Route 68 concession, Chile (PVR auction)

Description of PVR auction - type of concession, as summarized by Eduardo Engel, World Bank

The Route 68 concession, joining Santiago with Valparaiso and Viñaa del Mar, was auctioned in February of 1998. It was the first road franchised with a PVR auction. Under this scheme, the regulator fixes user fees and announces a discount rate, and the franchise is awarded to the firm that bids the least present value of toll revenue.{The discount rate should be a good estimate of the costs of funds faced by franchise holders and could be variable (such as LIBOR plus some fixed risk premium).} The franchise ends when the present value of toll revenue is equal to the winning bid. By letting the franchise length depend on demand realizations, PVR auctions reduce risk born by the franchise holder substantially.\footnote{Associated welfare gains can be , for developing countries, of the order of 30\% of the investment in the highway.} This should lower the demand for traffic guarantees. The Route 68 concession contemplated major improvements and extensions of the 130 kilometer highway and the construction of three new tunnels. Five firms presented bids, one of which was disqualified on technical grounds. For the first time in the Chilean concessions program, minimum traffic guarantees were not included for free, but instead were optional and at a cost. That the pricing of guarantees by the government was not way off the mark can be inferred from the fact that two of the bidders chose to buy a guarantee, while the winner declined. Bidders could choose between two rates to discount their annual incomes: either a fixed (real) rate of 6.5\% or a variable (real) rate given by the average rate of the Chilean financial system for operations between 90 and 365 days. A 4\% risk premium was added to both discount rates. Three firms, including the winner, chose the option with a fixed discount rate. Somewhat surprisingly, the present value of revenue demanded by the winner turned out to be \emph{below} construction and maintenance costs estimated by MOP.\footnote{The winner bid US\$374 million while the MOP estimated costs to be US\$379 million.} One possible xplanation for this outcome is that the regulator set a risk premium (and hence the discount rate) that was too high, neglecting the fact that PVR auctions substantially reduce the risk faced by the franchise holder. A return on capital in the 10--20\% range is obtained if a more reasonable risk premium (in the 1--2\% range) is considered.

It is also interesting to mention that, apart from the pressure exerted by the Ministry of Finance, the main reason why MOP decided to use the PVR mechanism is that it facilitates defining a fair compensation should the ministry decide to terminate the franchise early. This feature of PVR is relevant in this case since MOP estimates that at some moment before the franchise ends, demand will have increased sufficiently to justify a substantial expansion of an alternative highway (La Dormida) that competes with some sections of Route 68. Thus, the contract of the Route 68 concession allows MOP to buy back the franchise at any moment after the twelfth year of the franchise, compensating the franchise holder with the difference between the winning bid and the revenue already cashed, minus a simple estimate of savings in maintenance and operational costs due to early termination. No such simple compensation is available if the franchise term is fixed.

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