



Economics and Environmental Policy Research Network

Research Symposium

October 29th - 30th, 2018

Session Notes for Plenary II: Ecosystem Risk and Securitization

1. Context of Discussion

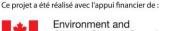
This session sought to explore how insights from corporate and environmental law may support the development of viable financial assurance tools for managing ecosystem risk.

Given that this a very nascent field of research, the presentation in this session first established a number of fundamentals. The source of the problem being experienced by many countries is the fact that corporate and insolvency law may be used strategically (and lawfully) to avoid costs associated with the environmental obligations of businesses. This conflict is not new and can be addressed through different types of regulatory intervention that mitigate risks to ecosystems as they relates to industrial activity. For instance, the industry operator could be required to provide evidence that provisions have been made for actual/potential environmental liabilities. These provisions could, depending upon the type of environmental liability under consideration, be in the form of environmental impairment liability insurance, a bank guarantee, a bond or a cash deposit with relevant regulator. This is described as evidencing or making 'financial assurance'.

When making these commitments, it is important to differentiate known obligations (e.g. environment-related obligations under a permit or other authorization, such as would arise upon closure of a mine) from unknown obligations (e.g. industrial accidents). Known obligations are certain to arise and, therefore, uninsurable. Unknown obligations are a fortuity and are, thus, insurable. This session focused principally on addressing **unknown obligations**, fundamentally ensuring that risk is incorporated into industry operations in a more fulsome way. When it comes to these unknown obligations, common financial assurance measures include funds or assets set aside with a 3rd party (e.g. Escrow accounts, cash deposits and trust funds), charges over valuable assets (e.g. real estate), transference of risk to a third party such as an insurer or bank in return for a premium or fee (e.g. insurance, bank guarantees and surety bonds), testing of financial strength (e.g. through self-insurance or parent company guarantees), membership of a fund or pool.

The session then examined specifically the case of financial assurance for costs associated with pollution incidents in the European Union. It has been observed that within the EU, with limited exceptions, the political will is not currently there to mandate that operators hold financial assurance. This is attributed to the costs this would impose on industry as well as the "first mover" disadvantage that would be experienced by the first country to start such a regulation.

As an alternative, an **EU-wide compensation fund** has been proposed. Such an EU-wide fund was first proposed by Hungary after a major mining accident in 2011. The European Commission has consulted on introducing such a fund, but to date, it has still not been implemented. This proposal is not without its



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controversies however. On the plus side, a fund like this would seek contributions from a wide array of operators, ensuring that private funds were available to undertake clean-up measures, even when these clean-up costs are very high (>100 million euros). Conversely, the operator responsible for the damage may never pay in full, with fund members collectively responsible for the damage. This goes against the "polluter-pays" principle, a central tenet of the EUs environmental law and policy. However, the possibility of implementing such a fund has proven to be a resilient one in the EU.

Ideally, the implementation of such a scheme would jointly achieve not just provision of sufficient private funds to respond to environmental accidents, but also motivate reductions in ecosystem risk, perhaps by requiring certain risk-reducing behaviours before groups can become members of the fund. This incentive effect is key, and not necessarily captured in Hungary's initial proposal of a .02 % EU-wide contribution, which removes the ability to price risk accurately in favour of a flat rate contribution. Many details would still need to be examined in detail, including at what level this fund would take place (nationally, intercontinentally, or internationally), how to structure these funds, what contribution levels would be required and what entry requirements would be imposed.

From a policy perspective, the following points were (re-)emphasized, with a particular focus on the Canadian mining sector:

- While financial assurance funds as they relate to the mining sector may be promising, the
 available levers to regulate mines in Canada are pretty narrow, given that economic
 instruments are not currently allowed to be used and there is no federal authority on
 contamination risk.
- While provinces and territories have a much broader scope in terms of regulatory ability, this fragmented federal-provincial regulatory system would certainly complicate the implementation of a comprehensive financial assurance strategy for the mining sector.
- Furthermore, the development of a regulation mandating financial assurance would be subjected to the same economic and technical analyses as all other regulations in Canada (e.g. CBA). The need to not just complete but receive the green light in each of a standard checklist of steps not specifically designed for this kind of regulatory approach could conceivably contribute to the preliminary classification of financial assurance options as non-starters for the Canadian mining sector.

2. Research Questions Identified

- How do we design financial assurance schemes that balance not just the provision of sufficient private funds to respond to environmental accidents, but also motivate reductions in ecosystem risk? Should we prioritize measures that have a strong remedial capacity or ones with a strong preventive capacity?
- With the proposed EU-wide compensation fund as an example, how wedded are we to the polluterpays principle? Are there alternative justifications upon which to build liability regimes? E.g. Largescale liabilities perspective.

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- Why is a compensation fund for environmental risk so difficult, when compensation funds are being used effectively in other areas? E.g. for pensions
- How should we trade-off the most financially and economically effective financial option versus the most politically palatable option? For instance in the case of the EU, how much effort should go into pushing for policies in support of individualized financial assurance rather than settle on the second best and more politically viable option of a pooled compensation fund? There is a need for exploration of the political economy dynamics of ecosystem risk and securitization.
- What are some of the barriers that limit the implementation of different financial assurance options in different sectors of the Canadian economy? E.g. what role has lobbying by major industrial sectors such as oil and gas against individual financial assurance played in preventing implementation? Why do we still permit self-insurance (i.e. passing the financial test) when we know the risks that the financial strength of companies can often deteriorate?
- What would the effect be on trade of different financial assurance regimes in, for example, the different provinces of Canada?
- How do we determine what level of financial assurance is required to mitigate a certain ecosystem risk? There is a need for the development of transparent, accurate valuation tools/methodologies to help figure out an adequate level of financial assurance before an environmental accident ever occurs. Ideally such methods would allow differentiation with regard to the environmental sensitivity of the land on which different industries are operating. (Currently the Spanish MORA risk assessment leads the field in terms of having online tool that operators are required to used, which helps predict/estimate damages).
- How do we address historic liabilities and could financial assurance provide new opportunities to resolve legacy issues? Given the existence of such legacy issues, how would contributions to a compensation fund be structured? E.g. Does an operator that wasn't even trading when the liability occurred have to provide compensation?
- Is there a role for governments (i.e. tax-payers) to contribute to financial assurance compensation funds or should the responsibility rest squarely with industrial operators? How is this discussion impacted by the fact that presently in many countries, taxpayers are indirectly already paying for costs that should likely be borne by industrial operators? (e.g. In the UK, taxpayers are paying for the decommissioning of nuclear power plants, power stations, etc. these large sums of money are not being paid by operators and are hence by default being passed on to the taxpayer.) If there is a role for tax-payers to contribute, how could we structure contributions so that consumers of the risky products are held liable instead of general taxpayers at large?
- Countries like Australia are using the strategy of a land damage tax that works on a geographic level.
 What other geographic financial assurance methods could be envisioned for particular countries or sectors, in lieu of compensation funds?