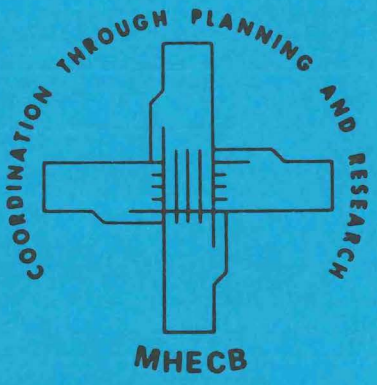
A REVIEW OF THE CURRENT
NEED ANALYSIS METHOD FOR STUDENT FINANCIAL AID
WITH COORDINATING BOARD RECOMMENDATIONS

A POLICY PAPER



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Minnesota Higher Education Coordinating Board

January 1986

SUBJECT: A REVIEW OF THE CURRENT NEED ANALYSIS METHOD FOR STUDENT FINANCIAL AID

DATE: JANUARY 16, 1986

ACTION: THE HIGHER EDUCATION COORDINATING BOARD RECOMMENDED THAT:

1. The Coordinating Board sustain its longstanding policy of using the Uniform Methodology to estimate the ability of parents to contribute to their children's education, and continue to work at the national level to secure changes in the methodology that respond to the needs of Minnesota applicants.

2. The Coordinating Board direct staff to work with legislators to develop approaches other than alterations of the need analysis to meet the unique problems facing families in rural Minnesota as they attempt to help finance their children's education.

OVERVIEW OF STUDY
AND COORDINATING BOARD RECOMMENDATIONS

Background and Rationale

Rising educational costs and a stagnant farm economy have raised concern about the ability of many students and families to afford a post-secondary education. During the 1985 legislative session, concern focused on how family assets and related levels of debt affect student eligibility for state student aid.

The 1985 Legislature directed the Coordinating Board to review the effect of the current need analysis on students and parents who have various types of assets and modest incomes, such as farmers, small business owners and homeowners without large mortgages, and to consider alternative methods of calculating parental contributions that are more closely related to income.

Minnesota uses the Uniform Methodology, a national consensus model that estimates a family's financial condition. The model estimates the ability of parents to contribute to their children's education from current income and assets. Since the family may not own the entire asset, the need analysis considers only the family's equity in the asset. Farm and business assets receive further protection. The amount available from various sources of equity in assets is added to the amount estimated to be available from income to derive the total amount of discretionary funds available to the family. Only a portion of these funds is considered available to help defray educational costs. As discretionary income increases, families are expected to contribute proportionately more toward educational costs.

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Rising educational costs and a stagnant farm economy have raised concern about the ability of many students and families to afford a post-secondary education. During the 1985 Legislative session, concern focused on how family assets and related levels of debt affect student eligibility for state student aid and how consistent these factors are with Minnesota's commitment to preserving access by awarding grants to students based on financial need.

The 1985 Legislature directed the Higher Education Coordinating Board to review the effect of the current need analysis method on students and parents who have various types of assets and modest incomes such as farmers, owners of small businesses and homeowners without large mortgages, and to consider alternative methods of calculating parental contributions that are more closely related to income.

Concern has been expressed about the appropriateness of public policy that expects families to either borrow against or sell the farm, business, or home in order to help their children pay for their education beyond high school. This issue has become particularly significant in view of the current farm crisis. Some farm families lack sufficient income to borrow against equity to offset educational costs. A similar situation could affect the person with low income, but substantial home or small business equity.

Minnesota uses the Uniform Methodology, a national consensus model developed in 1975 to estimate a family's financial condition. This model estimates the ability of parents to contribute to their children's education from current income. Since assets also are resources that a family has to purchase goods and services, including education, they too are considered in

determining the parents' expected contribution. Not all assets, however, are considered available to be used by the family to defray educational costs. Since the family may not own the entire asset, the need analysis considers only the family's equity in the asset. Farm and business assets receive further protection.

After these protections are considered, the amount available from equity in assets is added to the amount estimated to be available from income to derive the total amount of discretionary funds available to the family. Only a portion of these discretionary funds, however, is considered available to help pay post-secondary educational costs. As discretionary income increases, families are expected to contribute proportionately more toward educational costs.

Key to the effect on families is the interaction between the equity and income contributions. Few families have substantial income and no equity or, conversely, little income and substantial equity.

To examine the issues raised in the legislative mandate, a 10 percent random sample of dependent students who had applied for a Scholarship or Grant in 1985-86 prior to October 15, 1985 was drawn from the computer files of the Student Need Analysis Service of the American College Testing (ACT) corporation.

Almost 85 percent of the applicants' families own homes. Over 70 percent report home equity under $50,000; the average parental contribution for families is $2,046, but only $282, or 14 percent, of this amount results from the home equity. The influence of home equity on the expected contribution increases as home equity rises. The beneficiaries of excluding home equity from the Uniform Methodology calculation would be those with high equity.

Over one fourth of the applicants own a business or farm, and 60 percent of them report equity under $50,000. For these families, the average expected parental contribution is $1,609, but only $87, or 5 percent, results from business/farm equity. The influence of the business/farm equity on the expected parental contribution increases as business/farm equity rises. Those owners with the highest equity would benefit most from a change excluding this equity from the Uniform Methodology calculation.

The typical farm family has assets of over $150,000, but only 30 percent of the business/farm applicants to the state program have assets in that range. One third of these families report debt levels in excess of 80 percent of the asset value of the business/farm. Although the Uniform Methodology expects large contributions from those with large assets and low debt levels, little is expected of those who are deeply in debt.

Farm and business owners with low income levels, under $12,000 for example, are not expected to contribute much to their children's education until the equity exceeds $250,000. At that equity level, a substantial contribution is expected despite the low income level. A small portion of business and farm owners is affected by this situation.

In response to concerns about the treatment of equity from assets in the Uniform Methodology, the state could (1) continue to use the standardized method, (2) develop its own need analysis, or (3) develop solutions to address specific concerns without altering the national need analysis.

The Uniform Methodology has several advantages. For the student and family and institution, it is simple and clear and requires only one application form. The financial aid community believes the methodology is fair because it eliminates subjective judgment in estimating a family's ability to pay. For the state, the current methodology is simple, fair and objective; it

is consistent with current operating procedures and with the long-range plan of a campus-based delivery system for the Scholarship and Grant Program.

The advantages of continuing to use the Uniform Methodology need to be weighed against several disadvantages. Families who do not benefit because of an expected contribution from asset equity would remain ineligible for aid. Using a standard methodology limits an institution's discretion in determining a student's financial aid. And, as a participant in a national, consensus methodology, the state has limited ability to influence change in that approach.

Developing a unique Minnesota methodology that excluded asset equity from consideration would help applicants demonstrating an expected family contribution from this source. A unique Minnesota need analysis would be desirable if the national model did not meet the state's policy objectives. The state would have total control over its own methodology.

A unique Minnesota methodology, however, could create confusion for students and parents if they had to complete multiple applications for various sources of aid. The job of the institutional aid officer would become more difficult. Additional, complex information would have to be communicated to students and parents, and data processing requirements at the campus would become greater, more complex, and more costly. A state methodology ignoring asset equity might be viewed as less fair than the current approach. A disadvantage to the state of using a Minnesota methodology might be a loss of objectivity and the addition of data processing requirements.

Developing a specific remedy, such as a targeted-state program, would address a perceived problem and help students and parents without weakening the integrity of the financial aid system. Adopting a targeted approach would allow the state to review and revise special policies or programs as conditions

change without jeopardizing the strength of the existing aid system. Under a discretionary program relying on subjective judgments, however, those in need of the assistance might not receive it. Institutions would have another program to implement. The state would have less policy control, making it more difficult to ensure objectivity and fairness.

CHAPTER I. INTRODUCTION AND BACKGROUND

The goal of Minnesota's financial aid program is to ensure that all the state's citizens have an opportunity to pursue the post-secondary education that best meets their educational needs, regardless of personal or family financial circumstances. The state has chosen to fulfill this goal by targeting assistance to those students with the greatest financial need. Increased tuition and related educational costs have been offset for students from low and lower-middle income families by substantial state and federal grants. Because of this targeted approach, the process of estimating financial need becomes important.

ROLE OF NEED ANALYSIS

Minnesota's Shared Responsibility model expects students to cover 50 percent of their educational costs with a combination of savings, current earnings, loans, and assistance from institutional and private sources. The remaining 50 percent of educational costs is expected to be covered by parents--to the extent that they are able to contribute--and, where parents are not able to contribute, by a combination of State Scholarships and Grants and Federal Pell Grants. The parental ability to contribute is determined by the need analysis, which is a standard assessment of family financial circumstances.

The State Scholarship and Grant Program uses the Uniform Methodology, a nationally standardized need analysis model. The Uniform Methodology considers the family's income and assets, as well as factors such as family size, number

of children in post-secondary education, and age of parents in determining the expected parental contribution.

MANDATE

Rising educational costs and a stagnant farm economy have raised concern about the ability of many students and families to afford a post-secondary education. During the 1985 legislative session, concern focused on how family assets and related levels of debt affect student eligibility for state student aid and how consistent these factors are with Minnesota's commitment to preserving access by awarding grants to students based on financial need.

The 1985 Legislature directed the Higher Education Coordinating Board to review the effect of the current need analysis method on students and parents who have various types of assets and modest incomes such as farmers, owners of small businesses and homeowners without large mortgages, and to consider alternative methods of calculating parental contributions that are more closely related to income. A report of the review and recommendations is to be submitted to the 1986 Legislature.[1]

CURRENT ISSUES

Concerns about the role of assets in the need analysis have focused on two types of assets: business/farm equity and home equity. Concern has been expressed about the appropriateness of public policy that expects families to either borrow against or sell the farm, business, or home in order to help their children to pay for education beyond high school. This issue has become particularly significant in light of the current farm crisis. Some farm families lack sufficient income to borrow against equity to offset educational

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[1] Laws of Minnesota for 1985, First Special Session, Chapter 11, Section 3, Subd. 2.

costs. Thus, the only options might be to sell a portion of a farm, thereby reducing a source of income, or not providing for a child's education. A similar, difficult situation could evolve for the person with low income, but substantial home equity. The expected contribution from home equity might force the parents to choose between selling their home or not helping their children financially. As with the farm family, borrowing against the home equity is a difficult option for the low-income family because the family's income may not be sufficient to support the debt payment.

This paper responds to these issues in two ways. First, the philosophical framework for considering equity from assets in the need analysis is explored to assess the legitimacy of current concerns. Second, the impact of the need analysis on those types of families identified as being at risk is examined to determine whether the perceived problems do, in fact, exist.

CONTENTS

Chapter II examines the need analysis currently used in Minnesota to estimate the expected parental contribution. The chapter examines how and why the need analysis evolved, including the philosophical premises underlying the consideration of equity in assets as a family resource.

Chapter III uses data on current applicants for State Scholarships and Grants to examine how the need analysis affects students from families with different financial conditions. This chapter analyzes those who actually are affected adversely by including equity in assets when calculating the expected family contribution.

Chapter IV examines various ways in which the state could respond to the current concerns, including (1) staying with the current approach, (2) adopting a unique need analysis for Minnesota, or (3) developing alternative strategies

aside from adjusting the need analysis to respond to the concerns. The advantages and disadvantages of each approach are analyzed.

CHAPTER II. THE UNIFORM METHODOLOGY FOR ESTIMATING THE EXPECTED FAMILY CONTRIBUTION

INTRODUCTION

Minnesota uses a national model, the Uniform Methodology, to estimate a family's ability to assist financially its members who attend post-secondary institutions. The Uniform Methodology is used for all state need-based financial aid programs and by most public and private post-secondary institutions in the state.

The Uniform Methodology, developed in 1975, reflects a consensus within the national financial aid community about how best to estimate a family's financial condition. Developed to ensure consistency and fairness across the nation, it is based on five principles:

1. To the extent that they are able, parents have the primary responsibility to pay for their children's education.
2. Parents will, as they are able, contribute funds for their sons' and daughters' education.
3. Students, as well as their parents, have a primary responsibility to help pay for their education.
4. The family should be accepted in its present financial condition.
5. A need analysis system must evaluate families in a consistent and equitable manner while recognizing that special circumstances can and do alter a family's ability to contribute.[2]

This chapter discusses why the Uniform Methodology evolved and how it works.

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[2] ACT Handbook for Financial Aid Administrators, 1985-86 Academic Year, Page 2.

WHY THE UNIFORM METHODOLOGY EVOLVED

The importance of extending educational opportunity to a broader mix of persons became accepted in the 1950s and 1960s and the value of financial aid in achieving greater opportunity became evident. It also became apparent that more uniformity among institutions was needed in estimating students' financial need. A consistently simple, fair, and efficient way to estimate a family's financial condition was needed as the student considered attendance at several institutions.

Serious efforts to coordinate the analysis of student financial need began late in the 1960s. These efforts became formal in 1974 with the creation of a national task force of representatives from numerous post-secondary agencies and organizations. The task force addressed the problems associated with delivering financial aid at the federal, state, private, and institutional levels and developed a national standard of "ability to pay," from which evolved the Uniform Methodology, first applied in 1975.

Since its inception, the Uniform Methodology has been maintained by a subcommittee of the National Student Aid Coalition, which includes representatives from educational institutions, national and local educational organizations, students, providers of financial aid services, and other interested parties. The coalition provides a forum for continuous review of the Uniform Methodology and annually updates the methodology to accommodate necessary changes. Although the Minnesota Higher Education Coordinating Board is not a member of the coalition, it belongs to several organizations represented on the coalition and has provided suggestions for updating and revising the methodology.

HOW THE UNIFORM METHODOLOGY WORKS

For dependent students, Minnesota uses the Uniform Methodology to estimate how much parents are expected to contribute to the student's education. State policy sets the student's expected contribution. For an independent student, the Uniform Methodology is used to estimate the amount expected from the student and spouse for education. In estimating the parents' ability to contribute toward post-secondary education, the family's total financial strength, including both income and assets, is considered. The processes for estimating the expected contribution from income and assets are described separately below.

Contribution From Income

The first step in estimating the parents' ability to contribute to their children's education, as shown in Figure 2.1, involves estimating what they can contribute from current income. First, the income required for a family to sustain a reasonable standard of living is determined. In analyzing parents' income, allowances are made for normal living expenses over which the family has little control, such as taxes, medical expenses, and family maintenance (housing, food, clothing, etc.). These allowances are deducted from the parents' income. The need analysis formula differentiates these nondiscretionary expenditures by family size.

The remainder of the parents' income, after excluding these necessary living allowances, is considered "available income." This amount is considered available to the family for a variety of discretionary purposes, one of which is to provide for the post-secondary education of the children.

FIGURE 2.1. CONTRIBUTION FROM CURRENT INCOME

Parents' Income			
1984 Adjusted Gross Income			_____
Other Income		+	_____
Total Income		=	_____
Allowances:			
U.S. Income Tax	_____		
Social Security Tax	+ _____		
State and Other Taxes	+ _____		
Medical/Dental	+ _____		
Employment	+ _____		
Elementary/Secondary Tuition	+ _____		
Standard Maintenance	+ _____		
Total Allowances		-	_____
Available Income		=	_____

SOURCE: ACT Handbook for Financial Aid Administrators, 1985-86 Academic Year.

Contribution from Assets

Since assets, as well as income, are resources that a family has available to purchase goods and services, including education, they are considered in determining the parents' expected contribution. Expecting a contribution from the family's assets is consistent with the principle in need analysis that the family should be accepted in its current financial condition. A family with a small income and large assets may be considered to have the same relative financial strength as another family with a greater income but few or no assets.

As shown in Figure 2.2, the family is asked to report the current market value of all assets. For assets that can readily be converted to cash, such as savings accounts, checking accounts, and stocks, the current cash value is declared. For assets that would be converted less easily to cash, such as the parents' home, other real estate or investments, and farm or business assets, the family is asked to declare the current market value of the asset. Current market value is defined as the amount at which the asset could be converted to usable cash under current economic conditions. Indeed, the market value of an asset may vary appreciably from the family's perceived value of the asset.

Not all assets, however, are considered available to be used by the family to defray educational costs. The family may not own the entire asset, and therefore the need analysis considers only the family's equity in the asset. Farm and business assets are provided further protection.

Specifically, the Uniform Methodology determines the expected contribution from assets as follows:

First, the methodology determines the total amounts currently available to the family from the balance of checking accounts, savings, and cash on hand.

FIGURE 2.2. CONTRIBUTION FROM ASSETS

Parents' Assets				
Total Cash, Savings, Checking				_____
Home Market Value		_____		
Unpaid Mortgage	-	_____		
Home Equity			+	_____
Market Value of Other Real Estate/Investments		_____		
Debts against Other Real Estate/Investments	-	_____		
Net Value of Other Real Estate/Investments				_____
Market Value of Business/Farm		_____		
Debts	-	_____		
Total Net Worth	=	_____		
Taxation Rate*	x	_____		
Adjusted Net Worth of Business/Farm			+	_____
Net Worth for Computation			=	_____
Home and Other Asset Protection Allowance**			-	_____
Discretionary Net Worth			=	_____
Asset Conversion Rate***			x	_____
Income Supplement			=	_____

SOURCE: ACT Handbook for Financial Aid Administrators, 1985-86 Academic Year.

*See Table 2.1.
**See Table 2.2.
***See Table 2.3.

Any debt against these assets is subtracted so that only the net asset is considered.

Second, the methodology derives the parents' home equity by subtracting the unpaid mortgage and related debts from the current market value of the parents' home.

Third, the methodology derives the parents' equity in other real estate and investments by subtracting the unpaid debts on these holdings from their current market value.

Fourth, the methodology derives the parents' equity in their business or farm by subtracting the unpaid mortgage or debts from its current market value. The Uniform Methodology, however, protects farm and business equity to avoid endangering income producing ability. Only a portion of farm and business equity, or net worth, is considered in the need analysis, and this proportion increases as the value of farm and business equity increases. As shown in Table 2.1, only 40 percent of the first $60,000 of farm and business equity is considered. This percentage increases progressively as equity rises, reaching 100 percent of equity over $300,000. This farm and business equity is added to the other available equity to provide the total net worth from equity of the family.

Assets are not available exclusively to pay for post-secondary education, but rather have been accumulated for a variety of purposes, including emergencies and eventual retirement. Recognizing this, the Uniform Methodology provides an asset protection allowance which considers differences in family situation due to age and family type. The amount of protection increases as the age of the older parent increases and is larger for couples than for single parents. As illustrated in Table 2.2, the asset protection allowance varies from $27,300 for a family in which the older parent is 40 (which is in the

TABLE 2.1 BUSINESS/FARM NET WORTH ADJUSTMENT

Net Worth	Adjusted Net Worth
Less than $1	$0
$1-60,000	40% of net worth
$60,001-180,000	$24,000 + 50% of net worth over $60,000
$180,001-300,000	$84,000 + 60% of net worth over $180,000
$300,001 or more	$156,000 + 100% of net worth over $300,000

SOURCE: ACT Handbook for Financial Aid Administrators, 1985-86 Academic Year.

TABLE 2.2 HOME AND OTHER ASSET PROTECTION ALLOWANCE (DEPENDENT MODEL)

Age of Older Parent	Allowance for Couple	Allowance - Single
25 or Under	$ 0	$ 0
26	1,800	1,400
27	3,600	2,900
28	5,500	4,300
29	7,300	5,800
30	9,100	7,200
31	10,900	8,700
32	12,700	10,100
33	14,600	11,600
34	16,400	13,000
35	18,200	14,500
36	20,000	15,900
37	21,800	17,400
38	23,700	18,800
39	25,500	20,300
40	27,300	21,700
41	27,900	22,200
42	28,600	22,800
43	29,400	23,200
44	30,200	23,800
45	31,000	24,400
46	32,100	25,000
47	32,900	25,500
48	33,800	26,100
49	35,000	26,800
50	35,900	27,500
51	37,100	28,300
52	38,400	29,000
53	39,700	29,800
54	41,000	30,700
55	42,300	31,500
56	43,700	32,400
57	45,200	33,200
58	46,700	34,200
59	48,500	35,300
60	50,000	36,400
61	52,000	37,500
62	54,000	38,600
63	56,000	39,800
64	58,500	41,200
65 and Over	60,600	42,400

SOURCE: ACT Handbook for Financial Aid Administrators, 1985-86 Academic Year.

lower age range for parents with college-age children) to $60,600 for a family in which the older parent is 65 (which is in the upper age range).

The final step in estimating a family contribution from assets is to apply an "asset conversion rate" to the amount of equity remaining after subtracting the asset protection allowance. As shown in Table 2.3, 12 percent of the family's positive net worth from equity, after exclusions, is considered available to supplement discretionary income. Presumably, the family could reasonably convert this portion of its equity wealth into available discretionary resources, a portion of which could be used to pay for the post-secondary education of its children.

Determining the Parental Contribution

The amount available from various sources of equity in assets (income supplement) is added to the amount estimated to be available from income to derive the total amount of discretionary funds available to the family (adjusted available income). This is shown in Figure 2.3.

Only a portion of these discretionary funds, however, are presumed to be available to help defray post-secondary educational costs. As discretionary income increases, families are expected to contribute proportionately more toward educational costs. As shown in Table 2.4, families are expected to contribute 22 percent of the first $7,000 of discretionary income compared to 47 percent of all discretionary income greater than $14,200. This is called the AAI Taxation Rate. The total parental contribution is divided by the number of children attending school to determine the parents' contribution for any particular application for financial aid.

TABLE 2.3 ASSET CONVERSION RATE

Discretionary Net Worth	Available Income	Rate
$0 or More	any amount	12%
Less than $0	$0 or less	6
Less than $0	$1-14,999	$6\% \times \frac{15{,}000 - AI^*}{15{,}000}$ OR $[6 - (\frac{AI}{1{,}000} \times 0.4)]\%$
Less than $0	$15,000 or more	0%

SOURCE: ACT Handbook for Financial Aid Administrators, 1985-86 Academic Year.

*Available income.

FIGURE 2.3 DETERMINATION OF PARENTAL CONTRIBUTION

Income Supplement	+ _____
Adjusted Available Income	= _____
AAI Taxation Rate (undergraduate or graduate)*	x _____
Parents' Contribution (for all children)	= _____
Number in School (excluding parents)	÷ _____
Parents' Contribution	= _____

SOURCE: ACT Handbook for Financial Aid Administrators, 1985-86 Academic Year.

*Adjusted Available Income

TABLE 2.4 UNDERGRADUATE STUDENT AAI TAXATION RATE

AAI	Parents' Contribution
$-3,410 or less	$-750
$-3,409 - 7,000	22% of AAI
$7,001 - 8,800	$1,540 + 25% of AAI over $7,000
$8,801-10,600	$1,990 + 29% of AAI over $8,800
$10,601 - 12,400	$2,512 + 34% of AAI over $10,600
$12,401 - 14,200	$3,124 + 40% of AAI over $12,400
$14,201 or More	$3,844 + 47% of AAI over $14,200

SOURCE: ACT Handbook for Financial Aid Administrators, 1985-86 Academic Year.

EXAMPLES OF EXPECTED PARENTAL CONTRIBUTIONS FROM DIFFERING LEVELS OF INCOME AND EQUITY

Estimates of separate income and equity levels associated with various expected parental contribution levels are shown in Table 2.5. These calculations assume the following characteristics:

1. Families of four,
2. Both parents employed,
3. Oldest parent 45 years old,
4. Medical and dental expenses less than $1,000,
5. $400 in private elementary or secondary tuition.

Expected Contribution From Income

The amount that parents are expected to contribute to their children's education increases substantially as their income rises. No parental contribution would be expected from family income below $20,000. As shown in Worksheet 1, total allowances of $20,001 would exceed the adjusted gross income, leaving no available income.

Worksheet 1

Parents' Income			
1984 Adjusted Gross Income			20,000
Other Income		+	0
Total Income		=	20,000
Allowances:			
U.S. Income Tax	1,741		
Social Security Tax	+ 1,340		
State and Other Taxes	+ 2,000		
Medical/Dental	+ 400		
Employment	+ 2,000		
Elementary/Secondary Tuition	+ 400		
Standard Maintenance	+ 12,120		
Total Allowances		-	20,001
Available Income		=	0

By contrast, as shown in Worksheet 2, a family with $27,000 income, about the average income in Minnesota, would demonstrate total allowances of approxi-

TABLE 2.5 EXPECTED PARENTAL CONTRIBUTIONS AT THE VARIOUS INCOME, EQUITY, AND FARM AND BUSINESS EQUITY LEVELS

Parental Contribution	Income	Equity	Farm and Business Equity
$0	$20,000	$ 31,000	$ 74,000
$500	24,000	50,000	112,000
$1,000	27,000	69,000	150,000
$1,500	32,000	88,000	186,000
$2,000	34,000	107,000	214,500
$2,500	38,000	126,000	238,000
$3,000	44,000	145,000	259,000

SOURCE: Minnesota Higher Education Coordinating Board.

Note: Parental contributions rounded to nearest $500. Incomes and equity amounts rounded to nearest $1,000.

mately $22,500, leaving about $4,500 in available income. The Uniform Methodology expects the parents to contribute 22 percent, approximately $1,000, of this amount to their children's post-secondary education.

Worksheet 2

Parents' Income			
1984 Adjusted Gross Income			27,000
Other Income		+	0
Total Income		=	27,000
Allowances:			
U.S. Income Tax	3,113		
Social Security Tax	+ 1,809		
State and Other Taxes	+ 2,700		
Medical/Dental	+ 400		
Employment	+ 2,000		
Elementary/Secondary Tuition	+ 400		
Standard Maintenance	+ 12,120		
Total Allowances		-	22,542
Available Income		=	4,458
AAI Taxation Rate (undergraduate or graduate)		x	22%
Parent's Contribution (for all children)		=	980

Expected Contribution From Equity

The parental contribution also increases as the amount of family equity rises. No parental contribution would be expected from equity if this equity were less than $31,000 because of the home and asset protection allowance, as shown in Table 2.2. A family's equity would have to approach nearly $70,000 before the expected family contribution from equity alone would approach $1,000, as seen in Table 2.5. As illustrated in Worksheet 3, no contribution would be expected from the first $31,000; 12 percent ($4,545) of the remainder would be considered convertible to available income, and 22 percent of this amount ($1,000) would be expected as a parental contribution.

Worksheet 3

Net Worth for Computation	=	68,875
Home and Other Asset Protection Allowance	-	31,000
Discretionary Net Worth	=	37,875
Asset Conversion Rate	x	12%
Income Supplement	=	4,545
AAI Taxation Rate		x .22
Parental Contribution	=	1,000

Expected Contribution From Farm and Business Equity

For the family in which the older parent is 45 years old and there is no other equity, farm and business equity would have to exceed $74,000 before any parental contribution would be expected, as shown in Table 2.5 and Worksheet 4.

Worksheet 4

Market Value of Business/Farm		
Debts	-	
(Business/Farm Equity)	=	74,000
(Net Worth Adjustment)		
40% of 1st 60,000	=	24,000
50% of 60,000-180,000	=	7,000
Net Worth for Computation	=	31,000
(Equity Protection Allowance)	-	31,000
Discretionary Net Worth	=	0

Farm and business equity would have to approach $150,000 before the expected parental contribution would reach $1,000, as seen in Table 2.5. As shown in Worksheet 5, the business/farm net worth adjustment would reduce the net worth taken into account in the computation from $150,000 to $69,000. After subtracting the equity protection allowance of $31,000, discretionary net worth of $38,000 would remain.

Twelve percent of this amount ($4,500) would be considered convertible to available income, and 22 percent of this ($1,000) would be expected as a parental contribution.

Worksheet 5

Market Value of Business/Farm		
Debts	-	
(Business/Farm Equity)	=	150,000
(Net Worth Adjustment)		
40% of 1st 60,000	=	24,000
50% of 6,000-180,000	=	45,000
Net Worth for Computation	=	69,000
(Home and Other Asset Protection Allowance)	-	31,000
Discretionary Net Worth	=	38,000
Asset Conversion Rate	x	.12
Income Supplement		4,560
AAI Taxation Rate	x	.22
Parents' Contribution	=	1,003

These examples demonstrate the relative significance of income and assets in estimating how much families would be expected to contribute to their children's education. Key to the impact on families is the interaction between these variables. Few families have substantial income and no equity or, conversely, little income and substantial equity. Indeed, income and equity often are interrelated. The following chapter examines the actual relationships of income, equity, and expected contributions for applicants to the State Scholarship and Grant Program.

CHAPTER III. THE MINNESOTA PROFILE, 1985-86

In 1985-86, over 100,000 Minnesota families will submit information about their financial circumstances to the State Scholarship and Grant Program administered by the Higher Education Coordinating Board in order to be considered for an award. After this information is analyzed with the Uniform Methodology, approximately 59,000 students will demonstrate financial need and will receive over $51 million.

This chapter profiles the applicant population of the State Scholarship and Grant Program. The analysis focuses primarily on families who own homes as well as those who own businesses or farms. It explores (a) parental income, (b) home and business/farm assets, debt and equity, and (c) the contributions that the Uniform Methodology expects from the various sources of family wealth. Alternative treatments of home and business/farm equity are contrasted with the current approach to determining an expected parental contribution.

METHOD

A 10 percent random sample of students who had applied for a Minnesota State Scholarship or Grant in 1985-86 prior to October 15, 1985, was drawn from the computer files of the Student Need Analysis Service of the American College Testing (ACT) corporation for this study.[3] Due to time and resource constraints, this analysis was limited to the dependent student population.[4]

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[3] ACT operates one of many need analysis services in the country but is the only such vendor that supplies the need analysis for the Minnesota program.

[4] Dependent students make up over 70 percent of the Scholarship and Grant applicants. Moreover, legislative concerns that led to this study focused primarily on expectations of parents contributing to their son or daughter's education. A similar analysis of independent students is possible.

After rejecting any cases with incomplete or inconsistent data, 6,648 dependent student cases remained.

The ACT need analysis simulation service, which provides regular updates on the impact of changes in both the federal Pell Grant and the Uniform Methodology, was used to derive reliable estimates of the change in expected parental contributions resulting from specific changes in the treatment of home and business/farm equity.

CHARACTERISTICS OF THE APPLICANT POPULATION

A representative picture of the typical family of the dependent applicant can be drawn from the random sample selected for this study. The average family size is 4.4, including both parents and all dependent children. The typical applicant family has between one and two children enrolled in post-secondary education (mean equals 1.5). The average income was $26,539 in tax year 1984 (the base year for calculating need for the 1985-86 school year). The typical family had home equity of $37,808 and a total net worth of $41,647.

Table 3.1 and Figure 3.1 show the percentage distribution of state grant applicants by tax year 1984 parental income. The majority of the applicants came from families with an annual income below $36,000, with the largest single category being $24,000 to $35,999. A small proportion of the applicant families reported annual income over $41,000; their probability of qualifying for aid based on need is extremely low.

The previous chapter described the method of deriving an expected contribution from consideration of the parental income and assets. Table 3.2 and Figure 3.2 show the actual (average) contributions from both income and equity for families who report varying levels of income. The expectation from income is small until annual parental income reaches about $24,000, after which point

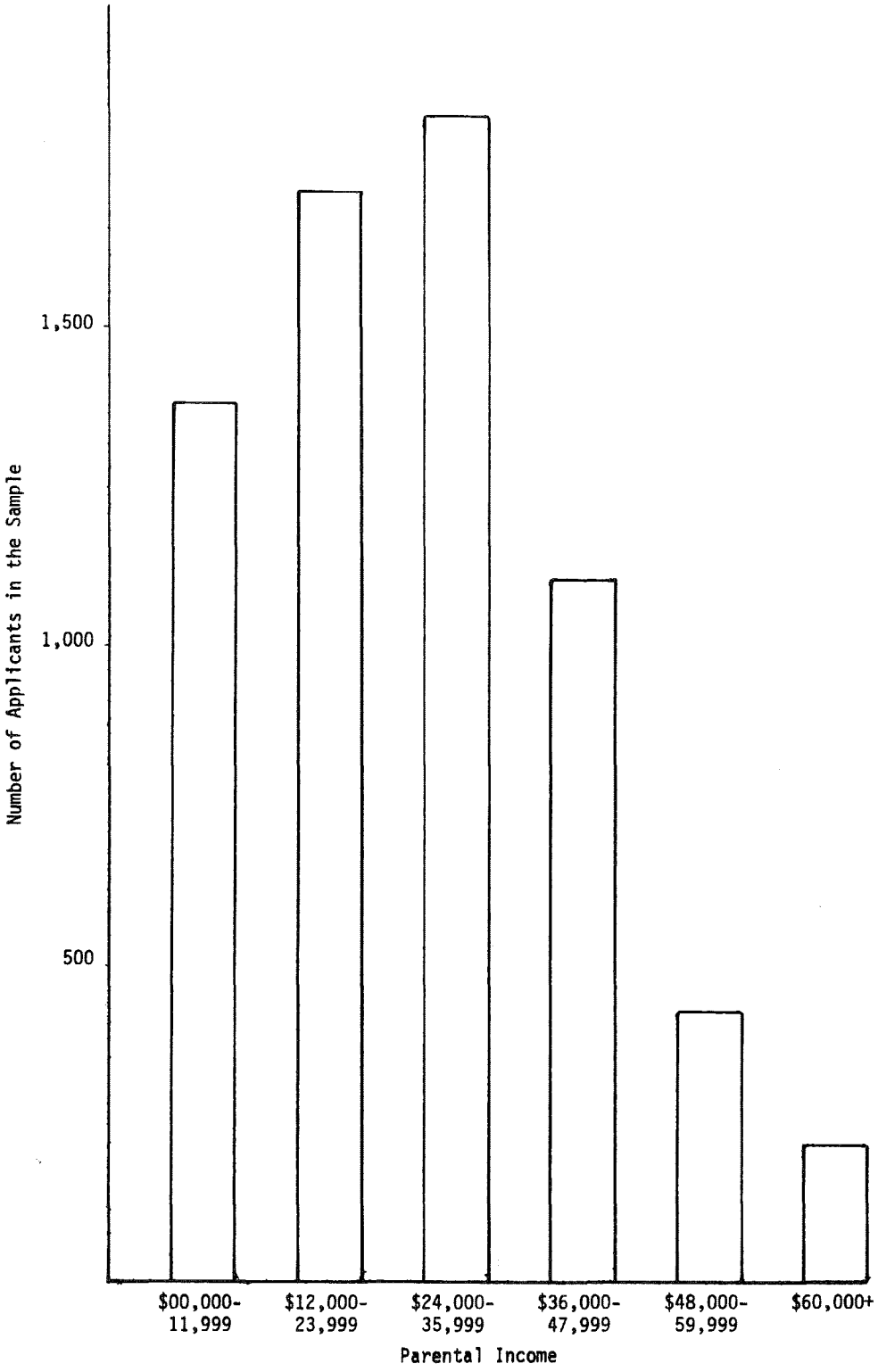
TABLE 3.1 DISTRIBUTION OF PARENTAL INCOME FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS

Tax Year 1984 Parental Income	Percent of Total Cases
$00,000-11,999	20.7%
$12,000-23,999	25.7
$24,000-35,999	27.5
$36,000-47,999	16.6
$48,000-59,999	6.3
$60,000+	3.2
Total	100.0%

SOURCE: Minnesota Higher Education Coordinating Board.

Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 (sample cases = 6,648).

FIGURE 3.1 DISTRIBUTION OF PARENTAL INCOME FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS



SOURCE: Minnesota Higher Education Coordinating Board.

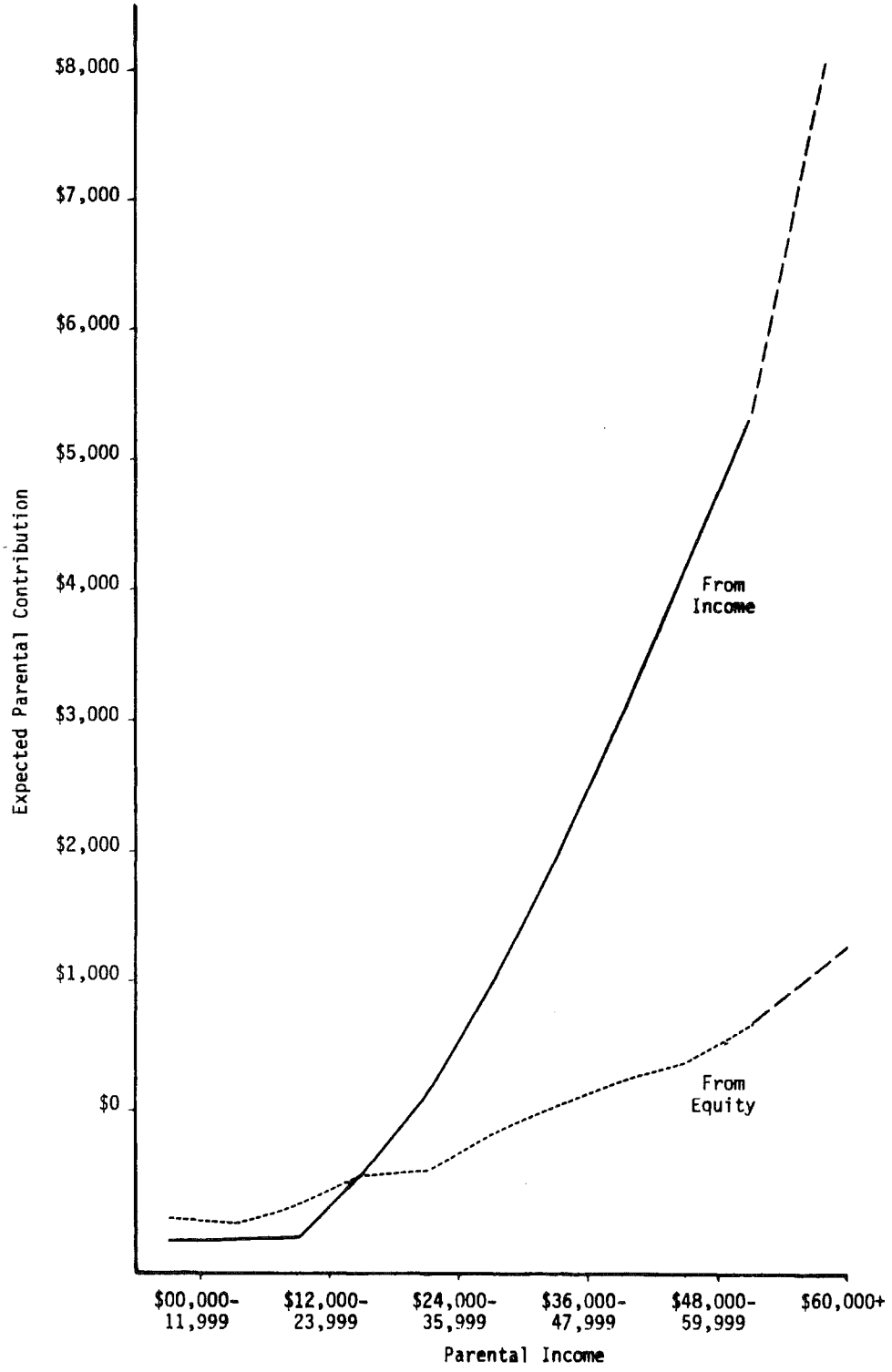
TABLE 3.2 AVERAGE EXPECTED PARENTAL CONTRIBUTION FROM INCOME AND FROM EQUITY FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS BY PARENTAL INCOME CATEGORY

Tax Year 1984 Parental Income	Percent of Total Cases	Expected Parental Contribution		
		From Income	From Equity	Total
$0,000-11,999	20.7%	$ 1	$ 152	$ 153
$12,000-23,999	25.7	309	397	706
$24,000-35,999	27.5	1,559	669	2,228
$36,000-47,999	16.6	3,363	1,117	4,480
$48,000-59,999	6.3	5,889	1,490	7,379
$60,000+	3.2	9,923	2,252	12,175

SOURCE: Minnesota Higher Education Coordinating Board.

Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 (sample cases = 6,648).

FIGURE 3.2 AVERAGE EXPECTED PARENTAL CONTRIBUTION FROM INCOME AND FROM EQUITY FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS BY PARENTAL INCOME CATEGORY



SOURCE: Minnesota Higher Education Coordinating Board.

it rises progressively. For families reporting below $24,000 in income, the majority of the expected contribution is derived from equity, although the average expectation from equity alone is below $400. For families above $24,000 in annual income, the expected contribution from income exceeds that which is expected from equity. Total parental contributions in excess of $4,000 disqualify a student for a state grant; eligibility typically ceases for families with incomes in the high $30,000s or low $40,000s.

TWO IMPORTANT SUB-POPULATIONS

The remainder of this chapter focuses on the treatment of two key populations of Minnesota families: homeowners and business- or farm-owners. Equity from either home, business, or farm is an important factor in determining a family's need and, thereby, its eligibility for state grant assistance.

Table 3.3 and Figure 3.3 demonstrate that the majority (84.5 percent) of the applicant families owned a home in tax year 1984, although a small fraction of those families had no equity in the home. By contrast, slightly over one-quarter (28.6 percent) of the applicant families reported ownership of a business or farm; however, 3 percent of the total population (or greater than one-tenth of the proprietors) had liabilities that exceeded their business or farm asset value.

The Homeowner

This section explores in greater detail the characteristics of the 84.5 percent of the applicant population which reported owning a home in 1984. The distribution by income level and home equity level is described, and the extent to which home equity influences the expected parental contribution is explored.

Parental Income. Table 3.4 and Figure 3.4 contrast the income distribution of homeowners with that of the population as a whole. The majority of

TABLE 3.3 OWNERSHIP OF HOME AND BUSINESS/FARM AMONG 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS

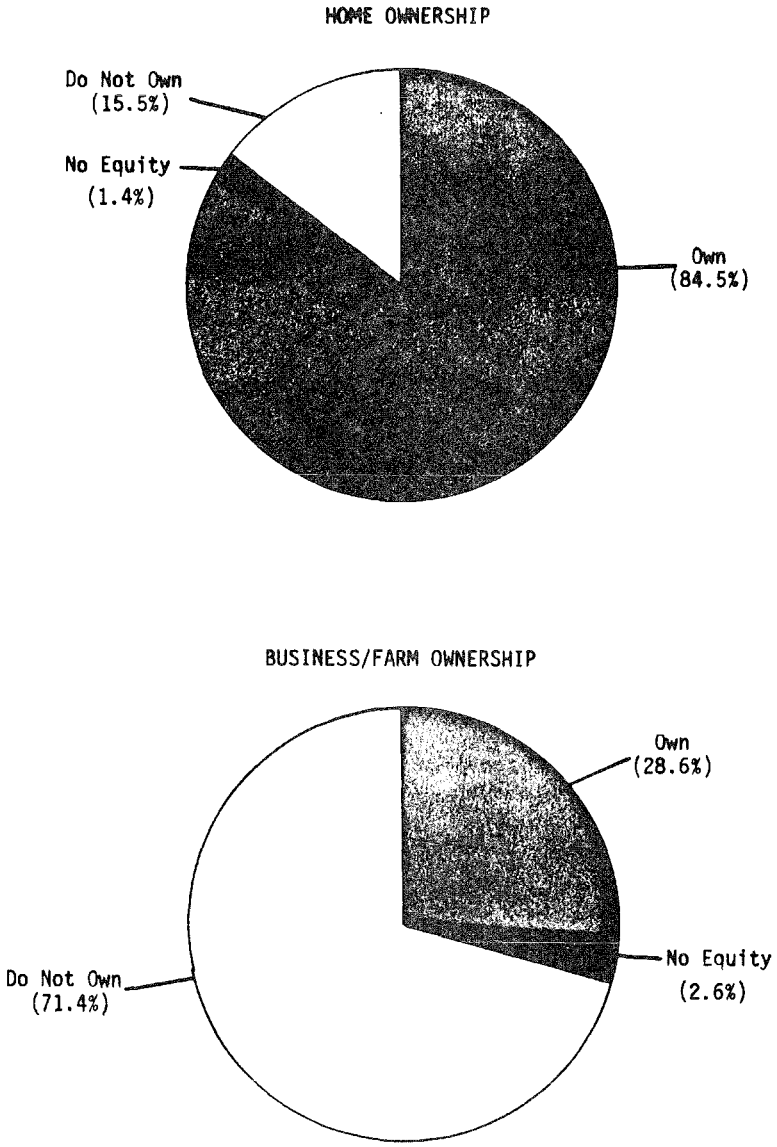
Property Status	Home		Business/Farm	
	Sample Number	Percent of Total Cases	Sample Number	Percent of Total Cases
Ownership Reported	5,614	84.5%	1,904	28.6%
Some Equity Reported	5,521	83.1	1,730	26.0
No Equity Reported[1]	93	1.4	174	2.6
No Ownership Reported	1,034	15.5	4,744	71.4
Total	6,648	100.0%	6,648	100.0%

SOURCE: Minnesota Higher Education Coordinating Board.

Note: The 6,648 cases reported in this table represent a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985.

[1] Liabilities exceed the asset value of the property.

FIGURE 3.3 OWNERSHIP OF HOME AND BUSINESS/FARM AMONG 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS



SOURCE: Minnesota Higher Education Coordinating Board.

TABLE 3.4 COMPARATIVE DISTRIBUTION OF PARENTAL INCOME FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS-- ALL FAMILIES COMPARED TO HOMEOWNERS

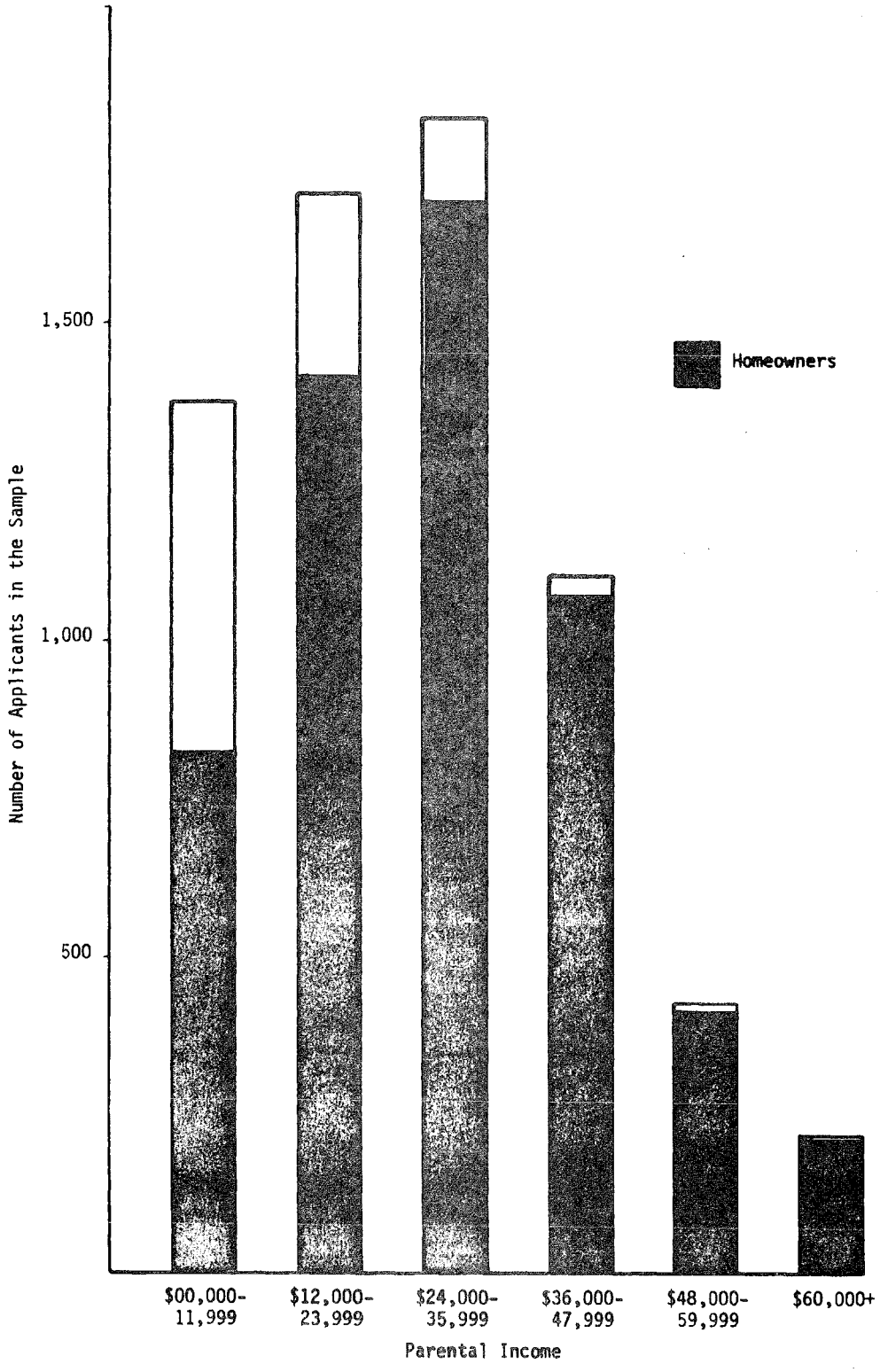
Tax Year 1984 Parental Income	All Families[1] Total Cases	Homeowners[2] Total Cases
$00,000-11,999	20.7%	14.6%
$12,000-23,999	25.7	25.2
$24,000-35,999	27.5	30.1
$36,000-47,999	16.6	19.0
$48,000-59,999	6.3	7.3
$60,000+	3.2	3.8
Total	100.0%	100.0%

SOURCE: Minnesota Higher Education Coordinating Board.

[1] Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 (sample cases = 6,648).

[2] Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 and reported ownership of a home in tax year 1984 (sample cases = 5,614).

FIGURE 3.4 COMPARATIVE DISTRIBUTION OF PARENTAL INCOME FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS-- ALL FAMILIES COMPARED TO HOMEOWNERS



SOURCE: Minnesota Higher Education Coordinating Board.

higher income families own a home, and the lowest proportion of home ownership occurs among the lowest income families.

Home Equity. The typical homeowner family (71.5 percent of all cases) has equity in the home of less than $50,000, as can be seen in Table 3.5 and Figure 3.5. Slightly over one-quarter of the homeowners reported home equity of between $50,000 and $99,999, whereas only one to two percent reported equity in excess of $100,000.

Expected Contribution. The Uniform Methodology expects larger contributions from the family as equity in all forms of assets increases. Table 3.6 and Figure 3.6 show the actual average parental expectation for families with varying amounts of home equity. The expected contribution rises steadily from about $2,000 for the family with under $50,000 in home equity to about $8,000 for the family with $100,000 to $150,000 in home equity, to much higher figures for families with extremely large equity levels.

The unique contribution of home equity to the expected contribution has been inferred by simulating the Uniform Methodology with all home equity levels set to zero and then subtracting the resulting average parental contributions from their corresponding contributions under the Uniform Methodology. The results of this analysis are also shown in Table 3.6 and Figure 3.6. The dollar impact of eliminating home equity from the equation is least significant for those families with low levels of home equity and most significant for those with high equity levels. Eliminating home equity from the Uniform Methodology analysis would reduce the expectations on average by 14 percent for those with under $50,000 in home equity to as much as 69 percent for those with over $150,000 in home equity.

TABLE 3.5 DISTRIBUTION OF HOME EQUITY FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED EQUITY IN A HOME

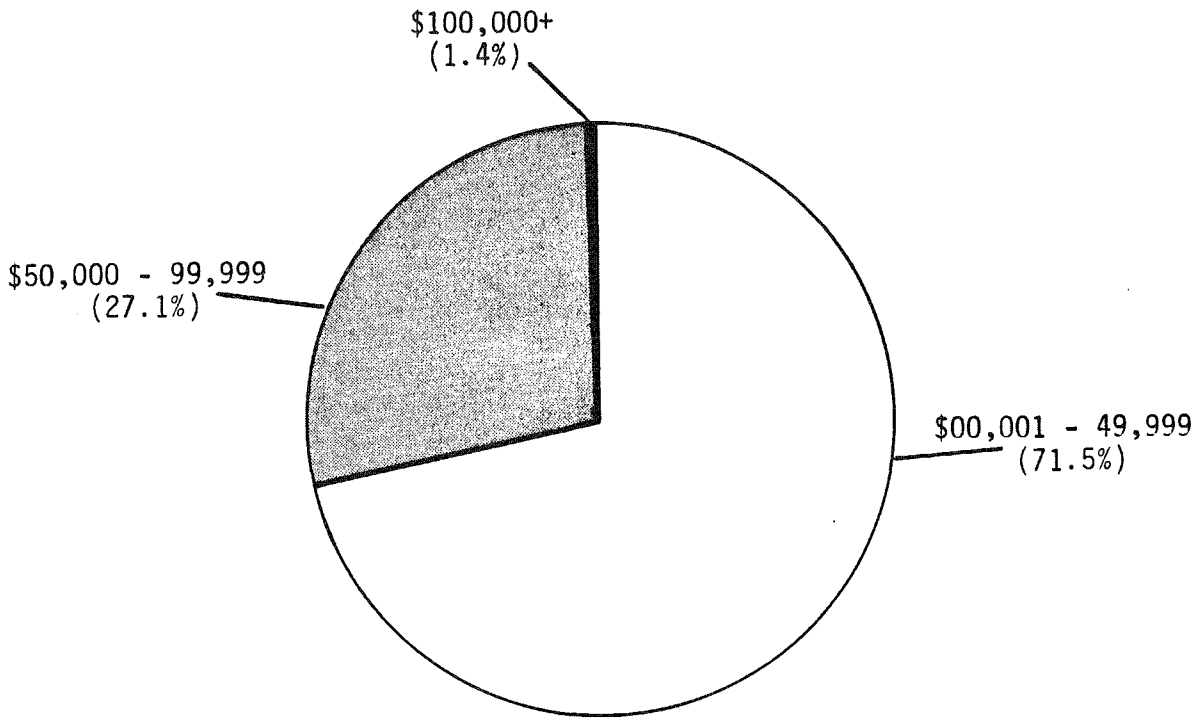
Tax Year 1984 Home Equity[1]	Percent of Total Cases
$00,001-49,999	71.5%
$50,000-99,999	27.1
$100,000-149,999	1.2
$150,000-249,999	0.1
$250,000+	0.1
All	100.0%

SOURCE: Minnesota Higher Education Coordinating Board.

Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 and reported equity in a home in tax year 1984 (sample cases = 5,521).

[1] Equity equals the asset value minus liabilities.

FIGURE 3.5 DISTRIBUTION OF HOME EQUITY FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED EQUITY IN A HOME



SOURCE: Minnesota Higher Education Coordinating Board.

TABLE 3.6 COMPARATIVE AVERAGE EXPECTED PARENTAL CONTRIBUTION FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED EQUITY IN A HOME--CALCULATION WITH HOME EQUITY INCLUDED COMPARED TO CALCULATION WITH HOME EQUITY EXCLUDED

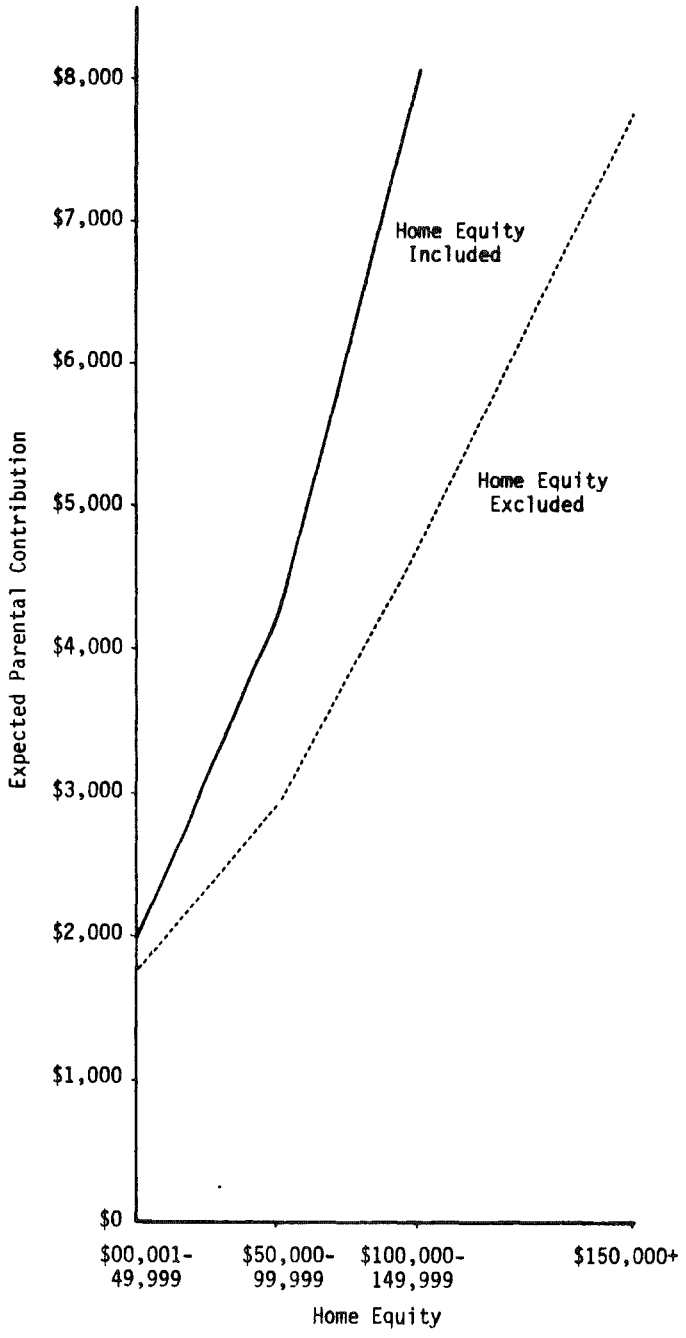
Tax Year 1984 Home Equity	Percent of Total Cases	Expected Parental Contribution		Difference in Parental Contribution	
		Home Equity Included[1]	Home Equity Excluded[2]	Dollars	Percent
$00,001-49,999	71.5%	$ 2,046	$1,764	$ (282)	-14%
$50,000-99,999	27.1	4,250	2,928	(1,322)	-31
$100,000-149,999	1.2	8,051	4,724	(3,327)	-41
$150,000+	0.2	24,873	7,740	(17,133)	-69

SOURCE: Minnesota Higher Education Coordinating Board.

Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 and reported equity in a home in tax year 1984 (sample cases = 5,521).

[1] Standard Uniform Methodology; assumes some contribution from home equity after applying an asset protection allowance (see Chapter II).
[2] Modified Uniform Methodology; assumes no contribution from home equity.

FIGURE 3.6 COMPARATIVE AVERAGE EXPECTED PARENTAL CONTRIBUTION FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED EQUITY IN A HOME-- CALCULATION WITH HOME EQUITY INCLUDED COMPARED TO CALCULATION WITH HOME EQUITY EXCLUDED



SOURCE: Minnesota Higher Education Coordinating Board.

The Business/Farm Owner

This section explores in greater detail the characteristics of the 28.6 percent of the applicant population which reported owning a business or farm in 1984. The distribution by parental income level and equity value is described, and the extent to which equity level influences the expected parental contribution is explored.

Parental Income. Table 3.7 and Figure 3.7 show the distribution of parental income for families that reported owning a business or farm contrasted with the income distribution for the entire applicant population. Business/farm owners make up about half of the $0 to $12,000 income category, and nearly 36 percent of all business/farm families reported such low levels of income in 1984. Fewer and fewer business/farm families fall into each successive category as family income rises. The income characteristics of the business/farm population are significantly different--and more bleak--than for the state's applicant population as a whole.

Business/Farm Equity. The distribution of equity for applicants who reported equity in a business or farm is skewed toward low values as can be seen in Table 3.8 and Figure 3.8. More than 60 percent of the business/farm owners show less than $50,000 in equity, and 20 percent show equity in excess of $100,000.

Expected Contribution. As with home equity, the Uniform Methodology expects larger contributions from business and farm assets as the equity level increases. A deviation from this progressive trend occurs in the $100,000-$149,999 level, however, which may be due to the high proportion of farm families with low income in this category. The unique contribution of business/farm equity to the expected contribution has been inferred by simulating the Uniform Methodology with all business/farm equity levels set to

TABLE 3.7 COMPARATIVE DISTRIBUTION OF PARENTAL INCOME FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS-- ALL FAMILIES COMPARED TO BUSINESS/FARM OWNERS

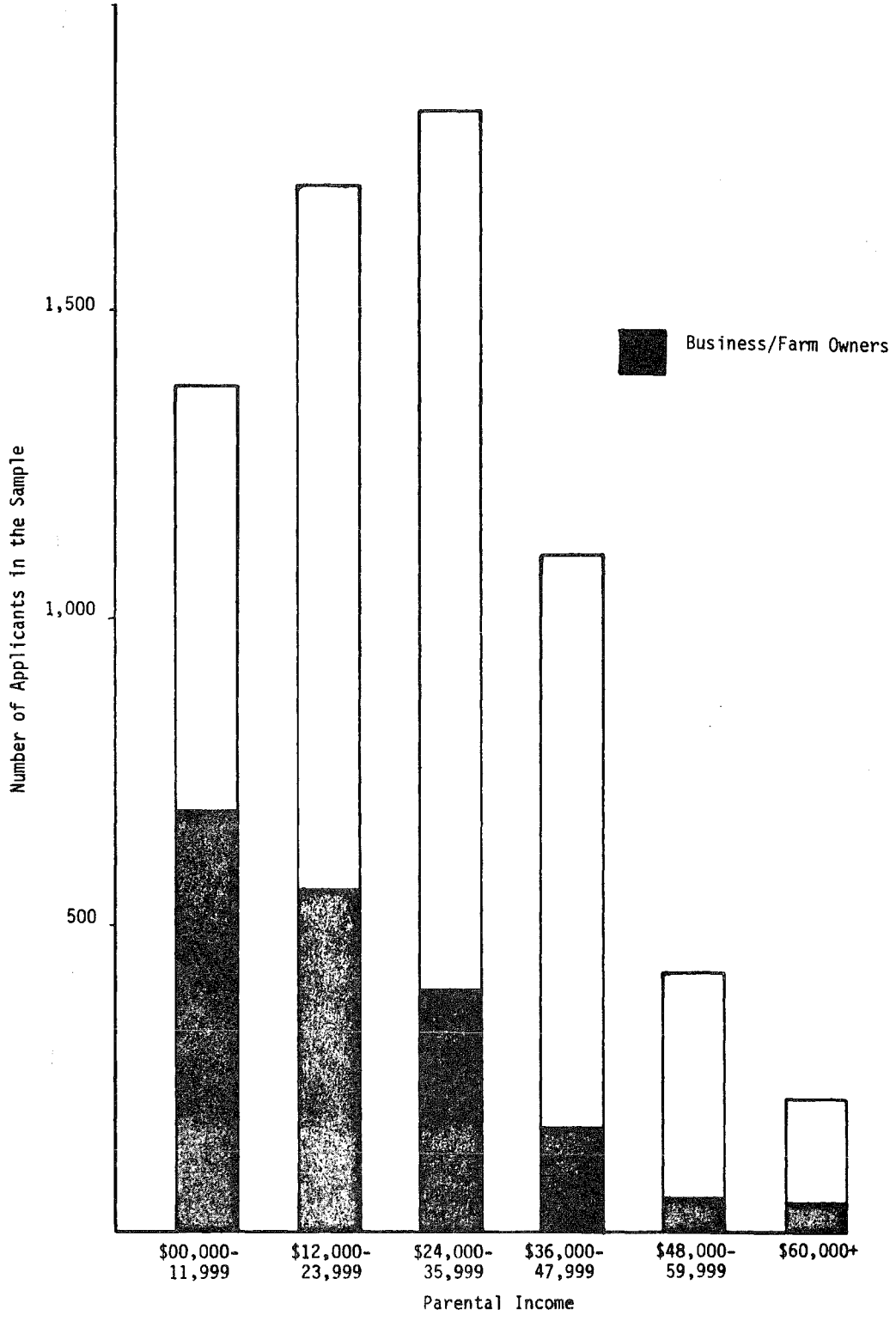
Tax Year 1984 Parental Income	All Families[1] Percent of Total Cases	Business/Farm[2] Percent of Total Cases
$00,000-11,999	20.7%	35.8%
$12,000-23,999	25.7	29.3
$24,000-35,999	27.5	20.8
$36,000-47,999	16.6	8.9
$48,000-59,999	6.3	2.9
$60,000+	3.2	2.3
Total	100.0%	100.0%

SOURCE: Minnesota Higher Education Coordinating Board.

[1] Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 (sample cases = 6,648).

[2] Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 and reported ownership of a home in tax year 1984 (sample cases = 5,614).

FIGURE 3.7 COMPARATIVE DISTRIBUTION OF PARENTAL INCOME FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS-- ALL FAMILIES COMPARED TO BUSINESS/FARM OWNERS



SOURCE: Minnesota Higher Education Coordinating Board.

TABLE 3.8 DISTRIBUTION OF BUSINESS/FARM EQUITY FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED EQUITY IN A BUSINESS OR FARM

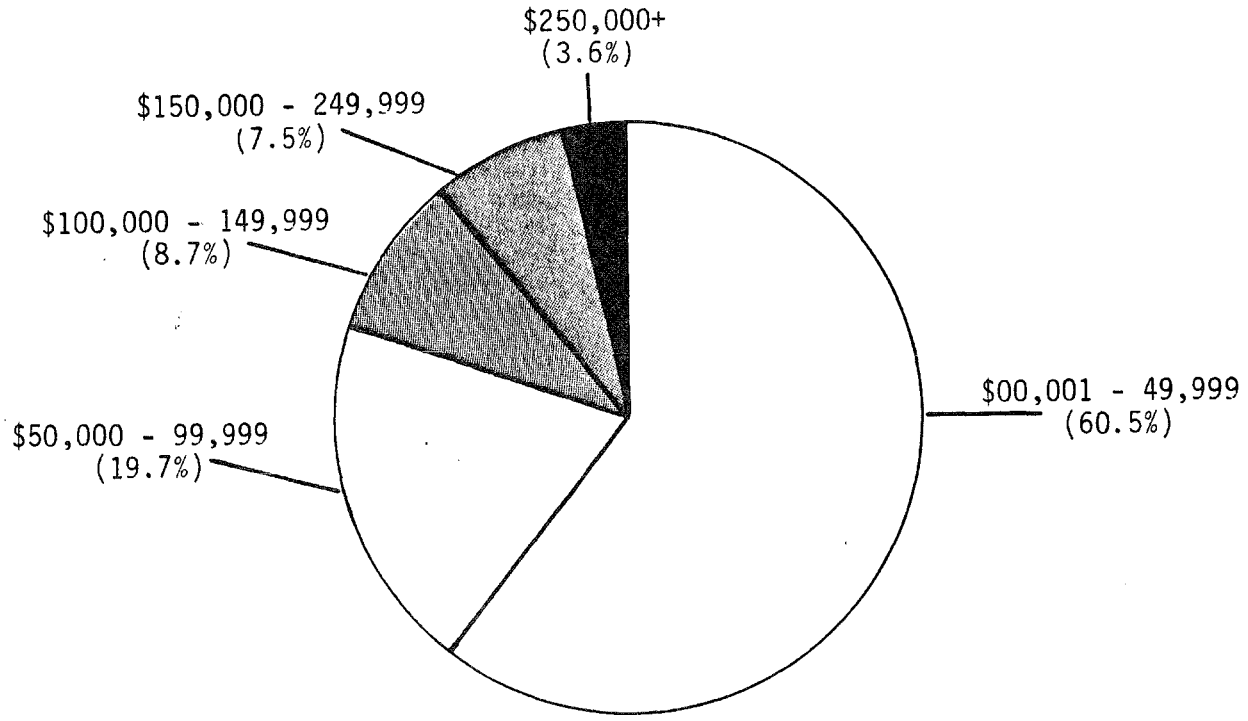
Tax Year 1984 Business/Farm Equity[1]	Percent of Total Cases
$00,001-49,999	60.5%
$50,000-99,999	19.7
$100,000-149,999	8.7
$150,000-249,999	7.5
$250,000+	3.6
Total	100.0%

SOURCE: Minnesota Higher Education Coordinating Board.

Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 and reported equity in a business or farm in tax year 1984 (sample cases = 1,730).

[1] Equity equals the asset value minus liabilities.

FIGURE 3.8 DISTRIBUTION OF BUSINESS/FARM EQUITY FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED EQUITY IN A BUSINESS OR FARM



SOURCE: Minnesota Higher Education Coordinating Board.

zero and then subtracting the resulting average parental contributions from their corresponding contributions under the standard Uniform Methodology. The results of this analysis are shown in Table 3.9 and Figure 3.9. The dollar impact of eliminating business/farm equity from the equation is least significant for those with low levels of equity and most significant for those with high equity levels. Eliminating business/farm equity would reduce the expectation on average by 5 percent ($87) for those with under $50,000 in business/farm equity and by as much as 73 percent ($6,687) for those with over $250,000 in business/farm equity.

SPECIAL ISSUES

Two issues related to the treatment of farm and business owners under the need analysis are (1) the relationship of debt levels to the expected parental contribution and (2) the expected contribution by equity at various levels of income.

Relationship of Debt Levels to Expected Contributions

Business/Farm Asset Value and Debt. Figure 3.10 shows the distribution of gross assets and of debt levels among applicants who reported owning a business or farm. Over one-third of the proprietors have assets of less than $50,000 and 70 percent have assets under $150,000. The remaining 30 percent report assets in excess of $150,000. Given the typical size of a Minnesota farm and prevailing land values, most full-time farm families are likely to fall in the latter group.

Debt levels are somewhat evenly distributed throughout the range of less than .20 to greater than .80. While nearly one-third of the business/farm owners report liabilities of below .20 of the gross asset value, nearly one-quarter report liabilities in excess of .80 of the gross asset value.

TABLE 3.9 COMPARATIVE AVERAGE EXPECTED PARENTAL CONTRIBUTION FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED EQUITY IN A BUSINESS OR FARM--CALCULATION WITH BUSINESS/FARM EQUITY INCLUDED COMPARED TO CALCULATION WITH BUSINESS/FARM EQUITY EXCLUDED

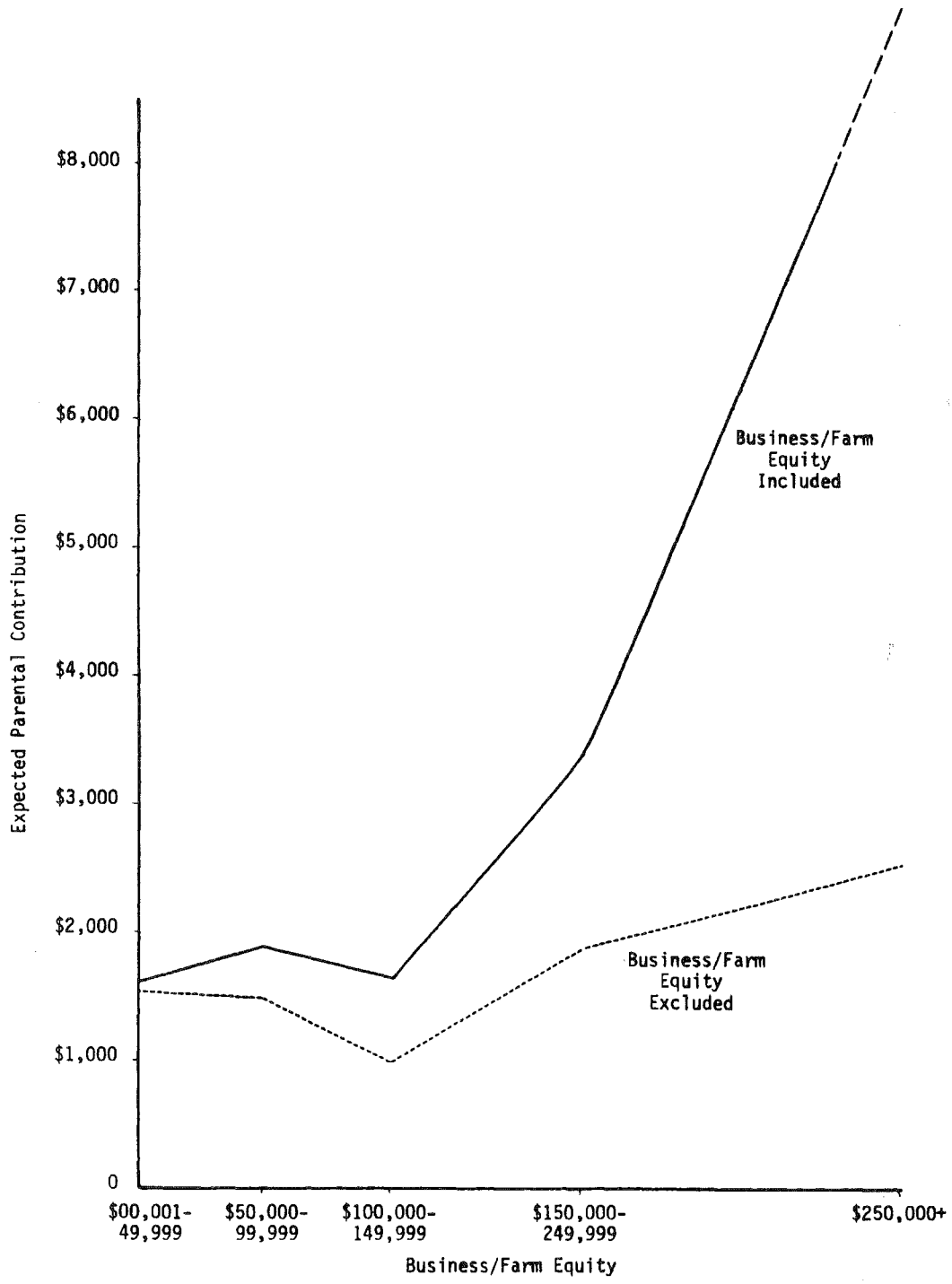
Tax Year 1984 Business/Farm Equity	Percent of Total Cases	Business/ Farm Equity Included[1]	Business/ Farm Equity Excluded[2]	Change	
				Dollars	Percent
$00,001-49,999	60.5%	$1,609	$1,522	$ (87)	-5%
$50,000-99,999	19.7	1,874	1,488	(386)	-21
$100,000-149,999	8.7	1,634	991	(643)	-39
$150,000-249,999	7.5	3,379	1,864	(1,515)	-45
$250,000+	3.6	9,195	2,508	(6,687)	-73

SOURCE: Minnesota Higher Education Coordinating Board.

Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 and reported equity in a business or farm in tax year 1984 (sample cases = 1,730).

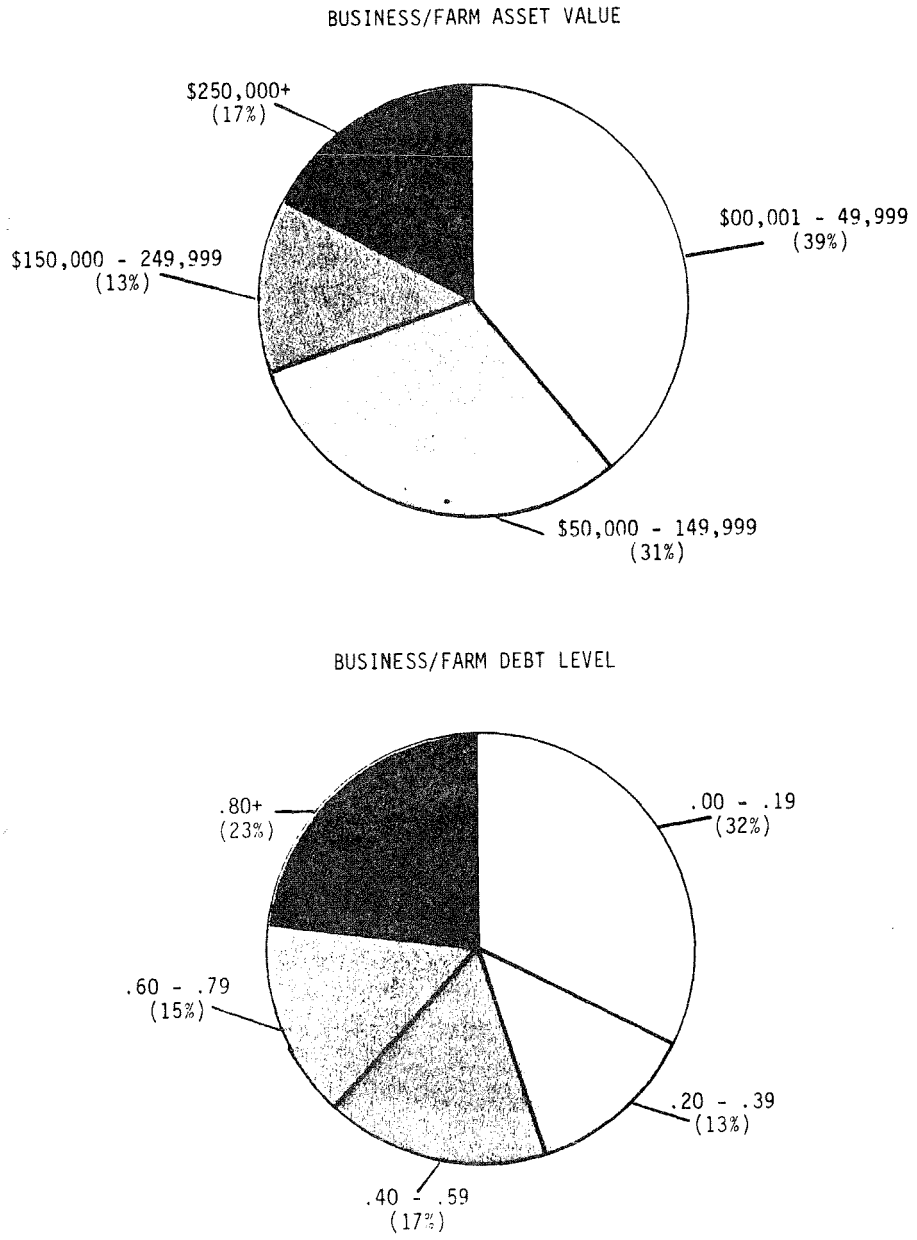
[1] Standard Uniform Methodology; assumes some contribution from business/farm equity after applying an asset protection allowance (see Chapter II).
[2] Modified Uniform Methodology; assumes no contribution from business/farm equity.

FIGURE 3.9 COMPARATIVE AVERAGE EXPECTED PARENTAL CONTRIBUTION FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED EQUITY IN A BUSINESS OR FARM--CALCULATION WITH BUSINESS/FARM EQUITY INCLUDED COMPARED TO CALCULATION WITH BUSINESS/FARM EQUITY EXCLUDED



SOURCE: Minnesota Higher Education Coordinating Board.

FIGURE 3.10 DISTRIBUTION OF BUSINESS/FARM ASSETS AND DEBT LEVELS FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED OWNERSHIP OF A BUSINESS OR FARM



SOURCE: Minnesota Higher Education Coordinating Board.

TABLE 3.10 AVERAGE EXPECTED PARENTAL CONTRIBUTION FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED OWNERSHIP OF A BUSINESS OR FARM BY BUSINESS/FARM ASSET VALUE AND LEVEL OF DEBT

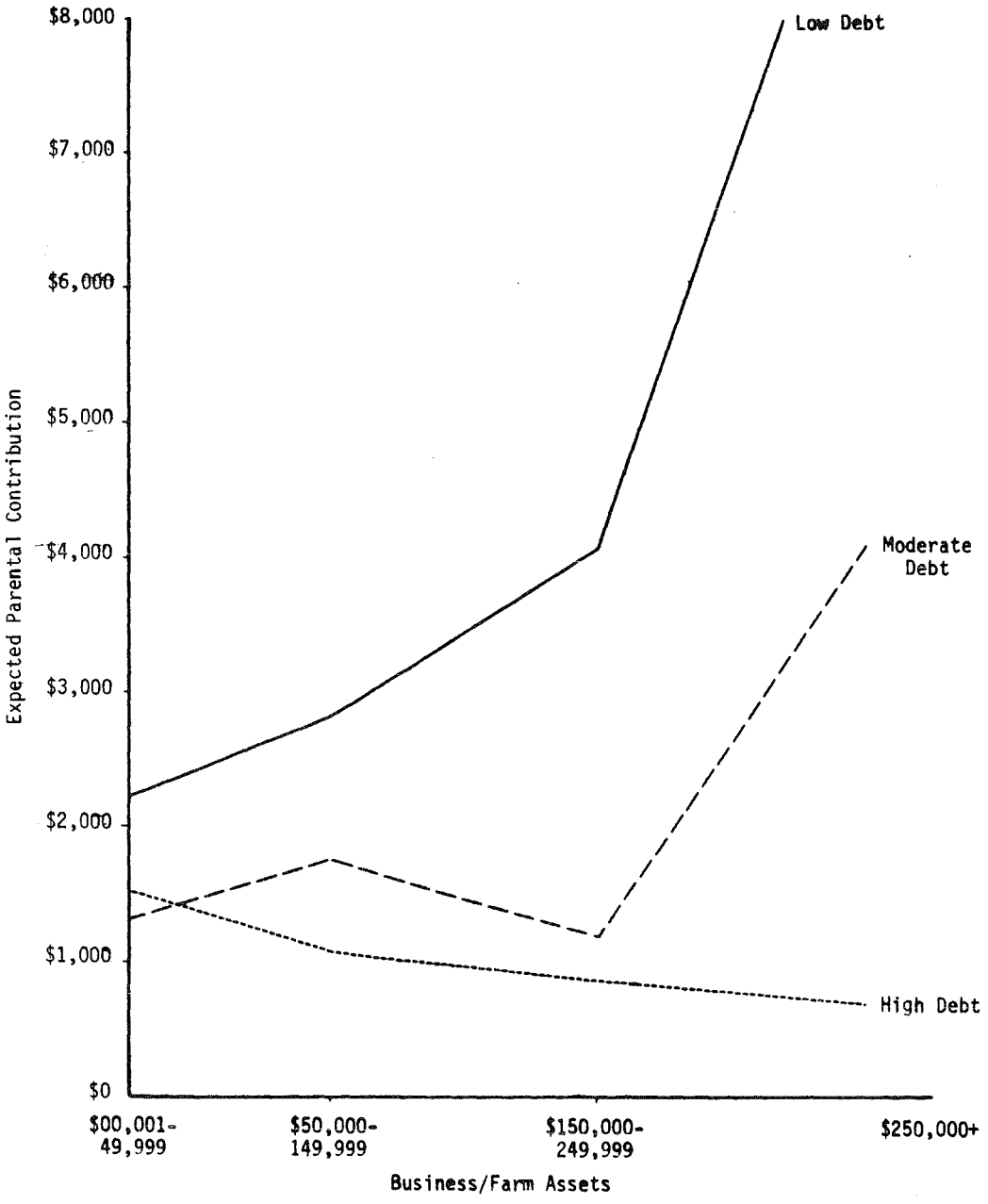
Tax Year 1984 Business/Farm Asset Value	Expected Parental Contribution by Level of Debt		
	Low Debt[1]	Medium Debt[2]	High Debt[3]
$00,001-49,999	$2,223	$1,307	$1,529
$50,000-149,999	2,808	1,762	1,085
$150,000-249,000	4,057	1,180	845
$250,000+	10,355	4,073	688

SOURCE: Minnesota Higher Education Coordinating Board.

Note: Based on a 10 percent random sample of students who applied to the Minnesota State Scholarship and Grant Program prior to October 15, 1985 and reported ownership of a business or farm in tax year 1984 (sample cases = 1,904).

[1] Low debt = .00 to .20 debt to asset ratio (e.g., less than $20,000 in debt on a $100,000 business or farm).
[2] Medium debt = .40 to.60 debt to asset ratio (e.g., between $40,000 and $60,000 in debt on a $100,000 business or farm).
[3] High debt = .80 to 1.00 debt to asset ratio (e.g., more than $80,000 in debt on a $100,000 business or farm).

FIGURE 3.11 AVERAGE EXPECTED PARENTAL CONTRIBUTION FOR 1985-86 MINNESOTA STATE SCHOLARSHIP AND GRANT APPLICANTS WHO REPORTED OWNERSHIP OF A BUSINESS OR FARM BY BUSINESS/FARM ASSET VALUE AND LEVEL OF DEBT



SOURCE: Minnesota Higher Education Coordinating Board.

Expected Contribution. Table 3.10 and Figure 3.11 show the actual average parental expectations for families with varying amounts of asset value and debt level. For business/farm owners with low levels of debt, the expected contribution increases steadily with increasing asset levels, then jumps dramatically as assets exceed $0.25 million. However for those with high debt levels, the expected contribution actually declines as the asset value rises. One likely cause of this phenomenon is the higher cost of debt servicing when large holdings are heavily mortgaged.

Expected Contribution by Equity Level and Income Level

A second special issue is the amount that farm or business owners are expected to contribute to their children's education from equity and how this varies by income level. Table 3.11 and Figure 3.12 show that little parental contribution is expected for the low-income business/farm family (those with income under $12,000) until the business/farm equity exceeds $250,000. For example, a business or farm owner with between $100,000 and $149,999 in equity whose income was under $12,000 is expected to contribute, on average, only $107 to his children's education. However, when the business or farm equity exceeds $250,000, the expected contribution is quite high, even though the income level is low or non-existent (average parental contribution of $5,094). The table also indicates that an extremely small percentage of business and farm owners fall into this situation.

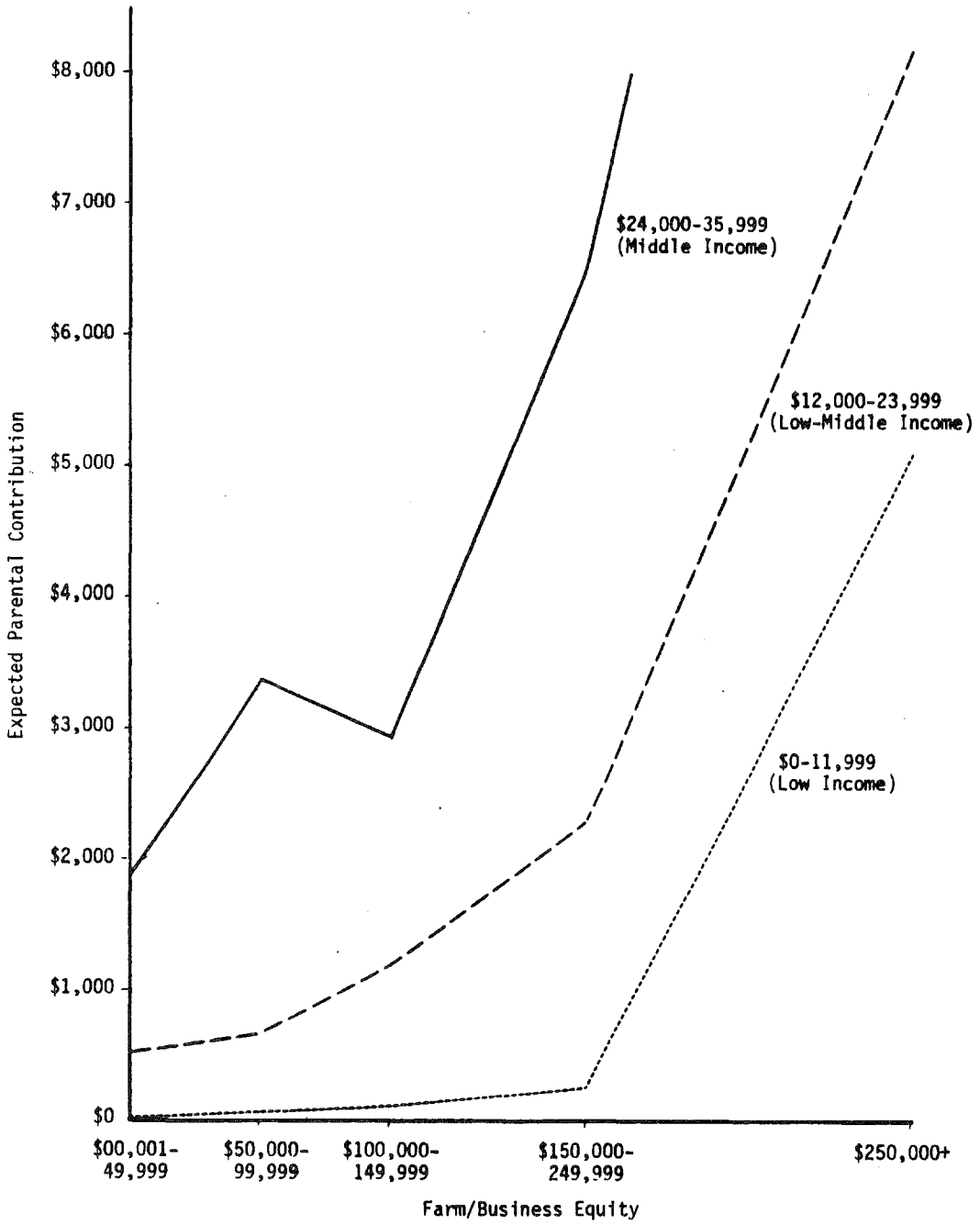
The trend is parallel, though higher in expected contribution, for families with higher parental incomes. Figure 3.12 contrasts the contribution trend for incomes of $0-$12,000 with that of $12,000-$24,000, and those of $24,000 to $36,000.

TABLE 3.11 PARENTAL CONTRIBUTION BY EQUITY AT VARIOUS LEVELS OF INCOME

Farm/Business Equity	Parental Contribution by Income $00,000-11,999	$12,000-23,999	$24,000-35,999
$00,001-49,999	$ 21	$ 506	$ 1,887
N =	303	319	256
$50,000-99,999	$ 62	$ 664	$ 3,356
N =	143	101	56
$100,000-149,999	$ 107	$1,183	$ 2,913
N =	75	42	19
$150,000-259,999	$ 260	$2,293	$ 6,482
N =	58	37	20
$250,000+	$5,094	$8,199	$13,837
N =	27	14	11
Average Expectation	$ 291	$ 931	$ 2,785
Total N =	606	513	362

SOURCE: Minnesota Higher Education Coordinating Board.

FIGURE 3.12 PARENTAL CONTRIBUTION BY EQUITY AT VARIOUS LEVELS OF INCOME



SOURCE: Minnesota Higher Education Coordinating Board.

SUMMARY OF FINDINGS

The previous sections presented profiles of the home and business/farm owning families that applied for State Scholarships and Grants in 1985-86. The incidence, or relative frequency, of various income, asset, debt, and equity circumstances has been shown, as well as the average expected parental contribution from families under each of these financial conditions. This section summarizes the findings concerning the treatment of homeowners and business/farm-owners under the Uniform Methodology.

The Homeowner

The vast majority (84.5 percent) of the applicants to the state program are homeowners, and most (71.0 percent) report home equity of under $50,000. For those families with under $50,000 in home equity, the average expected parental contribution is $2,046, but only $282, or approximately 14 percent, of this amount results from the home equity. The influence of home equity on the expected contribution increases as home equity rises, and the beneficiaries of a change in the Uniform Methodology that would exclude home equity from the calculation would be those with high equity. The current asset protection allowance, which is applied to the equity, appears to provide substantial coverage for the typical Minnesota homeowner.

The Business/Farm Owner

About one-quarter (28.6 percent) of the applicants to the state program own a business or farm, and most (60.5 percent) report business/farm equity of under $50,000. For those families with under $50,000 in business/farm equity, the average expected parental contribution is $1,609, but only $87, or 5 percent, of this amount results from business/farm equity. The influence of business/farm equity on the expected contribution increases as business/farm

equity rises; those owners with the highest equity would benefit most from a change that would exclude this equity from the Uniform Methodology calculation. As with home equity, the asset protection allowance works well for the small business operator or small farmer.

Special Issues

The typical Minnesota farm family has assets in excess of $150,000, but only 30 percent of the business/farm applicants to the state program have assets in that range. Fully one-third of these families report debt levels in excess of .80 of the asset value of the business/farm. Although the Uniform Methodology expects large contributions from those with large assets and low debt levels, little is expected of those who are deeply in debt. For example, the average expected parental contribution for a family with a business/farm asset in excess of $250,000 with high debt levels (in excess of 80 percent of the asset, or more than $200,000 of liabilities) is $688. On average, as Table 3.9 shows, only 5 percent of the parental contribution expected from families with less than $50,000 in equity can be attributed to the influence of the business/farm equity. Five percent of $688 is only $34. In conclusion, the Uniform Methodology appears to be sensitive to the situation of the debt-burdened farmer and would show a high level of need for that family when determining eligibility for state student aid.

Farm and business owners with low income levels, under $12,000, are not expected to contribute much to their children's education until their equity exceeds $250,000. At that equity level, a substantial contribution is expected despite the low income level. A small percentage of business and farm owners is affected by this situation.

CONCLUSION

The analysis in this chapter has demonstrated empirically the effects of the Uniform Methodology on Minnesota families who are applying for assistance to finance their children's education. The methodology produces actual expectations that are consistent with its philosophical orientation--namely, to expect more as real wealth increases. Whether these expectations are reasonable is a matter of value judgment, however.

The analysis has clearly documented the crisis of high levels of debt among many farm and business owners in the state. It has been shown, however, that the Uniform Methodology is sensitive to debt levels and alters the expectations accordingly.

The simulation of alternatives shows that blanket exemption of either home or business/farm equity would be a costly and inefficient means of targeting additional relief to those in greatest distress, if that is deemed to be an important policy goal.

CHAPTER IV. ALTERNATIVE STRATEGIES FOR CONSIDERING ASSETS IN THE NEED ANALYSIS

INTRODUCTION

Minnesota could respond in various ways to concerns about considering equity from assets in determining a family's expected contribution toward its children's post-secondary education. The state could continue to adhere to the Uniform Methodology, develop its own need analysis methodology to address unique Minnesota concerns, or develop solutions to address its specific concerns without altering the national need analysis.

Each of these three general strategies would have different effects on students and their families, post-secondary institutions, and the state. This chapter examines the advantages and disadvantages of each of these three approaches.

ADHERING TO THE UNIFORM METHODOLOGY

Advantages

Students and their families would experience clear advantages if Minnesota continued to adhere to the Uniform Methodology. One advantage is simplicity. By relying on a single need analysis for all state and institutional aid programs, the student and family need complete only one application form for all sources of aid. A second advantage is clarity. The student and family experience no confusion over what will be their expected contribution.

To post-secondary institutions, the advantages are similar. Institutions find it much simpler to rely on one need analysis to serve multiple purposes than to process multiple forms for each student and to incorporate into the student aid packages varying estimates of what a family can reasonably afford

to contribute. Indeed, the Uniform Methodology was developed to avoid the problems of multiple applications and multiple estimates of need. Institutions also find it easier to advise and explain to students their eligibility for various types of financial aid if only one estimate of the family's contribution is used.

An additional advantage from the perspective of the post-secondary institution is the Uniform Methodology's fairness. The financial aid community generally has accepted the concept that asset equity is a resource to consider when estimating a family's ability to pay. Therefore, the Uniform Methodology has been accepted by most post-secondary educational institutions as fair and objective to students and their families. Using this standard need analysis eliminates subjective judgment when estimating a family's ability to pay. Most institutions endorse this principle because they are committed to using financial aid to meet student financial need and not to enhance achievement of objectives, such as recruiting.

From the state's perspective, there are advantages in continuing to adhere to the Uniform Methodology as well. If the consensus within the state is that asset equity should be taken into account in estimating the family's ability to pay, then adhering to current policy is preferable. It is the simplest strategy for the state to implement and administer because it is consistent with current operating procedures and with the long-range plan to move toward a campus-based delivery system for State Scholarships and Grants. Furthermore, using the single need analysis eliminates any ambiguity about the estimated contribution of the student and family. Finally, the process is fair and objective. It treats all participants the same. And perhaps even more importantly, adhering to the Uniform Methodology prevents using irrelevant

factors, such as political and economic considerations, in estimating a family's ability to pay.

Adhering to the Uniform Methodology does not mean maintaining the status quo. The Uniform Methodology is reviewed and changed annually. Change occurs only through a deliberative process, however. The concerns of a state will be reflected in changes in the Uniform Methodology only if and when the majority of the parties involved in re-evaluating the methodology agree to the change.

Disadvantages

A disadvantage to students and their families of continuing to adhere to the Uniform Methodology is that those families who currently do not benefit because of an expected contribution from asset equity would remain ineligible for aid.

A disadvantage for post-secondary institutions of continuing to abide by the Uniform Methodology is that it limits the institution's discretion in determining a student's financial aid.

A disadvantage to the state is the lack of full policy control implicit in using a consensus model in which other parties participate. If, for example, a consensus were to develop within Minnesota that the current treatment of asset equity within the Uniform Methodology is inappropriate, there is no assurance that the state could prompt a policy change nationally to accommodate Minnesota's concern.

DEVELOPING A MINNESOTA METHODOLOGY

Developing a Minnesota methodology could take one of two forms. Minnesota could adopt an analysis that required collecting data different from those now collected. This would require both a separate application form and a distinct analysis of the family's ability to pay. Alternatively, the state could rely

on currently collected data but simply not include certain data elements, such as asset equity, in the determination of aid. This would eliminate the need for a separate application form, but likely would mean developing different expectations from other factors, such as income, that would be distinct from the expectations incorporated into the Uniform Methodology.

Advantages

Developing a unique Minnesota need analysis methodology would help some students and their families. If, for example, asset equity were excluded from any consideration in the need analysis, applicants who demonstrate an expected family contribution from asset equity would benefit. Families with the least wealth would benefit the least, however. If this change were made without any other adjustments and the legislature appropriated additional funds to fill the additional need, this benefit would come at no cost to other students. If additional funds could not be provided, however, other students would experience a reduction in aid eligibility.

A unique Minnesota methodology would be an advantage to post-secondary institutions only if they too were disenchanted with the national need analysis and preferred the adapted Minnesota model.

The chief advantage to the state would be to gain total control over need analysis policies.

Disadvantages

A Minnesota methodology would present two disadvantages to students and their families. First, applying for aid could become more tedious because of the possible need to fill out multiple applications. This would depend on how the methodology was developed. If the analysis used the same data elements as the Uniform Methodology but simply applied them in a different way, there would

be no need for a new application form. Whether or not there were multiple applications, a second disadvantage would exist--that is, the process of applying for aid would become more complicated because there would be multiple expectations of what the family should contribute. This could create confusion for students and parents.

For post-secondary institutions, there are several disadvantages to adopting a Minnesota methodology. First, imposing a Minnesota methodology would increase the complexity of providing financial aid to students. It would be more difficult for financial aid administrators to explain the various and contradictory aspects of financial aid to students and parents. Second, data processing requirements at the campus for estimating students' total financial aid packages would become more complex. Third, given the general perception within the financial aid community that estimating a contribution from asset equity is reasonable and fair, many financial aid officers would perceive a need analysis that ignored asset equity as being less fair than the existing procedure. And finally, developing a Minnesota methodology would provide a distinct disadvantage to those institutions that appeal to students from out of state because these students likely would be required to use multiple need analyses.

The state would find it more difficult to implement this strategy than to retain what it is doing today. Because of the significant difficulties that a unique state methodology would present for data processing, implementing this strategy could impede the state's ability to move toward the campus-based delivery system currently being pilot tested. A serious disadvantage is that the need analysis could lose its objectivity. At the federal level, for example, the Pell grant need analysis has been subjected to political and

economic considerations that have little to do with estimating a family's ability to pay. Similar developments could occur in Minnesota.

RESPONDING TO UNIQUE CONCERNS WITH NON-NEED ANALYSIS REMEDIES

The state could respond to specific concerns by developing special responses other than altering the need analysis. For example, the state could develop a targeted state-level program similar to the approach adopted by the 1985 Legislature to assist farm families that may have been overvaluing their farms. The state could develop a campus-based program that provides additional discretionary funds to financial aid officers to respond to unique needs on campus. Or, the state could provide more funding for alternatives to grant aid, such as the State Work-Study Program.

Advantages

Developing a specific remedy to a perceived problem would help students and parents without eroding the integrity of the financial aid system. Using this strategy would eliminate confusion that students and parents might experience with varying estimates of their family contribution or ability to pay.

The potential advantages to the state would depend upon the specific approach adopted. One advantage would be to preserve the objectivity of need analysis in general. Beyond this, however, a targeted approach could be designed to fit well into broader statewide goals. For example, expanding non-grant programs such as work-study would preserve the principle that asset equity represents a legitimate resource in analyzing a family's ability to pay but provide an alternative way for the student to secure financial assistance. Adopting a targeted approach also would allow the state to review and revise

the policy if it does not work without jeopardizing the strength of the existing financial aid system.

Disadvantages

A potential disadvantage to students and their parents of a discretionary program is that those who need the assistance may not receive it. Discretion implies use of judgment by many persons, and without clearly defined guidelines the subjective judgment of a financial aid officer might not recognize the student's perceived need.

The most salient disadvantage to the institution is that this approach would create another program to implement and monitor. It would mean more work for financial aid offices, many of which are heavily overburdened.

From the state's perspective the potential disadvantages would depend upon the nature of the program implemented. Developing a fully discretionary campus-based program, for example, would reduce state policy control, making it difficult to ensure objectivity and equity.

CONCLUSIONS

The Uniform Methodology has several advantages. It has stood the test of time and is accepted generally as a fair, equitable, and understandable approach to estimating a family's ability to pay. But adhering to this methodology makes sense only if it continues to meet the state's policy objectives. If it becomes apparent in the future that those objectives are not being met, other approaches might merit consideration, either as a replacement for or supplement to Uniform Methodology.