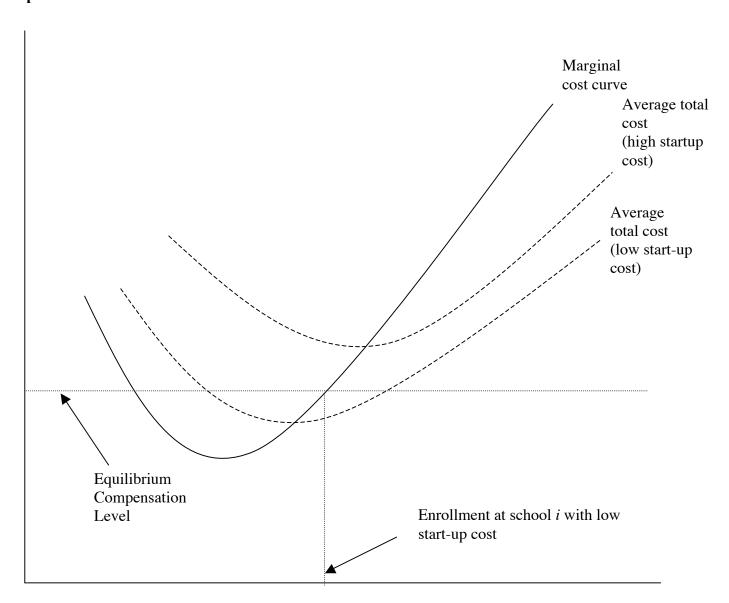
Figure 4—2 Long-Run Decisions to Enter or Exit Market, by Average Total Cost and Revenue per Pupil

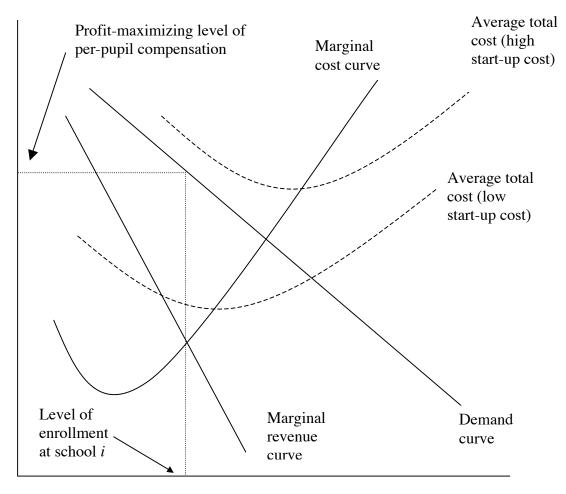
Per pupil compensation



Enrollment

Figure 4—3 School Choice under Monopolistic Competition

Per pupil compensation



Enrollment

chapter 4, Betts, Goldhaber, and Rosenstock, p. 3

Table 4—1 The Ranking of U.S. Public, Charter, and Private Schools, by Characteristics of Their Teachers

Characteristic	Public school	Charter	Private school
		school	
College rank	3	1	2
Math or science major	2 (tie)	1	2 (tie)
Extra instructional	2 (tie)	1	2 (tie)
hours			
Teacher control over	. 3	1 (tie)	1 (tie)
teaching methods			
State certification	1	2	3
Master's degree	1 (tie)	1 (tie)	2

Source: Calculations based on Caroline M. Hoxby, "Would School Choice Change the Teaching Profession?" Working Paper 7866 (Cambridge, Mass.: National Bureau of Economic Research, 2000).

- i. For a discussion about the impetuses for entering the education market, see Frederick M. Hess, *Revolution at the Margins: The Impact of Competition on Urban School Systems* (Brookings, 2002), pp. 211--15.
- ii. The concept of market entrance encompasses both new schools and existing schools that expand their capacity.
- iii. Economic theory states that if firms are risk neutral, the degree of uncertainty should not influence entry decisions. However, it is likely that administrators are at least slightly risk averse. Risk aversion becomes important because, as we discuss below, charter schools have difficulty borrowing money specifically because they are viewed by the financial sector as having uncertain future cash flows.
- iv. The question of who should be allowed into the classroom is hotly debated. For a discussion of this issue and some empirical evidence on the relationship between teacher licensure credentials and student outcomes, see Linda Darling-Hammond, Barnett Berry, and Amy Thoreson, "Does Teacher Certification Matter? Evaluating the Evidence," *Educational Evaluation and Policy Analysis* 23, no. 1 (2001): 57--77; Dan Goldhaber and Dominic J. Brewer, "Does Teacher Certification Matter? High School Teacher Certification Status and Student Achievement," *Educational Evaluation and Policy Analysis* 22, no. 2 (2000): 129--45; Dan Goldhaber and Dominic J. Brewer, "Evaluating the Evidence on Teacher Certification: A Rejoinder," *Educational Evaluation and Policy Analysis* 23, no. 1 (2001): 79--86; Margaret Raymond, Stephen Fletcher, and Javier Luque, *Teach for America: An Evaluation of Teacher Differences and Student Outcomes in Houston, Texas* (Center for Research on Education Outcomes, Stanford University, 2001); and Julian R. Betts, Andrew Zau, and Lorien Rice, *Determinants of Student Achievement: New Evidence from San Diego* (San Francisco: Public Policy Institute of California, 2003).
- v. Thomas A. Downes and Shane M. Greenstein, "Understanding the Supply Decisions of Nonprofits: Modelling the Location of Private Schools," *Rand Journal of Economics* 27, no. 2 (1996): 365--90; Thomas A. Downes and Shane M. Greenstein, "Entry into the Schooling Market: How Is the Behaviour of Private Suppliers Influenced by Public Sector Decisions?" *Bulletin of Economic Research* 54, no. 4 (2002): 341--71.
- vi. Lisa Barrow, "Private School Location and Neighborhood Characteristics," *Economic Perspectives: A Review from the Federal Reserve Bank of Chicago* 25, no. 3 (2001): 13--30.

- vii. Caroline M. Hoxby, "School Choice and School Productivity; or, Could School Choice Be a Tide that Lifts All Boats?" Working Paper 8873 (Cambridge, Mass.: National Bureau of Economic Research, 2002).
- viii. Jeffrey R. Henig and Jason A. MacDonald, "Locational Decisions of Charter Schools: Probing the Market Metaphor," *Social Science Quarterly* 83, no. 4 (2002): 962--80.
- ix. Brian P. Gill and others, *Rhetoric versus Reality: What We Know and What We Need to Know about Vouchers and Charter Schools* (Santa Monica, Calif.: Rand, 2001).
- x. Hess, *Revolution at the Margins*; Gill and others, *Rhetoric versus Reality*. Hess found schools with a missionary purpose to be a major source of new supply in a voucher program in Edgewood, Texas.
- xi. Caroline M. Hoxby, "Would School Choice Change the Teaching Profession?" *Journal of Human Resources* 37, no. 4 (2002): 846--91.
- xii. Dale Ballou, "Do Public Schools Hire the Best Applicants?" *Quarterly Journal of Economics* 111, no.1 (1996): 97--133; Dale Ballou and Michael Podgursky "Teacher Recruitment and Retention in Public and Private Schools," *Journal of Policy Analysis and Management* 17, no. 3 (1998): 393--417.
- xiii. Anita Landecker, personal conversation with Larry Rosenstock, June 30, 2003.
- xiv. Paul T. Hill, "The Supply Side of School Choice," in *School Choice and Social Controversy: Politics, Policy, and Law,* edited by Stephen D. Sugarman and Frank R. Kemerer (Brookings, 1999).
- xv. Eric Premack, personal conversation with Larry Rosenstock, June 30, 2003.
- xvi. Joe Mathews, "Charter Schools Choke on Rulebook: Red Tape and High Costs Are Stifling the Populist Trend, Discouraging Breakaway Educators, and Forcing Survivors to Mimic Public Districts," *Los Angeles Times*, June 1, 2003, p. A1.
- xvii. Eric Premack, personal conversation with Larry Rosenstock, June 30, 2003.
- xviii. The authors are familiar with the San Diego charter schools described here. Rosenstock is principal and chief executive officer of High Tech High, and Betts serves on the board of directors of the Preuss School at the University of California--San Diego.