Bright Flight: Unintended Consequences of Detracking Policy in Japan

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In many ways, Japan is an embodiment of meritocracy, stressing academic achievement and disapproving of social class influences. Before 1970, Japan had a strong tradition in which public schools were superior to private ones. However, around that time, a progressive movement succeeded in implementing detracking policies in some prefectures, which also had some unintended consequences, the opposite of their egalitarian intentions. This article presents case studies and multivariate analyses that find that prefectures with egalitarian detracking reforms had the most flight from public to private schools and the emergence of the most within-school grouping. We conclude that when policies tried to get less separation of students among public schools, separation emerged in other ways. The results have implications for the design of tracking policies.

Introduction

In many ways, Japan is an embodiment of Young's (1958) view of meritocracy. Japanese society stresses academic achievement as the criterion for social success and strongly disapproves of social class influences. While there are many imperfections, one feature is particularly noteworthy: Japan has a tradition in which public schools are superior to private ones. Unfortunately, this tradition has suffered a serious deterioration in recent decades, and our analyses suggest that it has done so because of a well-intentioned detracking reform.

Prewar and before 1970, public high schools were better than private high schools (Aso 1965). This was true throughout most of the 47 prefec-
tures of Japan, including Tokyo. There were only a few exceptions in the postwar era. Thus, by the mid-1960s, a large percentage of the youth cohort was in high school (71 percent in 1965), and all high achieving students had access to the very best high schools, regardless of their economic background. Rich people could send their children to private schools to make good social connections and to learn social graces, but these private schools did not offer the best education, they did not have the brightest students, and they sent very few graduates to the best Japanese universities, which are the key routes to the best jobs in society. In most prefectures, regardless of whether you were very rich or very poor, your children's goal was the same—high academic achievement in junior high to gain admission to the best public high schools and be prepared for the best Japanese universities (which are mostly public too).

While Japan's public schools were better than the private ones, public schools had a clear hierarchy that amounted to a form of tracking. We use the term "tracking" to refer to grouping of students by ability into different schools, a practice used by selective schools in New York, Boston, San Francisco, and other cities. While Japanese schools rarely had ability grouping within schools, their school hierarchy is regarded as tracking in Japan as it would be in the United States (Iwaki and Mimizuka 1983). Sociologists note that both forms of tracking have similar social properties (Sorensen 1970; Rosenbaum 1976).

In the late 1960s and early 1970s, a progressive movement succeeded in implementing detracking policies in some prefectures. While Japan's public high schools had formerly been highly differentiated into large numbers of ranks (8–16 levels in a district were common), the reforms reduced the hierarchy among public high schools to one or only a few ranks (Muta 1986; Hashimoto 1994). Unfortunately, these reforms also had some unintended consequences, and the results were not as progressive as the reformers had intended.

Until now, research has not examined the implications of these detracking reforms for private school achievement outcomes or for internal tracking in public schools in systematic quantitative analyses or in comparative case studies of the long-term effects. Those are the goals of this study. The results we are going to report are not definitive proof of the effects of detracking. Japan's 47 prefectures did not implement these reforms according to a randomized design, and Japan's experiences may not apply to the United States.

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Unintended Consequences of Detracking in Japan

Yet these results cannot be easily dismissed, for they proceeded from the same good intentions as contemporary American reforms. Japan's reforms bear a strong resemblance to contemporary calls to abolish or reduce high school tracking in the United States, and they were vastly more pervasively implemented than American detracking reforms. While it is tempting simply to deny that American detracking reforms could possibly have the kinds of undesirable side effects observed in Japan, this reaction sounds a lot like the denials that Japanese reformers gave. One cannot help wondering whether the Japanese experience might have some lessons for the United States.

Background

The Changing Policy toward High School Tracking in Japan

Japan has long had a hierarchy among high schools. Before 1945, secondary schools were clearly stratified (Fukaya 1969). Whenever several high schools existed in a district, Japan traditionally ranked them, ranks were clear, and admissions were selective, based totally on academic achievement. This led to great competition by students to get into the best high schools, and the severity of the competition was seen as a problem. In addition, many people also worried that the hierarchy of public high schools increased achievement differences among students, making government an agent for increasing inequality.

As high school enrollment increased, the number of high schools increased through the 1950s and much of the 1960s, and with this increase came an increase in hierarchy.1 The teachers union had advocated detracking since about 1960, but this view became more generally popular during the 1960s. In roughly the period 1967–75, many prefectures reduced the size of school districts, thus reducing the hierarchy by reducing the number of high schools in a district, sometimes from a fine-grained hierarchy of 16 ranks down to four or fewer ranks. Many districts were formed with only one school, and thus only one rank.

In addition, a further detracking reform was implemented in districts with more than one high school (Iwaki 1977). Even when many high schools existed in a district, the number of ranks was dramatically reduced by grouping several high schools into the same rank (called "group selection"). Exam scores would still influence assignments to ranks, but students would be randomly assigned to schools within each rank. Thus, a district with eight high schools would go from having a hierarchy of eight ranks to two ranks. By this procedure, many top-
achieving students were assigned to high schools that formerly had not been top-rank high schools, while many average-achieving students were assigned to formerly top-rank high schools. This was particularly common in urban areas.

While tracking among high schools was common, tracking within high schools was not. The grouping of students by ability into different classes within schools (ability grouping) was unknown in prewar Japan. Japan got the idea from the United States during the postwar occupation in the late 1940s (Kariya 1995), and it remained rare and negatively viewed until the 1970s. During the period when detracking reforms were reducing inequalities among high schools, between 1967 and 1975, ability grouping was largely absent. However, since the late 1970s, ability grouping in high school has increased (Amano et al. 1986).

Thus, in Japan, the main form of high school “tracking” was in the hierarchy among high schools—that is, between high schools, not within them. This form of tracking increased for about two decades, but starting in the late 1960s, the detracking reform began to reduce the distinctions among public high schools. This article will show some of the unintended consequences, and we will try to see whether there is an empirical linkage between the reforms and the apparent consequences.

The Model and Hypotheses

Today it is easily observed that the old tradition of inferior private high schools is no longer true. Many private high schools are quite good. There are many examples of mediocre private high schools in 1967 that came to have elite status after detracking. Several private high schools increased their admissions at the University of Tokyo (the most selective university in the nation) from two per year to 40 per year over the course of a decade.²

Three qualitative changes are particularly evident. First, private high schools became increasingly desirable, to the point where their applications increased, and they became increasingly selective of applicants. They were perceived as more desirable because they offered an accelerated pace of instruction.

Second, students in private high schools were able to learn faster. Japanese public high schools have a fixed curriculum of the topics students must study in each year, and all public high schools go through that curriculum at the designated rate. In contrast, many elite private high schools (including some formerly non-elite ones) were able to accelerate their students’ progress through the curriculum, so that many students finished the twelfth-grade curriculum by the end of eleventh grade or
even earlier. These schools could devote the last year of high school to review and prepare for examinations.

Third, internal tracking in public high schools, which was rare before the late 1970s, has become much more common since then. Students are selected based on their academic achievement, and different level classes deal with the subject matter in different ways and at different rates.

We shall investigate two hypotheses: (1) detracking public high schools was associated with improved achievement outcomes in private schools; and (2) detracking public high schools was associated with increased "internal tracking" in these schools.

We anticipate that two different groups of people might respond to changes in the high school hierarchy—parents and teachers. Our hypotheses propose that some parents may choose to leave the public high schools, leading to increased selectivity by private high schools and increased achievement outcomes of private school graduates.

Teachers' reactions are more difficult to predict. The teachers union was a strong proponent of detracking reforms (Sasaki 1976; Kariya 1995). Thus, we would expect teachers to support the detracking reforms and comply with them. However, individual teachers may find it more difficult to teach heterogeneous classes. If so, they might act to increase internal tracking in high school through ability grouping.

As noted, we know that private school achievement outcomes began improving around the time that detracking reforms began, and ability grouping began appearing in high schools in the late 1970s. However, this article examines the associations in more detail. First, our analyses will examine case studies that indicate whether these two changes were more likely to arise at the time of detracking reforms in specific prefectures. Second, we will also conduct quantitative analyses to examine whether these two changes were statistically associated with detracking reforms over all prefectures in the nation.

Our Indicator of School Achievement Outcomes

This study focuses on an unusual indicator of school achievement outcomes: admissions to top universities. This may not be a good indicator of school resources or instructional quality, but it is an extremely good indicator of what parents want their children to get from going to a school. While researchers often bemoan the difficulty of measuring "school quality," parents also have difficulty figuring out school quality, so they tend to base their school-choice decisions on easily seen signals.
In Japan, the number of school graduates admitted to the top-rank universities is one of the most obvious signals of school quality since it is published in newspapers and since it is usually a primary goal of parents. Thus, our study is using an indicator of "school achievement outcomes" that is likely to be the one primarily used by parents. Moreover, since university admissions in Japan is totally determined by achievement scores (not aptitude, grades, recommendations, nor activities), university admissions is also an indicator of academic achievement. While it does not necessarily indicate school effects on achievement gains (value added), a school's elite-university admission rate is an indicator of achievement outcomes.4

The University of Tokyo is the top-ranked university in Japan. Like the other top universities, its admissions are based solely on academic achievement. Neither recommendations nor other outstanding achievements influence admissions. Moreover, University of Tokyo is the most selective university in the nation, and its graduates get the best jobs in the nation (Takeuchi 1981). Thus, admissions at University of Tokyo indicates both high academic achievement and the likelihood of a high-status job.

Before the reforms, few private high schools were among the best high schools in the nation. In 1960, among the top 20 high schools in number of graduates admitted to University of Tokyo, only 2 were private schools. The rest were 16 public (prefecture) high schools and 2 national high schools. By 1965, the number of private high schools in the top 20 increased to 5, and to 7 by 1970 and 1975, and then to 12 in 1981. By 1993, 15 of the top 20 high schools were private (Kariya 1995). Thus, among the nation's high schools, private high schools came to have increasingly strong students, and public high schools had a decreasing portion of the top university slots in the nation since 1960, during the period when these schools were implementing detracking reforms.

Changes in School Achievement Outcomes in Specific Prefectures

This section analyzes case histories of individual prefectures to examine whether these changes in private schools' elite-university enrollments at a prefecture level occur at a subsequent time to the prefecture's public school detracking reforms. The above numbers on university admissions indicate gross national changes and many other factors were changing in Japan during this time. These gross changes do not directly show the influence of detracking. Is there any reason to think that these changes were associated with detracking and not some other factor? The history
of individual prefectures gives a more detailed picture of the timing of changes and the perceptions of the actors involved.

1. Radical prefectures.—Kyoto and Kochi were the two most progressive prefectures in the nation. These two prefectures did not have a high school hierarchy in the years after the war (1946–54). However, in Kochi, officials became concerned about student outflows to the private schools, and they introduced a high school hierarchy in 1955. Unfortunately, private high schools had already experienced a dramatic improvement in school achievement outcomes over the preceding 10 years. Kyoto retained its commitment to detracking for over two decades, and its private high schools continued to attract increased numbers of the highest achieving students over this period. These two radical prefectures continued to send large numbers of students to the nation's top two universities (Universities of Tokyo and Kyoto) over this period. However, while very few of these students came from private schools before the reforms, the vast majority did after the reforms, and the rate was more pronounced for the prefecture that retained is detracking the longest (85 percent [Kochi] and 97 percent [Kyoto] in 1994).

Even reformers perceived some relationship between their detracking and the increasing quality of students in private high schools. In Kanagawa prefecture, an official who bragged about detracking reforms, then complained that “31% of children have fled the public high schools.” This official blamed parents for their behavior, and he urged parents not to leave the public schools (Nihon Kyoshokuin Kumiai 1952).

Similarly, at the 1952 annual meeting of the teachers union, a union representative from Kochi bragged that Kochi prefecture abolished entrance exams and rankings among high schools, but then he complained that public high schools had difficulty recruiting good students. Their best students were going to private high schools (Nihon Kyoshokuin Kumiai 1952).

2. Progressive prefectures.—About 10 other prefectures began detracking in the 1960s and early 1970s. Tokyo was one of the leading examples of this group. In 1967, Tokyo implemented detracking by quasi-randomly assigning students to high schools (group selection). In the years after this, Tokyo’s private schools saw an increase in applications, and they were able to greatly increase their student-body quality in the late 1960s and early 1970s. Moreover, after the 1967 detracking reform, a decreasing percentage of admissions to University of Tokyo came from public schools. The percent of admissions from public high schools decreased 2 percent in the two years before 1967, 17 percent in the next two years, and 34 percent in the seven years after 1967 (Iwaki 1977).

It is noteworthy that the flight from detracking was not immediate. This was not quick panic flight. Parents gradually fled public
schools as they saw that de-tracked public high schools offered lower pass rates on admissions exams and lower rates of admission to the best universities.

3. Traditional prefectures.—Most northern and eastern prefectures were relatively untouched by the U.S. occupation and its reforms (e.g., Sendai in Miyagi prefecture). These prefectures kept highly stratified public high schools, and public high schools were explicitly ranked by number (a practice abolished postwar in other prefectures). Thus, while other prefectures were detracking and having an outflow of good students, these traditional prefectures failed to develop good private schools—their best schools were public schools. These prefectures retained the traditional prewar pattern where public schools were the best schools available.

For instance, Toyama prefecture (north of Kyoto) was famous for not detracking in 1960. It was strongly criticized by progressives across the nation. It had highly stratified high schools with very selective general high schools enrolling only 30 percent of students. Although the district was only average in prosperity, it had three very good public high schools, which did a good job of preparing students for national exams and which sent many students to University of Tokyo. The area had few and very mediocre private high schools that sent few students to the University of Tokyo. Indeed, 100 percent of its admissions to University of Tokyo in 1994 were from public schools.

Interestingly, some of these traditional prefectures later began detracking in the late 1970s, and then they experienced a similar outflow of good students and increased quality of private school enrollments that were evident earlier in other prefectures. However, this only happened if the prefecture had private schools. Many had few private schools to which students could flee, so these prefectures had little private school flight. However, even if there was no private school flight, achievement scores and University of Tokyo admissions severely declined, although some of these prefectures had had very high admissions earlier.

While the main cause of achievement decline in de-tracked public high schools was flight to private high schools, there were some indications that detracking reduced achievement even if there was no flight. In 1978, another prefecture that was late to de-track (Nagano) implemented reforms to reduce tracking. There was little flight to private schools, but test scores and numbers attending University of Tokyo severely declined. These outcomes suggest that detracking itself may lower achievement, beyond the process in our two hypotheses. Although we lack data to explore the process by which this occurs or under what conditions, we speculate about the reasons in the conclusion of this article.
Changes in Ability Grouping over Time

As noted, ability grouping among classrooms was largely absent from Japanese high schools until about 1977. Detracking reforms occurred between 1967 and 1975 and had little immediate influence on internal tracking. However, despite the time lag, there are reasons to think that ability grouping arose in high schools due to detracking and a concomitant increase in enrollment rates. While attendance in high school is not compulsory in Japan, the portion of the relevant age cohort in high school rose from 71 percent to 91 percent over the decade 1965–75. The addition of these students, coming at the same time as detracking, led to much discussion about how high schools could respond to the increasing diversity.

While teachers were ideologically committed to detracking reforms, and their union led the battles for detracking, many individual teachers began reporting difficulties in handling the new diversity in their classes. For instance, a nationwide survey of senior high school teachers was conducted in 1975. On one item, over half of teachers were in favor of selective admissions (54 percent), and another 28 percent were in favor of ability tracking within or between high schools. While this question was not asked on earlier surveys, it is unlikely that selective admissions or ability tracking would have been this popular with teachers in earlier years.

A special issue of an educational journal on the newly introduced ability grouping in high schools reports that in Hyogo prefecture, the teachers’ union (which strongly supported detracking) surveyed high school teachers and found that over half the respondents felt that a significant portion (over 25 percent) of students could not keep up with classes (Nakanishi 1978). In 1978, a vice principal of the only high school in the district (in Tottori prefecture) complained that while the usual difference in entrance exam scores between top and bottom students is about 70 (on a scale of 250), but “our school’s [range] is 120. We have such a great diversity in the student body that we had to introduce a ‘second’ rank class (in addition to the ‘top’) in order to realize parents’ wishes to send their kids to college. We want to set a realistic, attainable goal for students . . . to encourage them” (Nakanishi 1978).

Thus, teachers and administrators voiced concerns about student diversity creating difficulties for meeting students’ needs. Although teachers and administrators were ideologically opposed to ability grouping before detracking, their views changed after their high schools were detracked and the student body became more heterogeneous. Since practices inside Japanese schools are largely determined by teachers and administrators (and school boards rarely intervene on such matters), the
increased use of internal tracking probably arises from the changes in their views.

**Quantitative Analyses**

Having seen these many different examples, we wondered whether a general pattern could be seen in systematic quantitative analyses. We shall investigate two hypotheses: (1) detracking public high schools was associated with improved achievement outcomes in private schools; and (2) detracking public high schools was associated with increased "internal tracking" in these schools.

Getting indicators of school achievement outcomes is always difficult. Since admission to Japanese universities is totally determined by academic achievement, a school's percentage of graduates attending top universities is an indicator of both achievement and access to elite universities. Thus, for our indicator of private school achievement outcomes, we use the percent of private high schools' graduates who are admitted to the two most selective universities in the nation (Universities of Tokyo and Kyoto). (See table 1.)

**TABLE 1**

*Independent and Dependent Variables*

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>De-track dummy</td>
<td>If a prefecture had a small district (less than 3 schools in a district) or group selection policies in 1977, 1; otherwise, 0 (from Mombusho 1978)</td>
</tr>
<tr>
<td>Percent white collar</td>
<td>Percentage of workers who have white collar jobs (from preceding census)</td>
</tr>
<tr>
<td>Percent private</td>
<td>Percentage of high school students enrolling in private high schools in 1994 (from Mombusho 1995)</td>
</tr>
<tr>
<td>Teachers' union</td>
<td>Percentage of primary and secondary school teachers who are members of the Japanese Teachers' Union in a prefecture in 1977 (from Shimbori 1980)</td>
</tr>
<tr>
<td>Elite private high school</td>
<td>Percentage of students who passed the entrance exams for Universities of Tokyo or Kyoto from private high schools in a prefecture in 1994 (from Sunday Mainichi 1994)</td>
</tr>
<tr>
<td>Internal tracking</td>
<td>Percentage of public general high schools which have internal tracking in a prefecture in 1983 (from Amano et al. 1986)</td>
</tr>
</tbody>
</table>
We coded prefectures for whether or not they implemented a detracking reform (reducing the number of levels in the school hierarchy either by grouping or by reducing the number of schools per district). Detracking reform is coded as a dummy variable (detracking reform = 1, none = 0). This is a conservative test of the effects of detracking. Using a simple two-value variable limits how much variance can be explained, so if we see any effect, it is meaningful.

Our analyses control for two other factors. As a matter of simple logic, the percentage of all students in the prefecture attending private schools is likely to influence the percentage of elite university students who come from private schools from the prefecture (percent private). We also expect higher socioeconomic status (SES) in a prefecture to increase private high school quality. As a crude indicator of social class, we control for the proportion of the working population in white-collar jobs (percent white collar), taken from the decennial census preceding the dependent variable.

Linear regressions were run on private high school quality with these three variables for the 47 prefectures (table 2). The regression had an adjusted $R^2$ of 27.1 percent and was highly significant ($F = 6.70$, $p < .001$). As expected, higher white-collar composition increased private school quality. A one SD increase in white-collar composition increases the private school attendance rate at elite universities by almost half a SD ($\beta = .476$, $p = .0025$). Percent private schools had no influence. As hypothesized, detracking public schools increased private school attendance at elite universities ($\beta = .288$, $p = .028$). Prefectures that had detracking reforms among public schools had private schools that sent about 17 percent more students to elite universities than did prefectures without detracking reforms ($\beta = .173$).

For our second hypothesis, we examined the effects of detracking on

<table>
<thead>
<tr>
<th>TABLE 2</th>
</tr>
</thead>
</table>
| **Regression Analysis (OLS):**  
**Elite University Admissions from Private High Schools** |
| Regression Coefficient | SE | $\beta$ | Significance |
| De-track dummy | .173 | .076 | .288 | $p < .05$ |
| Percent white collar | 3.261 | 1.105 | .476 | $p < .001$ |
| Percent private | -.095 | .460 | -.031 | $p < .05$ |
| Constant | -.848 | .292 | | $p < .0001$ |

*Note.*—Adjusted $R^2 = 27.1\%, F = 6.605, p < .001$.  

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internal tracking. We took as our measure of internal tracking the percentage of public high schools in a prefecture that had ability-grouping practices (making classrooms homogeneous on achievement, excluding vocational high schools from the analysis; cf. Amano et al. 1986). Unlike tracking among high schools (high school ranks) that is decided by prefectural government, ability grouping within schools is solely decided by teachers and principals, not by outside citizens. Therefore, besides the influence of the detracking dummy variable, the second regression controls for the percentage of all teachers in the prefecture who are members of the Japan Teachers Union, the most progressive union. Since this union is ideologically opposed to tracking, we expect increased union membership to decrease tracking within schools. As before, we also control for percent white collar.8

Running linear regressions on internal tracking, we find that the regression had an adjusted $R^2$ of 28.3 percent and is highly significant ($F = 7.063, p < .001$; table 3). We find that higher white-collar composition decreased internal tracking. A one SD increase in white-collar composition decreases internal tracking by about a quarter of a SD ($\beta = -0.278, p = .0385$). As expected, teacher union participation also decreased internal tracking; a one SD increase in union membership decreased tracking by over one-third of a deviation ($\beta = -0.371, p = .0064$). However, even after these controls, detracking policies among schools increased internal tracking ($\beta = .279, p = .0319$). As hypothesized, prefectures that had detracking reforms among public schools had about 12 percent more internal tracking ($b = .122$) than prefectures without detracking reforms. Given that internal tracking was very rare in Japanese high schools a decade earlier, these results are particularly striking.

In sum, detracking reforms in public high schools was followed by declining access to the best universities. The reforms succeeded in treating all students in the public sector equally, and people felt good that their
public sector was not creating internal stratification. However, as private individuals, many of these same people sent their own children to private schools if they could afford it. And that is key—only those who could afford private high schools could gain access to the best education and the best universities.

Moreover, after the detracking reform reduced inequalities among high schools, teachers gradually became discontent with the situation. Teachers reported difficulties of teaching heterogeneous classes. As we have seen, those prefectures that had created the most equality among high schools were the ones that implemented the most internal tracking.

One goal of the detracking reform was to diminish social class differences in educational opportunities and attainment. Research usually finds that students from higher SES backgrounds tend to be in higher tracks in the United States (Gamoran 1987; Rosenbaum 1983) and in Japan (Kariya 1998), and detracking advocates hope that reducing tracking would reduce the advantages of higher SES backgrounds. Since private and national junior high schools provide an advantageous pathway to prestigious universities, one would wonder whether the reform reduced advantages of higher SES youth. To examine whether this occurred, Kariya (1998) analyzed national survey sample of Japanese men and women in 1985 (Survey of Social Stratification and Mobility 1985). Table 4 shows what proportion of each occupational group attended private junior high schools in two birth cohorts. The older cohort (born 1946–55) entered junior high school before the detracking reform (pre-1969), while the younger cohort (born 1956–65) entered after the reform had taken effect. In the pre-reform cohort, only 4.4 percent of the older cohort attended private junior high schools (or national junior high schools), and there is no correlation between students' social origins and the chance to go to these schools. However, among the younger cohort, who entered junior high schools after most egalitarian detracking reforms were implemented in several prefectures during the 1970s, we find a clear correlation between students' social origins and private (or national) junior high school attendance. While 18 percent of those from professional/managerial origins went to those schools, only 1.6 percent of those from manual worker origins and 3.4 percent of those from farmer origins did so. Although the proportion attending these schools has increased by the later cohort, the social origins effect has increased even more. Rather than decreasing the advantages of higher SES backgrounds, as detracking advocates had hoped, the relationship between SES and outcomes is even stronger after the detracking reforms were implemented.

These results suggest that egalitarian detracking reforms may have backfired. While a causal inference cannot be made with certainty, it is
### Table 4

**Percentage of Students in Private Junior High Schools by Father’s Occupation and Cohort**

<table>
<thead>
<tr>
<th>COHORT</th>
<th>Professional/Managerial</th>
<th>Clerical/Sales</th>
<th>Manual</th>
<th>Farmer</th>
<th>Total</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-reform, born 1946–55 (enter junior high school 1959–68):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private junior high</td>
<td>9.8</td>
<td>1.9</td>
<td>4.7</td>
<td>2.8</td>
<td>4.4</td>
<td>4.015</td>
</tr>
<tr>
<td>Public junior high</td>
<td>90.2</td>
<td>98.1</td>
<td>95.3</td>
<td>97.2</td>
<td>95.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>N = 271</td>
</tr>
<tr>
<td>Post-reform, born 1956–65 (enter junior high school 1969–78):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private junior high</td>
<td>18.2</td>
<td>9.5</td>
<td>1.6</td>
<td>3.4</td>
<td>7.2</td>
<td>9.767</td>
</tr>
<tr>
<td>Public junior high</td>
<td>81.8</td>
<td>90.5</td>
<td>98.4</td>
<td>96.6</td>
<td>92.8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>N = 166</td>
</tr>
</tbody>
</table>

Source.—Data from Survey of Social Stratification and Mobility 1985.

Note.—Attending private junior high schools includes national Junior high schools.
evident that the reforms failed to equalize educational opportunities. It seems likely that the apparent effect of detracking on private school access to elite universities has encouraged more privileged families to send their children to private junior high schools, which provide an advantaged pathway to prestigious university education. The ideals of egalitarian reform were not achieved. Rather, the reforms seem to have led to a more difficult situation for public policy, because now more of the most advantaged youth are out of the public system, and thus beyond the control of public policy. Equalization did not take place, but more difficult and less controllable situations emerged as unintended consequences of the reforms.

Conclusions

These findings pose a serious warning to reformers. Despite the great idealism that motivated these reforms, their consequences were the opposite of their egalitarian intentions. In effect, detracking backfired. When policy makers tried to get less separation among students among public schools, separation emerged in other ways—inside public schools and between public and private schools, and the latter was more strongly associated with socioeconomic background.

These results indicate a very large influence. While our regressions are the best indicators of the magnitude of effects, simple inspections of the data illustrate some stark discrepancies. For the 10 most northern prefectures, which showed the least detracking, the students attending the two top universities (Universities of Tokyo and Kyoto) from these prefectures rarely come from private schools. Six prefectures have 0 percent of their students at these universities coming from private high schools, and the other four have 5–18 percent. In contrast, for the two most progressive prefectures with the most detracking (which are recognized as best representing the detracking ideal), Kyoto and Kochi prefectures, 85 percent and 97 percent of their students at these top universities come from private high schools. These prefectures have reduced the inequality among their public high schools, but they purchased equality by creating equally low outcomes for all public schools. Very few of their public school graduates now attend the best universities in the nation.

Turning to internal tracking, in the 10 most northern prefectures, nearly all these prefectures have a large number of high schools (40–70 percent) with no internal tracking, while the prefecture that was most committed to detracking for the decades after the war, Kyoto, now has only 2 percent of its public high schools having no internal tracking.
Obviously, causality is always hard to infer. It is possible that some other factor might be creating these results. Thus, after the Japan Private School Foundation Law expanded subsidies to private schools between 1970 and 1974, this change might possibly explain the aggregate changes in national data we observed, and it could explain the changes observed in Tokyo following Tokyo’s reforms of 1968. However, this law was implemented nationwide, but it did not lead to any changes in the early 1970s in the northern prefectures where public school achievement declines did not occur until after 1976, when these prefectures began detracking reforms. Nor could the 1970 subsidy explain the “bright flight” in Kyoto and Kochi that was clearly evident in the 1950s. While we cannot exclude the possibility of other causal forces, we cannot discern any factor other than detracking that seems to account for these outcomes.

In sum, the most progressive prefectures offer public school graduates the least access to the best universities, and they offer the most internal tracking, while the least progressive prefectures offer the reverse. In an effort to reduce social inequality, progressive prefectures have created other forms of inequality, forms that present even clearer obstacles to youth whose families cannot afford private school tuition. Progressive reforms have had some perverse consequences.

Moreover, these consequence are not easily reversed. By 1982, the flight of better students to private high schools in Tokyo was already evident, so the Tokyo school system passed new rules that weakened random assignment and increased the hierarchy among high schools, even allowing students to apply to high schools outside the district. However, these counterreforms had no effect in reversing the tide of good students attending private high schools. Eleven years later, in 1993, the school system went even further; it totally abolished the randomized group selection and created a clear hierarchy among public high schools. Yet this reform has not increased the proportion of Tokyo students who entered the University of Tokyo from public school, which declined slightly between 1994 and 1997 (from 7.2 percent to 7.0 percent). Thus far, this counterreform has had no effect, and the private high schools continue to attract the best students.

Similarly, Kyoto, which was one of the first prefectures to implement detracking reforms, has sought to reverse those reforms in hopes of attracting the top students back into the public high schools. Thus far, these efforts have been unsuccessful.

Likewise, in Hiroshima, where detracking in 1956 led to a precipitous decline in the public school share of top university admissions (from 43.8 percent in 1955 to 28.6 percent in 1959, to 20.0 percent in 1961, and to 4.6 percent in 1965; Iwaki 1977), a counterreform began in 1977
to increase the public school hierarchy. But it was not successful and even in 1997, only 3.2 percent of the students from this prefecture who attend Tokyo and Kyoto Universities come from public high schools.

What is the mechanism by which private schools vastly increased their students' pass rates at top universities? The private schools do not seem to have superior resources; indeed, they have much worse student/teacher ratios. Nor do they use financial incentives to draw better teachers from public schools. Nor do most private schools boast of better instructors, better instructional techniques, or better curricula. Nor do they boast of better curricula—all high schools in the nation have the same curriculum and use similar methods and similarly trained faculty.

Private schools boast that they can create homogeneous classes of students who can proceed more quickly, and these classes accelerate the coverage of the national curriculum, which allows students to learn more over the course of their high school career. In a meritocratic system where academic achievement is the only selection criterion, private schools can promise more coverage of the national curriculum through homogeneous fast-paced classes. Such classes do not necessarily have better instructors, they just need students who can master the curriculum at a faster pace. In contrast, the wide heterogeneity in de-tracked public schools may slow the coverage of curriculum. This slower pace may explain the decision of faster students to leave the public schools, and it may explain the achievement declines in prefectures that had no "bright flight."

It is noteworthy that even when public schools introduce ability grouping, it is targeted to help slower students. Ability grouping is introduced more at middle- or lower-ranked high schools than in top-ranked public schools (Amano et al. 1986). Even when ability grouping is done for faster students, teachers seem embarrassed to admit that they are helping students who are "privileged" with high ability (even if they are often not economically privileged), so teachers do not discuss fast-paced classes publicly, for fear of being criticized (Kariya 1995). We suspect that parents must harbor some doubts about teachers' commitment to fast-paced curricula.

Following the custom in social science, we have stated our hypotheses in the careful language that avoids overstating causal inferences. Like most natural reforms, this reform does not provide the kind of random assignment that is required for causal inference. Nonetheless, it would be a mistake to understate the circumstantial evidence for causality. We have seen that the detracking reforms are statistically associated with private school achievement outcomes over all prefectures, they are associated over time in several case histories, they are associated in the minds of private school administrators who boast about their distinctive advan-
tages over the public schools in terms of their ability-grouped classes, and they are even associated in the minds of public school administrators when they made efforts to reverse the "bright flight" after they eventually noticed it. We have not proven causality, but a causal inference is hard to avoid.9

We conclude that the best-intentioned detracking reforms may not fix tracking problems. Even if high-SES youth are more highly represented in top tracks, detracking may reduce the separation, but perhaps only temporarily. Even if detracking appears to offer all students more equal instruction, this too may be temporary. Detracking alone may not solve the problems associated with tracking, and it may have its own undesirable consequences. If detracking lowers the achievement or engagement of faster students, it may drive them out of the public schools. These departures compound society's problem, since then the separation is in an entirely different sector of schools, which democratic society is reluctant to control, and students' schooling is affected by family income. Japan deals with this problem by declaring a moral victory—expressing pleasure at the "purity" of the de-tracked public sector, while expressing regret that so many parents have chosen to desert it.

In our opinion, such moral victories are really defeats. Real victories require recognition of the specific features of tracking that require change, and reforms of track structure alone may be inadequate or even counterproductive. For instance, tracking reform should not focus on high schools, even though they have the most visible form of tracking. The achievement inequalities in high school are often evident in third grade, when they are smaller and easier to address (Farkas 1996). Moreover, even within a track structure, lower-track classes can provide high-level instruction under the right circumstances (Gamoran 1993). In addition, without lowering the level of instruction in honors courses, some high schools have created upward-mobility programs that provide access to honors courses for students who normally would not qualify, if they agree to attend additional instructional programs (special summer schools, after-school sessions, and study halls) that help them catch up with their classmates. Such programs have increased the number of minorities (and nonminorities) in honors classes, without signs of slowing down the honors classes or creating "bright flight" (J. E. Rosenbaum, unpublished data, 1996).

This study provides a warning that without addressing these complexities, gross structural reforms may backfire and leave us with worse inequalities that are harder to fix. While Japanese private high schools had low reputation and poor desirability 30 years ago, they have attracted the best students, they have acquired a strong desirability, and this reputation has proven hard to reverse. Detracking reforms have succeeded in
creating greater equality among the public high schools, but they have been accompanied by a great increase in inequality between private and public schools, by an increase in internal tracking inside high schools, and even an increase in educational inequality among those from different social origins. We hope American reformers can learn from this experience and avoid these outcomes.

Notes

1. After 1946, about 30 prefectures implemented a one school per district policy, however, this was abandoned by some prefectures starting in the mid-1950s (Sasaki 1976).

2. For example, the private schools, Sugamo, Kaijo, and Johoku high schools, were all formerly mediocre schools that now have many students succeed on exams. It should be noted that as part of its strategy to increase selectivity, and perhaps to increase enrollments, Sugamo and some other private schools also started selective junior high schools to feed into their selective high schools.

3. Usually in schools that had their own junior high schools.

4. While we cannot examine school resources, private high schools do not seem to have greater resources than public schools; they may even have fewer. Private schools had a worse student/teacher ratio than public high schools in 1970 (26.8 vs. 19.1), and, while private schools improved by 1990, so did public schools (to 24.8 and 18.2). Private schools’ improved achievement outcomes are not likely to be a result of superior resources, at least as far as student/teacher ratio is an indicator. Unfortunately, we lack measures of teacher/student ratio by prefecture, so we cannot examine that point directly.

5. Kyoto has been famous for its long history of strict implementation of small district policy under a mayor who was supported by communist and socialist parties. Kochi is famous because the 1960s nationwide “high school education for all” movement was initiated there. For the purpose of the movement, Kochi prefecture did not give entrance examinations to applicants, so all students could attend senior high schools regardless of achievement. This was a radical idea at that time (Awatsu 1960).

6. The three best public high schools in Toyama had 24, 21, and 15 graduates who passed the entrance exams and were accepted to the University of Tokyo in 1980, while the best public high schools in such prefectures next to Toyama as Fukui and Ishikawa had only 10 and 2, respectively.

7. In 1980, the total number of students from public high schools in Nagano who passed the entrance exams for Tokyo University was 60, but it reduced to 33 in 1997.

8. Union membership by prefecture is a crude indicator, since membership can vary by school. We assume that the higher union membership in a prefecture, the higher average antitracking sentiment among teachers, but this is just a crude indicator.

9. Unlike the United States where student flight sometimes has racial overtones, the only racial minority in Japan is too small to prompt such flight (less than 2 percent of the population). Nor is there any reason to think that students are fleeing from others for any other reason. The flight is achievement based,
and that is what the private schools explicitly boast about. Indeed, most private schools with good achievement outcomes require very selective entrance exams, so they are not available to very affluent families if their children have poor achievement.

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