It is difficult to obtain concentration ratios for narrowly defined industry groups. Besides being a tremendous data gathering exercise, such ratios are not likely to be very meaningful due to the presence of multiproduct firms and the threat of potential entry. We tried to relate the OBCS case studies to the available concentration ratios at the four digit SIC levels which is the finest classification on which data are available (Table 3.1). These numbers are less than ideal descriptors of the industries we are studying because they are not well matched to the 12 innovations. Nevertheless, they do not suggest high levels of industrial concentration related to low-E windows and supermarket refrigeration systems.

R&D Expenditures. Data on R&D expenditures help gauge an industry's research potential. Industries with high research expenditures are able to undertake ambitious projects and to innovate more easily. However, data on R&D expenditures are quite scarce. There are several reasons for the lack of data: (1) firms often do not wish to disclose their R&D expenditures lest their rivals benefit from such information, and (2) the appropriation of commonly used assets to R&D versus other uses is problematic. Hence, firms do not like to disclose their research budgets and in some cases they are genuinely unaware of the true resources devoted to research. The use of patents as the outcome of a research undertaking is also problematic. It fails to consider the research that goes unpatented and does not weigh patents of varying importance (Comanor and Scherer, 1969).

Due to the problems noted above, we did not attempt to gather data on industry R&D expenditures. However, the managers and technical people we interviewed often commented on the low level of R&D effort in the lighting, window, heating equipment, refrigeration, and insulation industries.