

# **Economic and Environmental Aspects of the Mining Industry**

OECD Conference,

7-8 February

# **Mining, Minerals and Sustainable Development Project**

- **Two year process of participatory analysis**
- **The Project originated with the CEOs of several leading mining companies.**
- **It is managed by the International Institute for Environment and Development in London under contract to the World Business Council for Sustainable Development.**
- **Draft report due for public consultation 4 March**

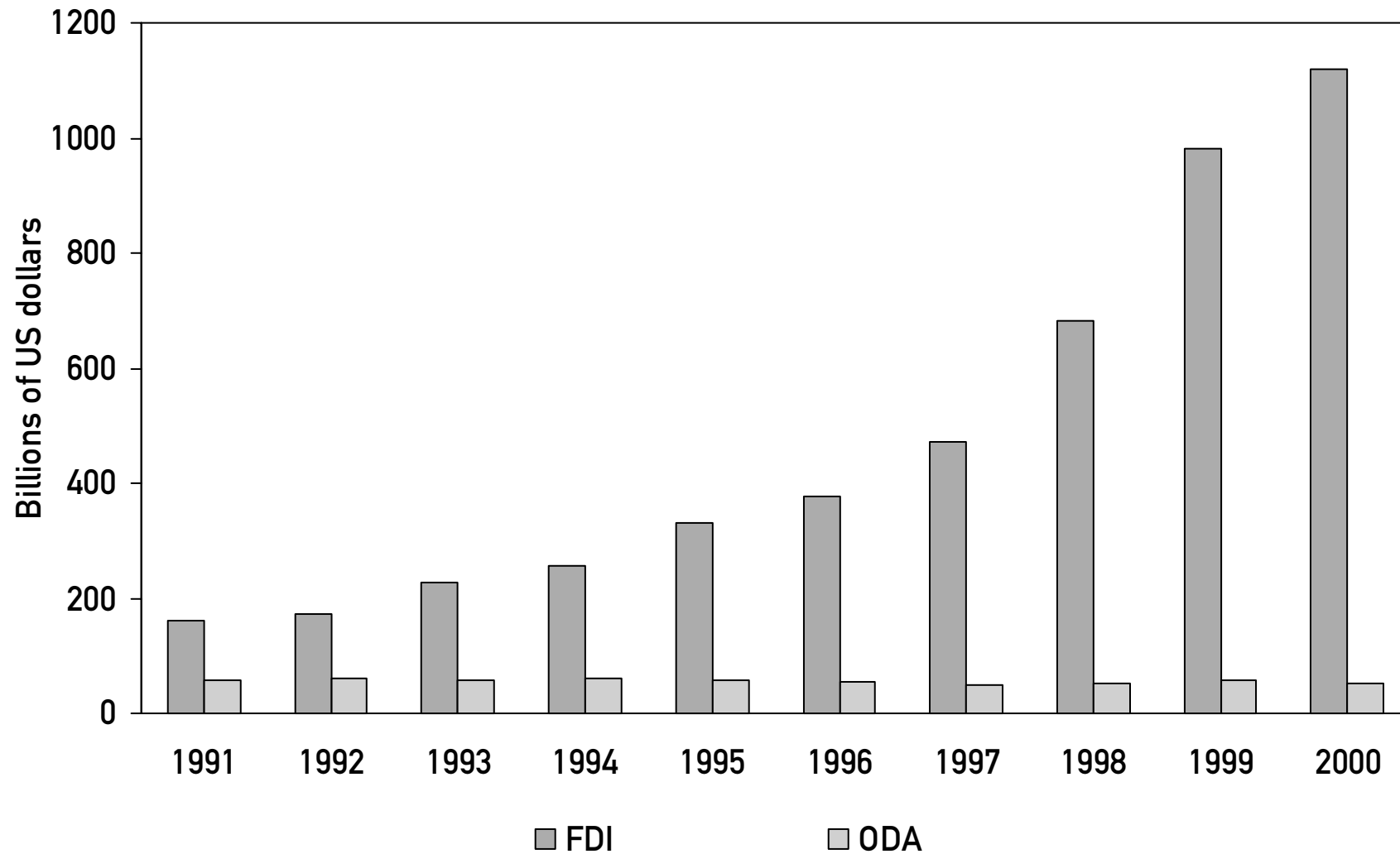
# **FDI in the minerals sector**

**What is the role of FDI in the minerals sector?**

**What are some of the dilemmas facing the minerals sector?**

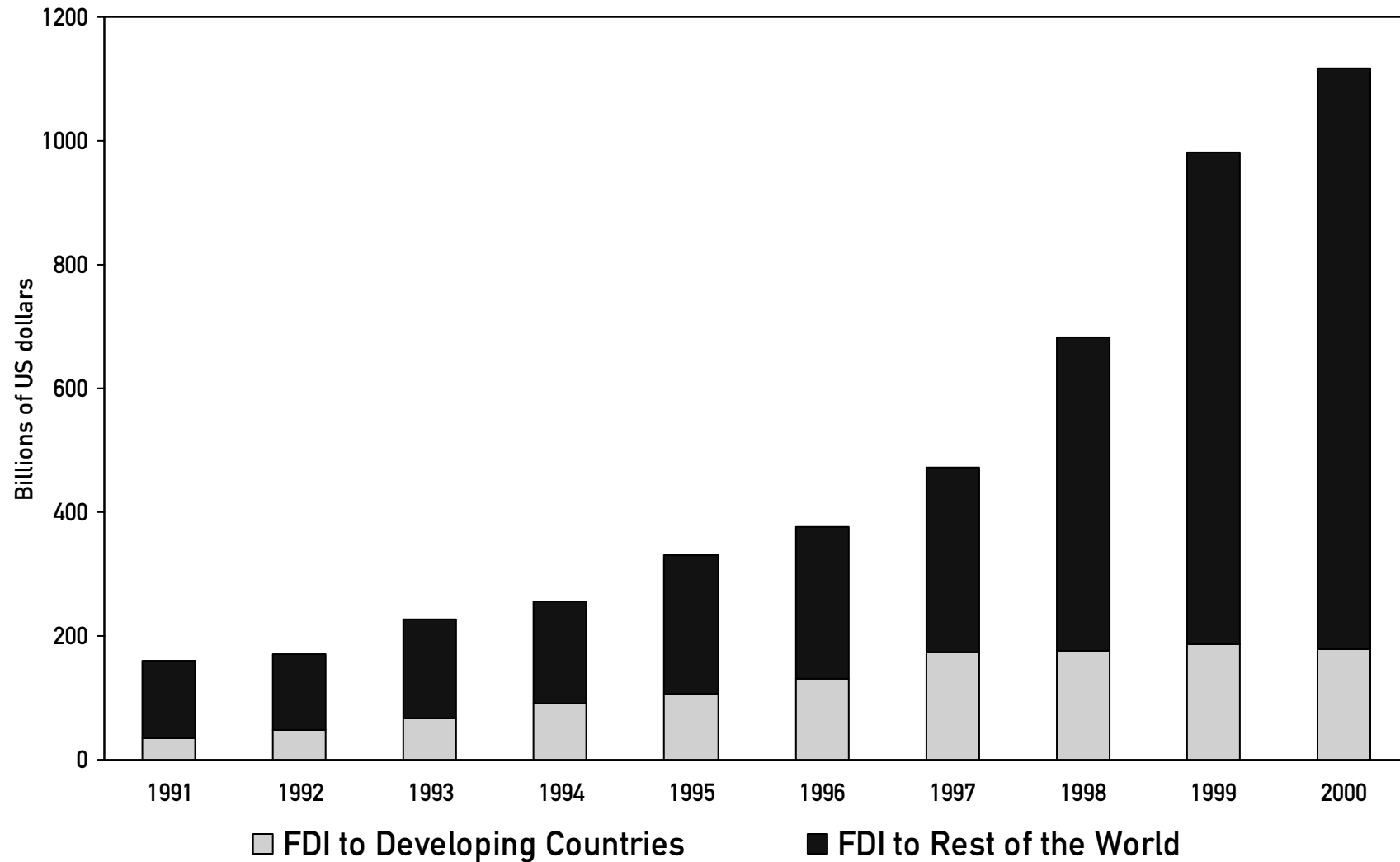
**What are some of the ways forward?**

**FDI has increased rapidly through the 1990s as ODA,  
once the major instrument of financing development,  
has fallen**



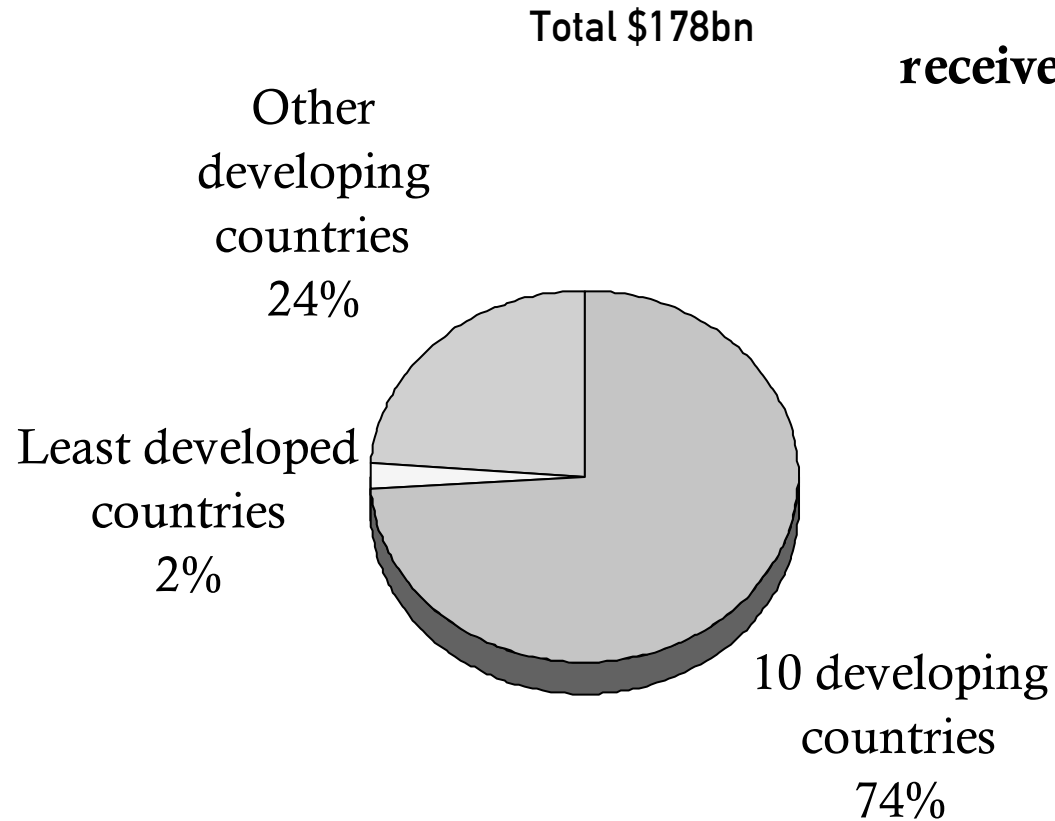
Source: World Bank; OECD

# FDI has been increasing in last 10 years although FDI to developing countries has not been increasing much in the latter half of 1990s



Source: World Bank; OECD

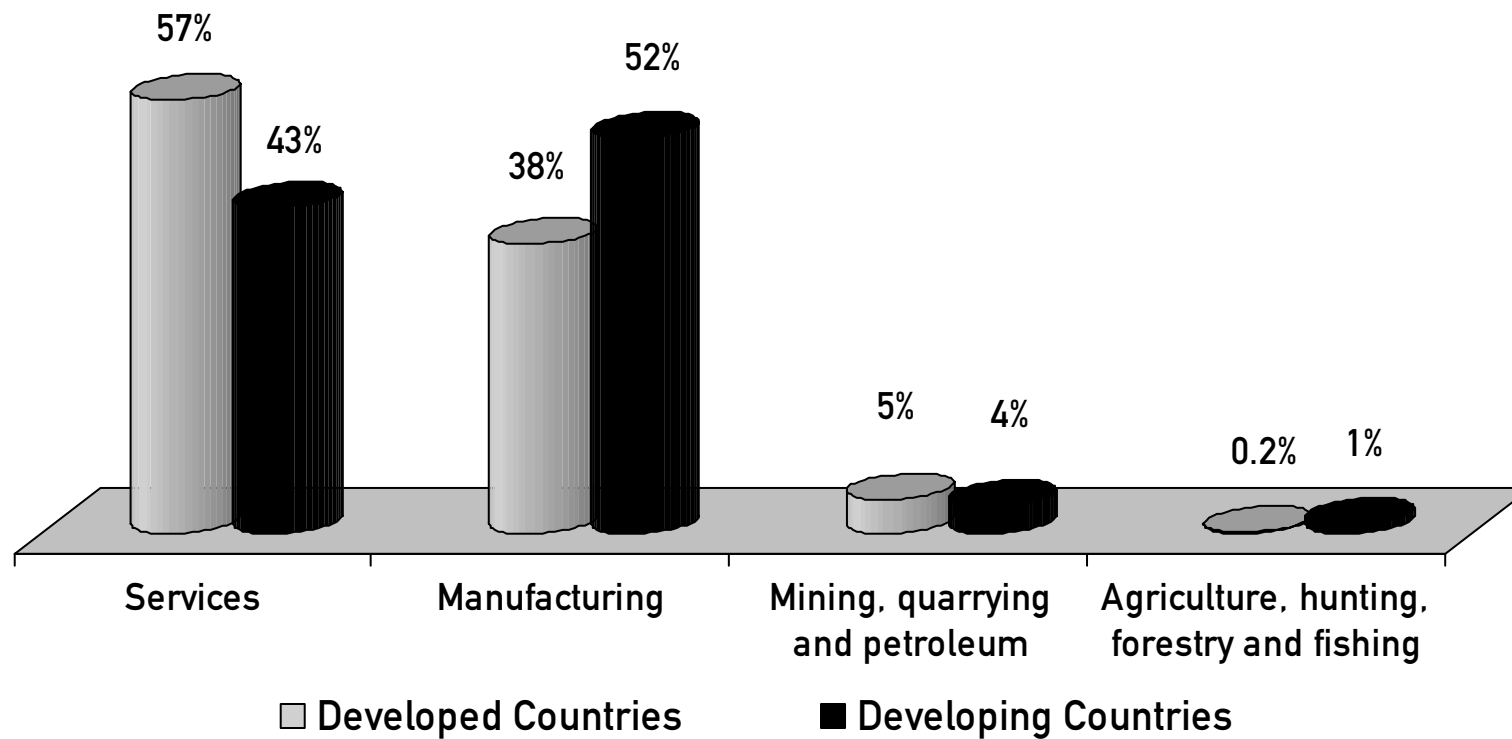
**In 2000, 10 countries received over 70% of the total FDI to developing countries; the least developed countries received little more than 2% of the total**



Source: UNCTAD

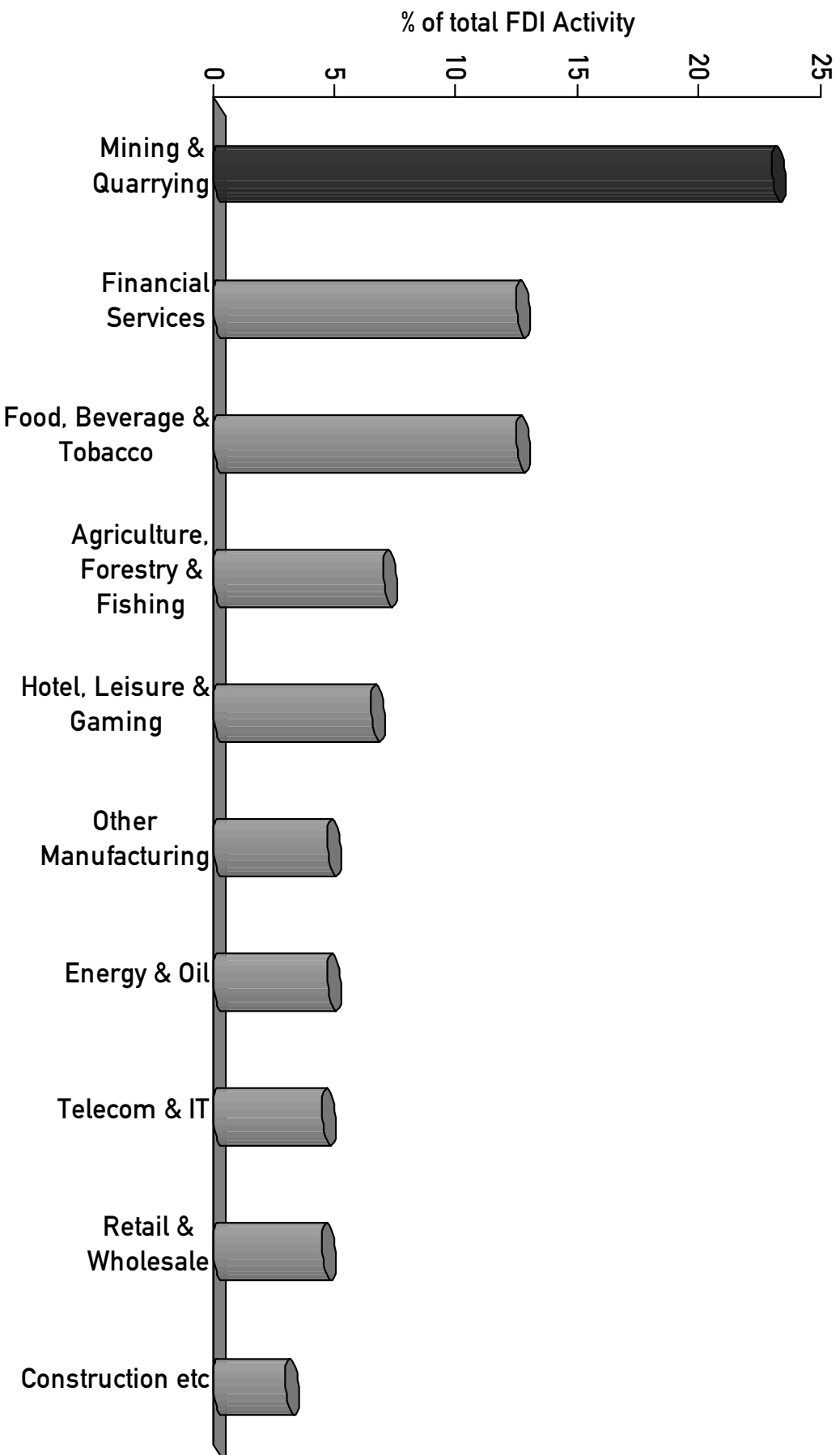
# Mining is still not a big player in FDI flows

% of FDI Flow to Various Sectors (1997)  
(Total FDI: \$473m)



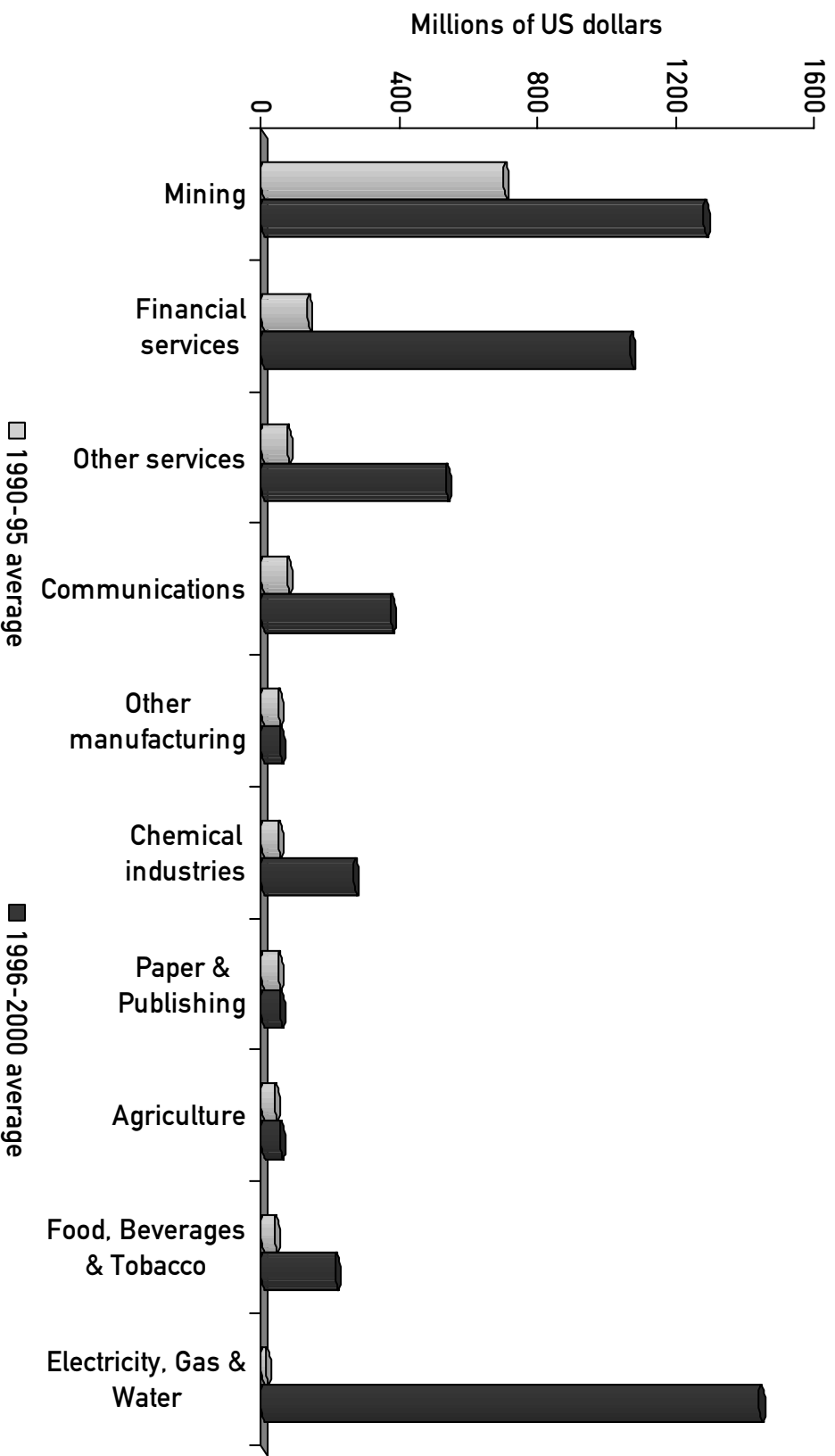
Source: UNCTAD

**In the SADC countries mining and quarrying accounted for about 23% of total FDI into the region**



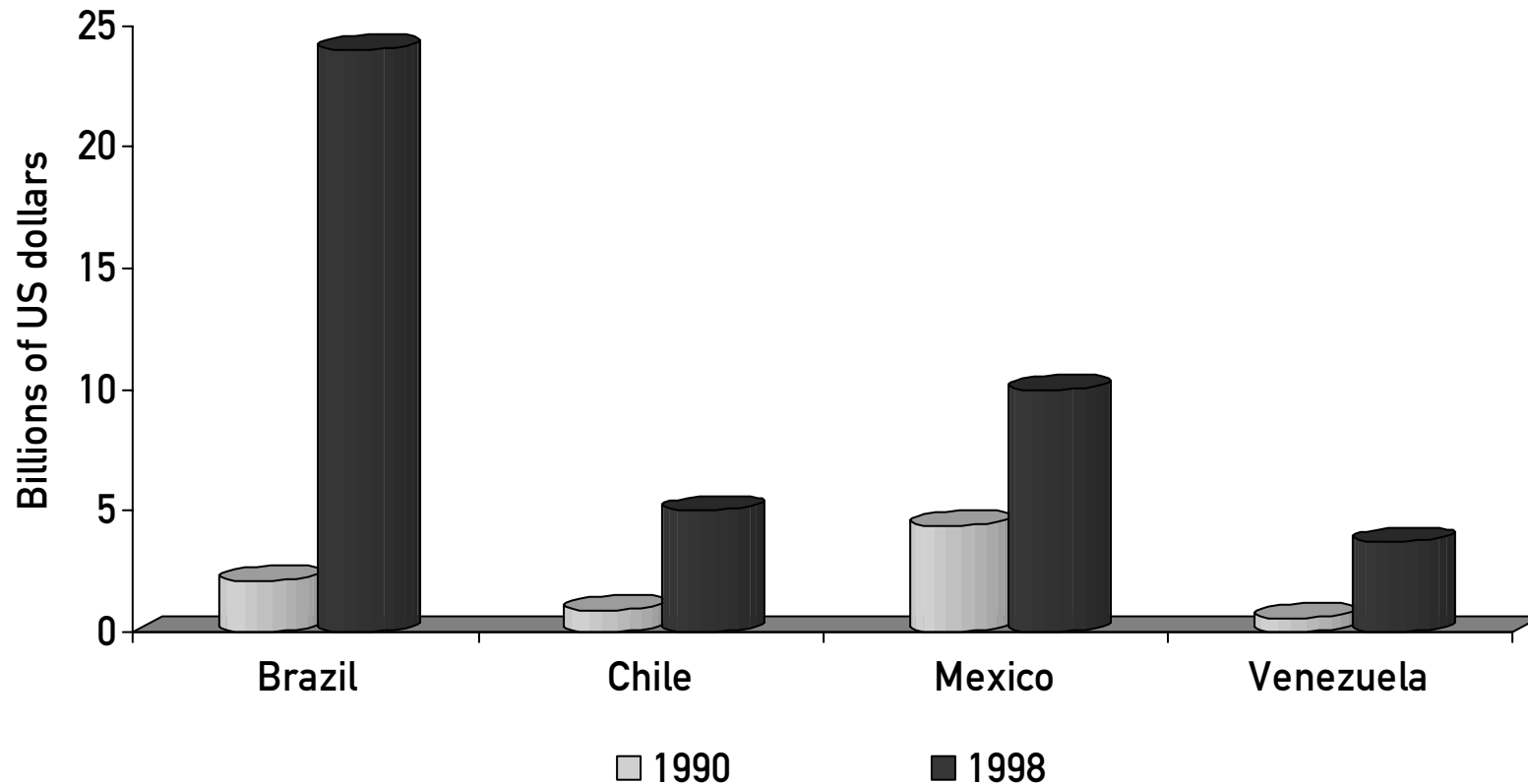
Source: DPRU Industrial Strategy Project

# FDI to the mining sector in Chile has been increasing



Source: ECLAC, Economic Commission for Latin America and the Caribbean

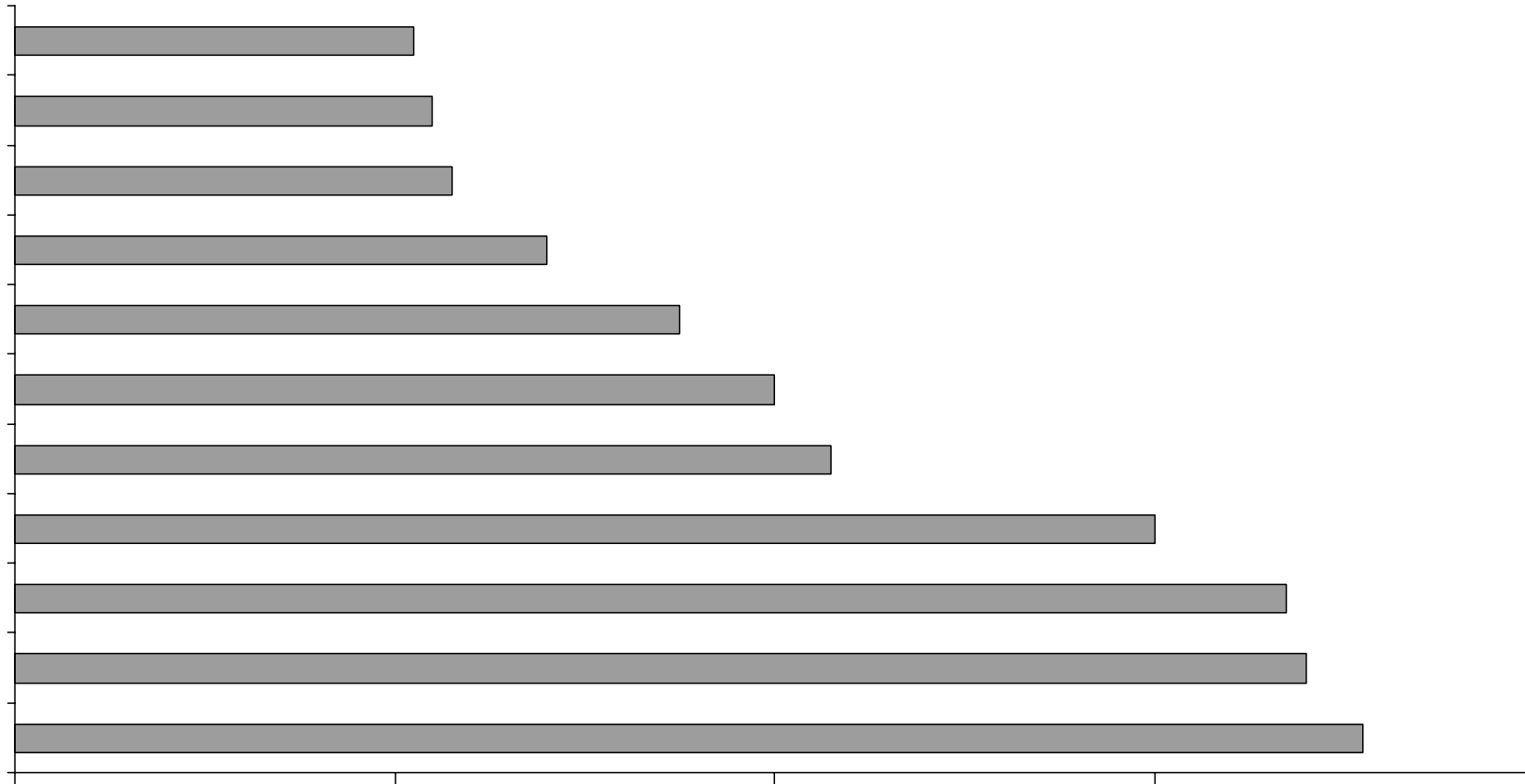
# Latin America is an important target for both mining exploration and development



Source: Adapted from World Bank *Debtor Reporting System*

# Mineral dependent economies reliant on investment

## Countries Dependent on Ore and Metal Exports, 1999



Source : R. Eggert (prepared for MMSD)

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# Scope

Heterogeneity of the sector means that there are  
no simple solutions

## What matters?

- Who is investing? – big, medium or small, foreign, domestic
- What are the conditions? – terms of finance, security risk, closure provisions
- What are the local benefits/disbenefits?

# **Key challenge areas**

**Environmental management**

**But also.....**

**Viability of the industry and access to capital**

**Access, management & use of land**

**Mineral economies**

**Community development**

**Life cycle thinking for sustainable use**

**Access to information**

**Governance**

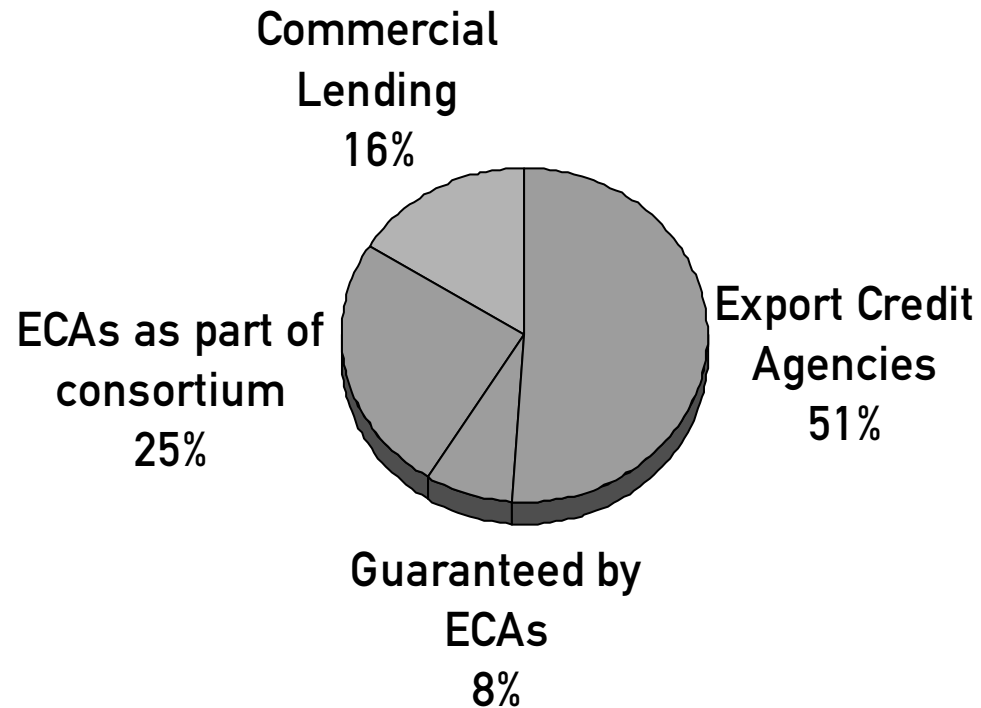
**Artisanal & small scale mining**

# **The role of financial institutions**

- **Key driver to improve environmental and social performance in the sector**
- **World Bank guidelines are de facto standard for commercial lenders**
- **No complaint mechanism when WBG not involved**
- **ECAs, the quiet giants of mining financing, have yet to agree on guidelines**

# Financing for the Antamina Zn/Cu Project, Peru\*

Total debt financing for Antamina  
(Total cost: \$2.3bn)



\* debt only

Source: A Zemek (2001)

# Closure Planning & Terminal Liabilities

- Uneconomic old mines put off closure because of inadequate planning for terminal liabilities
- A clear framework for closure agreed at the outset
  - not just environmental, long term maintenance of infrastructure, development of post-mining activities, transition from company supported schools, clinics etc.
- Some form of financial guarantee/bonding – difficult where government unwilling/unable

# **Biodiversity and Indigenous Cultures**

- **Some of the larger companies have formulated biodiversity and indigenous peoples policies**
- **But mining tends to happen in remote and biodiverse places**
- **The challenge is to have no net biodiversity loss and full property rights for communities**
- **But the dialogue to achieve this has only just begun in many places and cannot begin because of the legacy of distrust in others**

# Means for Sustainable Development at the Community Level

## *Changing Face of the Company in the Community*

- *Resources*, including natural resources, financial, *human, and information*  
quantity, quality, access to them, and realizable value
- Community *values and knowledge*  
including aspirations for sustainable development
- Community *institutions*  
governance, legitimacy, effectiveness, Internal and external relations
- Individual and community *powers*  
to negotiate, to plan, to influence policy and market conditions
- Individual and community *rights*  
to information, representation, development and self-determination

# Legacy Issues

- Given the uncertainty about the number and state of abandoned mines, it is impossible to estimate how much it takes to clean them up. Some estimates include

- Canada – to clean up abandoned mine sites C\$6bn

- Direct costs of cleaning up rivers polluted by ARD

Australia \$1bn, Canada \$2.5bn, US \$4bn

- In SADC region, clean-up of two river systems 10 times annual net revenues from mining

No mechanism to internalise these costs

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# Toward better solutions

## No easy off-the-shelf solutions

- **Better governance**
  - Companies cannot create better governance themselves but they need to support development of clear fair, democratically derived systems of rules and the institutions to make them work. National governments must work
- **Anticipating social expectations**
  - More acceptance of need to look beyond compliance
- **Finding resources**

The most intractable obstacle is the conflict between

- The need for resources to clean up some real environmental and social legacies
- The unfairness of asking today's company to pay for something its predecessor was involved in

Need to think outside the box – shared task – companies have clear incentive to lead rather than avoid how to deal with these problems

# Paradox of the Big

- By and large, only the multinational players can meet the higher and verified standards now demanded
- What does that mean for the national, small and medium size enterprises?
- Higher environmental standards equals more globalisation?

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