

DOCUMENT RESUME

ED 127 873

HE 008 182

AUTHOR Lee, Alfred M.
 TITLE Pricing Policy, Social Equity and Institutional Survival in Tertiary Education in New Jersey.
 PUB DATE Aug 76
 NOTE 31p.; Best available copy.

EDRS PRICE MF-\$0.83 Plus Postage. HC Not Available from EDRS.
 DESCRIPTORS *Educational Economics; *Equal Education; Family Income; Financial Needs; *Financial Policy; *Higher Education; Middle Class; *Public Policy; *State Aid; Student Costs; Student Financial Aid; Student Mobility; Tables (Data)

IDENTIFIERS *New Jersey

ABSTRACT

New Jersey aids private institutions but is deficit in low-priced open access to public colleges. Discussed is higher education in New Jersey in light of this historical condition; pricing policy; social equity; decisions, especially regarding institutional support, student aid, and public tuition; and the "free market." While the proportion of New Jersey high school graduates who stop participating in higher education because of the "free market" cannot be predicted, possibly out of every six students who leave the public sector but do not drop out of college, one will attend a New Jersey private institution and five will leave the state.
 (Author/KE)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

HE

ED127873

PRICING POLICY, SOCIAL EQUITY
AND INSTITUTIONAL SURVIVAL
IN TERTIARY EDUCATION IN NEW JERSEY

BEST COPY AVAILABLE

Alfred M. Lee
56 Sunny Slope
(P.O. Box 255)
Millington, N.J. 07946
(201) 647-0951

August, 1976

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

HE007122

CONTENTS

1. The Condition of Higher Education in New Jersey / p. 1
2. Pricing Policy in Higher Education in New Jersey / p. 4
3. Social Equity in Higher Education in New Jersey / p. 8
4. Decisions for New Jersey / p. 19
5. "Free Market" Tertiary Education / p. 27

1. The Condition of Higher Education in New Jersey

About two of every five New Jerseyans going to college leave the state.

New Jersey institutions are notably inert in gathering Federal support.

The New Jersey private sector has lost substantial revenue because of a brisk decline in its part-time enrollment.

The most current survey of tertiary education in America¹ commends New Jersey for its aid to private institutions and points to a deficit in low-priced open access public colleges. The study ignores some historical deficiencies that tend to manage New Jersey colleges independently of the managers.

The Emigration. About two of every five New Jerseyans going to college leave the state. This represents both a savings in tax subsidy and an export of New Jersey income to other states in the form of tuition, fees, room-and-board payments and incidental student-related expenses. The net interstate transfer cannot be determined; the data is not sufficient to measure

- o The impact on other states' accounts of revenue from New Jersey
- o The net interstate movement of Federal student aid.

Residential Education. "Four years at college" is

¹Carnegie Foundation for the Advancement of Teaching, The States and Higher Education (Jossey-Bass : San Francisco) 1976

a desire that many American families have for their children. It is the traditional college education.

Although New Jersey has increased the number of places in tertiary education in the past ten years, the state has made a comparatively small effort at increasing dormitory places. As opportunity for college credentials has expanded, the opportunity for "four years at college" has not. In the context of limited resources, this is a justifiable development.

The Top Quintile. Families that can best aspire to residential education (and emigration) are in the upper quintile of income. They are not "the rich," particularly. Almost two-thirds of the upper-quintile two-parent families include a working wife. These families, which participate most in higher education, tend to export college students. They also participate most in the private sector and least in the state colleges and county colleges.

The New Jersey Profile. The participation of the five income quintiles in New Jersey tertiary education shows the flight of the Top Quintile out of the public sectors.

Figure I

Participation of Income-Quintiles
in New Jersey Higher Education, by Sector

Quintile ²	County Colleges	State Colleges	Rutgers	All Public	Private	Public and Private
1st	22.3%	16.3%	13.7%	18.0%	12.5%	16.9%
2nd	22.5%	23.4%	19.8%	22.3%	16.2%	21.0%
3rd	21.4%	22.9%	22.4%	22.2%	18.3%	21.4%
4th	19.4%	21.4%	23.7%	21.0%	20.6%	21.0%
5th	14.5%	16.0%	20.6%	16.3%	32.5%	19.6%

² Estimates from Commission on Financing Postsecondary Education, An Analysis of the Monetary Benefits and Costs of Higher Education in New Jersey in 1975-76, adjusted for quintiles by Figure II of this study.

The higher-income 5th-quintile students occupy only 16% of the places at public institutions and not quite 20% of all places in New Jersey.

The lower-income 1st-quintile students, for whom emigration is precluded, participate even less. The quintile exceeds one-fifth of participation only at the two-year colleges; participation in programs leading to baccalaureate credentials is only 14%.

The Federal Input. New Jersey institutions are notably inert in gathering Federal support. Out-of-state institutions, as a result, receive two of every three research and development dollars collected from New Jersey taxpayers.³ Federal student aid is directed toward private institutions in all states. Out-of-state institutions again receive two of every three BEOG-SEOG-CWSP dollars collected in New Jersey.⁴

The Private Sector. Some private colleges are experiencing financial difficulties in the mid-1970's and in the conventional wisdom few private institutions will escape difficulties in the mid-1980's. Although national enrollments have been growing, the New Jersey private sector has lost substantial revenue because of a brisk decline in its part-time enrollment. Certain institutions have also lost full-time enrollment because of special situations.

³ Carnegie Foundation, Supplement, Figure A-12, p.16.

⁴ Estimate from Carnegie Foundation, Figure 12, p.38, and Commission on Financing Postsecondary Education, Table 6, p.15.

2. Pricing Policy in Higher Education in New Jersey

Intended or not, the effect of higher tuition will be to shake the Top Quintile out of public higher education.

Students are not likely to transfer from a less to a more expensive commuter education, especially for part-time credits.

For many New Jersey students, commuting can be as expensive as room-and-board.

Many voices speak to the pricing policy of the national accounts. One voice recommends that tuition at public institutions be priced at 50% of the instructional cost per student.⁵ Another suggests the slightly higher public pricing of 33% of total educational costs per student.⁶ Historically, tuition has been priced at 15-20% of educational costs at public institutions and at about 60% at private institutions.

There are three clear results of higher prices at the public institutions

- o Enhancing the competitive position of the private sector by narrowing the gap between private and public tuition
- o Taxing users according to their ability to pay (with student aid graduating the effective tuition-tax)
- o Increasing institutional revenues to meet rising costs.

*The price for New Jersey state colleges in 1976-77 has been set at about 40% of total educational costs.

⁵ Committee for Economic Development, The Management and Financing of Colleges (CED : New York) 1973.

⁶ Carnegie Commission on Higher Education, Higher Education: Who Pays? Who Benefits? Who Should Pay? (McGraw-Hill : N.Y.) 1973.

If tuition is raised with one purpose in mind, the other two will also result.

Families that qualify for student aid are unaffected by rises in tuition because they pay, in effect, a fixed price. And as tuition is raised, more families can qualify for the fixed-price preference while fewer families are asked to pay the advertised price. This pattern is complicated by families that pay the advertised price although they are eligible for the preference. Because of pride or inadequate information, they do not submit to the needs test.

If tuition is raised significantly in relation to per capita disposable income, four changes can be expected in the student body composition.

- o Some students in the middle quintiles will cease to participate because of the advertised price of participation
- o Some students previously eligible for preference will apply for it for the first time
- o Some students previously ineligible for preference will become eligible and will apply for it
- o Some students in the upper quintiles, who would ordinarily participate at the advertised price, will migrate to the private sector or out of state.

Certain changes in the public accounts can be predicted although their dimensions can only be guessed.

- o Enrollment will decrease
- o Student aid will increase
- o The expenditure per student will increase, at least in the short term
- o The total subsidy per student will increase.

Intended or not, the effect will be to shake the

Top Quintile out of public higher education. This group did not participate proportionately in the growth of the New Jersey public sector for two reasons: the scarcity of residential places and the failure of the pricing policy to attract the group. The same reasons will encourage higher-income students to seek education elsewhere, at New Jersey private colleges or out of state.

An often ignored factor in pricing is the aggregate outlay for subsistence. At residential institutions the chief dimension of subsistence is room-and-board. For students living at home, subsistence includes the cost of commutation. For many New Jersey students, commuting can be as expensive as room-and-board.*

The price differential shown in tuition, therefore, is the primary economic disincentive to a residential

*As the New Jersey population shifts westward and southward, the commuting distance to institutions in older population centers increases. A rough estimate of commutation costs can be counted for two hypothetical students sharing driving expenses for a 15-mile one-way trip.

When the cost of driving is assumed to be the standard 15¢ per mile, each student will pay \$2.25 for the daily round-trip. (If highway tolls are 35¢ in one direction, the expenditure per student will be \$2.60.)

Cafeteria luncheon, as a dimension of board, can average \$1.25 daily. When luncheon is added to driving costs, commuting expenses can total \$560 for a 32-week academic year (\$616 with highway tolls). For the hypothetical student driving alone, the outlay is \$920 for the academic year (\$1032 with tolls).

When board at home is estimated at \$15 per week, its cost is \$480 for the academic year.

The family outlay for commuter-related expenses can range from \$1040 (\$560 + \$480) to \$1512 (\$1032 + \$480). The typical residential expense for subsistence is \$1200-1400, which is approximately the expense of commuting 15 miles.

education. If the tuition gap is narrowed, the disincentive will be diminished and more students can be expected to migrate from the commuter sector of higher education to the residential sector. The shift is unlikely to affect New Jersey private colleges other than marginally.

- o Students are not likely to transfer from a less to a more expensive commuter education, especially for part-time credits
- o Some New Jersey private institutions use their dormitory places to serve students from other states
- o Some New Jersey private institutions limit access by non-economic criteria, such as sex, religion and high school credentials
- o Most Northeastern public institutions price migrant tuition lower than New Jersey private tuition
- o If enrollments in the 1980's decline as predicted, out-of-state institutions will be encouraged to compete more aggressively in the buyer's market.

3. Social Equity in Higher Education in New Jersey

State assistance is distributed progressively in each sector.

The higher subsidy for Rutgers shows that it is the research university in the New Jersey public system.

Benefits are not given for the asking; they are "sold" by the state for a fixed price.

The Commission on Financing Postsecondary Education in New Jersey (the Booher Commission) errs when it compares current-dollar taxation in 1970 with current-dollar state benefits from higher education in 1975-76.

The Commission apportions state expenditures in Fiscal Year 1976 among income groups according to their tax contribution in 1970. "The proportion of taxes paid by an income group is related to the effective rate [of state taxation] through the number of families," the Commission observes, "and their median income."⁷ (Emphasis added.) Because of spirited inflation in the 1970-76 period, the lower-income groups have been significantly depopulated; the tax burden has risen with the taxpayer into higher-income categories.

Although the configuration of the Fiscal Year 1976 tax burden is not available, it can be inferred by lifting New Jersey taxpayers through the income groups in proportion to the general rise of all United States taxpayers. The method is not exact but it is usable.

Figure II shows this adjustment in Column 1 for the

⁷Booher Commission, p.17.

period 1970-74.*

In Column 2, a second adjustment is shown. Boohar Commission figures distribute costs and benefits according to total taxpaying units -- primary families and primary individuals. But primary individuals do not have sons and daughters to send to college. While they are taxpayers, primary individuals are disproportionately populated in lower-income areas because of their youth or widowed retirement. Column 2 converts total taxpaying units to primary families only.

Column 3 in Figure II shows the percentage of the 1974 population in each income group according to the 1970 census base. Column 4 adjusts to the 1974 base.

The Figure II conversions are consistent with New Jersey's rank in the national and regional profile.

Figure III
Income at Selected Positions, 1974

	Upper Limit of Each Fifth			
	Lowest	Second	Middle	Fourth
Northeast	\$7400	\$11671	\$15845	\$21592
New Jersey by Model	\$7796	\$12292	\$17183	\$23512

Figure IV
Percent Distribution of Aggregate Income, 1974

	Lowest	Second	Middle	Fourth	Highest
	Fifth	Fifth	Fifth	Fifth	Fifth
United States	5.4	12.0	17.6	24.1	41.0
Northeast	6.0	12.5	17.8	24.0	39.8
New Jersey by Model	4.6	12.0	17.5	24.2	41.6

*The inflation from Fall 1974 to Fall 1975 (the latest documented period) was 7.6%, which has not been added to Figure II.

Figure II
Conversion of 1970 Population to 1974 Primary Families by Income Groups

Family Income	Column 1	Column 2	Column 3	Column 4
\$0-2999	.957	.443	4.9%	4.5%
\$3000-4999	.778	.740	6.0%	5.6%
\$5000-7499	.852	.902	9.4%	8.7%
\$7500-9999	.935	1.000	10.9%	10.1%
\$10,000-14,999	1.074	1.119	26.2%	24.2%
\$15,000-24,999	1.203	1.219	34.2%	31.6%
\$25,000 and Over	1.436	1.250	16.5%	15.3%

Column 1: 1974 income groups as a proportion of 1970 income groups.
 Column 2: 1974 primary families as a proportion of 1974 taxpaying units.
 Column 3: 1974 primary families, by income group, as a percentage of total 1970 primary families.
 Column 4: 1974 primary families, by income group, as a percentage of total 1974 primary families.

Source: Current Population Reports (January, 1976)

Table 5 of the Booher Commission benefit-cost study shows the 1975-76 distribution of New Jersey institutional support and student aid by sector and by income group. Figure V⁸ shows the comparable costs, in taxation, of these benefits according to the 1974 model shown in Figure II. Figure V shows that the tax burden is greatest in the \$10,000-\$25,000 income groups, especially in the \$15,000-\$25,000 group. The Commission has erred in assigning this burden to the \$5000-\$15,000 group.

Figure VI⁹ restates the benefits of state support net of state taxes; the benefits are negative for the two groups over \$15,000, the top half of the population.

Figure VII¹⁰ completes the economic narrative by showing the dollar benefits that accrue to families by participating in higher education, less their share of the taxation.

Figure VII displays three main features of tertiary education in New Jersey.

- o Families in the lowest quintile receive greater state assistance at private colleges than at county colleges
- o State assistance is distributed progressively in each sector
- o At public institutions, the county and state colleges are operated less expensively than the state research university.

The expenses of operating a multi-sector system are sometimes misunderstood. The pioneer examination of these expenses¹¹ showed that two-year public colleges in

⁸ See Ibid., Table 11, p.22.

⁹ See Ibid., Table 17, p.33.

¹⁰ See Ibid., Table 18, p.34.

¹¹ W. Lee Hansen and Burton Weisbrod, Benefits, Costs, and Finances of Public Higher Education (Markham Publishing Co. : Chicago) 1969.

Table 5
 (Booher Commission, Monetary Benefits and Costs)

The Distribution of All State Aid Benefits by Sector

Family Income	County Colleges		State Colleges		Rutgers		Independents		Total Benefits		Benefits % of Total	
											Per Student	Benefits
\$0-2999	\$ 4,223,000	\$ 4,719,000	\$ 2,948,000	\$ 1,360,000	\$ 13,250,000	\$1338	6.6%					
\$3000-4999	2,586,000	4,446,000	2,735,000	1,184,000	10,951,000	1493	5.5					
\$5000-7499	3,287,000	5,976,000	4,588,000	1,430,000	15,281,000	1311	7.6					
\$7500-9999	3,859,000	9,899,000	6,228,000	1,425,000	21,411,000	1147	10.7					
\$10,000-14,999	8,718,000	23,370,000	17,637,000	2,400,000	52,125,000	1096	26.1					
\$15,000-24,999	9,780,000	27,161,000	24,760,000	2,425,000	64,126,000	1064	32.1					
\$25,000 and Over	3,128,000	8,630,000	9,660,000	1,383,000	22,801,000	851	11.4					
TOTAL	\$35,580,000	\$84,210,000	\$68,558,000	\$11,606,000	\$199,945,000	\$1100	100.0					

Figure V

The Distribution of All State Aid Costs by Sector

Family Income	County Colleges	State Colleges	Rutgers	Independents	Total Costs	% of Total Costs	Total Cost Per Family
\$0-2999	\$ 93,000	\$ 219,000	\$ 178,000	\$ 30,000	\$ 520,000	0.3%	\$ 4.72
\$3000-4999	530,000	1,255,000	1,022,000	173,000	2,979,000	1.5	21.74
\$5000-7499	2,220,000	5,255,000	4,278,000	724,000	12,477,000	6.2	58.61
\$7500-9999	3,462,000	8,194,000	6,671,000	1,129,000	19,455,000	9.7	78.72
\$10,000-14,999	9,027,000	21,364,000	17,393,000	2,944,000	50,726,000	25.4	85.67
\$15,000-24,999	13,659,000	32,328,000	26,319,000	4,456,000	76,759,000	38.4	99.28
\$25,000 and Over	6,589,000	15,596,000	12,697,000	2,149,000	37,030,000	18.5	98.92
TOTAL	\$35,580,000	\$84,210,000	\$68,558,000	\$11,606,000	\$199,945,000	100.0	\$89.82

131

Sources: Figure II of this study
Booher Commission, Table 7 (revised) and Table 11

In this figure no costs are distributed to primary individuals.

Figure VI
The Distribution of All Net State Aid Benefits by Sector

Family Income	County Colleges		State Colleges		Rutgers Independents		Total		Net Benefits Per Family
\$0-2999	\$ 4,130,000	\$ 4,500,000	\$ 2,770,000	\$ 1,330,000	\$ 12,730,000	\$ 115.62			
\$3000-4999	2,056,000	3,191,000	1,713,000	1,011,000	7,972,000	58.18			
\$5000-7499	1,067,000	721,000	310,000	706,000	2,804,000	13.17			
\$7500-9999	397,000	1,705,000	-443,000	296,000	1,956,000	7.91			
\$10,000-14,999	-309,000	2,006,000	244,000	-544,000	1,397,000	2.36			
\$15,000-24,999	-3,879,000	-5,167,000	-1,559,000	-2,031,000	-12,636,000	-16.34			
\$25,000 and Over	-3,461,000	-6,966,000	-3,037,000	-766,000	-14,229,000	-38.01			

Figure VII
 Net State Aid Per Family with Student, by Sector

Family Income	County Colleges	State Colleges	Rutgers	Independents
\$0-2999	\$ 857	\$ 1847	\$ 2958	\$ 1119
\$3000-4999	998	1763	2987	824
\$5000-7499	654	1606	2677	746
\$7500-9999	515	1395	2411	417
\$10,000-14,999	470	1320	2283	222
\$15,000-24,999	455	1288	2230	97
\$25,000 and Over	449	1256	2168	34

California cost the taxpayer less than the California State University and Colleges system, while the University of California system cost the taxpayer most. The California governor responded to the study by asking why the taxpayer should subsidize "intellectual curiosity."

Intellectual curiosity is subsidized when a faculty generally teaches less than the standard load, which is twelve credit-contacts per week. Intellectual curiosity is minimized when a faculty generally teaches more than the standard load. Faculty payscales are usually higher where research is being subsidized. The dimension of this kind of subsidy can be roughly measured -- within a specific coordinated system -- by the expenditure per student. The higher figure for Rutgers shows that it is the research university in the New Jersey public system. The benefits of the greater state subsidy at Rutgers accrue to the faculty, and only indirectly to the general public and the students.

Even when no adjustment is made for the subsidy to intellectual curiosity, the net benefits shown in Figure VII do not define the true monetary benefits transferred from taxpayers to participating families. Benefits are not given for the asking; they are "sold" by the state for a fixed price. This price -- tuition and required fees -- is a user tax. To be sure, it is wholly refunded to the user in the form of instruction and other benefits, and those who cannot pay the price receive outright grants to help "buy" the benefits; but for nearly all participating families there must be an outlay from the family budget.

In Figure VIII tuition and required fees are shown as a monetary proportion of each net benefit-dollar in the New Jersey public institutions.

Students in the county colleges pay for proportionately

Figure VIII
 Payment in Tuition and Fees for Each Net State Benefit-Dollar
 per Family with Student, by Sector
 in Public Institutions

Family Income	County Colleges	State Colleges	Rutgers
\$0-2999	49¢	36¢	24¢
\$3000-4999	42¢	38¢	24¢
\$5000-7499	64¢	42¢	27¢
\$7500-9999	81¢	48¢	30¢
\$10,000-14,999	89¢	51¢	32¢
\$15,000-24,999	92¢	52¢	32¢
\$25,000 and Over	93¢	53¢	33¢

fewer state benefits because they also receive county benefits. Local benefits are not available to students in the other two public sectors, where state college students pay about 60% more for each dollar of subsidy than Rutgers students. This again reflects the "curiosity" and research component of the Rutgers budget. It also shows that for the top four quintiles of income, the state colleges provide a subsidy/tuition (benefit/cost) ratio of only 2:1, one of the lowest benefit/cost ratios in the United States.¹² For 1976-77 the ratio has been lowered to 3:2.

A few general observations are warranted about the condition and the pricing of New Jersey higher education as described in these patterns.

- o Tax benefits (Figures VI and VII) are slightly progressive
- o A free-tuition system, financed wholly by state taxes, will also be slightly progressive (Figure V) if participation remains stable
- o One explanation of the low benefit/cost ratio in the non-university public sector is high tuition
- o To many higher-income students, for whom the price of commutation is as great or greater than residency costs, the non-university public sector is unattractive
- o The private sector is underdeveloped*
- o The 1976-77 pricing policy will continue to encourage higher-income students to attend out-of-state colleges
- o The 1976-77 pricing policy does not add encouragement for lower-income students to attend college.

¹²Carnegie Foundation, Supplement, Figure A-19, p.25.

*Boston College and Boston University alone offer as many dormitory places as the whole New Jersey private sector offers.

4. Decisions for New Jersey

Tuition cannot be contained within the state.

Federal student aid, portable interstate, overshadows the state effort in student aid.

A policy of high tuition combined with high state student aid is especially vulnerable to economic recession because it maximizes the availability of student aid while creating more need for it.

Three sources of revenue for tertiary education are matters of public policy: institutional support, student aid and tuition.

Institutional Support. The Booher Commission finds tax "inequities" for families earning between \$5000 and \$15,000 because of "the large percentage of state aid appropriated to institutions."¹³ When 1974 income profiles (instead of the 1970 profiles used by the Commission) are compared with 1975-76 enrollments, however, the inequities do not exist. The benefits of taxpayer support to institutions are distributed equitably in New Jersey, in some degree according to student need. When 1975-76 income statistics become available, the net benefits will appear even more progressive.

Student Aid. New Jersey student aid grants are mainly generated by student need, but the funds enter the general accounts of institutions. Although as input this form of state support appears more progressive than enrollment-

¹³Booher Commission, p.34.

driven support, the output in instruction and general services is rendered without notice of financial need.

Tuition. As a user tax that can be graduated with student aid, tuition can be mildly progressive as input. Like the social security tax, however, it has a ceiling above which no payment is required. The ceiling is regressive. If assisted students are expected to make a minimum contribution through employment, the regressivity is severe.* Regressivity is greatest when this minimum is contributed through campus employment at less than the prevailing scale; in such a case, the student contribution must be entered into the accounts both as payment and as foregone income that is retained by the employer -- the institution.

Each of these dimensions has unique properties in New Jersey.

Institutional Support

- o Can be coordinated by a central body for the purposes of access, quality and cost-efficiency
- o Remains input-progressive because higher-income families continue to participate in benefits less than they pay in taxes

*In a hypothetical model of the price of higher education as a graduated user tax, tuition can be assumed at \$1000 and student aid can be administered progressively up to \$1000.

Family Income	\$3K	\$5K	\$8K	\$10K	\$12K	\$15K	\$20K	\$25K	\$30K
Price (Tuition Less Aid)	0	\$50	\$200	\$400	\$600	\$1000	\$1000	\$1000	\$1000
Price as % of Family Income	0	1%	2½%	4%	5%	7%	5%	4%	3%

When a minimum contribution of \$500 per student is required, the pricing schedule changes sharply. (And family incomes are increased by \$500.)

Price	\$500	\$550	\$650	\$750	\$850	\$1000	\$1000	\$1000	\$1000
%	14%	10%	8%	7%	7%	7%	5%	4%	3%

- o Cannot easily be expanded in the private sector for several political and fiscal reasons, most notably the difficulty in deciding priorities among private institutions, the inapplicability of an enrollment-driven formula to private institutions whose mission is to be small, and legal difficulties in directly funding institutions with religious affiliations.

Student Aid

- o Is portable between the public and private sectors
- o Is more input-progressive than institutional support
- o Cannot be coordinated for the purposes of access, quality and cost-efficiency
- o Is vulnerable to a self-aggrandizing private institution, as suggested in the current Bay College (Baltimore) investigation
- o Fluctuates with the general economy.

Tuition

- o Can be priced either to encourage or discourage unassisted students from participating
- o Cannot be contained within the state.

Any policy of financing tertiary education involves a structure of these advantages and disadvantages. In brief and in extreme, New Jersey has eight economic choices.

	Institutional Support	Student Aid	Public Tuition
1.	LOW	LOW	LOW
Students choose among the low-priced, low-benefit public sector, the private sector and the out-of-state sector.			
2.	LOW	LOW	HIGH
Students decide whether to attend college according to family income. Higher-income students choose between the private and the out-of-state sectors.			

3. LOW HIGH LOW
Students choose between the low-priced public sector and the aid-rich private sector.
4. LOW HIGH HIGH
Students choose among the aid-rich public and private sectors and the out-of-state sector.
5. HIGH LOW LOW
Students participate in the low-priced, high-benefit public sector.
6. HIGH LOW HIGH
Students decide whether to attend college according to family income. Higher-income students choose among the high-benefit public sector, the private sector and the out-of-state sector.
7. HIGH HIGH LOW
Students choose between the low-priced, high-benefit public sector and the aid-rich private sector.
8. HIGH HIGH HIGH
Students choose between the high-priced, high-benefit public sector and the aid-rich private sector.

Some of these choices represent very risky policy. The X/HIGH/HIGH configuration in Models 4 and 8 is especially vulnerable to economic recession because it maximizes the availability of student aid while creating more need for it. When personal income declines in a recession, state revenues also decline while student need increases. During a recessionary squeeze, students cannot be coordinated as efficiently as institutions in order to reduce costs; the recession-inflated student aid budget will have to be fully funded unless the X/HIGH/HIGH system is abandoned under stress. There are only four sources of immediate funding.

- o The budget for institutional support

- o The budgets of other state programs
- o Higher taxes
- o Deficit state spending.

A reduction in institutional support means a reduced commitment to public-college students for the benefit of private-college students in Models 4 and 8. Two of the other choices are politically unrealistic and the third is unconstitutional.

The X/LOW/HIGH configuration in Models 2 and 6 limits the access of lower-income students.

Any X/X/HIGH configuration will discourage some students from attending college and encourage others to emigrate.

Policy decision mindful of these dangers has to be limited to Models 1, 3, 5 and 7. In these models "LOW" tuition is not clearly defined; but the national averages, skewed as they are toward low tuition, show a usable norm. Tuition and fees averaged \$589 at public universities nationally in 1974-75 and \$474 at public comprehensive colleges.¹⁴ During the same year tuition and fees averaged \$718 at Rutgers and \$667 at the state colleges.¹⁵ In this comparison the Rutgers tuition rides 22% above the national average and tuition at the state colleges is 41% above. (The New Jersey prices have been raised 30% for 1976-77.)

In state institutional support, Rutgers ranks nationally in the top quartile of public research universities and the New Jersey state colleges rank slightly above the national median for public comprehensive colleges.¹⁶ In student aid for all sectors, New Jersey ranks fourth in the United States.¹⁷

¹⁴ Carnegie Foundation, Supplement, Figure A-25, p.32.

¹⁵ Booher Commission, p.39.

¹⁶ Ibid., and Carnegie Foundation, Supplement, Figure A-21, p.28.

¹⁷ Carnegie Foundation, Figure 14, p.54.

The actual configuration for New Jersey is MID-HIGH/HIGH/HIGH, similar to Model 8, if "LOW" and "HIGH" are defined by the national averages. Although such conventional definitions need not be helpful or even germane, the apparent high levels of tuition and state student aid in New Jersey can be signs that the state is prepared to take the risks of X/HIGH/HIGH. The continuing high emigration of New Jersey students is what Models 4 and 8 predict.

Other factors complicate the economy of pricing. The structure of public benefits and costs can be misperceived as LOW/X/HIGH, particularly by higher-income families. The reasons are

- o That historically the public comprehensive colleges served narrowly as normal schools and their new status has not yet been fully perceived by parents
- o That the emergence of two and four-year commuter institutions has been perceived in common with the "open enrollment" controversy in New York City
- o That the advertised local-resident tuition at comparable public institutions east of New Jersey (in New York City, Connecticut and Massachusetts) has been lower than New Jersey tuition, suggesting that New Jersey is overpriced
- o That dormitory space is relatively inaccessible in New Jersey, and New Jersey tuition-room-and-board charges are a high percentage of the charges at comparable institutions out of state.

Independent New Jersey institutions compete both with public New Jersey institutions and with private and public out-of-state institutions. Their competitive position in New Jersey is enhanced by relatively high public tuition, by state and Federal student aid that favors private institutions, and by state institutional aid to private institutions that ranks second in the United States.¹⁸

¹⁸ Carnegie Foundation, Supplement, Figure A-30, p.37.

The Booher Commission has argued for increased state student aid and higher public tuition,¹⁹ but it is not clear that the strategy can give additional comfort to ailing institutions in the private sector.

- o The strategy as practiced in recent years has not prevented the ailments
- o Federal student aid, portable interstate, overshadows the state effort in student aid
- o Some private comprehensive residential colleges are active in the commuter sector, where the state colleges have intervened.

The expansion of public commuter education has filled a need; it also gives the appearance of the public sector competing for enrollment with the private sector. The 1976-77 academic year will serve experimentally to show whether this apparent competition exists in fact. Because of state budgetary limitations, public tuition has been raised by 30% and ceilings have been imposed on enrollments.

The full-time freshman and the part-time enrollments for 1976-77 ought to show whether financially troubled private institutions can gain ground when the local public competition is reined in. If this happens, it will argue that pricing policy in the public sector can affect the entire private sector during the 1980's. But if the experimental year does not aid private enrollments, the causes of current and future ailments are likely to lie outside the control of state policy

- o In interstate Federal assistance
- o In families' perceptions of the private offerings
- o In families' perceptions of out-of-state offerings.

Whatever the results of a crisis year in the public

¹⁹Booher Commission, p.34.

sector, future policy cannot go far in the direction of 1976-77 practice. A ceiling on enrollments is effectively a policy of college admission by lottery. But the lottery will be rigged against certain groups (late-comers, part-time day students, evening students and transfer students); if students with weaker high school credentials are excluded, the goal of open access will be defeated.

If New Jersey decides on a policy of structuring institutional support, student aid and tuition according to specific objectives, higher education will become a carefully administered marketplace. The Booher Commission has proposed to administer the market to resemble a "free market."

5. "Free Market" Tertiary Education

Institutions need not play the "free market" game unless they are carefully regulated.

Many middle-income families will perceive the "free market" as a closed market, especially for those who do not choose to classify themselves as needy.

If the "free market" drop-out rate is 25%, however, the state will lose two college educations for every new private tuition.

The most extreme "free market" proposals always take the shape of Model 4: LOW/HIGH/HIGH. "HIGH" tuition is set at the full cost on instruction in some proposals, at full instructional costs in others. In both approaches the public and private institutions must be regulated in the way they advertise tuition; otherwise, institutions with revenues from dormitories, dining halls, research grants, endowment, public general support or church support can draw subsidy from these ancillary accounts to lower the price of tuition below costs. That is, institutions need not play the "free market" game unless they are carefully coordinated.

Additional coordination will be necessary to assure an equitable distribution of student aid. If it is to be made available to pay the price of room and board, aid must also be made available to students commuting long distances even when this means public payment for the depreciation of private vehicles.

Many middle-income families will perceive the "free market" as a closed market, especially for those who do not choose to classify themselves as needy. Higher-income families, even when eligible for student aid, will perceive

out-of-state public institutions as more reasonably priced than most New Jersey institutions.

The proportion of New Jersey high school graduates who stop participating in higher education because of the "free market" cannot be predicted. The dispersal of public students into different sectors, however, is likely to resemble the historical division between the emigration and the private sector.²⁰ Of every six students who leave the public sector but do not drop out of college, one will attend a New Jersey private institution and five will leave the state.

If only one student in seven leaving the private sector is a drop-out, New Jersey will lose one college education from the state census for every tuition added to the state's private accounts. If the "free market" drop-out rate is 25%, however, the state will lose two college educations for every new private tuition.

²⁰ Goals for New Jersey Higher Education: Phase I Master Plan (New Jersey Board of Higher Education) January, 1970, Figure 16, p.60. Of every 100 New Jersey high school graduates starting college in 1968, only ten entered the New Jersey private sector (eight at 4-year colleges and two at 2-year colleges). Fifty-three left the state (38 to 4-year public colleges, five to 2-year public colleges and ten to 4-year private colleges). Of the 63 students not attending New Jersey public institutions, 84.1% did not attend New Jersey private colleges either.