account the past changes in income, which are used as indicators of expected changes of demand in the future. For fields that have experienced a fairly stable growth of income, as in the health professions, and where the relative position of income in each field has been fairly constant, it is not necessary to look at the past changes in income to indicate what future income is likely to be. If the relative position of income in each field in a group has been fairly constant, there is no reason to expect it to change in the relevant future. In such a case, the discounted income of the life cohort of the members of the profession is an adequate indicator of the relative present value of expected income at any given time.

The service professions are more sensitive to the growth of population and national income and not so much to changes in the composition of the national output. If market information is not perfect but it improves with time until demand shifts again, the profession with a stable growth will have better market information at any point of time. There are small changes in demand for service professions, such as in the health fields and professions dominated by women. Information about the relative income in these professions at any point of time is more perfect than in the case of engineering and science fields where there are more fluctuations in demand. If relative income changes at some time, t, the information at time t+1 for the latter professions will be less perfect than in the case of the medical or teaching professions, which have a stable growth in demand.

The elasticity of the supply of degrees with respect to income and available stipends at the mean values of the variables can be calculated given the regression coefficients of equation (4). The elasticities of the supply of degrees with respect to income for different groups of fields show the rate at which students shift from one field to another in response to a percentage difference in their expected income. The elasticities computed at the mean value of income and degrees range from .266 to 5.431 for all groups tested. The regression coefficients of income are significant at fairly high confidence intervals when a one-tail t-test was applied to the regression statistics. The significance level of the regression coefficients, from which the elasticities were computed, indicate that indeed the relative expected income that can be earned from specializing in each field is an important determinant of the choice of field, and on the aggregate supply of degrees.

The elasticities computed at the mean vary not only between groups but also between levels of degrees in Group I and between two time periods for Group II and the health fields. The variation in the income elasticities observed in the various groupings may be explained in part by the differences in "tastes", other than specific attitudes and interest in the work activity that differentiate people who go to each group. The average academic ability also differs by group. The proportion of the college population that is qualified to enter one group is different from the proportion that is qualified to major in another

broad area of study.

For each group tested, the elasticity of degrees with respect to income increased as the lag increased by one more year. This would mean that the influence of income on the supply of degrees becomes stronger with time from one equilibrium point to the next. Market information improves with time, and tastes and educational facilities become more flexible toward the fields that experienced relative high increases in demand.

The elasticity of the supply of degrees on enrollment with respect to stipends is found to be higher than the elasticity with respect to income, except for Ph.D. degrees, which are adjusted for differences in academic ability in Group I. The regression coefficients of stipends are also significant at an almost 100 per cent confidence interval. Stipends entered first in the step-wise regression and explain a larger portion of the variance in degrees and enrollment. Graduate enrollment responds to stipends more strongly than the number of degrees. There are factors other than income and stipends that determine the number of students who actually complete their degrees.

The discount rates that gave the best results in the empirical section are 3% for Group I, B.S. degrees, Group II, and Group III. For Group I at the Masters and Ph.D. levels, a discount rate of 8% gave the best results. It can be argued

that those students who are deciding to pursue a graduate degree behave as though they use a higher rate to discount the future stream of income from their investment in education. This seems reasonable for the time preference of consumption of older students higher. They are more likely to have a family to support and realize the standard of life they have to give up in order to be in school.

The adjustment in the market when changes in income occur is assumed to be an adjustment toward a new equilibrium. Changes in income disturb the relative position of the present value of investment in each field. The field that experienced an increase (decrease) in income will have a positive (negative) rate of return unless the supply of degrees increases in this field pushing down its present value towards the new equilibrium point.

The fairly high R^2's observed from the regression of equation (6) and the low significance level of the regression coefficient of the changes in income indicate that the supply of degrees actually respond to changes in income. When a change in demand occurred, the supply of degrees also changed in the same direction. This positive relationship is regarded as an adjustment of the supply from a disequilibrium situation toward an equilibrium situation. However, shortages are experienced for a number of years before the market finally makes a complete adjustment. The adjustment in the market for professional skills

can be improved tremendously by making use of subsidies to education. It is found in the test of the masters and Ph.D. degrees for Group I that students are very responsive to stipends. In fact, stipends are more significant than income in the choice of field for graduate students. Therefore, if it is the desired social goal either to make the market adjustment faster or to increase the supply of members in a profession, subsidy in the form of stipend can be a very effective tool. The amount of stipends received by each field is small relative to funds budgeted for other purposes by society and the increase of stipends to fields that are experiencing a shortage is rather marginal. We have only to look at the elasticity of the supply of degrees with respect to stipends to see the effectiveness of this tool for educational planning. Of course, if stipend allocation is not handled correctly in terms of aiding the market adjustment, the effect will be to slow down or even obstruct the normal adjustment of the market.

No definite conclusion can be stated from the California results. At best, the market behaves as well as on the national level. But, as has been stated before, the possible errors in the data makes it difficult to say whether the expensive publicly-supported educational system at the college and university level improves the market adjustment or not. A more thorough study of the impact of publicly-supported institutions of higher learning on the individual decision is warranted as soon

as adequate data becomes available. Of course, there are other social goals that society may have in its educational policy of providing subsidized education. Discussion of these goals is beyond the realm of this paper.

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APPENDIX A

Sources and Processing of Data:

1. The number of degrees by field, by level of degree--bachelor, master and Ph.D.--are obtained directly from the U.S. Office of Education *Circular Earned Degrees Conferred* for various years from 1952 to 1964.

2. Degrees of those graduates who are equally eligible to get at least the median requirement. Wolfle gives the percentile distribution of B.S. and Ph.D. graduates and graduate students by Army General Classification Test scores, otherwise known as AGCT scores or I.Q. Choosing arbitrarily the median IQ score for the field that has the highest average $\overset{**}{IQ}$, the proportion of graduates in other fields that meet at least the IQ of Physicists can be estimated from the percentile distribution of graduates by IQ. If the chosen $\overset{**}{IQ}$ falls between two known percentile distributions in field i, it is assumed that graduates in that field are distributed between these two IQ scores at a decreasing rate from a lower IQ score to a higher IQ score. This assumption follows the general distribution of IQ, the higher the score, the smaller the number of students who possess this score. For each level of degree, the percentage of graduates in each field who meet the $\overset{**}{IQ}$ score chosen is given in Table A below. To find the number of degrees of those graduates who are equally eligible to major in any field, the total number of graduates are multiplied by the percentage of graduates who have $\overset{**}{IQ}$ score.

The distribution of graduates in each field shows some overlapping of scores which makes it difficult to say categorically that some students are not qualified to major in any one field. Therefore, using the total number of degrees, D instead of $\bar{D}$ is still a valid test of our hypothesis. $\bar{D}$ has the advantage of allowing us to deal with equally qualified graduates and see how they made their choice of field.

3. Stipends - The National Science Foundation's *Scientific Manpower Bulletin* No. 5, July 29, 1955, gives for each field the total number of graduate students; the number who hold straight fellowships, research assistantships and teaching assistantships; the percentage who hold one or more stipends, the mean amount of stipend held under each form of stipend. The total amount of stipends is easily computed by multiplying the number of graduate students who held one type of stipend by the mean stipend. The total number of students who held any form of stipend is estimated by multiplying the percentage who had stipends by the total number of graduate students.

The same data are available for 1963 from the National Opinion Research Center-National Science Foundation Survey of *Graduate Students Finances, 1962-63.*

The National Opinion Research Center, headed by James Davis also made an extensive study of graduate students finances including the income from spouses and support from families. However, the data presented are for broad fields of study. In order to estimate the total amount of stipends available and the total number of students who held stipends for each field in Group I, it is assumed that the stipend for 1958 for field i has the same relationship to 1954 as the stipend in 1958 and 1954 for Group I.

4. Income for Group I--Annual income by field, by degree, by age, is available in unpublished data from the National Science Foundation. Annual income for the years 1956-68, 1960, 1962, by field and by age are reported in the different issues of the National Science Foundation, Science Manpower, 1956-58, 1960 and 1962. The National Science Foundation in its Scientific and Technical Manpower Resources, 1964, also gives income by field and by age for 1964. To estimate the average income *by field, by degree* and *by age* for 1956-58, 1960 and 1962, it is assumed that the ratio of income of people with a B.S. degree to the income of all graduates in each field at each age bracket, remained constant from 1956-58 to 1964. The ratio of income, B.S. graduates to the income, all graduates at each age group in 1964 is multiplied by the income by age in the previous years to get the income by field, for the B.S. graduates, by age in the previous years. The same method is used to estimate the annual income of M.S. and Ph.D. graduates, by field, by age in previous years.

To get the hiring rate, the average income of the first five years in the profession is used. The income of members of the profession at age 40-44 is given directly from the raw data.

LY, the discounted income from the age cohort of members of each profession is calculated in the following, if Y is the average income of members of given age.

$$PV_{it} = \sum_{n=1}^{T} \frac{(Y_{it} - C_{it})^n}{(1+p)^n}$$

where the working life is T.

PV, the present value of expected lifetime income, is calculated, given that g is the expected growth of LY, the discounted income. g is assumed to be equal to

$$PV_{1960} = PV_{1957}(1+\hat{g})^3$$

A longer time interval is also used to calculate g where

$$PV_{1962} = PV_{1957}(1+\hat{g})^5$$

Solving for $\hat{g}$, $\hat{PV}$ is calculated in the following way:

$$PV_{i60} = PV_{60}(1+g)^n$$

where n=43 for the B.S. degree
n=41 for the M.S. degree
n=39 for the Ph.D. degree

where n is the length of the working life counting the time immediately after graduation to the age of 65. For the health professions, n varies with the length of the investment period, 43 for medicine, 42 for veterinary and dentistry and 41 for optometry. n differs from each other in the health professions.

The cost of a year in college is approximately equal to the total out-of-pocket cost--tuition and fees, and supplies, plus the opportunity cost of being in school. The latter is estimated to be equal to 25% of the income of the labor force who have the same academic accomplishment and are of the same age. Data on the national average tuition and other fees are available for public and private universities and colleges. The weighted average cost can be estimated by the multiplying the cost at public and private schools and the relative weight in the corresponding profession.

The weighted average cost in 1958 and 1961 is adjusted for the average cost obtained directly from NORC-NSF.

The academic cost per annum is assumed to be equal for all levels of degrees.

5. Incomes of doctors are available from the various surveys done by their respective associations except for medicine which tries to defend the doctors' high relative income. The only data available for doctors of medicine comes from the specific survey done by the Bureau of Labor Statistics in 1949 and by the Bureau of the Census in 1960.

The American Optometrist Association made a survey of the members' income in 1951, 1958 and 1964. Income by age for these three years is given on a chart in H.W. Hofstetter "Optometrists'

Income, 1937-64", in the Journal of the American Optometrists Association, October, 1966, pp. 959.

The average income of dentists, by age, is taken in various surveys made by the American Dental Association. The association published the result of these surveys in their Journal of ADA giving income by age for 1948 in Journal, Vol. 40, March 1950; income for 1953 in Journal, Vol. 48, Jan., 1954; income for 1956 in Journal, Vol. 53, Dec., 1956; income for 1958 in Journal, Vol. 60, May, 1960; income for 1961 in Journal, Vol. 66, April, 1963; and income for 1964 in Journal, Vol. 72, March, 1966.

The American Veterinary Association took a survey of their members' income in 1950, 1955 and 1960. But the published data for 1950 and 1955 are for the mean income of all the members of various ages. The income data for 1960 is by age. The discounted income, PV, is estimated from the age cohort for 1960, and the discounted income for the previous years, 1950 and 1955 are assumed to have the same relation to that of 1960 as the mean income of all the members.

6. Income of Engineers is available biennially from the survey of members of the profession. Annual income by age, by field, are available from these survey reports for 1952, 1956, 1958, 1960, 1962 and 1964. The survey does not publish income by age, by field and by degree. The discounted Y is computed for each year by field.

The Bureau of Labor Statistics surveyed engineers income and employment outlook in 1949. The result of the survey was published in its Bulletin A968 entitled *Engineering Employment Outlook*. Income by age, by field and by degree is given in this publication. The discounted income, LY, is computed for each field and degree.

In order to estimate the discounted Y, PV for each field of a given degree it is assumed that the ratio of discounted income, PV, of a given degree in 1949 to the discounted income PV of members with all degrees in 1949 has remained constant. This ratio is used to extrapolate discounted Y, PV, Y_{40-44} for the later years, 1952-64 where income is given by age and field only.

Table A.1.a Number of Bachelors
Degrees Conferred Annually

Field	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Agriculture	9595	8825	7832	7170	6117	6619	6769	6767	6335	5717	5894	6063	7158
Biological Science	11196	9708	9366	9050	12566	13868	14408	15149	15655	16162	17014	19218	23350
Mathematics	4721	4396	4090	4043	4660	5546	6924	9019	11437	13127	14610	16121	18677
Physics	2247	2005	1952	1996	2335	2745	3186	3809	4338	4322	4812	4785	4956
Chemistry	6819	5943	5791	5920	6178	6591	7010	7308	7603	7604	8089	8823	9724
Earth Science	2434	2025	1758	1867	2292	2713	3084	3149	2803	2257	1861	1479	1500
Engineering													
Chemical	2859	2227	2042	2027	2466	2828	3008	3131	2966	2864	2677	2724	2998
Civil	5329	4400	3955	3868	4227	4683	5134	5394	5287	5330	5185	4793	5077
Electrical	6373	4905	4485	4860	6220	8108	5967	10786	10631	10200	10263	10393	11261
Mechanical	7606	5917	5419	5876	6728	7907	9060	9592	9597	8651	8473	7697	7697
Education				38383	50733	54447	57261	61426	63035	66687	71158	76621	78940
Dietician & Nutrition					510	548	547	520	483	524	552	602	513
Library Science				1157	1233	1173	1287	1301	1471	1504	1625	1797	1966
Medicine & Dental Tech.					802	956	1072	1076	1185	1102	1327	1564	1917
Nursing				5179	5265	5700	6003	6222	6580	6504	6305	7053	7270
Social Work				1286	1172	1206	1270	1357	1458	1532	1694	1915	2159

Source: U.S. Office of Education: Annual issue of Earned Degrees Conferred.

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Table A.1.b. Number of Masters
Degrees Conferred Annually in Science and Engineering

Field	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Agriculture	1608	1470	1302	1364	1038	1122	1104	1183	1203	1241	1357	1261	1145
Biological Science	2307	1891	1610	1609	1759	1801	1852	2002	2154	2358	2642	2921	3296
Mathematics	802	677	786	761	896	965	1234	1499	1765	2238	2680	3323	3603
Physics	886	721	714	729	742	825	795	915	1073	1271	1425	1567	1848
Chemistry	1409	1211	1098	1173	1164	1047	1125	1145	1228	1313	1425	1463	1569
Earth Sciences	684	693	481	579	576	675	857	828	777	836	805	769	787
Engineering													
Chemical	540	433	448	470	545	602	561	596	610	650	676	711	762
Civil	581	573	565	693	822	850	810	926	1024	1220	1269	1392	1567
Electrical	1017	880	1074	1161	1312	1570	1846	1993	2414	2701	2816	3163	2808
Mechanical	651	627	723	759	765	812	952	1081	1179	1401	1531	1664	1886

Table A.1.c. Number of Ph.D. Degrees
Conferred Annually in Science and Engineering

Field	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Agriculture	412	473	515	507	379	341	340	376	440	450	465	449	450
Biological Science	764	966	1077	994	1025	1103	1125	1045	1205	1193	1338	1458	1510
Mathematics	206	241	227	250	235	249	247	282	503	344	396	490	596
Physics	485	478	485	522	470	453	464	482	487	564	667	752	778
Chemistry	1005	986	1003	939	1007	1048	1131	1139	1254	1301	1999	1982	2270
Earth Sciences	181	203	158	171	162	188	191	242	256	260	277	332	300
Engineering													
Chemical	159	147	133	139	136	146	127	143	170	171	225	238	262
Civil	43	32	43	29	59	39	69	70	73	117	142	142	217
Electrical	121	132	111	141	136	130	144	189	203	250	295	386	460
Mechanical	68	78	72	79	61	67	76	83	107	106	159	104	200

Table A.1.d Number of Ph.D. Degrees
Conferred Annually in the Health Fields

Field	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Medicine	6201	6686	6751	7056	6853	6785	6861	6868	7074	6986	7183	7278	7342
Dentistry	2918	2935	3102	3099	3009	3038	3065	3150	3247	3289	3209	3191	3196
Optometry	844	882	709	524	352	341	337	268	342	316	290	379	315
Veterinary	1005	878	803	855	910	794	845	809	825	821	833	906	852

Source of Tables A.1.b, C & d: U.S. Office of Education: Annual issue of Earned Degrees Conferred.

Table A.2

Mean Stipend in U.S. Dollars by Graduate Field

Field of study	1954	1958	1962-63
Agriculture	955	1171	1387
Biological Sciences	947	1434	1878
Mathematics & Statistics	573	1089	1089
Physics & Astronomy	862	1680	1680
Chemistry	951	1767	1767
Earth Sciences	625	1059	1224
Engineering, total	423	1909	
Chemical	662	1740	1395
Civil	436	1687	1086
Electrical	332	1541	650
Mechanical	193	1435	683
Other	535	1759	1225
Social Sciences	268	1013	
Psychology	386	627	1135
Anthropology	266	636	1133
Economics	340	858	1011
Sociology	330	597	1026
Political Science	253		
Humanities	384	560	
English			400
History	201	524	420
Social Work			1488

SOURCE: National Science Foundation. See discussion of these data for the detailed source of data.

Table A.3

Table A.3

Percent of Students with Stipend

	1954	1958	1963
Agriculture	.642	.698	.725
Biological Sciences	.663	.794	.825
Mathematics	.422	.702	.666
Physics	.591	.816	.774
Chemistry	.686	.861	.807
Earth Sciences	.516	.734	.705
Chemical Engineering	.435	.564	.693
Civil Engineering	.267	.443	.619
Electrical Engineering	.182	.365	.547
Mechanical Engineering	.179	.576	.576

Table A.4

Number of Graduate Students with at Least One Form of Stipend

	1954	1958	1963
Agriculture	2177	2742	3236
Biological Sciences	5662	11968	17027
Mathematics	1423	7384	9680
Physics	2883	7692	9118
Chemistry	5361	9259	10949
Earth Sciences	1116	2551	2726
Chemical Engineering	815	1730	2608
Civil Engineering	442	2137	3171
Electrical Engineering	904	5431	8311
Mechanical Engineering	509	3406	5473

SOURCE: National Science Foundation. All details from text of Appendix A.

Table A.5

Graduate Enrollment by Field

	1954	1958	1963
Agriculture	3390	3852	4463
Biological Sciences	8540	14775	20639
Mathematics	3375	10795	14538
Physics	4871	9675	11781
Chemistry	7819	11169	13567
Earth Sciences	2159	3543	3867
Chemical Engineering	1874	2750	3764
Civil Engineering	1654	4025	5132
Electrical Engineering	4959	11928	15193
Mechanical Engineering	2823	7140	9503

SOURCE: U.S. Office of Education, *Graduate Enrollment*, 1954, 1958, 1963.

Table A.6

Proportion of B.S. Graduates from Public Institutions and Estimated Academic Cost in Selected Years

	Proportion from Public Institutions			Academic Cost		
	1958	1961	1963	1958	1961	1963
Agriculture	.638	.583	.601	442	610	560
Biological Science	.449	.467	.459	526	784	702
Mathematics	.545	.575	.589	483	616	775
Physics	.420	.425	.439	539	564	855
Chemistry	.414	.435	.439	542	706	747
Earth						775
Chemical Engineering	.567		.635	434	499	.901
Civil Engineering	.602		.660	420	483	.933
Electrical Engineering	.542		.566	444	520	.930
Mechanical Engineering	.536		.55	446	524	.926

SOURCE: Proportion of graduates from public institutions from the NORC-NSF Graduate Students Finances, 1963-64. The academic cost in 1963 is given directly by the NORC-NSF Survey.

Table A.7: PV, the Discounted Lifetime Income minus Cost in each field by degree (in thousands of U.S. dollars)

Fields: AB-BS	At 3% discount rate				At 6% discount rate				At 8% discount rate			
	1957	1960	1962	1964	1957	1960	1962	1964	1957	1960	1962	1964
Agriculture	135.43	147.17	161.98	182.74	72.48	76.95	86.23	95.72	49.88	52.12	57.95	64.77
Biological s.	116.50	134.83	153.89	170.90	63.28	72.75	81.37	89.49	43.76	49.95	55.01	60.31
Mathematics	194.55	223.44	252.19	279.57	103.11	118.22	131.62	145.68	70.67	80.71	88.89	98.17
Physics	178.32	208.76	223.06	246.10	97.26	112.24	118.31	129.69	66.34	77.02	80.26	87.87
Chemistry	172.32	185.97	192.21	215.33	91.09	98.87	101.73	113.20	61.78	67.29	68.89	77.64
Earth science	189.22	201.57	206.14	224.00	98.87	105.82	107.16	116.00	66.89	71.73	71.81	77.75
Chemical Engr.	220.58	249.58	164.59	281.26	115.28	127.12	138.42	145.18	81.08	90.06	97.39	101.35
Civil Engineering	190.09	206.98	226.60	242.89	101.81	110.49	120.60	128.89	72.68	78.64	85.74	91.47
Electrical "	205.77	229.93	249.90	259.49	109.47	122.26	132.57	137.38	78.07	86.98	94.15	97.29
Mechanical "	211.70	230.82	250.58	260.44	112.21	121.76	131.81	137.37	79.71	86.01	92.99	97.13
Masters degree												
Agriculture	147.38	160.97	178.35	200.58	86.17	92.27	103.61	115.46	64.34	86.00	76.96	85.32
Biological sc.	122.53	142.84	163.40	181.18	74.03	87.43	96.94	106.96	106.33	65.61	72.85	80.15
Mathematics	159.33	184.85	207.34	230.54	98.19	114.02	126.13	140.18	75.13	87.50	95.80	106.15
Physics	178.17	209.16	223.21	245.48	109.11	127.65	134.74	147.36	82.12	96.19	101.83	119.93
Chemistry	194.43	207.64	215.41	240.36	113.33	122.27	126.90	141.43	85.46	91.27	94.74	105.55
Earth science	197.79	206.14	213.54	231.57	115.00	119.97	123.25	132.86	85.34	88.77	90.86	97.70
Chemical Engr.	237.24	265.00	279.67	298.39	117.78	129.99	141.73	148.52	80.32	89.45	96.80	100.52
Civil Engineering	190.24	208.66	228.33	245.86	97.59	106.93	116.54	125.61	67.04	73.55	79.99	86.37
Electrical "	212.43	238.12	259.30	270.09	107.75	121.49	131.96	137.59	73.34	83.47	90.51	94.36
Mechanical "	212.22	232.76	253.07	263.86	107.37	117.89	127.90	134.17	73.37	80.48	87.23	92.04
Ph.D. degree												
Agriculture	169.43	186.61	206.03	231.22	95.83	103.80	115.99	129.02	69.71	74.64	84.00	93.55
Biological sc.	155.98	181.54	211.09	234.77	88.59	103.02	118.22	130.38	64.60	74.89	85.29	90.72
Mathematics	108.90	194.94	221.23	246.03	95.25	110.10	123.35	137.17	68.90	69.65	88.38	98.23
Physics	208.32	245.68	262.86	289.89	119.02	140.26	162.71	162.71	86.72	102.21	106.81	116.65
Chemistry	222.76	236.28	246.54	274.70	125.97	134.03	139.41	154.97	91.42	97.08	101.03	112.18
Earth science	192.53	204.23	211.33	228.95	107.00	113.76	117.46	126.35	76.83	81.75	84.17	90.20
Chemical Engr.	246.95	280.06	295.03	315.63	120.12	132.36	143.07	151.64	82.37	88.24	94.15	99.34
Civil Engineering	215.93	236.18	258.99	279.72	106.58	116.58	127.48	138.21	71.40	77.55	84.69	92.24
Electrical "	241.02	270.03	294.00	306.81	118.16	133.77	144.14	150.81	78.63	88.32	95.63	100.18
Mechanical "	241.58	264.98	288.03	300.85	117.92	129.79	140.22	147.77	78.03	85.42	92.44	98.16

Source: National Science Foundation. See de[illegible] source in the test of Appendix A.

Table A.8.a Present Value of Expected
Lifetime Income For Selected Years (in thousands of U.S. Dollars)

	Discounted at 3%	Discounted at 6%	Discounted at 8%
Education	103.5	56.9	40.6
Dietetics & Nutrition	103.6	56.0	39.4
Medical & Dental Tech.	102.3	55.4	39.2
Librarian	94.2	51.3	36.3
Nurses	90.9	48.9	34.3
Social Workers	102.7	55.1	39.5

See text for sources of data and method of estimating data.

Table A.8.b
Discounted Income in Group II from 1950-61 (discounted at 3%)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1
cine	134.4	129.1	143.7	148.3	152.9	157.6	162.2	166.8	171.4	176.0	180.7	18
istry	103.4	110.1	116.7	123.4	133.12	142.8	149.0	155.2	161.4	170.8	180.2	18
metry	90.7	93.7	96.7	99.7	102.7	105.7	108.7	111.7	114.7	122.8	131.0	13
rinary	81.6	89.0	96.3	103.7	111.0	118.4	124.0	129.7	135.4	141.0	146.7	15

text for sources of data and method of estimating data.

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Table A-9-a
Number of B.S. Degrees Conferred in California

	1955	1957	1960	1963	1964
Agriculture	287	420	397	350	444
Biological Science	800	996	1036	1431	1621
Mathematics	209	269	599	842	1073
Physics	171	258	374	410	453
Chemistry	247	282	317	386	512
Earth Sciences	231	181	206	123	111
Chemical Engineering	28	44	104	66	68
Civil Engineering	224	286	322	321	328
Electrical Engineering	289	472	669	609	630
Mechanical Engineering	327	414	529	422	446

Table A-9-b
Number of M.S. Degrees Conferred in California

	1955	1957	1960	1963	1964
Agriculture	24	38	34	56	101
Biological Science	83	64	155	198	193
Mathematics	49	44	83	125	277
Physics	66	102	101	124	146
Chemistry	33	30	30	85	83
Earth Sciences	64	73	69	49	55
Chemical Engineering	32	25	30	36	38
Civil Engineering	87	112	110	196	213
Electrical Engineering	174	242	351	405	454
Mechanical Engineering	99	143	169	224	254

Table A-9-c
Number of Ph.D. Degrees Conferred in California

	1955	1957	1960	1963	1964
Agriculture	9	3	8	12	16
Biological Sciences	104	107	126	168	189
Mathematics	37	21	24	47	54
Physics	78	60	73	128	88
Chemistry	83	93	90	89	108
Earth Sciences	21	33	38	34	38
Chemical Engineering	4	5	6	12	12
Civil Engineering	3	5	3	20	23
Electrical Engineering	29	23	37	66	73
Mechanical Engineering	13	9	6	29	38

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