

## An Analysis of Shopping Center Investment<sup>1</sup>

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During the decade of the 1980s, the over-supply of retail space lowered rents, raised vacancies, and damaged the integrity of financial institutions as numerous developers and other borrowers were forced into default. The spate of over-building that took place has shown clearly that errors made in response to changing retail markets cannot be corrected easily or quickly. The fixity of retail space, the large amounts of capital required for construction or expansion, and the lags in the retail development process all act to inhibit rapid reallocations.

This research project examines the propensity of developers to create shopping center space. It formulates a model of shopping center investment derived from the macroeconomic investment literature. The model is estimated using shopping center and retail sales data from the fifty states of the U.S. and the District of Columbia.

The model demonstrates that the construction of new retail space is related to past retail sales, capital costs, and

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taxes. New construction adjusts very slowly to changes in retail sales. Often when new space is completed, sales levels have changed and are not consistent with the newly expanded level of space. The slow adjustment process explains how the recent glut of space was produced and why prolonged cycles are observed in the retail industry.

The magnitude of the recent over-development is illustrated by the "index of shopping space supply" that is derived from the model using national data. In 1992, the index was at 1.22, indicating that actual space was 22 percent larger than the level desired, given the volume of retail spending in 1992. Thus, the index suggests that real spending must rise substantially before additional investment is warranted.