

Natural Gas Reverse Flows in the Danube Strategy Region

Current State and Outlook

Jan Osička

Filip Černoch

Tomáš Dráb

Tomáš Martanovič

Jiří Vlček

Masaryk University Center for Energy Studies

www.ceners.org

Presentation outline

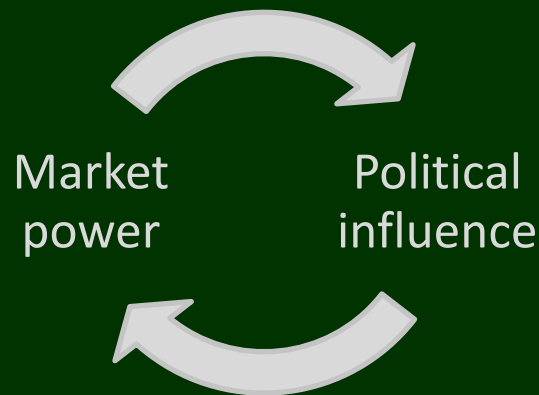
- Theoretical assumptions
- The role of bi-directional interconnectors (BDICs) on the contemporary gas market
- Scenarios of future development
- Interpretations
- Recommendations

Theoretical assumptions

- (1) Most of the Danube Strategy states are at the same time:
 - Subject to Russian long term gas contracts
 - Subject to the EU energy market law
- (2) The Russian and European vision of the future of natural gas trade in the region is fundamentally different

Russian export strategy

- (1) High market power brings premium margins
- (2) As a side effect also political power
- (3) Political power is used to maintain/increase market power.



- ⇒ Russian gas is neither „standard business“
- ⇒ Nor it is only about politics.

The market according to EU and Russia

	EU	Russia
Continental market	Single European market	Set of isolated national markets
Network topology	Grid	Linear
Pricing	Gas-to-gas	Oil-indexed
Price levels	Hub pricing/single price	Set according to negotiation position
Secondary trade (re-export)	Desirable, necessary for sufficient hub liquidity	Prohibited via destination clause
Contract duration	1-5 years or spot	20-30 years, no spot
Contract flexibility	Full	Seasonal (10-15%)

BDICs

- Changing the unidirectional lines into grid
 - Diversification
- ⇒ Supply security (gas crises stroke heavily because lack of infrastructure, not lack of gas in the system)
- ⇒ Trade incentive (price arbitrage among newly connected markets)

Russian import price in 2013



Russian import price in 2013

Austria: 397 USD/tcm

Czech Rep: 503 USD/tcm

Serbia: 457 USD/tcm

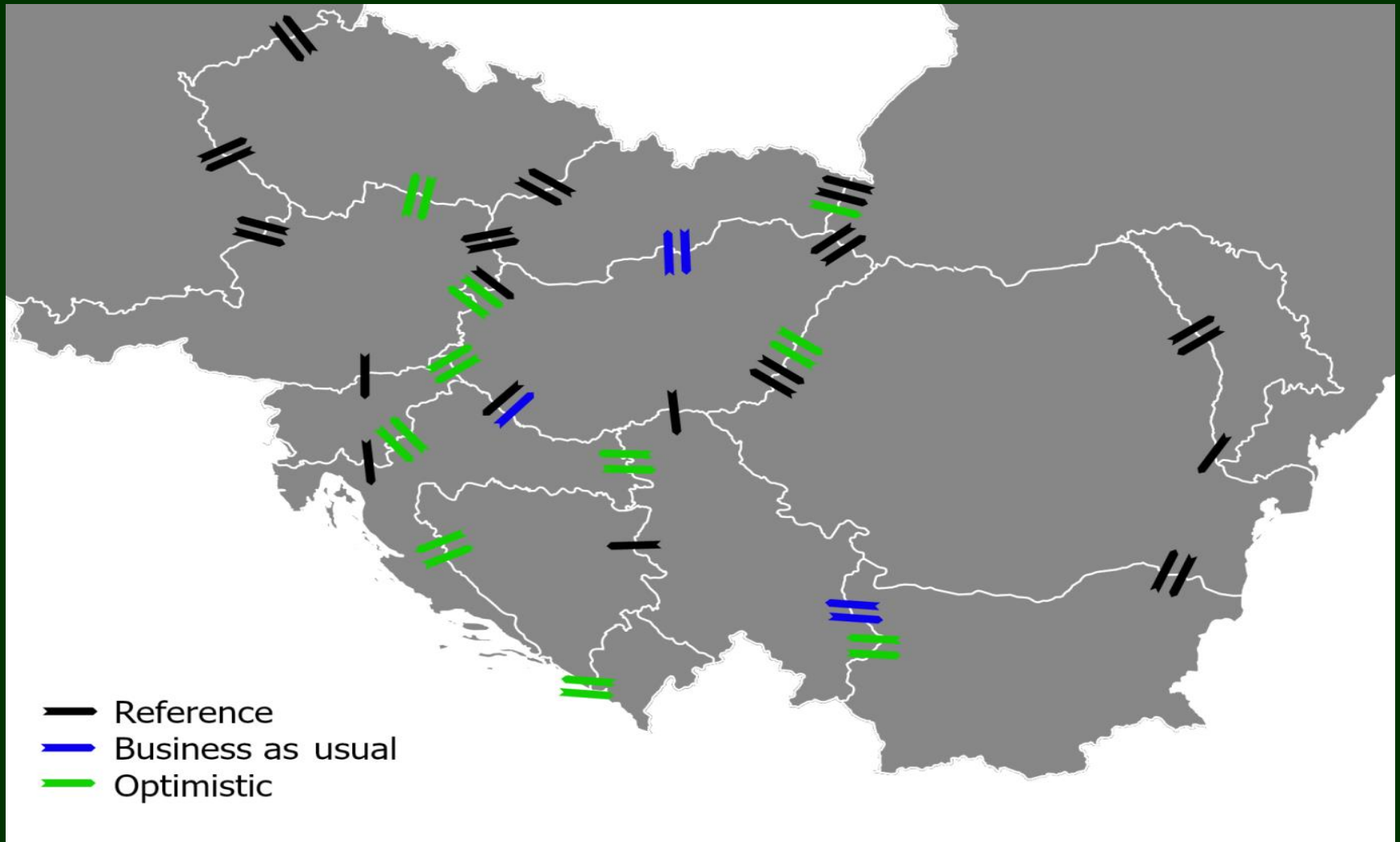
Macedonia: 564 USD/tcm

=> Price convergence shall gain more attention

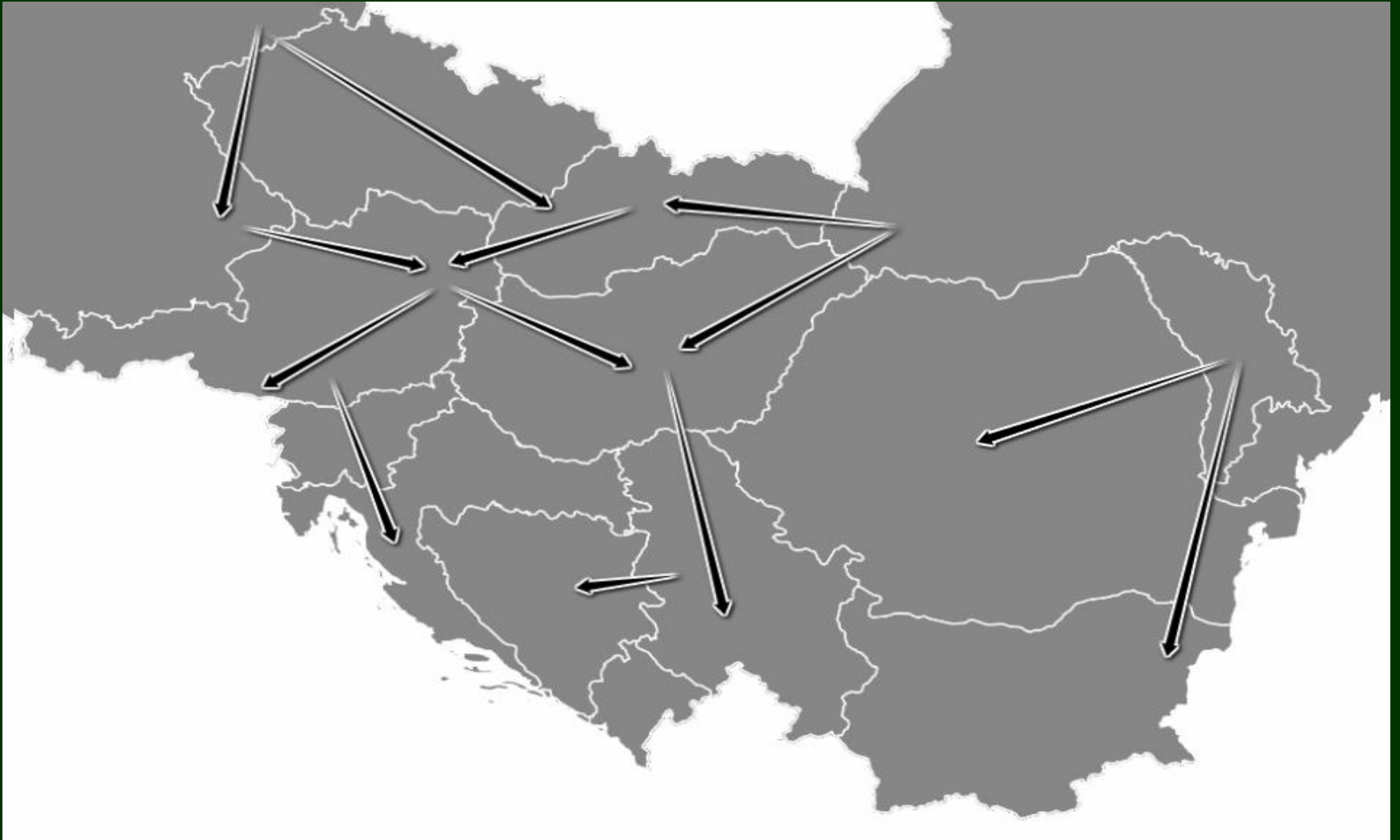
BDICs scenario analysis

- Reference scenario
 - Current state of interconnection (direction, capacity)
- Business as usual scenario
 - Current state
 - Infrastructure that has already passed the final investment decision phase
- Optimistic scenario
 - Current state
 - Infrastructure that has already passed the final investment decision phase
 - All other gas infrastructure included in „Projects of Common Interests“ (PCI)

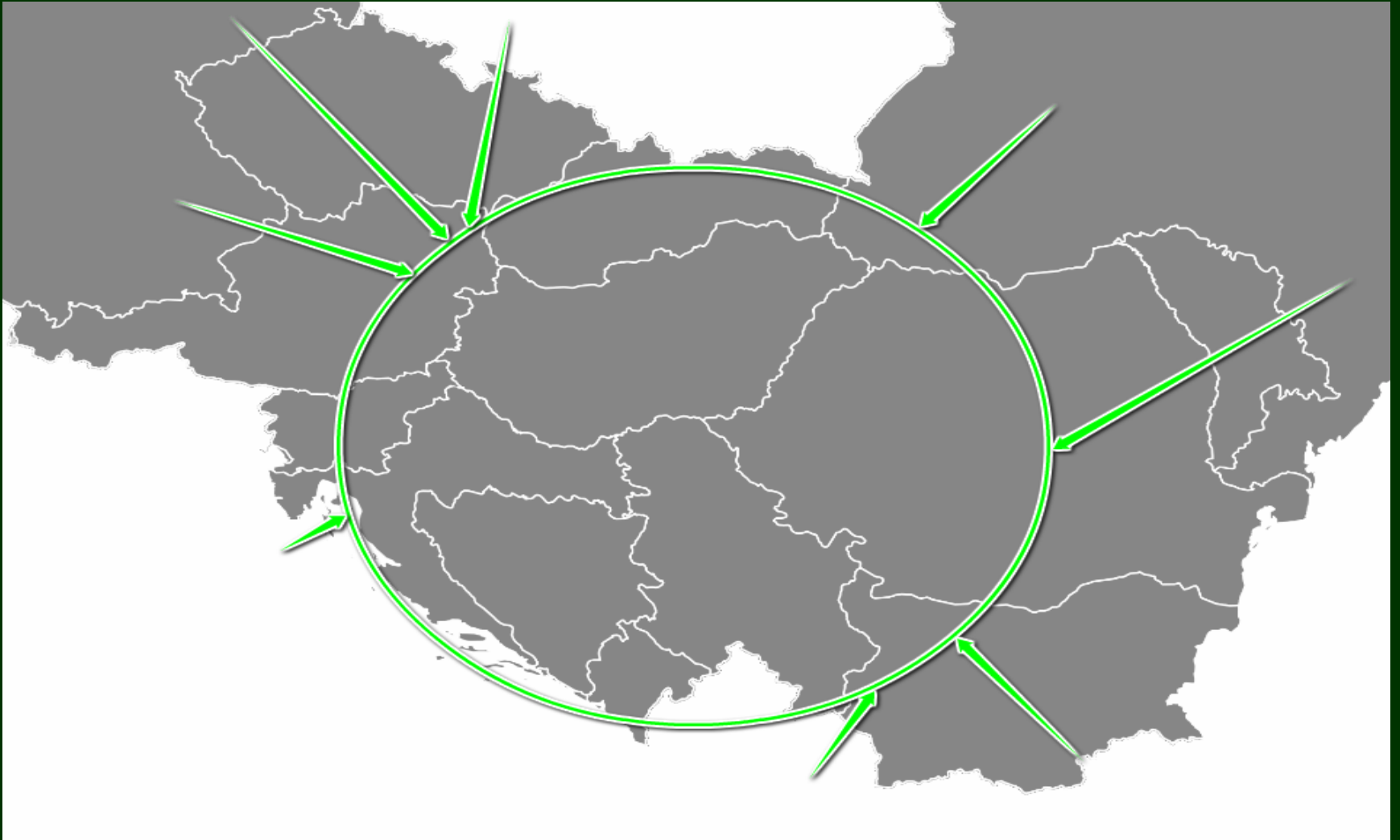
The scenarios



Results: current gas flows



Results: current gas flows



Interpretations

Sufficient interconnection (BDICs) and high price levels likely to attract traders

⇒ More liquid markets

⇒ Arbitrage (price convergence)

⇒ Diversity of supply

⇒ Flexible trading

Interpretations

However, South Balkan market is too small to be interesting for the traders

- Combined consumption of Bosnia i Herzegovina, Bulgaria, Croatia, Monte Negro, and Serbia equals to 12.5% of Italian consumption or 5.8% of the Chinese consumption
- ⇒ Transaction costs too high for marketing such little quantities, despite the premium margins.
- ⇒ South Balkan diversification is only possible as a part of a bigger project
 - ⇒ Azerbaijan, Iraq, Cyprus, Israel to Italy?
 - ⇒ LNG to Ukraine?
 - ⇒ West European hubs to Ukraine?

Flexible trading in DS: The Winners

States

- All Danube Strategy: dependence on Russia will be lower and shared among all market players.
- Austria and Germany: Increased liquidity due to intensified trade movements in the West-East direction.
- Central Europe: Access to diversified source portfolio at the Austrian and German hubs; higher utilization of the vast transit capacity.
- The Balkans: Supply security would grow significantly as gas could be imported from more sources via more routes.

Traders

- New export markets will open
- New sources of gas will become available (namely those around Turkish borders)

Consumers

- Lower prices due to increased competition (not applicable for heavily regulated retail markets)

Flexible trading in DS: The Losers

Gazprom

- New suppliers and secondary trading endanger Gazprom's dominance over individual markets, causing erosion of Gazprom's export strategy.

Russia

- With Gazprom's position weakened/normalized, the political leverage against the target markets will decrease significantly.
- Any political manipulation with supply or pricing will inevitably backfire, as it would affect **all** markets connected to the targeted market, questioning Gazprom's reliability.

National monopolies and interest groups

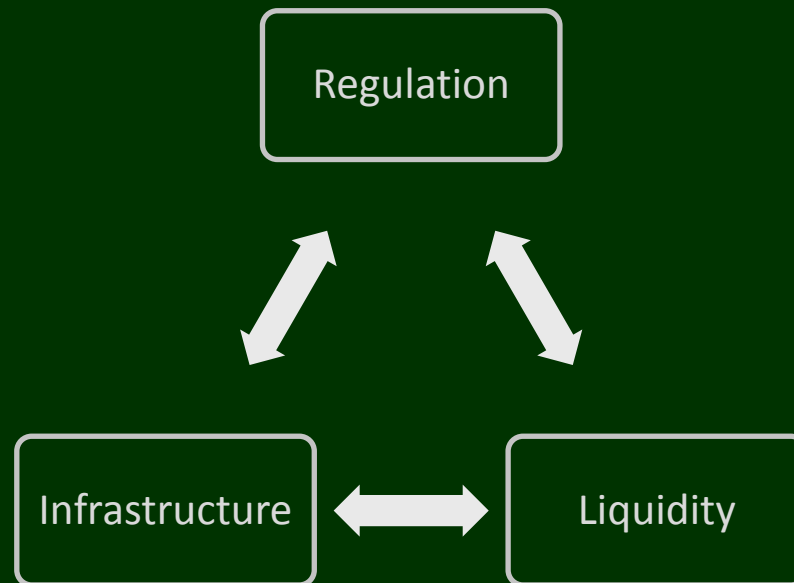
- Actors involved in marketing Russian natural gas are likely to lose their above-standard revenues stemming from the monopolistic market setup.

That sounds good...

...so why do we not have this already?

Flexible trading

- Three necessary conditions must be met.
- And held in line for certain period of time
 - Until existing long term contracts expire (CZ: 2029, SVK: 2035)
 - Until the infrastructure is developed



Recommendations: Regulation

- Follow and adopt the European Commission's policies on market liberalization and integration.
- Do not link natural gas contracts to other arrangements with Russia.
- Cut the influence of energy incumbents and interest groups on public policies.
- Support non-EU partners in adopting the European legislation.

Recommendations: Infrastructure

- Consider direct or indirect form of support to projects that enhance diversity of sources of supply, not only diversity of routes.
- Insist on South Stream's compliance with the EU regulatory framework regardless of where the pipeline end up entering the EU borders.
- Support offshoots from the emerging Turkey-Greece-Albania-Italy trunk line.

Recommendations: Liquidity

- Support the Turkey-Greece-Albania-Italy corridor despite it circumvents the CEE markets.
- Initiate intergovernmental negotiations with Middle Eastern, Central Asian, and Mediterranean suppliers.
- LNG terminal in Croatia may be additional source of liquidity in the region.
- Initiate dissolution of national incumbents.