

**Mass Production of Higher Education in Japan**  
**—The impact of market economy principles—**

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# Mass Production of Higher Education in Japan

## — The impact of market economy principles —

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### Introduction

In recent years, the central issue concerning higher education in many modern countries has been money. The population going to higher educational institutions has increased dramatically, while the enrollment capacity of the schools, regardless of its funding sources, simply has not kept pace due to a lack of financial support. This has been the case for Japan. Although Japan has expanded its higher education capacity rapidly, a large number of high school graduates who seek higher education are unable to get into college because of limited enrollment capacity. In situations like this, some countries resort to the government to bear the responsibility while others try to seek solutions through private institutions. The United States for example, in the early stage after World War II, expanded the higher educational system through government institutions, mainly through state supported colleges and universities. Today, over 70% of undergraduate students attend state educational institutions. Japan, on the other hand, has achieved enrollment expansion mostly through the private sector. Over 75% of Japanese students, 3,102,600, attend private colleges and universities now, while in 1953 the percentage was only 57.2% (RIHE, 1995). The total number of four-year universities is 586, with 431 of them being private institutions. The number of two-year junior colleges is 504 in 1997. The percentage of total high school students going to universities or junior colleges reached 47.6% (Ministry of Education, 1997). These enrollment figures are truly remarkable because in the past, prior to World War II, college education was a monopoly of the nation's elite and not accessible to the average citizens of Japan. In the late 1940s only one out of ten high school graduates went to college and today nearly one out of two attends colleges.

How has this happened? There is no single factor responsible for this development, however, the following factors are considered to be significant and deserve some scrutiny. Five Factors of Market Economy:

1. National economic growth and industrial needs (supply/demand relationships)
2. Affordability of tuition (price)
3. Ideological shift toward higher education (consumers' attitudes)
4. Absence of academic standards for college admission (barrier free climate)

## 5. Cost effective approach to expansion (efficiency)

### Economic Growth

The overall Japanese economy has grown tremendously in the last forty years. The G.D.P. has multiplied 58.6 times in that period. The G.D.P. in 1955 was only U.S. \$ 68.7 billion, whereas in 1996 it was U.S. \$ 4,026.8 billion. Even taking the 580% inflation into consideration, the Japanese economy has roughly grown 10 times in real terms in that period (Economic Planning Agency; 1997). (Exchange rate, Y 125=U.S. \$1.00) Another significant statistic stems from the change in the employment structure of the growing economy. Obviously some industries expanded while other industries declined in the last thirty years. The primary industries such as agriculture, mining and forestry have shrunk from 19.8% in 1968 to 5.7 % in 1995. Manufacturing, down from 34% to 32.9%, has also been in a declining trend in recent years due to automation and technological innovation. The service sector of the economy has increased significantly, up from 46.1% to 61% (Management and Coordination Agency, 1997).

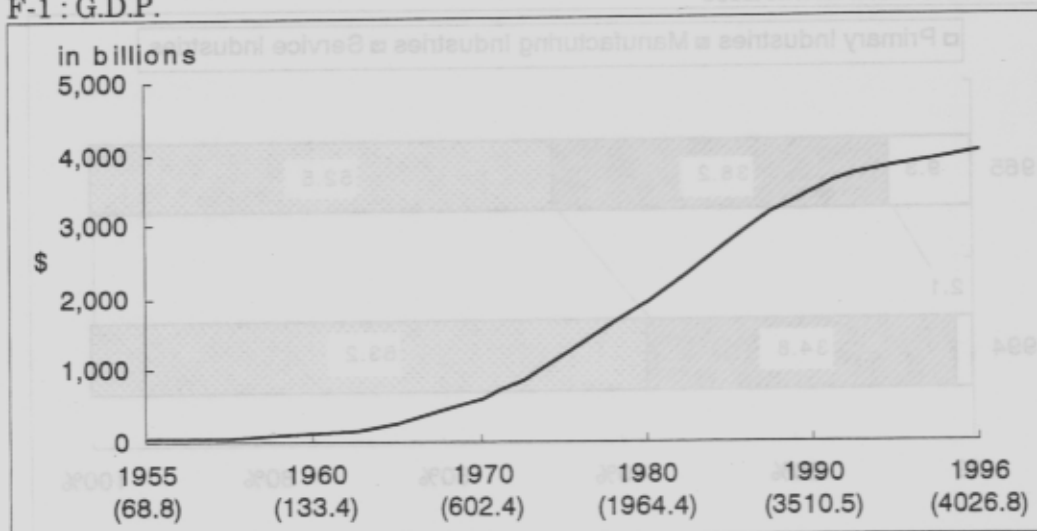
The change in the employment structure also validates the extent of contribution by various industries to the Japanese G.D.P. in the same period. The primary industries have declined from 9.3 % in 1965 to 2.1 % in 1994. The manufacturing industries have declined slightly from 38.2 % to 34.8 %. The service industries have increased their share from 52.5 % to 63.2 % (Management and Coordination Agency, 1997). The study shows that the expansion of higher education in terms of enrollment in colleges and universities is directly related to the economic growth in the same period. Enrollment increased from 238, 784 in 1950 (RI HE, 1995) to 3, 102, 594 in 1997 (Ministry of Education, 1997). This is an increase of more than twelve times in that period. It is logical for us to assume that high tech industries and service industries require great many trained specialists and that colleges and universities have been responding to these industrial demands. The following four figures show proof of this contention.

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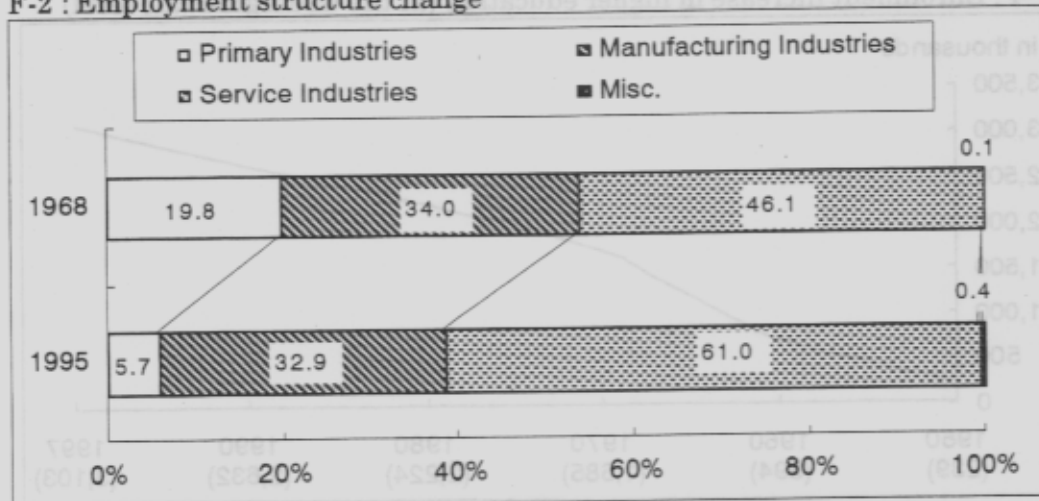
1. National economic growth and industrial needs (supply - demand relationship)
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F-1 : G.D.P.



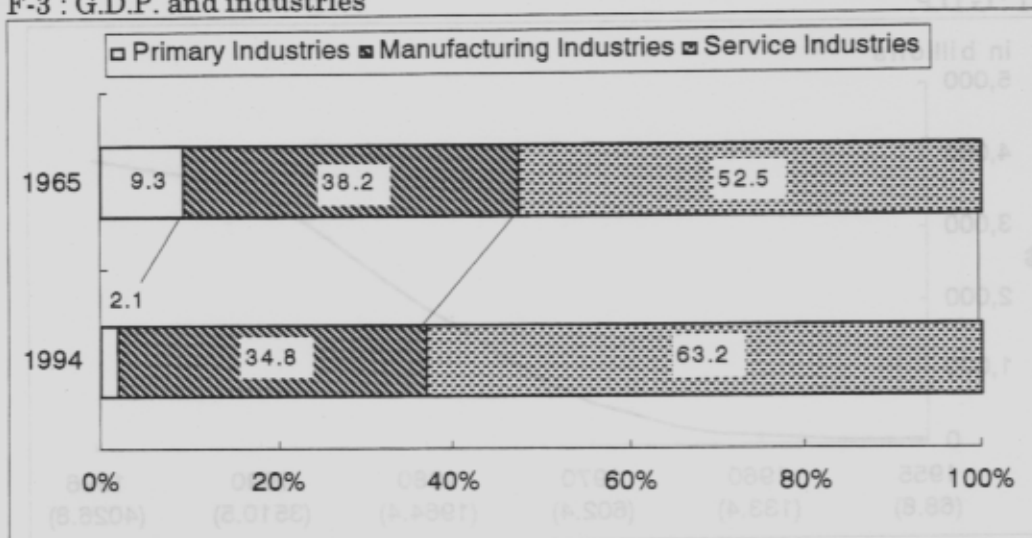
(Source: Economic Planning Agency; White Paper on Economics, 1997, appendix p.14)

F-2 : Employment structure change



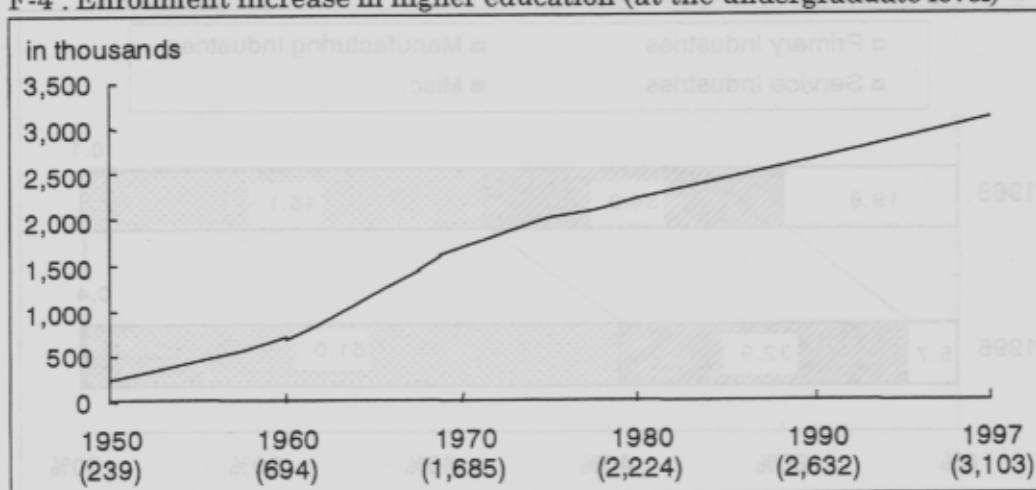
(Source: Management and Coordination Agency; White Paper on Youth in 1996, 1997, pp.40-42)

F-3 : G.D.P. and industries



(Source: Management and Coordination Agency; White Paper on Youth in 1996. 1997, pp.40-42)

F-4 : Enrollment increase in higher education (at the undergraduate level)



(Sources: RIHE, Hiroshima University; Statistical Data of Higher Education. 1995, pp.14-15. Ministry of Education; White Paper on Education. 1997, pp.568-569)

## Tuition Affordability

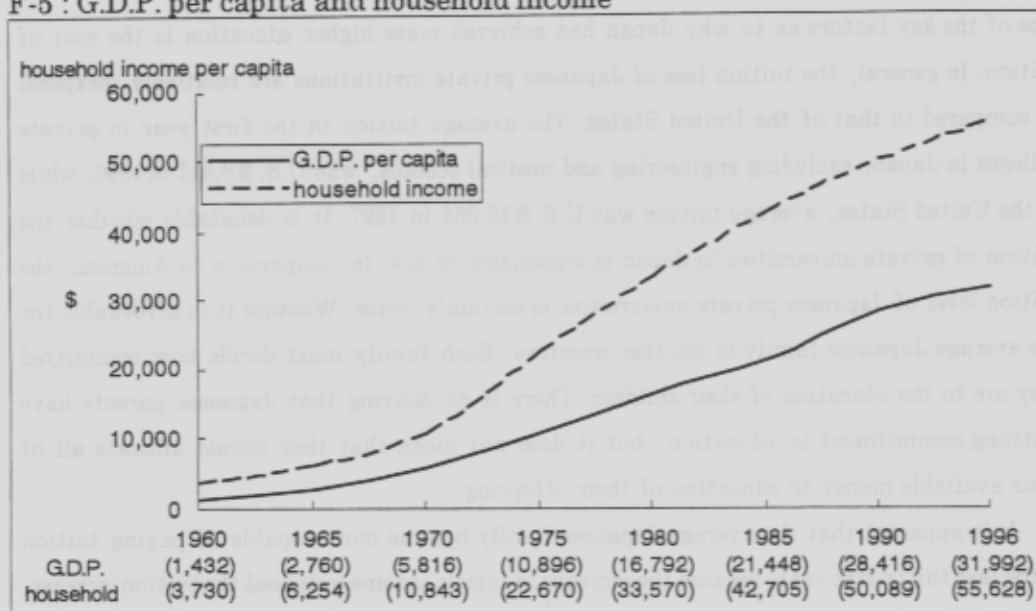
One of the key factors as to why Japan has achieved mass higher education is the cost of tuition. In general, the tuition fees of Japanese private institutions are relatively inexpensive compared to that of the United States. The average tuition in the first year in private colleges in Japan, excluding engineering and medical schools, was U.S. \$8,511 in 1996, while in the United States, average tuition was U.S. \$13,664 in 1997. It is debatable whether the tuition of private universities in Japan is reasonable or not. In comparison to America, the tuition level of Japanese private universities is certainly lower. Whether it is affordable for the average Japanese family is another question. Each family must decide how committed they are to the education of their children. There is no denying that Japanese parents have a strong commitment to education, but it does not mean that they should allocate all of their available money to education of their offspring.

It is apparent that the average Japanese family became more capable of paying tuition in the last thirty-five years because the increase in family income outpaced the tuition increase. The annual income per capita has grown 22.3 times, from U.S. \$1,432 in 1960 to U.S. \$31,992 in 1996, and the average annual workers' household income has grown 15.1 times in the same period, from U.S. \$3,690 in 1960 to U.S. \$55,628 in 1996 (Economic Planning Agency, 1997), while the average tuition fees in the first year of university increased 13.8 times, from U.S. \$705 in 1961 to U.S. \$9,746 in 1996 (PSPF, 1971; RIHE, 1995). Another significant statistic is family size. The Japanese birth rate has been steadily declining and as a result, family size has also shrunk. Now, the average family size is 2.79 (Economic Planning Agency, 1997) which means that the number of children for the average family to support has become less and college tuition has thus become more affordable. It is interesting to point out that there is no significant difference in tuition fees levels among Japanese private universities. On the other hand, in America the variation in the amount of tuition is vast. Some ivy league schools charge over U.S. \$29,000 annually, which is more than double the tuition of average private universities. The following statistics are useful to explain the affordability of tuition.

Year	Per Capita Income (U.S. \$)	Workers' Household Income (U.S. \$)	First Year Tuition (U.S. \$)
1996	31,992	55,628	8,511
1985	14,320	36,900	705

(Source: Economic Planning Agency, White Paper on Economics 1997, Appendix 4)

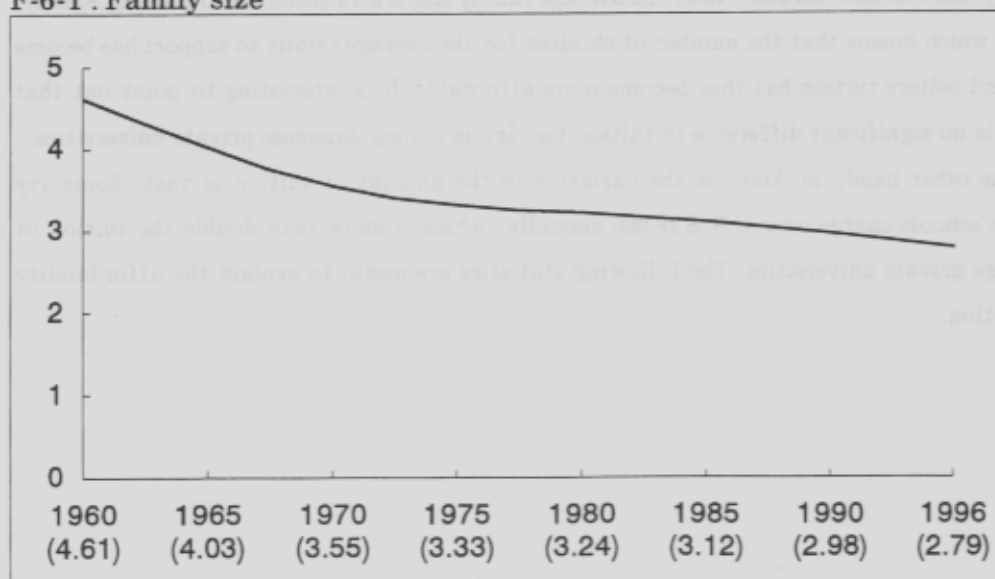
### F-5 : G.D.P. per capita and household income



(Sources: Economic Planning Agency; White Paper on Economics. 1997, appendix p.15. Management and Coordination Agency; Annual Report on the Family Income and Expenditure Survey. 1966, 1976 and 1997, pp.76-77, 36-37, 76-77)

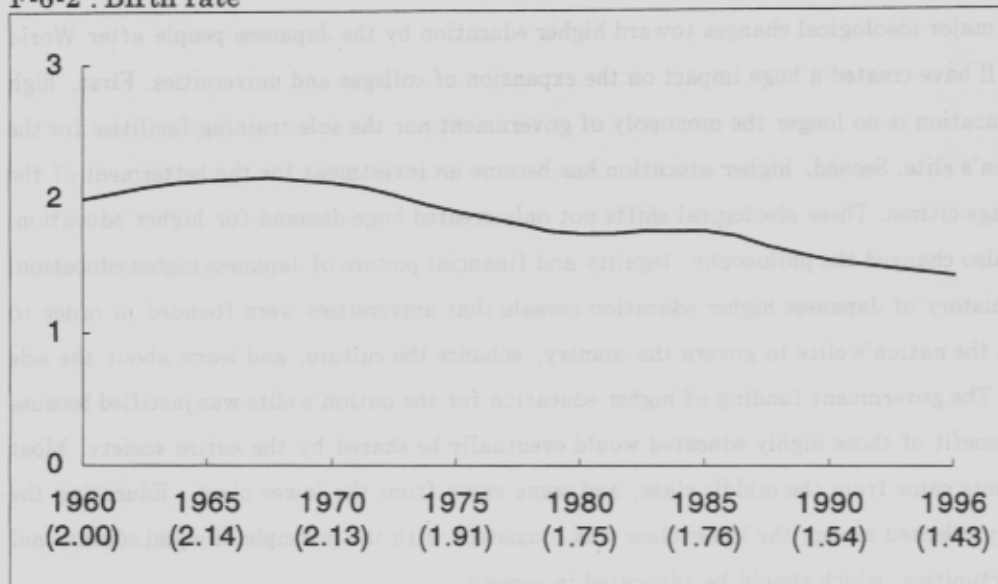
### F-6 : Family size and birth rate

#### F-6-1 : Family size



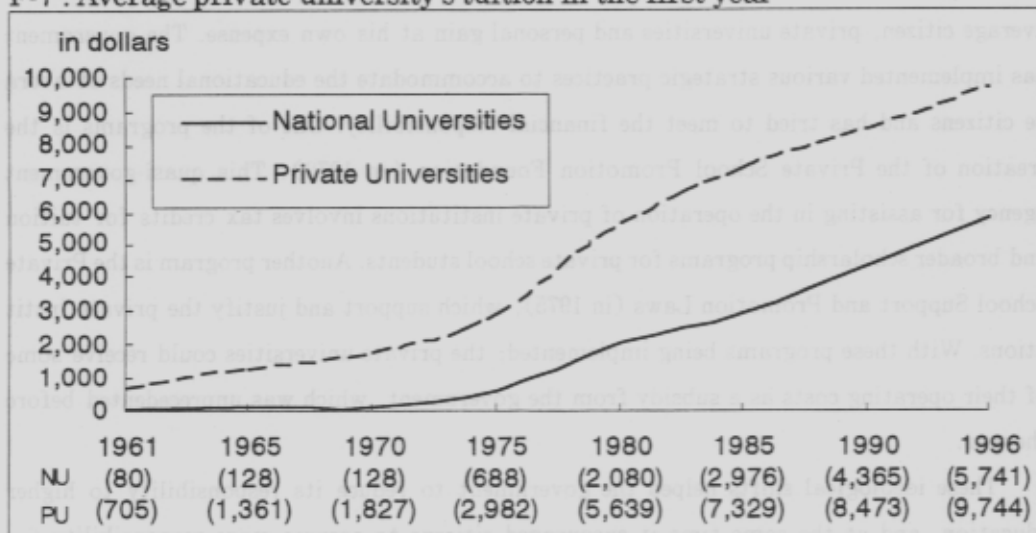
(Source: Economic Planning Agency; White Paper on Economics. 1997, appendix p.4)

F-6-2 : Birth rate



(Source: Economic Planning Agency; White Paper on Economics, 1997, appendix p.4)

F-7 : Average private university's tuition in the first year



(Sources: RIHE, Hiroshima University; Statistical Data of Higher Education, 1995, pp.284-285. Private School Promotion Foundation; Tuition Fees Survey at Private School in 1970, 1971, pp.14-19)



## Ideological Shift toward Higher Education

Two major ideological changes toward higher education by the Japanese people after World War II have created a huge impact on the expansion of colleges and universities. First, higher education is no longer the monopoly of government nor the sole training facilities for the nation's elite. Second, higher education has become an investment for the betterment of the average citizen. These ideological shifts not only created huge demand for higher education, but also changed the philosophy, legality and financial picture of Japanese higher education. The history of Japanese higher education reveals that universities were founded in order to train the nation's elite to govern the country, enhance the culture, and learn about the sciences. The government funding of higher education for the nation's elite was justified because the benefit of those highly educated would eventually be shared by the entire society. Most students came from the middle class, and some came from the lower class. Educating the highly talented among the lower class was consistent with the principle of equal educational opportunities, which should be advocated in society.

When the government was faced with the legal and financial task of meeting the great demand for higher education, the ruling people navigated various challenges concerning universities. The government has been successful in adopting and selling a new concept of higher education: college and university for the masses. It is in essence a linkage between the average citizen, private universities and personal gain at his own expense. The government has implemented various strategic practices to accommodate the educational needs of average citizens and has tried to meet the financial responsibility. One of the programs is the creation of the Private School Promotion Foundation (in 1970). This quasi-government agency for assisting in the operation of private institutions involves tax credits for tuition and broader scholarship programs for private school students. Another program is the Private School Support and Promotion Laws (in 1975), which support and justify the private institutions. With these programs being implemented, the private universities could receive some of their operating costs as a subsidy from the government, which was unprecedented before the war.

These ideological shifts helped the government to reduce its responsibility to higher education, and at the same time it encouraged citizens to assume more responsibility for their own children's higher education. It is, therefore, consistent with a market economy principle that education is a personal investment for the future and a means for individuals to attain their own personal goals. If the individuals wish to become CPAs, engineers, doctors, or lawyers, they should devote themselves to the training and bear the financial responsibility.

### **Absence of Academic Standards for College Admission**

The lack of national standardized tests for screening college bound applicants helped the expansion of higher education because it encouraged the students to apply for colleges regardless of their native intellectual ability. College admission is open to virtually anybody in Japan as long as they complete the high school curriculum and pass the entrance examination imposed by each college and university. This open door policy for college admission gives enormous incentives and encouragement to students who seek higher education. In reality, there are so many different academic levels among Japanese colleges, universities and junior colleges that almost all students can find suitable institutions for themselves. Compared to European countries, the Japanese academic market is almost a free trade zone in a sense that there are no restrictions or pre-qualifications imposed on the students. It is as if the Japanese college admission is a barrier free business climate where all kinds of trades and deals are welcomed. It is a hypothetical question that if a national academic standard such as GCE, A level of UK or Baccalaureate of France was imposed on the students as pre-screening, then the percentage of advancement to college among Japanese students would be reduced significantly, and for that reason mass higher education would not have flourished as it has. Obviously, this claim is not substantiated by any empirical data but the experience of the free market economy strongly supports the assumption. Less interference by the government and barrier free economic climate make the market prosperous because they encourage competition and participation.

### **Cost Effective Approach to Expansion**

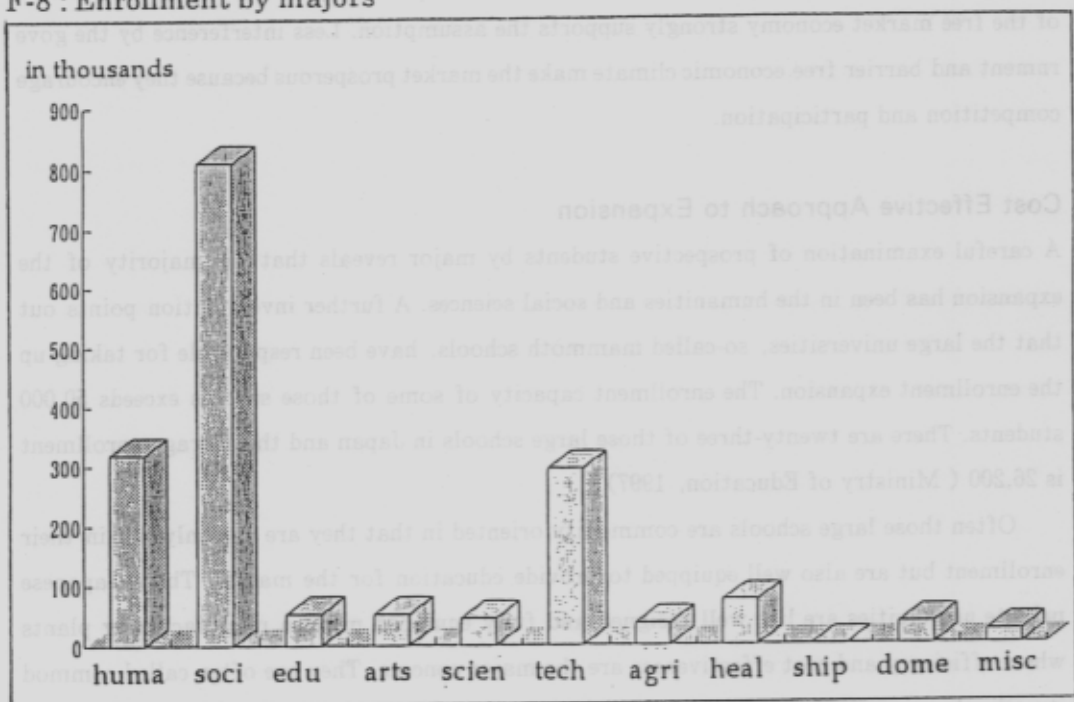
A careful examination of prospective students by major reveals that the majority of the expansion has been in the humanities and social sciences. A further investigation points out that the large universities, so-called mammoth schools, have been responsible for taking up the enrollment expansion. The enrollment capacity of some of those schools exceeds 50,000 students. There are twenty-three of those large schools in Japan and the average enrollment is 26,200 (Ministry of Education, 1997).

Often those large schools are commodity oriented in that they are not only big in their enrollment but are also well equipped to provide education for the masses. Those Japanese private universities are like well designed and fully equipped modern manufacturing plants where efficiency and cost effectiveness are the major concern. They are often called commodity schools as opposed to engineering schools or professional schools. In the business world, the concept of "commodity vs. engineered products" is well known. Making garden hose is certainly a commodity business because there is no uniqueness in the product to create special value. Usually commodity products do not require a great deal of research and innovation

as long as they meet the specifications. On the other hand, making computer chips is a high tech business which requires large capital and innovation. It also involves a significant amount of risk because these products are often applied in untested fields and performance is not guaranteed.

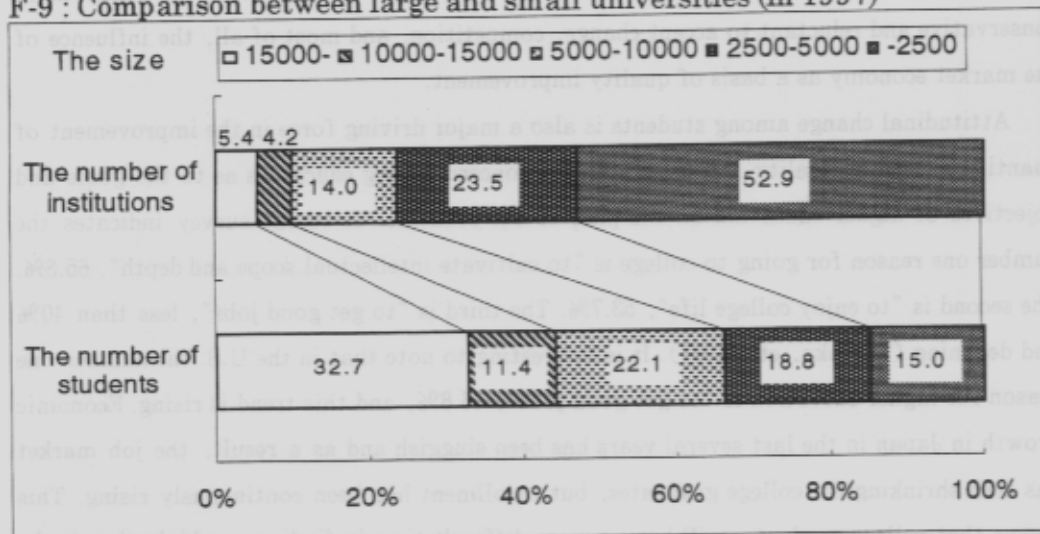
The fact is that humanities and social sciences are the driving force of expansion and the main bearer of mass higher education in Japan. However, it does not mean that commodity is bad or cheap. It is a simple economic truth of free market, in that if the demand is there, then the market will respond in a timely fashion and in the most cost effective way. The majority of Japanese large private universities emerged as a result of market needs. It is often noted in the business world that engineered products will soon become commodity products. In other words, today's high tech products sold at specialty shops at high prices will become commodity goods sold at convenience stores at less than half of the original price one year later. However, in the case of academics, the opposite trend might be possible in that the commodity schools may become professional schools by offering special courses. Today there are several well established professional schools which started as commodity schools.

#### F-8 : Enrollment by majors



(Source: RIHE, Hiroshima University; Statistical Data of Higher Education. 1995, p.33)

F-9 : Comparison between large and small universities (in 1997)



(Source: Ministry of Education; A List of Universities. 1998)

### Concluding Remarks

Japan has made big strides in achieving its mass higher education after the war. It has accomplished this through the private sector. Today, the total college enrollment is over 3 million and nearly one out of every two high school graduates goes to college. These numbers are notable when they are compared to other countries in the world including the United States. This study focused on the factors responsible for expanding higher education and validating the assumption that the Japanese post war economic growth has been the major contributor. The study also confirmed that Japan took advantage of market economy principles in the development of higher education in which affordability of tuition, liberal admission policies, and efficient, cost effective approaches in providing educational opportunities are identified as significant causes.

The study only dealt with the quantitative aspect of higher education via enrollment and not the quality of the education. Regarding the quality of Japanese higher education, the situation is drastically different from the United States and European countries. In order for a productive comparison to be conducted, a whole new set of research apparatus, tools, and concepts would be needed. In fact, the people in the community of higher education in Japan have recognized that serious quality problems exist in their system. The Japanese higher education system needs to improve the quality of instruction, quality of facility and laboratory and quality of institutional management. Qualitative development has just begun and institutional assessment has been implemented recently whereby quality problems can begin to be identified. However, it is questionable at this moment whether schools can take

advantage of market economy principles because the world of academia is much more conservative and reluctant to accept change, competition, and most of all, the influence of the market economy as a basis of quality improvement.

Attitudinal change among students is also a major driving force in the improvement of quantity as well as quality. However, there is concern among educators as to the goals and objectives of higher education on the part of the students. A recent survey indicates the number one reason for going to college is "to cultivate intellectual scope and depth", 65.8%. The second is "to enjoy college life", 53.7%. The third is "to get good jobs", less than 40% and declining (Tanioka, etc, 1997). It is interesting to note that in the U.S. the number one reason for higher education is "to get good jobs", 46.8%, and this trend is rising. Economic growth in Japan in the last several years has been sluggish and as a result, the job market has been shrinking for college graduates, but enrollment has been continuously rising. This means that college graduates will have a more difficult time in finding good jobs than in the past, and eventually they may have to change the thinking regarding college education once again.

The ideological view of Japanese higher education shifted from a national mission for the elite to an investment for better jobs for average citizens. It also offered an opportunity for liberal thinking, intellectual growth and the enjoyment of college life for affluent students. However, it is questionable how long the current trend will continue. The prediction is that another ideological shift is imminent and it would be more job oriented in that students will become more sensitive to the practical value of an education and more serious about training and learning relative to jobs, and this shift may occur sooner than expected.

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# 日本における高等教育の大衆化

## —市場経済原則の効果—

馬場 将光・嶋田 高司

高等教育のマス化がなぜ日本でおきたのか、が本稿のテーマである。周知のように、日本の高等教育への進学率は、1997年に47.6%に達している。約2人に1人は高等教育に進んでいることになる。この数値の高さはなぜ生じたのか。しかも、その進学者の75%強が私学に通っている。私学の数、全4年制大学586校のうち431校、2年制短大の数は504校に達している(1997年)。まさに日本の高等教育は、私学依存型というものである。他方アメリカは、高等教育の拡充を日本とは逆に州政府に依存する州立大学方式で達成してきた。今日、学部学生の70%強がそうした公立系高等教育機関に通っている。では、なぜ日本では上述の状況がおきたのか。それを解明するために、次の5つの要因について分析を試みた。

### 1. 経済成長

経済成長と、産業構造の変革たとえば第2・3次産業の成長が高度専門職業人の養成を求め、それに大学が応えることになり、そのことが学生数の増大を招いたのではないのか。

### 2. 授業料

日本の私学の授業料は医・理工系を除くと、アメリカのそれより低い。しかしそのことが問題なのではなく、問題は日本の授業料のレベルが家計が負担しうる範囲にあるかどうかである。その場合、子どもの出生数が減少し、1家族の構成数も減少した結果、家計の子ども1人当たりの教育費の負担能力を高めているのではないのか。

### 3. 高等教育の社会的機能の変化

高等教育はエリートのためのものではなく、みんながよい仕事につくための投資であると考えようになってきて、そのことが高等教育への大きな需要を生み出し、そのことが同時に高等教育をめぐる行財政に根本的な変容を生んだのではないのか。

### 4. 統一的な入学水準の欠除

全国的に共通する、高等教育への入学水準のないことが、高等教育へ押し掛ける進学者の増加を手助けしたのではないのか。日本にはヨーロッパのいくつかの国にみられる高等教育への統一的な入学水準というものがなく、入学レベルは大学によって異なっている。このことが、進学者増にプラスに作用したのではないのか。

## 5. 費用の効率的運用

高等教育の学生増は主に人文・社会科学の分野を中心としていたが、同時に大学の中でも大規模大学の出現が学生数増を生み出しているのではないのか。このことは、多かろう、安かろう、悪かろうを必ずしも意味するのではなく、費用の効率の視点から説明されるのではないのか。

### 結 論：

高等教育の拡大を招いた要因は、経済成長が主要因であるが、それだけではなく授業料、入試制度、教育機会を増大させる費用の効率的運用といった市場原理が強く影響していた。他方、高等教育の質の面については、学生が高等教育に何を期待しているかがこの問題を解く1つの鍵になると考えられる。