• Bergemann and Pesendorfer (Journal of Economic Theory (2007))
The Role of Participation Constraints
Convexity of Information Rent

- convex interim winning probabilities
- coarse, partitional information
- asymmetric partitions are optimal
 Sequential Disclosure

- Courty and Li: Sequential Screening (2000)
• leisure travelers \( \nu \sim [1, 2] \) with probability 1/3
• business travelers \( \nu \sim [0, 1] \cup [2, 3] \) with probability 2/3
• cost of flying is 1
• optimal price after the resolution of uncertainty: 2 and expected profit of 1/3
Sequential Screening

- offer two distinct contracts to leisure and business travelers
- with refund for business travellers
- without refund for leisure travellers
- incentive constraints determine the level of advance payment
- efficiency consideration determine level of refund
resulting optimal pricing

\[ p_l = 1.5, \quad p_b = 1.75, \quad r_b = 1 \]

with an expected profit \( 2/3 \)

- with complete surplus extraction
• Eso and Szentes: Optimal Information Disclosure (2007)
• a generalization of Courty and Li (2000)
• valuation is given by $V_i = u_i(v_i, z_i)$
• $v_i$ is initial signal, $z_i$ is continuation signal
• define $s_i$ as the quantile

$$s_i(z_i, v_i) = H_{iv_i}(V_i)$$

• by construction $s_i$ is distributed uniformly on $[0, 1]$ irrespective of $v_i$:

$$\Pr(H_{iv_i}(V_i) \leq y) = \Pr(V \leq H^{-1}_{iv_i}(y)) = H_{iv_i}(H^{-1}_{iv_i}(y)) = y,$$

and hence independent of $V$
virtual valuation is given by

\[ u_i(v_i, s_i) - \frac{1 - F_i(v_i)}{f_i(v_i)} u_{i1}(v_i, s_i) \]

thus only initial private information matters