Economics & Logistics

The Perspectives for the Netherlands

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Agenda

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0 Introduction Buck Consultants International

1 Supply chain trends at the demand side

2 Changing geographical patterns wordwide

3 What's happening in Europe?

4 Top sectors and the network of Schiphol Amsterdam

5 Conclusions

0 Introduction Buck Consultants International

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Areas of activity for

- Corporate clients
  - Business strategy development
  - Location advice
  - Supply chain optimization
  - Strategic outsourcing
  - Real estate strategy and projects
- Public clients
  - Transport, logistics and infrastructure projects
  - Airport development
  - Economic development
  - Programs and strategies to attract foreign enterprises

Offices
In Europe:

In USA: Chicago

Profile

- Established in Nijmegen, the Netherlands in 1985
- Employs 60 full-time professionals
- Performed studies in more than 40 countries

Sample corporate clients

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COLLINS & AIKMAN
TOSHIBA
VISTAKON DIVISION OF Johnson & Johnson Vision Care, Inc.
DELL
YAMAHA
Lundbeck
sappi
NCR
CooperVision
TNT
JOHN DEERE
Medtronic When Life Depends on Medical Technology
SAMSUNG
SOLA
UPS
Baxter
Boston Scientific
ESSILOR
MasterFoods
UnieKaas
Chiquita
Grolsch
Transitions
AVERY DENNISON
Ocular Sciences
SONY
Amway
PERFETTI Van Melle
UNITED SOFT DRINKS
Columbia Sportswear Company
FAIRCHILD SEMICONDUCTOR
ONDEO Nalco
CardinalHealth
PitneyBowes
bp
McCormick The taste you trust
FOSSIL
IKEA
FISKARS
DANONE
NewellRubbermaid
DHL
exel
Gebrüder Weiss Transport und Logistik
KRAFT
meneba
Heineken
FRANS MAAS
campina
AMGEN
LIZ CLAIBORNE
LANDS' END DIRECT MERCHANTS
Friesche Vlag
NORBERT DENTRESSANGLE
Cadbury Schweppes
GEODIS VITESSE
EMERSON
INVACARE Yes, you can.
NOVARTIS
JANSSEN PHARMACEUTICA
hp
MAERSK
Ewals Cargo Care
SWEDISH MATCH

Airport clients

- Amsterdam Airport Schiphol
- Arlanda Airport Stockholm
- Cairo Airport
- Frankfurt Airport
- Hannover Airport
- Malta Airport
- Manchester Airport
- Ostrava Airport
- Porto Airport
- Rostock Airport
- Rotterdam Airport
- Shannon Airport

Consulting services

- Business & master planning
- Economic impact assessment of airports
- Airport related real estate development
- Airport product & market assessments
- Marketing planning
- Feasibility study of new logistics concept

1 Supply chain trends at the demand side

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The overall business strategy drives the customer service and the supply chain strategy

Business strategy → Customer service strategy → Supply chain strategy

Business strategy
- Go to market decisions
- Resource utilization
- Management priorities

Customer service strategy
- Channel selection
- Product/market allocation
- Service offerings

Supply chain strategy
- Number and location of facilities
- Inventory positioning
- Transportation solutions
- Partner selection

The value proposition must drive the supply chain strategy

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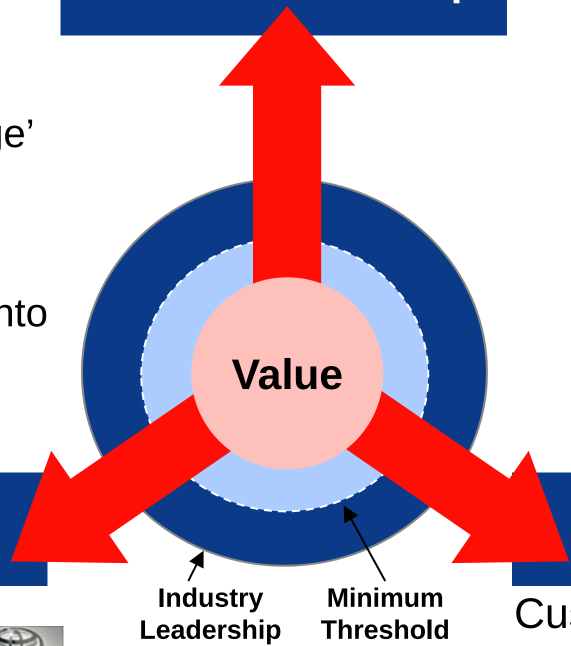
Product leadership

Customers' perspective

- 'They're the most innovative'
- 'Constantly renewing and creative'
- 'Always on the leading edge'

Internal perspective

- Focus on continually introducing new products into the marketplace
- 'Product is king'



Operational Excellence

Customers' perspective

- 'A great price'
- 'A no hassle firm'
- 'They never make mistakes'

Internal perspective

- Focus on cost and quality
- 'Process is king'

Customer intimacy

Customers' perspective

- 'Their services are unique'
- 'Exactly what I need'
- 'They're very responsive'

Internal perspective

- Focus on identifying, understanding and serving customers
- 'Customer is king'

Value proposition

The different strategic focus leads to a different configuration and organization

Value discipline Perception characteristics	Product leadership	Operational excellence	Customer intimacy
Customer's perception of you as a provider of products and services	• Innovative • Leading edge • Constantly pushing new products	• A great price • No hassle firm • They never make mistakes	• Unique services • Exactly what I need • Responsive
Supply chain characteristics	• Short pipeline • Focus on eliminating tiers from the chain ↓ **Agile**	• Robust • Capable of dealing with high volumes • Focus on cost ↓ **Lean**	• Flexible • Individualized solutions • Linked to customer process ↓ **Responsive**

Four 'megatrends' influencing demand for logistics

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Globalization of production and commerce	Increasing transport distances, growing demand for logistic services in global supply networks, new communication and integration requirements, growing competitive pressure
The transition to a post-industrial society	The end of growth in industrial manufacturing in the countries of Western Europe, accompanied by an increasing demand for product individualization and more service
Acceleration of the clock speeds of economic activity in an 'on demand' world	Stockpile production is replaced by just-in-time responses to customer demand, the compression of technology and product cycles, by time-based competition and the atomization of contract and shipment sizes, the increasing flexibility of logistical systems and the growing importance of asset management
Environmental threats and the drive towards a sustainable economy	Growing threats to logistical systems from terrorism (incl. robbery, piracy, etc.); new political intervention against climate change, the trends for extended and more complex logistic chains that meet requirements for sustainability and more recycling as well as ensure security – and prevention - requirements

Challenges for the supply chain strategy

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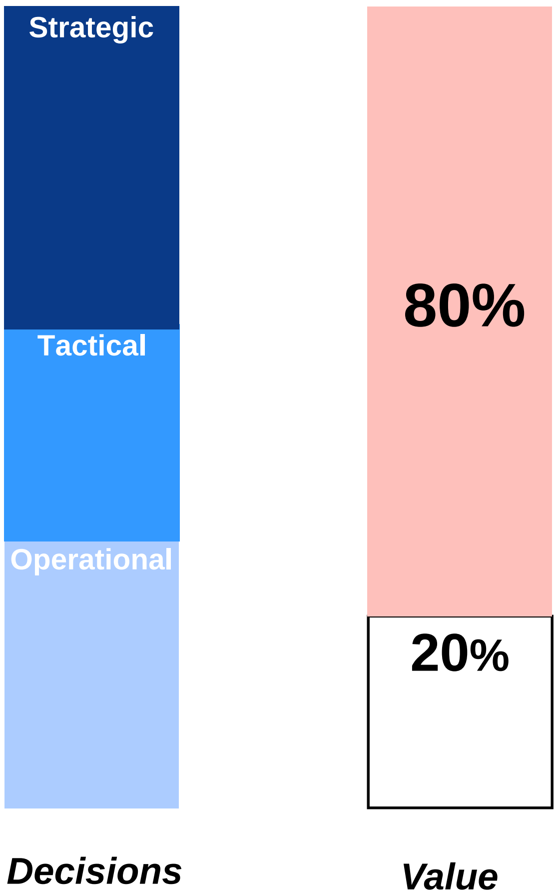
The dynamics that impact the supply chain are numerous:

- Rapidly and unpredictably changing markets
- A shift from mass markets to fragmented niche markets
- Increasing opportunities in the area of web-based technology
- Ever shortening product life cycles
- Increasing demand for service bundle solutions (e.g. products+services)
- Growing pressure on financial impact of supply chain performance
- Continuous pressure to squeeze waste (both time and cost) out of the supply process
- Supply chain management becomes ‘core business

Future supply chains will have to be more flexible and tailored to ‘individual’ markets than ever before

Why focus on strategic network design first?



Source: *AMR Research*

The majority of the value chains lifecycle costs are locked-in at the start

Such "up-front" decisions include:

- Distribution network
- Inventory locations
- Assembly network
- Part & component suppliers
- Inventory Levels
- Desired part & component availability
- Desired part & component costs
- In-house vs. contract manufacturers
- Logistics suppliers

2 Changing geographical patterns wordwide

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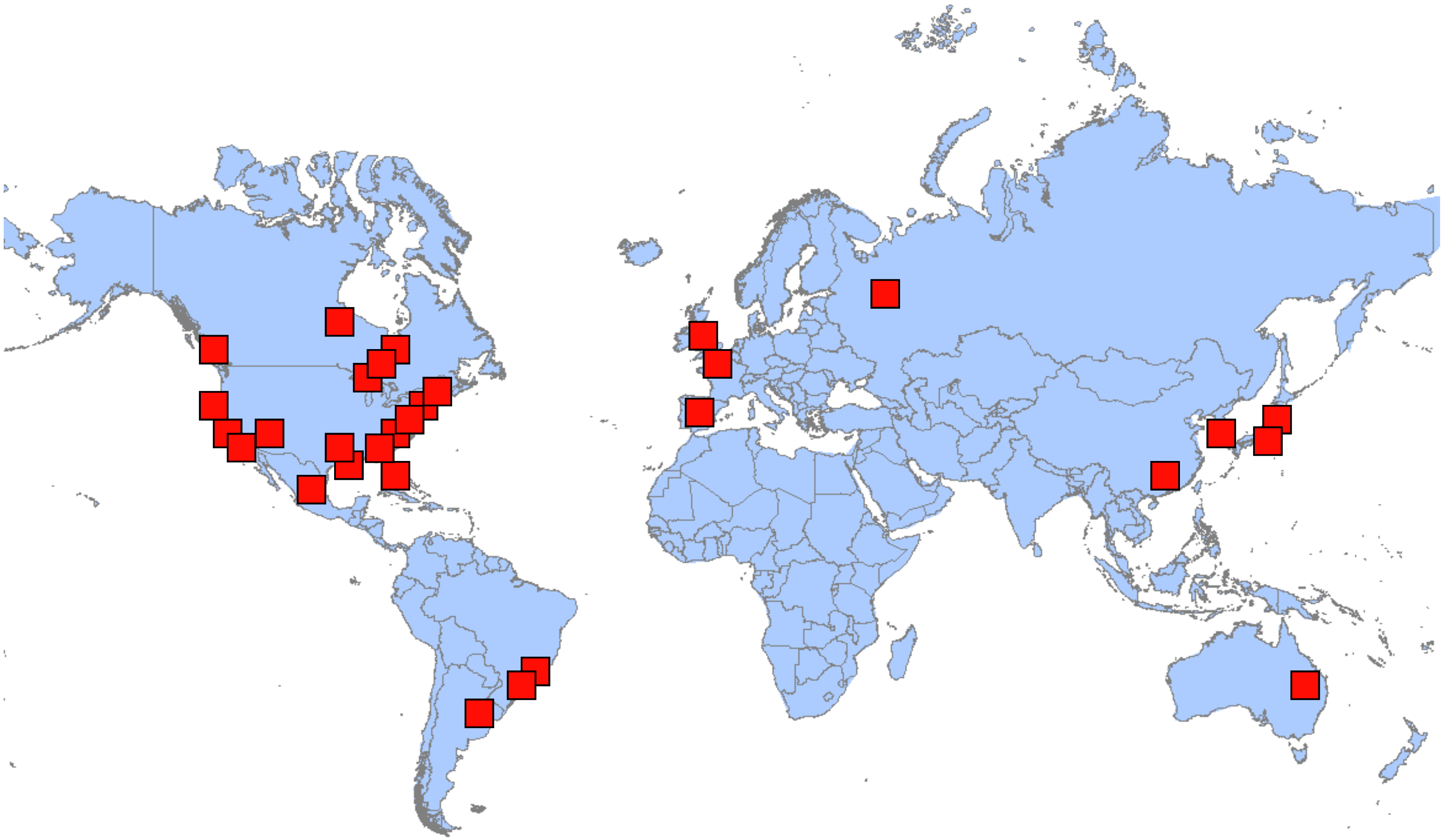
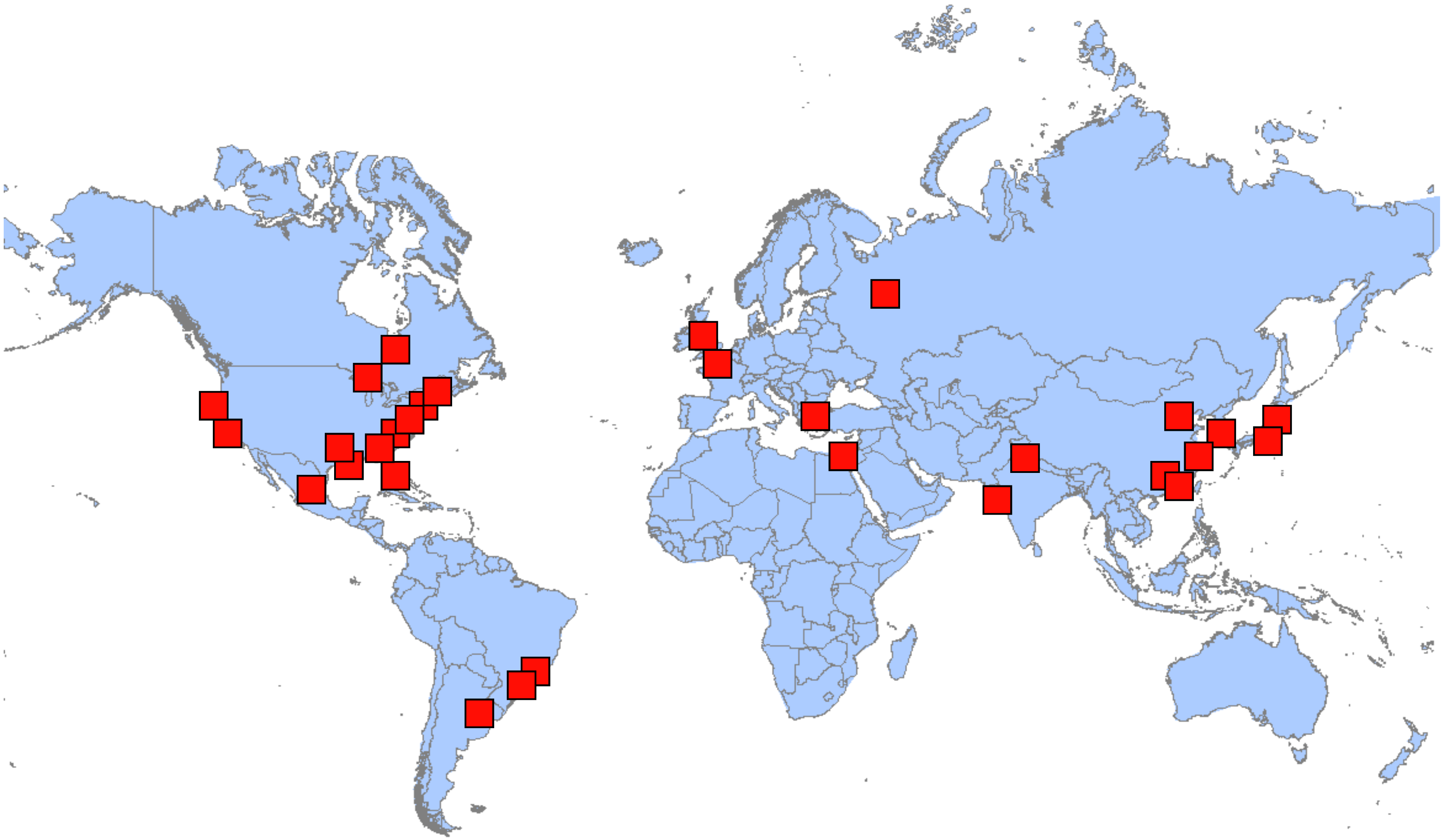
Richest cities in the world by GDP (2005)



Source: PwC, 2009

Richest cities in the world by GDP (2025)



6 new cities in the Eastern Hemi-sphere

Source: PwC, 2009

Top 30 cities – Economic strength

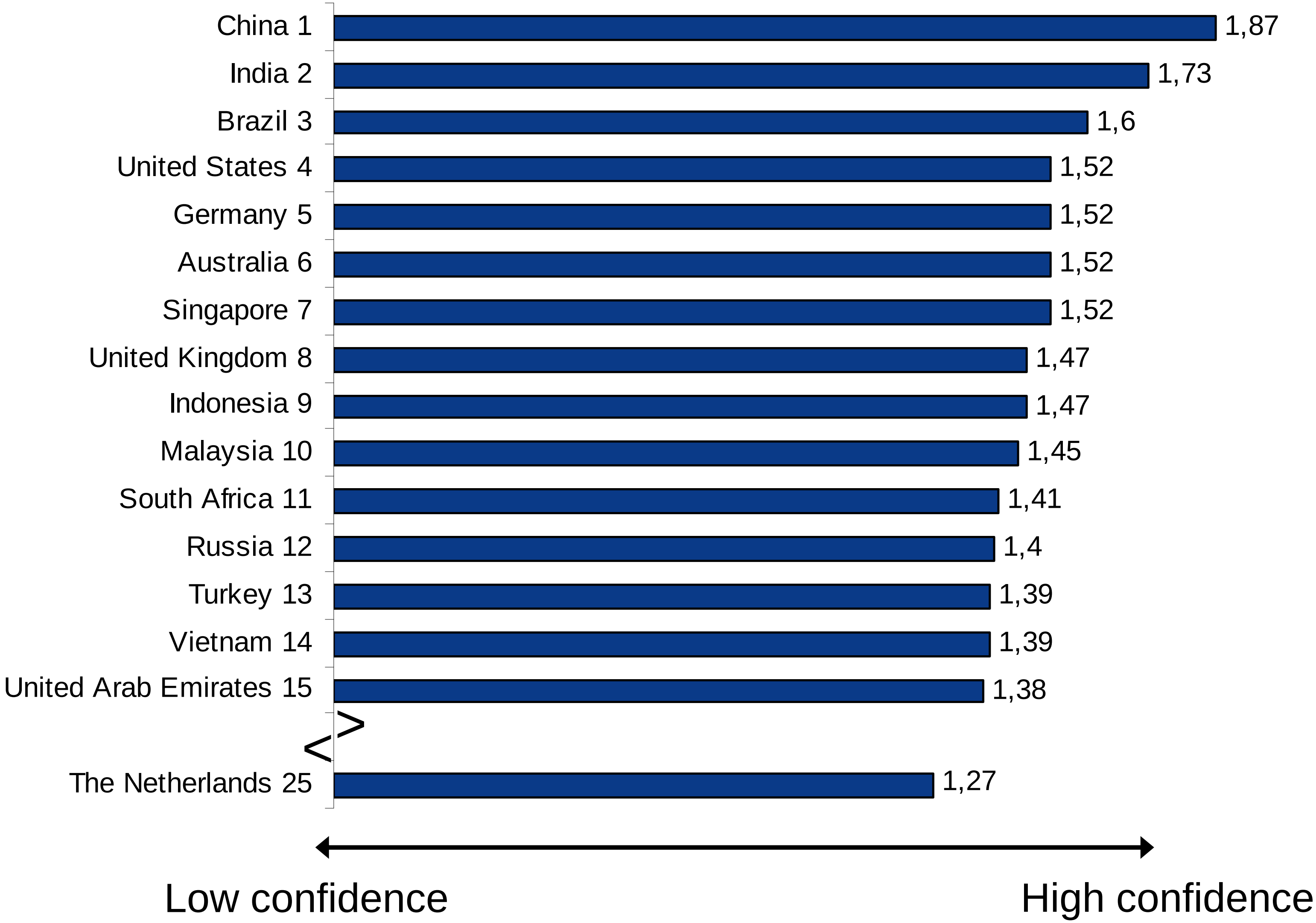
Rank	(out of 120)	Overall economic strength score/100*	GDP 2010-2016 (% real change p.a.)**
1	Tianjin	56.6	12.9
2	Shenzhen	55.4	11.5
3	Dalian	55.0	12.7
4	New York	54.0	2.4
5	Doha	53.7	8.3
6	Guangzhou	53.6	11.3
7	Shanghai	51.8	9.5
8	Tokyo	50.5	1.7
9	Chongqing	49.9	12.2
10	Beijing	49.8	9.4
11	Qingdao	49.4	11.4
12	Chengdu	49.2	11.7
13	Suzhou (Jiangsu)	48.1	10.5
14	Hangzhou	47.6	10.3
15	Singapore	46.0	5.7

Rank		Overall economic strength score/100*	GDP 2010-2016 (% real change p.a.)**
16	Bangalore	45.9	10.3
17	Los Angeles	45.7	2.7
18	Houston	45.6	4.4
19	Ahmedabad	45.3	10.1
20	Hong Kong	43.8	4.9
20	Hanoi	43.8	10.2
22	Paris	43.6	2.2
23	Washington	43.4	3.6
23	Dallas	43.4	4.1
25	Abu Dhabi	42.5	4.7
26	Mumbai	42.4	8.4
26	Delhi	42.4	8.9
28	Seattle	42.0	4.2
29	Taipei	41.9	5.1
29	London	41.9	2.7
74	Amsterdam	33.8	

* The overall economic strength score is comprised of five indicators, including real GDP growth
** Cumulative average annual growth rate

Source: Economic Intelligence Unit, 2012

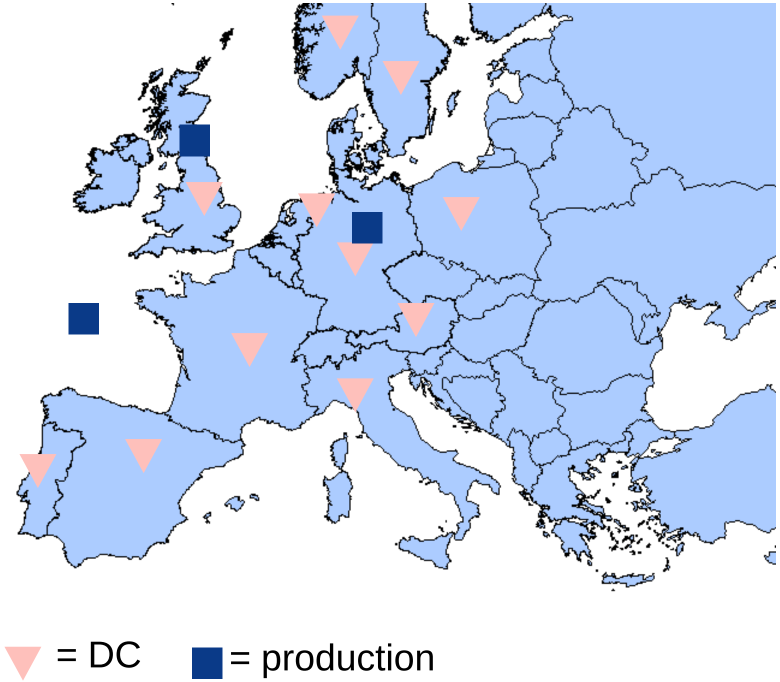
AT Kearney 2012 FDI Confidence Index



3 What's happening in Europe?

European supply chain design has moved from decentral execution to central execution to a hybrid between central and decentral execution…

Pre 1990: the decentralized execution and decentralized control model



	Characteristics
Primary production	European/ full range
Distribution	By individual country
Logistics responsibility	Country
Inventory	Country specific
DC operations	In house
DC activities	Receive, store, ship
Fulfillment strategy	One size fits all
Organization	Fully fledged country organization

Key drivers for centralization versus decentralization

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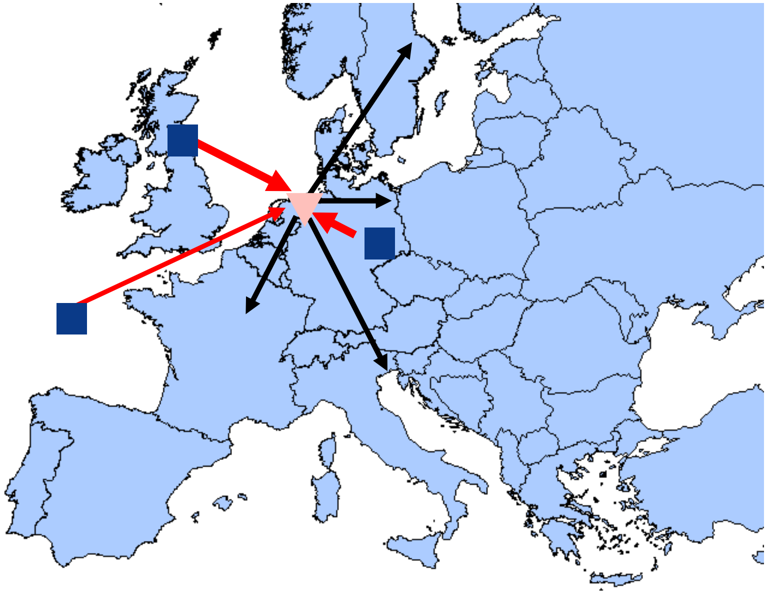
	Central execution	Decentralized solution
Local market volume /local SKUs	Low	High
Ability to forecast accurately	Low	High
Required market responsiveness	Low	High
Transport intensity	Low	High
Product value density	High	Low
Labor intensity	High	Low
Number of global suppliers	High	Low
Importance of consistent quality	High	Low

90’s: centralized control and execution during the 90’s



= DC ■ = production

	Characteristics
Primary production	In or near market region
Secondary production	Mainly integrated in primary production function, trend towards integration in DC
Distribution	Centralized in single Euro DC or local market DC’s
Inventory	European inventory
Planning	Centralized
Customer service	De-centralized
Shared services	De-centralized but with plans to centralize

Drivers for change

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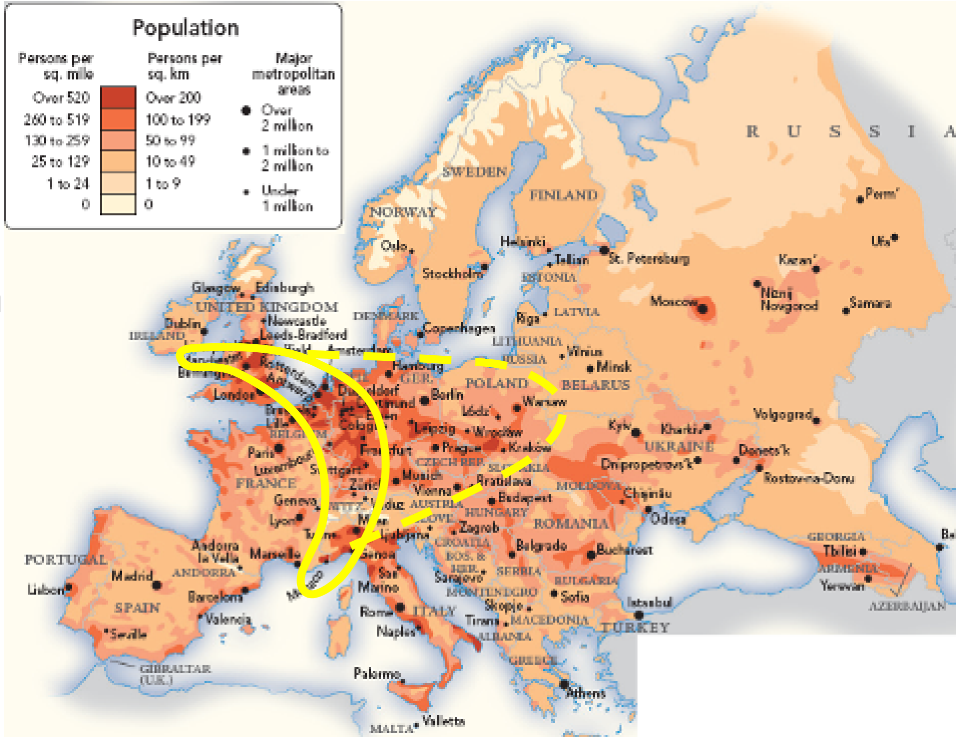
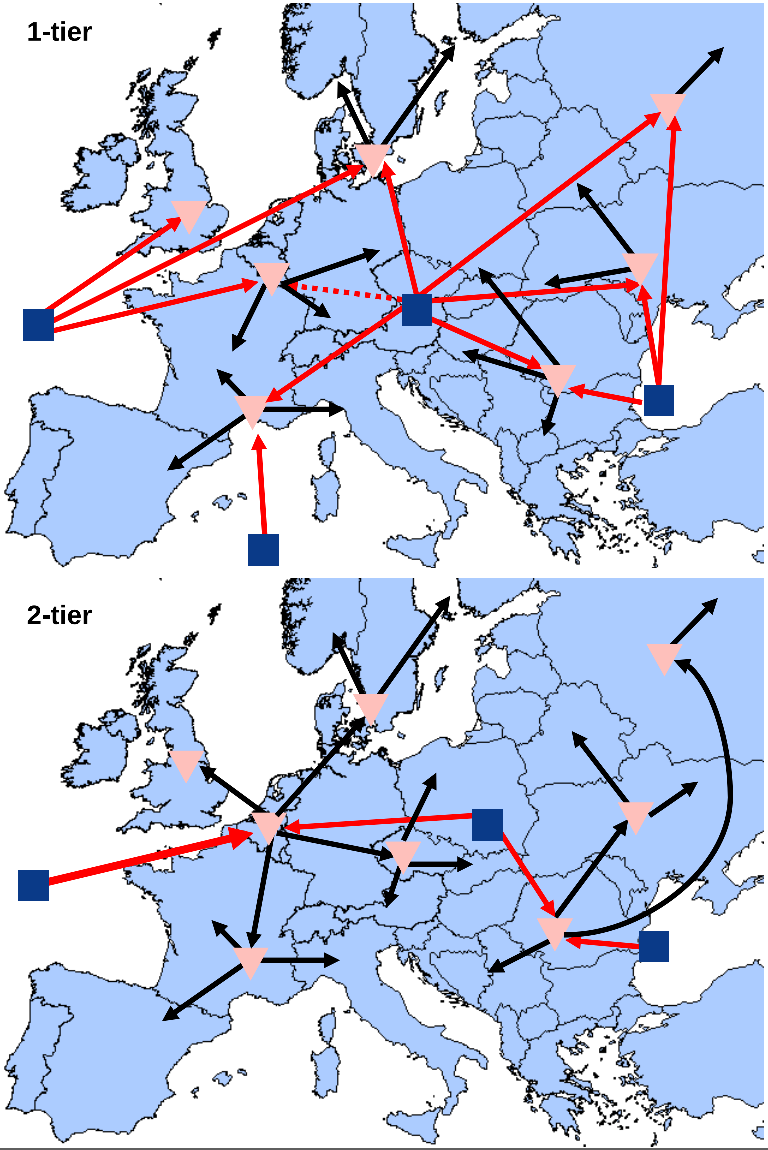
- EU expansion from 15 to 27 countries
  - Customer base grows from ‘banana’ London-Germany-Milan (350 million Europeans with very high buying power) to an area including CEE with 500 million people
- Globalization
  - Low labor costs in Far East, especially China and India
  - Producing in CEE may lower total supply chain costs



- Others
  - Increasing congestion
  - Increasing environmental regulations
  - Increasing costs of land, labor, energy and transportation (fuel, toll)
  - Increasing market demands (retail)
  - Shortened product life cycles

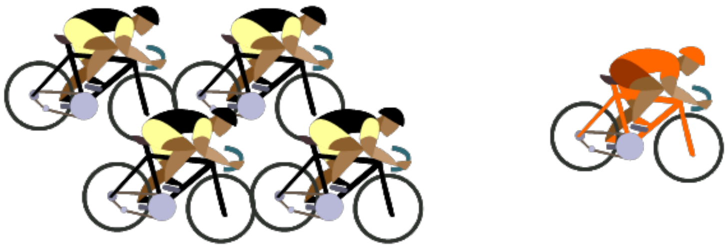
Today: decentralized NETWORKS with central control…towards product-market specific, hybrid supply chains



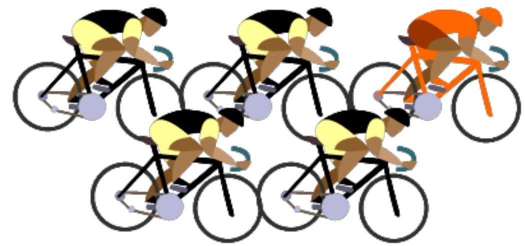
	Characteristics
Primary production	Off-shore or Near-shore
Secondary production	In market/low cost region
Distribution	Regional DC's ● Direct sourced ● Satellite structure / X-dock
Inventory	European inventory
Planning	Centralized
Customer service	Regionalized
Shared services	Centralized / regionalized

The footprint should be aligned to the requirements per product and market-channel in order not to over-service and not to under-service

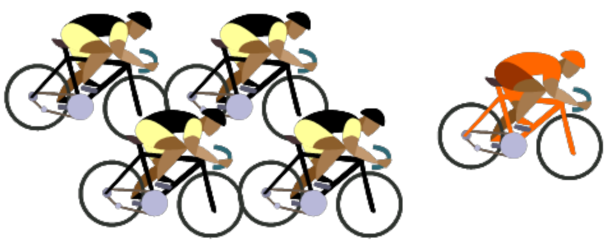
Changing position of the Netherlands



1995



2012



2000

2020

4 Top sectors and the network of Schiphol Amsterdam

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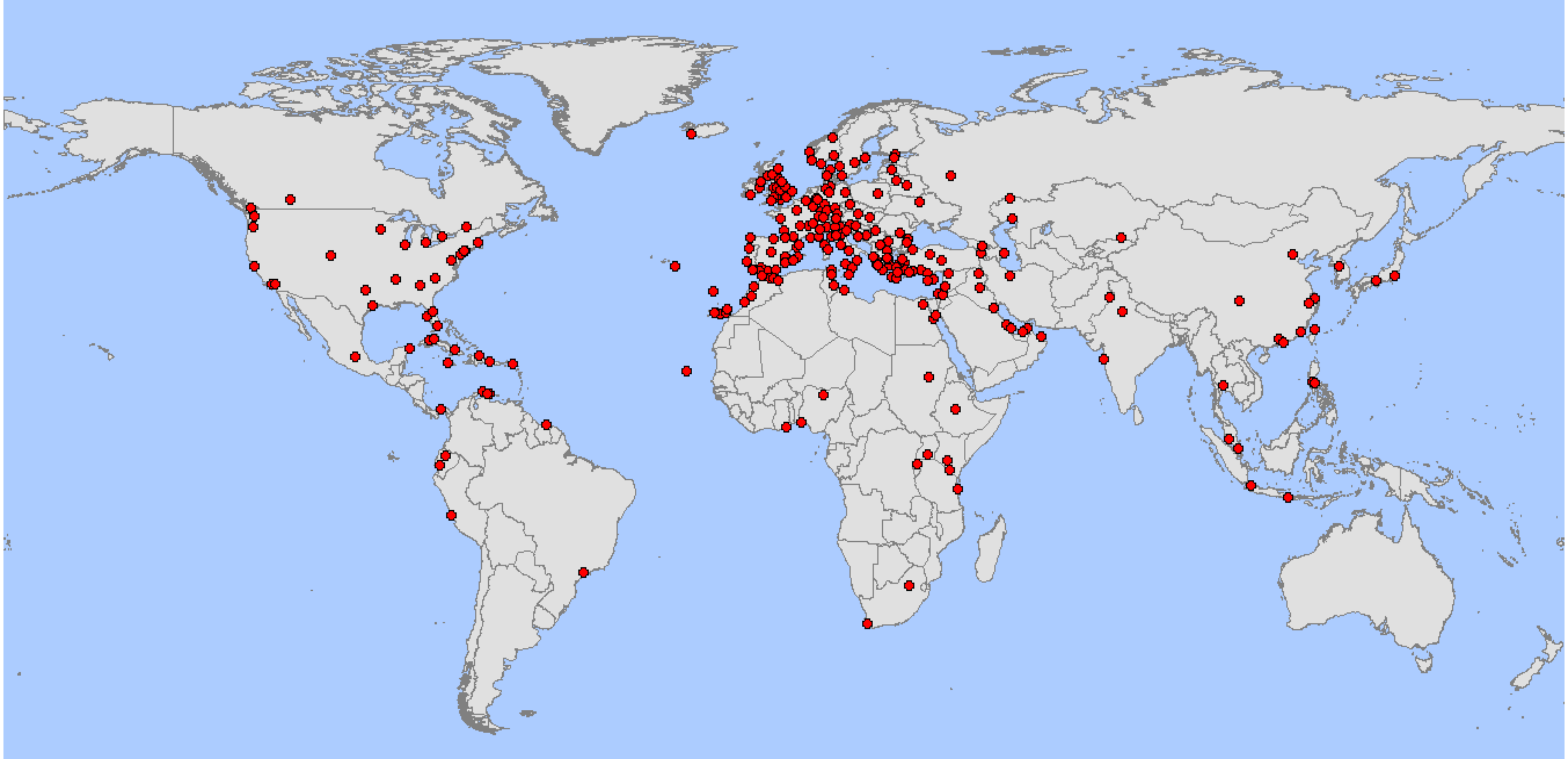
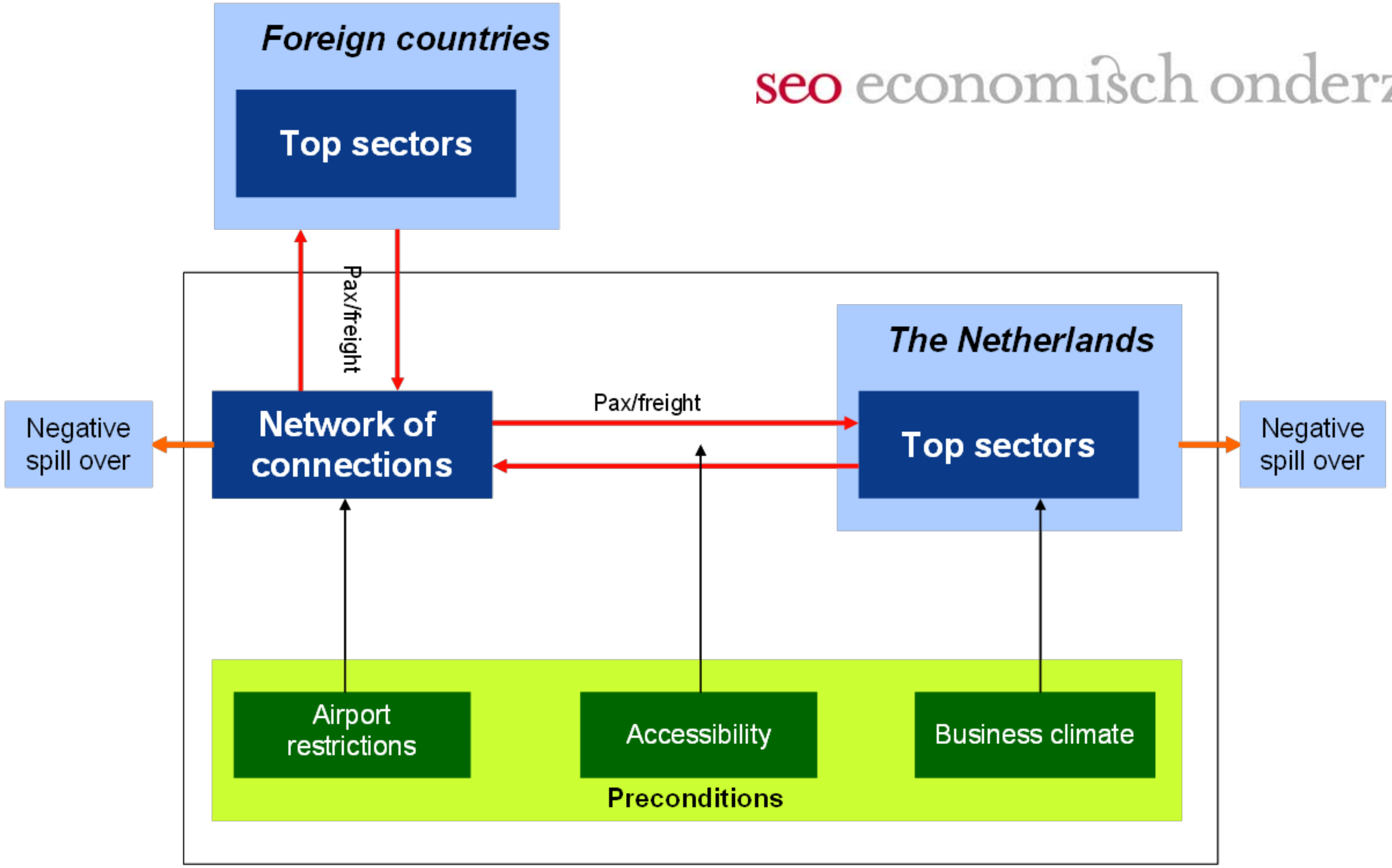
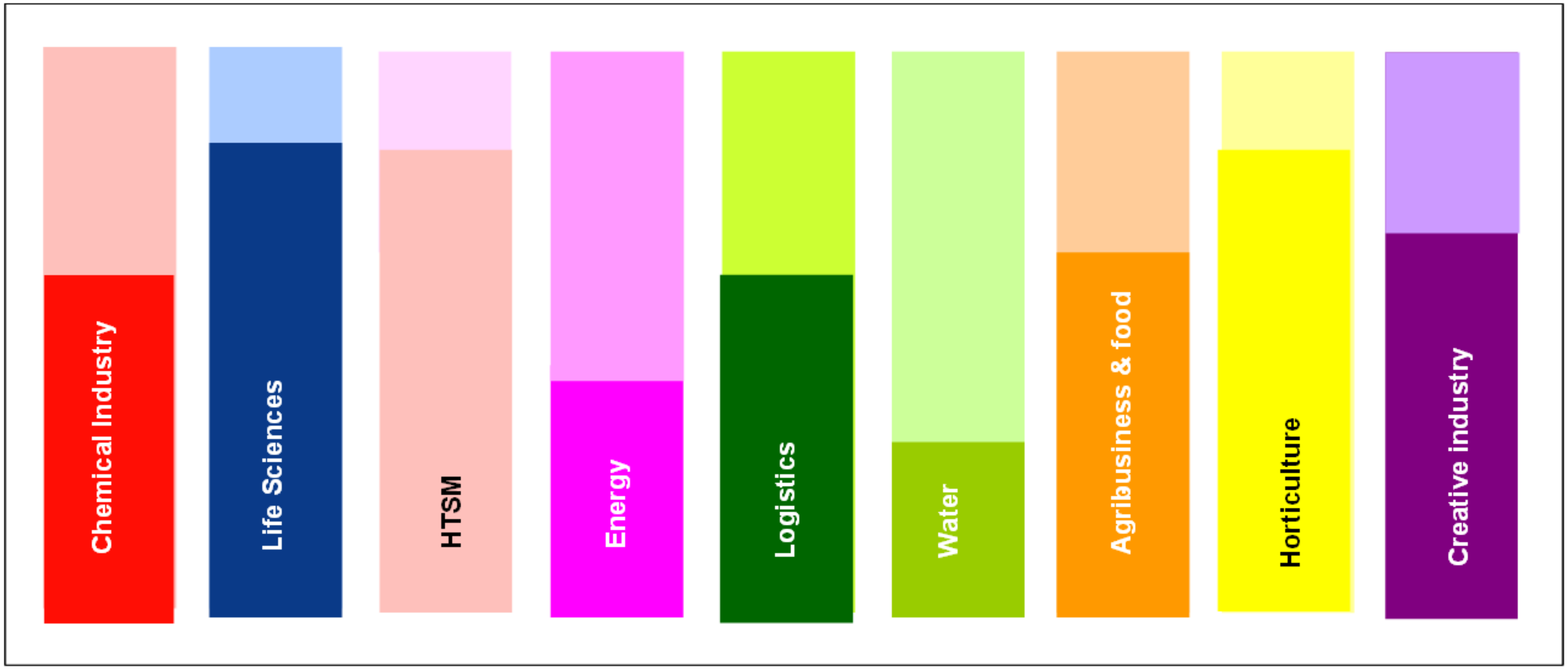
Direct connections from Schiphol



Relationship airport and top sectors



Airport dependence of the top sectors (indicative)



Airport dependence of the top sectors

Top sector	Headquarters	International trade	Air freight
Chemical industry	+	+	-
Life Sciences	+	+	+
HTSM	+	+	+
Energy	-	+	+
Logistics	-	+	+
Water	-	+	-
Agribusiness & food	+	+	-
Horticulture	+	+	+
Creative Industry	-	+/-	+/-

Top sectors in China

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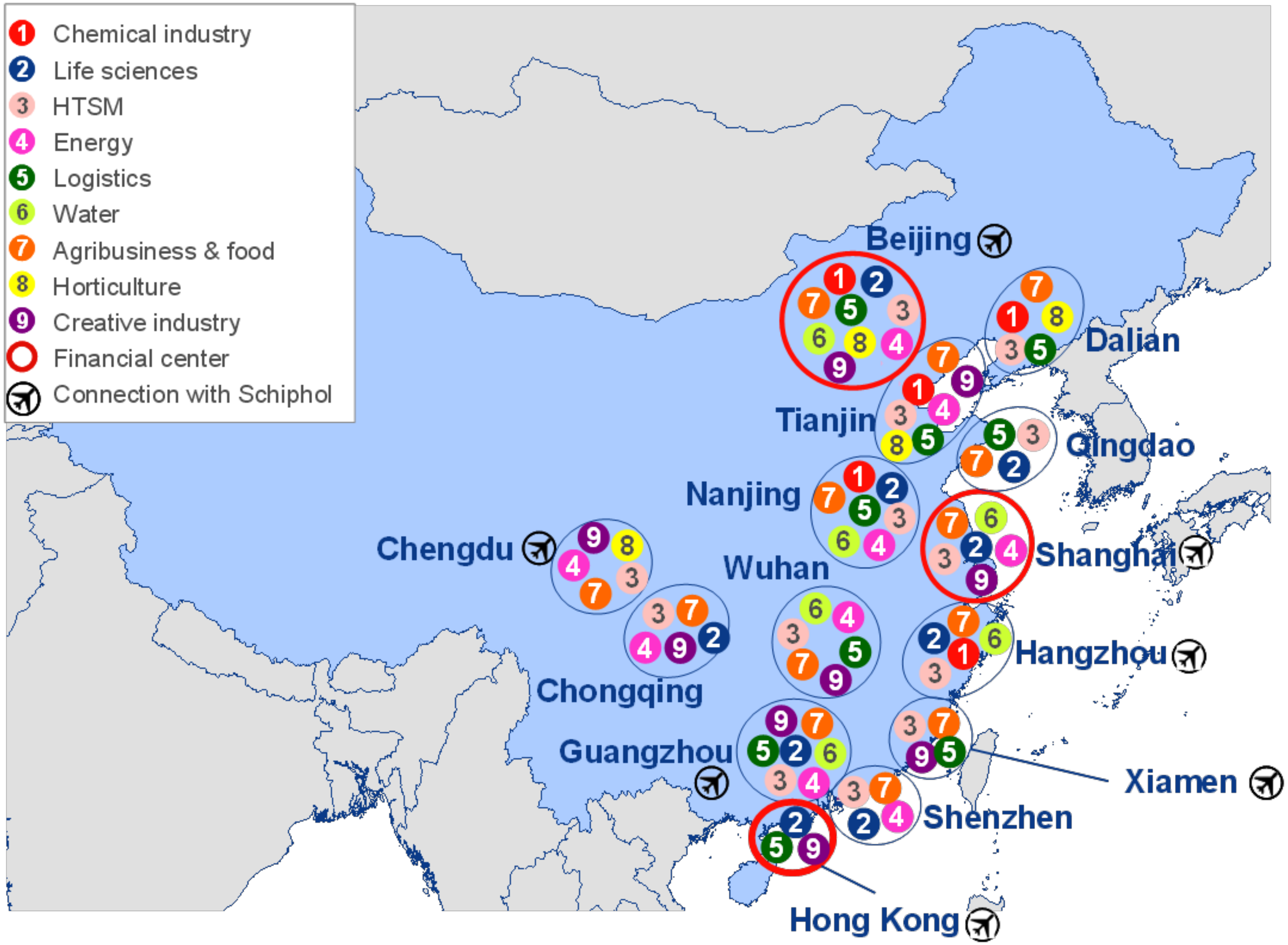
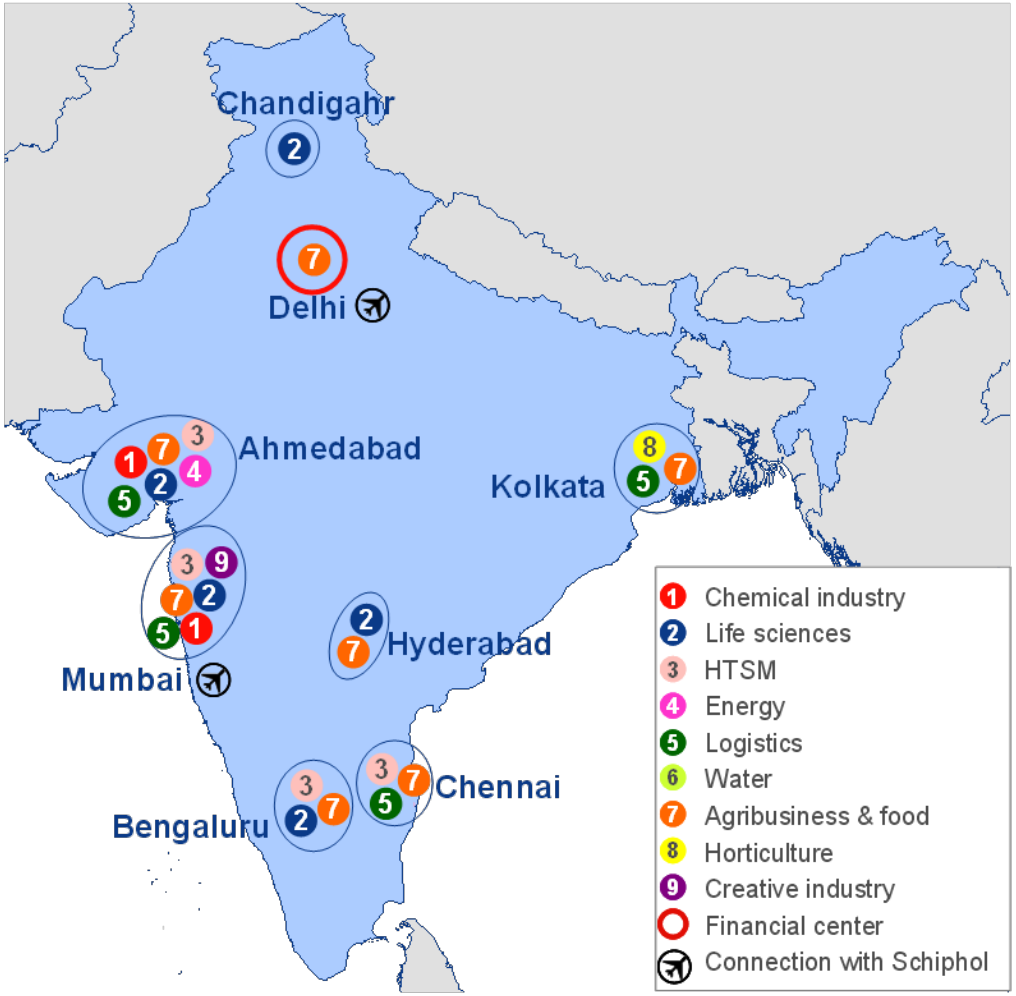


Top sectors in India



Import and export per top sector in volume and value

		Chemical Industry	Life Sciences	HTSM	Horticulture	Creative Industry
Export	Volume	◐	◐	●	●	○
	Value (€)	◐	●	●	○	○
Import	Volume	○	○	●	●	◐
	Value (€)	◐	●	●	○	○

● Large
◐ Medium
○ Small/limited

Source: Districon, 2005: editorship Buck Consultants International

Possible air freight connections

5 Conclusions

- Companies face a variety of challenges, which will ask for tailor-made and flexible solutions; airlines and airports need more customer focus

- Within Europe companies tent to decentralized distribution networks with product-market specific, hybrid supply chains

- Economic dynamics are more to be found in Asia

- From a top sectors perspective life sciences, high tech systems, horticulture and creative industries have a high airport dependency

- Combining shifting geo-economic gravity centers and top sector concentrations in the world, Amsterdam Schiphol Airport needs to consider new destinations in:
  - South-America: Brazil, Argentina
  - Russia
  - China (Central, West, North)
  - India
  - Vietnam