## General discussion

Professor Stavins commenced discussion with questions and comments to panellists:

- he asked Professor Libecap to clarify whether the US Congressional moratorium on Individual Transferable Quotas (ITQs) was still in place, and for his views on the social efficiency (in terms of the social benefits and costs) of the Californian court decisions on Mono Lake
- he commented that the notion of common property resources did not eliminate
  the potential for market failure it was not a dichotomous choice between
  common property and open access, and there was potential for significant market
  failures across the full spectrum
- he asked Suzi Kerr to identify any lessons for the United States that might be learnt from New Zealand's experience with ITQs.

Professor Libecap confirmed that the moratorium on ITQs under the Magnuson-Stevens Act had expired. He explained that the point he was making was that in the United States, relying on common property regimes such as marine fishery management councils, was not very effective.

Suzi Kerr said that New Zealand had the most extensive ITQ system in the world, with more than 500 separate markets operating under one unified system. The market was working well on the whole, there was evidence of species recovery, and the value of the fisheries industry had increased. There were some challenges, however, including governance issues and high regulatory costs relative to benefits in some areas.

Suzi Kerr challenged Professor Libecap's view that environmental markets tend to be introduced only after a crisis. Fisheries markets were introduced early in New Zealand, and this meant political conflict was avoided and simple and efficient processes could be implemented. 'In contrast, US fisheries are in crisis with very entrenched local communities, and the social issues of adjustment are very significant. If [market reforms] had been implemented earlier, before fishing communities were collapsing, it would have been much easier.'

In relation to the Mono Lake decisions, Professor Libecap said: 'We just don't know whether or not it's the right decision. It cost Los Angeles about US\$1 billion

in terms of stranded capital and opportunity costs, but we don't know whether the [social and environmental benefits] are worth that much. This is symptomatic of the problem of addressing reallocation issues through judicial processes rather than through water rights'.

In response to Professor Stavins' comment about common property and market failure, Professor Brunckhorst said that common property was a form of private property, rather than part of a broad spectrum of open access. The issue was not the type of property ownership, but achieving the right institutional rules and monitoring systems.

Professor Freebairn asked the panellists to discuss the transaction costs of the different types of instruments: regulations and property rights and markets. Professor Libecap observed that the first response to a variety of open access problems was generally regulation — usually restrictions on either inputs or outputs — not the implementation of a property rights regime. Why was that? Were there any reasons why this might be an efficient approach? There are clear costs involved in property rights regimes, and the more valuable the resource (and the more contention around it), the greater are the costs. Economists tend to overlook the cost of defining and enforcing property rights. 'This raises an important empirical question: "What does it cost to put regulation into place?". When the problem isn't a big one, it could be that regulation is the best response. But as regulation doesn't solve incentive issues, problems tend to grow over time, and that's when a property rights regime is effective.'

Professor Libecap added that trading systems, such as those described by Suzi Kerr, were also costly, and that these costs might be incurred without achieving the desired outcome (that is, a reduction in global warming). 'We might need to have a big crisis before we resolve the uncertainty of how China, India and the United States will participate', he said.

The question of whether perceptions of equity generated institutional constraints on market instruments was raised by one participant. Professor Pannell replied that notions of equity, based on expectations of support created by existing environmental programs, often prevented the adoption of different approaches. Professor Brunckhorst agreed that perceptions of equity were very important but could be managed by appropriate institutional rules and monitoring (which should be subject to constant adjustment and adaption) and, if necessary, sanctions (including cultural sanctions).