

# Who should lead a mining cluster strategy? A burning issue for the Chilean case.

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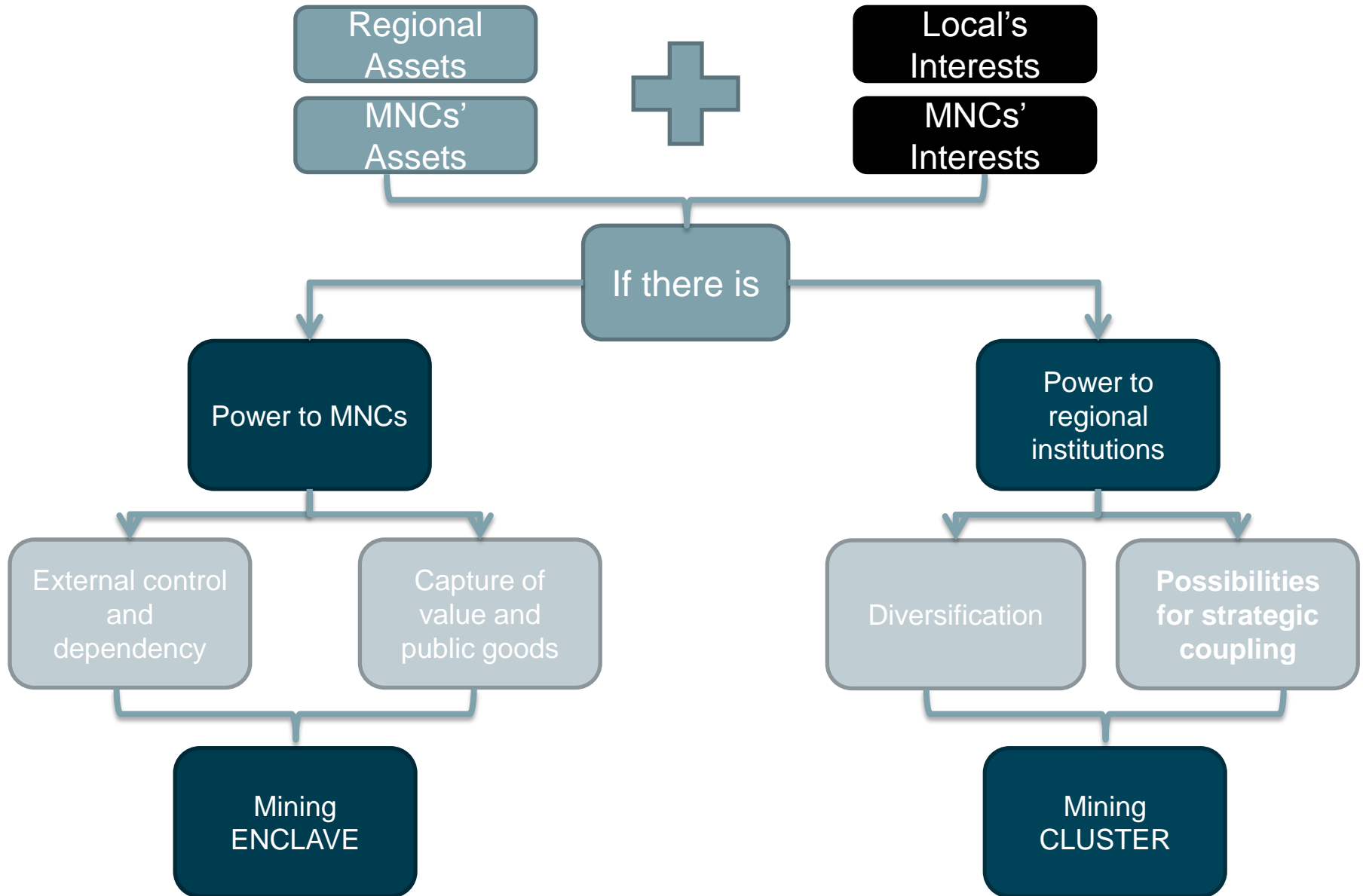
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# The challenges of a mining Global Production Network (GPN)

- Literature about extractive resources:
  - Mineral wealth as a *blessing* and a *curse*.
  - However, the relationship between MNCs and State in the extractive GPN has been absent (Bridge, 2008).
    - This is vital for the kind of agglomeration that takes place (*clusters/enclaves*) and its development outcomes (Arias et al, 2014).
  - Case study: Chilean mining GPN.

# Outline

1. A mining Global Production Network (GPN).
2. Why the Chilean case?
3. Mining in Chile: Between enclaves and clusters.
4. Who should lead the mining cluster strategy?
5. What now?



# Why the Chilean case?

- Historically the mining industry has been a key for Chilean growth.
- Largest producer of copper worldwide
  - 31.8% of global production and 34.4% of exports (COCHILCO, 2012).
- Largest deposit of copper, iodine, lithium among other minerals (U.S. Geological Survey, 2014).
- Considered as an “example” of sustainable development by international institutions (ECLAC, OECD)
- The historical relationship between MNCs and State has changed over the years
  - Promotion of enclave (by the State) and cluster (State and MNCs) policies .

London



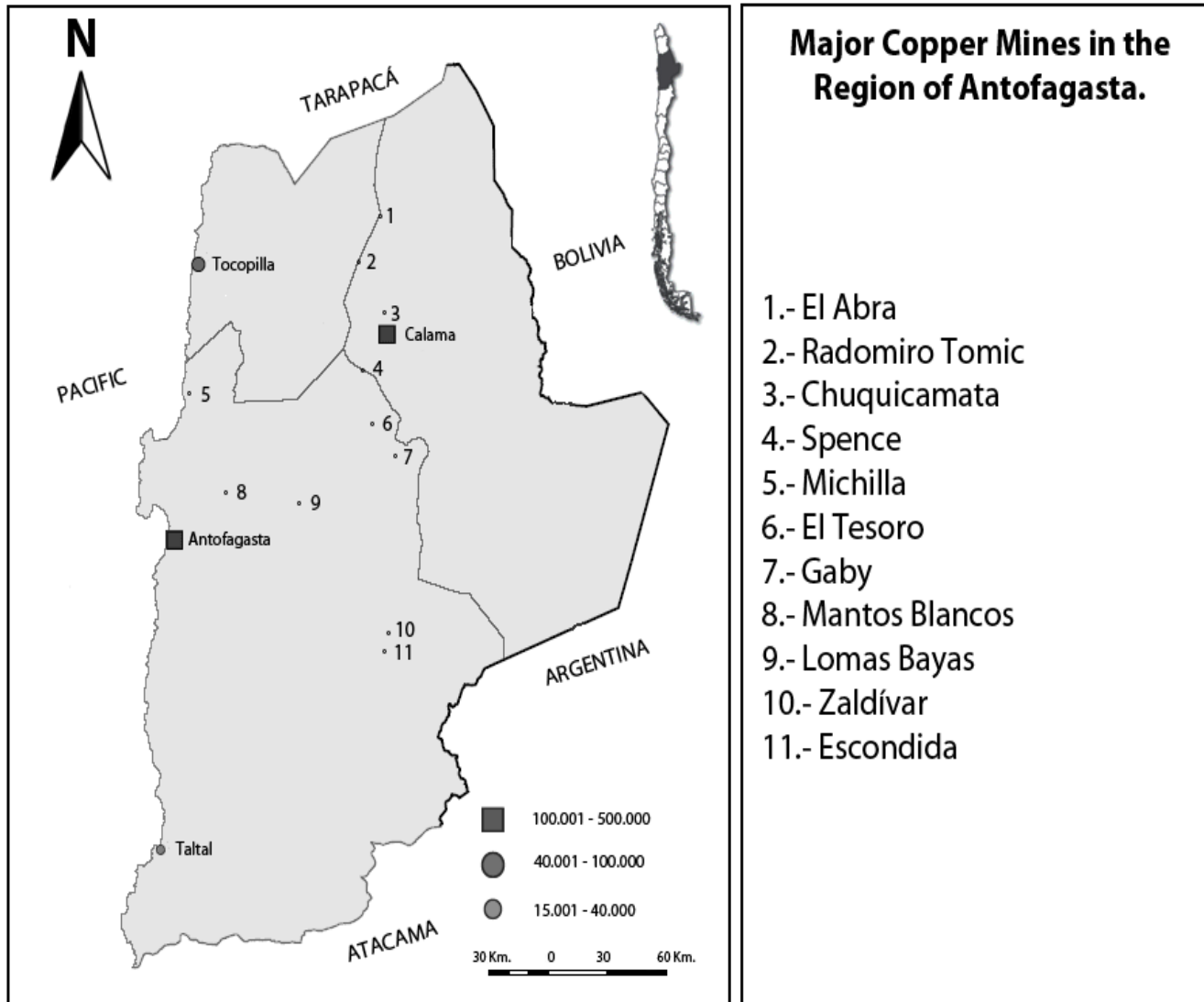
Santiago, Chile



Antofagasta, Chile



# The Antofagasta Region, Chile



# Mining in Chile: Between enclaves and clusters

- Mining Enclaves

- 1880 – 1930 Chile as the world's largest nitrate producer.
- FDI promoted by the State created several mining enclaves (company towns) (Cademartori, 2008).
  - Weak productive linkages.
  - Firms controlled almost every aspect of the social life.
  - Caused unsustainable growth and social issues.
- Creation of the synthetic nitrate: severe socio-economic crisis (Arias et al, 2014).



# Outcomes of the Chilean mining enclaves



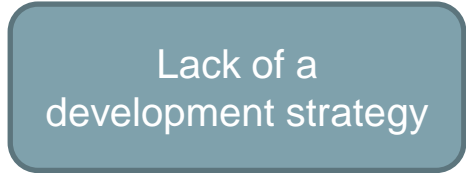
# Mining in Chile: Between enclaves and clusters

- 1940 Copper became the most important product for the Chilean economy.
- 70's: CODELCO is created and the copper industry is nationalized.
- 1973: Coup d'état. Beginning of the neoliberal era.
  - Increase of FDI in Chile.
- Cluster voices appear in the Antofagasta Region based on Ramos (1998) work.

# Mining in Chile: Between enclaves and clusters

- Mining Clusters

- 90’s: Cluster policies were applied, but the State kept pulling back from the economy (interviews, 2013).
- Early 2000’s: Super cycle in the extractive market.
  - Second wave of FDI causes some issues.
  - Piñera’s government abandoned the cluster policy.
  - State played only a “supervising role”.
- 2009: The gap was filled by the mining MNCs (private and public) which created the “Programme for the creation of worldwide class suppliers” (also known as “cluster programme”).



Lack of a development strategy

## What now?

- Policy analysis of the impact over the regional/national productive fabric of:
  - Of the mining MNC led cluster policy “Programme for the creation of worldwide class suppliers” (2009 – today).
  - Of the State mining cluster policy.
- Focus on suppliers.
  - What do they supply.
  - Where are they located.
  - Power relationships.

## Data sets

- Primary Data
  - Survey taken to 561 SMEs, related with the mining industry in the Antofagasta Region.
  - Analysis of interviews gathered in the main nodes of the Chilean mining GPN (45 interviews made on 2013).
  - Second fieldwork in order to consider the changes that the new government is implementing (2015).
- Secondary data.
  - Database from State owned and MNCs regarding suppliers.
  - Reports from other institutions related with the mining industry.

## Research questions

- What kind of cluster?
  - National?
  - Regional?
- What is the role of the State and firms in the promotion of a mining cluster policy?
  - Need of a national/regional development strategy that involves all the agents.
  - The Chilean State needs to address the persistent characteristics of a mining enclave.
- Who should lead the cluster?

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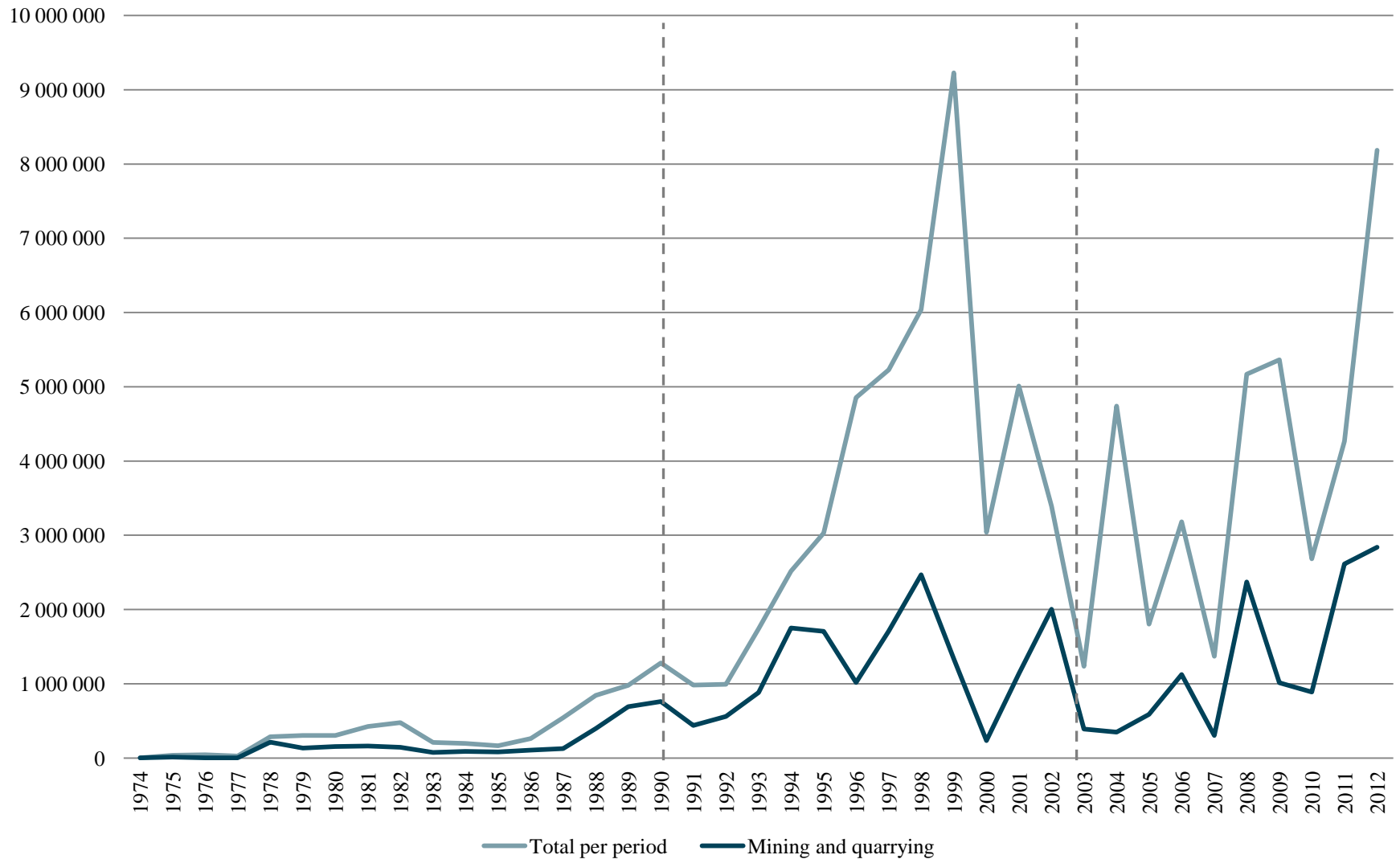
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**Figure 3: Foreign Investment Statute (D.L. 600) - Materialized investment 1974- 2012  
(in nominal US\$ thousand )**



Source: Foreign Investment Committee, 2014.