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ABSTRACT

A comparative analysis of enrollment influences in four countries is presented. From the enrollment histories of the 1970's in Belgium, France, Japan, and the United States several generalizations are drawn: (1) while demographic growth in young people produced difficult labor market conditions at all levels of educational preparation, college graduates in particular felt a decline in career prospects, a situation made worse by general economic depression after 1973; (2) total private demand for traditional or long university study ceased growing by mid-decade; (3) ability and socioeconomic factors in educational demand varied in the four countries; (4) educational and career demand from all ability levels has caused increasing meritocratic selection in programs with surest and largest career rewards; (5) for students with neither high ability nor high socioeconomic status educational demand has largely been diverted to shorter programs or non-university programs; (6) where the time and effort necessary for postsecondary study is variable and costs are low (France and the United States) the phenomenon of "discounting" occurs, or a reduction in the investment of student resources commensurate with lower anticipated career rewards; and (7) though a portion of educational demand can be accounted for by technological advancement, much of this is the product of the penalty effect, credential inflation, and the promotion of certain types of education to postsecondary status. These factors put into a different perspective the earlier vision of universal higher education: a significant proportion of young adults have talents best developed outside the classroom. A growing proportion of graduates will cause incentives for graduate careers to regress toward the mean, weakening the principal motivation to seek postsecondary education. In these four nations it is felt that the limits of mass higher education have been reached. (Author/MSE)

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THE LIMITS OF HIGHER EDUCATION: A COMPARATIVE ANALYSIS OF FACTORS AFFECTING ENROLLMENT LEVELS IN BELGIUM, FRANCE, JAPAN AND THE UNITED STATES

by

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THE LIMITS OF MASS HIGHER EDUCATION

1. Beyond Mass Higher Education: the Road Not Taken

In recent years those concerned with the evolution of systems of higher education have been accustomed to discussing this topic in the terms of a paradigm first offered by Martin Trow. According to this schema higher education in most developed countries could be characterized not too long ago as being "elite", not just in patterns of recruitment, but also including dependence upon high academic standards and an explicit association with research or knowledge creation. Within the last two decades most of these countries (the obvious exception being the considerably advanced United States) passed the threshold to "mass higher education". More than 15% of the relevant age cohorts began attending higher education, thereby creating pressures for more diversified curricula to accomodate a greater variety of students and a broader range of social purposes. Beyond this, the model foresaw a dawning age of "universal higher education" as more than 50% of the population availed themselves of advanced instruction. The general acceptance of Trow's paradigm is testimony to his insight into the processes of educational development. It also reveals the desperate need at the time for concepts and language to deal with the macro-educational change then engulfing advanced industrial societies, and, more specifically, the need to relate expansion and structure to the content and performance of higher educational system.

If the Trow paradigm proved to be a valuable tool for analyzing contemporary educational trends, it was somewhat less successful in prophesying the future. In particular, the promised land of universal higher education that once appeared so close at hand no longer seems to be imminent. Indeed, this turnabout has been accurately recorded in Trow's own continuing commentary

on the development of American higher education. Just a decade ago he could write that universal higher education had been all but realized in California, with the rest of the country foreordained to follow:

> in the upper-middle classes and in some states like California the proportion of youngsters going on to some form of post-secondary education is already over 80%. For some youngsters in those places and strata, universal higher education is here: nearly everybody they know goes on to college. And those strata and areas are growing inexorably. (Trow 1970)

Or so it then seemed. Only a few years later that inexorable growth had already been somehow arrested -- but not universal higher education. That ultimate stage now took the form of a "learning society", where the boundaries between formal education and other forms of life experience become blurred, and the higher educational system endeavors "to maximize the adaptability of [the whole] population to a society whose chief characteristic is rapid social and technological change" (Trow 1974). In his most recent pronouncements on this subject (Trow 1979) he concedes that, at least for the nations of Western Europe, the developments of the 1970s have not met his prescriptions for growth. He had assumed that the inertial forces of educational expansion would generate demand for ever more higher education, but instead these processes were interdicted. Consequently, Trow no longer feels that these nations are still on the same developmental track as the United States and Japan -- the countries closest to the universal phase. However, Trow might well have noted that these last two countries have also encountered detours on the road to universal higher education. Participation in American higher education, it will be seen below, has been decreasing since the middle of the decade; and for the time being the extraordinary growth of Japanese higher education has finally been exhausted. Taken together thse developments indicate that advanced industrial nations in general have become mired at a particular stage of mass higher education (cf. Hecquet, Verniers & Cerych, 1976).

Explanations for this phenomenon have been lacking. Public opinion has been keenly aware of the deteriorating job market for graduates in this decade. And, these perceptions have been carefully documented by writers such as Freeman (1976, 1977) in the United States, Ushiogi (1979) for Japan and Herzlich (1978) for France. It is less clear, however, how the declining rate of return to higher education affects enrollments. It has been the demographic misfortune of the 1970s in most of these countries to have too many young people in the labor market at every level of educational qualification. Moreover, those with more education are still better off in terms of earnings and rates of unemployment, even though the differentials may be narrowing.

Another line of explanation holds that it has been the failure to ameliorate the inherent inequalities of the social structure which has limited the growth of higher education. Intractable social barriers have prevented the participation rates of working-class children, in particular, from following the path that middle-class enrollment rates took in the fifties and sixties. Accordingly, both Christopher Jencks (1972) and Raymond Boudon (1974) conclude that the most effective way to redress inequality of educational opportunity would be to reduce social inequality. Their prescription, while no doubt correct, is hardly a practical one. After all, equality of educational opportunity is generally pursued as a means to greater social justice and equality; reversing this relationship makes this comprehensive goal a prerequisite for one of its component elements.

Curiously, most discussions of enrollment fluctuations have little to say about the entire dimension of academic ability -- the capacities to perform and profit from classroom learning. Yet, systems of mass higher education generally tend to be sufficiently meritocratic so that enrollment patterns reflect academic abilities more than any other single factor. Ability

has an important effect upon the economic returns that can be expected from schooling: high ability students who successfully enter selective tracks for preferred occupations have abundant incentives to graduate, while the value of degrees of more average students fron nonselective institutions have become problematic in this decade. Similarly, ability interacts with social position in a variety of ways to determine the likelihood of enrollment in higher education.

All indications would seem to be that no single variable can explain the multitude of individual decision that make up private demand for higher education. Rather, an understanding of the forces behind enrollment fluctuations must come from an appreciation of the interaction of the three factors just mentioned. Accordingly, the next section will discuss the general influence of academic ability, socio-economic status (SES) and cost-benefit considerations upon enrollments under conditions of mass higher education. The following four sections will then evaluate the enrollment experiences of Belgium, France, the United States and Japan in the 1970s. It will be seen that these forces are refracted differently through each national structure of higher education to produce contrasting outcomes within a similar general trend.

2. The Structure of Incentives to Higher Education

As national systems of mass higher education mature concerted efforts are usually made to reduce external impediments to higher education. Institutions are spread widely across the country so as to minimize any possible geographical disadvantages. Some provision is generally made to encourage the enrollment of linguistic or cultural minorities in order to raise their participation rates nearer to the norms. And, various forms of subsidization are usually provided, at least for poorer students, so that cost alone will not be a barrier to higher education. Sex is another factor in attendance

that usually tends toward greater equality over time, but relative sex roles and expectations vary considerably fron one culture to another. Female participation lags well behind that of males in the Flemish half of Belgium, and even more so in Japan; while currently in the United States a higher percentage of women enter higher education than men. Insofar as the persistence of external impediments such as these may prevent major pools of talent from benefiting from higher education it should be an important focus of governemnt policy to attenuate their effects. However, for most advanced nations well into the stage of mass higher education the pools of high-ability talent have been largely mopped up.

The entire question of why young people choose to attend higher education is inextricably linked with the matter of who it is that attends. The latter has been a central concern of sociologists in advanced countries for the last two decades and it not the intent of this paper to summarize the vast literature on this topic. It will nevertheless be useful to introduce some concrete data on this subject to illustrate some of the general issues involved. The best data for these purposes comes from the United States, where two large, representative studies have followed the careers of different classes of secondary school graduates. The inclusion of information on tested academic ability and parental SES has make it possible to break down the college-going population into the cross-tabulations in Tables 2:1 and 2:2.

The first table represents the rates of college attendance by academic ability and SES for a sample of Wisconsin high school seniors in 1957; the second presents the results of the National Longitudinal Study of the High School Class of 1972 conducted under the auspices of the National Center for Educational Statistics. In 1957 approximately 50% of high school graduates continued their education in either two or four year colleges (compared with 38% for the sample of Wisconsin seniors), while by 1972 this proportion had

Table 2:1. Percentages of 1957 High School Seniors Attending College, by SES, Ability (Quartiles) and Sex.

	MALE SES Quartiles					FEMALE SES Quartiles				
Ability Quartiles	Low			High		Ability Quartiles	Low			High
Low	6.3	11.7	18.3	38.8		Low	3.7	6.3	8.9	27.5
	16.5	27.2	34.3	60.8			9.3	20.2	24.1	36.7
	28.0	42.6	51.3	73.2			16.0	25.6	31.0	48.1
High	52.4	58.9	72.0	90.7		High	33.3	44.4	67.0	76.4

SOURCE: Sewell & Shah 1967

Table 2:2. Percentages of 1972 High School Seniors Attending College, by SES, Ability (Quartiles) and Sex.

	MALE SES Quartiles					FEMALE SES Quartiles				
Ability Quartiles	Low			High		Ability Quartiles	Low			High
Low	16	16	20	30		Low	14	13	21	38
	22	31	36	41			22	25	29	51
	36	47	57	69			28	46	50	65
High	53	70	81	85			66	66	75	85

SOURCE: National Longitudinal Study: Bailey & Collins 1977.

Table 2:3. Changes in Participation Rates, U.S.A., 1957-72.

	SES Quartiles		Ability Quartiles	
	Male	Female	Male	Female
Low	11.5	24.5	6	10.5
Low mid.	7	17	-0.5	7.5
High mid.	3.5	13.5	2	12.5
High	-17.5	-4.5	-2	19

SOURCE: see Tables 1 & 2

risen to 58% (44% for the NLS class of 1972). Together, then, they represent the evolution of attendance patterns within a mature system of mass higher education.

It would be quite instructive to compare t'.se patterns with those found in other advanced nations, but unfortunately comparable data does not exist. Nevertheless, Raymond Boudon (1974) has constructed a theoretical model of inequality of educational opportunity in just this form, based upon the fragmentary information that has been accumulated in Western countries. His model duplicates the same monotonic relationship between the combined effects of ability and SES upon pursuing higher education, even though his percentages reflect a lower overal' level of participation. Boudon's purpose was not merely to demonstrate the existence of these patterns of inequality, but to illuminate the chief mechanism that produced them and to examine how they would tend to change over time. Our purposes in introducing Tables 2:1 and 2:2 are essentially the same.

The attendance rates in these Tables are given here in terms of the background characteristics of the students finishing secondary school -- their academic ability and SES. These rates could also be envisioned in a forward-looking sense as reflecting several overlaying dimensions of incentives and disincentives for higher education; factors facilitating or impeding, encouraging or discouraging these students to continue their education. Ability is obviously strongly related to some of these factors: for high ability students in general, higher education is likely to be more intellectually satisfying and more likely to lead to a desirable professional career; but for those with less ability college study will tend to be more arduous, less gratifying and the career benefits far from automatic. These differences show up starkly in the completion rates: 56% of the enrollees from the high-ability quartile graduated from college compared to only 19% of those who attended from the

low-ability quartile (class of 1957: Sewall & Shah 1967). SES also has an important bearing on the structure of incentives, but moreso for entering higher education than for completing. For example, about the same proportion of attenders from the high-SES quartile graduated (57%) as from the high-ability quartile, but nearly twice as many suceeded from the low-SES quartile (36%) as from the low-ability quartile. Controlling for ability, the influence of SES is nevertheless pervasive, although the mechanisms through which it operates are not always obvious. It is not difficult to see that the nominal costs of higher education will be more of a hardship for a poor student than for a wealthy one, yet it is generally the opportunity costs (foregone earnings) that present a more difficult obstacle for the poorer student. In a similar vein Raymond Boudon (1974) has demonstrated that it is the "secondary effects of social stratification" that are chiefly responsible for the disparities in educational participation. The primary effects of stratification produce cultural differences which are manifested in ability measures; however, the secondary effects cause students of equal abilities but different social strata to operate within different decision fields. For a student of high social standing, for example, family and peer pressures all support higher education, while the same path for his low-status conterpart may entail formidable psychological costs. Similarly, for the high-SES student all acceptable status alternatives would require higher education, but a lower-SES student might consider a number of status-enhancing career paths that would not require post-secondary studies. Thus, motivation and aspiration for higher education tend to decrease as one descends the social scale. Moreover, this is an important consideration in probing the limits of mass higher education.

In examining the evolution of attendance patterns from 1957 to 1972 there is no doubt about the persistance of a basic pattern of inequality, but that

should not be allowed to obscure some significant changes. Most obvious is the striking increase in female participation from less than 31% to 43% in those years, as compared with an increase in male participation of just over 1%. This in itself represents an impressive advance toward equality of educational opportunity. But, even beyond this there is a decided shift in the direction of greater meritocracy. It is immediately evident in the participation rates of high-SES males -- the most privileged group -- which shows declines for every level of ability. But, this shift is best isolated by examining the changes in ability and SES quartiles separately (Table 2:3). The high-SES quartile for both men and women shows declining rates of participation: for the men it is remarkably large, and for the women it runs counter to strongly rising rates everywhere else. In addition, the greatest increases for women occur in the high-ability quartile and in the two lower-SES quartiles. The original analysis of the 1957 data found that ability was more important than SES in determining male college attendance, but that this relationship was reversed for women (Sewell & Shah 1967). Clearly by 1972 the relative role of ability had increased considerably for both sexes; SES, while still more important for women than for men, would now seem to be eclipsed by ability as the predominant factor in female college attendance.

There is little doubt, then, that inequality of education opportunity declined in the United States over the decade and a half between these two studies. But, does this represent the general direction of evolution for systems of mass higher education, or is it merely a unique occurance? Raymond Boudon has shown in his model that inequality of educational opportunity should decrease over time as enrollment rates grow, but this phenomenon is no more than an arithmetic consequence of relatively deprived groups catching-up with more priveleged ones. Something else occurred in the United States, however, which cannot be found in the Boudon model: the most privileged groups actually

lost ground to the groups below them. This reversal of the accustomed direction of educational change has not been to date directly confronted and investigated. Yet, it would seem to be one of the principal reasons why American higher education did not enter the promised land of universal higher education. The case of the United States will be dealt with explicitly in a later section. Here, this example serves to introduce the more general question of how a mature system of mass higher education might -- should they deem it desirable -- increase enrollment rates further.

The variables affecting college attendance can, at least for theoretical purposes, be separated into background characteristics on one side, and present or future cost-benefit incentives on the other. For background characteristics there is no reason to consider either ability or SES in relative terms (as they were presented, by quartile, in Tables 2:1 and 2:2). Academic abilities and the most significant cultural attributes of SES can increase (or decrease) in absolute terms, with corresponding impacts on enrollment rates. The extraordinary expansion of Japanese higher education, for example, seems to have corresponded with a decided improvement of achievement in lower schools (Cummings 1978). In the United States, on the other hand, declining test scores for high school seniors in this decade have coincided with declining participation of males (Geiger 1978/79). A sophisticated analysis of higher educational demand based upon U.S. data has shown that increased ability would have a much greater impact upon enrollment rates than increases in SES (Radner & Miller 1975). Whether this would be true for other countries would depend upon the specific contours of their demand functions for higher education. Nevertheless, raising ability levels would seem to be a highly desirable method of stimulating demand for higher education. Unfortunately, the academic abilities of students depend upon a complex interaction of variables that are barely understood, much less controlled.

Although social status is by definition a relative thing, those aspects of social inequality that bear on participation in higher education are subject to amelioration in an absolute sense. Cultural differences resulting from the primary effects of stratification show up as differences in ability, and hence are covered under what has just been said. Except for this difference: insofar as ability deficiencies are localized in a specific population there would at least be the possibility of targeting corrective action (e.g. the U.S. Head-Start Program). However, it is likely to prove more feasible to attack the secondary effects of stratification because they depend in part upon the structure of schooling. The nations of Western Europe in general have attempted, and are still endeavoring, to reduce inequality by reducing the number and the finality of the decision points in secondary education. Specifically, common curricula have been extended so that the first significant branching point does not occur until the middle of secondary schooling; and entrance requirements for higher education have been broadened to include all secondary-school graduates. On the other hand, efforts to achieve greater social equality that do not touch the wellspring of educational inequalities (e.g. punative taxation) would not seem likely to stimulate enrollments in higher education.

An entirely different set of considerations governs the incentives which cause students to pursue higher education. These would include both incentives and disincentives operating over the short and the long term. In the short run the governments considered here have made college attendance attractive by deliberately underpricing it. An additional subsidization is usually available for poorer students to cover nominal costs, and on occasion part of the opportunity costs of their studies. The impact of subsidization would naturally vary with different national traditions, but student subsidies nevertheless represent a direct and obvious means of raising higher educational enrollments (cf. Doermann 1978, Radner & Miller 1975). Yet, there is good

reason why states have been wary of going too far in this direction. Making higher education too attractive as an immediate alternative essentially induces students to attend for the wrong reasons. Not only is this wasteful of resources, but it will ultimately lead to credential inflation and widespread discontent with graduate job prospects. Optimally, the demand for higher education should be determined by long-range considerations of enhanced earnings for the individual and enhaced productivity for the economy. The post-war growth in higher education has been supported by an ideology based upon such expectations (Geiger 1979). Simply put, the argument runs that technological advance will require an ever greater proportion of highly trained personnel in the workforce. A more recent variant of this theme asserts that the rapid rate of technological change will produce a "learning society" featuring periodic retraining of highly educated workers. While there are undeniable trends in these directions, these expectations seem to considerably overestimate both the technical component of mass higher education and the role of traditional higher education in accommodating technological change in the workplace. It is probably more valid to argue that the continued relative expansion of the service sector of the economy should enlarge the need for graduate labor (Trow 1979). From the standpoint of the labor structure it is difficult to see how any government could deliberately enhance the long-range incentives to higher education outside of the normal processes of economic growth. There nevertheless is the possibility of affecting these incentives within the structure of higher education by diversifying the curriculum to articulate it more fully with opportunites in the economy.

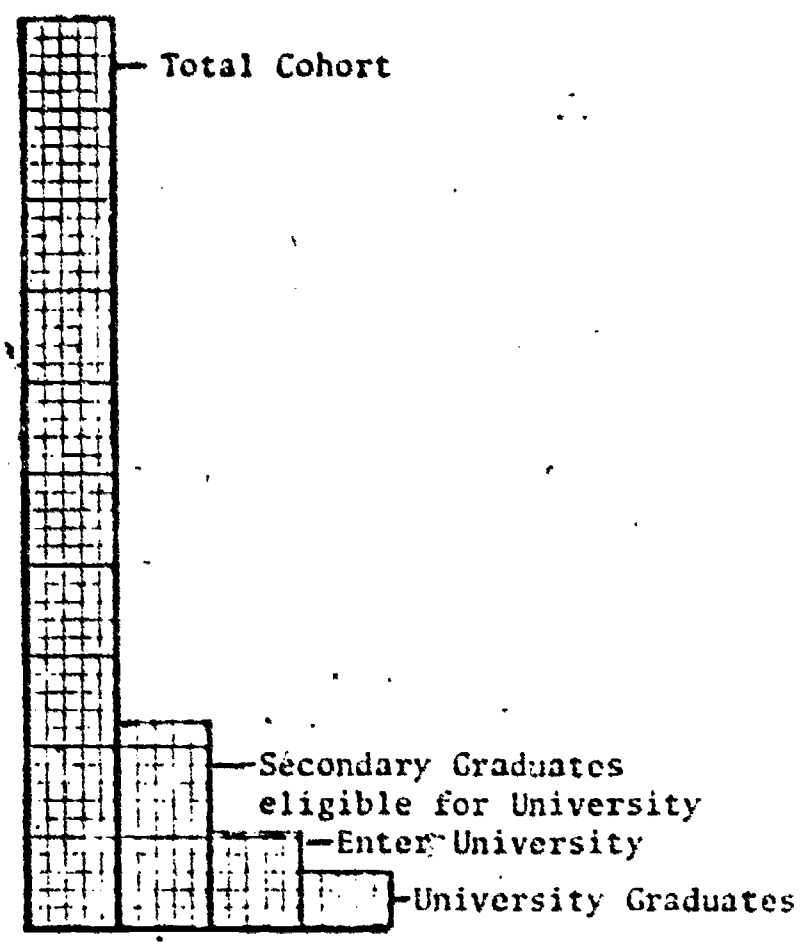
Each of the policies just mentioned have been implemented in this decade to some extent in at least one of the four countries under consideration, but of course nowhere has a specific commitment been made to achieving universal higher education. Instead, these systems tended toward an equilibrium situation,

with the factors promoting growth becoming more or less offset by various limitations. In the next four sections these four systems will be examined in detail in an attempt to establish the balance of forces that have determined enrollments in this decade. This effort may or may not establish some signposts for the future; the purpose is primarily to comprehend the dynamics of enrollments within mass higher education by discovering where we are and where we have just been.

3. Belgium: Maintaining Academic Hurdles

Belgian higher education possesses a binary structure, with six universities and 11 partial university institutions on one plane and non-university institutions occupying a distinctly subordinate status. More than half of the university sector is privately controlled, but all these institutions are fully funded and closely regulated by the government; they all also grant equivalent national degrees. (Geiger 1978). Compared with other European systems Belgian universities have retained many of the features of "elite" higher education. Admission is open to all secondary school graduates who pass an almost perfunctory qualifying exam, except for the faculties of applied science, which operate much like French grandes écoles. Nevertheless, only 11% of an age cohort enter the university sector, and the rigorous academic programs prevent almost half of them from graduating. Mass higher education has consequently been accommodated in the non-university sector, particularly in the short and long-cycle technical schools. The two-year programs offer a wide variety of specific vocational courses, often closely linked with local industries. The long-cycle programs are in the process of being standardized and lengthened from three to four years in order to make Belgian degrees comparable with those of other European Economic Community members. Although there are more total enrollments in the university sector because of the greater length of the programs, a larger number of students

BELGIUM



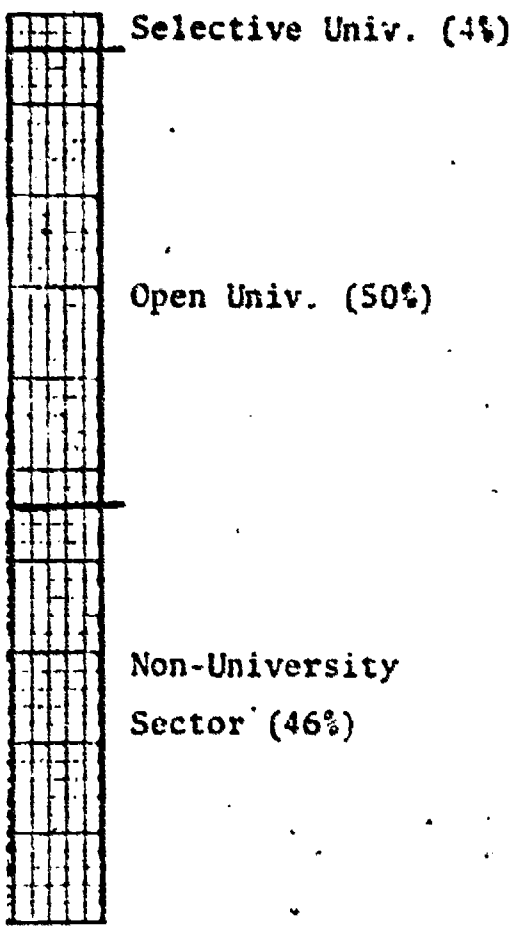


FIGURE 3:1. Graduates Eligible for University and New University Enrollments.

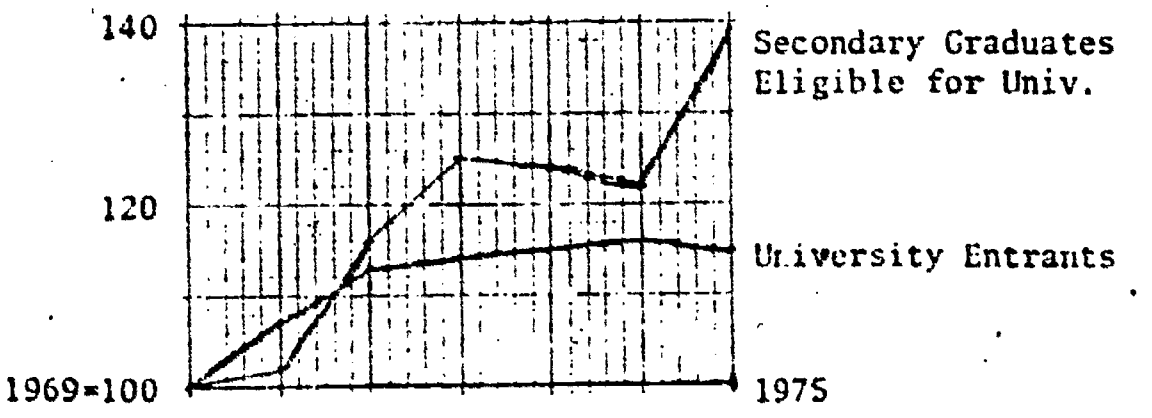
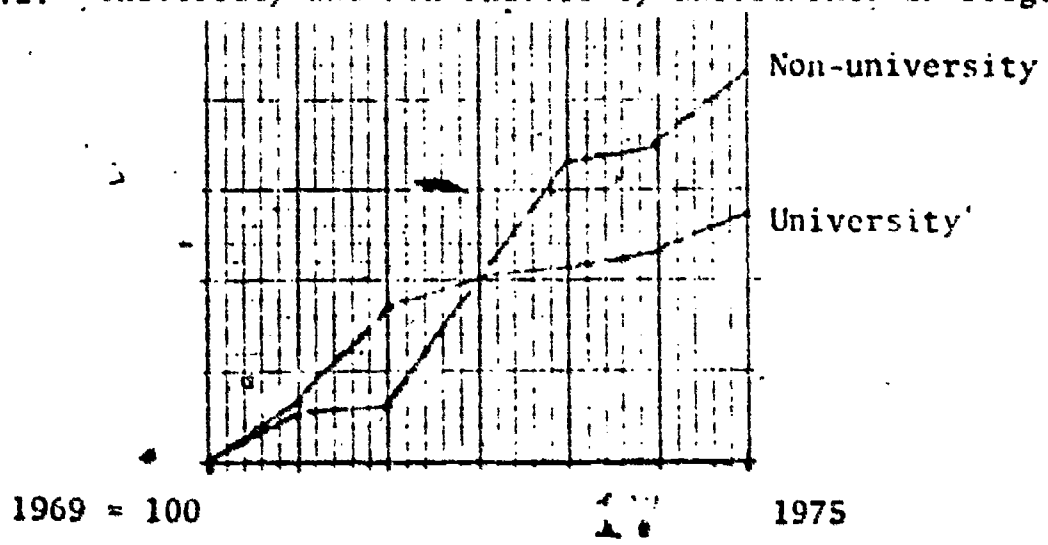


FIGURE 3:2. University and Non-university Enrollments in Belgium



pass through non-university higher education. Indeed, trends in the 1970s have accentuated this situation.

As late as 1971 all indications pointed to substantial continued enrollment growth for Belgian universities. Enrollments had been rising at a 9% annual rate, the size of 18 year-old cohorts could be counted on to increase until 1983, and the number qualifying for university study would be growing by some 4% per year. An overall university growth rate of at least 5% seemed assured, but the reality of the seventies unfolded quite differently. The number of new students enrolled in 1975 was only 18,538 --- exactly equal to the previous year and slightly below that of 1971. Consequently, total university enrollments grew by a scant 2% per year, while enrollments in non-university technical schools were expanding at a 7% annual rate. It should be apparent from Figure 3:1 that the stagnation in university enrollments represented a decline in the transfer rate of secondary school graduates. Clearly more students than ever were reaching the threshold of the university: why were they declining to enter?

It has been common in Belgium to associate the halt in university growth with the economic stagnation of the seventies which has afflicted that nation with exceptional severity. Given hard times, so the reasoning goes, students naturally seek security in practical and marketable studies (Janne 1979). While there is undoubtedly some truth to this, there is also good reason not to accept this as the principal explanation. For one thing, university enrollments leveled off before economic difficulties were felt; for another, economic downturns generally stimulate demand for higher education as an alternative to unemployment. While there has been a perceptible shift toward vocational subjects within the universities (Janne 1979), evidence is lacking that students are substituting non-university for university study. In fact, the 7% growth rate for technical schools in the 1970s is somewhat less than that of the

preceding period. In the final analysis a university degree constitutes a substantially greater level of achievement than a non-university diploma, and should amply justify the effort in the long run.

The principal retraint upon private demand for university education, however, seems to be precisely that high level of achievement which the universities require. The hard reality of university life in Belgium is that only about half of the entering students are able to successfully complete the first year of work (first candidature). This is largely due to a heavy academic load averaging a dozen courses, comprehensive oral examinations which determine success or failure for the entire year's work as a unit, and the maintenance of rigorous standards typical of traditional European universities. Students can, and often do, repeat their first candidature, but attrition is nevertheless severe. Probably not many more than half of an entering class eventually manage to graduate (Geiger 1978).

Potential students are well aware of the perils of the first candidature, and ought to have a fairly good estimate of their own chances of survival. Success on the first candidature, not surprisingly, correlates with achievement in secondary school, and it also varies according to the secondary program followed. The requisite academic skills are most readily acquired in the most difficult and competitive programs. Students following one of the Latin options stand a better than average chance of succeeding in the university; those studying "Math-Modern Languages" have about average chances; but students electing the modern tracks are decidedly less likely to survive in the university should they choose to attend (Bonte 1976). Thus, stiff academic competition produces self-selection well before the threshold of the university. And here, the limitation on the number of qualified students is evident. From 1969 to 1975 the number of students graduating from the Latin or Math-Modern Languages curricula remained constant, while the number of graduates in the other general

programs increased by 50%.

It should be clear, then, why the growth in secondary school graduates during this period did not translate into university growth. Most of the additional graduates understandably chose not to gamble a year's work at poor odds on the first candidature. Their demand for additional education was consequently met by the non-university sector. Belgian universities have in essence changed little in the transition from elite to mass higher education. In fact, georgraphical expansion combined with enrollment stagnation have left them underutilized for the present. Belgium has only achieved mass higher education through the uncoordinated proliferation of the non-university sector. This has produced a system of considerable diversity and a high degree of vocational specificity, but under existing conditions it would seem to have little potential for future growth.

As long as the number of secondary school graduates continues to increase, there will probably be some corresponding expansion of the non-university sector. An improved economic climate might also stimulate demand in vocational programs (although not necessarily in the short-run). But, given the existing educational structure, factors relating to ability would seem to be the chief limitation on the rate of university attendance. By the same token, there are a number of structural changes which, if made, could dislodge the current balance. Efforts are already underway to decrease the extent of tracking in secondary schools by substituting a more integrated general curriculum. But, the majority of schools have not yet chosen to implement such changes (Janne 1979). Attrition in the universities might become less severe if courses were offered individually on a credit basis instead of in annual units. The possibility also exists of upgrading some non-university programs to university-level status.

Given the traditional educational structure of Belgium and the important role of the Latin curriculum, one might expect a high degree of social inequality.

Yet, data for the 1960s show only the U.S. and Norway among OECD countries having less inequality of educational opportunity (OECD 1970). This is apparently due to the strongly meritocratic basis for university study. This would mean that any concerted effort to expand university participation by easing the academic rigor of current programs would be likely to have a socially regressive effect. It would probably turn out that the largest number of potential students would come from relatively privileged social groups -- from among those who for social reasons strongly desired a university education, but who for academic reasons were presently being excluded (Geiger 1979).

Currently there is little sentiment in favor of expanding the number of university students beyond existing levels. There is widespread concern for the public expense of higher education, and government support for the universities is narrowly indexed to enrollments. The current equilibrium, then, seems likely to persist into the early 1980s when declining cohorts of 18 year-olds, among other things, will undoubtedly change the constellation of forces in Belgian higher education.

4. France: The Predicament of the University

The structure of French higher education is considerably more complex than that of Belgium. For analytical purposes it would be convenient to distinguish between grandes écoles, admitting students on a selective basis, universities open to all holders of the baccalauréat, and short-cycle technical education (Sections de technicien supérieur and Instituts universitaire de technologie [IUTs]). However, the grandes écoles are actually a heterogeneous group, and the universities have changed markedly since 1968. They now contain a selective sector (medicine, dentistry), some engineering schools similar to grandes écoles, a broad variety of specialized programs, as well as short-cycle education in the IUTs. One result is that enrollment statistics given in

FRANCE

FIGURE 4:1 Enrollments in Universities, Short-cycle & Preparatory Classes

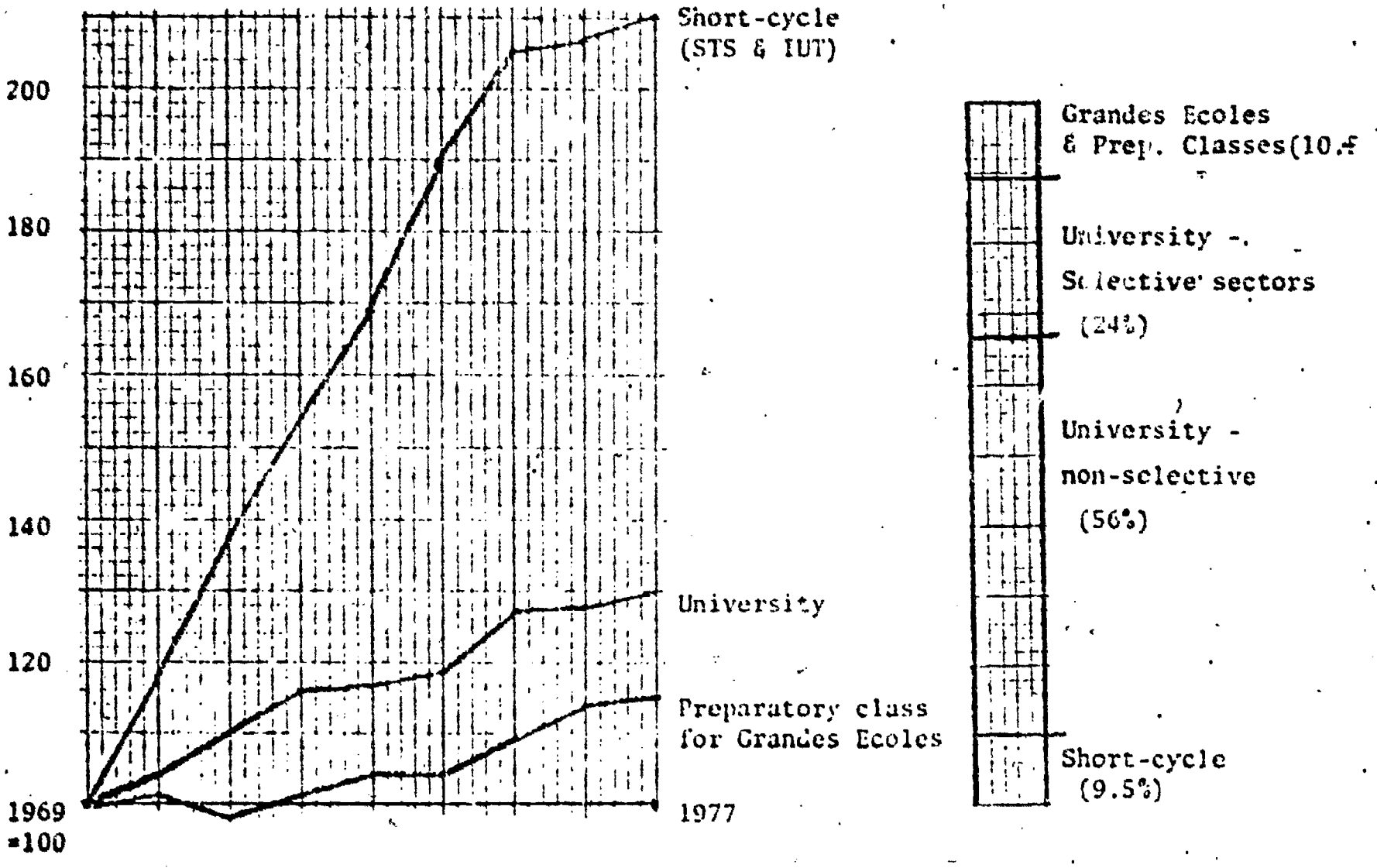


FIGURE 4:2 Rates for Baccalauréats, University Entrants & Total Higher Education

conventional government categories are somewhat difficult to interpret. Even if they are taken as approximations, though, some superficial trends are evident.

First, it should be noted that the number of general baccalauréats awarded has levelled off since the middle seventies. The number of technical baccalauréats, on the other hand, has continued to grow, and now comprises more than a quarter of all secondary-school graduates (vs. about 12% in 1970). The growth in technical baccalauréats may have fueled the increase in short-cycle education during the 1970s, but in the last few years their rate of growth has slowed considerably. Perhaps more salient has been the increasing demand for places within the selective tracks of French higher education. This demand is not revealed in statistics, however, because of the fixed number of admissions. The gradually rising enrollment in the preparatory classes for the grandes écoles (Figure 4:1) only represents a part of that demand, since they are themselves selective. Another significant portion exists in the universities where 4 or 5 students compete for each opportunity to study medicine. Finally, for the universities as a whole there has been a virtual cessation of growth since the middle of the decade. From 1972 to 1977 French universities (without IUTs) grew by some 84,000 students, or about 12%. However, almost half of the additional students were foreigners; the number of French students, then, grew by just over 1% per year over this period. Even this small change needs to be interpreted in the light of the general "student condition" in French universities.

The rapid enrollment growth of French universities in the 1960s touched off a crisis that has yet to be resolved. Since the late sixties there has been a decided deterioration in the occupational prospects for the majority of students graduating in letters, sciences, social sciences and law. Indeed, this was already an important factor in the student rebellion of 1968, and since then conditions have continued to worsen. Why, then, did students continue to enroll in the universities in ever increasing numbers during this period? There would

seem to be two principal reasons: one concerns adaptations that students have made within the university, and the other is a result of the social basis of university recruitment.

The nominal costs of being a university student in France are quite low. Fees are minimal, a non-too-generous stipend is available to poorer students, and student-status includes a variety of benefits like cheap meals, discounts and health care. Much the same could be said for Belgian students too, except for this important difference: whereas university study in Belgium demands a full commitment of a student's time, in France it does not. French students follow fewer courses, have less incentive to attend them and have little assigned work to do on their own. Consequently, the amount of time they decide to alot to their studies is highly variable, and will depend greatly upon the motivation of each individual. An analysis of this phenomenon by a French economist, Lévy-Garboua (1976), has established a general correlation between the economic rewards for university study and the time and effort students are willing to commit to it. As graduate labor markets have continued to weaken French students have devoted larger proportions of their time to part-time jobs or leisure activities. A more recent survey indicated that 35% of university students took some employment during the school year. (L'Etudiant 1977). In this manner the devaluation of university study is effectively "discounted" by reducing the cost and effort expended. "To spend as little time as possible at the university, while still giving oneself a chance to obtain a diploma," was one student's instinctive strategy (Boggio 1978). Unfortunately, this strategy cannot help but reduce the chances of attaining a diploma. This development has been accompanied by an increased failure rate and a decreasing rate of graduation (Lévy-Garboua 1976; Geiger 1980a). Many "students" apparently make no effort at all: the proportion of first year students that did not even present themselves for their exams was 41% in letters, 43% in economics and 32% in law

(Lévy-Garboua 1979). Thus a considerable part of the student population represents a "soft" constituency, suspended between the university and the workplace with uncertain motivation and vague aspirations. However, their predicament to a large extent arises from their social background.

Recruitment to French universities has always been marked by a high degree of social inequality, and the great expansion of the last two decades has done nothing to alleviate this (Geiger 1977a; 1979a). In 1976 37% of recorded university students indicated a family background of "professions libérales" or "cadres supérieurs"; another [illegible] listed "cadres moyens." For the first two categories, in particular, participation in higher education has reached the saturation point. More than 50% of their children attain their baccalauréats, and virtually all of them continue on to higher education (Girard & Bastide 1973). Yet, those who do not find a niche in one of the elite tracks of French higher education, and find themselves without clear goals and strong motivation in the university, are likely to face a dilemma of sorts. University credentials are increasingly less capable of securing employment of the status they seek; but on the other hand, the only route to that status is through a university degree. Thus, even though they may be disillusioned with their studies and propsects, they are forced to persist because the penalty for non-graduation is to be permanently foreclosed from high-status positions. This "penalty effect" will be discussed further in connection with the United States. Here it is sufficient to note that this phenomenon produces a socially differential relationship to higher education. For high SES students none of the more vocational educational alternatives are capable of diverting the demand for higher education because they inherently imply lower status attainment (cf. Boudon, Cibois & Lagneau 1975). But, for lower SES students the university holds little attraction because of the uncertainty of its occupational outlets. Moreover, those uncertainties are considerably compounded for those with cultural disadvantages as well.

From this perspective it seems quite understandable that French university enrollments have largely leveled off in recent years: the maximal demand of its principal clientele has been fully absorbed, and the universities offer little that could attract a wider constituency. It would be a mistake to assume that French universities, like those in Belgium, have for the moment reached a rough equilibrium. The forces of change that have agitated French universities since the late 1960s have by no means been quieted (cf. Geiger 1980a; Lévy Garboua 1979).

In 1976 some of this turmoil abruptly surfaced in the largest student demonstrations since 1968. The object of their protest was for most observers difficult to discern: they seemed to be protesting government efforts to make university graduates more employable (Geiger 1977a; 1977b). It should be clear from the preceding analysis why the proposed reform of the second-cycle (third and fourth years of university study) profoundly threatened the type of student adaptation just described. First, the government intended to limit the time students could take to attain their degrees and also to place a selective barrier to advanced programs. This would have forced the "soft constitutency" out of the university, with or without Secondly, by imposing a vocational emphasis on many university programs the reforms would have accomplished the status demotion that the students were explicitly resisting.

The exertions of the students ultimately prevented the implementation of the most significant aspects of the reform. Yet, their quixotic defense of existing practices merely postponed the inevitable. By blocking a direct administrative solution to the predicament of the university they have left the way open for evolutionary readjustments in curriculum, the organization of studies and student preferences. Selection, for example, which seemed to have been explicitly rejected in 1976, now appears to be rapidly seeping into the university at a number of points (Geiger 1979a; Lévy-Garboua 1979). Universities, for their part, have been working toward greater articulation with the labor market as a

necessary means of preserving enrollments, almost in spite of the fact that this is what the Ministry wants them to do. And, there is a certain hope within the system that market reactions among students will tend to strengthen the prestige and the marketability of some programs. However, given the entrenched interests of powerful corporate groups and the heavy hand of a centralized administration, market forces will likely play a circumscribed role in the evolution of French universfties. Furthermore, in the immediate future the system will be encumbered by the continued predominance of social selection to the university, which tends to constrain the range of curricular choice, and the persistance of weak markets for university graduates, which will make it difficult for new programs to prove their worth. So, France faces a near-term future of continued instability as these conflicting forces gradually work themselves out. But, it is probably only through this kind of process that a foundation can be created for a more equitable and efficient system in higher education.

5. The United States: More Students and Less Education

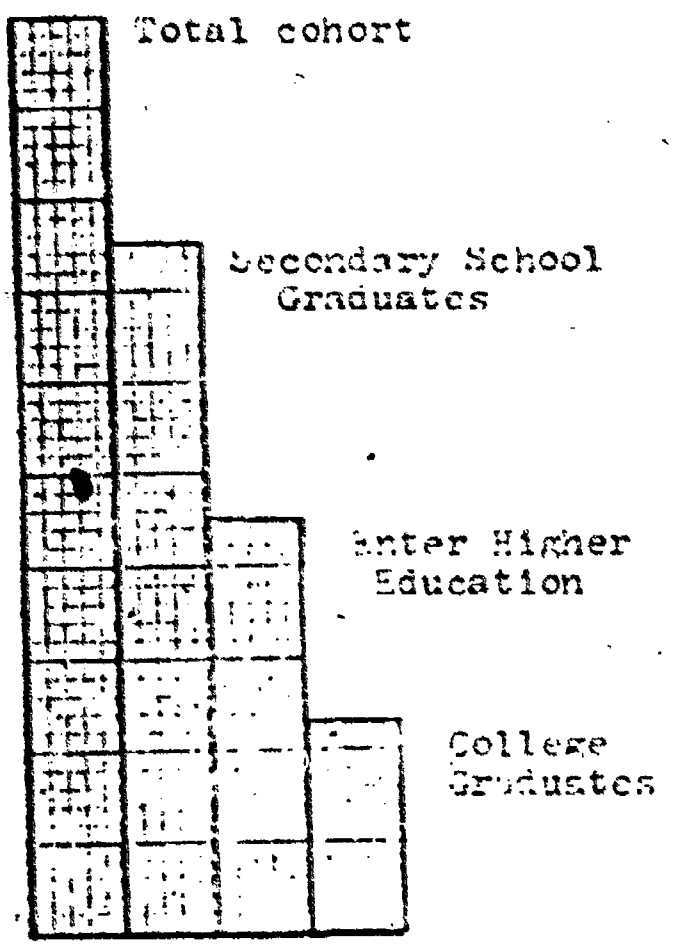
For U.S. higher education the decade of the seventies has been one of moderate growth but considerable change in the composition of the college-going population. To put this change in starkest terms, the average student entering higher education in 1969 was a male attending a four-year college or university; in 1978 the majority of entering students were female, more of these women entered two-year than four-year colleges, and more than half of these community college students studies less than full time. Another significant difference might be noted: The average freshman of 1969 stood a better than even chance of eventually becoming a college graduate, whereas the typical 1978 freshwoman just described has a rather poor chance -- probably less than 15* -- of earning a bachelor's degree. If this comparison exaggerates the extent of change in U.S. higher

education, it nevertheless identifies several of the most significant directions of change during the seventies. Moreover, in the enormous literature on U.S. higher education there has been little acknowledgement of these developments, much less of their causes and consequences. The consequence most germane in this context no doubt is that under current conditions U.S. higher education would seem to have completely exhausted its capacity for potential growth.

The pattern of total enrollments for the 1970s divides into two distinct trends. Through 1975 enrollments rose from around 8 million to over 11 million, but since then they have wavered inconclusively around that level (Figure 5:1). A look at the other line in Figure 5:1 reveals that much of that growth was demographic in nature, and that enrollment rates have actually declined since 1975. Indeed, for 1978 the proportion of the 18-24 year olds in higher education was only slightly above that of 1969. When these participation rates are broken down by sex a different picture emerges. From 1969 to 1974 the participation rate of male 18-19 year-olds fell from 44% to 33% -- a loss of one of every four male students from these cohorts. With the enrollment surge of 1975 this rate improved slightly, but still stands around 35%. The corresponding female rate has risen steadily, and now seems to have leveled off at 36-37%. Thus, for the past several years more women than men have been entering U.S. colleges; and now, according to preliminary figures from the National Center for Educational Statistics, they comprise the majority of students for the first time ever.

It is not too difficult to account, at least in general terms, for the remarkable progress of U.S. women. The past decade has experienced a profound cultural transformation regarding the role of women in all aspects of social life. In economic terms this has meant that the long-range incentives to higher education have increased as women have gained access to formerly male-dominated fields. Short-term incentives may have been increased as well with the introduction of Basic Educational Opportunity Grants providing direct Federal support for needy students.

THE UNITED STATES



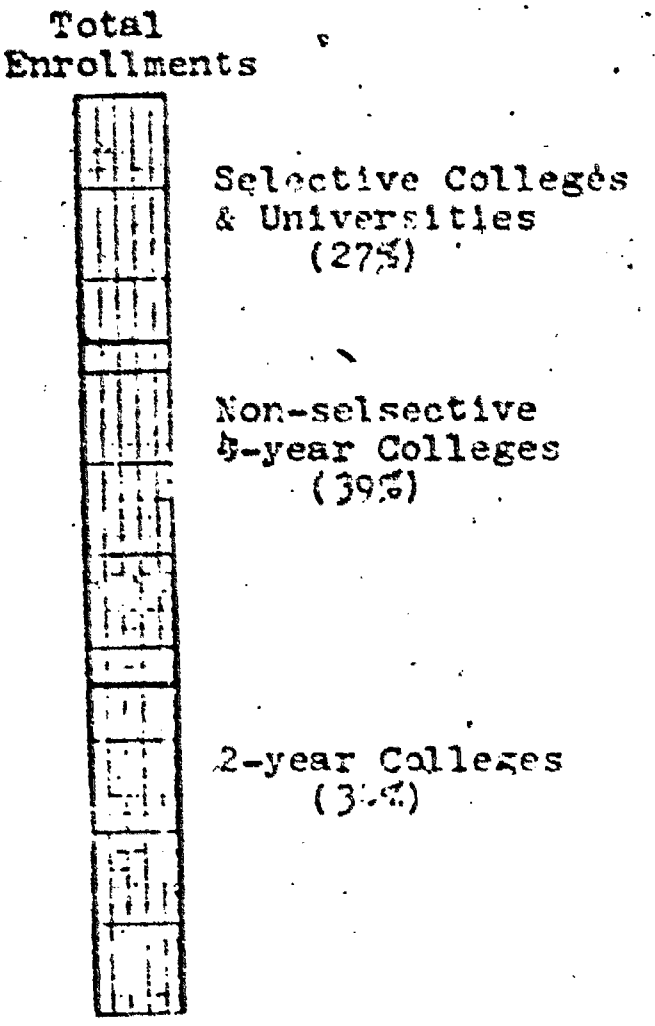


FIGURE 5.1 Total Enrollments in Higher Education:

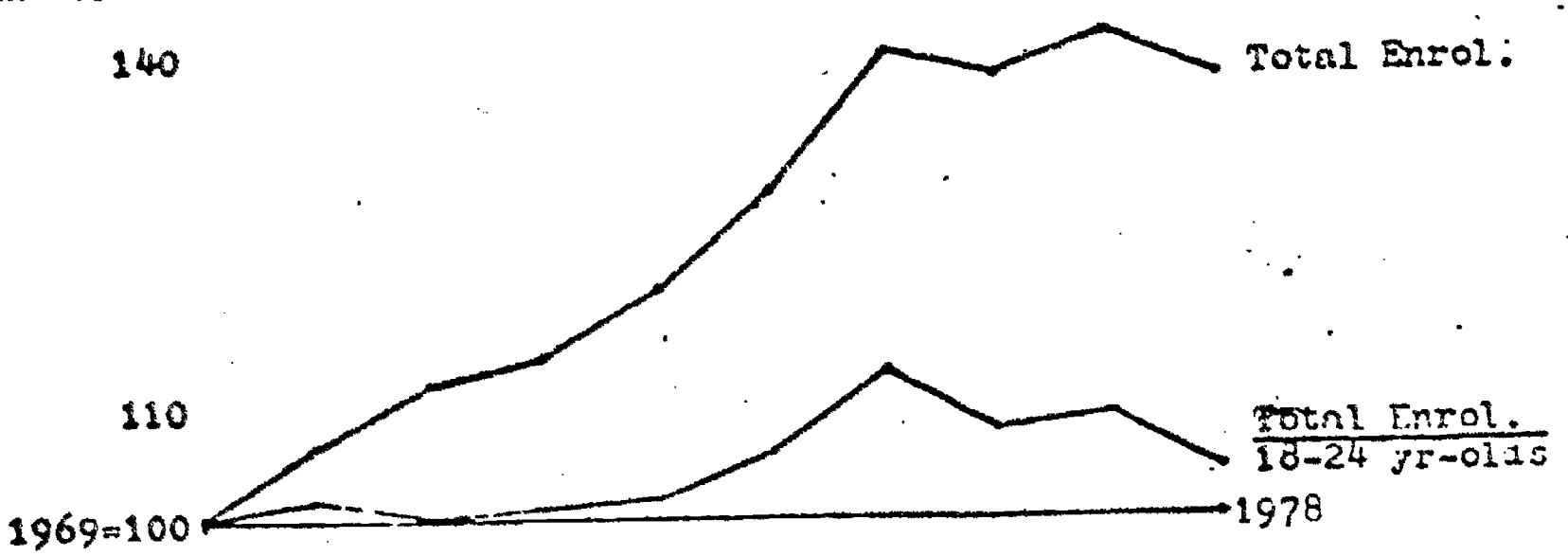


FIGURE 5:2 Enrollments in Higher Education by Type

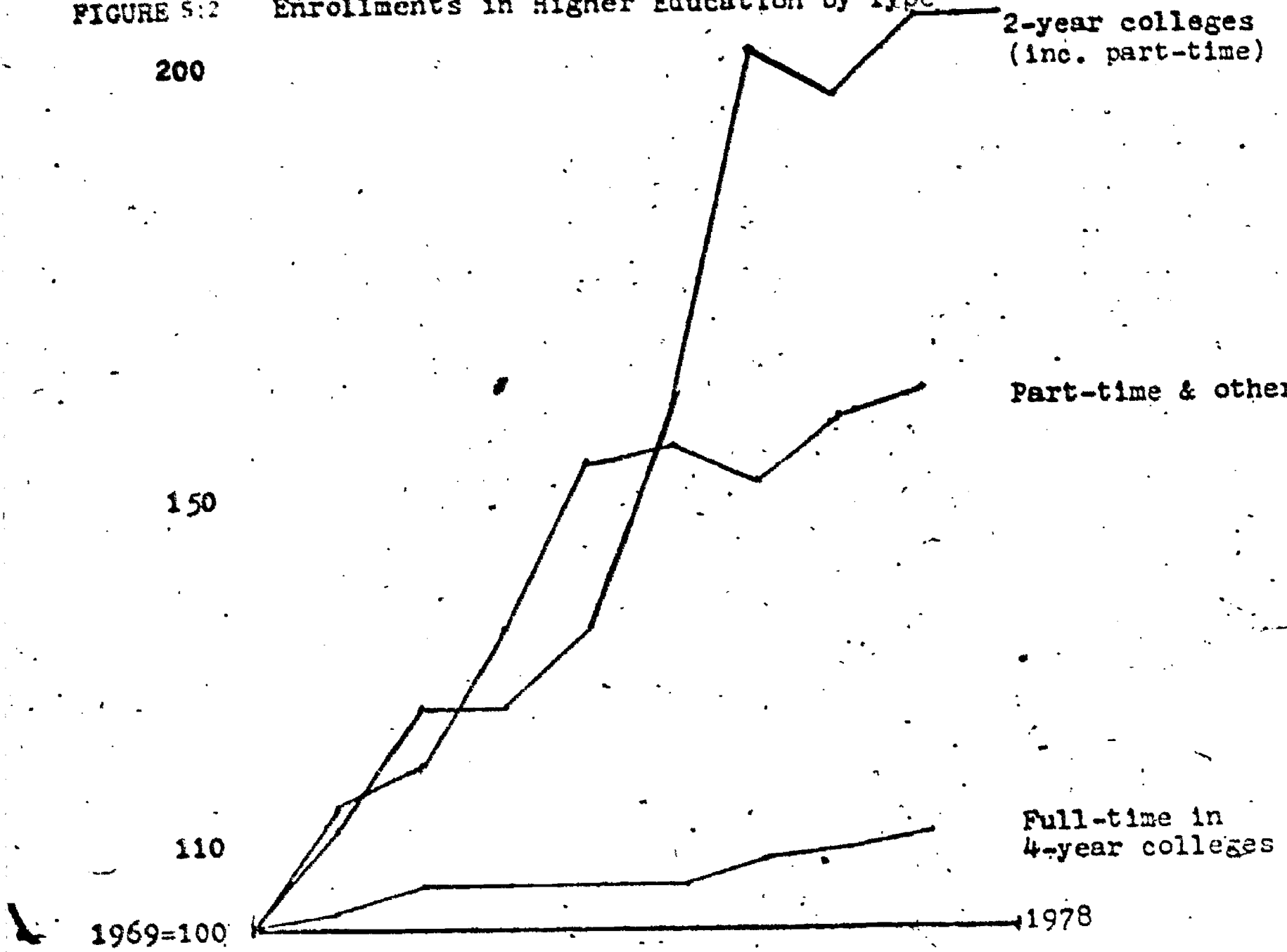
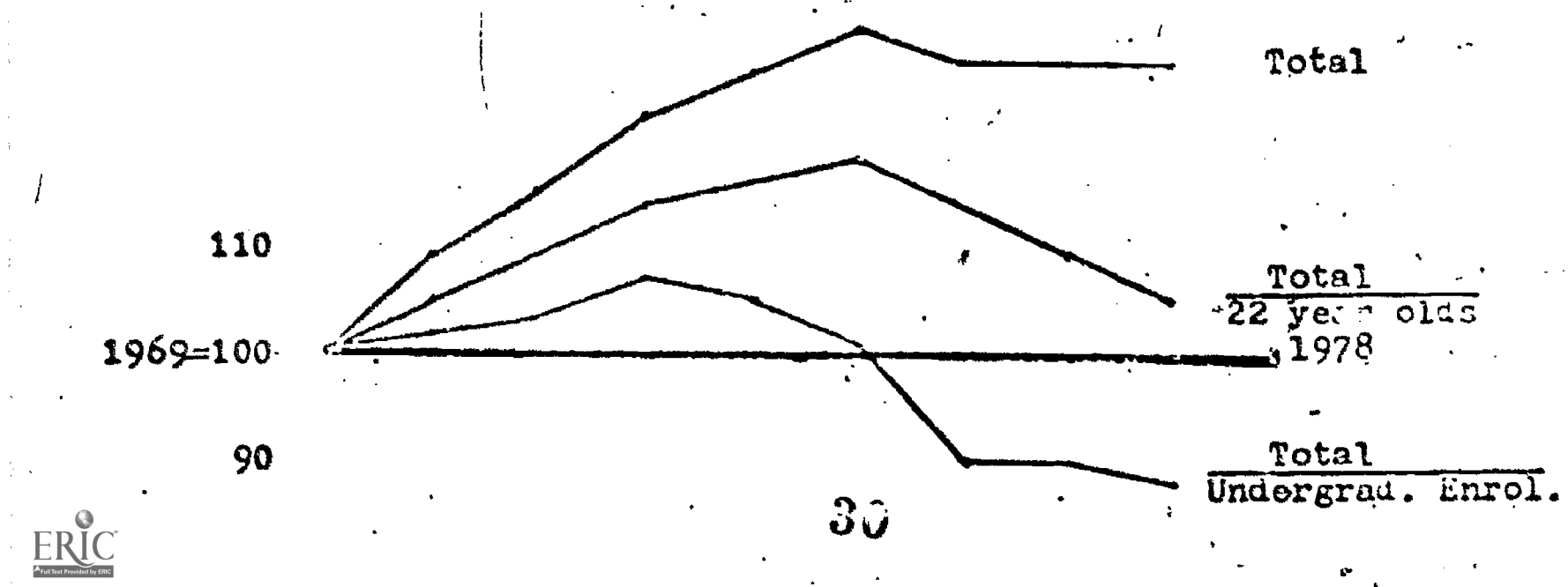


FIGURE 5:3 Bachelor's Degrees Awarded



The precise impact of this program has yet to be analyzed, but traditionally lower SES families have been more reluctant to invest in education for their daughters than for their sons. BEOGs could very easily have changed the calculus of college-going for a significant number of American women.

The decline in participation by U.S. males is considerably more puzzling, and may be due to a combination of factors. The termination of draft deferments for young men in college (followed by the abolition of the draft) is often singled out as the chief cause of this decline. My own estimation has been that lifting the threat of the draft was responsible for less than half of the drop immediately after 1971. The weakening job market for graduates and the declining returns to a college education have naturally also been cited (Freeman 1976). However, analysis of this decline broken down by family income percentile reveals a curious pattern that is not wholly consistent with an economic explanation (Geiger 1978/79). The largest declines in the income spectrum occurred at both modest income levels -- where one would find a high proportion blue-collar or hourly wage earners -- and at the highest income levels -- what would definitely be upper-middle class. The decline was approximately eleven of every hundred students at both levels: in the $10-15,000 income range where male enrollments were just below 25%, and in the $25,000 range where they were almost 50%. It is doubtful if working-class and affluent young men would have the same reaction to the falling value of college credentials. In fact, it would seem that lower-middle class students would be most sensitive to the relative earning power of alternative occupations. High-SES males, on the other hand, would be under strong social pressures to attend higher education or else face almost certain social demotion. Why, then, have so many of them decided against going to college?

It seems quite probable that this phenomenon is related to the general trend of declining achievement in U.S. secondary schools (Geiger 1978/79). The most notable manifestation of this trend has been falling scores of the Scholastic

Aptitude Tests taken by most college-bound high school seniors, As general levels of achievement fall clearly fewer students will be capable of college-level work. It is not that these students are unable to be admitted; rather, it is that for students with inadequate literate or numerate skills further schooling, unless undertaken with quite high motivation, will merely perpetuate a condition of frustration and failure. Women, although they score lower on standardized tests, average higher levels of academic attainment than males in secondary school. They consequently seem more capable of sustaining the effort necessary to succeed in their education. It seems most likely, then, that the poor market for college graduates has been primarily responsible for declining male enrollments from the lower half of the income spectrum where non-graduate occupations may constitute desirable alternatives, while falling academic achievement has been discouraging students from upper-income groups where attendance rates may be higher than ability levels alone would warrant.

The second major trend of the 1970s in U.S. higher education involves the institutional distribution of students. In the eight years from 1969 to 1977 full and part-time enrollments in two-year college increased by 106%; the number of part-time and unclassified students in four-year institutions grew by 62%; but the number of full-time undergraduates in four-year colleges and universities increased by a scant 11% (Figure 5:2). The percentage of undergraduates in this category declined from 57% of the total in 1969 to only 44% in 1977. In relation to the population of 18-21 year-olds the proportion of full-time college undergraduates declined some 6%. Clearly, for traditional higher education in the United States the decade of the 1970s has brought virtual stagnation in an absolute sense and decline relative to the rest of the system. Also, there is unequivocal evidence that the shifting enrollment mix has been accompanied by a decline in the productivity of the higher educational system as a whole. That is, more undergraduate enrollments have not produced more college

graduates; in fact, the output is presently at about the same level as 1973 (Figure 5:3). Nor would this be unexpected: there are some obvious and substantial differences on the average between full-time, full-college students and those categories which have provided the enrollment growth of the seventies.

According to a national annual survey of entering freshman 3/4 of the students entering two-year colleges have aspirations for a bachelor's degree. Nowhere near this percentage, however, will actually attain this goal. Various estimates place the proportion of college graduates at from 10 to 15% of those who begin their higher education in a two-year institution. Actual enrollment totals convey the even more discouraging fact that only a minority of community college students successfully complete two years. Second-year enrollments in public community colleges for 1977 comprised only 38% of the first-year enrollment of the previous year; and, the number of associate degrees awarded was only about half of second-year enrollments. The proportion of associate degrees has been rising rapidly -- from 43% in 1971 to over 58% in 1977. In a classic analysis of community colleges done two decades ago Burton Clark (1960) exposed one of their primary functions to be "cooling-out" students from higher education. In twenty years apparently all that has changed is the numbers -- now ten times what they were in 1959. Why, then, has there been such a remarkable increase in these marginal students during this decade, when the reality of their chances would appear to be so uninviting?

The surfeit of college graduates on the labor markets in the 1970s, in the U.S. and elsewhere, has produced the phenomenon of credential inflation (Dore 1975; Thurow 1975; Ushiogi 1979). Few of the frustrated graduates spend an inordinate period of time in unemployment lines. Rather, they eventually accept less prestigious positions than they had originally hoped for, often ones that had not been considered graduate positions at all. In doing so they effectively displace workers with less education. Thus, the positions in

question over time become upgraded to graduate status, and graduates correspondingly become "occupationally downgraded" as they lower their original expectations. As this occurs it might seem graduate status would become less and less enticing, but in fact it is the obverse effect that has the most significant impact. As more workers acquire graduate credentials those with less education are effectively penalized by being pushed farther down the occupational hierarchy. So, at the same time that the pull of superior graduate earning is weakening, this very penalty effect provides an increasingly powerful push toward college for potential students. How individuals react to these conflicting forces naturally varies.

For high-ability or high-SES students the problem created by the squeeze on graduate labor markets has been one of securing access, under increasingly competititve conditions, to the elite slots in the graduate occupational hierarchy. In some cases a B.A. from a highly selective institution, o a B.S. in a restrictively hard subject like engineering, may be sufficient; but more likely such positions would require a graduate or professional degree. Hence, the crush for medical school admissions and the burgeoning law school enrollments that have been evident since the mid-seventies. More average students, who are unlikely to do well in this competition, have had to resort to different strategies. In ever-growing numbers they have opted for the security and relative well-being of middle-level technical professions. Clear evidence of the magnitude of such choices is afforded by the growing proportion of vocational bachelor's degrees -- from 48.6% of the total in 1968 to 57.9% in 1977 (Geiger 1979b).

It is the part-time and community college students who most acutely feel the bind created by the graduate labor-market squeeze. They at best are likely to land near the bottom of the graduate occupation hierarchy, and they are closest to the realities of the penalty effect. Yet, their adapatation to this situation -- seeking higher education part-time or in two-year institutions --

in effect considerably diminishes their likelihood of ever becoming graduates. There is nevertheless an underlying rationality to this behavior. Because the potential rewards of higher education are so uncertain for students in this category, they are actually "discounting" the value of an eventual degree by reducing the value of their investment in it. This discounting assumes two forms. First, the cost is kept low either by attending inexpensive community colleges or by mixing schooling with part or full-time work. Secondly, the investment is made incrementally, course by course, semester by semester. Schooling can be interrupted or discontinued any time that circumstances would seem to warrant. And, apparently it often is: the actual enrollment patterns of individual Marginals are notoriously irregular, reflecting their tenuous motivation and the interference of non-academic activities. This makes these patterns sensitive to immediate labor market conditions. Work and education in many cases would seem to be strongly inter-related, so that the more satisfactory working opportunities become the less they desire additional education, and vice-versa. For example, in 1975, as the economy was just beginning to emerge from a severe recession, community college enrollments mushroomed by 25%; but in 1978, when employment was at record levels, total enrollments were down by some 3% with a decided shift from full-time to part-time status.

The diversity of attendance patterns among these marginal students not only defies generalization, but is actually one of their starkest characteristics. In essence they feel their way along in their education. Those who are able to stick with this process will eventually reach a point at which most of the costs of a college education are already sunk. Consequently, a relatively small additional investment of time, effort and money will yield a degree. When this commitment appears worthwhile and feasible they are likely to enroll for the number of semesters necessary to meet graduation requirements. This form of discounting, then, brings into balance the uncertain value of a college degree

and the level of investment that the marginal student is willing to make.

The structure of American higher education has always been highly stratified, and the position of an institution in this stratified structure has reflected on its students. In this light it is somewhat dismaying that the growth of the seventies has so dramatically, and almost exclusively, enlarged the lowest component of this hierarchy. This would seem to suggest that the once self-evident value of a college education has increasingly in this decade become clouded with ambiguity. The inordinate growth of marginal students in essence stems from the credentialing aspect of U.S. higher education. The fact that their chief motivation comes from the penalty effect makes them less interested in the substance of their education than in its certification.

The growth of the seventies has been principally engendered by short-term incentives: a highly constructive labor market for youth, the institution of direct subsidization of college attendance and the penalty effect. For women a decided trend toward later marriages has foreclosed another traditional alternative. Longer-range career incentives have undoubtedly improved greatly for high-ability women, and perhaps somewhat for those of average abilities; but for males of average abilities career prospects for graduates have deteriorated during the decade. The balance of economic factors will undoubtedly change during the 1980s, but only after the size of college-age cohorts has diminshied substantially. It is difficult to see how the social basis of recruitment could be significantly broadened. The point of diminishing returns may already have been passed in this respect, so that greater participation by lower-SES (and predominantly low-ability) students would only serve to accelerate credential inflation. Reversing the trend of declining academic achievement, on the other hand, might have a salutory effect on enrollments and education; but there is no evidence to date that these developments can be brought under control. There is a large degree of uncertainty in each of the factors impinging on college

enrollments, and much greater uncertainty in attempting to aggregate them. Nevertheless, the best current estimate would be that total enrollment will not rise above the current plateau in the foreseeable future. The U.S. does not seem about to transcend its present phase of mass higher education.

6. Japan: The Setting Sun on Rising Enrollments*

The expansion of higher education in Japan is certainly the most remarkable of the cases considered here. In 1960 Japanese participation in higher education was about equal to the French; by 1975 it was comparable to that of the United States (Japan, 1976). In fact, Japan now rivals the United State for the honor of being the most highly educated society in the world. The Japanese currently graduate 90% of an age cohort from high school, compared to only 75% for the U.S.; and the annual number of college graduates in each society approximates 22-23% of 22-year olds. However, there is a significant difference here: almost all of the Japanese graduates are close to actually being 22 years old, while the age spread for American graduates is considerably wider. Beyond this level the U.S. has an enormous edge: only about 4% of Japanese graduates continue on to graduate study (Japan, 1979), compared to a much larger, but not strictly comparable, figure in this country. It is also interesting to note that the growth curve of Japanese higher education did not carry it beyond the educational level of the U.S., but rather abruptly leveled off in the last half of the seventies. Thus, Japan too appears stuck at this particular stage of mass higher education.

Japan possesses a hierarchical system of Higher education much like the United States, except that gradations of rank are far less ambiguous than here.

* I would like to thank Akiko Hashimoto for invaluable assistance with this section. Responsibility for information and conclusions nevertheless remains entirely my own.

JAPAN

Figure 6:1. Enrollments in Japanese Higher Education by Type of Institution.

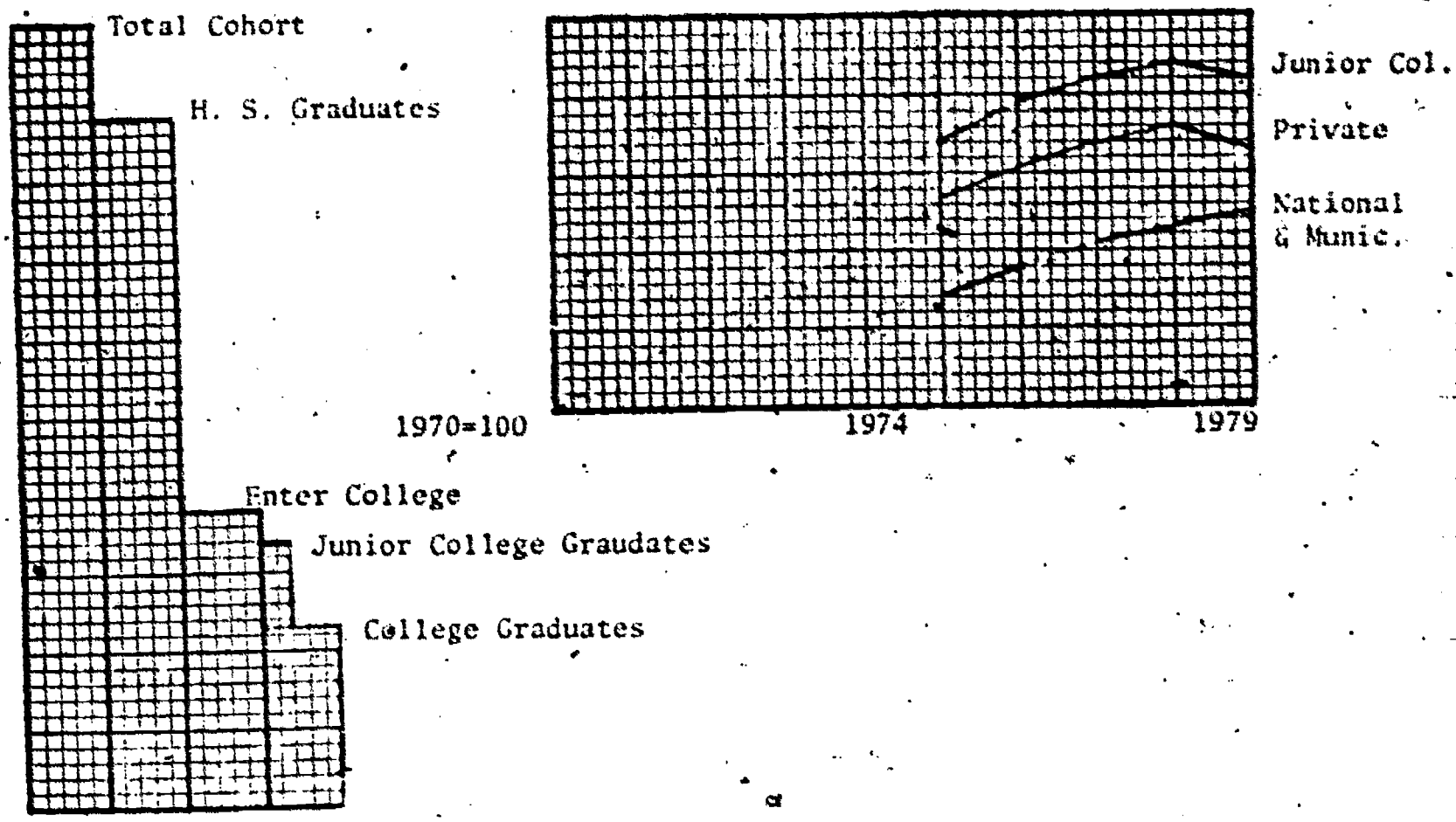
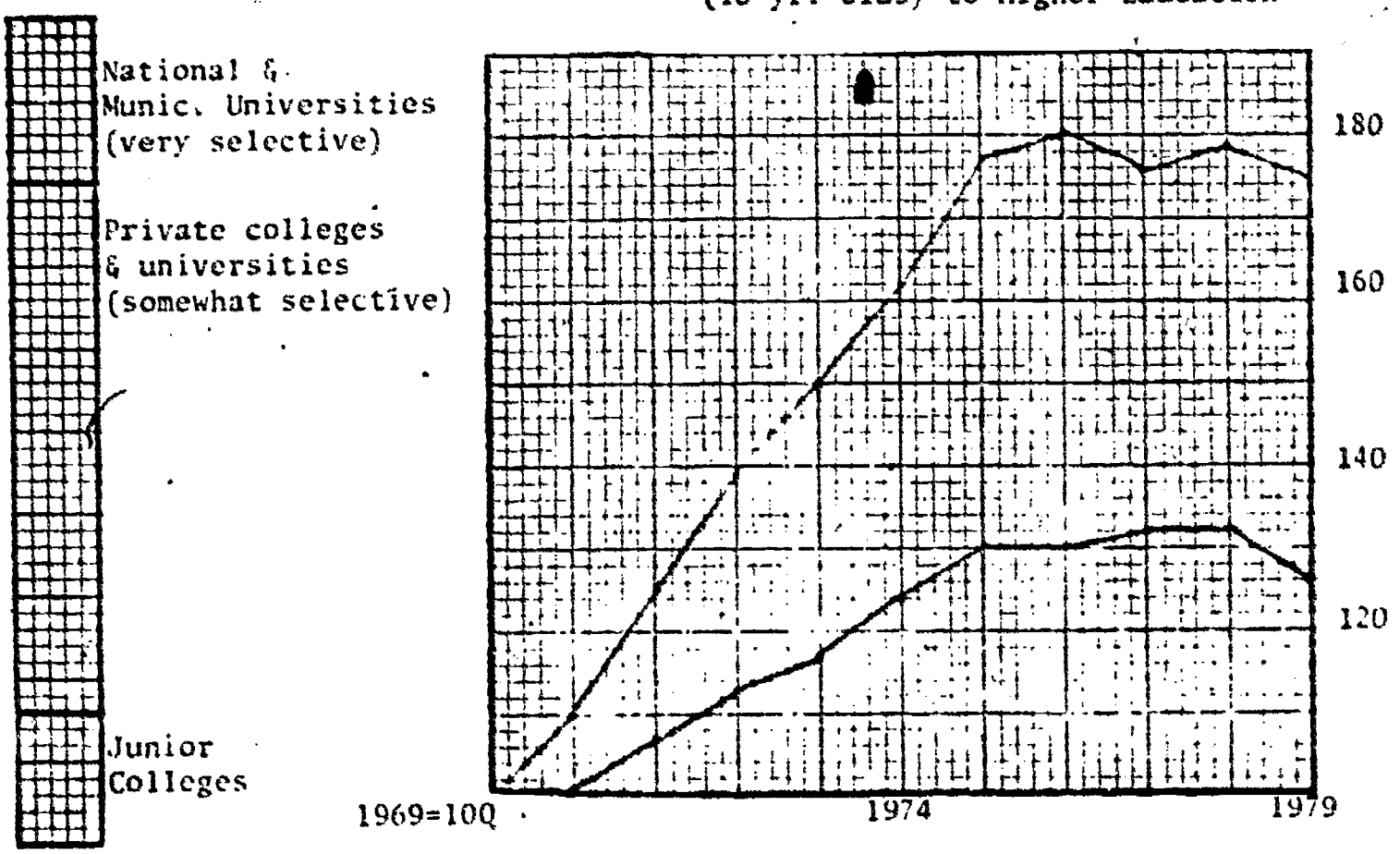


Figure 6:2. New Entrants and Admission Rates (18 yr. olds) to Higher Education



At the top of the system are National universities which are publicly financed, highly selective, and which lead rather directly to the most desirable career opportunities. The private sector, which now enrolls 80% of all students, contains a range of institutions from highly selective to only slightly selective, with corresponding gradations of prestige. Junior colleges (90% private) are an important component of the system, but cater almost exclusively to women. In addition, a variety of technical colleges and specialized or vocational schools are integrated with upper secondary education, and thus only marginally a part of the post-secondary sector. The most distinctive feature of the Japanese system, however, is the extent to which students are definitively sorted during the transition from high school to college.

Consider the following elements of the Japanese situation: close to 90% of an age cohort graduate from high school and reach the threshold of higher education; of those who enter the universities nearly 90% will graduate within five years; entry into the labor force is strongly dependent upon educational qualifications and tends to be for life-long positions. Together these factors make the sorting that occurs after high school crucial in determining the lifetime possibilities of each individual -- and thus indispensible to understanding the dynamics of Japanese enrollments. However, it is necessary to recognize from the outset that the lifetime career possibilities for men and women are markedly different in Japan. What follows will pertain largely to the men who comprise 78% of the 1978 university enrollment. The special constraints operating on higher education for women will then be considered separately.

Students with particularly strong academic abilities would be likely to compete for entrance into the University of Tokyo, generally regarded as the peak of the hierarchy, the University of Kyoto, its close rival, or one of the other national or municipal universities. The competition for these coveted slots is naturally fierce, becoming ever more intense as one nears the summit.

however, considering the payoff, it is highly worthwhile to devote special efforts toward success on these examinations. Thus, large numbers of students known as Rōnin spend a year or more at private cram school in order to gain entry. The function of these schools is similar to that of the state-run classes préparatoires aux grandes écoles in France, except that Rōnin sit the same examinations as new high school graduates, many of whom succeed in going directly to the universities. Presently Rōnin account for about a third of university entrants, although that figure rises to two-thirds for the most competitive faculty, medicine. Perhaps a more indicative figure is that almost one half of the male entrants to the national and municipal universities during the seventies have been Rōnin (Japan, 1976). In the private sector during the mid-seventies Rōnin constituted 35-40% of all male entrants; however, because of the heterogeneous nature of this sector that figure represents a variety of outcomes. Some of these Rōnin have succeeded in entering prestigious and selective private universities, but others have had to accept decidedly inferior alternatives.

The Japanese private sector has been the most elastic component of the system, and its expansion has been responsible for bringing Japan into the advanced stage of mass higher education. In the mid-fifties private institutions contained about 60% of the places in Japanese universities; since 1974 their share has stabilized at about 76% of enrollments. From 1960 to 1978 the national and municipal universities roughly doubled in size, while the privates were growing by some 250% (Japan, 1979). In absolute numbers this meant adding 220,000 places in the public universities vs. more than a million in the privates. This rapid and uncoordinated growth has tended to aggravate the disparities between the public and private sectors during this period. By 1975, for example, the ratio of students to full-time teachers in private colleges and universities was 41:1, compared to 11.7:1 at national institutions; educational expenditures per student

were 343,000 yen vs. 909,000 yen; and, the number of library books per student was 26.6 vs. 109.4 (Ichikawa 1979). These differences are naturally reflected in the relative selectivity of institutions, and thus the quality of their students. In 1968, 64.1% of students entering private universities had less than a "B-" average in upper secondary school, while of those entering national universities 82.7% had better than a "C+" average (Narita 1978). Moreover, these aggregate statistics for the entire private sector include some prestigious, selective and well-endowed universities which would raise the averages. This merely indicates that the distance from the top to the bottom of the institutional status hierarchy is great indeed. And, the steepness of this hierarchy is essential for comprehending the enrollment dynamics of Japanese higher education.

From 1967 to 1975 the rate of admission to Japanese colleges and universities rose at virtually a constant rate from 18% of a cohort to 38%. Since then it has remained on that plateau, varying by less than one percentage point (see Figure 6:1). The same factors that have been discussed for Belgium, France and the U.S. would seem to have an important bearing on this stability, i.e. the structure of career incentives and the interaction of ability and SES. The Japanese case, however, presents an additional consideration in a government policy to deliberately restrain enrollment growth.

The rapid growth of the private sector gradually built up pressures that forced the Japanese government to develop an explicite policy concerning educational expansion and the role of the privates. The educational boom of the sixties stimulated private institutions to expand their facilities. By the end of the decade they were burdened with a substantial debt, higher operating costs and a militant student body which would not tolerate further tuition hikes (Ichikawa 1979). An intensive publicity campaign by these institutions succeeded by 1970 in convincing the government to assume a share of the financing of private higher education. Government subsidies and private enrollments increased

substantially during the next five years, prompting a more stringent policy. The government was concerned not only with limiting its own expenditures in this area, but also with assuring that its funds served to upgrad the quality of private higher education, rather than to underwrite its unceasing expansion. The result was a new finance law for private education in 1975, plus a five-year plan (1976-80) for Japanese higher education as a whole. Private institutions were to receive up to 50% of operating expenditures, although technical features of the law keep this rate much lower (Ichikawa 1979). However, they were forbidden from creating new institutions or new departments for five years, and student numbers in the private sector were supposed to remain constant. Yet, this policy cannot be held solely responsible for the leveling of enrollments; actual student numbers in the private sector remain substantially above the "authorized" figures used to calculate subsidies. Nevertheless, the 1975 law has undoubtedly furthered this goal by decreasing institutional incentives for growth. In the final analysis government policy has been successful because it coincided with a stabilization of the private demand for higher education. (Amano 1980; Kitamura 1979). And, it is that phenomenon which still requires explanation.

Perhaps more than in any other country the growing college enrollments in Japan translated quite directly into proportionate increases in graduates in the workforce. This has had a predictable effect upon graduate labor markets. It has been well documented that the increase in graduates during the 1960s was accompanied by significant "occupational downgrading" (above p. 26) and a narrowing of the differential between graduate and non-graduate wages (Ushiogi 1979). These conditions have naturally been exacerbated during the past decade. As of 1972 the average college graduate would not surpass the earning power of high school or compulsory school graduates of the same cohort (who would have a seniority advantage by virtue of t continuing their schooling) until he passed

age 30 (Ushiogi 1979). Obviously, for the graduate with below average credentials higher education is a financially dubious investment. But, why did it take until 1975 for this fact of life to begin to influence the educational choices of marginal decision makers?

The factors affecting this situation can best be elucidated by interpreting Table 6:1 in the light of the sharply graded career incentives to higher education.

Table 6:1 : Percentage distribution of day university students by household (aged 45-54) income (1978)

	low				high	
Colleges & Universities	I	II	III	IV	V	total
National	22.0	19.0	18.9	19.1	21.0	100
Municipal	18.4	19.1	22.3	19.1	21.1	100
Private	11.1	16.8	19.9	20.5	31.7	100
Total	13.5	17.2	19.8	20.2	29.3	100

SOURCE: Gakusei Seikatsu Chosa Hokoku 1978, Mombusho
(Survey Report of Student Living Conditions, Ministry of Education).

Compared to Western nations the social origins of students in National and Municipal universities is nothing short of astonishing! Each income quintile provides roughly one-fifth of the student total. (Household heads aged 45-54 approximate the population of families having college-aged children.) That is, there is no apparent evidence of the primary effects of social stratification, let alone the secondary effects. This data, if it can be believed, suggests that 1) academic abilities are distributed quite equally across the social spectrum; 2) the value of education in Japanese society is universally recognized and supported; and, 3) Japanese schools are so effective that they overwhelm pre-existing cultural disadvantages. Even if these conditions only partly obtain -- certainly a more plausible position -- it would still mean that

the intensely competitive access to the most desirable educational opportunities is determined almost solely by academic ability.

When the focus is moved to the private sector the importance of SES again assumes its expected prominence. Not only is tuition to private institutions often a significant barrier, but the career incentives for many programs have become increasingly problematic. For those from high social backgrounds, however, this last consideration is more than cancelled out by family pressure toward higher education. In this respect, the rather sharp fall-off in participation rates from the highest to the next highest quintile is noteworthy. Thus, the socially induced demand for higher education which sustains the base of the institutional hierarchy attenuates rapidly below the wealthiest 20%.

Given this constellation of forces, then, an anti-growth government policy plus a slackening of economic growth (further depressing graduate opportunities in the labor market) were apparently sufficient to halt a decade of steady enrollment growth. The resultant equilibrium seems likely to be sustained through the current five-year plan. But, what about the next? Planners now discussing the 1981-86 period seem to be counting on the enrollment rate remaining near 38%, so that the major efforts can be aimed at geographical redistribution, diversification and the implementation of non-traditional forms of higher education (Amano 1980). There are, however, at least two clouds on this horizon which could upset this fair-weather forecast by once again significantly enlarging private demand for university places.

The first of these concerns the position of Japanese women in higher education -- an aspect of the subject which has been omitted from the discussion thus far. Japan's post-war constitution declares men and women to be equal before the law but social customs, economic practices and family traditions have prevented more than a small minority of women from pursuing the same educational goals as men. The precise position of women can be constructed

from the latest educational statistics (Japan 1979). More women than men graduate from upper secondary school, and more of them actually continue their education; but, once again, it is at this crucial sorting point that paths tend to diverge. Women are more likely to seek vocational skills in special training schools whose post-secondary enrollments are now 69% female. The largest single category of women graduates enter junior colleges which are not only almost wholly female (88%), but also essentially terminal (2% continuation rate). For the one in ten women who manages to enter a university things are still not likely to be equal. Few of them, perhaps 20%, will be Rōnin seeking entry into the elite tracks. Instead, most will either study traditionally female subjects like teacher training and home economics (27%), or culturally enriching subjects like humanities and arts (43%). The female presence in Japanese universities has been growing, but only slowly--from 18% of the total in 1970 to 22.1% in 1979. Japanese women, unlike their American counterparts, are not about to conquer educational parity within the forseeable future. However, a modest increase in their ambitions could create a substantial demand for additional university places.

The other potential concern is far less uncertain because it depends upon the numbers of children already born. During the next five years higher education will have to accommodate 5% more 18 year-olds. If all things remain equal this will produce about the same absolute growth as the past quinquennium. But, beginning in 1986 cohorts about 20% larger will begin reaching higher education. At this point it does not seem possible for all things to remain equal. The government, in all probability, would like to see these "extra" students diverted to upgraded technical colleges or special training schools. However, if its policy of diversification is not entirely successful, the result will be increasing pressure to enter the existing universities. Given the present intense competition for the better university places such a development would certainly be

unwelcome. The present system has already spawned a supplementary, and essentially unproductive, educational industry in the form of cram schools. Every Spring the "Examination Hell" is held responsible for the suicide of numerous adolescents. Any intensification of this competition would not improve the selection of students, but rather warp even further the educational process. Considering the alternatives, then, the Japanese might well be satisfied with the state of mass higher education at which they are currently lodged. Advancing beyond existing levels of enrollment could prove even more traumatic than achieving them in the first place.

7. CONCLUSIONS

From the enrollment histories of the seventies in the four countries considered here the following generalizations might be drawn:

- The momentum of rapid growth in higher education carried over from the sixties to the early seventies propelled by rising private demand for higher education, public policy commitments to expand access and availability, and increasingly large university-age cohorts. Demographic growth in the number of young people produced labor market conditions that were difficult for young job-seekers at all levels of educational preparation. The larger number of university graduates, in particular, brought a decline in graduate career prospects. This situation was exacerbated by generally depressed economic conditions after 1973.
- Total private demand for traditional or long university study ceased growing either early in the seventies (Belgium, U.S. men), or near the middle of the decade (France, Japan, U.S.).
- The relative roles of ability factors and SES factors in determining private demand in university (or university-level) sectors varied with

national educational structures: in Belgium university enrollments have been informally limited by the requirement of high academic ability; in the U.S. the increasing role of ability has displaced a portion of the socially induced enrollment; in Japan ability seems to be the sole determinant of entry into the highly selective national universities, but the demand for places in the academically weaker private sector is to a large extent socially determined; in France the marked social bias of university recruitment has supported enrollment levels despite discouraging career prospects, but it has also virtually precluded additional growth.. Thus, given existing conditions in Belgium, Japan and the U.S., the exhaustion of the high-ability pool has constrained growth in the university sector.

- High ability students continued to have strong career incentives to pursue higher education; in addition, students of lesser abilities, but with strong social incentives to attain graduate status, have also continued to attend in significant proportions. Demand from these groups has caused an increasing degree of meritocratic selection to those programs promising the surest and largest career rewards.
- For the potential students who are neither high-ability nor high-SES, the declining value of university credentials has tended to divert enrollments to the short-cycle or non-university sectors. These sectors continued to expand after the cessation of university growth, and have provided the most significant growth component of the decade for Belgium and the U.S. The same pattern could occur in Japanese higher education in the future, but not in France where the broad scope of the universities constrains the short-cycle sector.
- Where the amount of time and effort necessary for post-secondary study study is variable and nominal costs are low (France, U.S.), declining

returns to higher education coupled with the penalty effect produce the phenomenon of "discounting", or a reduction in the investment of student resources commensurate with lower anticipated career rewards.

- A portion of the growth in demand for non-university higher education during the seventies can be accounted for by technological advancement of the productive base and a redistribution of the labor force favoring the service sector. However, much of this demand is the product of the penalty effect, credential inflation and the promotion of certain types of education to post-secondary status.

These propositions taken together make it possible to place the educational expansion of the last two decades in a larger historical perspective. There can be little doubt that the extraordinary growth in the quantity of education consumed in the advanced nations of the world has irrevocably altered the overall role of education in those societies. While this expansion was in progress no limits were visible for the further extension of higher education and its associated benefits. Hence, the visions of universal higher education. Now, however, expansion has ceased; a plateau has been reached; and the inherent limitations weighing on higher education are evident for those who wish to see them. Only a minority, it would seem, possess the academic abilities to profit from sixteen years of formal education. Or, to put it more fairly, a significant proportion of young adults have talents which are best developed outside of the classroom. Similarly limited are the number who feel higher education is necessary for achieving the social status of their parents. And finally, irrespective of demographic or economic conditions, a growing proportion of graduates will cause the incentives for graduate careers to regress toward the mean, thus weakening the principal motivation for seeking post-secondary education. These limitations show up implicitly in the arguments of proponents of sustained educational growth. They urge changing the nature of schooling in order to accommodate those who are poor

at what used to be called "book-learning". Or, they propose changing the workplace, altering income differentials and reducing social stratification, all in order to restructure career incentives to harmonize with prolonged education (cf. Geiger 1980b). However, leaving these hypothetical alternatives aside, it is difficult to see how under present conditions more education, particularly more higher education, could augment the intelligence, the productive capacity or the general happiness of the population. There is of course no reason to believe that this state of affairs will be any more permanent than the last. But for the present, at least, in the four advanced nations discussed here it would seem that the limits of mass higher education have been reached.

REFERENCES

Amano, Ikuo. 1980. "Plans, Policies, Developments: Stability and Change in Japanese Higher Education", Report to the Second Hiroshima International Seminar on Higher Education, Research Institute for Higher Education, Hiroshima University.

Bailey, J.P. Jr., & Collins, E.F. 1977. "Entry into Post-secondary Education", Symposium: National Longitudinal Study of the High School Class of 1972: Trends in Post-secondary Education". Research Triangle Institute.

Boggio, Phillipe. 1978. "Les étudiants sans mémoire", Le Monde de l'éducation (21, 22 & 23 juin).

Bonte, A. 1976. "Examenuitslagen in de kandidatuur", Intermediair (12-18 juni).

Boudon, Raymond. 1974. Education, Opportunity and Social Inequality. New York: Wiley.

Boudon, Raymond, Cibois, Philipe & Lagneau, Janina. 1975. "Enseignement supérieur court et pièges de l'action collective", Revue française de sociologie, 16, pp. 159-88.

Clark, Burton R. 1960. The Open Door College. New York: McGraw Hill.

Cummings, William K. 1979. "Expansion, Examination Fever, and Equality" in Cummings, Amano & Kitamura, pp. 83-106.

Cummings, William K., Amano, Ikuo, & Kitamura, Kazuyuki. 1979. Changes in the Japanese University: A Comparative Perspective. New York: Praeger.

Doermann, Humphrey. 1978. Toward Equal Access. New York: College Entrance Examination Board.

Dore, Ronald. 1975. The Diploma Disease. London: Allen & Unwin.

L"Etudiant. 1977. Guide pratique, 1977-78.. Paris: Editions Générations.

Freeman, Richard B. 1976. The Overeducated American. New York: Academic Press.

_____. 1977. "The Decline in the Economic Rewards to College Education", The Review of Economics and Statistics. pp. 18-29.

Geiger, Roger L. 1977a. "The Second-Cycle Reform and the Predicament of the French University", Paedagogica Europaea, XII, 1.

_____. 1977b. "A Retrospective View of the Second-Cycle Reform in France", Yale Higher Education Research Group Working Paper #18.

_____. 1978. "Higher Education in Belgium: Historical Development and Current Issues", Yale Higher Education Research Group Working Paper #29.

_____. 1978/79. "The Case of the Missing Students", Change (Dec.-Jan.) pp. 64-65.

References (cont.)

_____. 1979a. "Two Paths to Mass Higher Education: Issues and Outcomes in France and Belgium". Yale Higher Education Research Group Working Paper #34.

_____. 1979b. "The College Curriculum and the Marketplace: Academic Disciplines and the Trend toward Vocationalism in the 1970s". Working paper #40.

_____. 1980a. "Changing Demand for Higher Education in the Seventies: Adaptations within Three National Systems", Higher Education (forthcoming) IX, 3 (May).

_____. 1980b. (Review) "Future Educational Policies in the Changing Social and Economic Context," American Journal of Education. August.

Girard, Alain, & Bastide, Henri. 1973. "De la fin des études élémentaires à l'entrée dans la vie professionnelle ou à l'université", Population, 28, 3 (mai-juin). 57-92.

Hecquet, Verniers, & Cerych, L. 1976. Recent Student Flows in Higher Education. Paris: Institute of Education of the European Cultural Foundation.

Herzlich, Guy. 1978. "Le Chômage des jeunes diplomés", Le Monde de l'Education, (nov.).

Ichikawa, Shogo. 1979. "Finance of Higher Education" in Cummings, Amano & Kitamura, pp. 40-63.

Janne, Henri. 1979. Education and Youth Employment in Belgium. Berkeley: Carnegie Council on Policy Studies in Higher Education.

Japan, Ministry of Education, Science and Culture. 1976. Educational Standards in Japan, 1975.

_____. 1979. Statistical Abstract of Education, Science and Culture, 1979 Edition.

Jencks, Christopher, et al. 1972. Inequality: a Reassessment of the Effects of Family and Schooling in America. New York: Basic Books.

Kitamura, Kazuyuki. 1979. "Mass Higher Education" in Cummings, Amano & Kitamura, pp. 64-82.

Lévy-Garboua, Louis. 1976. "Les demandes de l'etudiant ou les contradictions de l'universite de masse", Revue française de sociologie, XVII, 53-80.

_____. 1979. "Planification et régulation de l'enseignement supérieur en France", Sciences de Gestion, Cashiers de l'ISMEA, Série SG, no. 1. 737-73.

Narita, Katsuya. 1978. Systems of Higher Education: Japan. New York: ICED.

References (cont.)

OECD. 1970. "Group Disparities in Educational Participation". Conference on Policies for Educational Growth, Background Study #1. Paris.

Radner, Roy, & Miller, Leonard. 1975. Demand and Supply in U.S. Higher Education. New York: McGraw-Hill.

Sewell, William H. & Shah, Vimal. 1967. "Socio-economic Status, Intelligence, and the Attainment of Higher Education", Sociology of Education 40, 1. 1-23.

Thurow, Lester. 1975. Generating Inequality. New York: Basic Books.

Trow, Martin. 1970. "Reflections on the Transition from Mass to Universal Higher Education", Daedalus, 99, 1 (winter). 1-42..

_____. 1974. "Problems in the Transition from Elite to Mass Higher Education", in Policies for Higher Education. Paris: OECD, 1974, pp. 51-104.

_____. 1979. "Elite and Mass Higher Education: American Models and European Realities" in Research into Higher Education: Processes and Structures, Stockholm: National Board of Universities and Colleges, pp. 183-219.

Ushiogi, Morikazu. 1979. "The Japanese Student and the Labor Market", in Cummings, Amano & Kitamura, 107-26.

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