Sweden has long been known for its pursuit of equality—both equality of opportunity and equality of outcomes. This well-earned reputation is reflected in the country’s history of maintaining a large public sector, generous social programs, and high and progressive income taxes. Its egalitarian goals have also had a strong impact in other policy areas, especially in education policy. In 1842, for example, Sweden became the first country in the world to introduce compulsory schooling, largely motivated by a desire to pursue egalitarian economic and social goals. Indeed, Sweden has succeeded in producing one of the most equal distributions of income in the world, while at the same time affording its citizens a high standard of living.

For all these reasons, it will come as a surprise to many readers that Sweden introduced sweeping, market-oriented reforms in public education in the 1990s that encouraged private schools to compete with public schools, delegated authority for the public schools from the central government to the local municipalities, and greatly increased variability in the resources available to students in different social classes and geographic areas. This book provides an initial evaluation of the effects of these sweeping reforms on student achievement in Sweden. In addition to considering the effects of the reforms on the level of academic performance, we also consider the effects on the variability in student performance, as well as on Sweden’s rank in international comparisons of educational outcomes.

Before we summarize the plan for the rest of the book and the major findings of our analyses, it is worth asking: what provoked such dramatic changes in public education in Sweden, of all countries? Sweden’s major market-oriented education reforms were put in place when the incumbent Social Democratic Party lost office in 1991 and a center-right coalition government assumed power for the first time in a decade. However, the movement toward these reforms, and indeed the more general growing public support for decentralization that may have led to the center-right
government’s success in the 1991 election, had begun several years earlier, and it persisted even after the Social Democrats regained power in 1994.

The groundwork for the reforms may have been laid in the 1980s, when the "spirit of the times" began to change markedly in Sweden, as in many other countries. The concepts of decentralization and "goal steering"—the practice of governing by defining a broad set of goals for local governments to achieve rather than by setting strict regulations—became very fashionable. Decentralization was sometimes depicted as a panacea for solving problems in the public sector, which was criticized as being too large, expensive, and inefficient. Several public-sector activities were accordingly decentralized. This growing public support for decentralization was accompanied by growing dissatisfaction with Swedish schools, which were highly centralized. It was widely argued that Swedish schools were performing poorly and that Sweden’s once-lofty position in international comparisons on reading, math, and science tests had slipped. The chorus of critics espousing a crisis in Swedish public school performance continued to grow louder in the late 1980s and early 1990s.

The first major steps toward decentralization of public education were taken in 1989, when the Social Democratic government passed legislation that made the local municipalities the main employers for teachers. This reform, passed after a major political battle with the teachers’ unions, allowed for greater variability in teacher pay and working conditions. The government also abolished some of the detailed central regulations of the schools. The major central authority (Skolöverstyrelsen) that oversaw these regulations—and was considered a symbol of Swedish bureaucracy—was closed down and replaced by a new body whose main task was to implement goal steering of the schools.

Around the same time, the Swedish economy suffered a severe setback. Unemployment surged from 1.8 percent of the labor force in 1990 to 9.3 percent in 1993, and it crested at 10.1 percent in 1997—the highest rate since the Great Depression. This economic downturn, coupled with growing public support for decentralization, is likely to have contributed to the 1991 election of the center-right coalition government and may also have provided momentum for the additional school reforms the new government implemented.

In 1993 the center-right government established block grants to the municipalities, which greatly increased the financial responsibility of the local governments. The municipalities could spend the block grant on schools as they saw fit and could even shift the money to other services, such as elderly care. To some extent, the groundwork for these reforms was laid by the Social Democrats’ devolution of responsibility for teacher employment a few years earlier. The economic downturn and resulting government budget crisis also facilitated the reform—since the budget had to be cut, it was
politically appealing to delegate authority to the local governments and to let them take the blame for the cuts. Around the same time, the government also introduced the voucher system, which led to the expansion of independent schools—schools that are publicly funded but privately run.2

Continuing concern over the performance of the public schools as well as the continuing fiscal crisis may explain why the Social Democrats did not dismantle any of the center-right’s reforms when they regained power in 1994. The influential Lindbeck Commission report of 1993 (Lindbeck et al. 1993) had painted an unflattering picture of the performance of Swedish schools. On the basis of evidence then available, the commission argued that devoting resources to reducing class size would not improve student achievement, so it instead recommended more homework and larger classes.3 This environment supported the policy reforms that the center-right government advocated and also made it easier for municipalities to implement changes. Also, the lingering weakness of the economy contributed to the continuing political appeal of the block grants. Finally, the Social Democratic Party was also weak, as it did not have a majority in the government and was forced to rely on support from the center-right party that had established many of the major reforms a few years earlier.

Goals of Education in Sweden

Sweden’s radical, market-oriented reforms of the 1990s must be evaluated in the context of the long-standing egalitarian goals of Swedish education policy. Ever since the early introduction of the compulsory school in 1842, efforts to promote equality have been central to Swedish education policy. As discussed in a recent policy document (Regeringens skrivelse 188 2001–2002), these egalitarian goals still feature prominently in Swedish education policy, which attempts to promote both equality of outcomes and equality of opportunities.

The goal of equalizing outcomes, such as cognitive skills, has been evident in many ways. For example, the compulsory-schooling system has gradually become more comprehensive—students are not grouped according to ability, and all follow a similar curriculum. Furthermore, extra resources have been allocated to students with special needs, such as handicapped students and children of immigrants. The goal of equalizing opportunities, on the other hand, has generally been interpreted as an effort to weaken the link between students’ family background and their subsequent educational attainment, which may in turn reduce earnings and income inequality.

Through the 1980s Sweden appears to have been quite successful in terms of achieving overall economic equality. At least according to readily available measures like hourly wages and annual disposable household in-
come, Sweden generally ranked high in cross-country comparisons of equality (see, for example, Bjo¨rklund and Freeman 1997 and Edin and Topel 1997 in the SNS-NBER study of the Swedish economy). Comparisons of equality based on long-run measures of earnings and income are more complicated, but the available evidence suggests the same cross-country patterns as those found in point-in-time income data (see Aaberge et al. 2002). However, the contribution of education policy to these egalitarian outcomes remains an unsettled issue.

The Swedish Schooling System in the Early 1990s

As a starting point for evaluating the reforms that followed, it is useful to describe the Swedish school and day care system at the beginning of the 1990s. At the time, Sweden had an extensive public day care system for children age one to six. This system was heavily subsidized, and the fees paid by families covered only 15 to 20 percent of the average cost per child. The public day care system had expanded rapidly since the late 1960s, and by 1989 the supply of spaces in the system more or less met demand.

Since the mid-1960s, the Sweden educational system has included nine years of tuition-free compulsory education starting at age seven, which is late by American standards. The compulsory schooling is comprehensive: all children follow essentially the same curriculum, which is determined by the central government. Upper-secondary school is voluntary and offers several programs, ranging from vocational training to programs that prepare students for further studies at the university level. In the early 1990s about 80 percent of Swedish schoolchildren continued from compulsory school to any of the study tracks at the upper-secondary level.

For some time, day care, primary, and secondary education have been operated by the municipalities. Nonetheless, the system was highly centralized throughout the 1980s. The central government determined the goals and curricula and provided earmarked money for the schools. A national body was responsible for evaluation of the schools’ performance. There was little leeway for the individual municipalities to deviate from the national standards, although the rules allowed the municipalities to “top up” their resources with local funding.

Swedish youth could typically apply for university education at age nineteen, after having completed three years of high school. Swedish universities are public, with a few exceptions, and run by a central agency, and they are not allowed to charge tuition. At the beginning of the 1990s all students who were admitted to a university or college and completed their courses at an acceptable speed were eligible for subsidized student loans and a stipend of around $300 per month. An important purpose of the public
financial support system was to eliminate any credit constraints that prospective students might face, so that families with more limited resources could still send their children to college. Nonetheless, the financial support system is universal, so even students from wealthy families have been eligible for the loans and the stipend, reflecting the preference for universalism in Swedish education and social policy.

By tradition, prospective university students apply to a specific university and must specify a field of study (such as law, medicine, engineering, business administration, social work) at the time of application. This may compel young people to wait for a few years to decide which career they would like to pursue before they move on from high school to university, and Swedish university students are relatively old by international standards. The admission rules also tend to favor older applicants.

What Happened During the 1990s?

Among the radical changes Sweden made to its schooling system during the 1990s were changes in governance, changes in the amount of resources allocated to different types of education, and changes in enrollment at different levels of the system. Some of these changes were motivated by more traditional egalitarian arguments, while others were motivated by efficiency concerns. They all raise important issues about trade-offs in education policy.

**Governance**

The changes in the governance of Swedish schools during the 1990s in many ways represent a radical ideological shift, reflecting a movement toward decentralization, goal steering, accountability, parental choice, and competition. In this respect, Sweden has followed the same route as many other OECD countries. Indeed, Benjamin Levin (1998) refers to an “epidemic” of decentralizing education policy reforms in the OECD countries. Nonetheless, the quick and radical restructuring of Swedish education during the 1990s seems to have made the school system one of the most decentralized in the entire OECD (Lindblad et al. 2002). Decentralization itself introduces a form of competition into the market for education because people can, and do, vote with their feet in choosing where to reside. The quality of local schools is a major factor in residential choice, with important implications for local property values.

The Swedish central government took the first major step toward its decentralization of public education in 1990 when it transferred the authority for primary and secondary education to the municipalities. As a result of this reform, the municipalities were given full financial responsibility for
primary and secondary schools. Although the central government continued to redistribute financial resources from rich to poor municipalities, the funds earmarked specifically for education were gradually reduced and then completely eliminated by 1993. Thus, the scope for differences in expenditures on education across municipalities increased considerably.

Responsibility for teacher employment was shifted from the central government to the municipalities in 1989, although teacher pay negotiations remained centralized. This changed in 1995 when responsibility for teacher pay negotiations was transferred to the school level. Thus, since that time, school-level factors may have affected wages to a greater extent. Many school managers have used the reform as an opportunity to move to more individualized wage setting for teachers. During the 1990s, after an initial wage increase for teachers in 1990, a long-predicted shortage of trained teachers developed, and schools that sought licensed teachers needed to offer a higher starting salary to fill their vacancies. These higher salaries were a visible price that the government paid to persuade teachers’ unions to accept the decentralization of primary and secondary education to the municipalities.

School choice was introduced in 1992. The reform allowed parents to choose between all public schools in the municipality, subject to space limitations. However, proximity to a school (the residence principle, närhetsprincipen) is still the main principle for allocating students to schools. If students residing close to a particular school fill the available slots, the other parents’ preferences for their children to attend that school are given little weight. In 2000, however, the city of Stockholm introduced a major deviation from the residence principle. For upper-secondary education, the city introduced a system in which admission is based exclusively on student achievement, as measured by compulsory-school grades.

Also beginning in 1992, municipalities were required to fund independent, privately operated schools. In 2002 almost 6 percent of students at the primary and lower-secondary level attended a private school, a sharp increase from the fewer than 1 percent who attended such schools in 1990. Families were given complete freedom to choose between private and public schools, provided that a private alternative was available. Private schools exist in about half of the municipalities and tend to be located in large urban areas.

In parallel with the move to decentralization and the introduction of school choice, the government increasingly emphasized goal steering. Schools were provided with a broad set of goals and given the responsibility of deciding how to evaluate themselves and determining whether they had fulfilled the general goals. As an element of their self-evaluation, the schools could use results from the national tests administered to students in grades five and nine. The actual use of these tests has varied among schools, how-
ever. Some schools and municipalities have published tables showing their average test scores or grade point averages, while others have not.

**RESOURCES**

The financial crisis in the public sector has also had consequences for the level of resources devoted to day care and schools. The child-staff ratios in the day care centers have increased markedly since the late 1980s. During most of the 1990s day care fees were also raised considerably, although they were dramatically reduced in 2002 when the central parliament enforced a ceiling on fees. The magnitude of the reduction varied among municipalities depending on the fee structure previously in place, but proportionate reductions in excess of 50 percent were common. By 2001 the fees had become quite high, so the ceiling implied a large reduction in expenditures for families with small children.

In compulsory schools, the student-teacher ratio increased considerably during the 1990s. After having decreased gradually for many years, the student-teacher ratio increased from close to eleven-to-one in 1991 to over thirteen-to-one in 1997. Expenditures per student in compulsory schools fell markedly from 1990 to 1995, followed by a slight recovery in the second half of the 1990s.

At the same time that resources per student declined in the 1990s, computers were introduced in Swedish schools on a large scale. Teaching techniques changed as well, partly because the computers offered opportunities for new types of instruction. In many schools the traditional concept of a “class” lost its meaning owing to changes in teaching styles. It is fair to say that there was no overall consensus in the educational community behind these sweeping changes. Thus, the changes made for a turbulent decade in Swedish schools.

**SCHOOL ENROLLMENT**

By 1990 the available number of public day care slots by and large met the demand, so the expansion of slots tapered off during the ensuing decade. One important change was made to the day care system, however: because of a new emphasis on preparing six-year-olds for primary school, Sweden effectively introduced a kindergarten-type of program.

School enrollment rates did not change in compulsory school. However, some important changes took place in upper-secondary school. In 1991 a reform added one year of mainly theoretical studies to the vocational programs. Completion of the curriculum at a vocational program now implies that the student has fulfilled the so-called general requirement for entering university studies. In turn, some of the university programs are now avail-
able for vocational students. The enrollment rate at upper-secondary schools increased during the 1990s: by the second part of the decade, around 95 percent of each cohort participated in such studies.

During the second half of the 1980s, university enrollment rates had started to increase somewhat, after having fallen sharply in the early 1970s (see Fredriksson 1997). The deterioration of the youth labor market in the early 1990s was accompanied by a rapid increase in university enrollment rates, which could not have taken place without political decisions to expand the number of slots at the public universities. Indeed, one motivation for this expansion in slots was the commonly held idea that university education is a much better alternative than unemployment or participation in labor market programs for the unemployed. Much of the expansion took place at new regional colleges rather than at the older and more established universities. Another motivation for this change was the goal of facilitating the recruitment of new students to higher education, especially students from working-class families.

Other types of adult education also expanded in the 1990s. Between 1990 and 1993, as employment fell rapidly, labor market training (typically with a classroom training component) became the most common type of labor market program. By the mid-1990s this measure had largely been replaced by work-related programs. Unemployed persons were required to participate in these programs in order to renew their unemployment benefits after their UI eligibility period of sixty weeks had expired.

During the second half of the decade, adult education expanded enormously as a consequence of Sweden’s Adult Education Initiative (AEI) (kunskapslyftet). This program gave unemployed individuals the opportunity to maintain their unemployment benefits while taking part in education at the primary and secondary levels. In contrast to the short courses provided in labor market training programs, this new initiative helped low-skilled adults increase their education levels and, in some cases, qualify for study at the university level.

Education and Growth

So far, we have emphasized the egalitarian goals of Swedish education policy. However, growth and efficiency are also prominent concerns of education policy in Sweden. Sweden’s economic growth compared to that of other countries and the role of public policy in improving it are subjects that have been discussed quite intensively over the past ten to fifteen years (see, for example, the exchange between Walter Korpi 2000 and Magnus Henrekson 2001; see also Lindbeck 1997 and Freeman, Topel, and Swedenborg 1997). The discussion has focused on reasons why Sweden’s position in international comparisons of GDP per capita has fallen from a top
rank of third or fourth in the world in the early 1970s to a more mediocre rank of only fifteenth to eighteenth in 1995.

Much of this discussion has centered on the classical question of whether Sweden’s high taxes and high public spending hinder economic growth. In addition to the school reforms, during the 1990s Sweden also implemented a major tax reform, joined the European Union, successfully lowered inflation, and deregulated many markets. These developments were all motivated by a desire to strengthen growth and enhance efficiency.

Education policy has also been seen as a potential tool for stimulating economic growth and enhancing efficiency. Critics of Swedish education policy have focused on the low estimated wage returns to higher education (see, for example, Gylfason et al. 1997). These returns were particularly low in the early 1980s, when both wage compression and high marginal tax rates contributed to the low private, after-tax return to additional schooling. Some data suggested that Sweden’s labor force was poorly educated compared to that in other countries. Swedish job training programs were also criticized, since most evaluation studies from the 1990s suggested that these programs had poor or modest results.

The defenders of Swedish education policy garnered some comfort from the International Adult Literacy Study that was published in the mid-1990s. The results from this study showed that Swedish adults did very well in terms of literacy and numeracy skills. Not only did Swedes perform well on average, but the lower tail of the distribution also performed remarkably well in a cross-national comparison (see, for example, Nickell and Layard 1999; Bjo¨rklund et al. 1998).

Questions for the Rest of the Book

The dramatic changes to Swedish education policy during the 1990s raise a number of interesting research questions. The answers may be of interest to policymakers, school boards, and parents in Sweden as well as to interested parties in other countries who are concerned about educational performance and are considering market-oriented school reforms. In many ways, Sweden can provide a laboratory for studying the impact of dramatic, market-oriented reforms in education. If such radical reforms to public education were undertaken in Sweden, they could certainly be undertaken in other countries as well. Furthermore, if the reforms increased inequality of achievement with little gain in efficiency for Sweden, a country with a strong safety net and narrow distribution of income, then other countries could risk an even greater increase in inequality from implementing similar reforms.

We begin in chapter 2 with a discussion of the basic theoretical arguments in favor of a public education policy, and we consider how these
arguments relate to both efficiency and equality concerns. In chapter 3, we examine some basic empirical evidence about Swedish education policy. We report on international comparisons of both the academic achievements of Swedish students and the skills of the Swedish adult labor force. We also report estimates of the private returns to schooling.

Chapters 4 through 6 focus on Sweden’s experience during the 1990s. Chapter 4 shows that the decentralization of education changed the allocation of school resources among Swedish municipalities. We use this change in resource allocation to study the impact of school resources on student achievement. In chapter 5, we examine the supply of teachers to Swedish schools in light of the expectation that many Swedish teachers will retire in the next decade and the erosion of incentives to become a teacher. In chapter 6, we investigate whether the competition induced by new independent schools in combination with free school choice has improved productivity by raising achievement in all schools.

A system with free school choice requires that parents have good information about the quality of schools. In chapter 7, we discuss the role of quantitative measures like grades and test scores in guiding parents in their choice of schools. We also examine how well grades and test results for students in the compulsory-schooling years predict outcomes in adulthood, such as eventual educational attainment and labor market earnings.

In chapter 8, we examine Sweden’s success in meeting its goal of equalizing the educational and labor market performance of individuals from different family backgrounds. In particular, we investigate whether the reforms of the 1990s increased disparities in educational attainment and labor market disparities relative to previous decades. Finally, we summarize our main findings in chapter 9 and also suggest directions for future evaluations of Swedish education policy.

Our overriding conclusion is that the effects of the education reforms have been exaggerated by both sides, by their proponents as well as by their opponents. The reforms did increase the efficiency of the school system, but this increase was modest. Inequality also increased over the decade, but at least so far the increase in disparities in achievement resulting from the reforms appears to have been modest. Some groups, most notably immigrants, have not benefited from the availability of school choice, but by and large the newly decentralized, choice-driven system has had small positive effects on the academic performance of most Swedish students.

The main conclusion from our study is that we should not expect miraculous results even from radical market-oriented education reforms, but neither should we expect a dramatic increase in inequality. The best course of action may be to continue to monitor the effects and implementation of the reforms while also working to improve academic assessment procedures.