



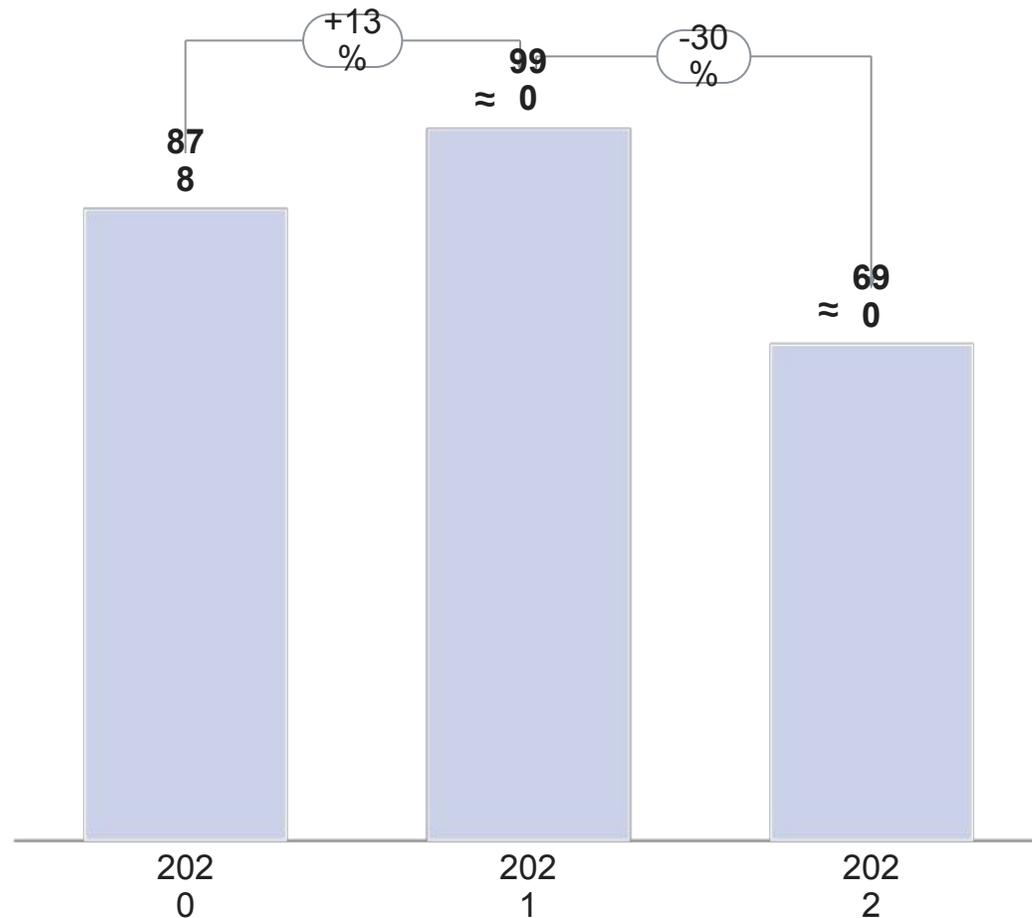
Volume development and corridor perspectives under geopolitical influence

Presentation at Silk Road Summit 2022
Andreas Schwilling

Duisburg, 8 December 2022

Significant decline of Eurasian rail cargo transports in 2022 – Volumes expected to be below 2020 levels

Development of Eurasian rail cargo volumes¹⁾ ['000 TEU]

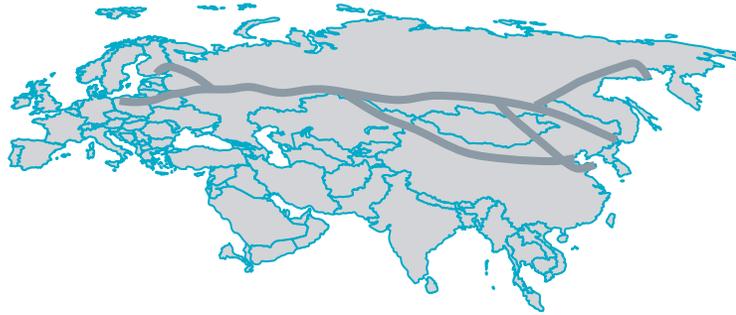


- RZD confirms **35% decline** of traffic from **China to Europe** and back for the first nine months 2022
- **Decline** is partly compensated by transport from China to Russia, however this is not counted as silk road traffic
- **duisport** as key hub currently reports about **30 silk road trains** per week (compared to peak in pandemic of 60-70 trains)
- In general, volumes have **recovered steadily** after a slump immediately after the start of the war, western shippers avoid silk road transports
- **Operations**, especially in Brest/Małaszewicze have become more **reliable** than last autumn
- **Middle corridor not competitive yet** in terms of regular service, travel time and cost, $\approx 1\%$ of volumes
- Beside the war, **normalization of shipping rates and lockdowns in China** are reducing demand for Eurasian rail cargo

1) Defined as EU28 (all European Union countries + UK) to Asia 5 (Kazakhstan, Mongolia, China, Japan, South Korea)

Operators' quotes provide a representative picture of the recent development on both corridors

Quotes from a recent survey among operators



"Eurasian freight volumes along the North Corridor have decreased by c.20-40% in 2022 compared to 2021 – EU customers are leaving the corridor due to security concerns and moral questions"

"The North Corridor is still very relevant for us – Transit traffic is barely touched by sanctions and operations are working smoothly, we expect freight volumes to recover to near crisis levels soon"

"We have observed a significant increase of rail traffic between CHN and RUS, also for goods on EU sanction lists"

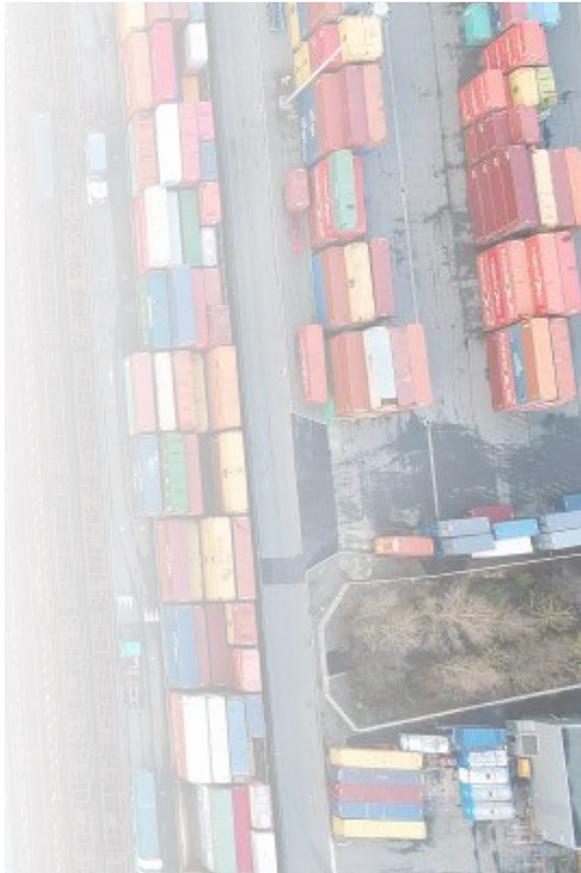
"Demand for Middle Corridor has increased this year. The volume increase, however, is negligible since the corridor still lacks sufficient capacities to serve customers"

"European freight forwarders are highly interested in adopting the Middle Corridor as alternative to the North Corridor, but with current prices and transit times, the best alternative is air or sea freight"

"Everyone is currently talking about the Middle Corridor – However, we believe large volumes will be possible only in the upcoming 3-5 years"

There is additional demand for the middle corridor due to the war, however last year's challenges still remain

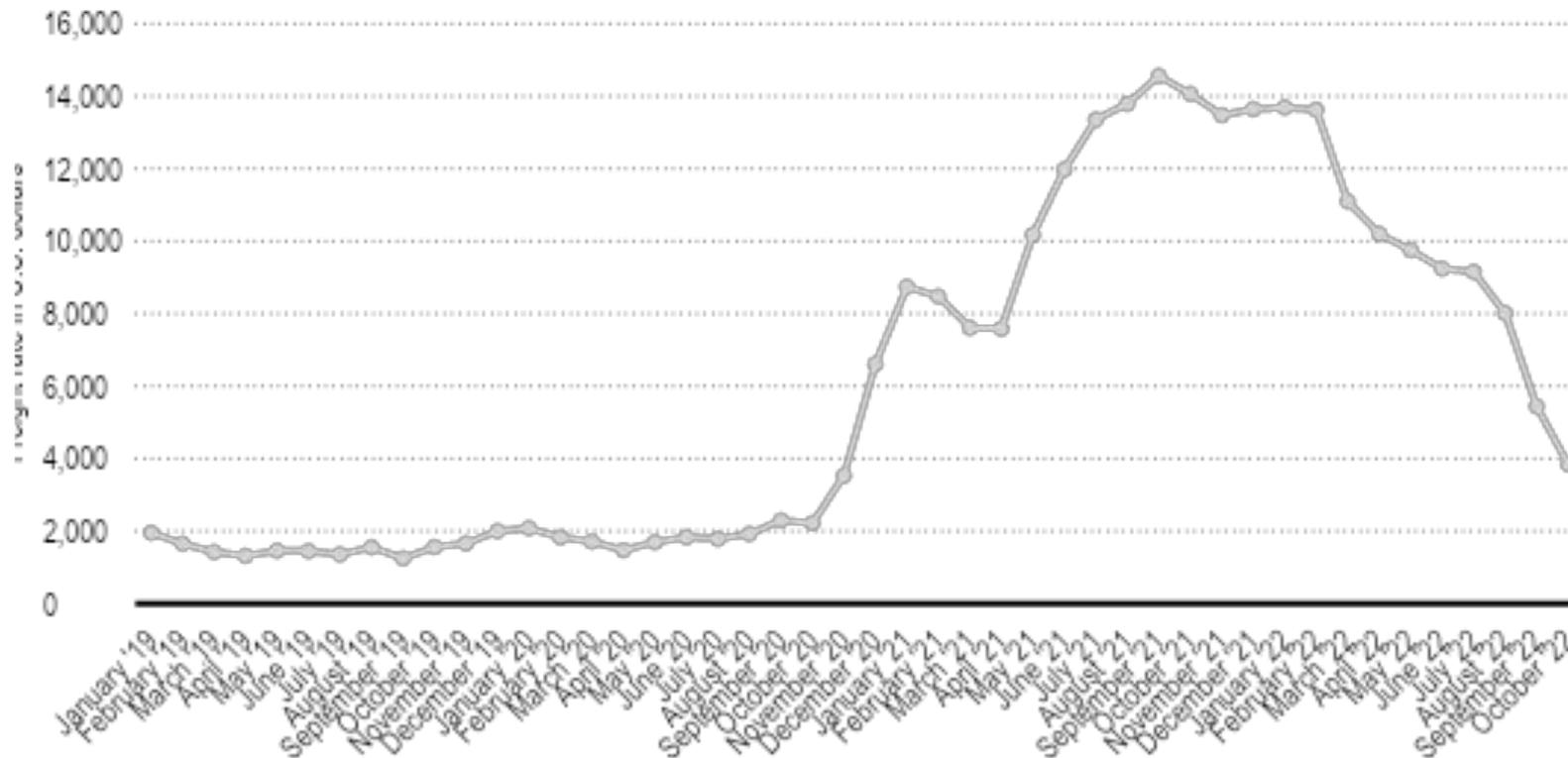
Current situation on middle corridors



- 1 For northern European destinations, middle corridor represents a larger distance and takes longer
- 2 Limited scheduled train service
- 3 Scarcity of active players on corridor, especially integrators
- 4 Limited and non-scheduled ferry services
- 5 Many ongoing projects and initiatives, but implementation needs time

Shipping rates for containers fell from their historic highs in fall 2021 and reduce demand for silk road rail transports

Container freight rate index from Shanghai to Rotterdam [USD per FEU]



- In late 2021/early 2022, sea shipping rates were higher than rates for rail transport
- If rates fall to 2019 levels, subsidies by Chinese regions will become important to rail cargo transports again to be competitive

Beside the war, trade volumes with China and the price delta to shipping determine the Eurasian silk volumes

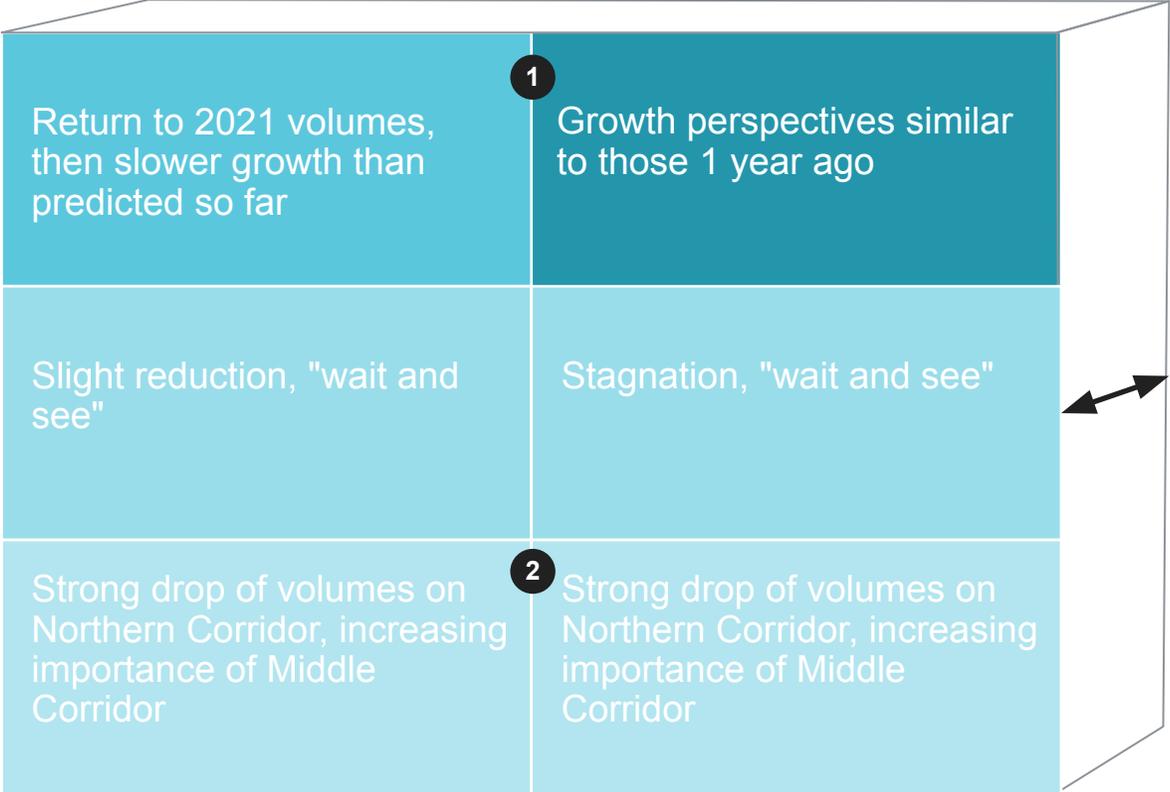
Outlook

Development of Ukraine war and political tensions with Russia

Cease fire, easing of tensions

Status quo continued

Stronger sanctions preventing rail transports with RZD



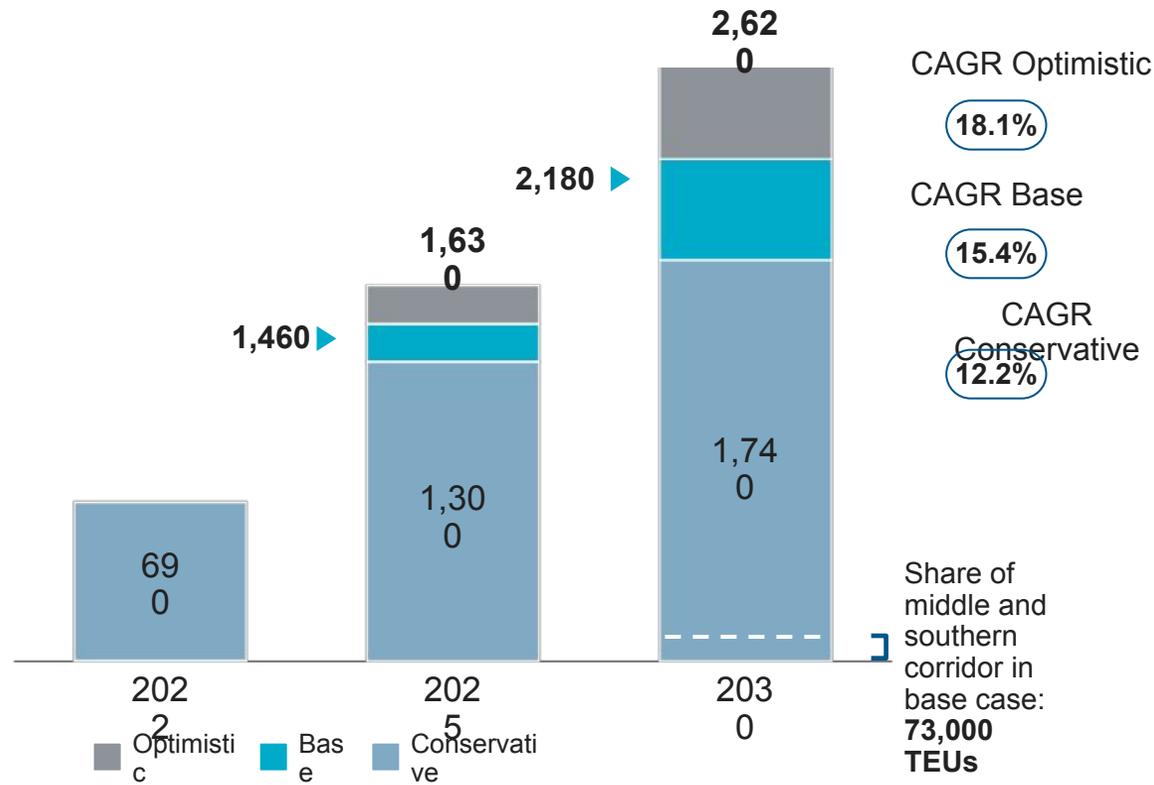
Price delta to sea shipping

Trade volume Europe - China
Declining | Growing

1

In the positive case of a cease fire and easing of sanctions, volumes can return to the levels projected a year ago

Europe (excl. Russia) to Asia rail traffic¹⁾ ['000 TEUs]



Key assumptions

Strong growth for Silk Road rail traffic

After a cease fire, Eurasian rail cargo expected to return to growth path, conservative case relevant if trade volumes between China and Europe stagnate and sea shipping rates decline to 2019 levels

Rail expected to be a stable alternative

Currently, rail has only a ~2% share of containerized traffic, experts expect the share to increase gradually over the years but will stabilize at ~4-6%, as there will always be goods that need the low cost of sea and the high speed of air

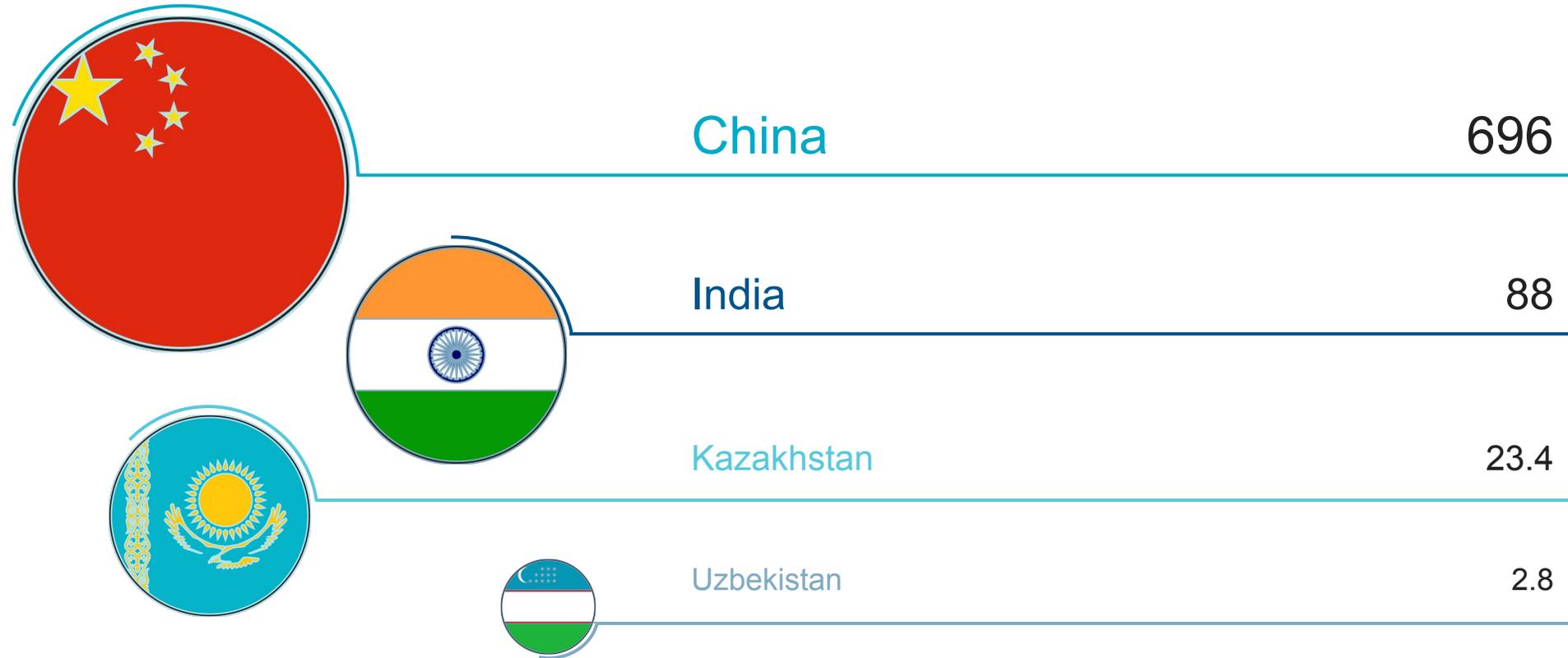
Middle Corridor will grow, but remains minor

The southern and middle corridors can obtain more share based on trade flows within their natural catchment areas if they can become more competitive in performance – Even so they are likely to remain minor

1) Defined as EU28 (all European Union countries + UK) to Asia 5 (Kazakhstan, Mongolia, China, Japan, South Korea)

Trade with China is the important driver – Other countries along the silk road cannot fulfill the same role

Relevant trade flows from and to EU, 2021 [EUR bn]

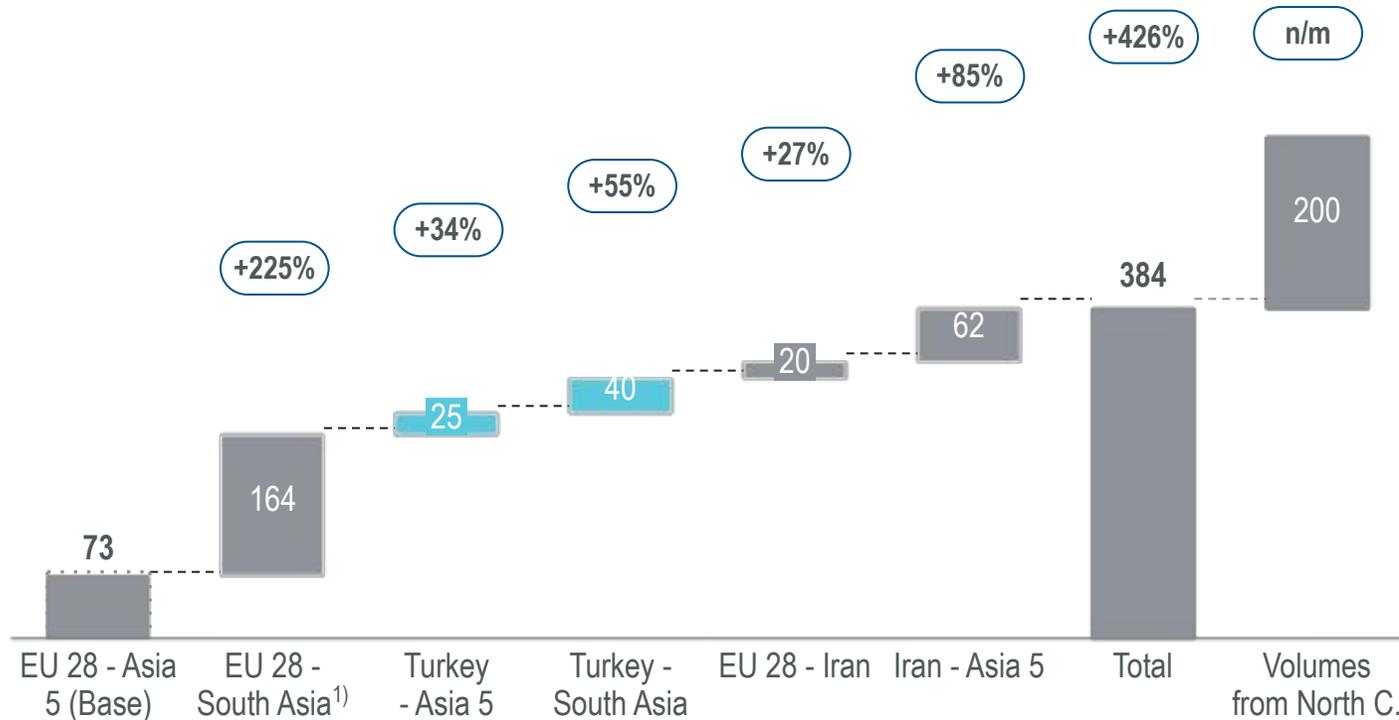


Remark: Volumes with Turkmenistan: EUR 0.5 bn

Source: EU, Trading Economics, Roland Berger

We expect the middle and southern corridor to benefit little if sanctions against Russia are tightened further and the northern corridor becomes unusable

Volumes middle and southern corridors and upsides²⁾ ['000 TEUs]



Key take-aways and assumptions

Middle/Southern corridor will not become significant with "traditional" Eurasian flows

Mainly due to the **natural catchment area** of the southern and the middle corridors and the longer transport time needed

Major potential comes from upsides with countries that have no other alternative

For countries like Turkey, Iran, and countries in South Asia, southern and middle corridors are not only the **natural**, but the **only rail route**

All upsides come with heavy pre-conditions that need to be met

South Asia, esp. **India**, has huge potential volume. However, political rivalries with Pakistan need to be resolved or circumvented and rail connection towards Myanmar be established. Iran's potential is heavily depending on sanctions

1) Defined as Pakistan, India, Nepal, Bangladesh, Myanmar, Thailand. Of the potential with EU, majority >50% is attributable to India

2) All numbers for the year 2030, upsides only refer to flows with enough distance between them, but not adjacent flows

