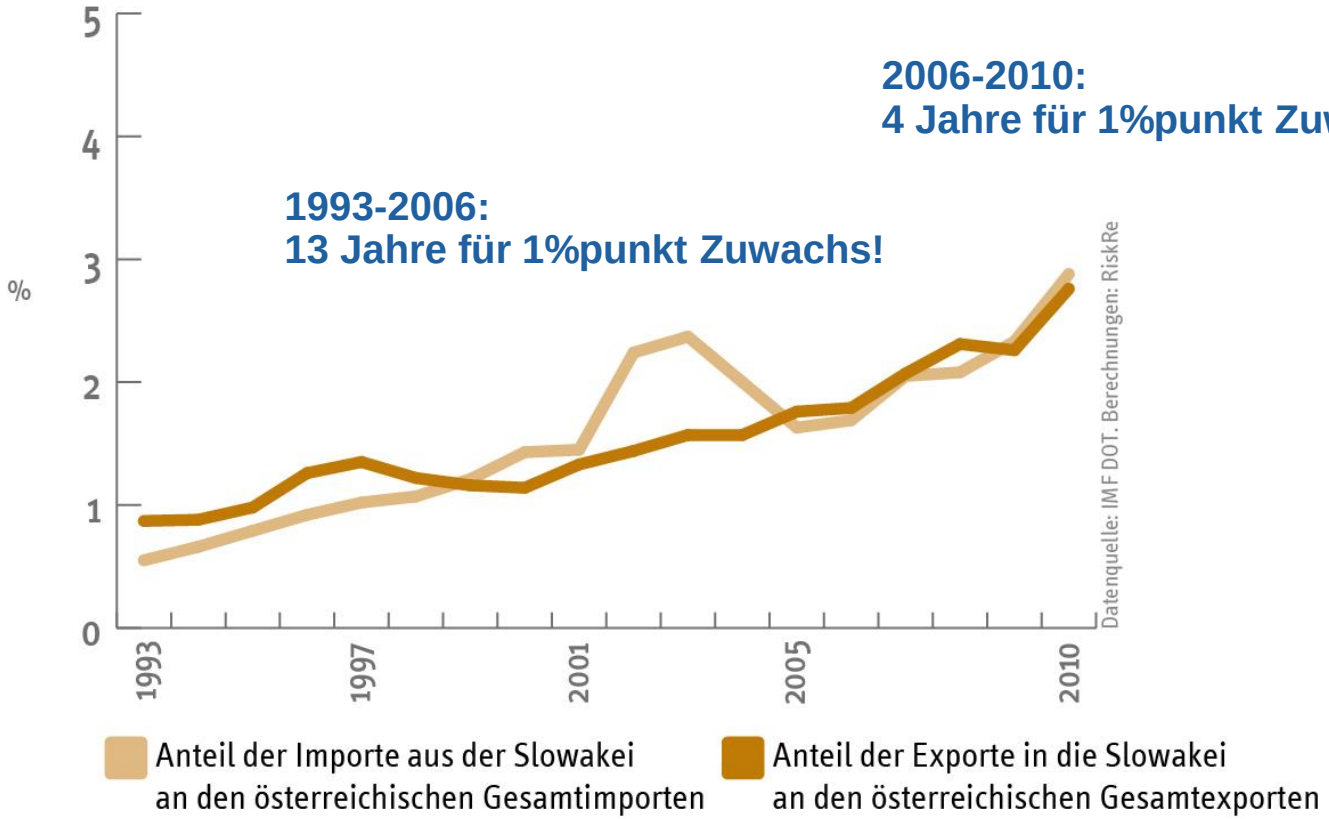
Export-/Importdynamik

Österreich/Slowakei



Quelle: DUO**STARS, IMF DOT, RiskRe.