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Federal Tax Credits and the Federal Tuition and Fee Deduction

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Dr. Gerald Setter died unexpectedly in 2008 after completing most of the in-depth analysis reflected in this report. The Office of Higher Education is grateful for his thoughtful insight, hard work and nearly 30-year commitment to public service.

Introduction

The Minnesota State Grant framework assigns the Recognized Price of Attendance to three parties: the student, the families and, if necessary, the taxpayers. The Assigned Taxpayer Responsibilities are the portion of the Recognized Price of Attendance not covered by the student or the family. Coverage of Assigned Taxpayer Responsibilities is provided by federal Pell Grants and, if necessary, Minnesota State Grants.

An estimated \$5.9 billion in federal Hope and Lifetime Learning tax credits and in tuition and fee deductions was claimed by taxpayers on their federal individual tax returns in Fiscal Year 2007. This compares with an estimated \$12.9 billion in federal Pell Grants awarded nationally and in Fiscal Year 2007.¹ Both the federal tax code and direct spending on grants assist students and families in paying for postsecondary education. This paper briefly describes the federal Hope and Lifetime Learning tax credits and the tuition and fee deduction. Their relationship to the assignments of Recognized Prices in the Design for Shared Responsibility and resulting price distributions are presented.

The federal Hope and Lifetime Learning tax credits and the tuition and fee deduction have three important characteristics that differ from traditional financial aid policies and practices:

- Reimbursed after out-of-pocket expenses
- Administered outside the provisions of Higher Education Act of 1965, as amended
- Expanded the income range of recipients

The federal Hope and Lifetime Learning tax credits and the tuition and fee deduction reduce individual and family federal tax liabilities. By reducing federal tax liabilities, the federal government effectively reimburses students and/or their parents for out-of-pocket postsecondary education expenses. These reimbursements occur when taxes are filed, after students and families have financed the out-of-pocket expenses associated with attending. Unlike reimbursed tax benefits, Minnesota State Grants and federal Pell Grants are paid when students begin attending.

The federal Hope and Lifetime Learning tax credits and the tuition and fee deduction are included in the Internal Revenue Code as determined by the tax committees of Congress and approved by the President. The Higher Education Act of 1965, as amended, defines a number of federal financial aid programs and policies and is the product of the education committees of Congress as approved by the President. The Higher Education Act of 1965, as amended, also defines the Federal Need Analysis in determining what students and families are expected to pay for postsecondary education. The Act also prescribes coordination among federal, state and other student financial aid awards. The federal postsecondary education tax benefits and the programs of the Higher Education Act of 1965, as amended, are not coordinated, although all provide financial assistance to eligible students and families.

¹ College Board (2007) p. 7.

The federal Hope and Lifetime Learning tax credits and the tuition and fee deduction expand the income range for federal postsecondary education benefits beyond the income range covered by federal programs incorporated in the Higher Education Act of 1965, as amended. Whereas the Higher Education Act of 1965, as amended, generally directs program benefits to low-to-moderate-income families, the federal Hope and Lifetime Learning tax credits and the tuition and fee tax deduction provide benefits to eligible families further up the income scale.

Federal Tax Credits

Federal Hope and Lifetime Learning tax credits were created by the Tax Relief Act of 1997 and first available to federal individual income tax filers in 1998. Today, these tax credits reduce the tax burdens on families with the largest financial efforts assigned to them by the Federal Need Analysis.²

The Clinton administration recommended the federal government pay for the first two years of community college tuition and fees in the “Middle Class Bill of Rights” in December 1994. Subsequently, the idea acquired the name federal Hope Scholarship tax credit, piggybacking on the state of Georgia’s Helping Outstanding Pupils Educationally (HOPE) grants.

Federal Lifetime Learning tax credits followed a policy and political path different from federal Hope tax credits. They were the result of continuing political efforts to make tuition payments an allowable federal individual income tax deduction. As such, the differences between the two federal tax credits are as much the result of their genesis as explicit policy decisions.

The Hope and Lifetime Learning tax credits are computed based on qualifying expenses defined as out-of-pocket or net tuition and applicable fees paid by the filers and students. The credit must be claimed by the filer who claims the student as an exemption for federal income tax purposes.³ The student and filer can be the same person. The credit must be claimed for the same year a qualifying expense was incurred (tuition and fees can be prepaid for terms that begins in the first three months of the subsequent tax year). The credit cannot be carried forward or backward.

To qualify for a federal Hope tax credit, students must attend at least half time for at least one term during the tax year. The tax rules indicate a term ought to look like a semester or quarter although the rules do not provide a tight definition. A weekend seminar would not be a term, for example. No such restriction on registration loads or term length applies to federal Lifetime Learning tax credits.

² See the following two papers, *Overview of the Design for Shared Responsibilities* and *More on Assigned Family Responsibilities: Dependent Students*.

³ In this paper, the term “filer” refers to the entity filing a federal personal income tax return. A joint return represents one filer. While the reports presented in the various news and information outlets seem to assume that Mom, Dad and Junior are one happy, smoothly functioning economic unit, the interesting aspects of this and most other provisions of the Tax Relief Act of 1997 become more “clear” if you think of Mom, Dad and Junior as potentially separate filers, all adults and without the benefit of marital or other contractual arrangements among them.

Federal Hope tax credits apply to payments for courses leading to a degree, diploma or certificate. Federal Lifetime Learning tax credits also apply to payments for courses leading to a degree, diploma or certificate, but may also apply to payments for courses taken by the student to acquire or improve job skills.

In tax year 2006, federal Hope tax credits equaled 100 percent of the first \$1,100 of qualifying tuition and applicable fees and 50 percent of the second \$1,100 of qualifying tuition and fees. Federal Hope tax credits can be claimed for each eligible student; one filer can claim multiple federal Hope tax credits. The maximum federal Hope tax credit per year in tax year 2006 was \$1,650 per student.

In tax year 2006, federal Lifetime Learning tax credits equaled 20 percent of the first \$10,000 of qualifying tuition and fees. The maximum federal Lifetime Learning tax credit per year equaled \$2,000 per filer. The limit applied to each return and included all individuals counted as exemptions on the filer's return. The 2006 tax year tax credit and deduction parameters were used in the analysis in this paper.

Not all tax filers with postsecondary education expenses qualify for federal tax credits. The following students (and their families) would not have qualified in tax year 2006 for federal Hope or Lifetime Learning tax credits.

- Filers not owing any federal income taxes, the credits are non-refundable and cannot exceed tax liabilities
- Married filers, filing jointly, with more than \$110,000 adjusted gross income
- Unmarried filers earning more than \$55,000
- Married filers, filing separately
- Students' receiving more in price discounts (examples, grants and scholarships) than they were charged in tuition and applicable fees

Tax filers qualifying for the maximum federal tax credits in tax year 2006 were as follows.

- Students in the first two years of their college careers with \$2,200 or more in net tuition and applicable fees and whose family (eligible filer) had federal tax liabilities of \$1,650 or more
- Families (filer and students) who paid \$10,000 or more in net tuition and applicable fees and whose family (eligible filer) had federal tax liabilities of \$2,000 or more

Other students (and their families) would be eligible for partial federal Hope or Lifetime Learning tax credits.

The “first two years” provision in the federal Hope tax credit has two conditions. First, the eligible educational institution where the student enrolled must not have awarded the student two years of academic credit for postsecondary course work completed by the student prior to the beginning of the taxable year. Any academic credit awarded by the educational institution solely on the basis of the student’s performance on proficiency examinations could not be taken into account.

Second, filers must not have claimed a federal Hope tax credits for the qualifying student in any two earlier tax years. While the “official” explanation describes federal Lifetime Learning tax credits for “juniors, seniors and graduate students,” in reality, students spending three years as freshmen could claim federal Hope tax credits for only two years, and thus, could claim federal Lifetime Learning tax credits as freshmen in the third year. Since tax years and academic years do not correspond, most students progressing on a “four-year bachelor’s degree plan” may spread their first two academic years over three tax years such that some families of sophomores would no longer be able to claim federal Hope tax credits, but could be eligible for federal Lifetime Learning tax credits.

Federal Hope Tax Credit Impact on Students and Families

The analysis reported in this section assumed the tax credits applied to the same period as the federal Pell and Minnesota State Grants, even though federal tax years and Minnesota fiscal years are different. The calculation of Minnesota State Grants begins with Recognized Prices. The sums of the average Recognized Tuition and Fees and the standard Living and Miscellaneous Expense allowance are shown in the following table for Fiscal Year 2007. The mean Recognized Tuition and Fees, for each institutional grouping, was based on values used for calculating Minnesota State Grants weighted by the number of applicants.

Institutional Grouping	Mean Recognized Tuition and Fees	Living and Miscellaneous Expense Allowance	Mean Recognized Price of Attendance
MnSCU 2-year Colleges	\$4,252	\$6,065	\$10,317
MnSCU 4-year Universities	\$5,955	\$6,065	\$12,020
University of Minnesota	\$9,397	\$6,065	\$15,462
Minnesota Private 2-year Institutions	\$6,349	\$6,065	\$12,414
Minnesota Private 4-year Institutions	\$8,547	\$6,065	\$14,612

The next step in this analysis partitioned Recognized Prices into Assigned Student Responsibilities and Family-Taxpayer Shares as shown in the next table.

Institutional Grouping	Mean Recognized Price of Attendance	Assigned Student Responsibility	Family-Taxpayer Share
MnSCU 2-year Colleges	\$10,317	\$4,746	\$5,571
MnSCU 4-year Universities	\$12,020	\$5,529	\$6,491
University of Minnesota	\$15,462	\$7,113	\$8,350
Minnesota Private 2-year Institutions	\$12,414	\$5,711	\$6,704
Minnesota Private 4-year Institutions	\$14,612	\$6,722	\$7,891

Dependent Students

Consistent with standard State Grant program distributional analyses, federal Hope tax credits were calculated across the income spectrum at \$5,000 increments, from \$0 to \$100,000 federal adjusted gross income. The federal Hope tax credit was calculated for a household size of four, one member attending a postsecondary institution and two employed parents filing jointly using the standard deduction. It was also assumed no family was subject to the Alternative Minimum Tax.

The typical Hope tax credit was calculated using the mean Recognized Tuition and Fees presented above. It was further assumed the only discounts received by the student were the federal Pell and Minnesota State Grants, if the student qualified. The tax filer's out-of-pocket tuition and fees were set at tuition and fees minus the two grant amounts, if any.

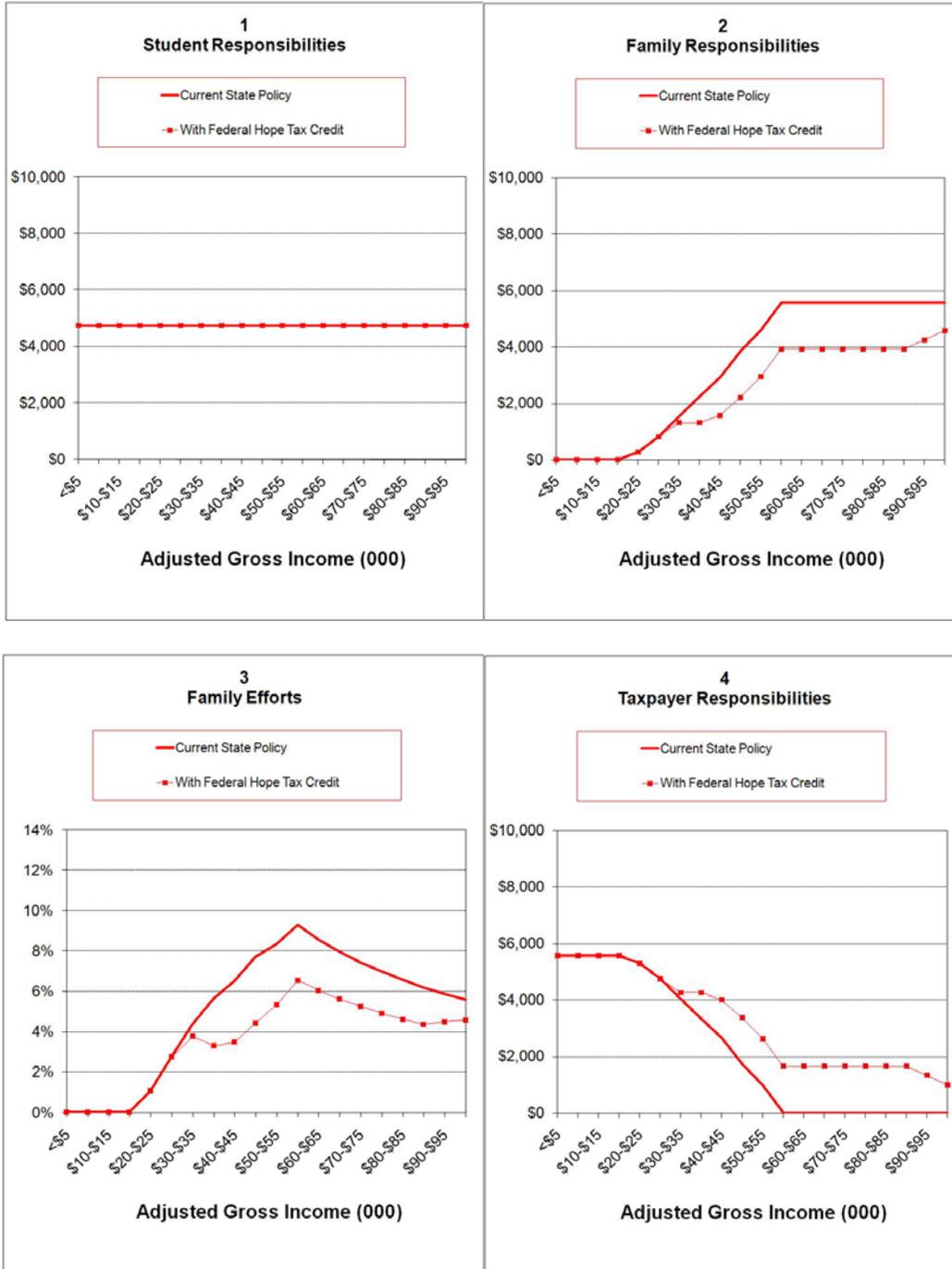
Federal Hope tax credits were used to reduce the Recognized Prices assigned to families, the Assigned Family Responsibilities, in the analysis presented in this section. If the credit exceeded the Assigned Family Responsibilities, the excess was used to reduce the assignment to students. In no cases did the federal Hope tax credit result in a reduction in the Assigned Student Responsibilities.

Two price points were used in this analysis to describe the impact of federal Hope tax credits on payment assignments. The lower price was \$10,317, the Recognized Price at MnSCU two-year institutions in 2006-2007. The higher price was \$15,462, the Recognized Price at the University of Minnesota Twin-Cities in 2006-2007. These two points were used to check the sensitivity of the Hope tax credit to price.

Dependent Students / Low Price Example / Federal Hope Tax Credit

At the lower price (\$10,317), federal Hope tax credit increased taxpayer investment for typical dependent students from families reporting adjusted gross incomes of \$35,000 or more, up to the tax credit cutoff of \$110,000, as shown on Panel 4 of the next page. Assigned Taxpayer Responsibilities, as defined in the Design for Shared Responsibility, are shown as a solid line, with the sum of Assigned Taxpayer Responsibilities and the calculated federal Hope tax credits shown as a dashed line.

Federal Hope Tax Credits, Dependent Student with Recognized Price = \$10,317



Families earning less than \$20,000 typically do not qualify for federal tax credits. In this analysis, typical students from families earning less than \$30,000 received more in federal Pell and Minnesota State Grants than qualifying tuition and fees and, therefore, had no out-of-pocket expenses as defined by the Internal Revenue Code. They did not qualify for a Hope tax credit. Panel 4 shows federal Hope tax credits for families from about \$60,000 to \$110,000 adjusted gross incomes, families who typically do not qualify for federal or state grants.

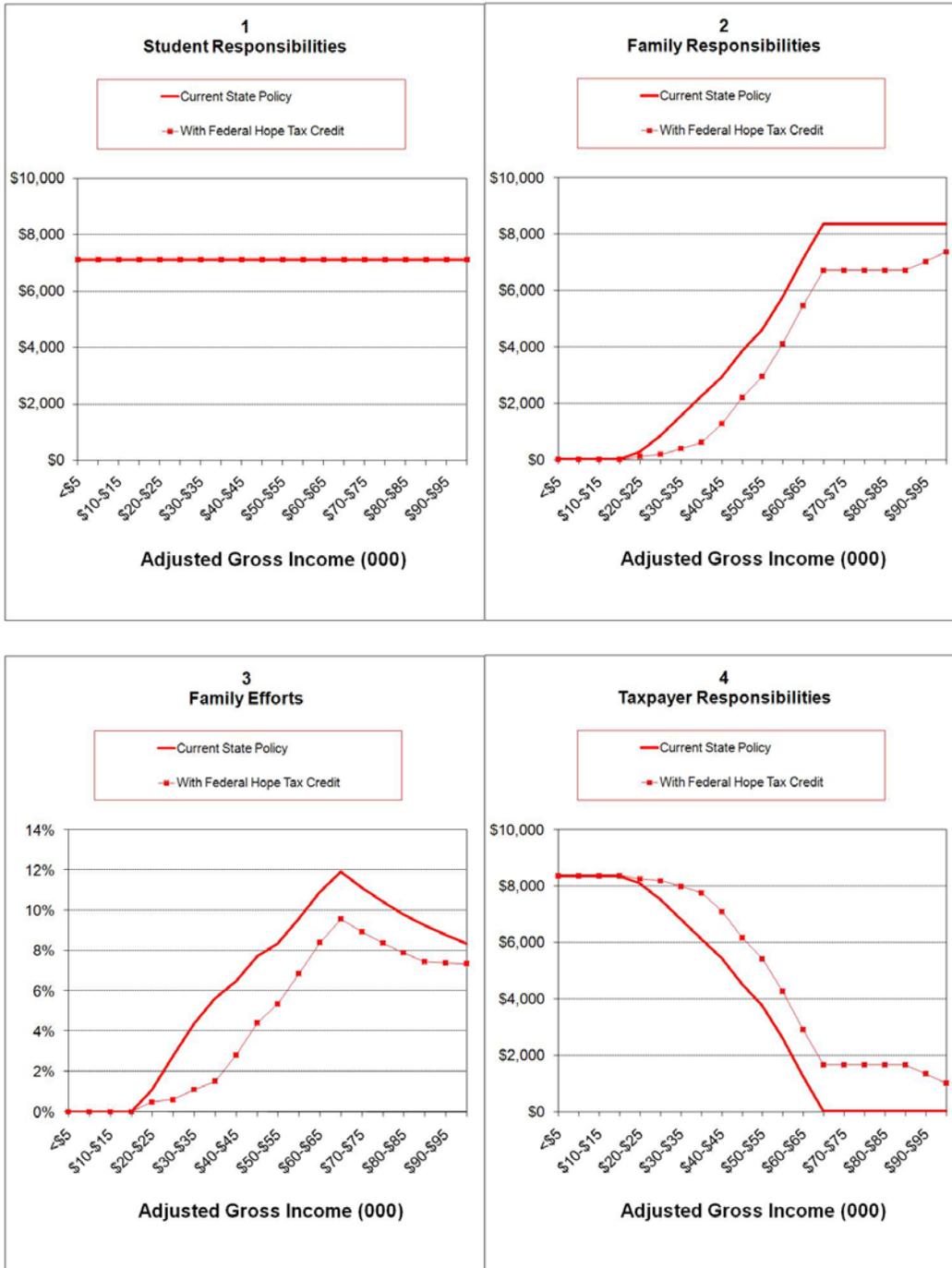
Increasing taxpayer investments through federal Hope tax credits effectively reduced the amount assigned to families (parents, in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Efforts, as shown in Panel 3, from nine to six percent of adjusted gross income. This is equivalent to lowering the individual income tax rate by almost three percentage points.

Dependent Student / Higher Price Example / Federal Hope Tax Credits

At the higher price (\$15,462), federal Hope tax credits increased taxpayer investment for typical dependent students for families reporting adjusted gross incomes from about \$20,000 up to the tax credit cutoff of \$110,000, as shown on Panel 4 of the next chart. Families earning less than about \$20,000 typically do not have a federal tax liability and do not qualify for postsecondary education tax credits. Unlike the low price example, students from families with incomes in the \$20,000 to \$30,000 range would have been eligible for federal Hope tax credits because the combination of federal Pell and Minnesota State Grants was less than the qualifying tuition and fees.

Federal Hope tax credits shifted the portion of the income distribution receiving taxpayers' investment to the right from about \$60,000 adjusted gross income to \$110,000, as shown in Panel 4.

Federal Hope Tax Credits, Typical Dependent Student with Recognized Price = \$15,462



Increasing taxpayer investments through federal Hope tax credits effectively reduced the amount assigned to families (parents, in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Effort, as shown in Panel 3, from 12 to nine percent of adjusted gross income. This is equivalent to lowering the individual income tax rate by three percentage points.

Unmarried Independent Students with No Dependents

Consistent with standard State Grant Program distributional analyses, 20 federal Hope tax credits were calculated along the income spectrum at \$5,000 increments, from \$0 to \$100,000 adjusted gross income. The Hope tax credit was calculated for a household size of one using the standard deduction. To calculate a typical Hope tax credit, a tax liability for a typical student in each of the 20 groups was calculated based on a household of one using the standard deduction. It was also assumed no tax filer would be subject to the Alternative Minimum Tax.

The typical Hope tax credit was calculated using the mean Recognized Tuition and Fees presented above. It was further assumed the only discounts received by the student were the federal Pell Grant and the Minnesota State Grant, if the student qualified. The tax filers' out-of-pocket tuition and fees were set at tuition and fees minus the two grant amounts, if any.

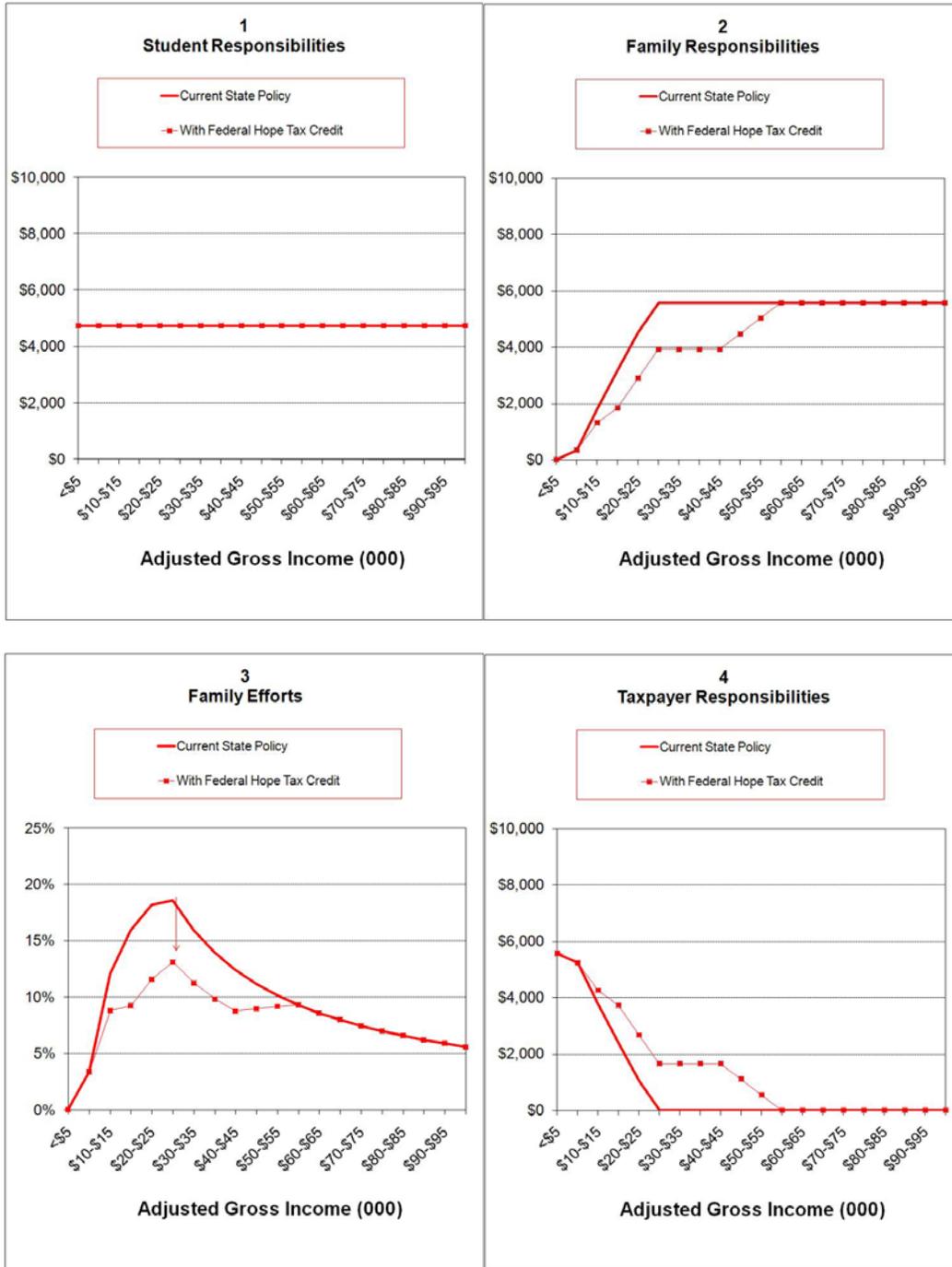
The federal Hope tax credit was used to reduce the Recognized Prices assigned to families, the Assigned Family Responsibilities, in the analysis presented in this section. If the credit exceeded the Assigned Family Responsibilities, the excess was used to reduce the Assigned Student Responsibilities. In no case did the Federal Hope tax credit result in a reduction in the Assigned Student Responsibilities.

Independent Student / Low Price Example / Federal Hope Tax Credit

At the lower price (\$10,317), federal Hope tax credits increased taxpayer investment for typical unmarried independent students with no dependents reporting adjusted gross incomes of \$10,000 or more up to the tax credit cutoff of \$55,000, as shown on Panel 4 of the next chart. Assigned Taxpayer Responsibilities, as defined in the Design for Shared Responsibility, are shown as a solid line, with the sum of Assigned Taxpayer Responsibilities and the calculated Federal Hope tax credits shown as a dashed line.

Individual filers earning less than about \$5,000 typically do not have a federal tax liability and do not qualify for federal tax credits, so the two lines in Panel 4 are the same. In this analysis, typical students earning less than \$10,000 received more in federal Pell and Minnesota State Grants than the qualifying tuition and fees and, therefore, had no out-of-pocket expenses as defined by the Internal Revenue Code. They did not qualify for a Hope tax credit. Federal Pell Grants and/or Minnesota State Grants accounted for nearly all Assigned Taxpayer Responsibilities up to about \$15,000 adjusted gross income. The dashed line in Panel 4 shows federal Hope tax credits from about \$30,000 to \$55,000 adjusted gross income.

Federal Hope Tax Credit, Typical Unmarried Independent Student with Recognized Price = 10,317.



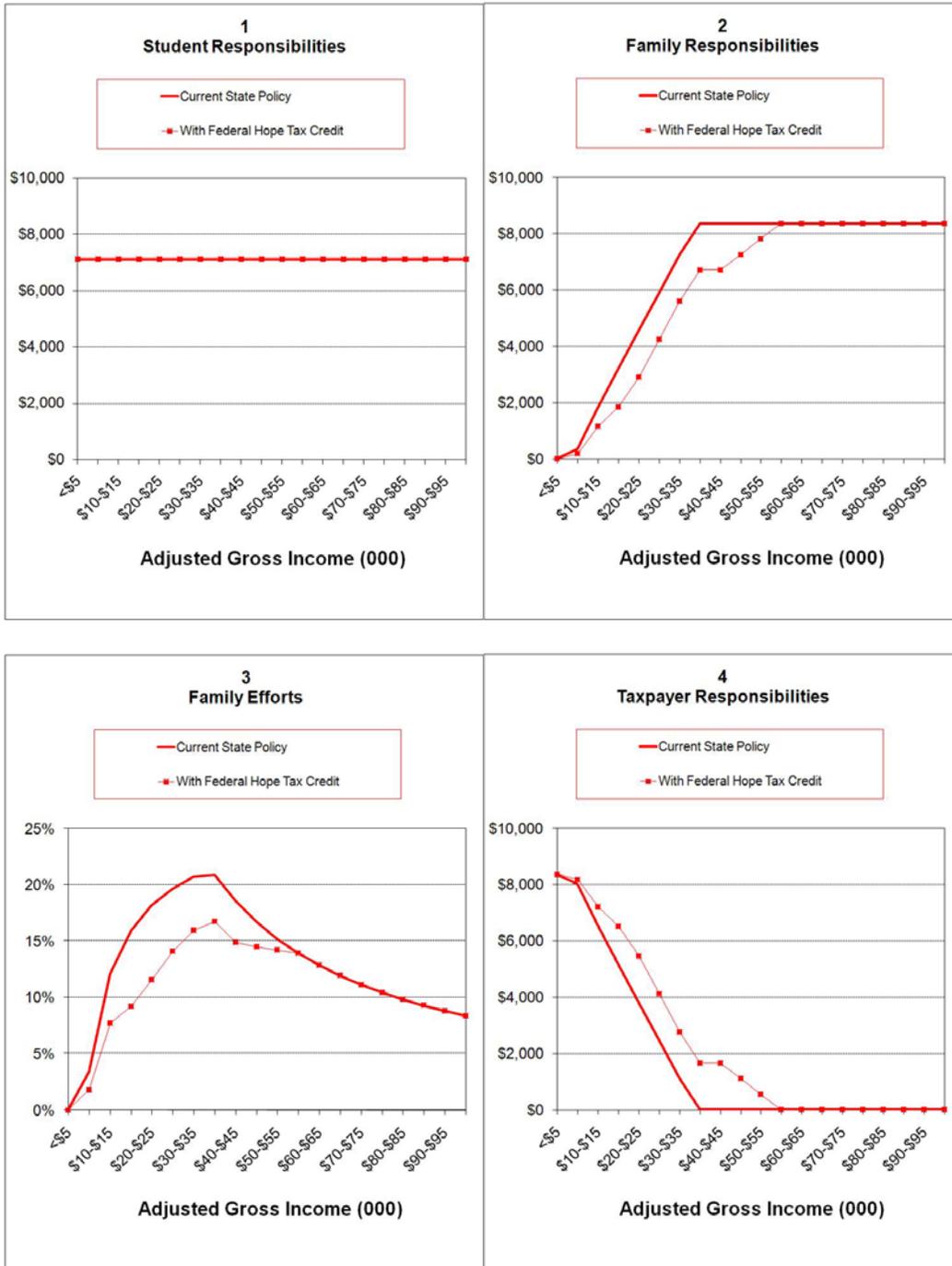
Increasing taxpayer investments through federal Hope tax credits effectively reduced the amount assigned to families (students in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Effort, as shown in Panel 3, from 18 to 12 percent of adjusted gross income. This is equivalent to lowering the individual income tax rate by six percentage points.

Independent Student / High Price Example / Federal Hope Tax Credit

At the higher price level (\$15,462), federal Hope tax credits increased taxpayer investment for typical independent unmarried students with no dependents reporting adjusted gross incomes of \$5,000 or more up to the tax credit cutoff of \$55,000, as shown on Panel 4 of the next chart. Assigned Taxpayer Responsibilities, as defined in the Design for Shared Responsibility, are shown as a solid line, with the sum of Assigned Taxpayer Responsibilities and the calculated federal Hope tax credits shown as a line.

Individuals earning less than about \$5,000 typically do not have a federal tax liability and do not qualify for the Hope tax credit, so the two lines in Panel 4 are the same. Federal Hope tax credits shifted the portion of the income distribution receiving taxpayers' investment to the right from about \$40,000 to \$55,000 adjusted gross income.

Federal Hope Tax Credit, Typical Unmarried Independent Student with Recognized Price = \$15,462



Increasing taxpayer investments through federal Hope tax credits effectively reduced the amount assigned to families (students, in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Effort, as shown in Panel 3, from 21 to 16 percent of adjusted gross income. This is equivalent to lowering the individual income tax rate by five percentage points.

Federal Lifetime Learning Tax Credits Impact on Students and Families

This section examines the impact of federal Lifetime Learning tax credits on the distribution of payment responsibilities following a format parallel to the analysis of the impact of federal Hope tax credits. One important difference between the two tax credits is the treatment of out-of-pocket expenses as defined by the Internal Revenue Code. Federal Hope tax credits recognize 100 percent of the first \$1,000 of out-of-pocket while federal Lifetime Learning tax credits recognize only 20 percent.

Dependent Students

Consistent with standard State Grant Program distributional analyses, 20 federal Lifetime Learning tax credits were calculated along the income spectrum at \$5,000 increments, from \$0 to \$100,000 adjusted gross income. Federal Lifetime Learning tax credits were calculated for household size of four, one member attending a postsecondary institution and two employed parents filing jointly using the standard deduction. It was also assumed no family would be subject to the Alternative Minimum Tax.

The typical credit was calculated using the mean Recognized Tuition and Fees presented above. It was further assumed the only discounts received by the student were the federal Pell Grants and Minnesota State Grants, if the student qualified. The tax filer's out-of-pocket tuition and fees were set at tuition and fees minus the two grant amounts, if any.

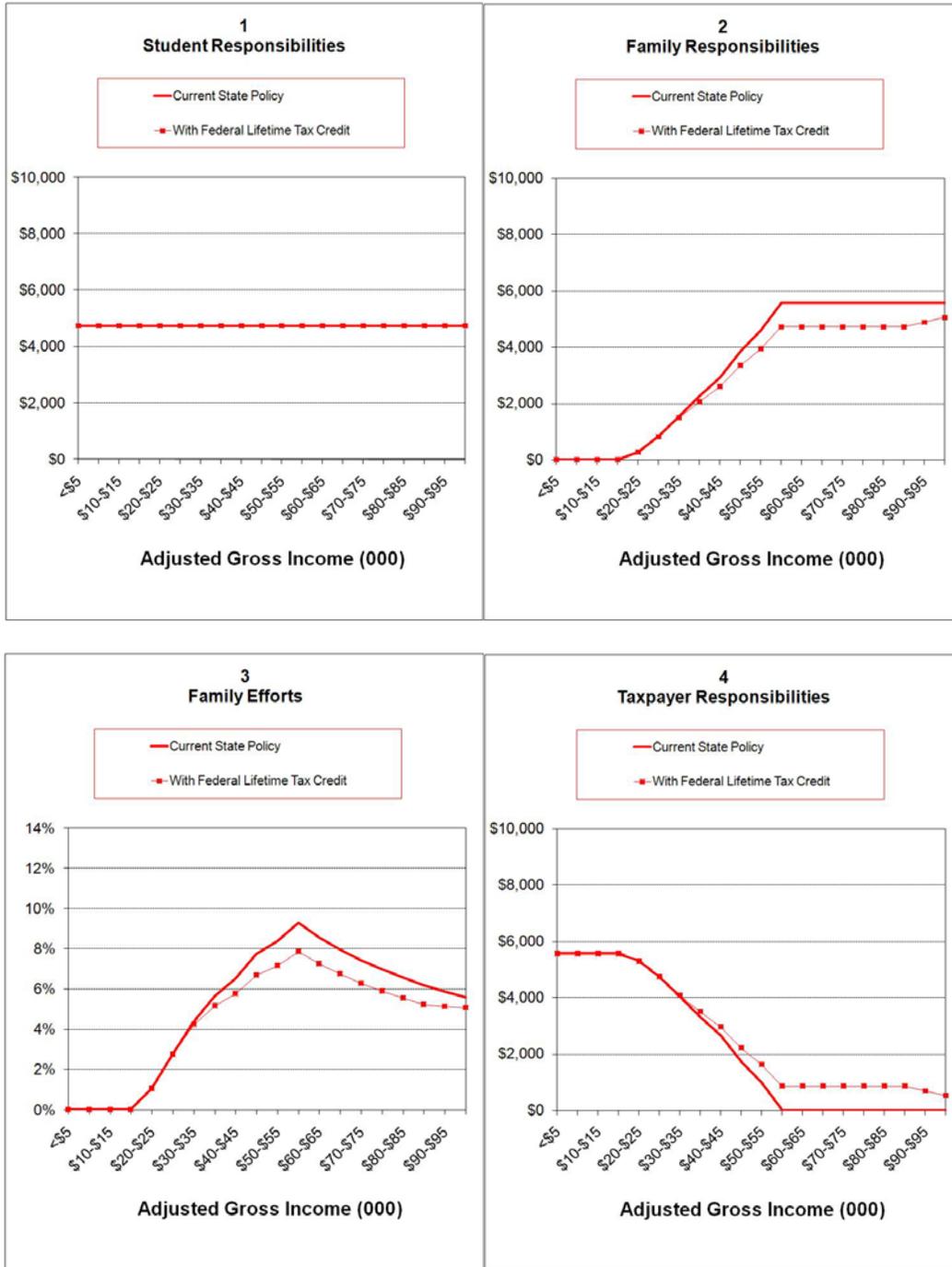
The federal Lifetime Learning tax credit was used to reduce the Recognized Price assigned to families, Assigned Family Responsibility, in the analysis presented in this section. If the credit exceeded the Assigned Family Responsibility, the excess was used to reduce the assignment to students, Assigned Student Responsibility. In no cases did the federal Lifetime Learning tax credit result in a reduction in the Assigned Student Responsibilities.

As above, two price points were used to describe the impact of federal Lifetime Learning tax credits on payment assignments. A low price of \$10,317 and a higher price of \$15,462 were used. These two points were used to check the sensitivity of the credits to price.

Dependent Students / Low Price Example / Lifetime Learning Tax Credit

At the lower price (\$10,317), federal Lifetime Learning tax credits increase taxpayer investment for typical dependent students from families reporting adjusted gross incomes of \$35,000 or more up to the tax credit cutoff of \$110,000, as shown on Panel 4 of the next chart. Assigned Taxpayer Responsibilities, as defined in the Design for Shared Responsibility, are shown as a solid line with the sum of Assigned Taxpayer Responsibilities and the calculated Federal Lifetime Learning tax credits shown as a dashed line.

Federal Lifetime Learning Tax Credits, Typical Dependent Student with Recognized Price = \$10,312



Increasing taxpayer investments through federal Lifetime Learning tax credits effectively reduced the amount assigned to families (parents, in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Effort, as shown in Panel 3, from nine to seven percent of adjusted gross income. This is equivalent to lowering the individual income tax rate by two percentage points.

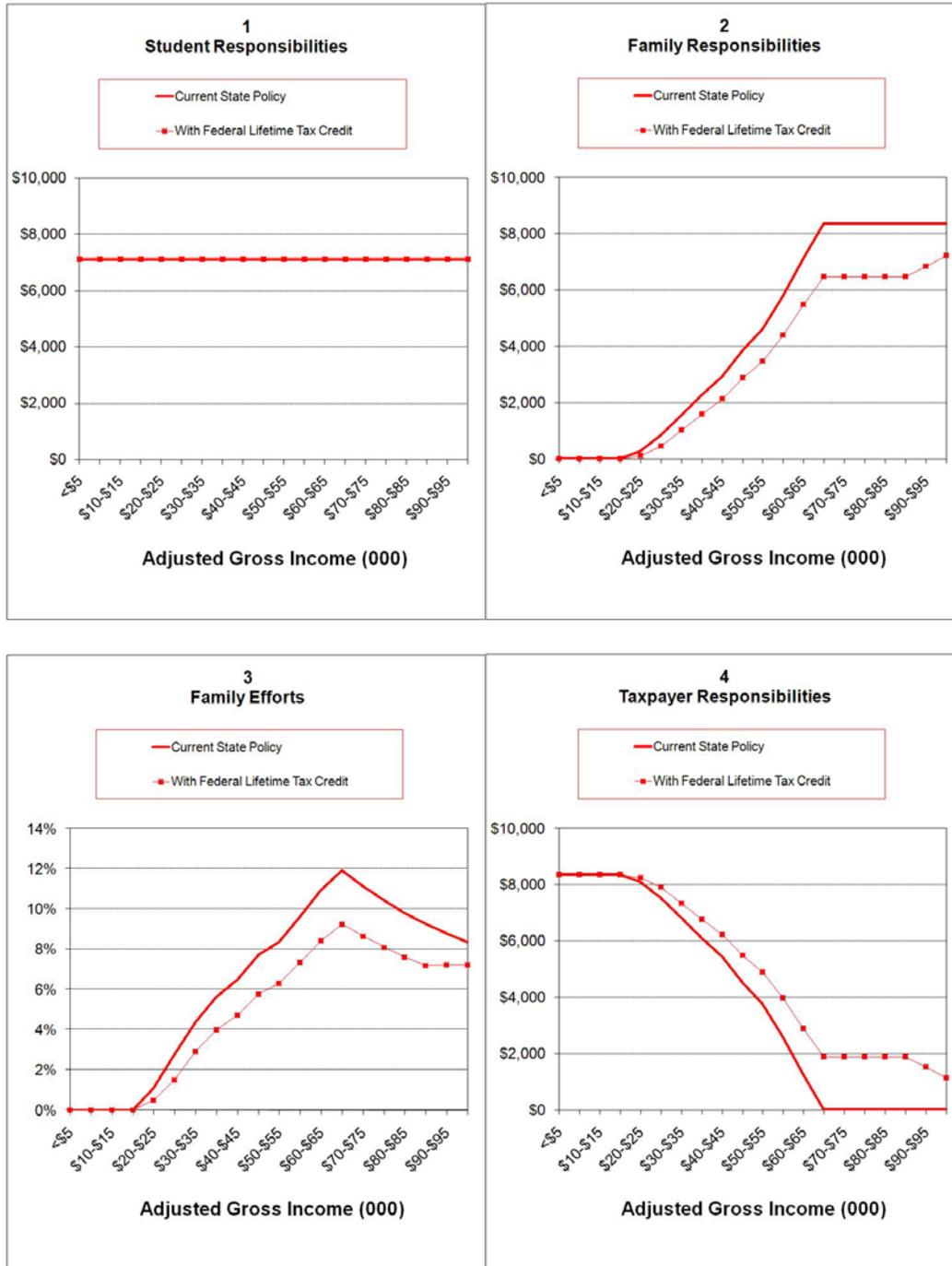
Families earning less than about \$20,000 typically do not have a federal tax liability and do not qualify for federal tax credits, so the two lines in Panel 4 up to \$20,000 are the same. In this analysis, typical students from families earning less than \$35,000 received more in federal Pell and Minnesota State Grants than the qualifying tuition and fees and, therefore, had no out-of-pocket expenses as defined by the Internal Revenue Code. They did not qualify for a federal Lifetime Learning tax credit. Federal Lifetime Learning tax credits shifted the portion of the income distribution receiving taxpayer investment to the right from about \$65,000 to \$110,000 adjusted gross income, as shown on Panel 4.

Dependent Students / Higher Price Example / Lifetime Learning Tax Credit

At the higher price (of \$15,462), federal Lifetime Learning tax credits increased taxpayer investment for typical dependent students from families reporting adjusted gross incomes from \$20,000 up to the tax credit cutoff of \$110,000, as shown on Panel 4 of the next page. Assigned Taxpayer Responsibilities, as defined in the Design for Shared Responsibility, are shown as a solid line, with the sum of Assigned Taxpayer Responsibilities and the calculated federal Lifetime Learning tax credits shown as a dashed line.

Families earning less than about \$20,000 typically do not have a federal tax liability and do not qualify for federal tax credits, so the two lines in Panel 4 are the same up to \$20,000. In this analysis, typical students from families earning less than \$20,000 received more in federal Pell and Minnesota State Grants than the qualifying tuition and fees and, therefore, had no out-of-pocket expenses as defined by the Internal Revenue Code. They did not qualify for a federal Lifetime Learning tax credit. Federal Lifetime Learning tax credits shifted the portion of the income distribution receiving taxpayers' investment up from about \$65,000 adjusted gross income to \$110,000, as shown in Panel 4.

Federal Lifetime Learning Tax Credits, Typical Dependent Student with Recognized Price = \$15,462



Increasing taxpayer investments through federal Lifetime Learning tax credits effectively reduced the amount assigned to families (parents, in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Effort, as shown in Panel 3, from 12 to nine percent of adjusted gross income. This is equivalent to lowering the individual income tax rate by three percentage points.

Unmarried Independent Students with No Dependents

Consistent with standard State Grant program distributional analyses, federal Lifetime Learning tax credits were calculated along the income spectrum at \$5,000 increments, from \$0 to \$100,000 adjusted gross income. Federal Lifetime Learning tax credits were calculated for household size of one using the standard deduction. It was also assumed no tax filer would be subject to the Alternative Minimum Tax.

The typical credit was calculated using the mean Recognized Tuition and Fees presented above. It was further assumed the only discounts received by the student were Pell and Minnesota State Grants, if the student qualified. The out-of-pocket tuition and fees were set at tuition and fees minus the two grant amounts, if any.

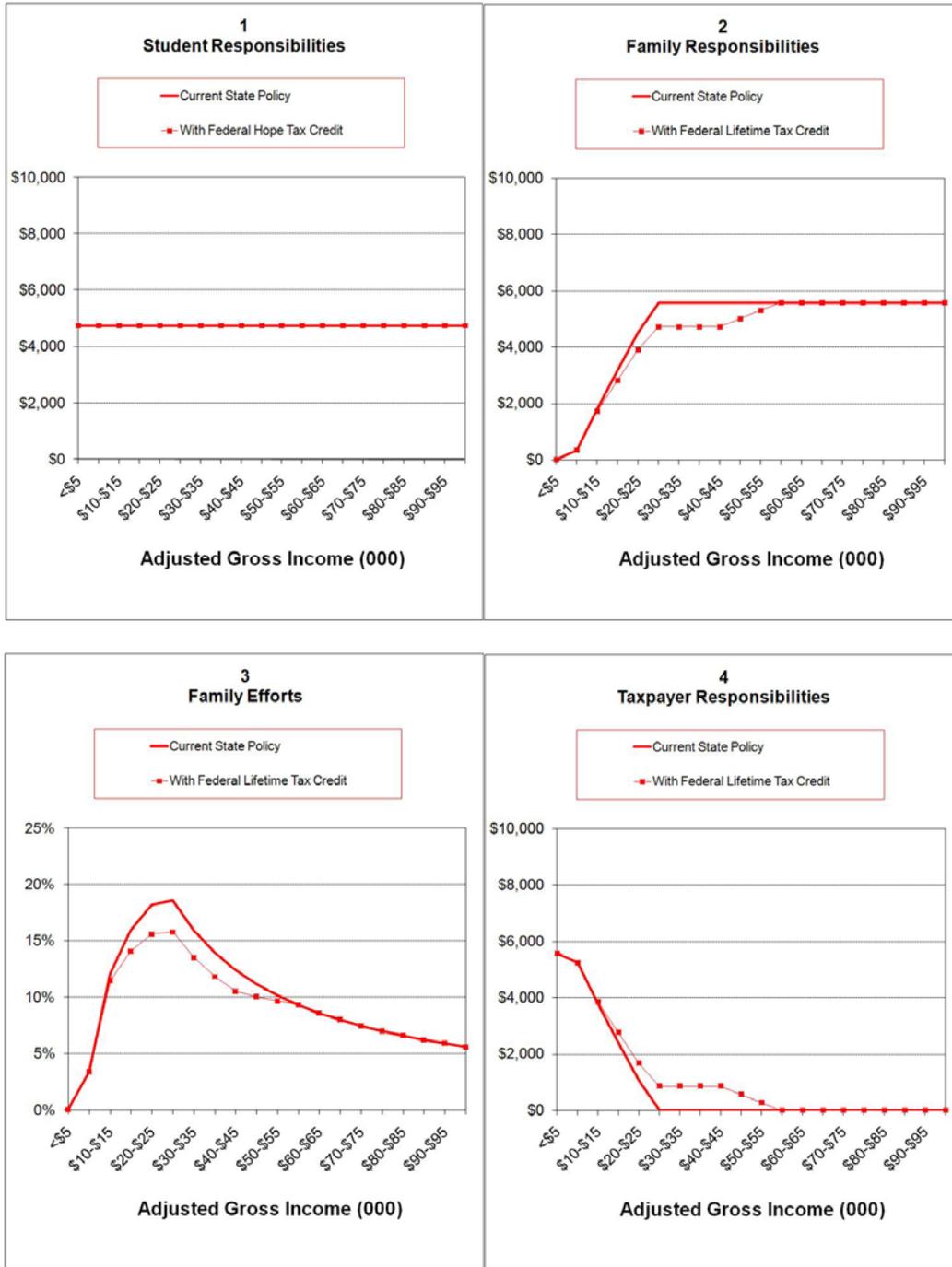
The federal Lifetime Learning tax credit was used to reduce the Recognized Price Assigned to Families, Assigned Family Responsibility, in the analysis presented in this section. If the credit exceeded the Assigned Family Responsibility, the excess was used to reduce the assignment to students, Assigned Student Responsibility. In no cases did the federal Lifetime Learning tax credit result in a reduction in the Assigned Student Responsibilities.

Independent Students / Low Price Example / Lifetime Learning Tax Credit

At the lower price (\$10,317), federal Lifetime Learning tax credits increased taxpayer investment for typical unmarried independent students with no dependents reporting adjusted gross incomes of \$10,000 or more up to the tax credit cutoff of \$55,000, as shown on Panel 4 of the next chart. Assigned Taxpayer Responsibilities, as defined in the Design for Shared Responsibility, are shown as a solid line with the sum of Assigned Taxpayer Responsibilities and the calculated federal Lifetime Learning tax credits shown as a dashed line.

Individuals earning less than about \$5,000 typically do not have a federal tax liability and do not qualify for federal tax credits, so the two lines in Panel 4 are the same up to \$5,000. In this analysis, typical students earning less than \$10,000 received more in federal Pell and Minnesota State Grants than the tuition and fees and, therefore, had no out-of-pocket expenses as defined by the Internal Revenue Code. They did not qualify for federal Lifetime Learning tax credits. Federal Lifetime Learning tax credits shifted the portion of the income distribution receiving taxpayers' investment to the right from about \$35,000 adjusted gross income to \$55,000.

Federal Lifetime Learning Tax Credits, Unmarried Students with No Dependents with Recognized Price = \$10,317



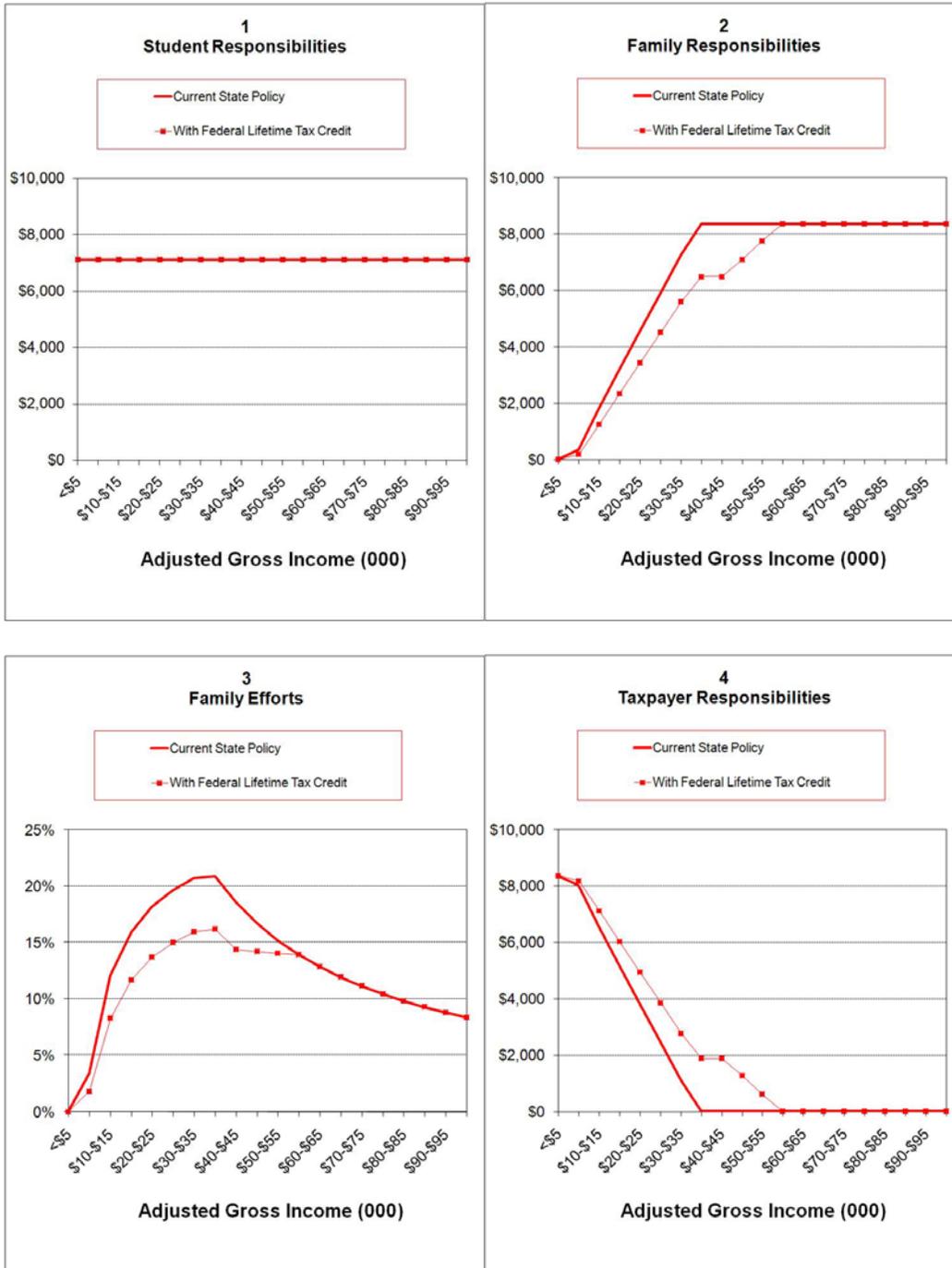
Increasing taxpayer investments through federal Lifetime Learning tax credits effectively reduced the amount assigned to families (often paid by the student in the case of independent students), as shown in Panel 2. The lowering of assignments to families reduces the peak Assigned Family Effort, as shown in Panel 3, from 18 to 16 percent of adjusted gross income. This is equivalent to lowering the individual income tax rate by two percentage points.

Independent Students / Higher Price Example / Lifetime Learning Tax Credit

At the higher price (\$15,462), federal Lifetime Learning tax credits increased taxpayer investment for typical unmarried independent students with no dependents reporting adjusted gross incomes of \$5,000 or more up to the tax credit cutoff of \$55,000, as shown on Panel 4 of the next chart. Assigned Taxpayer Responsibilities, as defined in the Design for Shared Responsibility, are shown as a solid line, with the sum of Assigned Taxpayer Responsibilities and the calculated federal Lifetime Learning tax credits shown as a dashed line.

Individuals earning less than about \$5,000 typically do not have a federal tax liability and do not qualify for federal tax credits, so the two lines in Panel 4 are the same. Federal Lifetime Learning tax credits shifted the portion of the income distribution receiving taxpayers' investment to the right from about \$40,000 to \$55,000 adjusted gross income, as shown on Panel 4.

Federal Lifetime Learning Tax Credits, Unmarried Students with No Dependents with Recognized Price = \$15,462



Increasing taxpayer investments through federal Lifetime Learning tax credits effectively reduced the amount assigned to families (the students, in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Effort, as shown in Panel 3, from 21 to 16 percent of adjusted gross income. This is equivalent to lowering the individual income tax rate by five percentage points.

Federal Tuition and Fee Deduction

Taxpayer investments made through the federal tax code were expanded by the Economic Growth and Tax Relief Reconciliation Act of 2001, HR 1836. HR 1836 included a number of provisions targeted to postsecondary students (and their parents). In this section, only the portion of the Act related to the tuition and fee deduction (Sec 431) was analyzed.⁴

The federal tuition and fee deduction reduces the tax filer's adjusted gross income and subsequently the filer's income tax liability. This is in contrast to the federal Hope and Lifetime Learning tax credits which are subtracted from the filer's income tax liability. The value of the deduction depends on the marginal tax rate of the filer, rather than a percentage of out-of-pocket tuition and fees as with federal Hope and Lifetime Learning tax credits.

The definitions of qualified expenses for the tuition and fee deduction were the same as for the federal Hope tax credit, the out-of-pocket or net tuition and applicable fees paid by the filer and student.⁵ For Tax Year 2006, the maximum dollar amount of the deduction per filer was:⁶

- \$4,000 for married filers filing jointly with adjusted gross income of \$130,000
- \$4,000 for unmarried filers with adjusted gross income of \$65,000
- \$2,000 for married filers filing jointly with adjusted gross income > \$130,000 and \$160,000
- \$2,000 for unmarried filers with adjusted gross income > \$65,000 and \$80,000
- \$0 for any other taxpayer

Any one postsecondary education expenditure can be used to claim only one federal tax benefit. For example, the tax filer must choose between a federal Hope tax credit and the tuition and fee deduction. In addition, the filer cannot deduct qualified education expenses that have been used to figure the tax-free portion of a distribution from a Coverdell education savings account or a qualified tuition program or deduct qualified education expenses that have been paid with tax-free interest on U.S. savings bonds.

Claiming the tuition and fee deduction for purposes of calculating federal income taxes will affect the filer's income base used to calculate Minnesota individual income taxes. The base for Minnesota individual income taxes is the filer's federal taxable income. For families qualifying for the tuition and fee deduction, their federal adjusted gross income is reduced which subsequently reduces their federal taxable income.

⁴ Other direct benefits to students include changes to the following: Employer Provided Tuition Assistance (Section 127), Student Loan Interest Deduction, Qualified Tuition Plans, Education IRAs and Health Scholarships.

⁵ See IRS Publication 970, *Tax Benefits for Education for Use in Preparing 2006 Returns*

⁶ These limits apply to the sum of qualified expenditures made on behalf of all the persons included on the filer's return.

Following a format parallel to the analysis of the impact of federal Hope tax credits above, this section examines the impact of the tuition and fee deduction on the assignment of payment responsibilities in the Design for Shared Responsibility. Like the tax credits, the tuition and fee deduction is based on the same out-of-pocket tuition and fee payments.

Dependent Students

Consistent with standard State Grant Program distributional analyses, 20 federal tuition and fee deductions were calculated along the income spectrum at \$5,000 increments, from \$0 to \$100,000 adjusted gross income. The tuition and fee deduction was calculated for a household size of four, one member attending a postsecondary institution and two employed parents filing jointly using the standard deduction. It was also assumed no filers would be subject to the Alternative Minimum Tax.

The typical tuition and fee deduction was calculated using the mean Recognized Tuition and Fees presented above. It was further assumed the only discounts received by the student were the Federal Pell and Minnesota State Grants, if the student qualified. The out-of-pocket tuition and fees were set at tuition and fees minus the two grant amounts, if any.

The federal tuition and fee deduction was used to reduce the Recognized Price assigned to families, the Assigned Family Responsibility, in the analysis presented in this section. If the deduction exceeded the Assigned Family Responsibility, the excess was used to reduce the assignment to students, Assigned Student Responsibility. In no cases did the federal tuition and fee deduction result in a reduction in the Assigned Student Responsibilities.

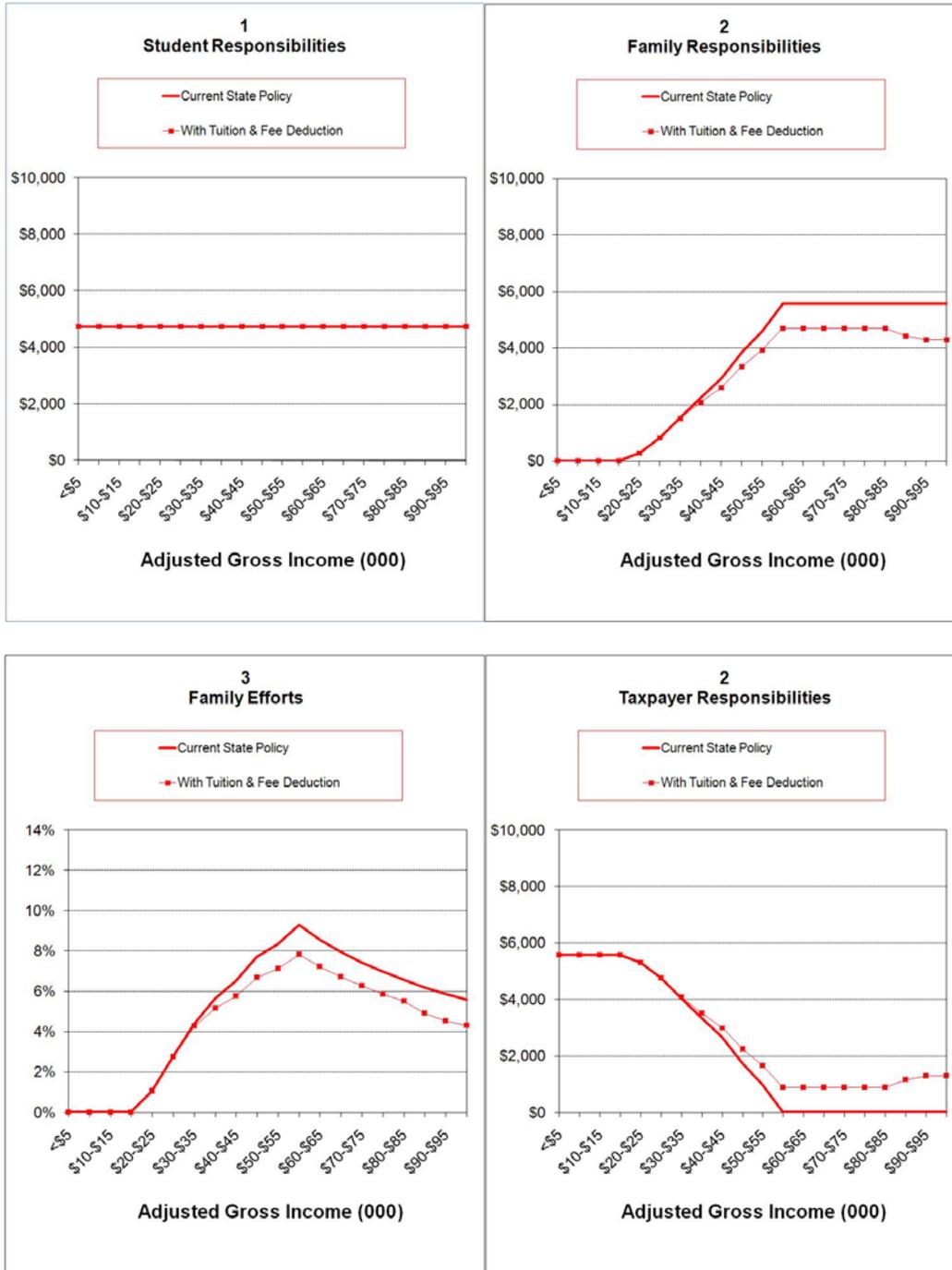
As above, two price points were used to describe the impact of the deduction on payment assignments. A low price of \$10,317 and a higher price of \$15,462 were used. These two points were used to check the sensitivity of the credits to price.

Dependent Students / Low Price Example / Federal Tuition and Fee Deduction

At the lower price (\$10,317), the deduction increased taxpayer investment for typical dependent students from families reporting adjusted gross incomes of \$35,000 or more up to the tax deduction cutoff of \$160,000, see Panel 4 of the next chart. Assigned Taxpayer Responsibilities, as defined in the Design for Shared Responsibility, are shown as a solid line, with the sum of Assigned Taxpayer Responsibilities and the calculated tuition and fee deduction shown as a dashed line.

Families earning less than about \$20,000 typically do not have a federal tax liability and the deduction is irrelevant, so the two lines in Panel 4 are the same up to \$20,000. In this analysis, typical students from families earning less than \$35,000 receive more in Federal Pell and Minnesota State Grants than the qualified tuition and fees and, therefore, had no out-of-pocket expenses as defined by the Internal Revenue Code. They did not qualify for the tuition and fee deduction. The deduction shifted the portion of the income distribution receiving taxpayers' investment to the right from about \$60,000 adjusted gross income to \$160,000, as shown on Panel 4.

Federal Tuition and Fee Deduction, Dependent Students, Recognized Price of Attendance = \$10,312



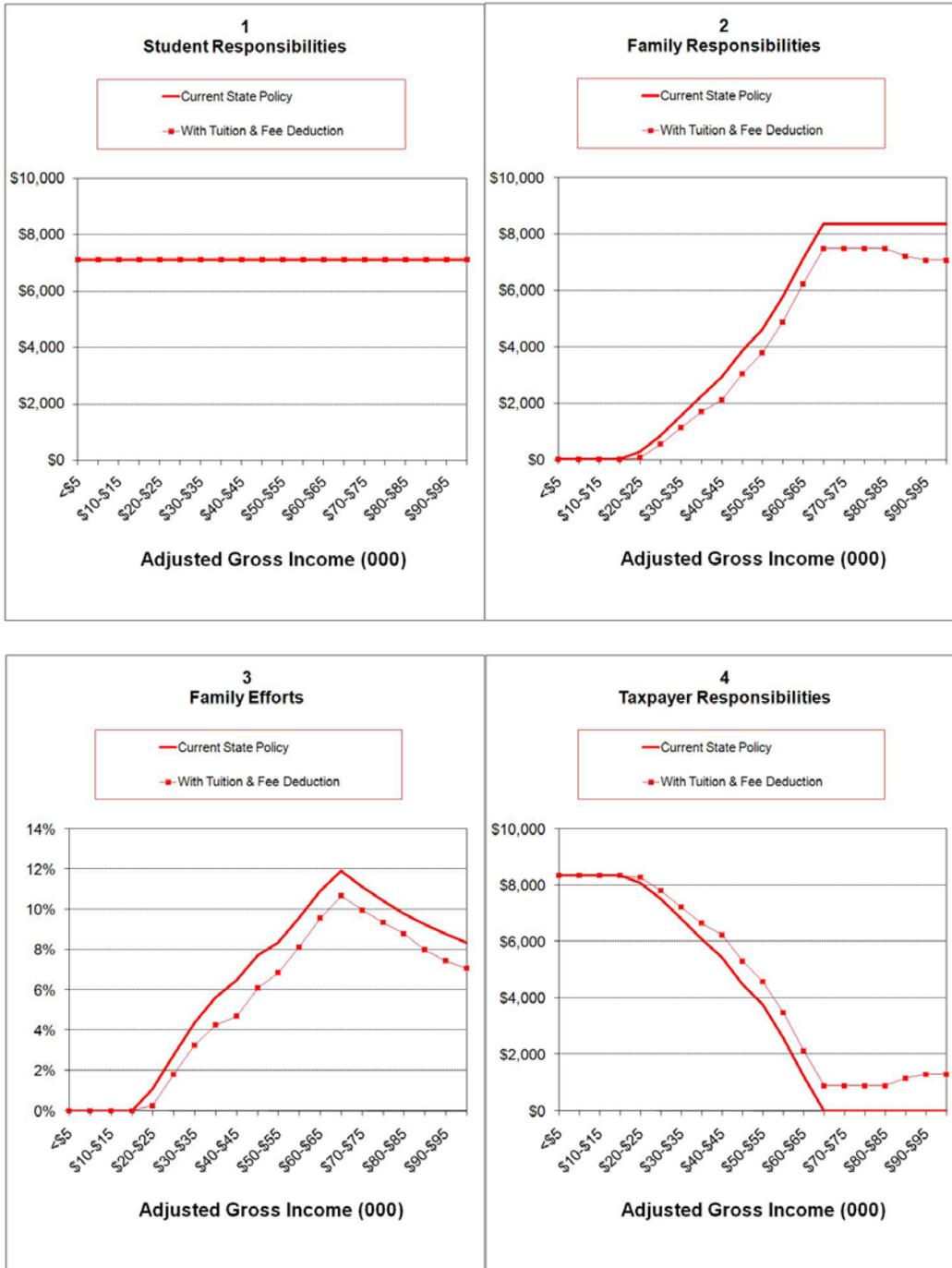
Increasing taxpayer investments through the tuition and fee deduction effectively reduced the amount assigned to families (parents, in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Effort, as shown in Panel 3, from nine to eight percent of adjusted gross income. This is equivalent to a two percentage point reduction in individual income tax rates.

Dependent Students / Higher Price Example / Federal Tuition and Fee Deduction

At the higher price (\$15,462), the tuition and fee deduction increased taxpayer investment for typical dependent students for families reporting adjusted gross incomes from about \$20,000 up to the program cutoff of \$160,000, see Panel 4 of the next chart. Families earning less than about \$20,000 typically do not have a federal tax liability so the deduction is irrelevant. Unlike the low price example, students from families with incomes in the \$20,000 to \$35,000 range would have qualified out-of-pocket expenses because the combination of Federal Pell and Minnesota State Grants was less than the qualified tuition and fees used at the \$15,462 price.

The tuition and fee deduction shifted the portion of the income distribution receiving taxpayers' investment to the right from about \$65,000 adjusted gross income to \$160,000, as shown on Panel 4.

Federal Tuition and Fee Deduction, Dependent Students, Recognized Price of Attendance = \$15,462



Increasing taxpayer investments through the tuition and fee deduction effectively reduced the amount assigned to families (parents, in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Effort, as shown in Panel 3, from 12 to 10 percent of adjusted gross income. This is equivalent to a two percentage point reduction in individual income tax rates.

Unmarried Independent Students with No Dependents

Consistent with standard State Grant Program distributional analyses, 20 federal tuition and fee deduction were calculated along the income spectrum at \$5,000 increments, from \$0 to \$100,000 adjusted gross income. The deduction was calculated for a household size of one using the standard deduction. It was also assumed no filer would be subject to the Alternative Minimum Tax.

The typical tuition and fee deduction was calculated using the mean Recognized Tuition and Fees presented above. It was further assumed the only discounts received by the student were the federal Pell and Minnesota State Grants, if the student qualified. The out-of-pocket tuition and fees were the set at tuition and fees minus the two grant amounts, if any.

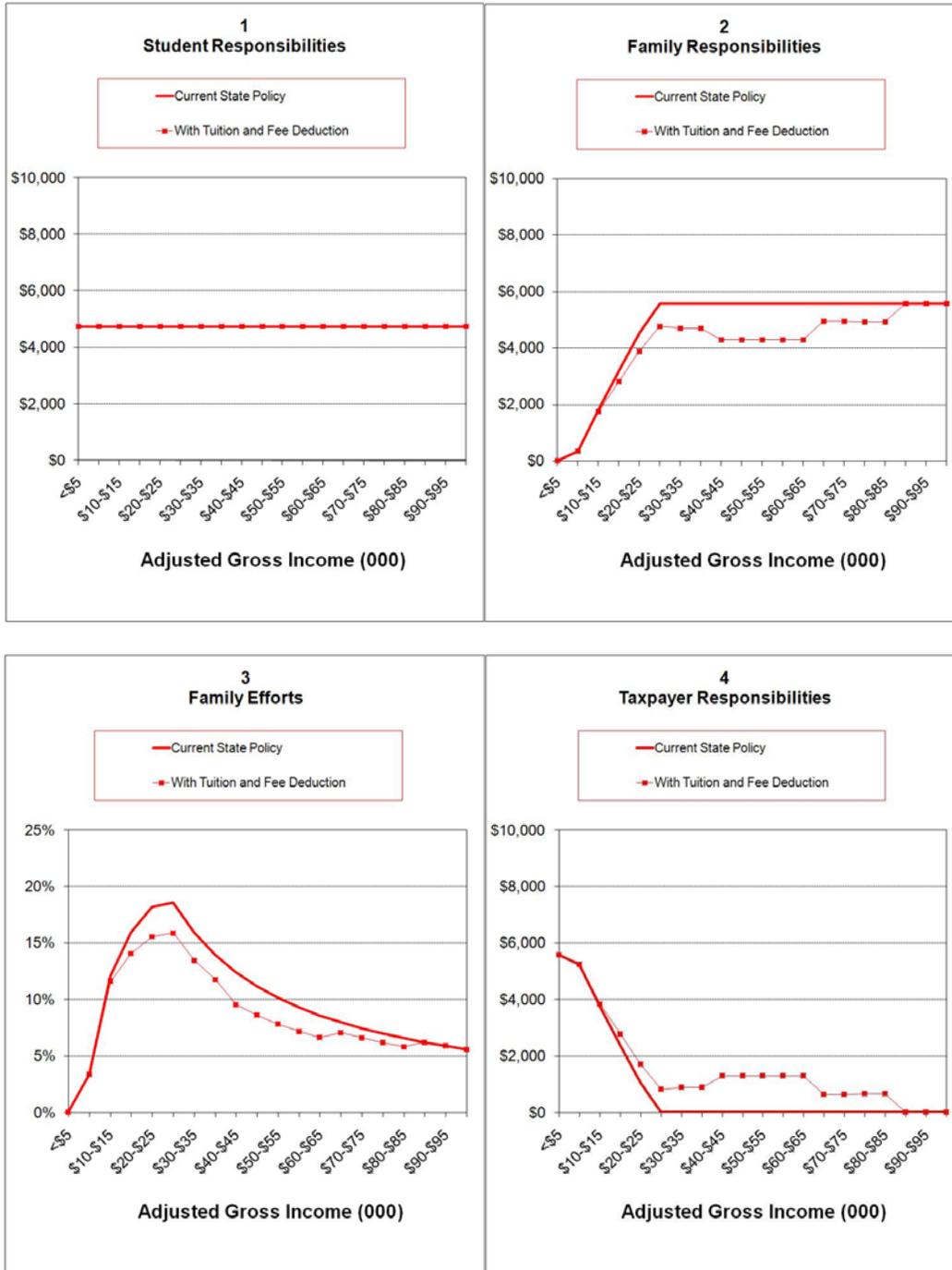
The federal tuition and fee deduction was used to reduce the Recognized Price assigned to families, the Assigned Family Responsibility, in the analysis presented in this section. If the deduction exceeded the Assigned Family Responsibility, the excess was used to reduce the assignment to students. In no cases did the Federal tuition and fees deduction result in a reduction in the Assigned Student Responsibilities.

Independent Students / Low Price Example / Federal Tuition and Fee Deduction

At the lower price (\$10,317), the tuition and fee deduction increased taxpayer investment for typical unmarried independent students with no dependents reporting adjusted gross incomes of \$10,000 or more up to the tax deduction cutoff of \$80,000, as shown on Panel 4 of the next chart. Assigned Taxpayer Responsibilities, as defined in the Design for Shared Responsibility, are shown as a solid line, with the sum of Assigned Taxpayer Responsibilities and the calculated tuition and fee deduction shown as a dashed line.

Individuals earning less than about \$5,000 typically do not have a federal tax liability and further reducing income through the deduction is irrelevant, so the two lines in Panel 4 are the same. In this analysis, typical students earning less than \$10,000 receive more in federal Pell and Minnesota State Grants than the qualifying tuition and fees and, therefore, had no out-of-pocket expenses as defined by the Internal Revenue Code. They did not qualify for the tuition and fee deduction. The federal tuition and fee deduction shifted the portion of the income distribution receiving taxpayers' investment to the right from about \$35,000 adjusted gross income to \$80,000, as shown on Panel 4.

Federal Tuition and Fee deduction, Unmarried Students with No Dependents with Recognized Price = \$10,317



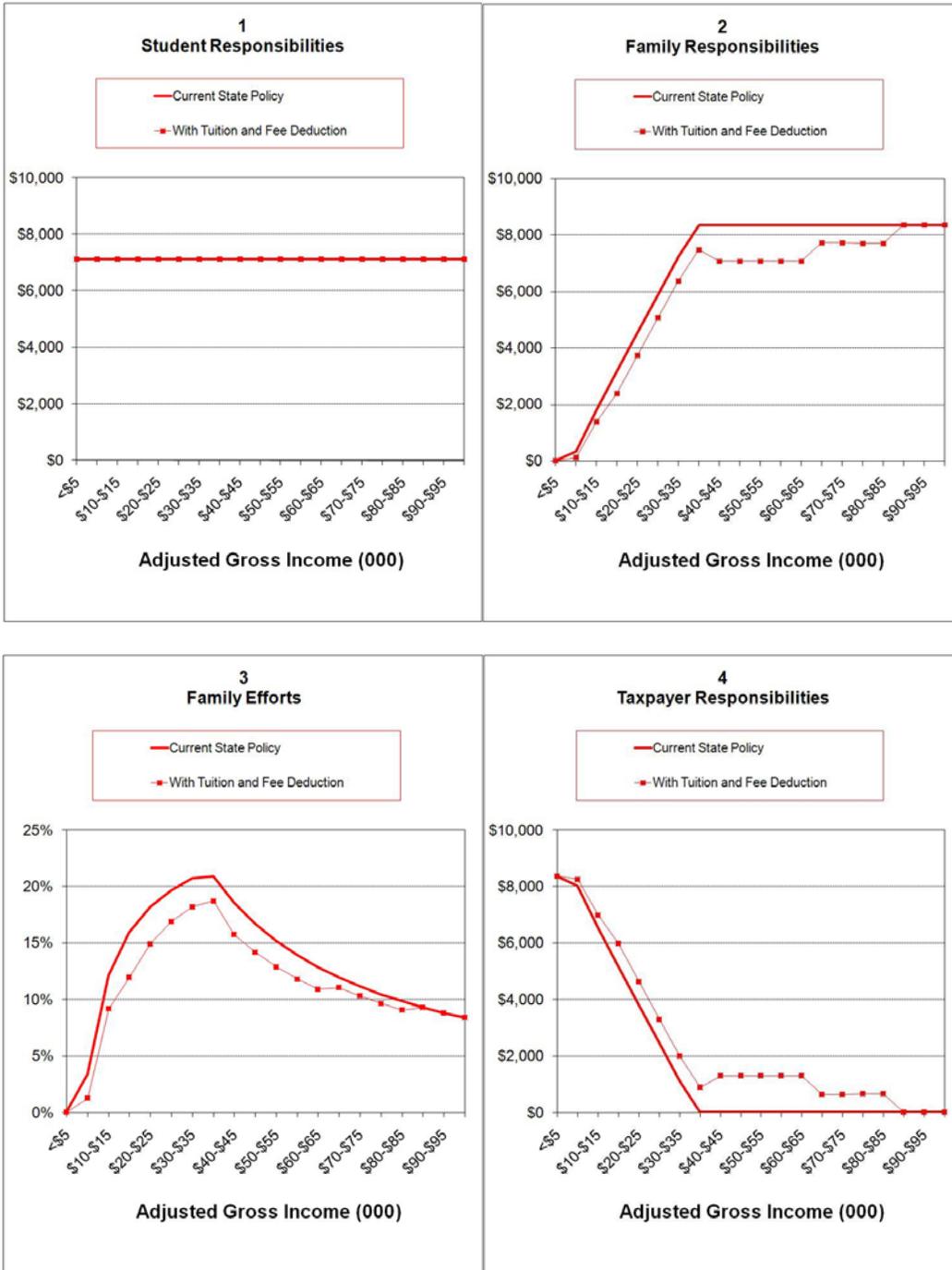
Increasing taxpayer investments through the tuition and fee deduction effectively reduced the amount assigned to families (students, in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Effort, as shown in Panel 3, from 18 to 16 percent of adjusted gross income, a two percentage point decrease.

Independent Students / Higher Price Example / Federal Tuition and Fee Deduction

At the higher price (\$15,462), the federal tuition and fee deduction increased taxpayer investment for typical unmarried independent students with no dependents reporting adjusted gross incomes of \$5,000 or more up to the tuition and fee deduction cutoff of \$80,000, as shown on Panel 4 of the next chart. Assigned Taxpayer Responsibilities, as defined in the Design for Shared Responsibility, are shown as a solid line, with the sum of Assigned Taxpayer Responsibilities and the calculated tuition and fee deduction shown as a dashed line.

Individuals earning less than about \$5,000 typically do not have a federal tax liability and further reducing income through the deduction is irrelevant, so the two lines in Panel 4 are the same. The deduction shifts the portion of the income distribution receiving taxpayers' investment to the right from about \$40,000 adjusted gross income.

Federal Tuition and Fee Deduction, Unmarried Students with No Dependents with Recognized Price = \$15,462



Increasing taxpayer investments through the deduction effectively reduced the amount assigned to families (students, in this case), as shown in Panel 2. The lowering of assignments to families reduced the peak Assigned Family Effort, as shown in Panel 3, from 21 percent of adjusted gross income to 18 percent. This is equivalent to a three percentage point reduction in individual income tax rates.

Families Receiving Federal Tax Benefits for Postsecondary Education and Federal Pell and Minnesota State Grants

Some families are eligible to receive both federal tax benefits and federal and state grants. Federal Hope and Lifetime Learning tax credits and the federal tuition and fee deduction are not currently counted in calculating Minnesota State Grants; however, federal Pell grants are counted. Some families will qualify for federal tax credits and Minnesota State Grants, and other families will qualify for the federal tuition and fee deduction and Minnesota State Grants. The fact that some families receive federal tax benefits and Minnesota State Grants, and the fact that federal tax benefits are not counted in calculating Minnesota State Grants, complicates program evaluation. Nevertheless, the panels on the following pages show the distribution of recipients of federal Pell Grants, Minnesota State Grants and federal tax benefits at the higher price alternative used in this analysis. The charts illustrate that Pell Grants, Minnesota State Grants and federal tax benefits are not mutually exclusive.

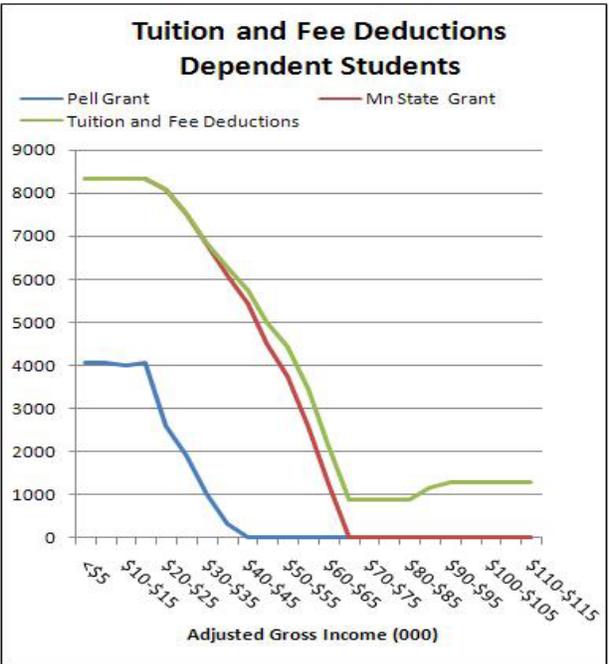
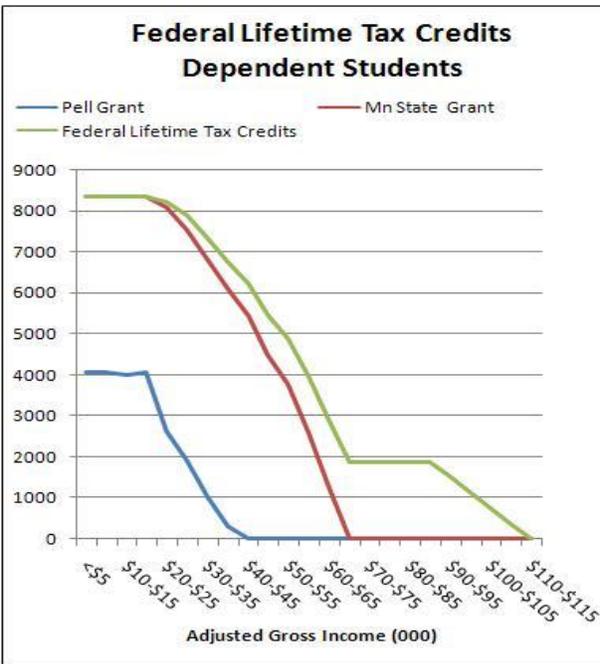
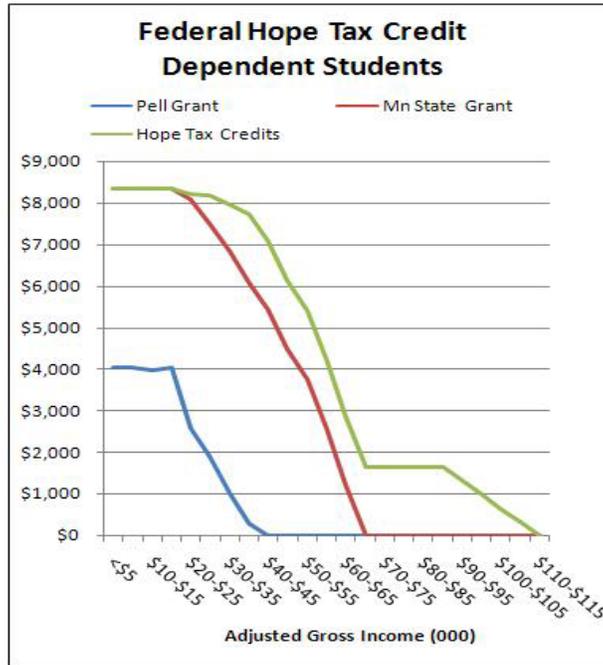
For dependent students at the higher priced option:

- Families up to \$40,000 qualified for both federal Pell and Minnesota State Grants, as shown on the next page.
- Families in the \$25,000 to \$40,000 income range qualified for federal Pell Grants, Minnesota State Grants and federal tax credits, as shown on Panels 1 and 2 of the next page.
- Families in the \$25,000 to \$65,000 income range qualified for both Minnesota State Grants and federal tax credits, as shown on Panel 3 of the next page.

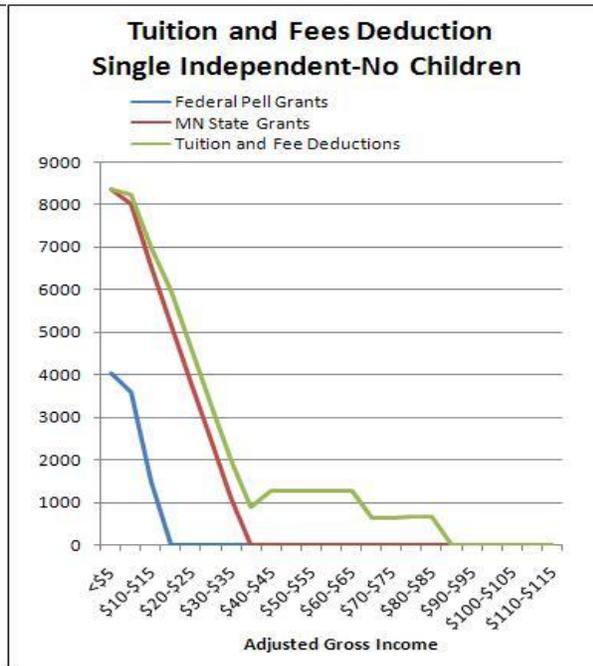
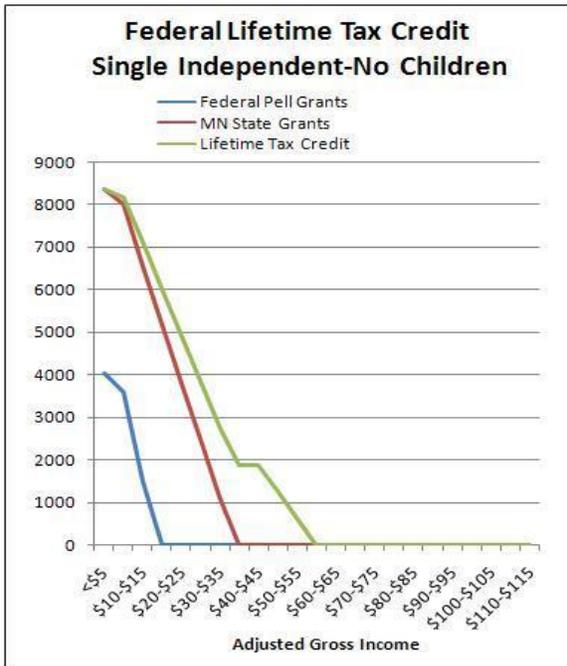
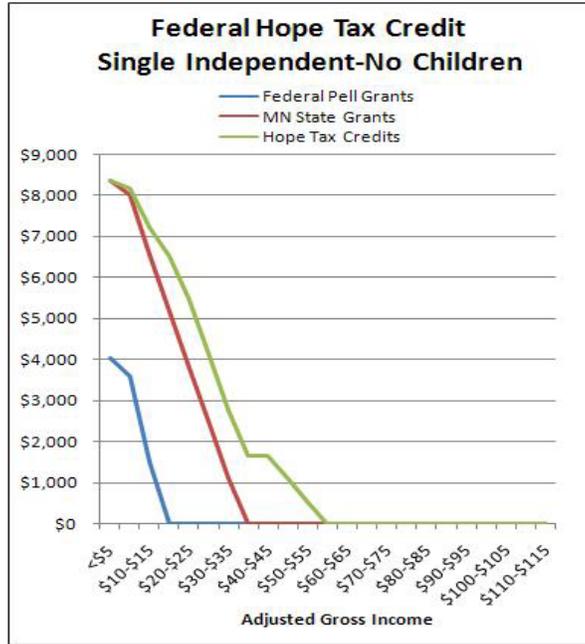
For independent students with no dependents at the higher priced option:

- Unmarried independent students with no dependents up to \$20,000 qualified for both the federal Pell Grant and the Minnesota State Grant, as shown on the following pages.
- Unmarried independent students with no dependents in the \$5,000 to \$20,000 income range qualified for both federal Pell Grants and federal tax credits, as shown on the following pages.
- Unmarried independent students with no dependents in the \$5,000 to \$35,000 income range qualified for both Minnesota State Grants and federal tax credits, as shown on the following pages.

Distribution of Federal Tax Benefits, Pell Grants and Minnesota State Grants for Typical Dependent Students with Recognized Price of Attendance = \$15,462



Distribution of Federal Tax Benefits, Pell and Minnesota State Grants for Unmarried Students with No Dependents with Recognized Price of Attendance = \$15,462



Conclusions

- The federal Hope tax credit, the Lifetime Learning tax credit and the tuition and fee deduction assist student and families in paying for postsecondary education. Unlike student financial aid programs and practices, federal tax benefits are reimbursed through the filing of federal individual income taxes after students and families have incurred qualifying out-of-pocket postsecondary education expenses.
- Federal tax benefits generally provide postsecondary education benefits further up the income spectrum than student financial aid. Nevertheless, federal postsecondary education tax benefits and student financial aid are not mutually exclusive, as shown in this analysis. Some students and families receive federal tax benefits, federal Pell Grants and Minnesota State Grants.
- Federal tax benefits reduce financial burdens the most for students and families who are expected to pay the most, as determined by the federal need analysis used in student financial aid programs.

References

College Board (2007), *Trends in Student Aid 2007* [Available at www.collegeboard.org/trends.]