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## STUDENT ATTITUDES TOWARD INCOME CONTINGENT LOANS

*D. Bruce Johnstone, Daniel B. Wackman, Scott Ward*

In early 1971, Yale University announced its "Tuition Postponement Option," and revived interest in income contingent loans as a means of financing higher education. The intense interest in this form of lending, expressed by colleges, governments, students, and parents, grows out of a concern for the rapidly rising costs of higher education, especially that portion — nearly \$1.5 billion in 1970-71 — covered by student borrowing. Income contingent loans, to their proponents, could provide a more "manageable" form of credit by expressing the annual repayment obligation as a percent of the borrower's future annual income. In this way, repayments could be correlated with ability to pay, and some protection could be afforded to those whose future earnings might be insufficient to repay their loans in full.

The research reported in this paper was undertaken as part of a series of studies on the income contingent loan concept conducted by the Ford Foundation. D. Bruce Johnstone is Project Specialist and Director of "Pay As You Earn" studies at the Ford Foundation. Daniel Wackman is the Director of the Research Division, School of Journalism and Mass Communication, University of Minnesota. And Scott Ward is Research Associate, Marketing Science Institute; and Assistant Professor, Harvard Business School.

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Income contingency raises a host of conceptual, financial, legal and administrative problems. Two of the major — and hitherto unstudied — questions are student willingness to borrow in this form and student preference among the many income contingent loan forms theoretically available. Assuming that income contingent loans can be made administratively, financially, and legally viable, we still need to know how the student might respond to the option of one or more loan plans of the income contingent variety and which plans best seem to meet the students' criteria of "more manageable debt." This paper is a report of a ten-campus, 1000-student, personal interview survey conducted in the spring of 1971 on student attitudes toward income contingent and other loan forms. Also summarized in this paper are findings from two similar surveys supported by the Ford Foundation at Stanford and Portland State universities, as well as some preliminary data from the Yale Tuition Postponement Option.

## II

### *The Income Contingent Concept*

In a conventional, fixed-schedule loan, the borrower contracts for — and thus knows at the time of borrowing:

- \* a rate of interest,
- \* a repayment period, and
- \* an amortization schedule, stipulating each repayment over the life of the loan.

All who borrow under the same terms make identical payments and repay at the same rate of interest. The conventional borrower does not know, and generally has no control over, the *burden* of repayments — that is, the relationship of the annual payments or of the ultimate cost of the loan to his income.

In an income contingent loan, by contrast, a borrower contracts for — and knows at the time of borrowing:

- \* a repayment rate, specifying the percent of income — generally per \$1000 borrowed — to be repaid each year;
- \* a maximum repayment period beyond which he need no longer repay regardless of accumulated repayments; and
- \* an upper limit on accumulated repayments, expressed either as a premium (e.g., 10%) rate of interest or as some multiple (e.g., 150%) of the original debt at a market rate of interest.

The borrower repays a percent of annual income per \$1000 borrowed until he has repaid his debt at, say, a 10% rate of interest — or, as in the Yale plan, until he has repaid 150% of his debt at about 7% — or until the maximum repayment period is reached, *whichever comes first*. High earners, of course, may get out well before the maximum repayment period — but will repay their loans at more than cost. Some low earners will reach the maximum repayment period and be forgiven a substantial portion of their debt. The comparison between a fixed schedule and an income contingent loan is shown in Table 1.

The benefits ascribed to income contingency are two:  
*First*, repayments are correlated with income, distributed over time in such a way as to maintain a constant "burden" of annual repayments.  
*Second*, there is some redistribution of the *total* repayment burden among borrowers such that some portion of borrowers with the lowest earnings never repay their debts in full and are, in turn, subsidized by the higher earning borrowers who will repay their loans at more than cost.

The degree of low-earner subsidization, or redistribution of income among borrowers, however, will vary widely among loan plans, depending entirely upon the particular combination of terms selected. A high repayment rate, particularly when combined with a long repayment period, means that repayments could probably be generated from nearly all borrowers sufficient to meet the average, or "break-even", rate required by the loan plan. Few borrowers would receive subsidies, and a low or moderate upper limit on repayments would be sufficient to generate the small surplus needed from the higher earning borrowers. Such a plan would distribute the individual's annual payments over time in accord with income, but would do little to redistribute the *total* burden among borrowers.

Table I  
 Comparison Between Fixed Schedule and Income  
 Contingent Loan Contracts

The Borrower:	A Fixed-Schedule Loan	An Income Contingent Loan
A. Contracts for ..	<ol style="list-style-type: none"> <li>1. A rate of interest.</li> <li>2. A repayment period</li> <li>3. An amortization schedule showing each repayment installment.</li> </ol>	<ol style="list-style-type: none"> <li>1. An annual repayment rate, generally a percent of income per \$1000 borrowed.</li> <li>2. An upper limit on liability, which may be expressed as a premium, or "exit," interest rate (e.g. 9%), or a multiple (e.g. 150%) of the original principal plus a market rate of interest.</li> <li>3. A maximum repayment period.</li> <li>4. (optional) a minimum annual repayment.</li> </ol>
B. Repays until ..	<ol style="list-style-type: none"> <li>1. Each schedule repayment has been made.</li> </ol>	<ol style="list-style-type: none"> <li>1. He has reached the upper limit on liability (e.g., repaid his loan at 9%) or has repaid for the maximum repayment period—whichever comes first.</li> </ol>
C. Discovers, depending on income .....	<ol style="list-style-type: none"> <li>1. The "burden" of the loan —i.e., the relationship of annual repayments and the total cost of the loan to annual and lifetime income.</li> </ol>	<ol style="list-style-type: none"> <li>1. Each annual repayment.</li> <li>2. The actual repayment period.</li> <li>3. The actual rate of interest paid.</li> </ol>

On the other hand, low repayment rates, particularly if combined with short maximum repayment periods, mean that many borrowers would be unable to cover the full cost of their loans. Unless there is some outside source of these subsidies, or "forgiven balances", they would have to be recovered from the higher earning borrowers, and the plan would need high "exit" interest rates or high "multiples of principal" in order to generate substantial surplus payments from high earners. Such a plan actually redistributes income among borrowers, "mutualizing" the risk of low earnings.

An income contingent loan plan, then, can provide:

- \* low annual repayments . . . but at a "cost" of long repayment periods for most borrowers; or
- \* short repayment periods . . . at a "cost" of higher repayment rates.

Similarly, a plan can feature:

- \* generous subsidies to low earning borrowers . . . but at a "cost" of high effective interest rates paid by higher earning borrowers, or
- \* minimal "premiums" collected from the higher earners . . . but with a loss of protection for those whose future incomes turn out to be low.

### III

#### *The Survey*

In order to predict student receptivity toward the concept and to ascertain which students might prefer which kinds of income contingent loans, we sought answers to the following questions:

1. What proportion of students have borrowed in the past . . . in what form and in what amount . . . and how many plan to borrow in any given year?
2. What proportion of these likely borrowers would prefer some kind of income contingent loan over conventional borrowing alternatives?
3. What kind of income contingent loans, among options differing widely in terms, amortization schedules, and degree of redistribution from high to low earners, do students prefer?
4. What "features" of a loan (e.g., interest rates, repayment periods, promise of a subsidy in the event of low earnings, etc.) are most instrumental in loan preferences?

For each set of questions we were interested not only in aggregate responses but in those variables or attributes which predict response and which tell us something about those students who might prefer alternative loan forms. Do the students' expressions of loan preference, in other words, differ systematically by such attributes as:

- \* parental income
- \* expected future income
- \* student status (e.g., race, sex, class)
- \* type of institution

Ten institutions were surveyed, most of which had expressed some interest in income contingent lending, but which also represented a range of institutional types.\* The target sample was to include about 40 percent undergraduate and about 60 percent graduate students, excluding only those from graduate or professional schools which maintained distinct faculties (e.g., medicine and law). Interviews were obtained from 430 undergraduates and 507 graduates for a total sample of 937. The institutions and number of students polled are shown in Table 2.

### *Borrowing Experience*

Students from low income families and black students (predominantly from Clark and Howard) had borrowed more in their college careers and during the current (1970-71) school year and expected to borrow more in the future than other students. These results are shown in Table 3. Over half of the students sampled had borrowed, including 61% of the black students, 58% of the white graduate students, and 43% of the white undergraduates. About one-third of all students sampled had borrowed that year, and about one-fourth of the continuing students expected to borrow in the next (71-72) academic year. Borrowing experience did not differ significantly among undergraduates who attended public or private institutions, nor by sex or marital status, although working students holding part-time jobs were more apt to borrow. Over-all, about three-fifths of black students and about two-fifths of white undergraduates at the institutions surveyed were found likely to borrow sometime during their undergraduate years.

Table 2  
Institutions and Numbers of  
Students Surveyed

Institution	Number of Students Interviewed		Total
	Undergraduates	Graduates	
<i>Public</i>			
U. Cal-Berkeley	40	66	106
Purdue	51	50	101
Washington	39	61	100
Wisconsin	42	62	104
<i>Private</i>			
Brandeis	38	61	99
St. Louis U.	40	61	101
Emory	36	69	105
MIT	36	59	95
<i>Predominantly Black</i>			
Howard	29	18	47
Clark	79	0	79
<i>Totals</i>	430	507	937

\* Most conspicuously absent were smaller state colleges and private liberal arts colleges. Because of the particular problems in considering an income contingent loan plan for junior colleges, these, too, were not considered for inclusion in the sample.

*Preference Among Alternative Income Contingent Loan Plans*

The respondents were presented with three income contingent loan options, each designed to "break even" for the lender, but each offering different terms, different degrees of low income protection (i. e., redistribution of income from high to low earners), and different emphases on minimizing annual or total repayment obligations. Respondents were shown repayment schedules with annual and total repayments and actual interest rates for each plan according to projected "low", "average", and "high" future incomes. The income contingent loan options were:\*

Plan I: \* .85% of income per \$1000 borrowed repayment rate

\* 8% maximum, or "exit" interest rate

\* 30 year maximum repayment period

Table 3  
Borrowing Experience by Race and Parental Income <sup>(a)</sup>

	Black family income			White undergrad. family income			White grad. family income		
	All Students	low	med. or high	low	med.	high	low	med.	high
Previous borrowing	54%	76%	44%	64%	55%	20%	68%	63%	44%
Previous borrowing over \$2,000	17	18	5	14	12	4	25	27	14
Borrowing in 1970-71	32	66	29	67	41	14	28	31	20
Borrowing in 70-71 over \$1,000	13	21	11	12	14	5	15	14	8
Expect to borrow in 71-72	39	68	58	57	50	37	29	16	20
Expect to borrow in 71-72 over \$1000	14	25	13	28	27	8	8	3	10

(a) Low = under \$10,000  
Medium = \$10,000 to 20,000  
High = over \$20,000

This plan provides minimal redistribution of income between high and low earners and could be expected to appeal to those who anticipate high incomes, who have little fear of unmanageable debt, and/or who are averse to the notion of high earners having to partially subsidize low earners.

Plan II: \* .65% of income per \$1000 borrowed repayment rate

\* 9% maximum, or "exit," interest rate

\* 30 year maximum repayment period

\* The plans were generated from the model developed by Stephen P. Dresch and Robert D. Goldberg. They are based on future income estimates drawn from 1969 Census data, and are designed to recover about 7.5% over all borrowers. These are but three of the literally infinite number of plans (i.e., combinations of repayment rates, exit interest rates, and maximum repayment periods) which can be generated from any given set of future income profiles together with a target "break even" rate of return from all borrowers. See Stephen P. Dresch and Robert D. Goldberg, "Variable Term Loans for Higher Education: Analytics and Empirics," *The Annals of Economic and Social Measurement*, 1:59-92, Jan., 1972.

This plan features more redistribution of income between high and low earners. In addition, it features lower repayment rates than Plan I, minimizing the annual burden, but lengthening the probable terms for most borrowers, regardless of the amount or rate of interest paid at termination of one's obligation. It is a plan which should appeal to the borrower who expects low incomes and who places a very high premium on minimizing the annual payment burden. It would not be expected to appeal to the borrower who anticipates high income or who places a high premium on a short repayment obligation and minimum total dollar repayments.

- Plan III: \* .85% of income per \$1000 borrowed repayment rate  
 \* 10% maximum, or "exit" interest rate  
 \* 20 year maximum repayment period

Plan III is a high subsidy plan, presumably attractive to those who anticipate low earnings. Because of the high maximum interest rates — paid by all those who terminate their obligations before the maximum repayment period — it is a costly plan for the high earners.

Respondents were asked which of the three plans they would prefer, assuming a need to borrow \$3000. Preferences among these three Plans are shown in Table 4, according to student status. Plan I — the low subsidy 30-year plan — was the most attractive, with Plan II — the low repayment rate-moderate subsidy plan by far the least attractive. This suggests little value attached to low annual repayment rates, at least for debts in the neighborhood of \$3,000. Those students who wanted low income protection evidently turned to the high subsidy 20-year Plan III. Students preferring Plan III — and presumably expecting lower incomes — were also somewhat more "actually interested" in borrowing on an income contingent basis.

Table 4  
 Preference Among Three  
 Income Contingent Loan Options

	Choice of Plan			Total
	Plan I 30-year low subsidy	Plan II 30-year, low rpmt. rate	Plan III 20-year, high subsidy	
White undergraduates (n=301)	52%	5%	43%	100%
White graduates (n=458)	61	8	31	100
Black undergraduates (n=162)	49	2	49	100
All students <sup>(a)</sup> (n=921)	56	6	38	100
All continuing students expressing an "actual interest" in some VTL (n=76)	49	8	43	100

The preference among plans, as expected, was related to future income expectations, with high exectors preferring Plan I (low subsidy) over Plan III (high subsidy) by a margin of over 2:1. Low income exectors expressed a similar preference for the high subsidy over the low subsidy option. These results are shown in Table 5. Black students and females, largely as a result of income expectations, expressed a slight preference for the high subsidy Plan III over Plan I. All males, and white undergraduates, expressed a slight preference for Plan I, and graduate students expressed a decided preference for the low subsidy Plan I. Parental incomes, marital status, and other characteristics of the students' current financial situation were *not* significantly correlated with choice of plan.



*Choice of Income Contingent or Conventional Loan Options*

Following the respondents' selection of a preferred income contingent loan plan, students were asked their preference between that plan, ten or twenty year conventional loans (repaid in equal installments at 7% interest), and the alternative of taking a part-time job.

When forced to choose between an income contingent and a 10 or 20-year conventional guaranteed student loan (GSL), 37% of those continuing students who expected to borrow preferred the income contingent plan. When forced to choose between an income contingent loan and a part-time job, 30% of all students — including 33% of the white graduate students, 28% of the white undergraduates, but only 23% of the black undergraduates — preferred the loan. Of all those expecting to borrow, the percentage favoring their preferred plan over a job rose to about 37%.

Table 5  
Loan Preference by Expected Income<sup>a</sup> Ten Years After Graduation,  
Undergraduates<sup>b</sup> and Graduate Students

	Undergraduate Income Expectations			Graduate Income Expectations		
	Low	Medium	High	Low	Medium	High
Plan #1	30%	57%	68%	43%	66%	69%
Plan #2	5	5	3	4	11	8
Plan #3	65	38	29	53	23	23
Total	100%	100%	100%	100%	100%	100%

<sup>a</sup> Income groupings: low = below \$14,000  
medium = \$14,000 - \$19,999  
high = over \$20,000

<sup>b</sup> The few black graduate students were included with the undergraduate black students for purpose of analysis.

When allowed to express a preference among an income contingent loan, a 10-year GSL, or "neither", 11% of all continuing students and 25% of all continuing students definitely expecting to borrow preferred the income contingent form. These results are shown in Table 6. Preferences differed significantly by student status, however, and the deliberate over-sampling of graduate students undoubtedly depressed the total sample preference for income contingent loans. It is also not certain what alternatives the expected borrowers had in mind who expressed a preference for "neither". Undoubtedly, a number of these would be potential income contingent borrowers.

The major variables predicting preference between income contingent and conventional loans, taking only students expressing an "actual interest" in one or the other and eliminating the "neither" category, were race (or the institutional effects of Clark and Howard) and sex. These differences are shown in Table 7. While just over one-half of the white males expressed a relative preference for income contingency, it was preferred by only 37% of black females and just over one-quarter of the black males and the white females. A cautious and tentative interpretation of this result is a somewhat greater suspicion of a rather novel and uncertain debt instrument on the part of the Clark and Howard students.

In addition, the amount which the student expected to borrow made a difference, with income contingent borrowing more popular for *smaller* expected amounts — a conclusion contrary to the supposed increase in the advantages of income contingency with larger total debts. Public-private institution mattered only for graduate students, with a 3:1 preference for the GSL at public schools and a roughly equal preference at private schools.

Table 6  
Choice of Preferred Income Contingent Plan,  
10-year GSL, or "Neither"

	Inc. Cont.	Choice of Plan		Total
		GSL	Neither	
White undergraduates (n=257)	13%	18%	69%	100%
White graduates (n=291)	8	10	82	100
All black students (n=147)	16	35	49	100
All continuing students (n=695)	11	18	71	100
All continuing students expecting to borrow (n=155)	25	43	32	100

Table 7  
Choice of Income Contingent or Ten Year Guaranteed Student Loan by  
Students Expressing an "Actual Interest" in One or the Other,  
by Race and Sex

	Black			White		
	Total (n=71)	Male (n=37)	Female (N=34)	Total (n=124)	Male (n=82)	Female (n=42)
Income contingent GSL (10-year)	32% 68	27% 73	37% 63	42% 58	51% 49	26% 74
Total	100%	100%	100%	100%	100%	100%

Parental income, borrowing experience to date, major, marital status, occupational choice, the future income expectations were not significantly correlated with loan preference. The absence of a significant correlation between future income expectations and preference for an income contingent over a fixed schedule loan is of considerable interest to the question of "adverse selection" — i.e., the possible over-representation in an income contingent loan plan of probable low earners. The survey results, while far from conclusive of course, suggest that this phenomenon might not occur.

Part of the reason why income expectation was not correlated with choice of income contingent or conventional loans in this survey, however, may have been the students' ability to choose among three different income contingent loan options for comparison with a conventional loan. High income expectors who might well have preferred a conventional loan over a high subsidy option also had a low subsidy plan to consider, differing only slightly in interest cost from the shorter term conventional loan option. The tentative conclusion of this survey, then, cannot be applied to a situation where only one income contingent plan is presented, especially when that one plan is highly redistributive and costly to the higher earner.

*Reasons for Preference of Loan Form*

Attitudes toward various loan plans seemed largely to be a function of the expected total dollar repayment. In an "economically rational" world, the "total dollars repaid" on a loan has no meaning independent from the time period involved; the "rational" consumer of loans will always choose the loan which minimizes the present value of all future repayments discounted at the student's rate of time preference (subjective rate of interest). The "cost," then, of high total dollar repayments over long periods of time may well be less than the "cost" of fewer dollars repaid over a shorter repayment period. For a variety of reasons, however, respondents seemed most concerned with minimizing total dollar repayments *irrespective of the time period involved or of the interest rates to be paid.*\* "Low percent of income," "low interest rate," and "short repayment" periods were all considered of significantly lesser importance. Table 8 shows the loan "features" ranked first in importance, by all students and by those students preferring one of the income contingent plans or a ten year guaranteed student loan.

Table 8  
Feature of Loan Ranked First in Importance by  
All Students and by Preference for Income Contingent  
Fixed Schedule Guaranteed Student Loans

	Low	Low % of	Low total		
	interest	income	dollar	Total	
	rate	repayment	amount		
All students (n=917)	17%	19%	22%	42%	100%
Those preferring (n=214) income contin. option	12	28	22	38	100
Those preferring (n=703) conventional option	18	16	22	43	100

*General Attitudes*

Two-thirds of all students surveyed, as shown in Table 9, were generally favorable toward income contingent loans. On "general attitudes", the black students (again, predominantly Clark and Howard) expressed a significantly more negative reaction than white undergraduates or graduates. Our tentative conclusion with respect to this finding is that income contingency, while allegedly designed to hedge against the risk of low future incomes, is actually perceived as *more "risky"* by many students who both fear debt and have the greatest uncertainty about future income prospects. We will comment further on this phenomenon in the summary.

\* Students, of course, might have quite different attitudes toward debt once they are in the repayment stage. While student preoccupation with total dollar repayments must be considered in planning loans, we feel strongly that students should be counseled to place primary emphasis on the manageability of individual payments and the present value cost, or at least the interest rate, of loan options rather than generally misleading figures of total dollar repayments.

Table 9  
General Attitudes Toward Income Contingent Loans,  
by Student Status

	Black	White Undergrads	White Grads	Total
Attitudes: Very favorable	16%	26%	24%	23%
Somewhat favorable	45	49	42	45
Somewhat negative	23	17	21	20
Very negative	16	8	13	12
Total	100%	100%	100%	100%

Over-all, about 70% of the respondents had positive attitudes toward the "redistributive" or "subsidy" feature of the income contingent loan plans, and 50% thought the low income protection worth the added cost. Those students most favorable toward these features tended to prefer the income contingent loans over the conventional alternatives and to prefer the more redistributive Plan III over the other options.

On the charge of "negative doweries", 57% of the females responded that application of the repayment rate to their husband's income would have no influence or would even make the plans more attractive. About one-third were negative about that feature of income contingent loans.

*Findings From Other Surveys*

*Stanford Survey of Business, Law, and Medical Student Attitudes Toward Alternative Loan Plans.*

A survey of Stanford business, law, and medical students also attempted to determine attitudes toward alternative loan plans.\* First-year Business School (MBA) students completed a questionnaire during class time, with 70% of the class returning usable questionnaires. Law and medical students were reached through a mail questionnaire yielding, respectively, a 30 and 45 percent response rate. The low response rate from law and medical students probably introduced a bias into the results, although the respondents are likely to have been those most apt to borrow, so the effect of any bias may not be significant in assessing preference among loan options.

The Stanford questionnaire presented seven alternative pairs of loan plans requiring a forced choice for each pair. The alternatives included 5-, 10-, and 20-year fixed schedule-equal installment (i.e., conventional) loans; 10- and 20-year fixed schedule-graduated payment loans (i.e., conventional loans with fixed but increasing installments); and two income contingent options. The preference between loan plans by future income expectations for each professional school is shown in Table 10.

\* George S. Day, "Loan Plans for Professional Schools: An Appraisal of Student Response." A Report to the Ford Foundation, Stanford University, July, 1971 (mimeographed)

Table 10  
Most Preferred Loan Plan by  
Future Income Expectations,<sup>(a)</sup>  
Stanford Professional Schools

Stanford Univ. Professional Schools	Conventional Loans; 5, 10, or 20 year terms	Graduated Payment loans; 10 or 20 year terms	Income Contingent Loans	Total
<i>The Business School</i>				
High income expectors (n=26)	50%	38%	12%	100%
Average income expectors (n=85)	44	36	20	100
Low income expectors (n=22)	32	14	54	100
Total MBA students (n=133)	43	33	24	100
<i>The Law School</i>				
High income expectors (n=11)	64	36	0	100
Average income expectors (n=42)	43	38	19	100
Low income expectors (n=26)	15	15	69	100
Total Law students (n=79)	37	30	33	100
<i>The Medical School</i>				
High & average income expectors (n=39)	36	41	23	100
Low income expectors (n=46)	18	18	65	100
Total Medical students (n=85)	26	28	46	100

(a) Respondents were asked to choose a "low," "average," or "high" expected income profile. The 1972 starting salaries were \$12,000; \$15,500; and \$19,500 respectively. Each "expected income" profile was then increased according to historical trends assuming a 3% annual rate of inflation.

Data taken from Tables 4, 13, and 19, *Ibid.*

About one quarter of the business students expressed a preference for the income contingent loans, including 54% of those expecting low incomes, but only 12% of those with high income expectations. The 5- and 10-year equal installment loans and the 10- and 20-year graduated payment loans were each chosen by about 17% of the respondents.

The Stanford Law students who returned the questionnaire expressed generally lower income expectations and more uncertainty about these expectations than the Business School students. Nearly 70% of those respondents expecting "low" incomes expressed a preference for an income contingent loan. The Law School preferences by income expectation are also shown in Table 10, but the total figures must be viewed in light of a response rate quite likely biased in the direction of those with lower income expectations. (The significance of the figures must also be interpreted with great caution due to the low number of entries in each cell.)

The Stanford medical students expressed a strong need for loan funds. Eighty-six percent reported plans to borrow, with the average debt expected to reach \$9,400 by graduation. As in the Law School survey, the low response rate on the mailed questionnaire undoubtedly introduced some bias, suggested by the low reported income expectations. This may largely have been due to the preponderance of respondents who expected to enter community medicine, teaching, or research (37%). Sixty-five percent of those expecting "low" incomes preferred an income contingent loan.

Because of the different circumstances, questionnaires, and survey techniques, little comparison can be made between the results of the Stanford survey and the larger interview survey reported earlier in this chapter. The Stanford survey does indicate the possibility that borrowers will sort themselves into income contingent or conventional loan plans according to future income expectations — a correlation not found in our own study. The Stanford results also show a considerable variation among attitudes between the different professional schools. Finally — and a difficult phenomenon to interpret — the Stanford results showed a surprisingly weak preference for fixed-schedule loans in which the installments were graduated over time to approximate the expected capacity of the borrower to repay. One explanation could be the tendency, as reported in the larger survey, for respondents to weigh alternative loan plans according to the total dollars to be repaid rather than the probable interest rate. Naturally, a loan plan which concentrates repayments in the later years will require higher interest *payments* even though the interest *rate* may be no higher. Evidently, those respondents who valued a correlation of repayments to income chose the income contingent loan, and the others kept to the more familiar conventional loan featuring repayments in equal installments and the lowest total dollar obligations.

*Portland State University Survey of Attitudes Toward Alternative Loan Plans*

A Portland State University study administered a modified version of the interview questionnaire to 220 randomly sampled students in the spring of 1971.\* Based on preliminary findings from the survey reported above, Plan II (the 30-year, "high subsidy plan") was omitted, and a 20-year fixed schedule loan was offered with increasing annual installments. Respondents, then, were asked preferences among:

- \* A 30-year "low subsidy" income contingent loan (Plan I)
- \* A 20-year "high subsidy" income contingent loan (Plan II)
- \* A 20-year fixed schedule-graduated payment loan
- \* A 10-year, "conventional loan" (GSL)

About 23% of the Portland State students said they would be "actually interested" in an income contingent loan if available at this time. Interest was somewhat greater among underclassmen than upperclassmen, single students, and those currently on aid. There were no differences in professed "interest" between undergraduates and graduates, or between those living at or away from home.

Sixty-seven percent of all students surveyed preferred an income contingent over the 20-year fixed schedule-increasing installment loan, and 50% preferred an income contingent over the 10-year conventional option.

The overwhelming preference between the two income contingent options was for the 20-year "high subsidy" option. Of the 67% who chose an income

\* Findings from the Portland State University survey are based on preliminary data supplied to the authors by William T. Lemman, director of the study.

contingent plan over the fixed schedule-increasing installment option, 85% preferred the 20-year "high subsidy option." It would appear that virtually all low income expectors chose this plan, while others took the lower cost "approximation" of income contingency offered by the 20-year fixed schedule-graduated payment option. The greater attraction of the 10-year straight conventional loan is probably explained by the previously reported phenomenon of the desire to minimize total dollar repayments. While the 20-year "high subsidy plan" kept most of the low income expectors, the 10-year conventional loan drew away more students who evidently prefer a faster amortization. Nevertheless, the Portland State University survey revealed surprisingly strong support for income contingent loans, and suggests a strong potential market in the public urban, commuter university.

#### *Yale Preliminary Findings\**

The Yale plan, begun in the fall of 1971, provides a unique opportunity to test the receptivity of students to an operational income contingent loan plan. Nearly one-quarter of Yale college signed up for the plan in the first semester of operation, including 35% of freshmen men, 24% of freshmen women, 17% of senior men, and 10% of senior women. Just over a quarter of the eligible graduate students chose an income contingent loan as part of their financial aid package. While no conventional alternatives were offered to the college students to replace the "gap" between total costs and student family resources from other sources, these results do suggest that a sizable portion of Yale students find an income contingent loan to be an attractive means of financing part of the costs of their education. It is probably safe to assume that participation will rise over time, as the need for credit grows and as students who borrowed as entering freshmen continue to borrow in the upperclass years. The percentage of T.P.O. participation for the College in 1971, by class and sex, is shown in Table 11.

While operation and analysis of the Yale plan have only just begun, preliminary research suggests a number of patterns in attitude and participation:

1. Future income expectations were not significantly correlated with participation or non-participation, although these expectations were noticeably low for the entire college;
2. Students who took the income contingent loans tended to have favorable attitudes toward debt, in general, and less aversion to risk or uncertainty;
3. Parental attitudes toward the Yale plan were influential in students' participation;
4. Knowledge of the plan was also influential, with a positive correlation between understanding of, and favorable attitude toward, the Tuition Postponement Plan;

\* Preliminary data from research on Yale's Tuition Postponement Option was supplied by David Storrs, T.P.O. Associate Director of Research.

5. A number of those students not participating in the plan were concerned with its cost, and might have participated with a shorter term and/or a less redistributive plan.

Table 11  
Participation in Yale's "Tuition Postponement Plan,"  
Undergraduates, by Sex and Class, Fall, 1971

Class	Total Class		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
Freshmen	416	32%	351	35%	65	24%
Sophomores	250	21	224	23	26	12
Juniors	215	20	189	22	26	13
Seniors	176	16	162	17	14	10
Total College	1057	23%	926	24%	131	16%

*Summary of Findings and Policy  
Implications*

*A. Is There a Potential "Market" for Income Contingent Loans?*

The surveys suggest that between one-third and one-half of potential borrowers might prefer loans of an income contingent variety. The actual figure, of course, would depend upon the financial needs of students and the alternative grant and loan options available. In addition, one might still assume that the relative attractiveness of income contingency would increase with the magnitude of debt, although the limited survey information does not support this contention. When the survey data are placed alongside the early experience of Yale's Tuition Postponement Plan, however, there can be little doubt that there is a potential market for income contingent loans.

*B. What Kinds of Income Contingent Loans Do Students Prefer?*

The limited evidence suggests that potential borrowers prefer loans which generally minimize the total dollar obligation. Between loans with roughly equivalent redistribution, or internal subsidization of low by high earners, students seem to prefer those with higher repayment rates and shorter expected amortization schedules. Preference between high or low subsidy plans, as expected, is a function of anticipated future income. This limited evidence suggests that there may be a market for income contingent loans with higher repayment rates and shorter maximum and expected repayment periods than most proposed or operational plans have featured.

*C. What Kinds of Students Would Most Likely Take Income Contingent Loans?*

Few variables from the evidence we now have predict the likely participants in an income contingent loan plan. Furthermore, the answer to this question will almost certainly depend on the kind of plan or plans offered as well as the availability and criteria for other forms of assistance. Likely participation does not seem to be a function of current financial situation, although there is some evidence that black students and women may participate less in income contingency provided other forms of loans are available.



The survey results are ambivalent on the most crucial variable determining the long range financial viability of income contingency: the relationship of participation to probable earnings. Our survey suggests that "expected income" may not be a factor provided that income contingent options can be provided which appeal to high as well as low income expectors. The Stanford and Portland findings, however, suggest that income contingent loans may, in fact, be taken preponderantly by students expecting low earning careers.

D. *What is the Potential Market for Conventional Loans with Increasing, or Graduated, Repayment Schedules?*

Conventional loans with repayment installments graduated according to the expected income growth of the average borrower could correlate repayments with ability to pay for most borrowers and thus "approximate" income contingency. This loan form was not included in our survey, but was one of the options in the surveys given at Stanford and Portland State Universities. In both cases, this form was less popular than either the income contingent or the more conventional "equal installment" option. It would appear that most students who place a high premium on the correlation of repayments with income found an acceptable income contingent option, and that most others preferred the faster amortization schedules of the short-term conventional loan. However, we still suspect that the graduated repayment option would be preferred by many students over an equal installment loan, especially for high levels of debt — assuming no income contingent alternative.

E. *Would Income Contingent Loans be Attractive to Black Students?*

*A priori*, income contingency should appeal most to those potential borrowers whose current financial need is greatest and whose future income expectations are low and/or uncertain. To the degree that race was correlated with high financial need and relatively lower or more uncertain income expectations, one might expect black students to be more favorable toward income contingency. In fact, however, black students were relatively *less* favorable toward income contingency, and this correlation held true even with family and expected future income held constant. One possible explanation is that other intervening variables specific to Clark College and Howard University were responsible for a more negative attitude toward income contingency. Another answer may be an *accumulation* of attributes associated with the black student, most of which were not picked up by the survey instrument. Such attributes could include, in addition to lower family incomes: unfavorable past experience with debt (largely a function of the lower family incomes); a general uncertainty about the future leading to a dislike of "open-ended" obligations *even when those obligations are, in fact, designed specifically to hedge against financial uncertainty*; and a negative reaction toward a program which they may perceive as a device to renege on society's obligation to provide equal educational opportunities for all. For these reasons, we are not yet willing to conclude that black students would not participate in, or even be uniquely assisted by, income contingent loans as a complement to other loan programs and not as a substitute for direct aid.

F. *What Implications Do These Studies Hold for the Formation of Grant and Loan Policy at the Federal, State, and Institutional Levels?*

All these studies show that a significant portion of borrowers would very likely take an income contingent loan in preference to a conventional alternative. If there is any "mandate" in this finding, it is that some borrowers see the correlation of repayments with income and the provision of some "low income insurance" as desirable features of a loan plan. Without government participation to assure the very considerable risks (to the lender) of income contingency, income contingent loans are probably not, at present, a viable option for any institution lacking the capacity to capitalize its own loan plan. Whether direct state or federal income contingent loan plans will emerge in the near future is also problematic. Many students do, however, want more manageable forms of educational loans than are now available. Policy makers should pursue this goal directly, whether the immediate outcome is more flexible repayment provisions, more readily available credit, longer terms, graduated amortization schedules, or some form of low income protection to those borrowers unable to manage loan repayments.