

## ABSTRACT

This thesis investigates the applicability of externality pricing to air pollution and noise pollution problems in passenger transportation. Potential and actual schemes are evaluated based on criteria of allocative efficiency, dynamic efficiency, informational requirements and political acceptability. Discussion focuses on why legislators favour direct regulation whereas economists deem externality pricing and other incentive schemes superior. Theoretically, externality pricing has an informational advantage over direct regulation. However, as real-world complexity is added to the analysis, doubt is cast on this alleged superiority.

However, direct regulation has not resulted in compliance. With externality pricing, there is no incentive to delay, it is cost effective, monitoring and enforcement costs are similar to direct control, and there is an incentive to innovate.

The current regulatory approach to automobile pollution and noise pollution from jet aircraft is flawed. Stringent standards for new cars and planes prolong the life of older, dirtier models by reducing the incentive to scrap them. The history of regulation has been one of delays and postponements. Cost effectiveness is also reduced due to the lack of flexibility in abatement techniques. A charge varying with the emissions of a particular pollutant per mile is suggested to decrease pollution from automobiles. For airport noise, a Pigouvian tax is recommended. These externality pricing schemes provide incentives for technological change, are flexible, enhance cost effectiveness, create no incentive to delay, and provide an incentive to maintain pollution control equipment.