Do States Practice Benefit Taxation?

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Abstract

Two strong/testable predictions of the Tiebout model are that people will sort themselves according to demand for public goods and services and that jurisdictions will rely on benefit taxes to fund public goods and services. A casual look across the fifty states leaves doubt as to the veracity of these predictions; states appear to be characterized by wide distributions in income (and presumably tastes for public goods) and by reliance on ability-to-pay taxes. However, whether these "facts" are an indictment of the Tiebout model depends on whether the variance across residents in taxes paid is mirrored by a related variance in benefits received. If so, then the Tiebout model would seem to stand or at least potentially be consistent with the facts.

We hope to shed light on the question of whether taxes and benefits are linked within a given state as the Tiebout model predicts they should be. We will gather data on all 50 states over the past few decades. These data will be employed to portray broad trends over time, differences across the states, and, within each state, trends over time in tax burdens, tax mixes, tax structures, expenditure shares, and expenditure levels. We will look for links between certain types of expenditures (e.g., expenditures that disproportionately benefit the poor) and certain types of revenues (e.g., revenues that are disproportionately paid by the poor). This analysis will provide a detailed picture of the landscape that we hope will point to potential discrepancies or consistencies with the predictions of the Tiebout model.

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1 Benefit Taxation and the Tiebout Hypothesis

A taxpayer's net fiscal benefit is the difference between the value of public services she consumes and her tax burden. When net fiscal benefits for all taxpayers are zero, fiscal policy is aligned according to the benefit-principle. That is, benefit taxation matches a taxpayer's tax payments with the value of public services benefitting that taxpayer.[1]

A taxpayer's net fiscal benefit varies across states because of across state variation in tax structure and the distribution of public expenditures. Net fiscal benefits will also vary across taxpayers within a state since taxpayers with different characteristics face different tax burdens and consume different amounts of public services.[2]

In the United States, the mobility of households and the democratic nature of state and local fiscal policy create suitable conditions for the existence of benefit finance. Household mobility encourages benefit finance because fiscal policies vary across jurisdictions and fiscal policies likely play at least some role in the location decision of households. Thus, households with similar demands for public services will tend to cluster together and households will avoid locations where taxes exceed benefits. If a taxpayer lives in a state where her net fiscal benefit is small or negative she may elect to move to another state where she receives a higher net fiscal benefit. For example, a state with high income taxes on the rich that spends disproportionately on the poor might create a situation where the poor enjoy positive net fiscal benefits while the rich have negative net fiscal benefits. This policy may attract poor residents from other states but it is likely to repel many of the state's own rich residents. If these migration patterns are substantial, the state may find itself unable to maintain poor residents' positive net fiscal benefits.[3]

Political forces also encourage benefit finance; voters are not expected to support a fiscal policy that leaves a majority receiving negative net fiscal benefits. A state's tax structure and its distribution of public expenditures are likely affected by the threat of exit and the use of voice through the political process. In the above example, the state's rich residents may use the threat of exit to alter the state's tax and expenditure mixtures to increase their own net fiscal benefits.

These twin forces of exit and voice exert the strongest tendency towards benefit finance when the costs and benefits of each public program are clear to taxpayers. Of course, it is difficult for anyone, let alone taxpayers, to accurately calculate the distribution of public service benefits across the population. Further, the general equilibrium nature of tax incidence makes the determination of the real economic burden of taxation extremely complicated. Regardless, taxpayers have the ability to respond to tax and expenditure policy according to how they perceive their own tax burden and public service benefits.

In some cases, it is relatively straightforward to determine tax burdens and public service benefits. Public schools charge fees for lunch, highways have tolls, and local gov-

[1] This section draws heavily on Oates (1972), Tiebout (1956), and Musgrave (1959).

[2] Using Tax Foundation data from the 1960s, Aaron and McGuire (1970) and Hines (2000) measure for various income levels the size of net fiscal benefits from federal taxes and expenditures. Ruggles and O'Higgins (1981) calculates net fiscal benefits at both the federal and local (i.e., non-federal) level.

[3] See Brown and Oates (1987).

ernments require fees for trash collection. When these taxes do not align well with benefits most households can find alternative food sources, driving routes, and trash disposal mechanisms. Thus, the jurisdictions must charge a fee that seems reasonable to the constituent users of the service. Beyond explicit user charges, other revenue instruments such as gas taxes, hunting licenses, and arguably tobacco taxes attempt to roughly align tax burdens with the benefits of public service consumption and the variety of external costs imposed on society.

In most cases, however, the difficulties of accurately determining and understanding the distributions of tax burdens and public service benefits suggests that a general system of benefit finance is unlikely to be achieved. Further, while benefit finance appeals to some concepts of equity, the tax burdens implied by benefit finance may not correspond very well to other societal notions of fairness.

For reasons of fairness, the voters in a state may install a tax system based on ability-to-pay rather than the benefit principle. In these cases, instead of corresponding directly with benefits, tax payments would correspond with measures of ability-to-pay such as income and wealth. Thus, we might observe a progressive income tax, an estate tax, or a property tax. Because willingness to pay for public services and/or the public service benefits may increase with income, however, the existence of progressive taxation does not imply that tax payments are necessarily out of line with benefits.

Our question is purely positive: do states practice benefit taxation?

2 Conceptual Framework

State and local governments spend money on a wide range of goods and services; some of these goods and services are amenable to benefit-tax financing, while others are not. To finance these goods and services states and local governments raise money through a wide range of revenue instruments; some of these instruments can be designed as benefit taxes, while are others are difficult to tailor to beneficiaries. We propose categorizing state and local government expenditures and revenues along two dimensions.

First, revenues and expenditures are described according to beneficiary and taxpayer characteristics. On the expenditure side a particular public service can be rich-intensive, poor-intensive, or neutral, depending on whether the rich or poor benefit disproportionately. On the revenue side, the distribution of the burden of the tax or fee across people may be rich-intensive (i.e., progressive), poor intensive (i.e., regressive), or neutral.

Second, expenditures and revenues are described according to how well they align with benefit finance. An expenditure aligns with benefit-tax financing if it satisfies three conditions: a) it must be possible to identify the beneficiaries of the service being provided, b) taxing or charging a fee to the beneficiaries must not conflict with societal notions of fairness, and c) it must be administratively feasible to charge or tax people for the service being provided. A revenue instrument aligns with benefit-tax financing if it satisfies three conditions: a) it must be possible to tailor the tax to the group that benefits and tax payments must be highly correlated with benefits received, b) targeting the tax must

not conflict with societal notions of fairness, and c) it must be administratively feasible to target the tax or charge to a particular group.

We use these categorizations to assess the nature and extent of the use of benefit-tax finance by states and to examine a number of hypotheses prefaced on the assumption that states, in fact, do practice benefit finance. Our method then is to examine whether the data regarding differences across states and changes over time in various categories of revenues and expenditures are consistent with predictions predicated on the assumption that states practice benefit taxation.

One difficulty in attempting to infer any causal patterns with these data is that the variables of interest are simultaneously determined. We propose to use court-ordered school finance reform, which occurred at different times in different states, as an exogenous shock that caused spending on K-12 education to become more poor-intensive. If Tiebout mechanisms are at work, we would expect to see changes in other categories of spending or in the revenue system to maintain next fiscal benefits, or we would expect to see changes in the composition of the population as people hurt by the change in K-12 spending move out of the state.

3 Trends in State and Local Revenues and Expenditures

In this section of the paper we will present basic facts separately on revenues and expenditures. We begin by examining national level aggregates and averages over the 44-year period from 1962 to 2006. The composition of state and local government revenues has changed dramatically over this period. The property tax has become relatively less important as a source of general revenue, while the general sales tax and the individual income tax have become relatively more important. The individual income tax is generally rich-intensive while the general sales tax is generally poor-intensive. Figure 1 displays the composition of general own source revenue for state and local governments in 1962 and 2006. General own source revenues includes all revenues except for intergovernmental, liquor, utility, and social insurance revenues. In 1962, property taxes represented 38% of revenues; in 2006, although still the largest revenue instrument, property taxes represented 21% of revenues. Individual income tax revenues represented 15% of revenues in 2006, up from 6% in 1962. Revenues from general sales taxes and "other" revenues both increased by 4 percentage points, from 12% to 16% and 14% to 18%, respectively. These "other" revenues are detailed in figures 9 and 10, which demonstrate that miscellaneous revenues are increasing in importance. Beyond property taxes, selective sales tax revenues experienced the most dramatic decline in relative importance falling from 16% to 7% of revenues.

The composition of state and local direct general expenditures has also changed from 1962 to 2006. Direct general expenditures include all expenditures except for liquor, utility, social insurance, and intergovernmental expenditures. Figure 2 displays the composition of direct general expenditures for state and local governments in 1962 and 2006. The

most striking increase occurs in the share of expenditures devoted to non-cash public welfare, essentially representing Medicaid expenditures, which increases from 8% to 18% of expenditures. Both health and higher education expenditures exhibit small two percentage point increases in their share of expenditures, while "other" expenditures increased from 11% to 14%. The largest decreases occurred in the share of expenditures on K-12 education and highways with decreases of five and eleven percentage points, respectively. Thus, states appear to have increased their share of spending in a poor-intensive service (public welfare) and also on a relatively rich-intensive service (higher education). Tables 1 and 2 provide more summary statistics on revenue and expenditure shares.

Figure 3 shows the path of five major revenue sources from 1962 to 2006 along with the path of their sum. Figure 5 displays the same revenue sources but omits their total. The figure combines revenues from charges and miscellaneous revenues into one category called MISCHG (Miscellaneous and Charge revenue).[4] This category increases steadily during the entire period and surpasses property taxes as the largest revenue source in 1979. Although property taxes lose their pre-eminence as a share of own source revenues, real property tax revenues increase throughout the period, except for the temporary "tax revolt" plunge of the late 1970s. Real general sales tax and individual income tax revenues move in concert almost as parallel lines, with income tax revenues only briefly exceeding sales tax revenues in 2001.

Figure 4 shows the path of five major expenditure categories from 1962 to 2006 along with the path of their sum. Figure 6 displays the same expenditure categories but omits their total. Real expenditures on K-12 education are the unchallenged leader of state and local expenditures during this period. Again, however, the most dramatic increases belong to non-cash public welfare expenditures (i.e., Medicaid). Expenditures on health, higher education, and police run approximately together throughout the period and steadily increase.

Comparing 1962 real per-capita revenues and expenditures to their 2006 levels provides additional evidence on which categories exhibited the largest increases. Figure 7 shows that property taxes are the largest revenue source in both 1962 and 2006. Per-capita revenues from the general sales tax and the individual income tax represent two of the largest proportional increases. Real per-capita revenues from the individual income tax in 2006 are over eight times as large as they were in 1962, while 2006 revenues from general sales are over 4 times as large as their 1962 level. Charges for hospitals and education and miscellaneous revenues also exhibit large increases. Interest revenue and miscellaneous revenues not elsewhere classified (i.e., the Census does not define their source) make up more than 60% of miscellaneous revenues.

The largest proportional increases in real per-capita expenditure occur in the categories of higher education ($\times 4$), non-cash public welfare ($\times 7$), and police, fire and corrections ($\times 4$). Figure 8 shows the real per-capita expenditure levels in some major categories. Although its share of direct expenditures has declined, K-12 education expenditures remain

[4]Prior to 1977 separate figures for miscellaneous revenues and charges are only available in census of government years (e.g., 1962, 1967).

the highest at $1,675 per-capita in 2006. Tables 3 and 4 provide additional summary statistics on revenue and expenditure levels.

Not all states' changes in revenue and expenditure shares mirror those seen in the national aggregates. The next set of figures compares the shares of revenues and expenditures derived from specific categories in 2006 to their shares in 1962 and two periods in between. Figure 11 compares the property tax share in 1962 to the property tax share in 2006 for all 50 states. Points along the 45 degree line represent states that did not change their share from 1962 to 2006. This figure shows that from 1962 to 2006 the share of general own source revenues derived from property taxes declined in every single state. The subsequent two figures compare shares in 1962 and 1977 and 1977 and 2006, demonstrating that the relative decline in the property tax share occurs throughout the entire period. 1977 marks the last year before Proposition 13 passes in California and the "tax revolt" begins.

Over the years 1962 to 2006 the individual income tax share increases by substantial amounts in nearly every state. Figures 14-16 demonstrate that the increase in the individual income tax share is most widespread from 1962 to 1977, with increases less widespread and more modest from 1977 to 2006. The widespread increased importance of the income tax is one of the clearest results from our analysis.

Figures 17 - 19 show that from 1962 to 2006 there is a similar but less widespread increase in the relative importance of the general sales tax. Here again the share increases are more widespread from 1962 to 1977, with many states decreasing the general sales tax share from 1977 to 2006.

In 1962 selective sales taxes were the second largest state and local revenue source in the United States (see Figure 1). By 2006 they had declined to the sixth most important, their national share falling by more than 50%. Figures 20 - 22 demonstrate that this decline occurred in all states over almost the entire 44 year period.

Figures 23 - 34 compare the revenues shares of total charges and various types of charges over the period. From 1962 to 2006 charges increased in relative importance in all but two states (CT and AK). The changes in the revenue shares of the three categories of charges examined here (education, hospital, and other), however, are more mixed across states. Changes in miscellaneous revenues share (Figures 35 - 37) are similar to the changes in total charges.

Higher education and non-cash public welfare experience the most widespread increases in expenditure shares from 1962 to 2006. Figures 38 - 40 show that nearly every state increased its higher education share from 1962 to 2006. This increase, however, is concentrated in the period from 1962 to 1977, with a majority of states keeping shares relatively constant or declining after 1977.

Figures 41 - 43 demonstrate that the increases in the non-cash public welfare share are similarly widespread and, in contrast with higher education, the share increases occur in both periods, 1962-1977 and 1977-2006. Figures 44 - 55 present the same figures for K12 education, police, health, and government administration. Expenditure shares for police and health increase in many states, K-12 education shares decline in most states, and government administration shares remain roughly constant in many states.

In many ways, states' revenue and expenditure mixes have become more similar during

this period. Columns (1) - (4) in Table 5 display the across state coefficient of variation for expenditure and revenue shares in 1962, 1977, 1992, and 2006. Columns (5), (6), and (7) show the change in the coefficient of variation from 1962-1977, 1977-1992, and 1962-2006, respectively. As column (7) indicates, states have become much more similar in terms of their individual income tax share with the coefficient of variation falling 0.31 points, from 0.66 to 0.35. States have also become more similar in the general sales tax and miscellaneous revenue shares. The share of state expenditures on health have become more dissimilar, while public welfare and higher education expenditure shares have become more similar across states. Property tax revenue shares and K-12 expenditure shares do not demonstrate any convergence or divergence across states.

As noted above, the most noticeable changes in revenue and expenditure shares occur in the individual income tax, general sales tax, higher education, and non-cash public welfare. The next section further examines revenues and expenditures in these categories.

4 Do States Practice Benefit Taxation?

In this section we examine whether differences across states and changes over time in various categories of revenues and expenditures are consistent with predictions predicated on the assumption that states practice benefit taxation. We begin by examining simple correlations between revenues and expenditures.

Expenditures on higher education are sometimes characterized as rich-intensive expenditures. The income tax is generally a rich-intensive tax. If forces conducive to benefit taxation exist, we might expect states that increase expenditures on higher education to pay for those expenditures with an increased reliance on individual income taxes. Figure 56 shows a positive correlation between the percentage change from 1962 to 2006 in real per-capita expenditures on higher education and real per-capita individual income tax revenues. Figure 57 shows the same positive correlation for percentage changes from 1977 to 2006.

Expenditures on non-cash public welfare are poor-intensive. If a state wanted to keep net fiscal benefits roughly constant, increases in public welfare expenditures should not coincide with increase in rich-intensive taxes like the income tax. Figure 58 shows that, from 1962 to 2006, there is a negative correlation between percentage changes in real per-capita public welfare expenditures and percentage changes in real per-capita income tax revenues. This correlation becomes positive, however, when examining only the period 1977 to 2006 (Figure 59).

As expected, increases in real per-capita personal income are positively correlated with increase in real per-capita income tax revenues, as shown in Figures 60 and 61.

The main poor-intensive source of state and local tax revenue is the general sales tax. In order to keep net fiscal benefits roughly constant, states expanding poor-intensive expenditures might increase general sales taxes. Figures 62 and 63 demonstrate that no such positive relationship exists for public welfare and general sales tax revenues; in fact the relationship between the two is negative from 1962 to 2006.

Figures 64 and 65 show a negligibly positive correlation between changes in higher education expenditures and general sales tax revenues. This is contrary to what is expected if, all else equal, states were attempting to roughly maintain net fiscal benefits as they increased higher education expenditures. Of course, as is the case with all the expenditure-revenue pairs we examine, it is possible that rather than trying to maintain net fiscal benefits across the population, states were attempting to realign them.

Changes in personal income are positively correlated with changes in general sales tax revenues (Figure 66) and higher education expenditures (Figure 68), but are essentially uncorrelated with changes in public welfare expenditures (Figure 71).

As noted above, we hope to use court-mandated changes in K-12 education spending as an exogenous increase in poor-intensive expenditures. Figures 74 - 83 display correlations between percentage changes in K-12 spending and percentage changes in general sales tax revenues, income tax revenues, higher education spending, public welfare spending, and personal income. K-12 spending is positively correlated with both income tax revenues and general sales tax revenues, which is not surprising since the distribution of the benefits of general K-12 spending is not clearly rich- or poor-intensive.

Of course, beyond increases in tax revenues there are also changes in tax structure. A primary example is the changing structure of the income tax in many states. The NBER's Taxsim program allows us to calculate the average state tax rate at different levels of real income from 1977 to 2006. Both the progressivity and the general level of income tax rates have changed within many states. Figures 84 - 91 provide comparisons of the average tax rate schedule for several states for 1977 and 2006.

5 Conclusion

Here we conclude.

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6 Figures: Descriptives

Figure 1: U.S. Revenue Mix

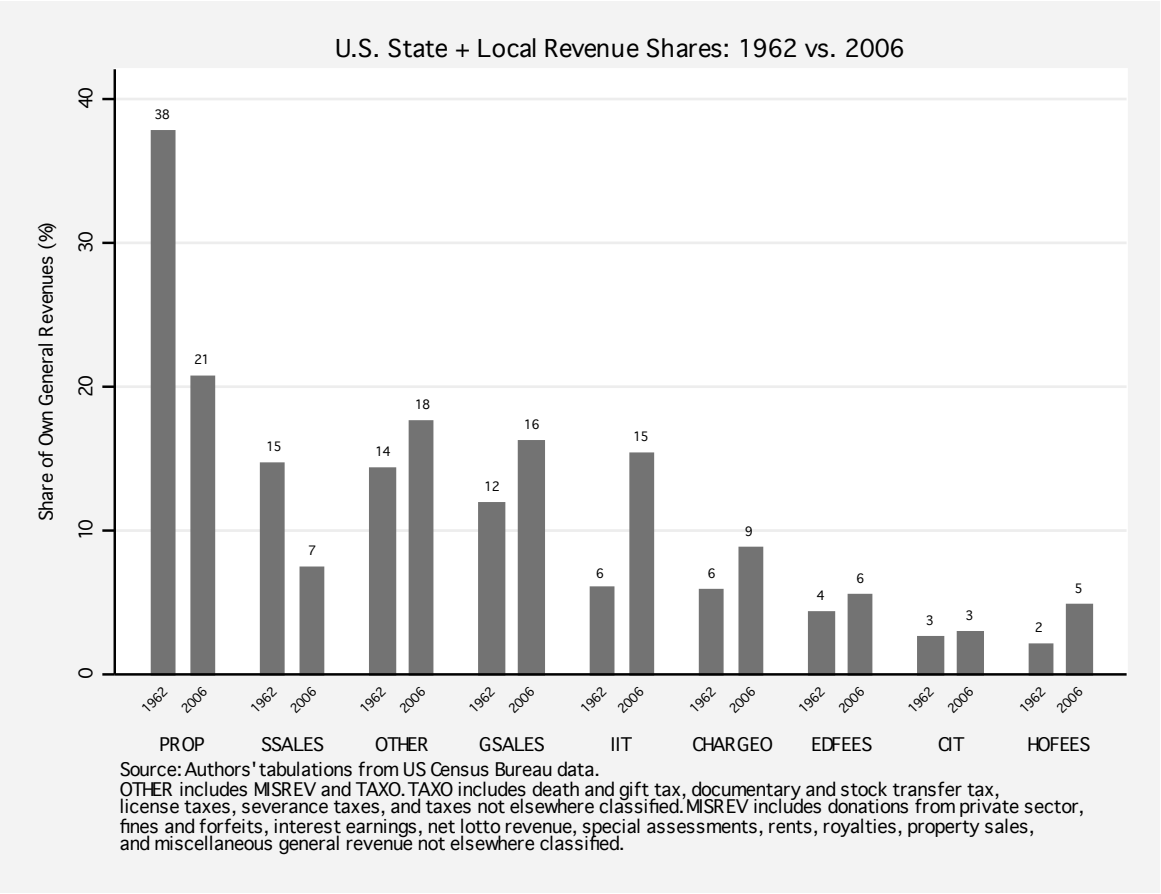


Figure 2: U.S. Expenditure Mix

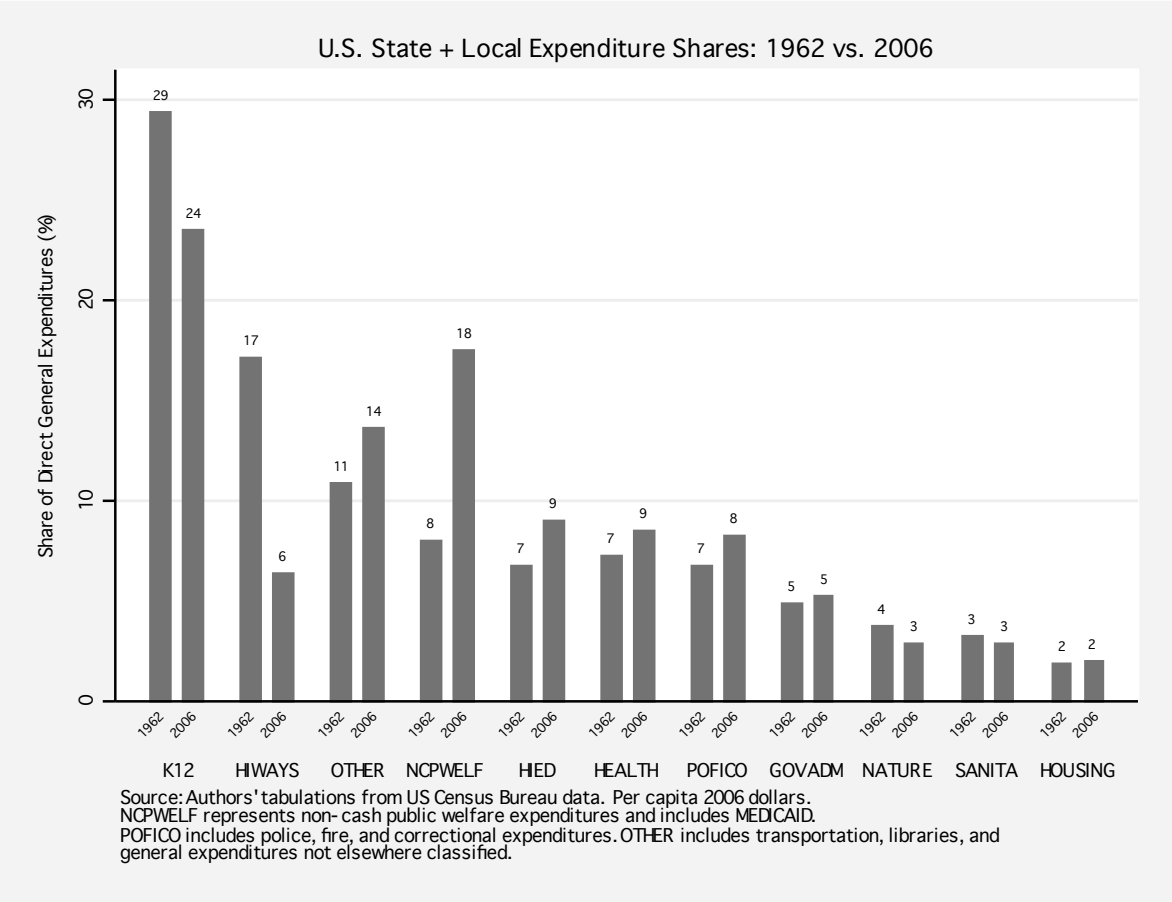


Figure 3: U.S. (Major) Revenues Over Time

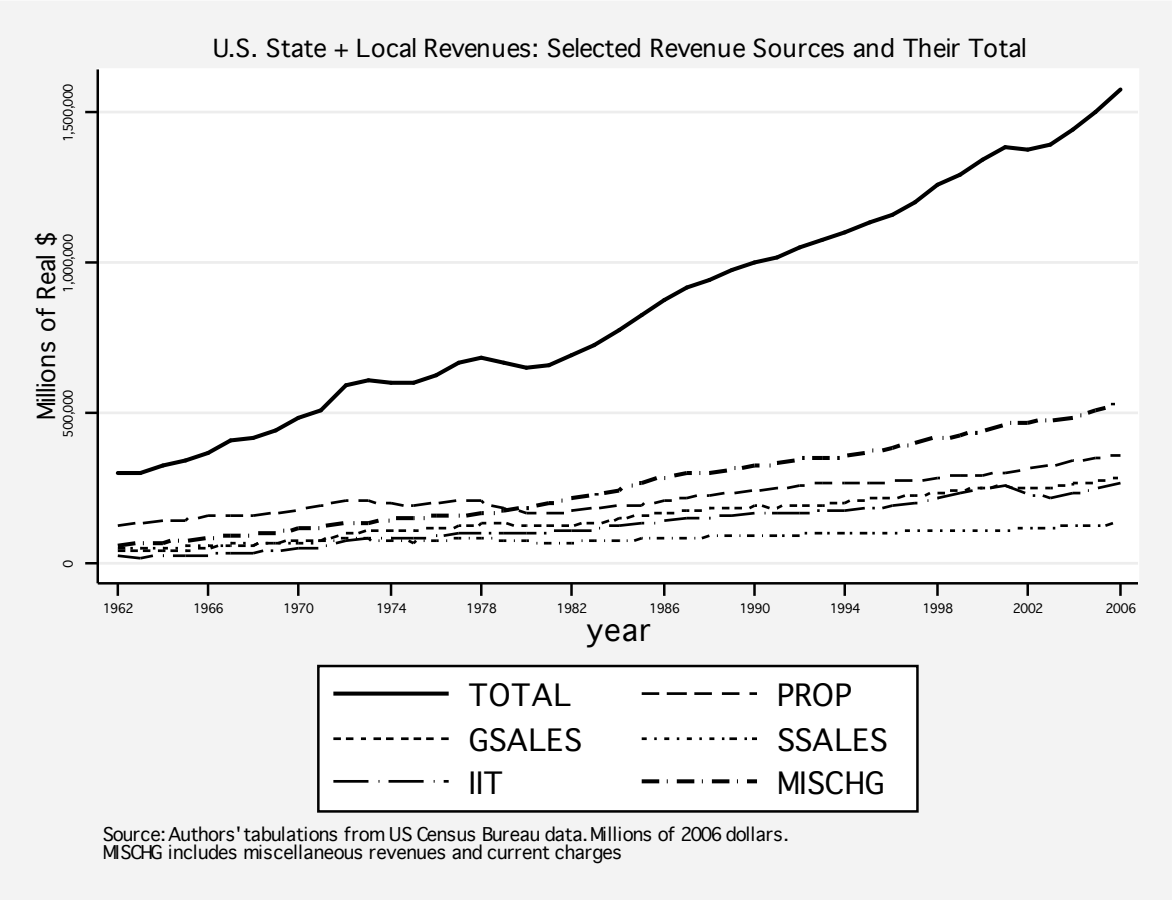


Figure 4: U.S. (Major) Expenditures Over Time

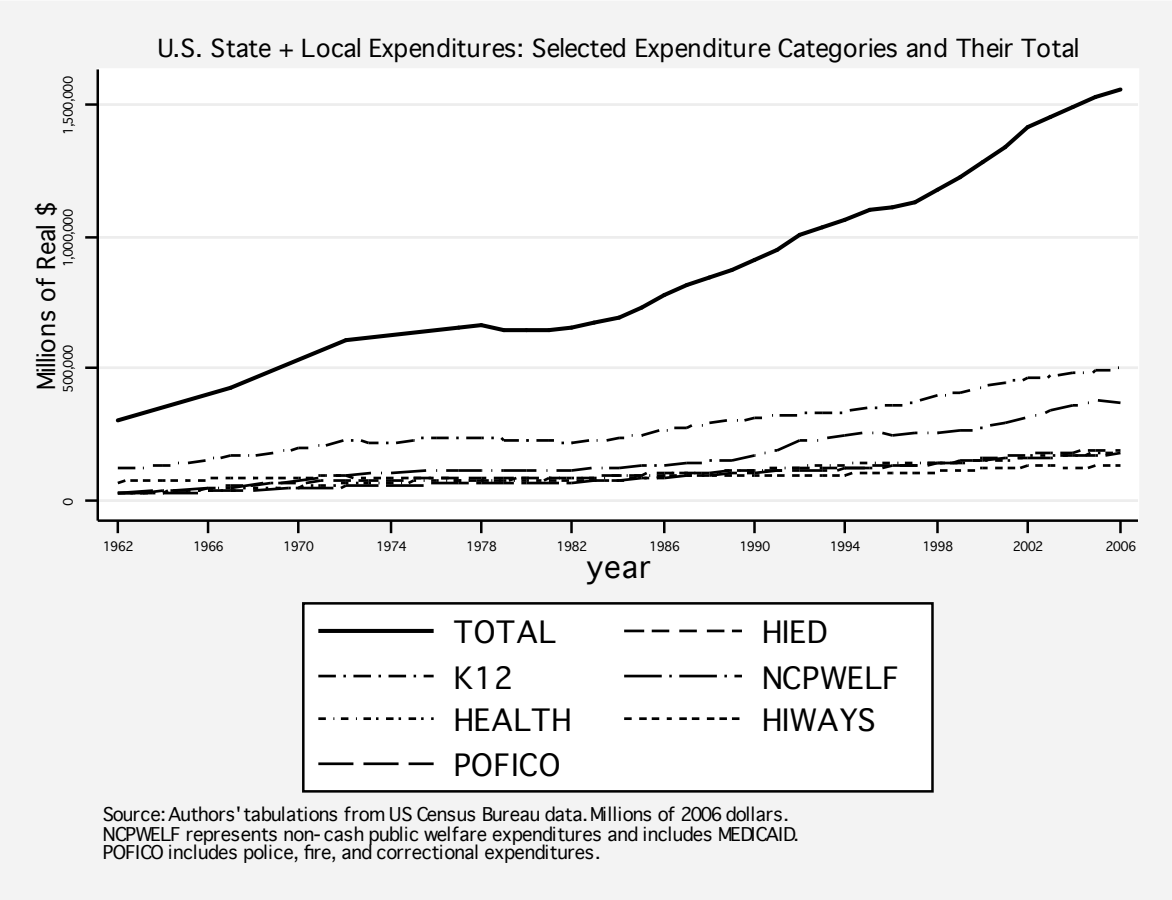


Figure 5: Close Up (Major) Revenues Over Time

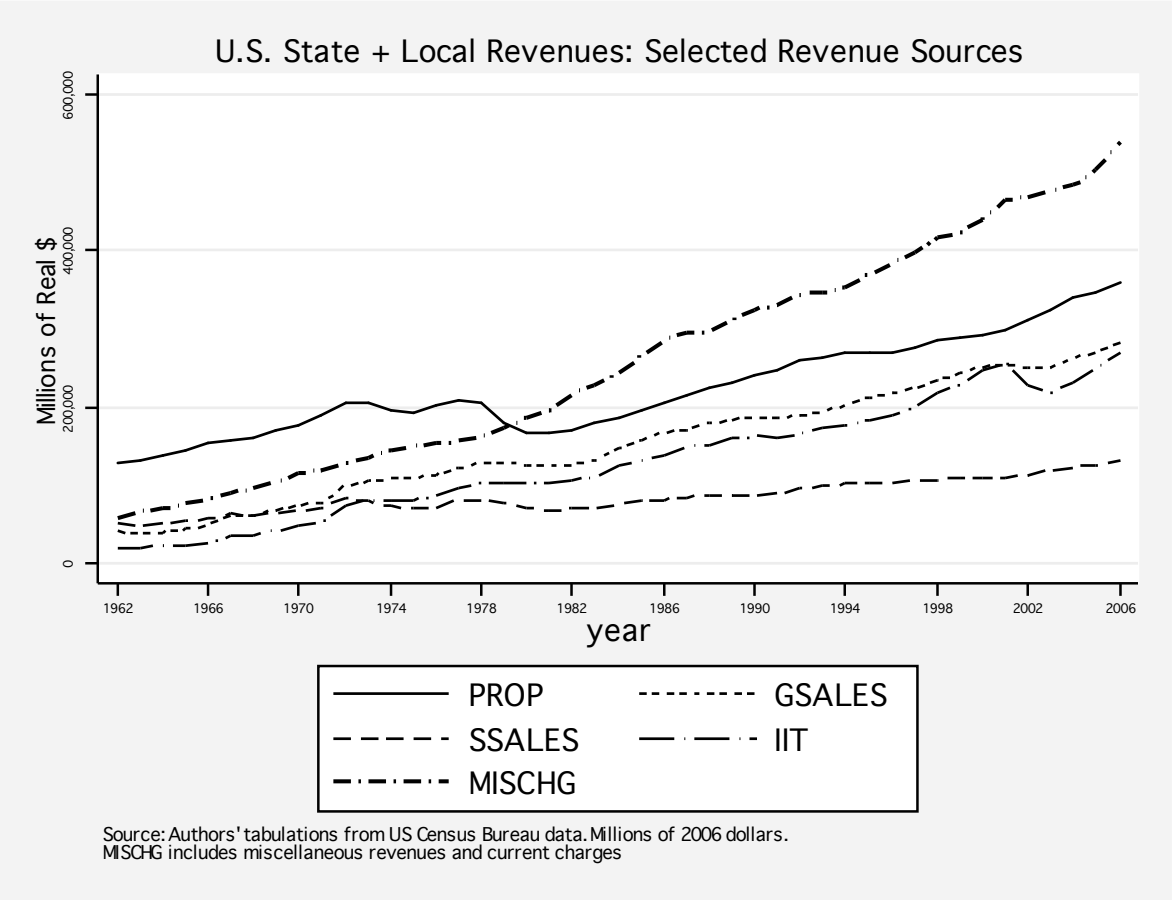


Figure 6: Close Up (Major) Expenditures Over Time

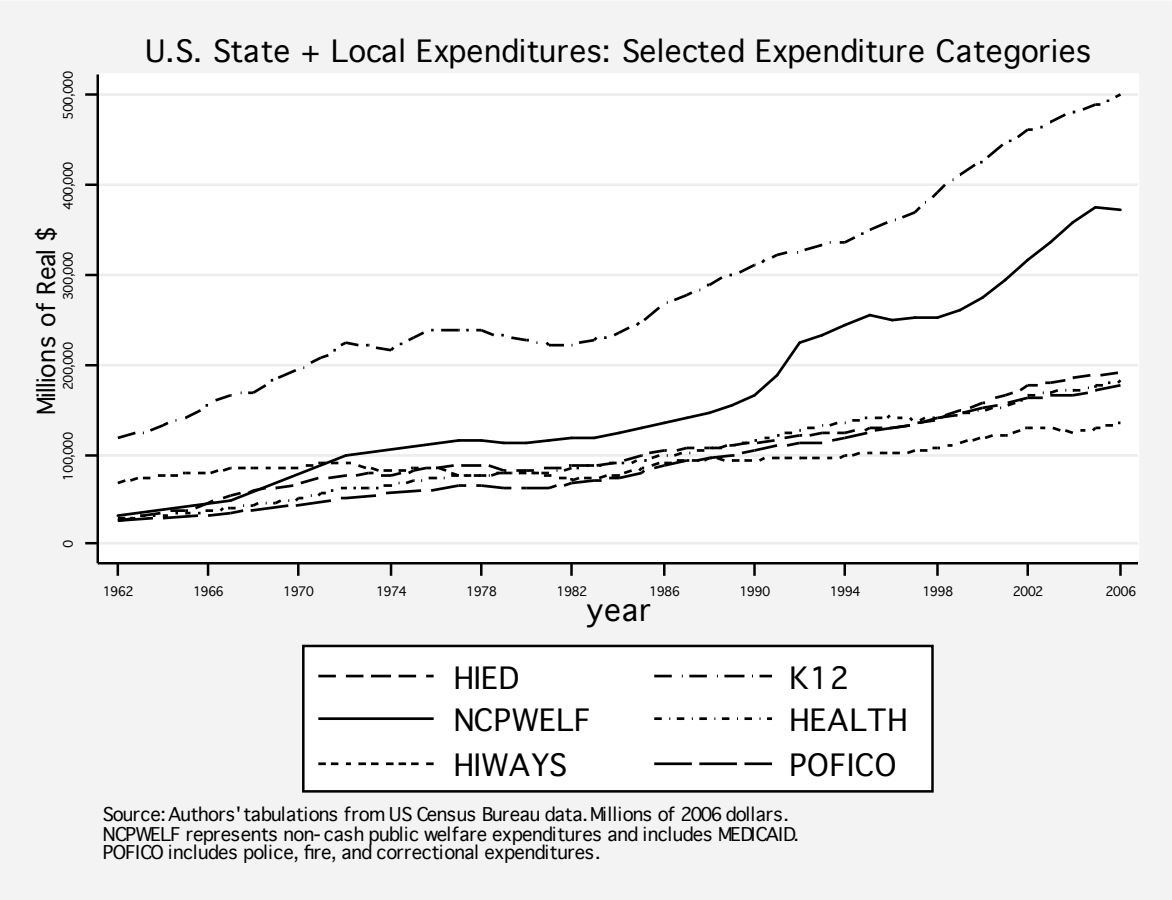


Figure 7: U.S. (Major) Revenues

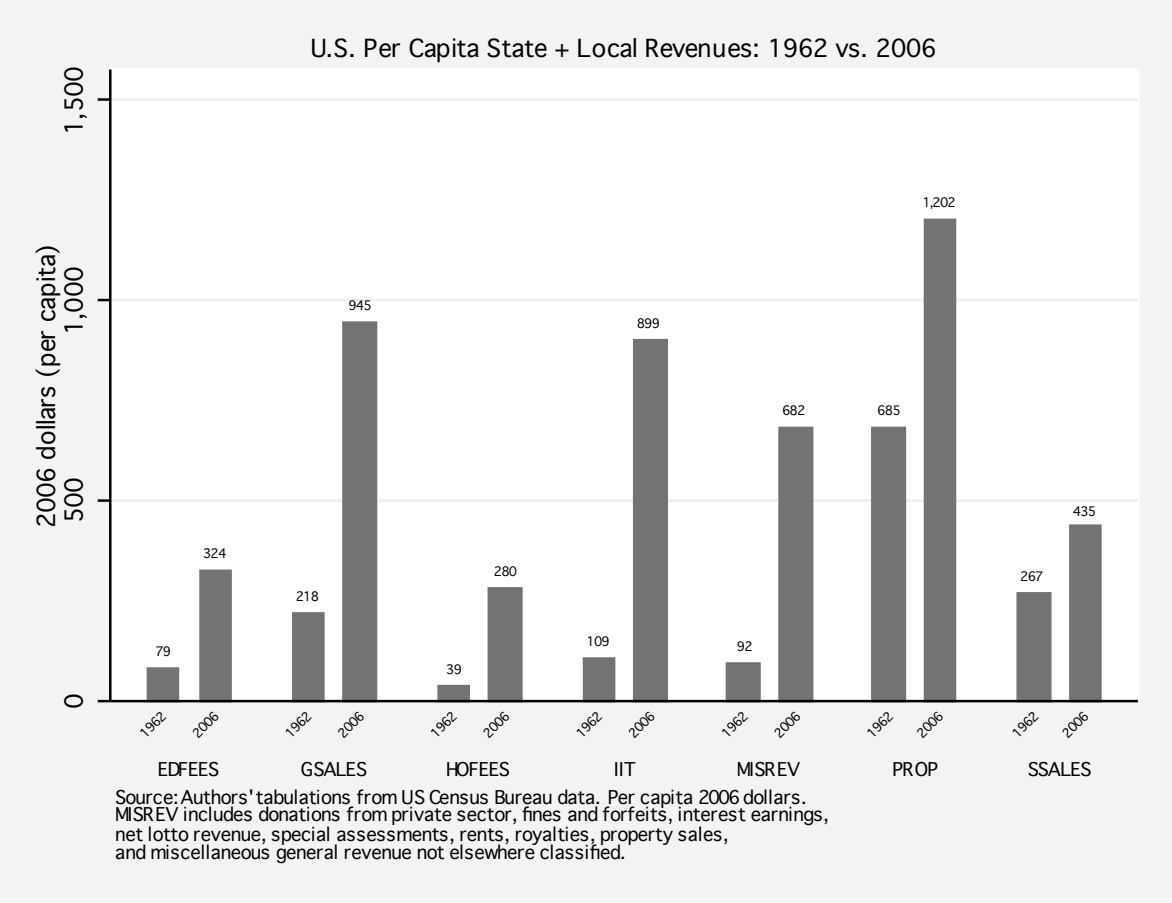


Figure 8: U.S. (Major) Expenditures

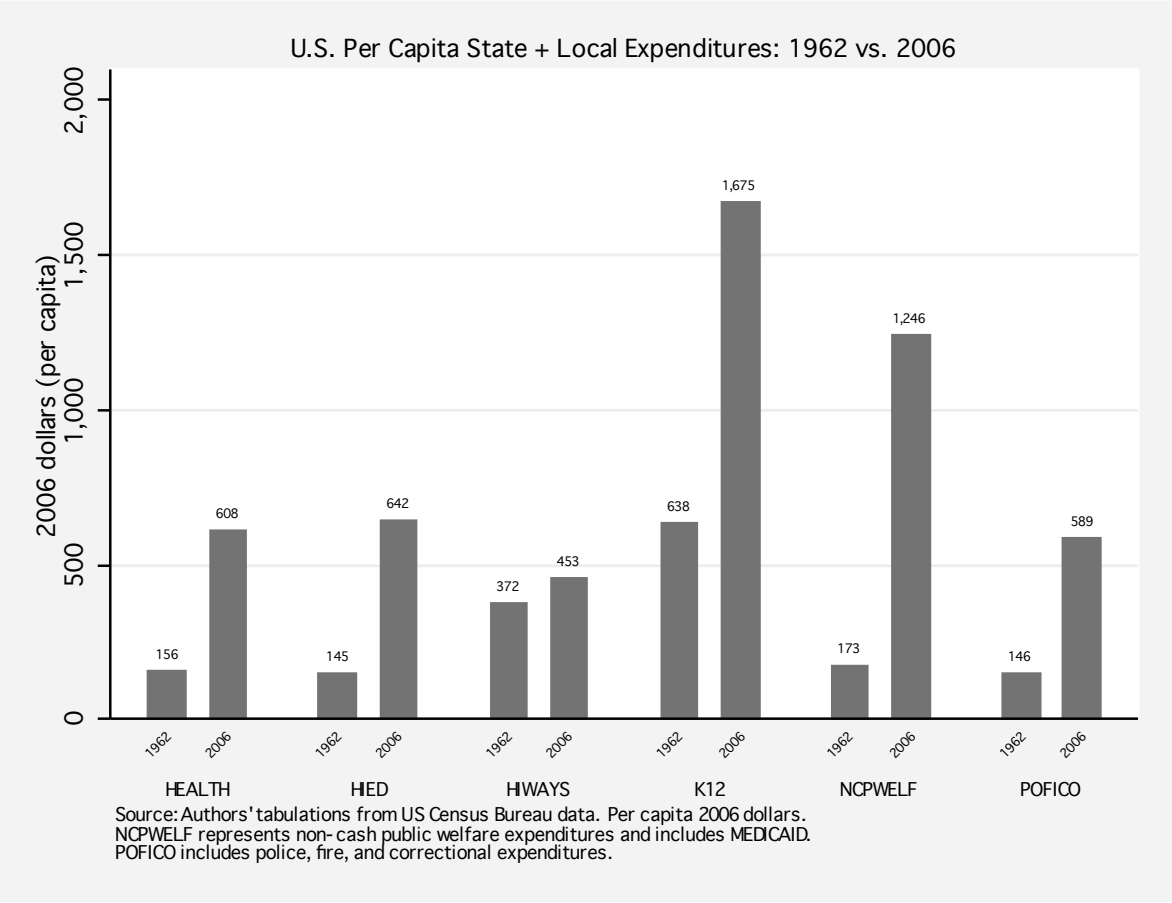
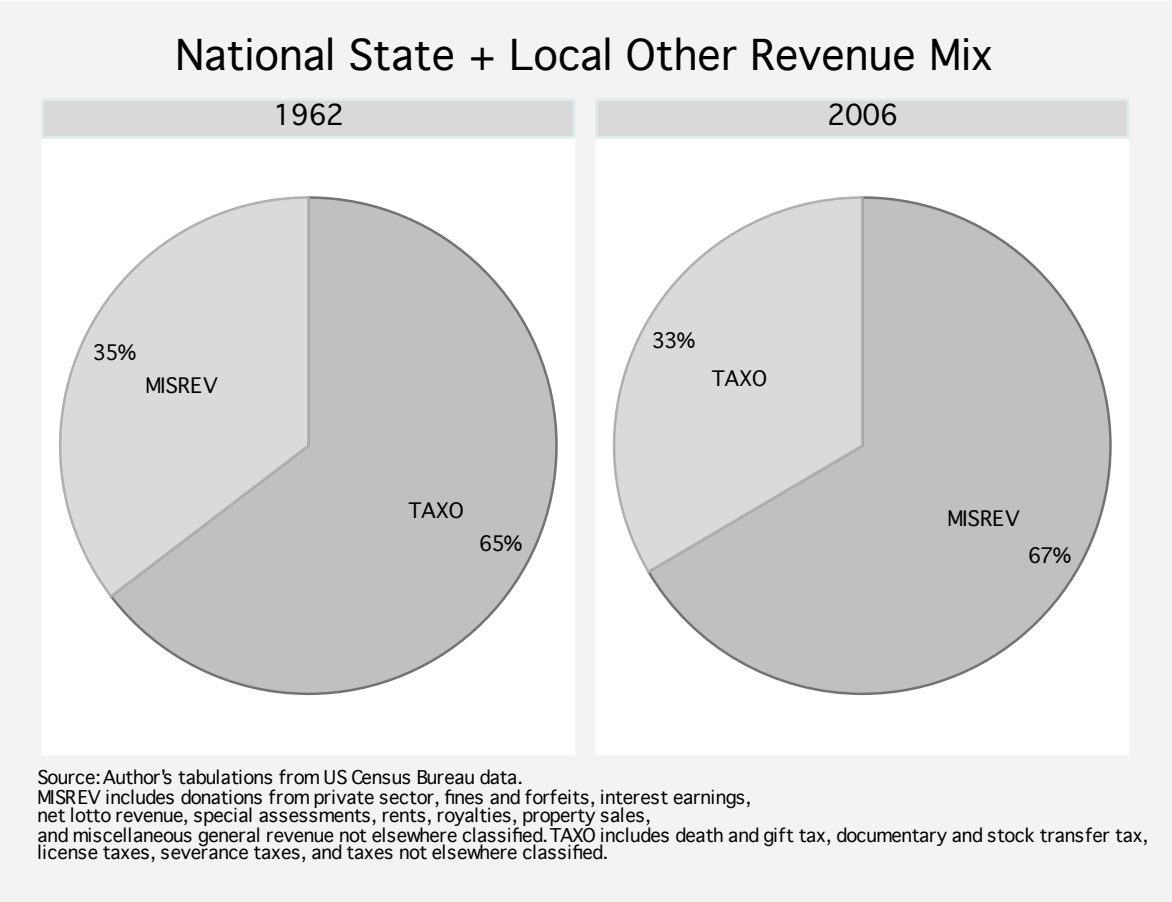
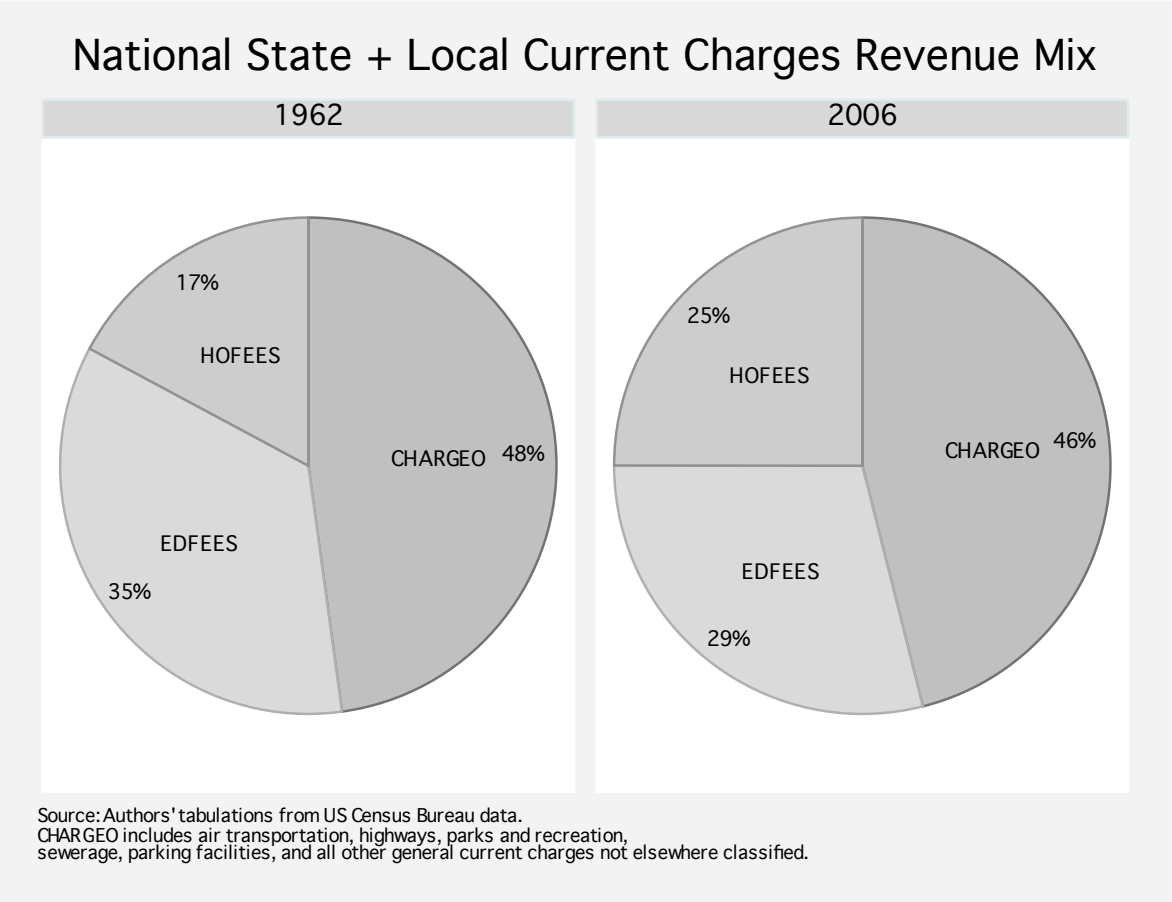


Figure 9: U.S "OTHER" Revenue Mix



Source: Author's tabulations from US Census Bureau data.
MISREV includes donations from private sector, fines and forfeits, interest earnings,
net lotto revenue, special assessments, rents, royalties, property sales,
and miscellaneous general revenue not elsewhere classified. TAXO includes death and gift tax, documentary and stock transfer tax,
license taxes, severance taxes, and taxes not elsewhere classified.

Figure 10: U.S Charges Revenue Mix



Source: Authors' tabulations from US Census Bureau data.
CHARGEO includes air transportation, highways, parks and recreation, sewerage, parking facilities, and all other general current charges not elsewhere classified.

Figure 11: Property Taxes as Share of Revenues

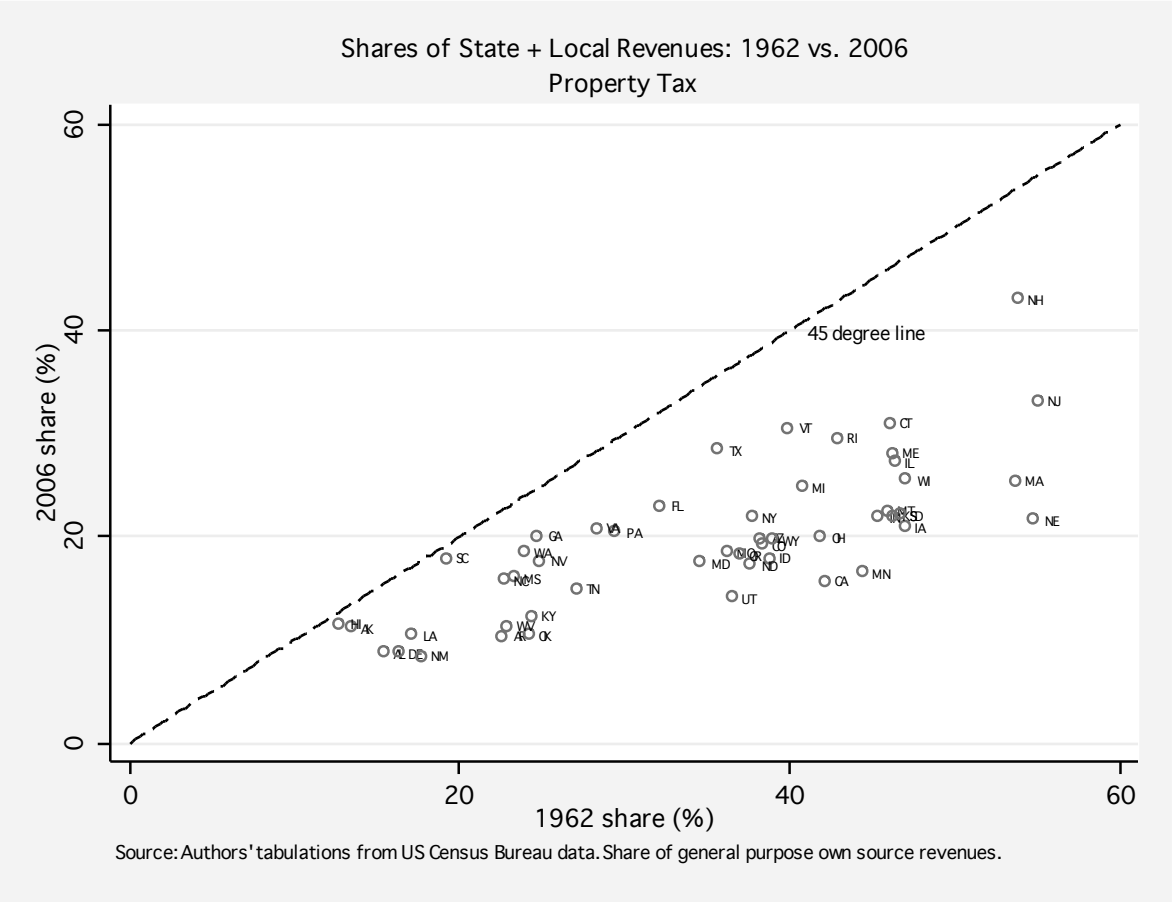


Figure 12: Property Taxes as Share of Revenues

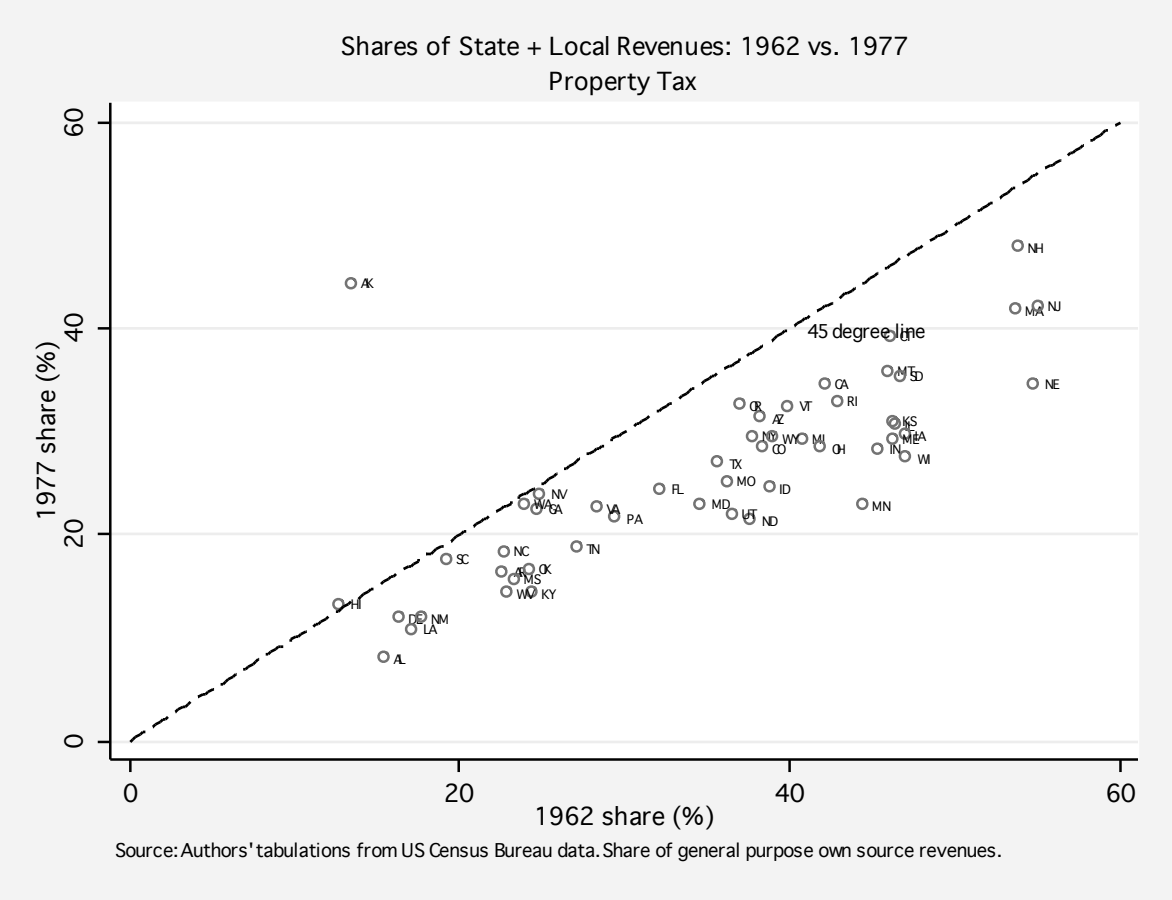


Figure 13: Property Taxes as Share of Revenues

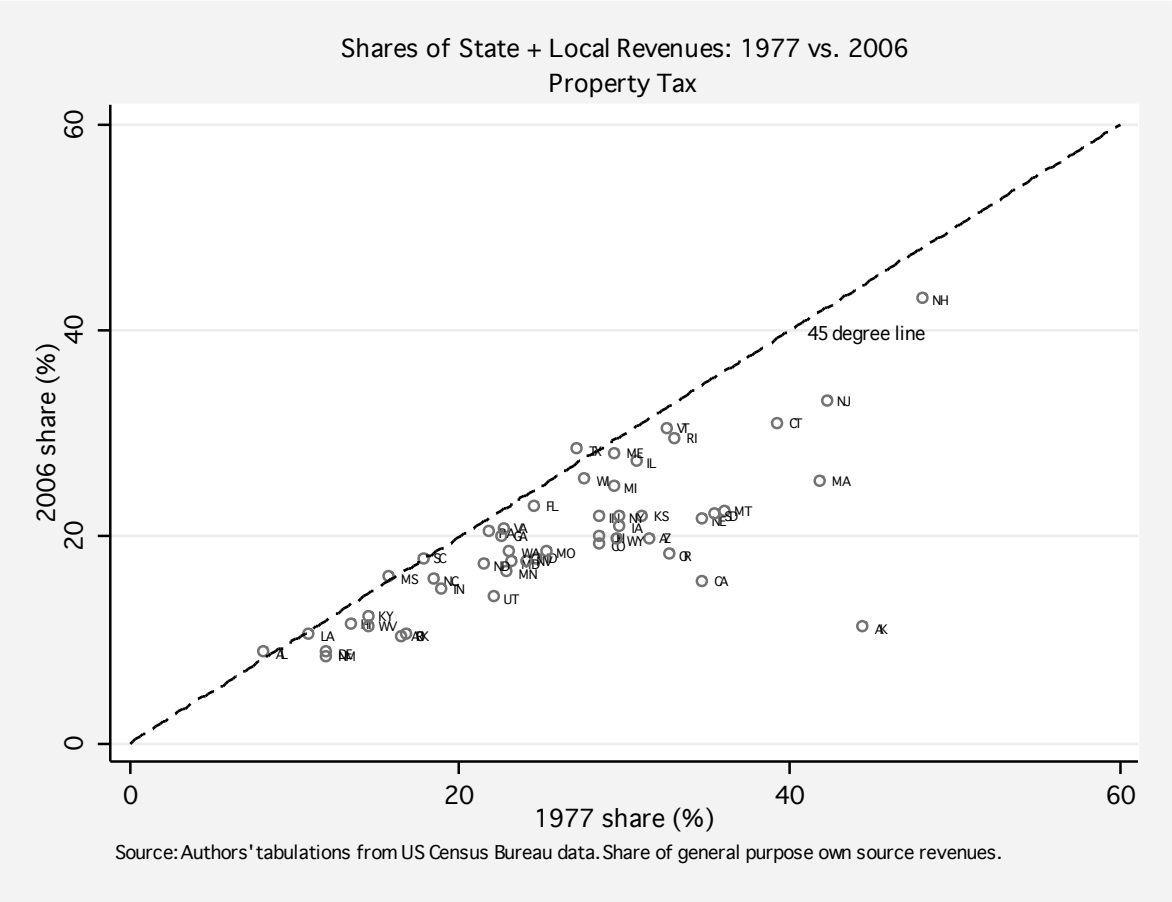


Figure 14: Individual Income Taxes as Share of Revenues

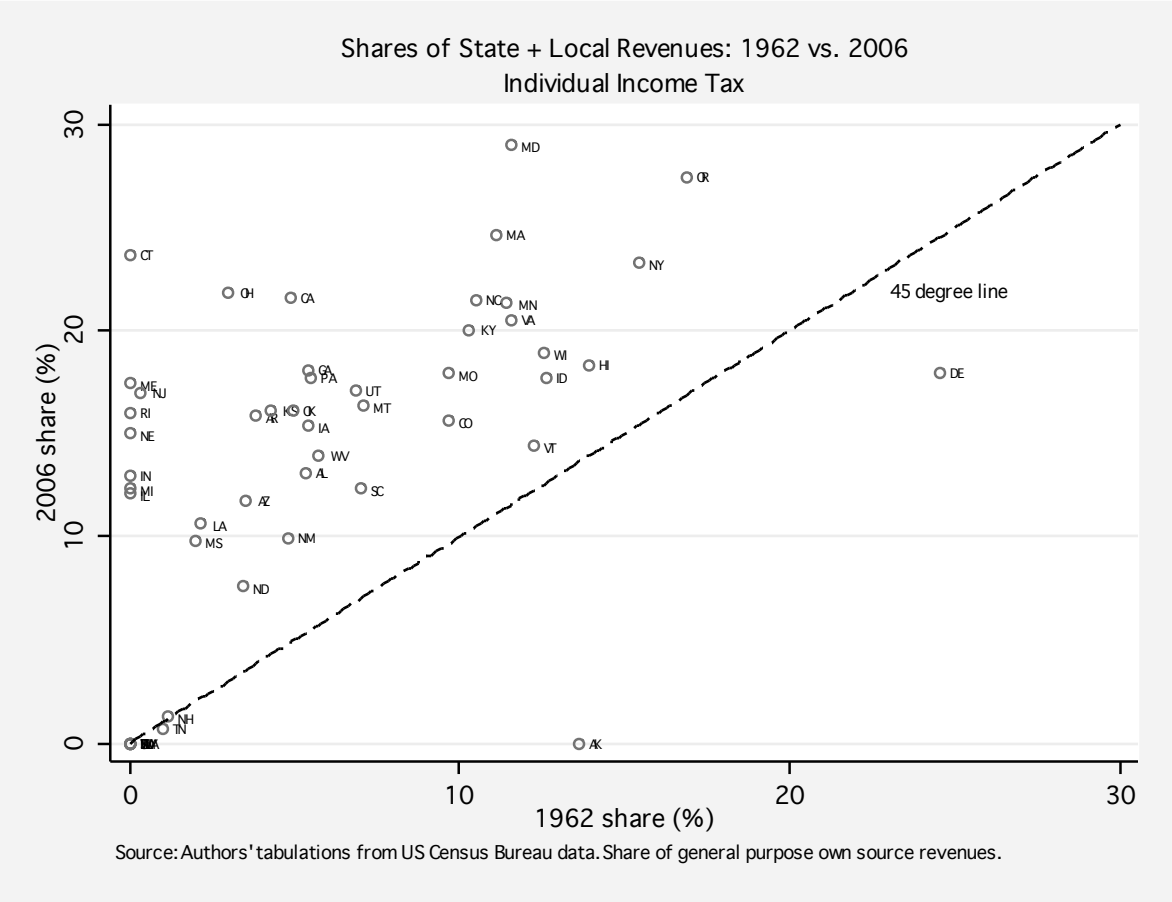


Figure 15: Individual Income Taxes as Share of Revenues

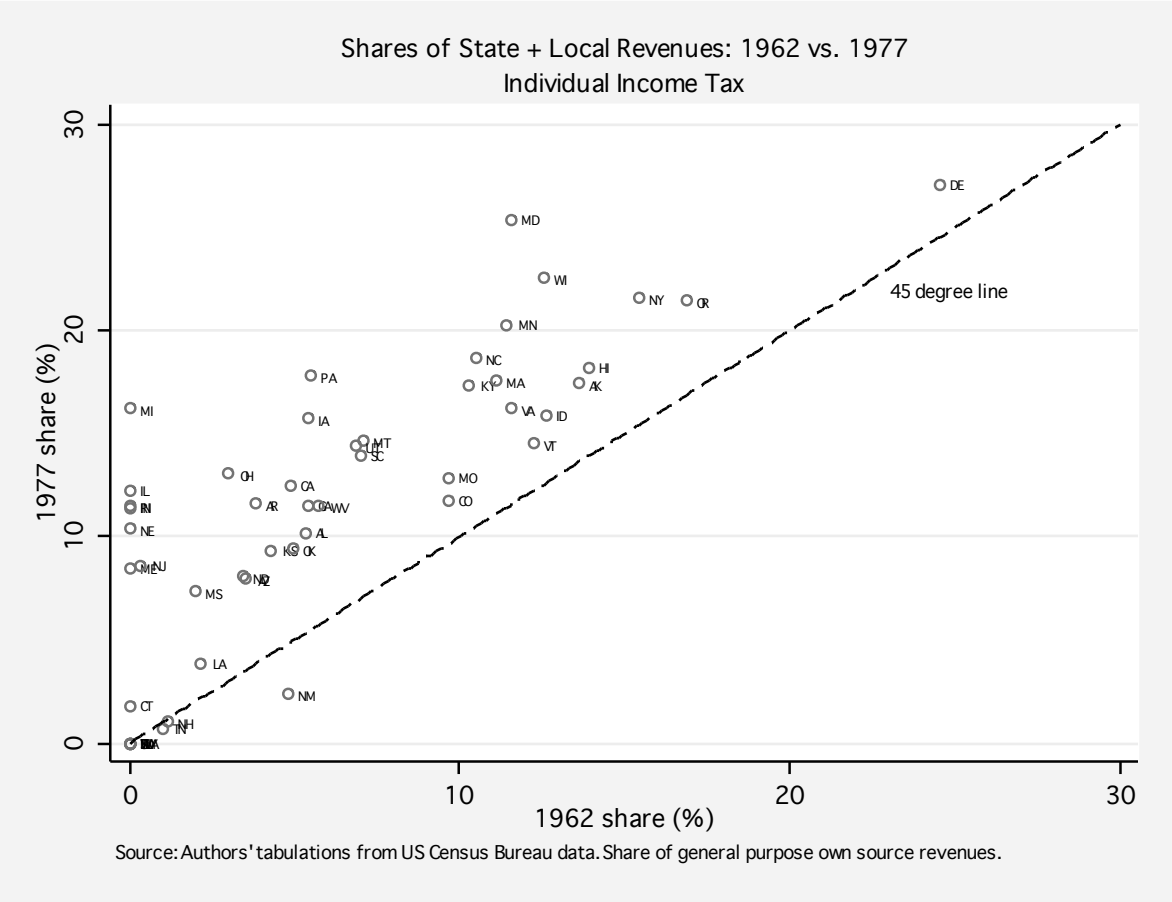


Figure 16: Individual Income Taxes as Share of Revenues

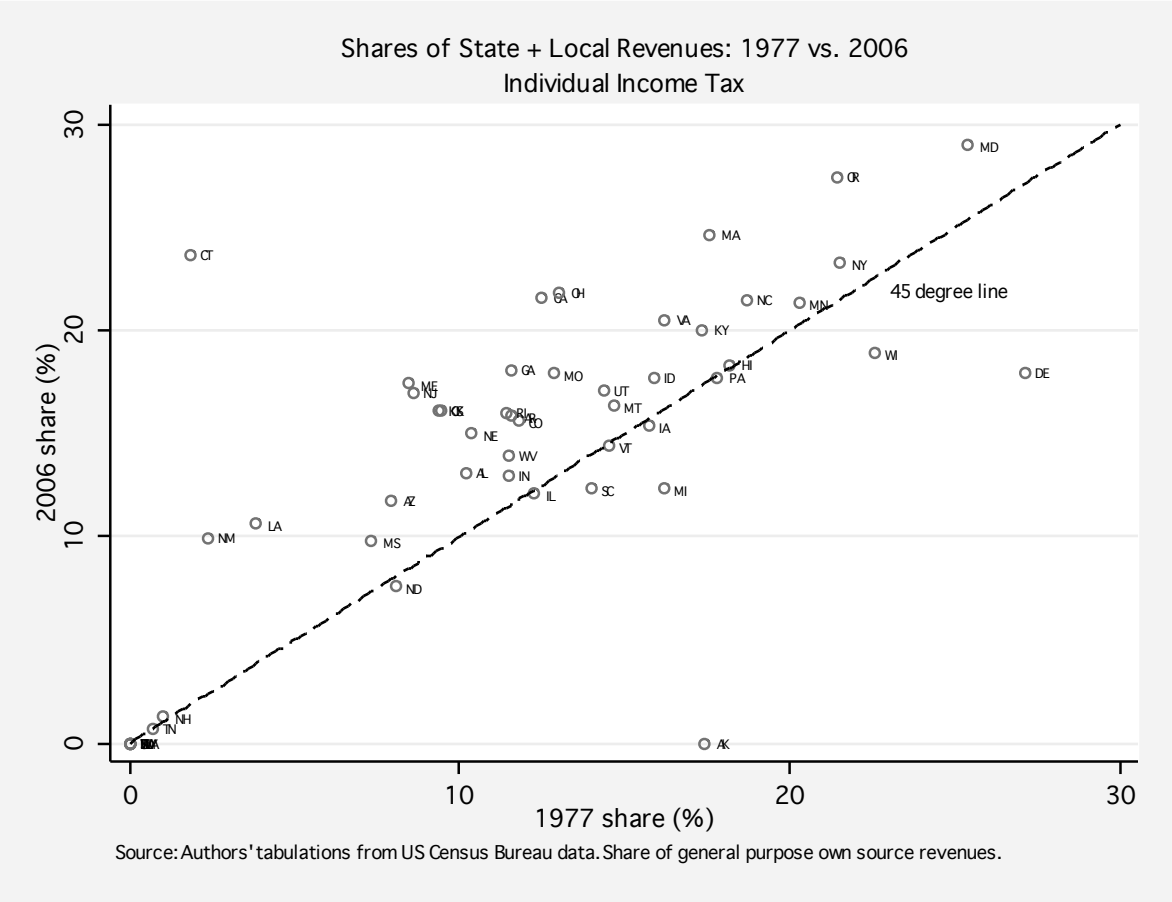


Figure 17: General Sales Taxes as Share of Revenues

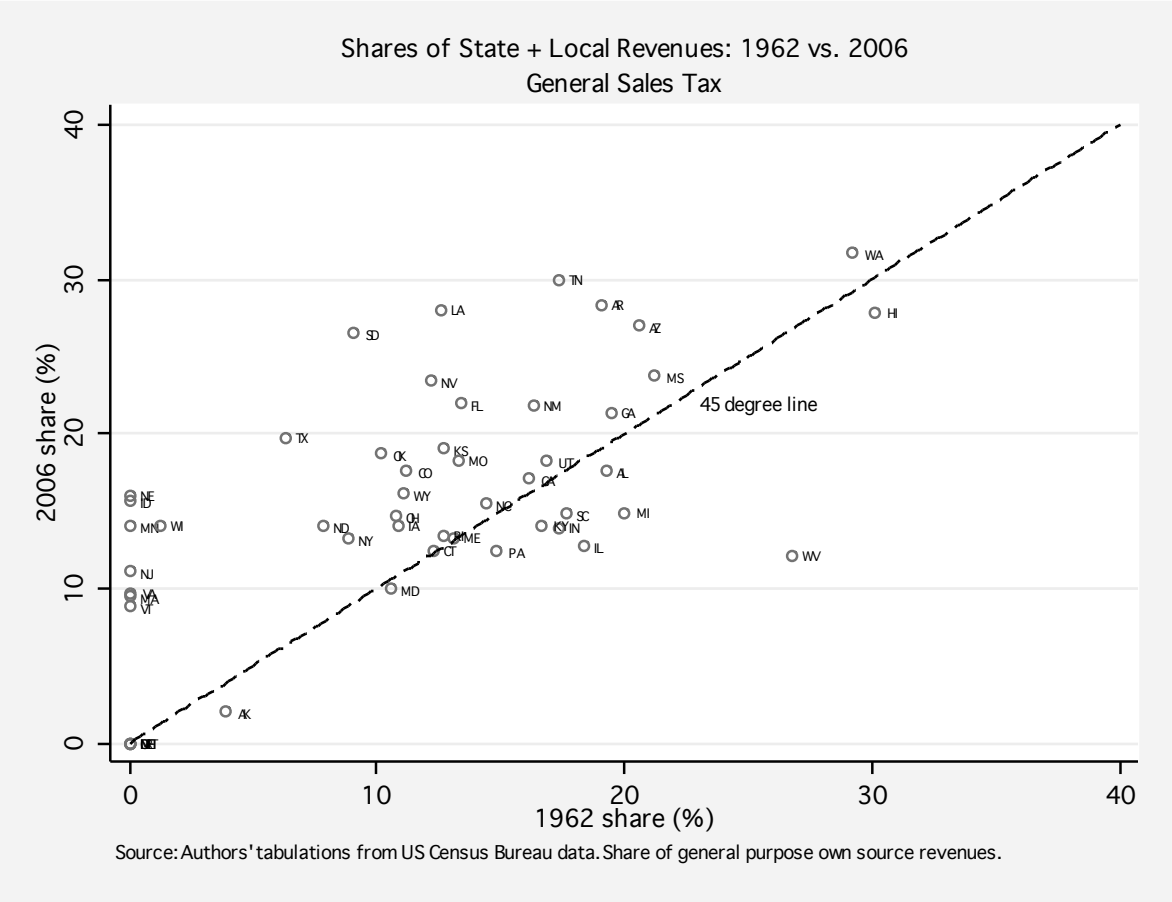


Figure 18: General Sales Taxes as Share of Revenues

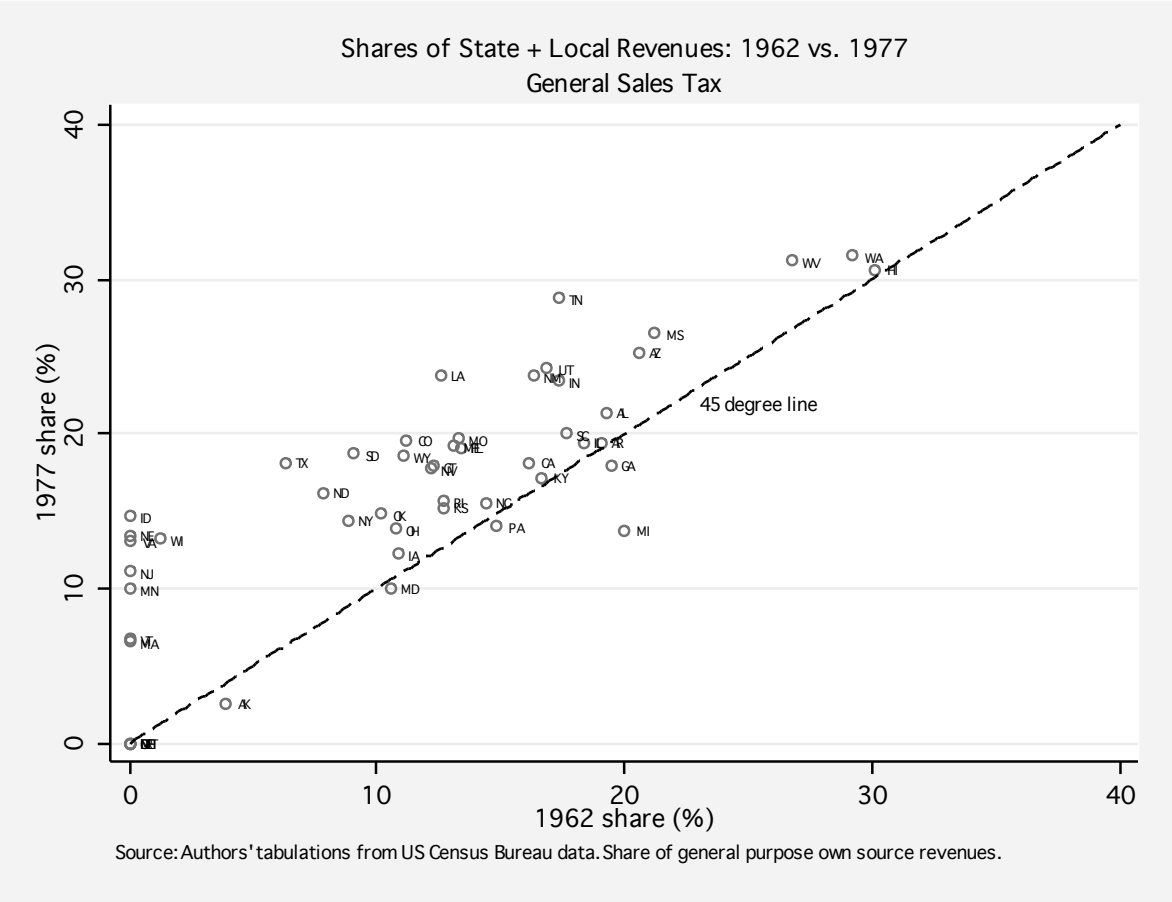


Figure 19: General Sales Taxes as Share of Revenues

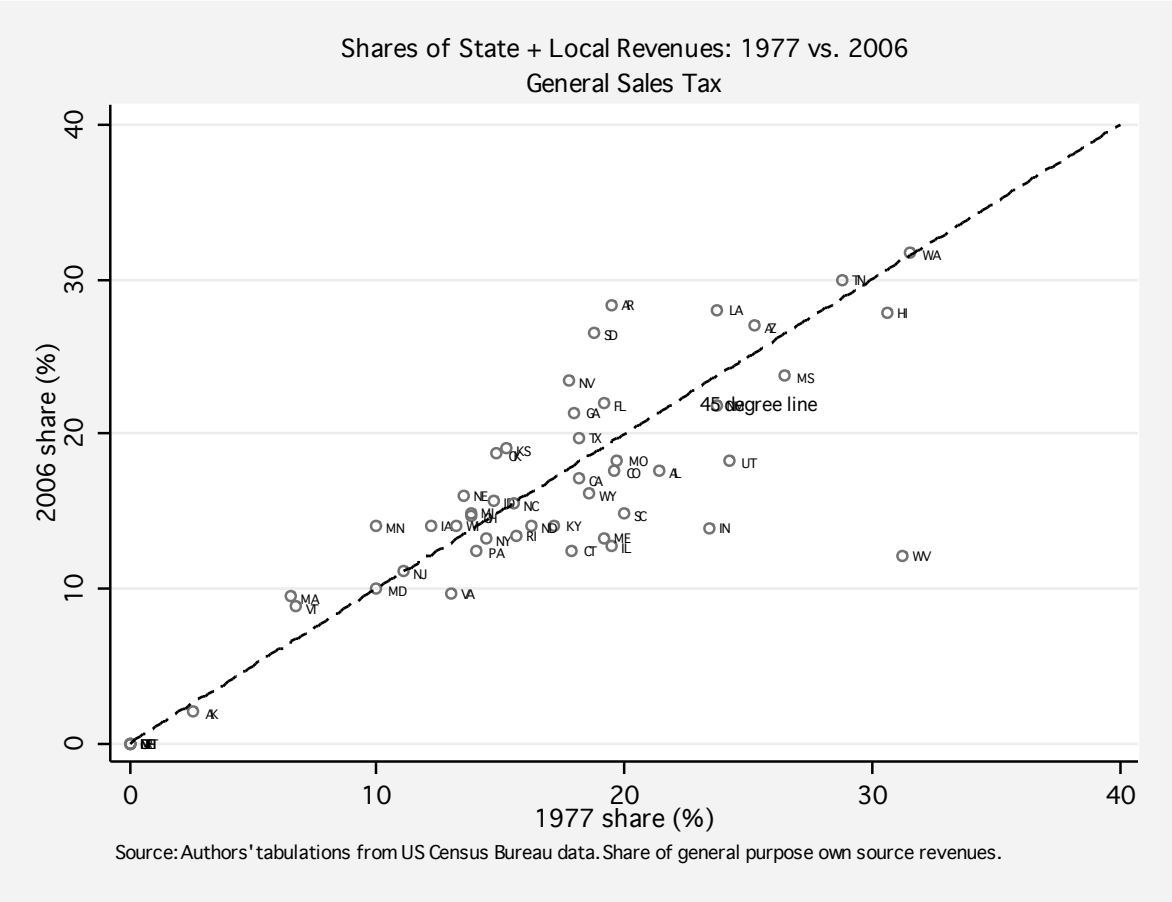


Figure 20: Selective Sales Taxes as Share of Revenues

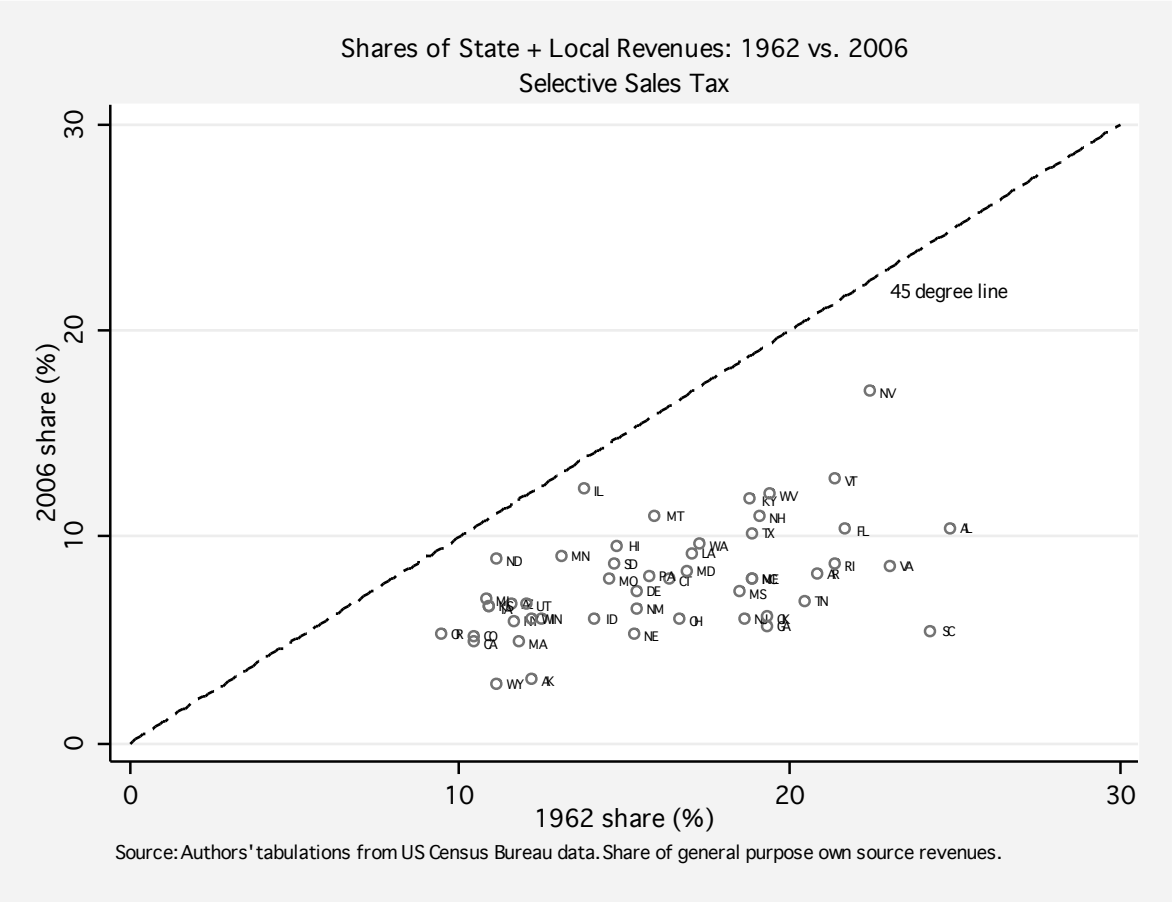


Figure 21: Selective Sales Taxes as Share of Revenues

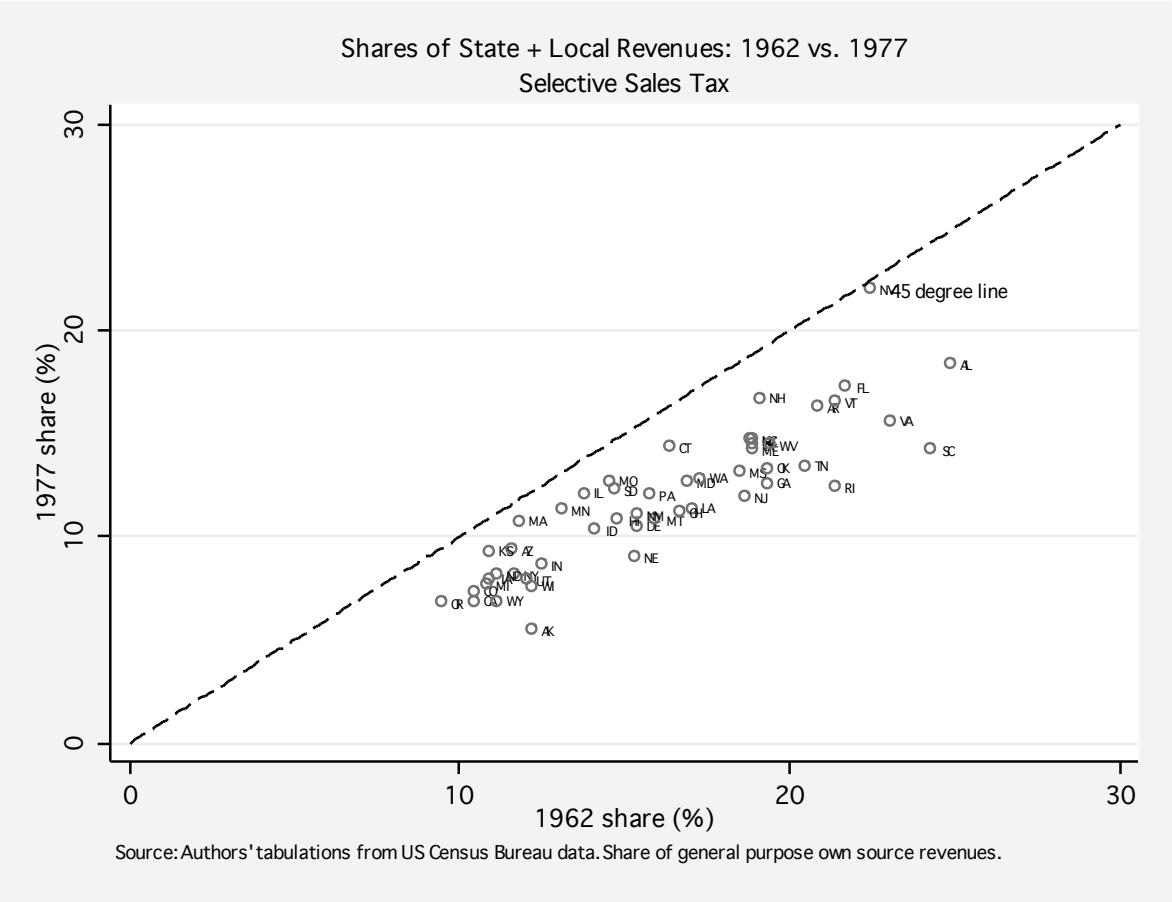


Figure 22: Selective Sales Taxes as Share of Revenues

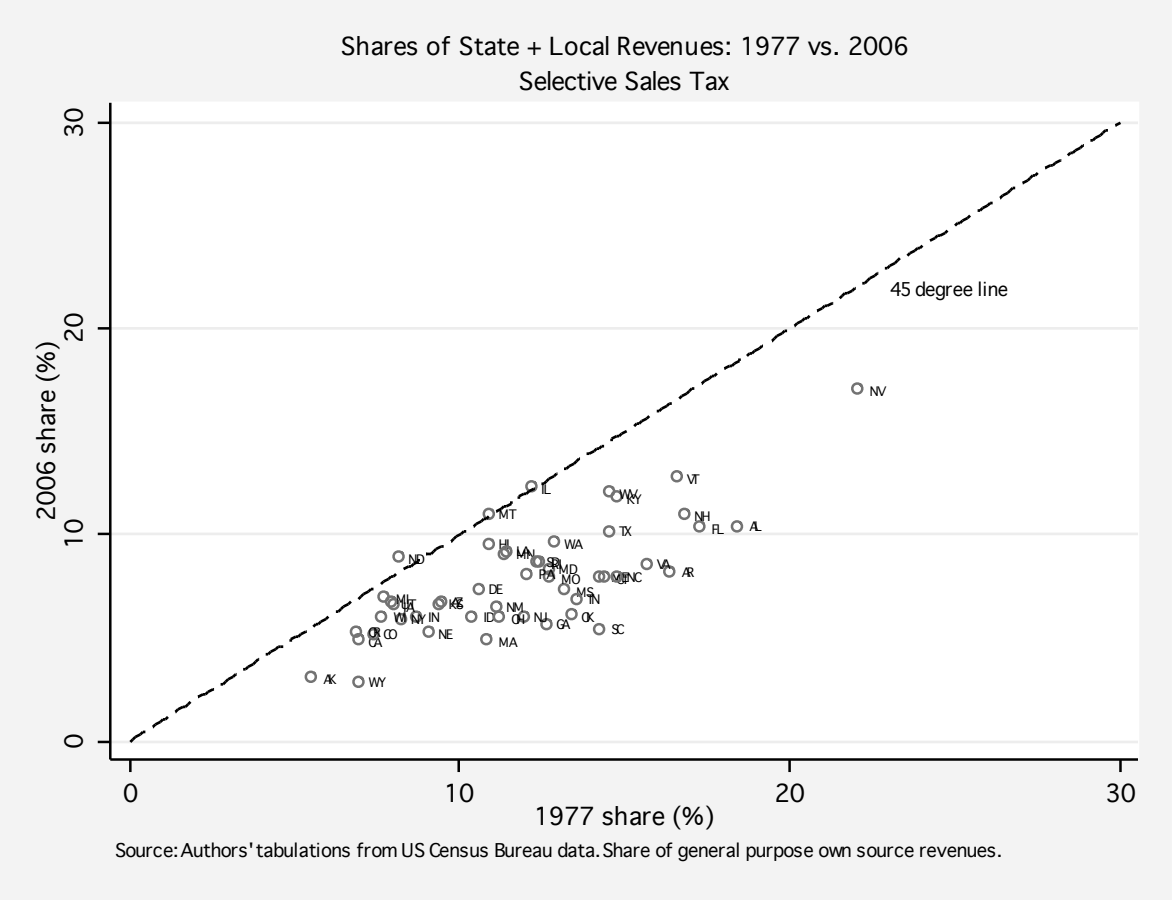


Figure 23: Charges as Share of Revenues

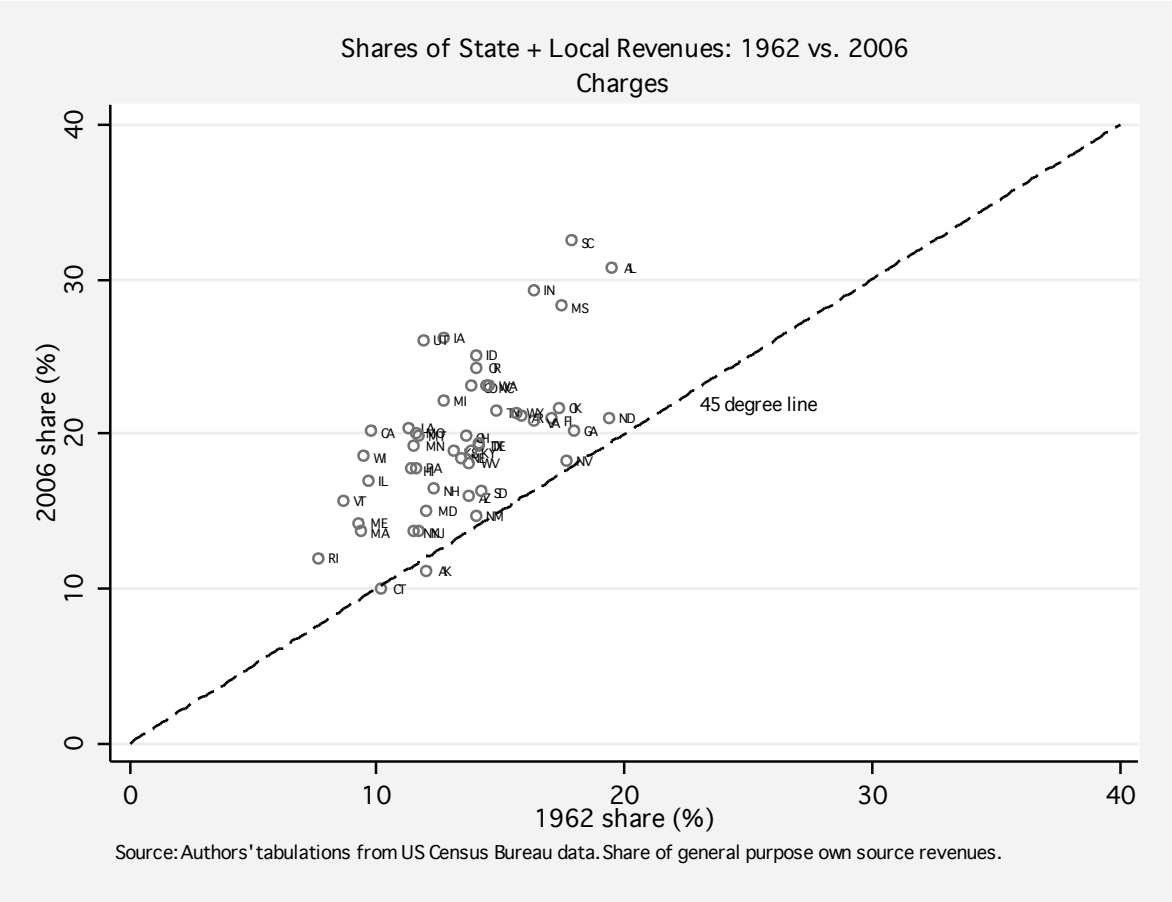


Figure 24: Charges as Share of Revenues

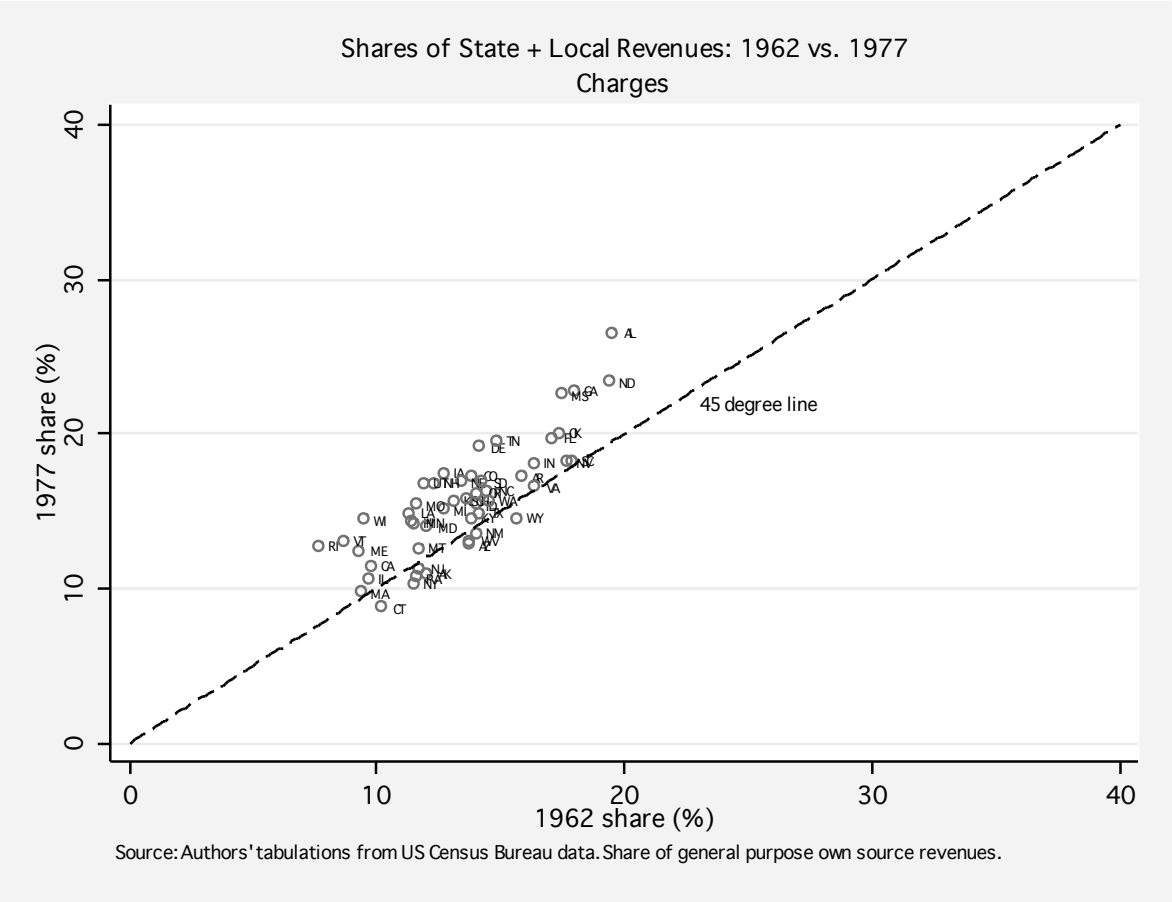


Figure 25: Charges as Share of Revenues

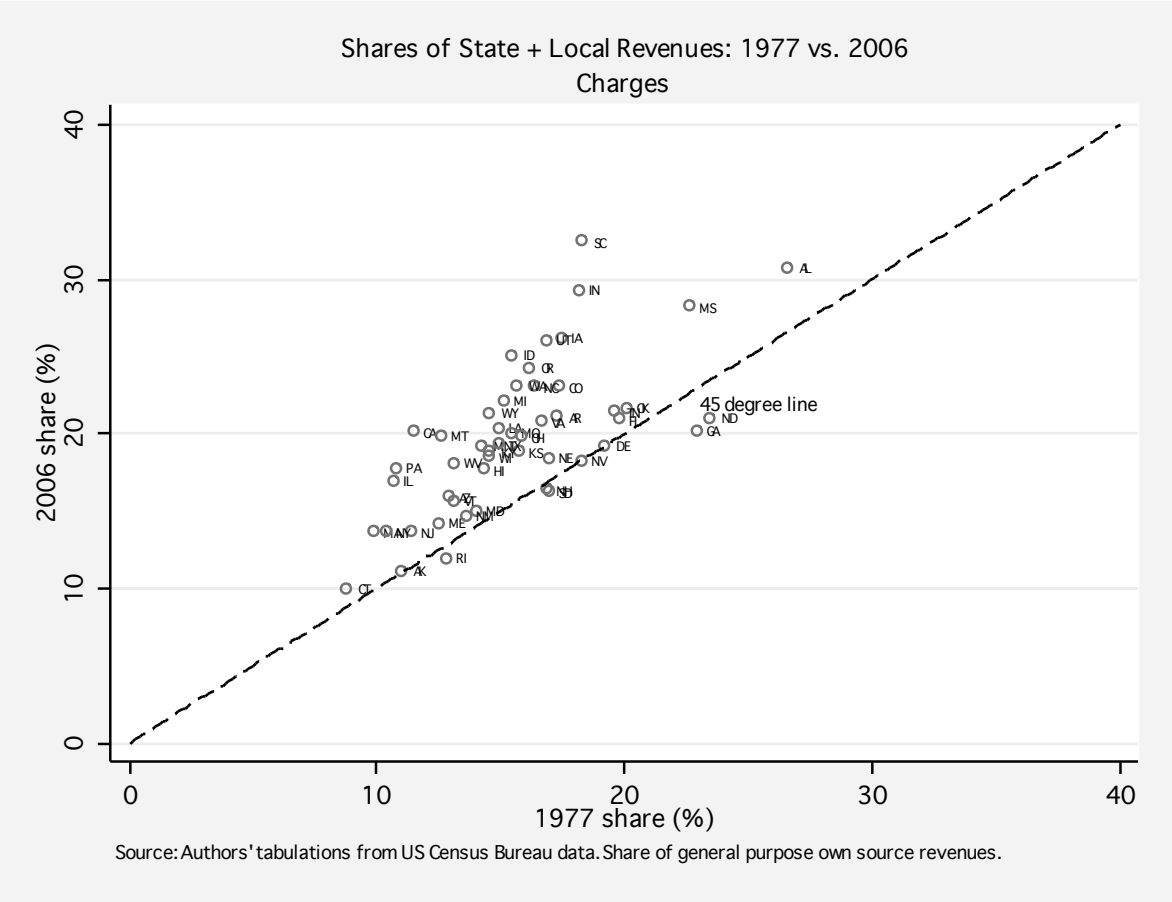


Figure 26: Education Fees and Charges as Share of Revenues

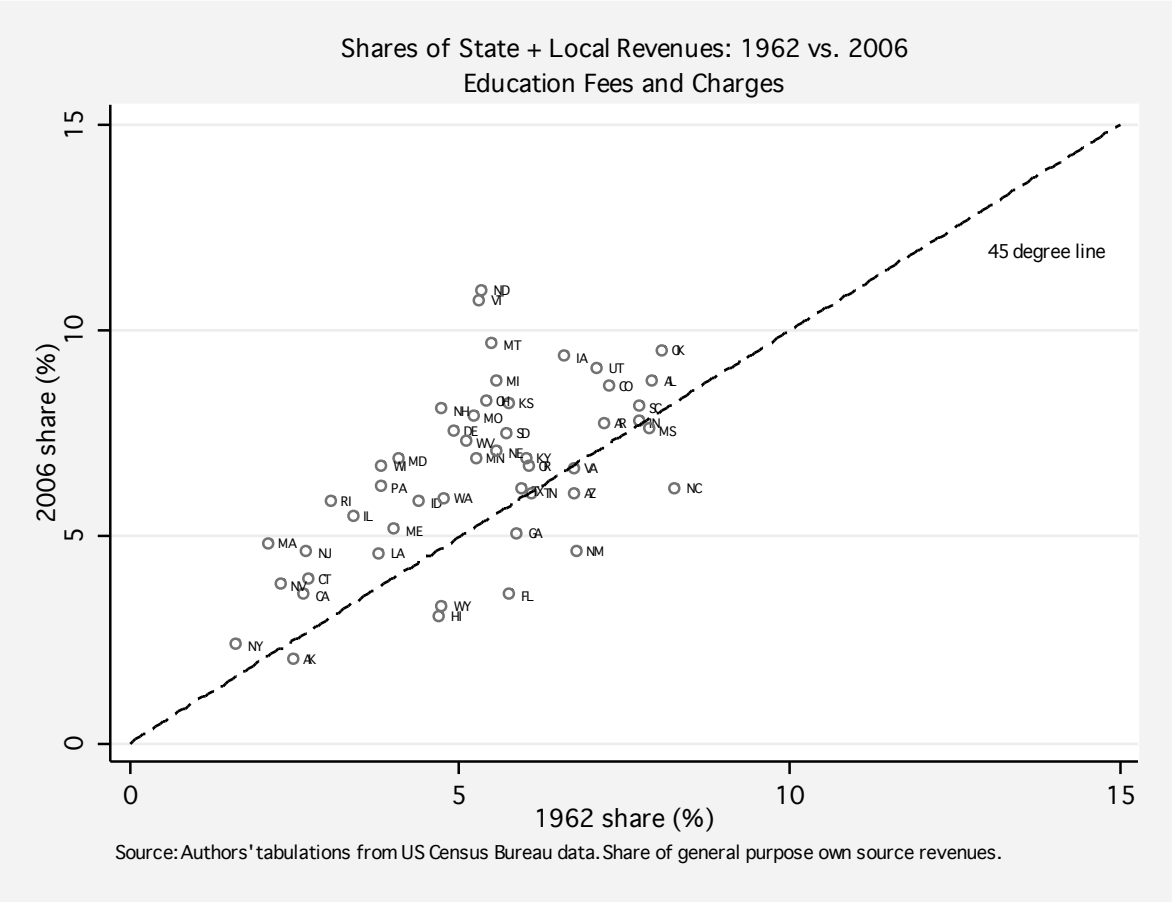


Figure 27: Education Fees and Charges as Share of Revenues

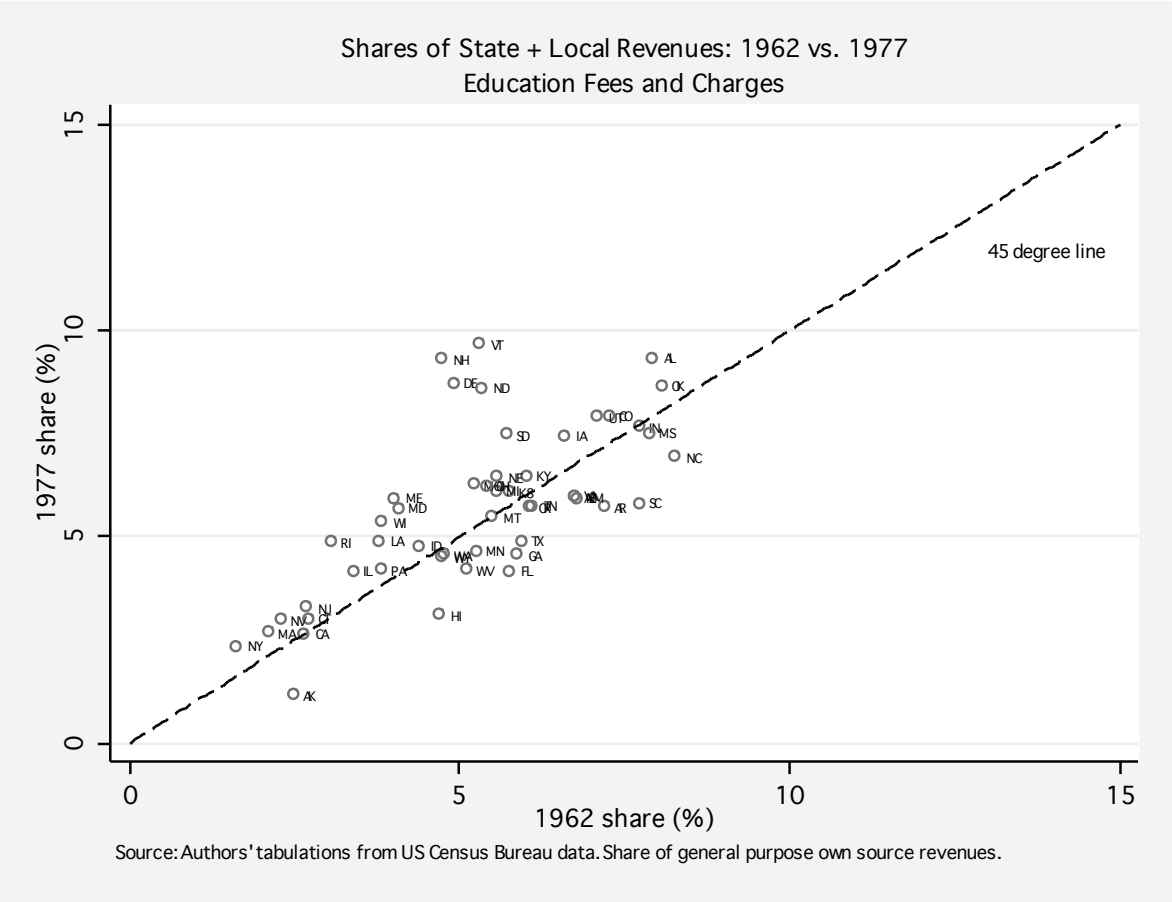
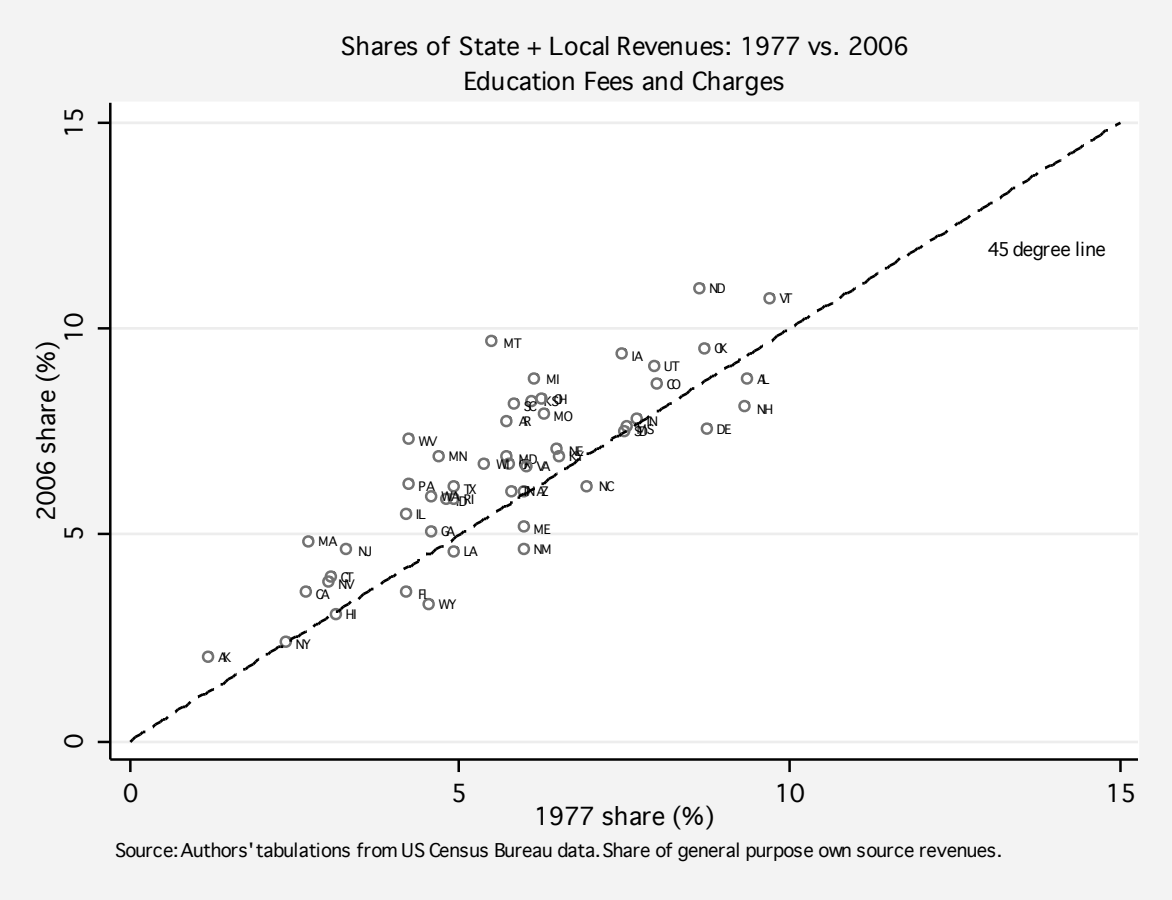


Figure 28: Education Fees and Charges as Share of Revenues



Source: Authors' tabulations from US Census Bureau data. Share of general purpose own source revenues.

Figure 29: Hospital Fees and Charges as Share of Revenues

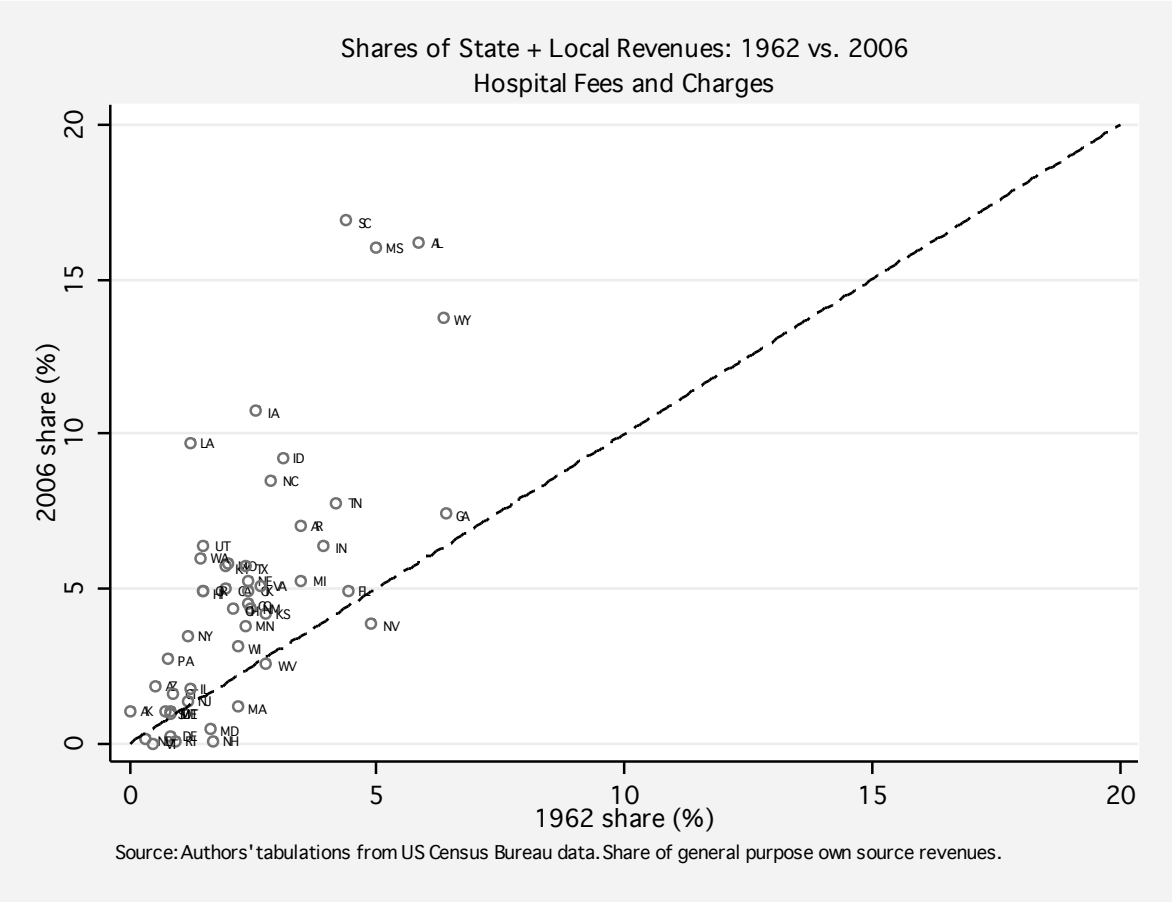


Figure 30: Hospital Fees and Charges as Share of Revenues

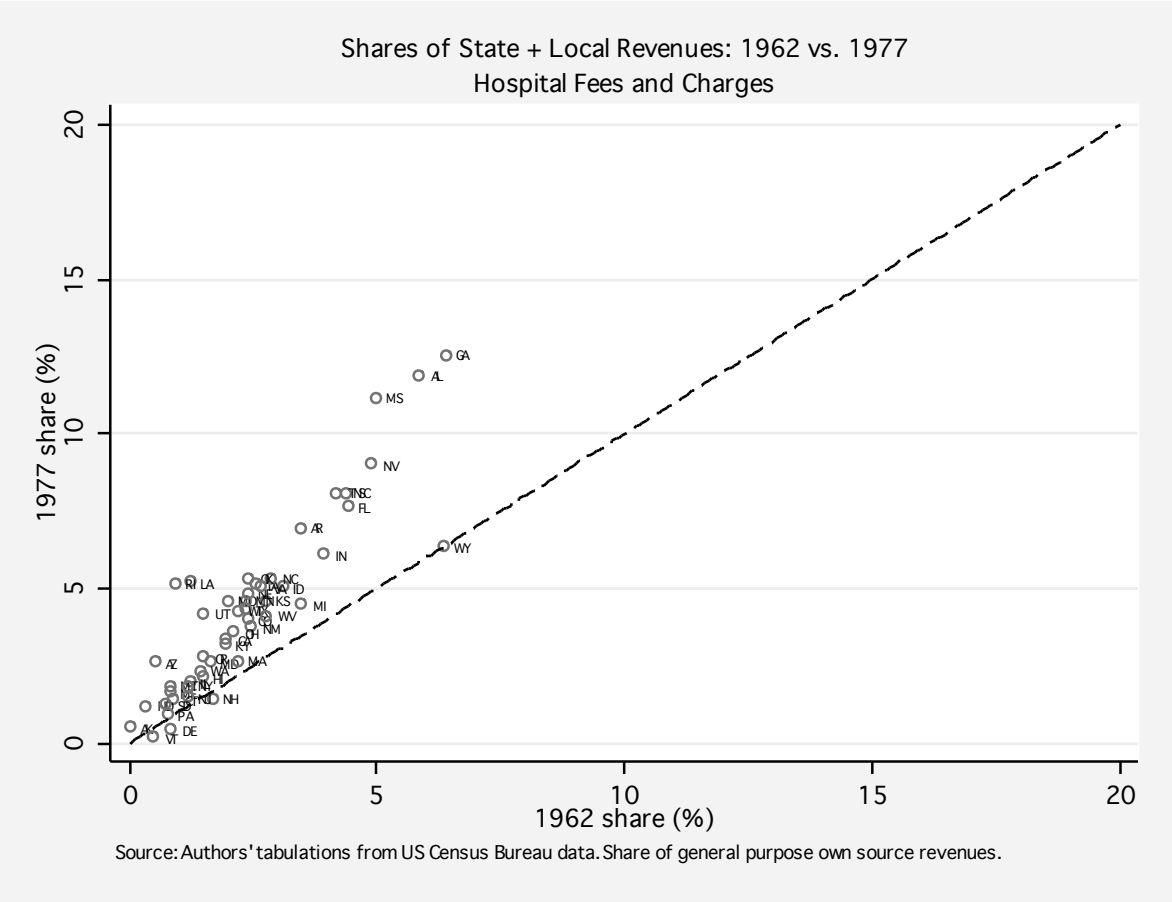


Figure 31: Hospital Fees and Charges as Share of Revenues

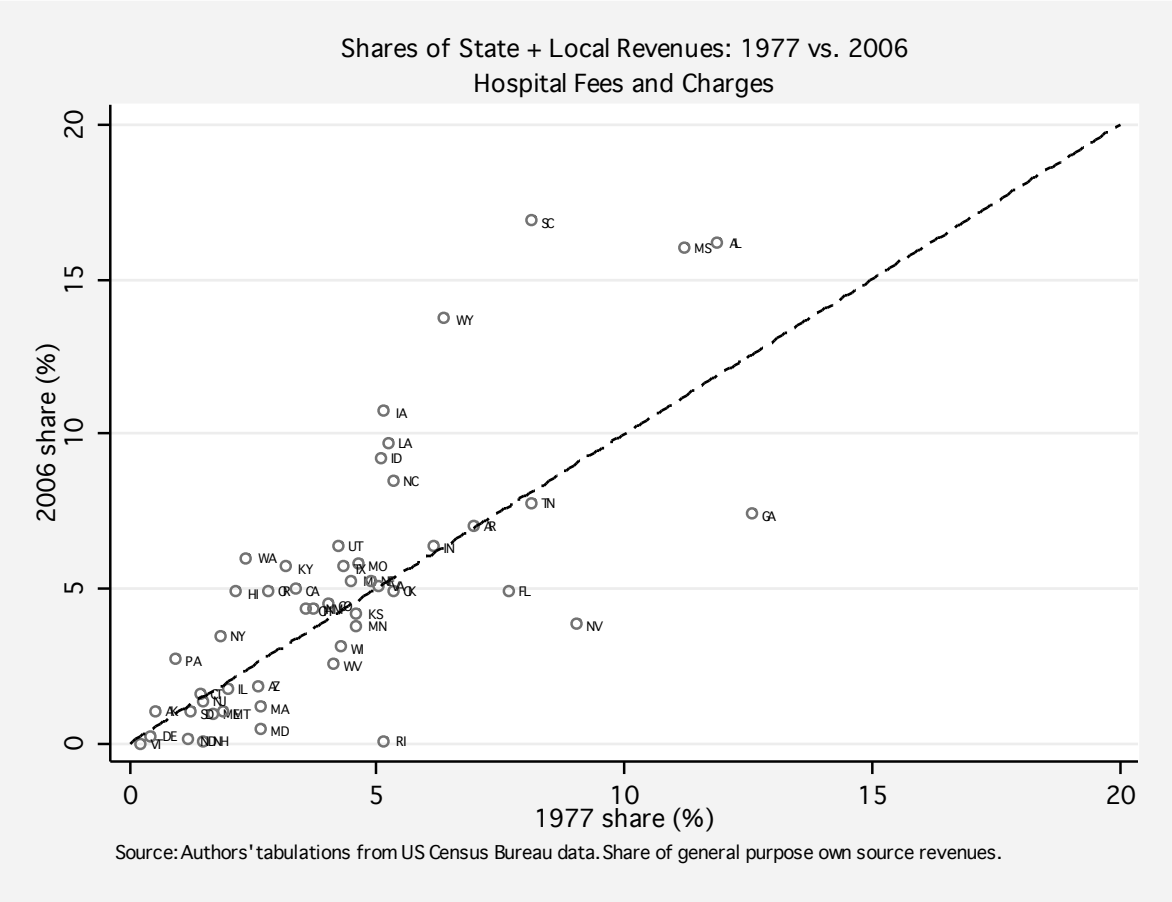


Figure 32: Other Charges as Share of Revenues

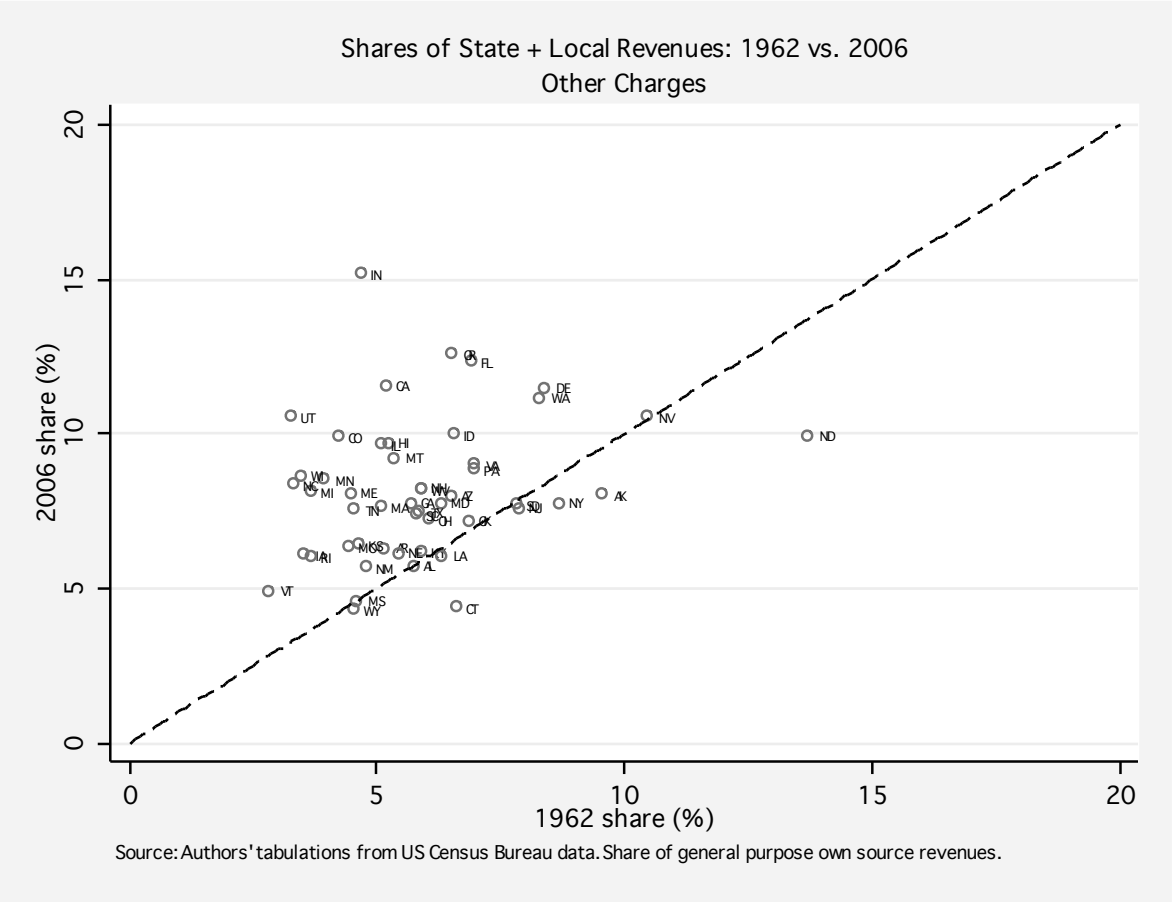


Figure 33: Other Charges as Share of Revenues

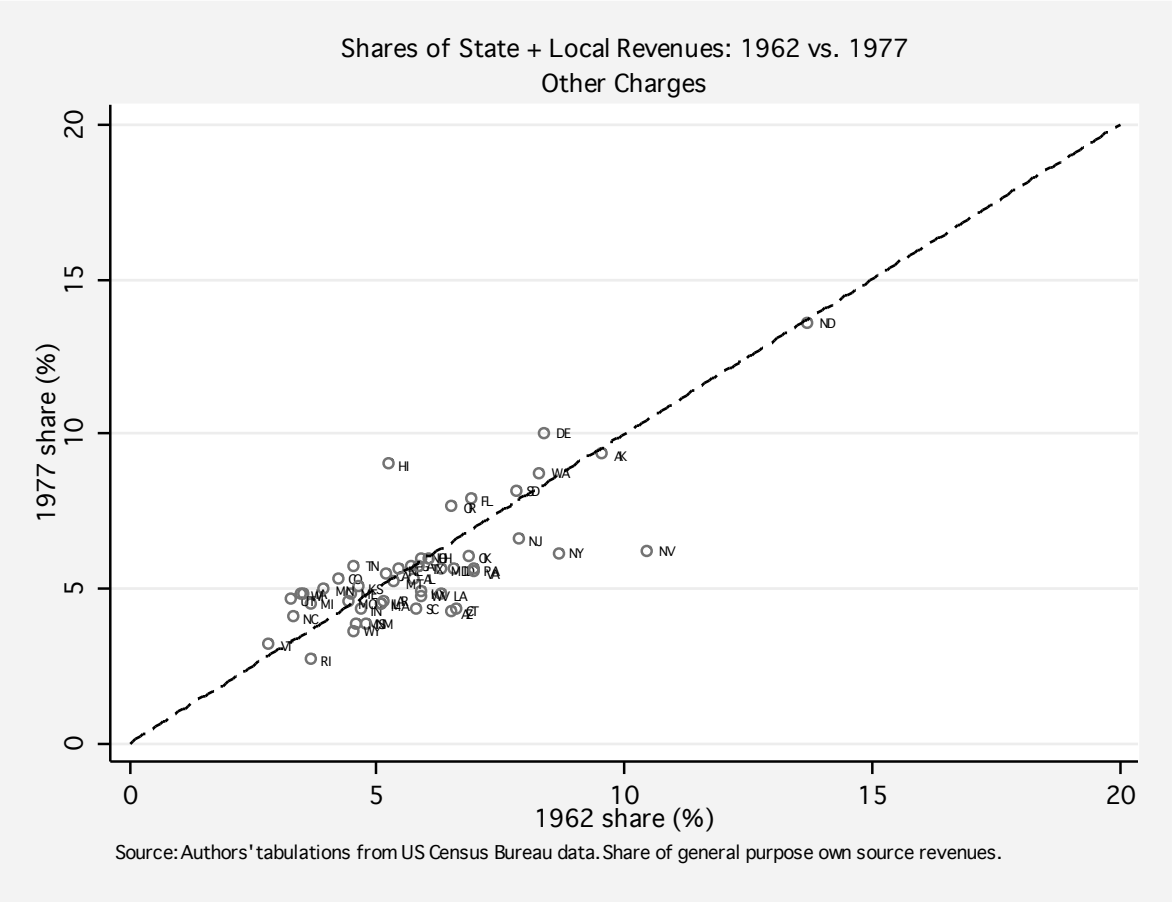


Figure 34: Other Charges as Share of Revenues

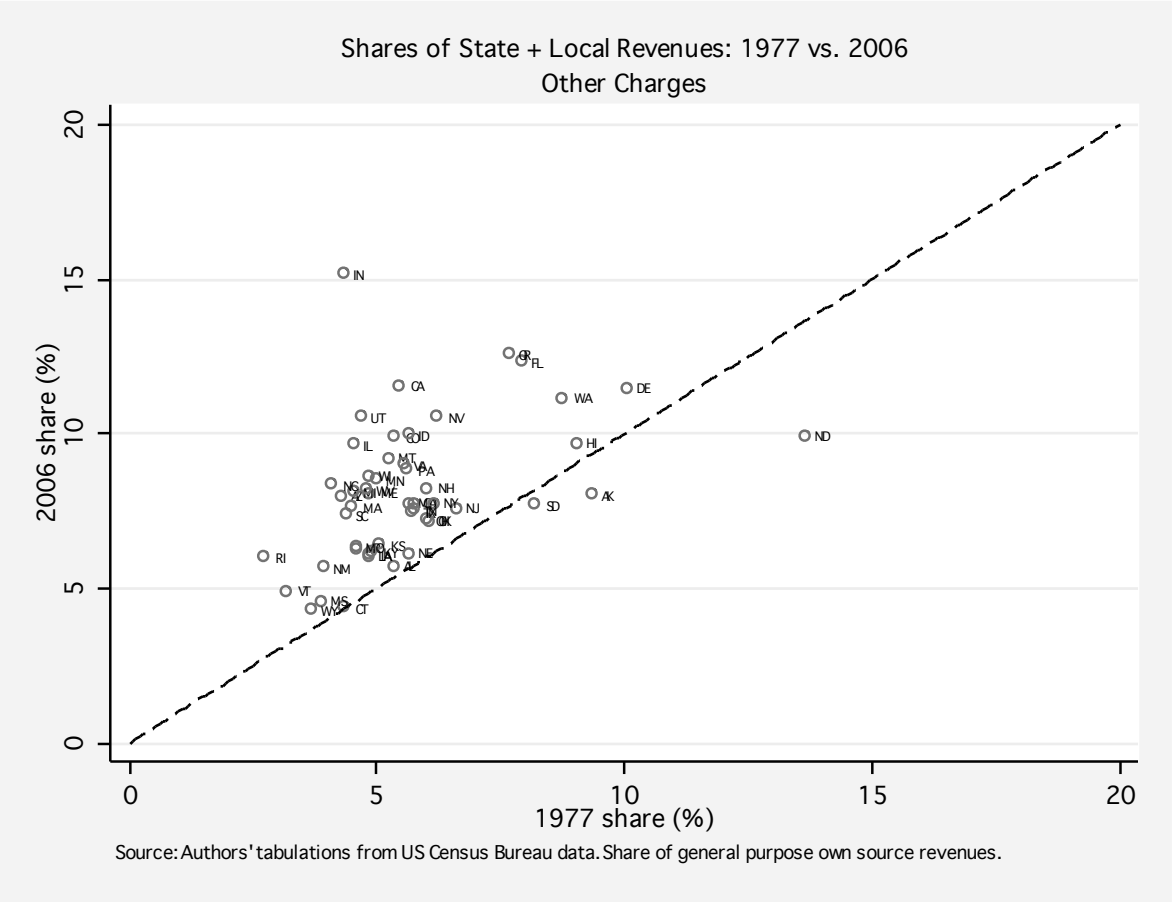


Figure 35: Miscellaneous Revenues as Share of Revenues

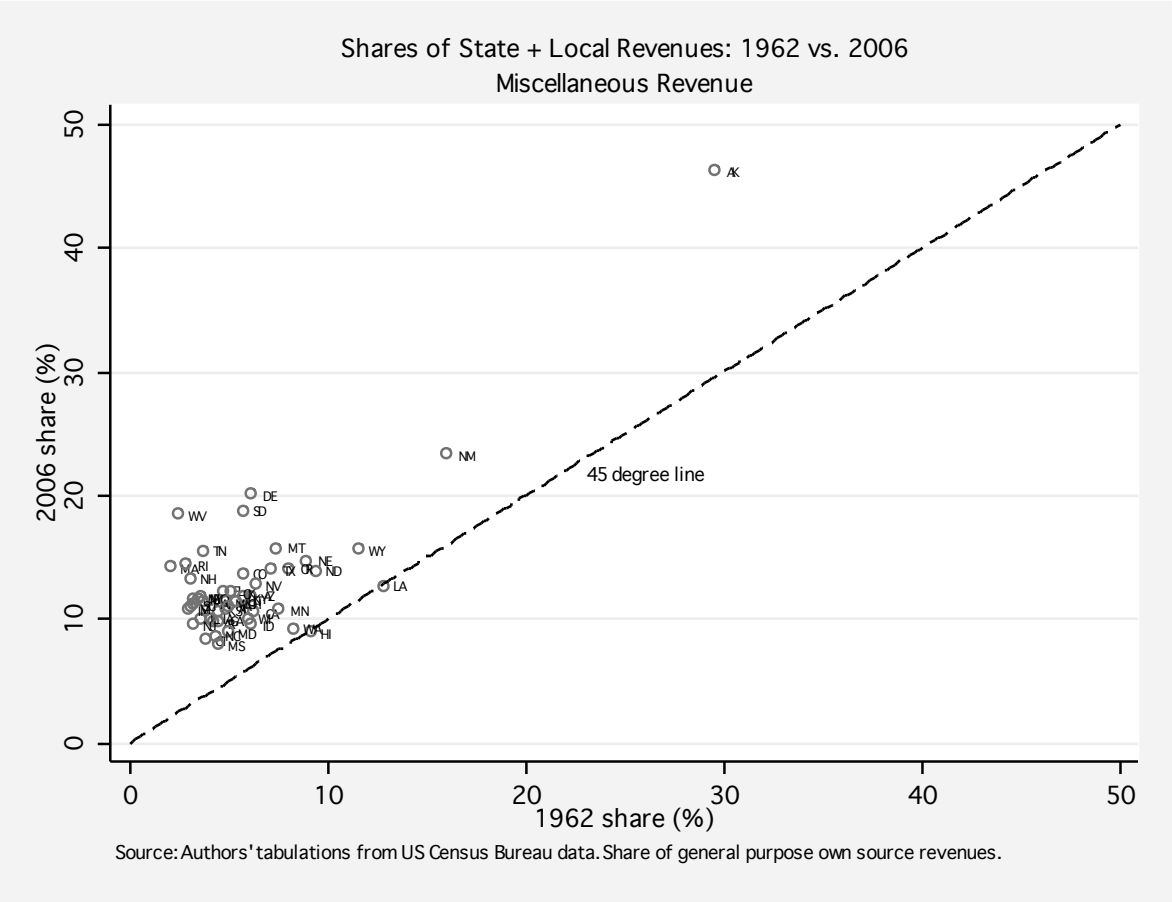


Figure 36: Miscellaneous Revenues as Share of Revenues

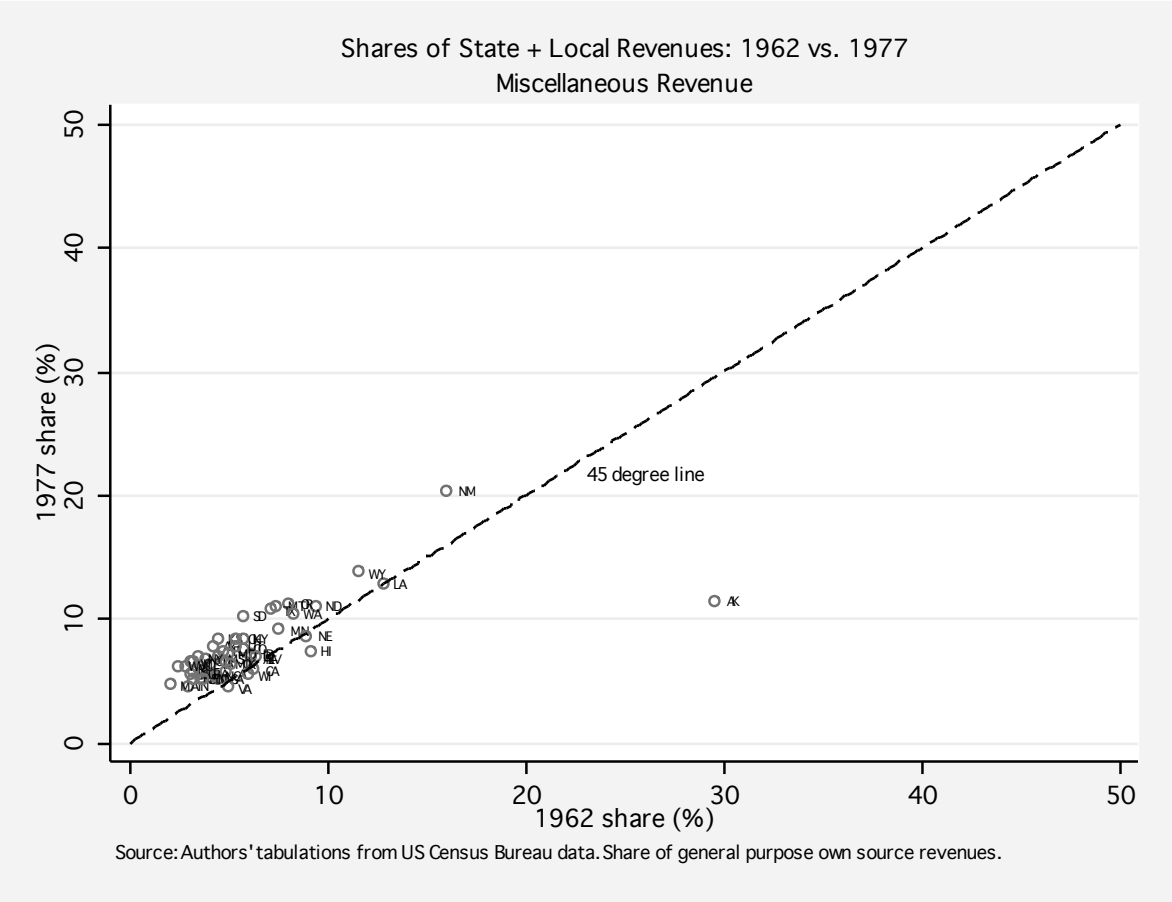


Figure 37: Miscellaneous Revenues as Share of Revenues

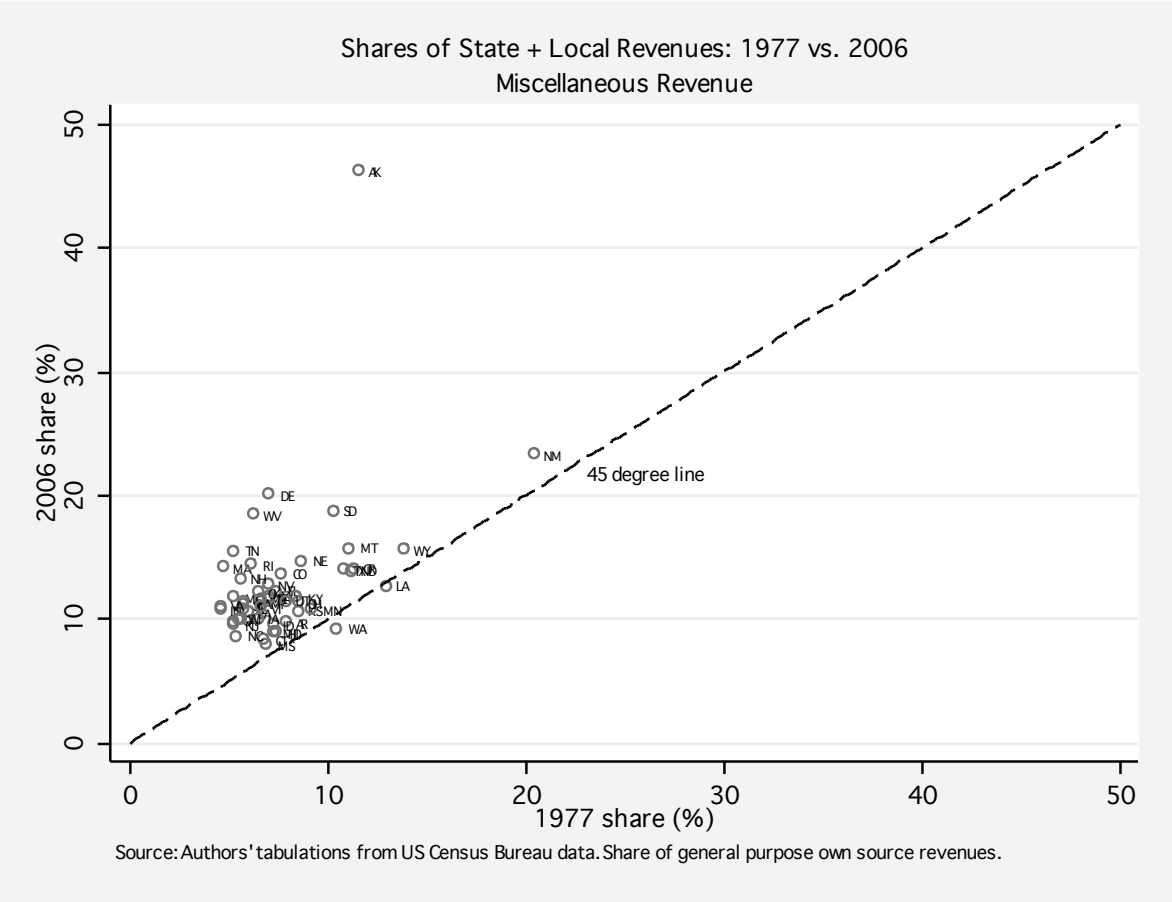


Figure 38: Higher Education as Share of Expenditures

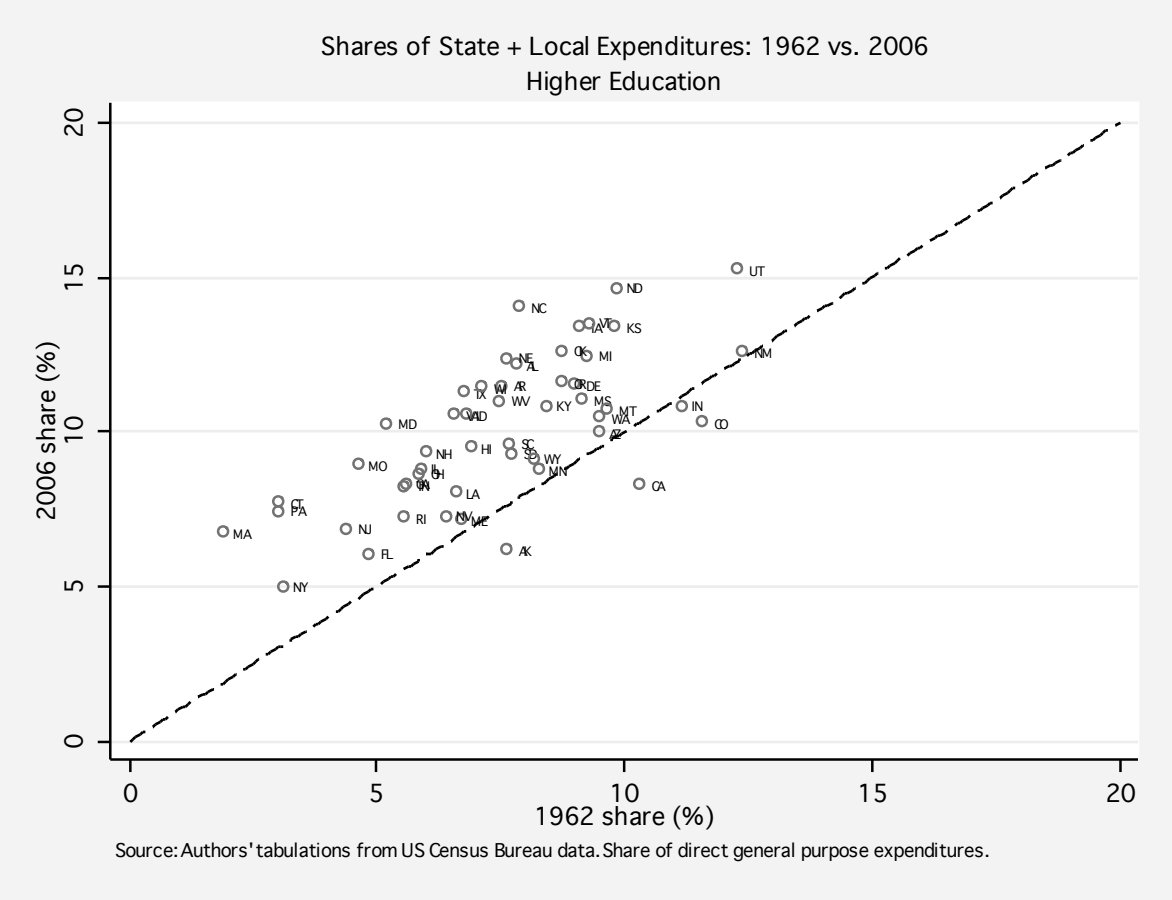


Figure 39: Higher Education as Share of Expenditures

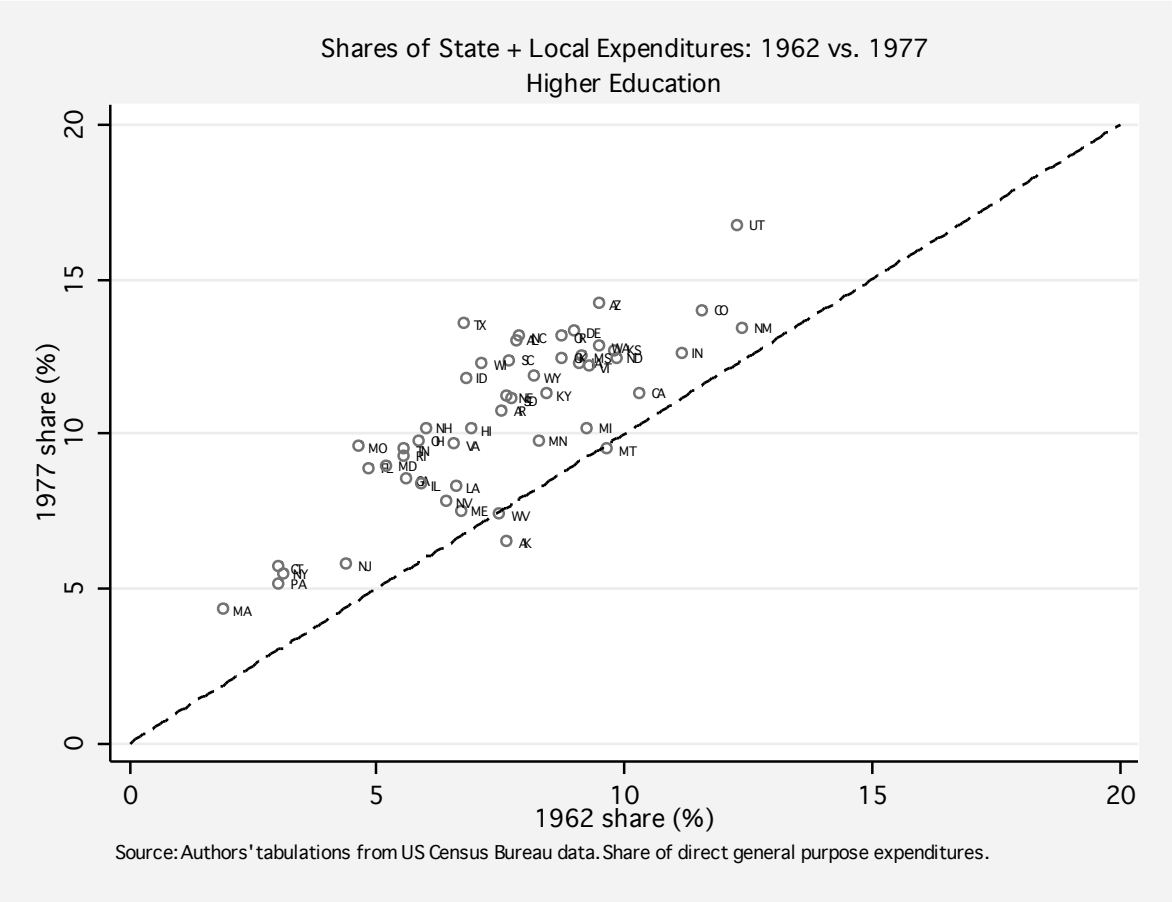


Figure 40: Higher Education as Share of Expenditures

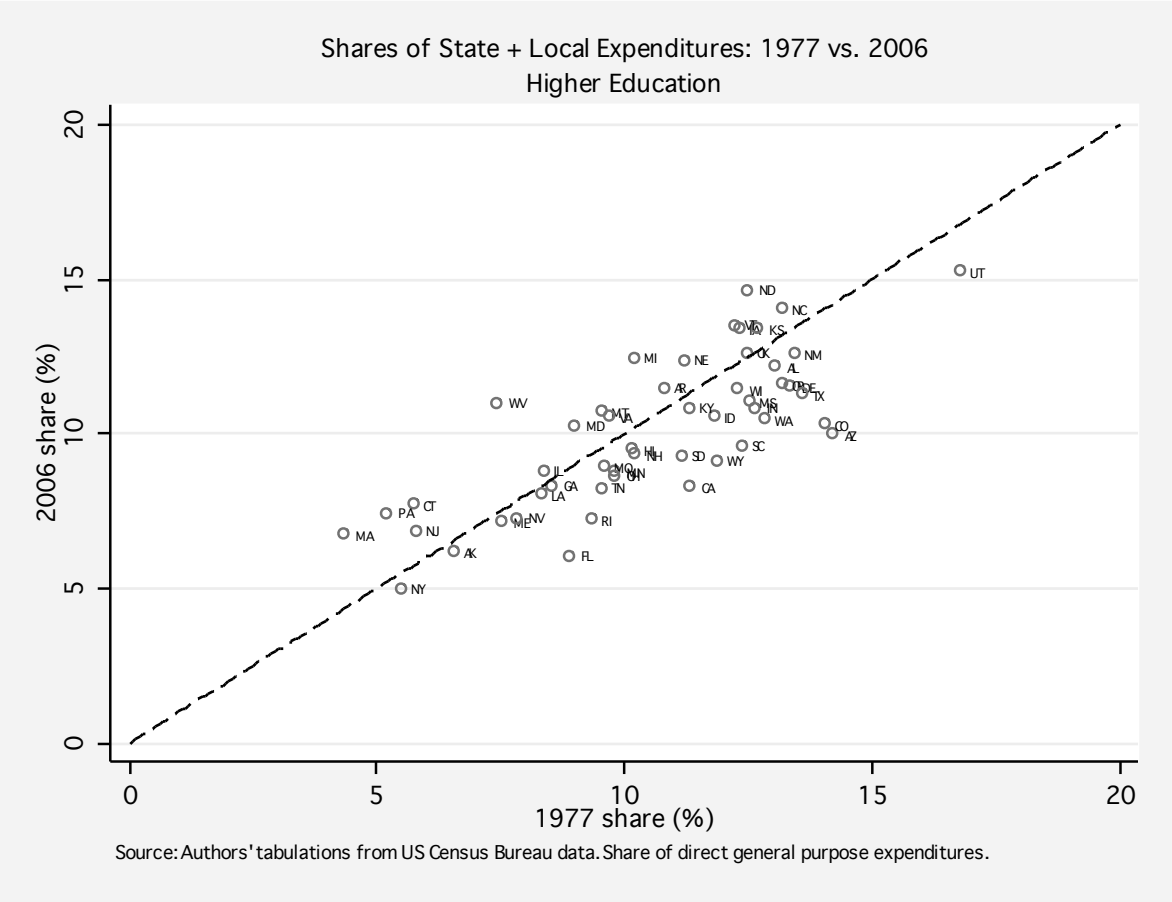


Figure 41: Non-Cash Public Welfare as Share of Expenditures

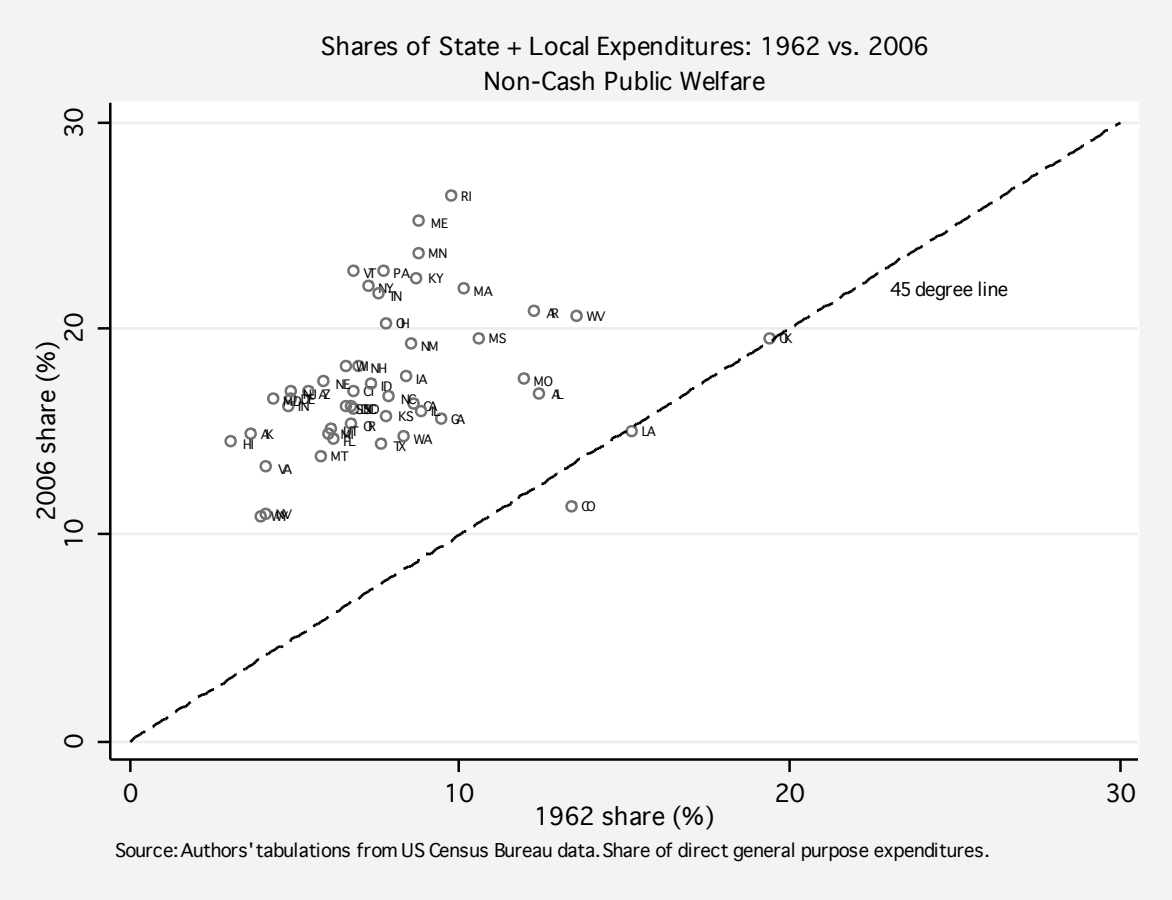


Figure 42: Non-Cash Public Welfare as Share of Expenditures

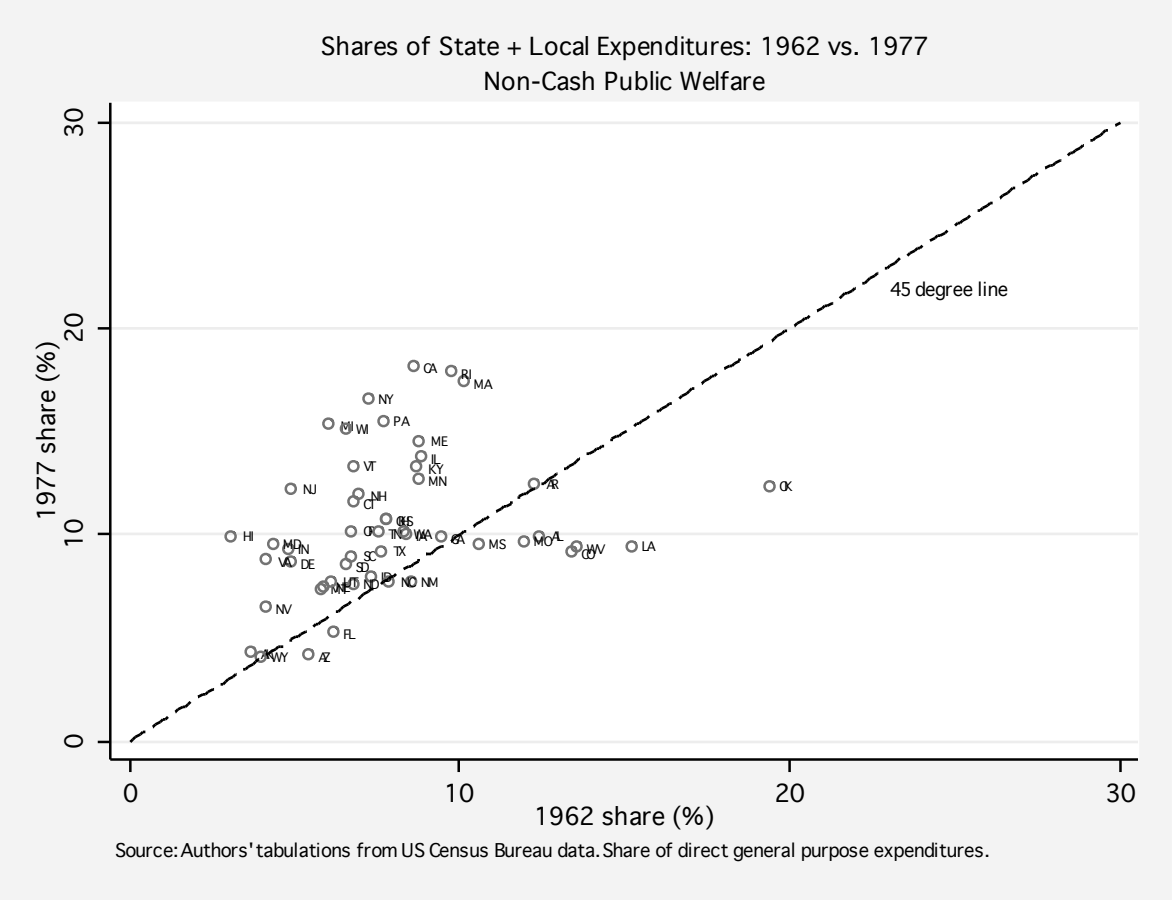


Figure 43: Non-Cash Public Welfare as Share of Expenditures

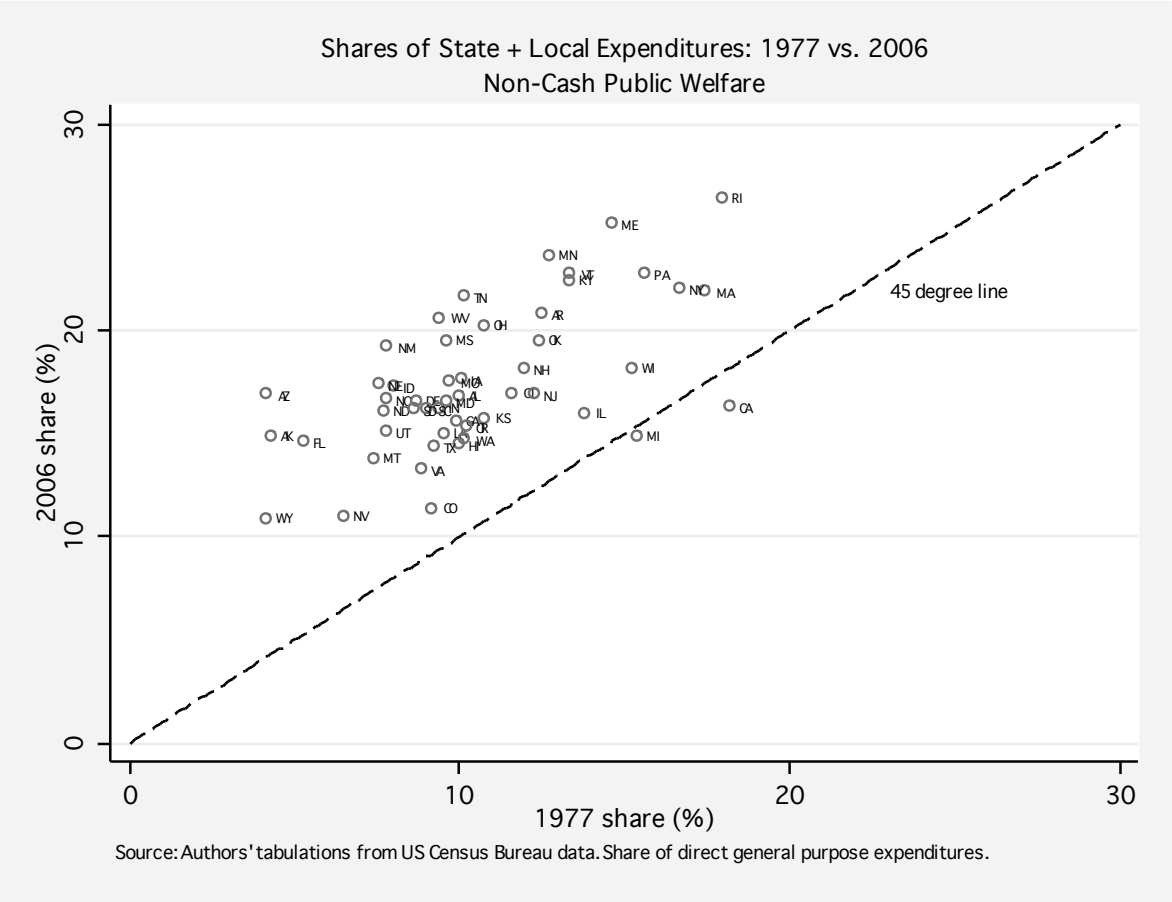


Figure 44: K-12 Education as Share of Expenditures

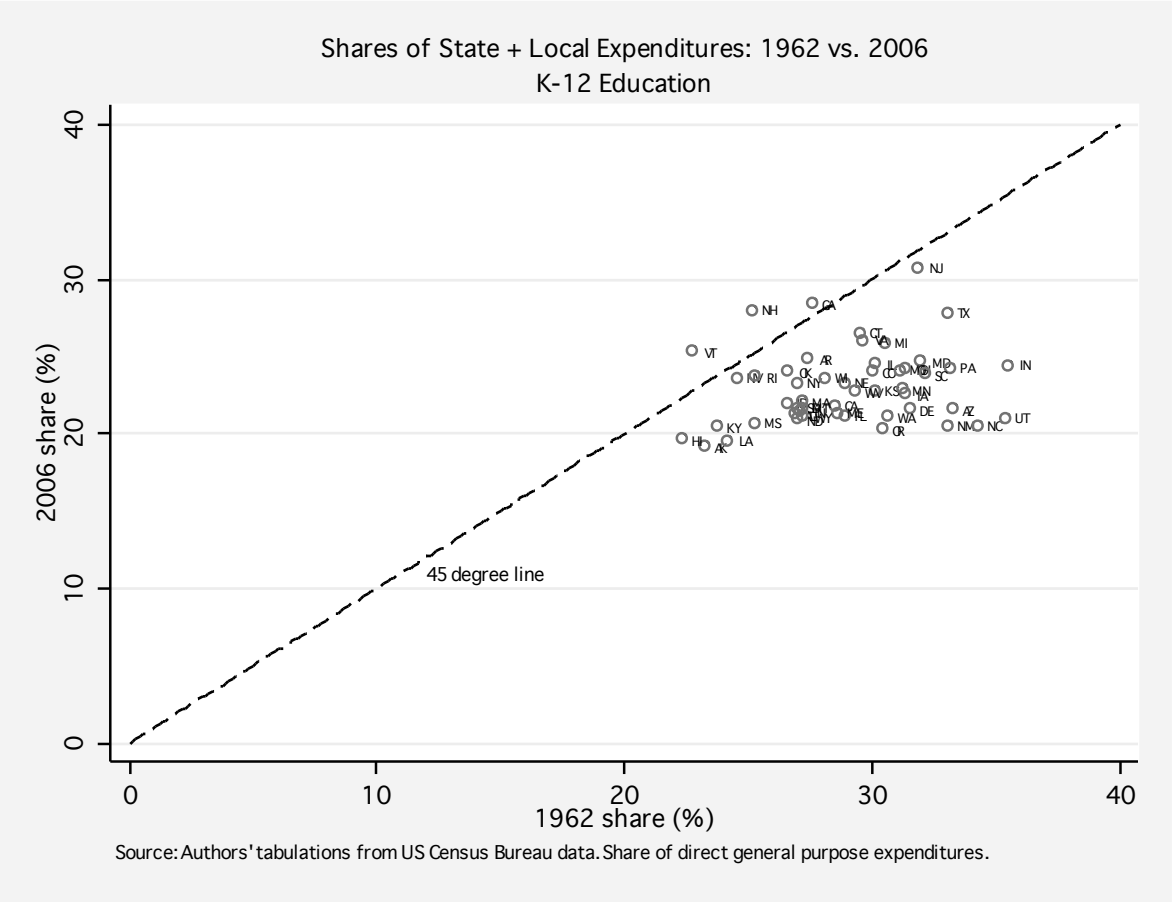


Figure 45: K-12 Education as Share of Expenditures

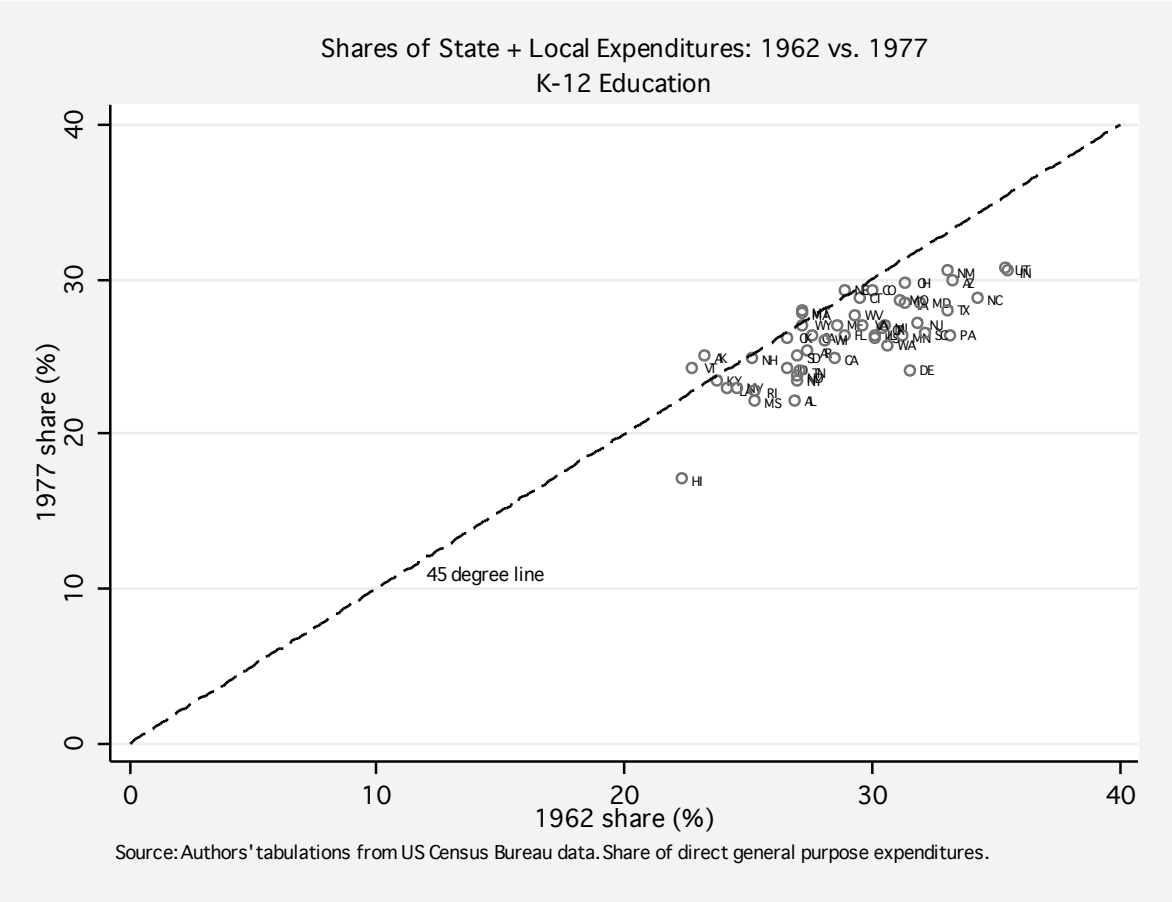


Figure 46: K-12 Education as Share of Expenditures

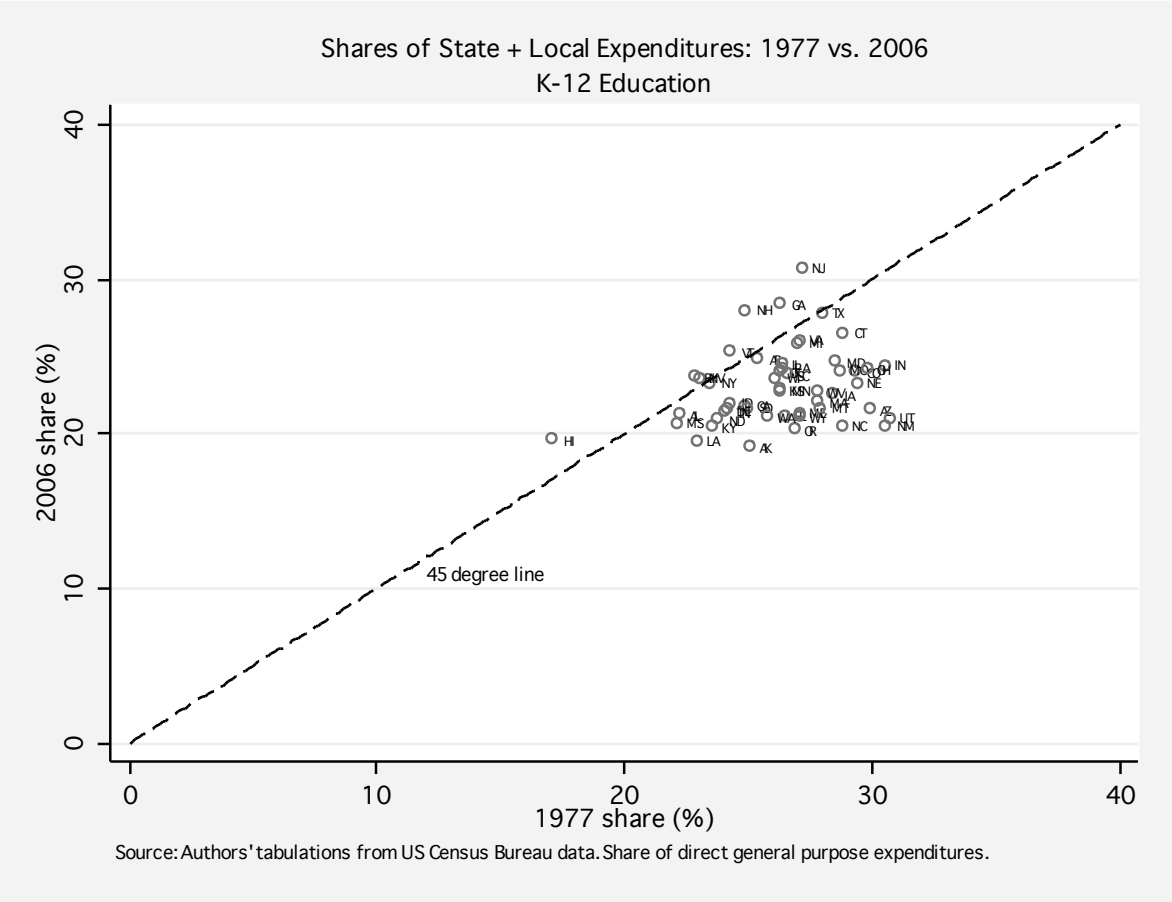


Figure 47: Police, Fire, and Corrections as Share of Expenditures

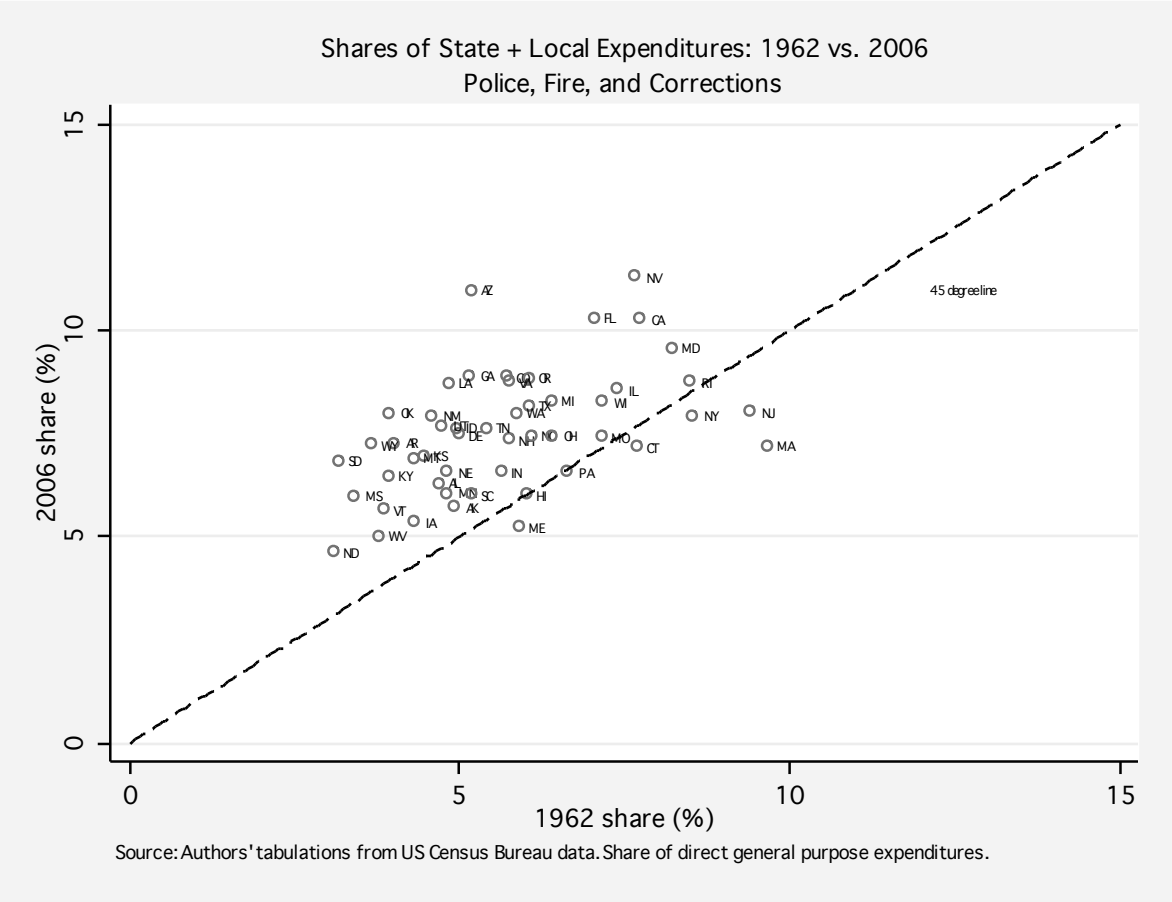
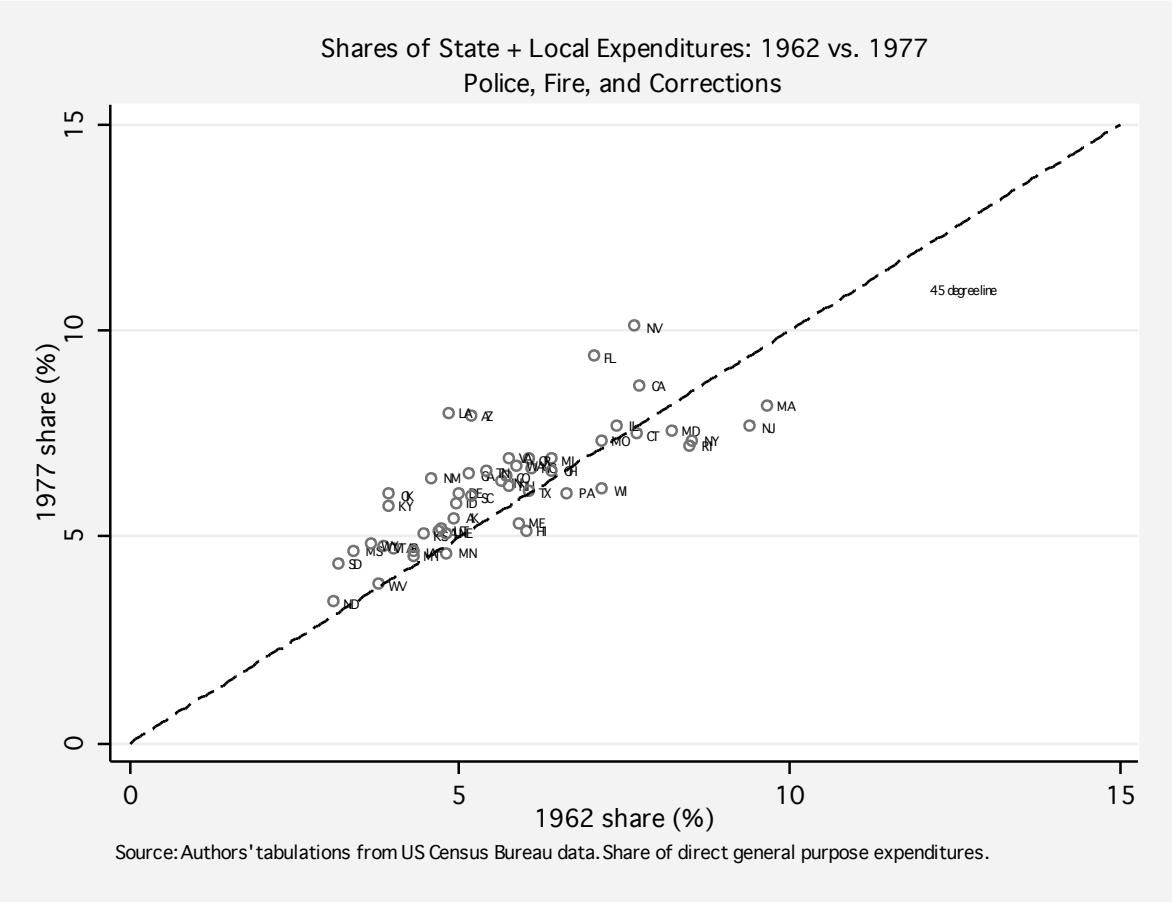


Figure 48: Police, Fire, and Corrections as Share of Expenditures



Source: Authors' tabulations from US Census Bureau data. Share of direct general purpose expenditures.

Figure 49: Police, Fire, and Corrections as Share of Expenditures

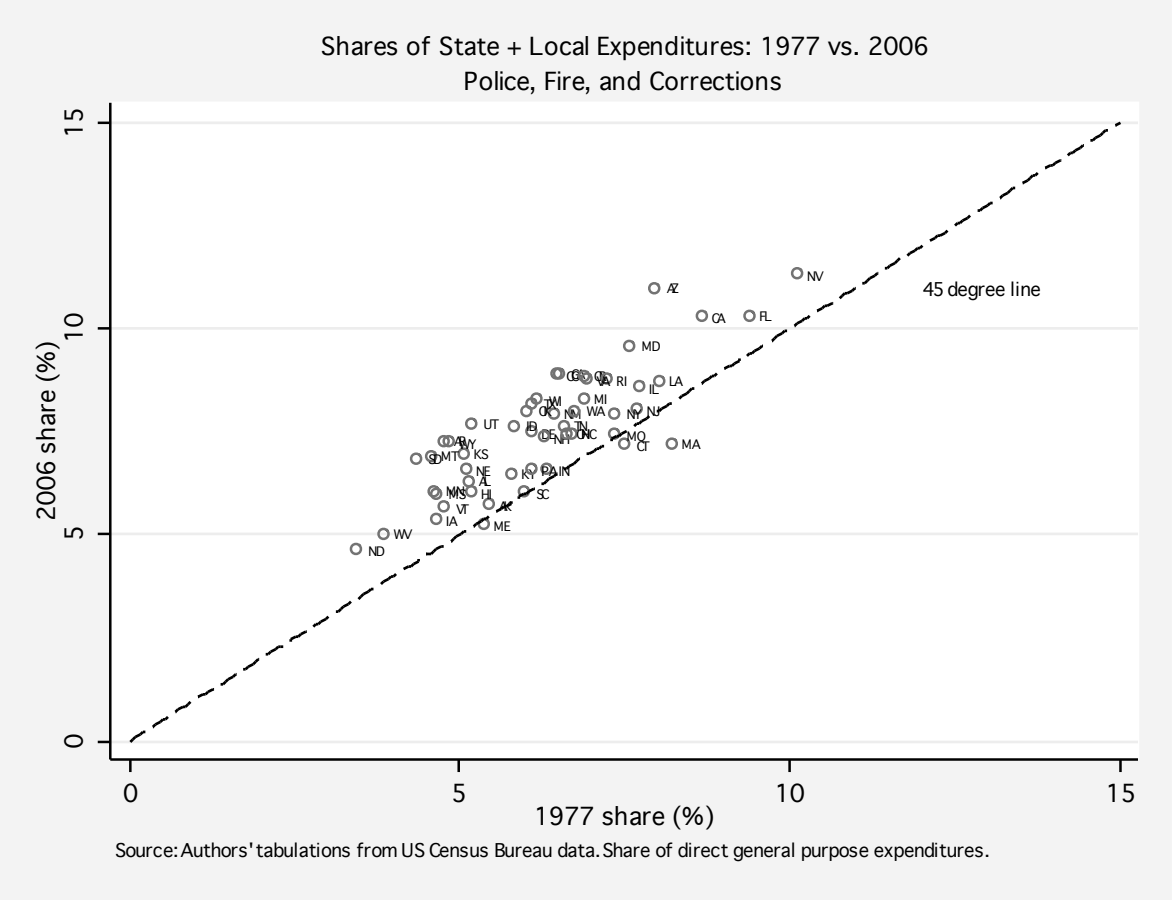


Figure 50: Health as Share of Expenditures

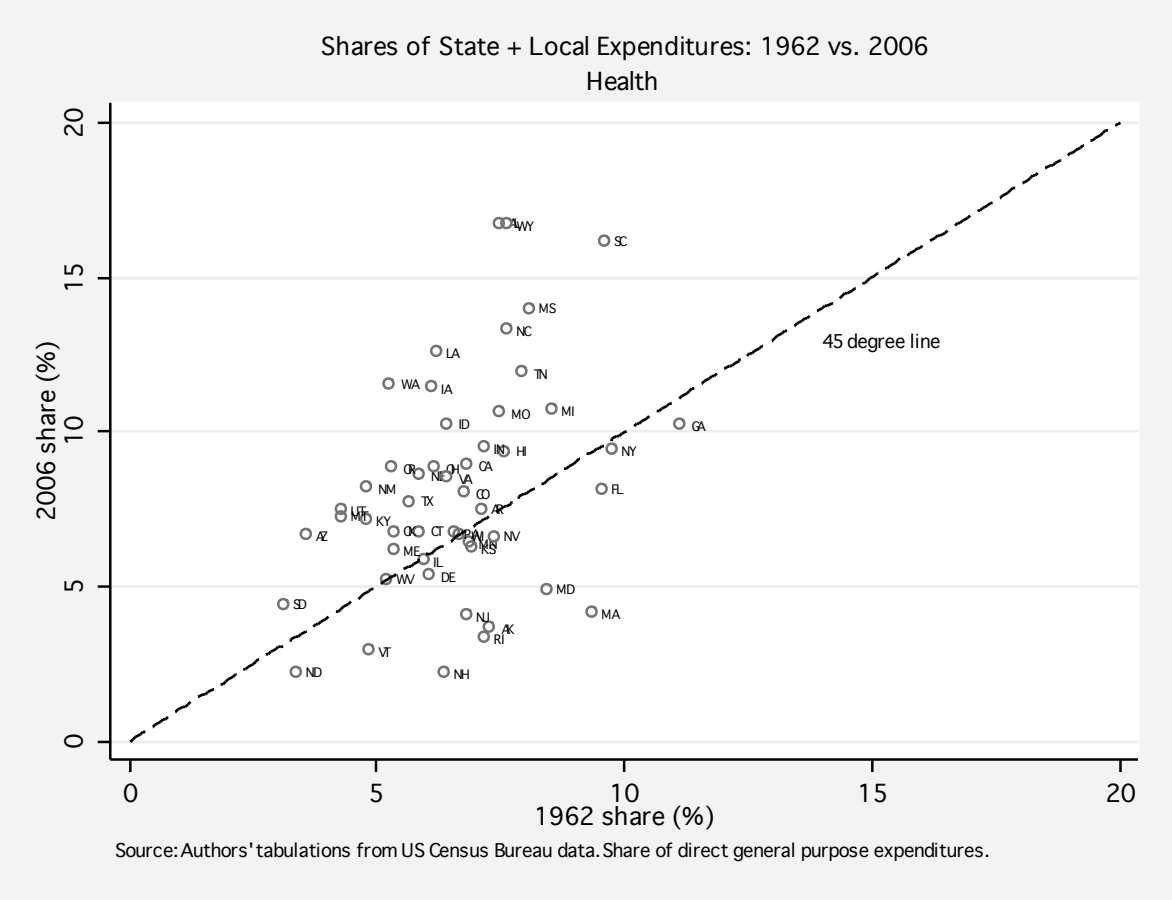


Figure 51: Health as Share of Expenditures

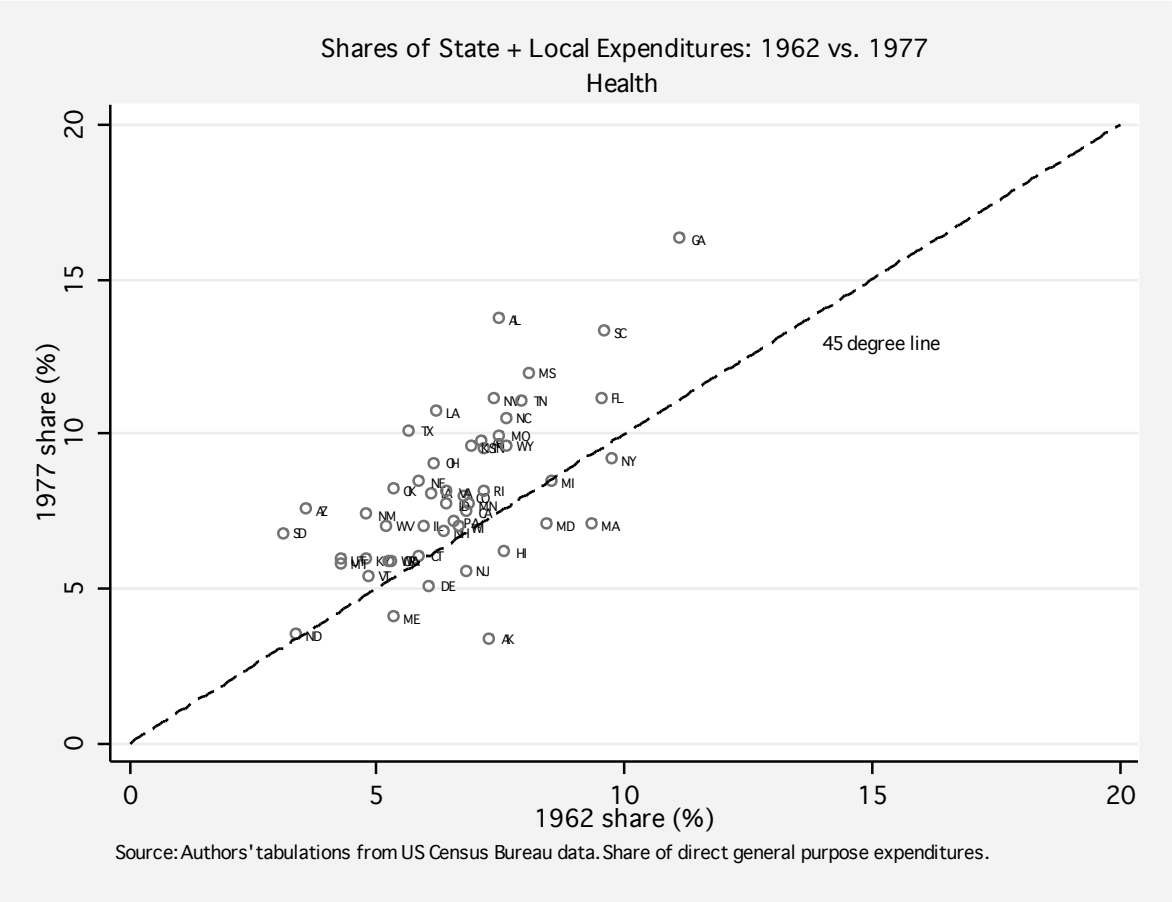


Figure 52: Health as Share of Expenditures

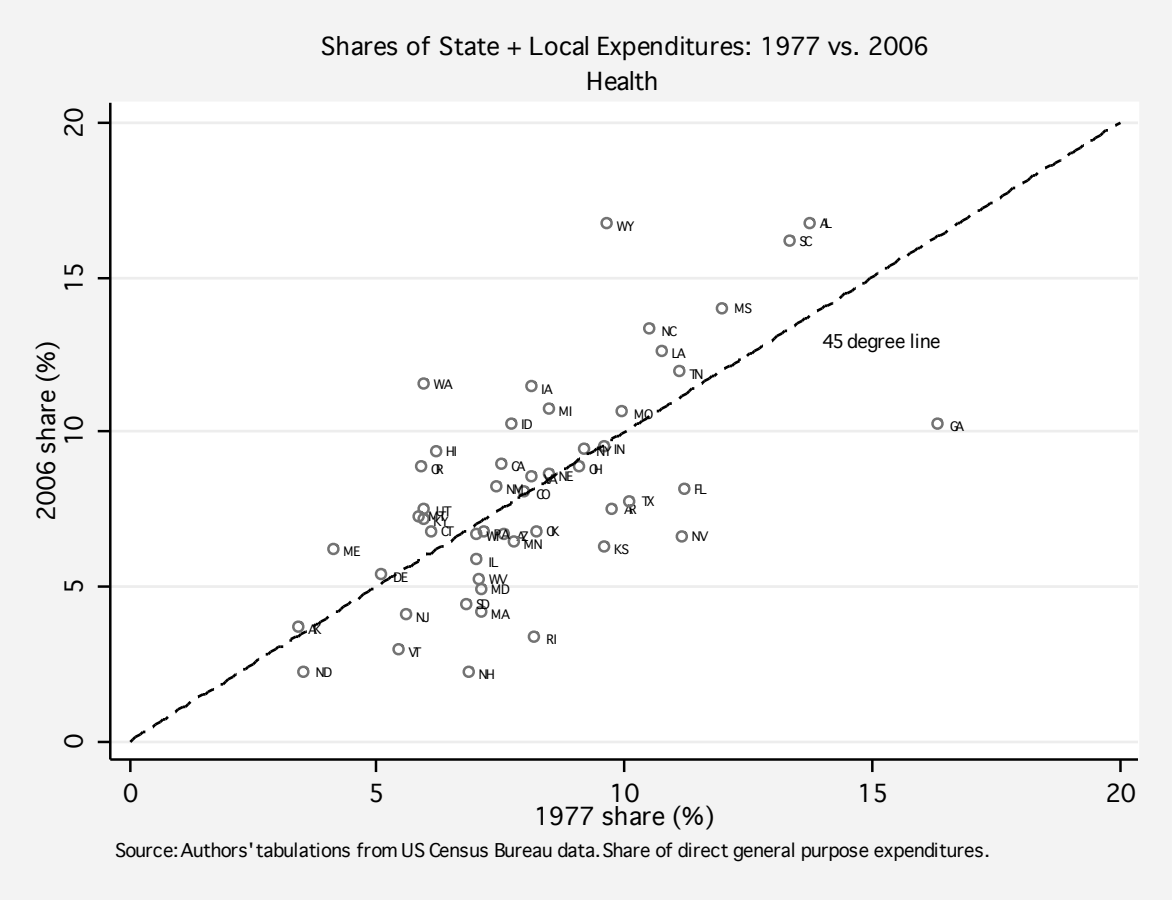


Figure 53: Government Administration as Share of Expenditures

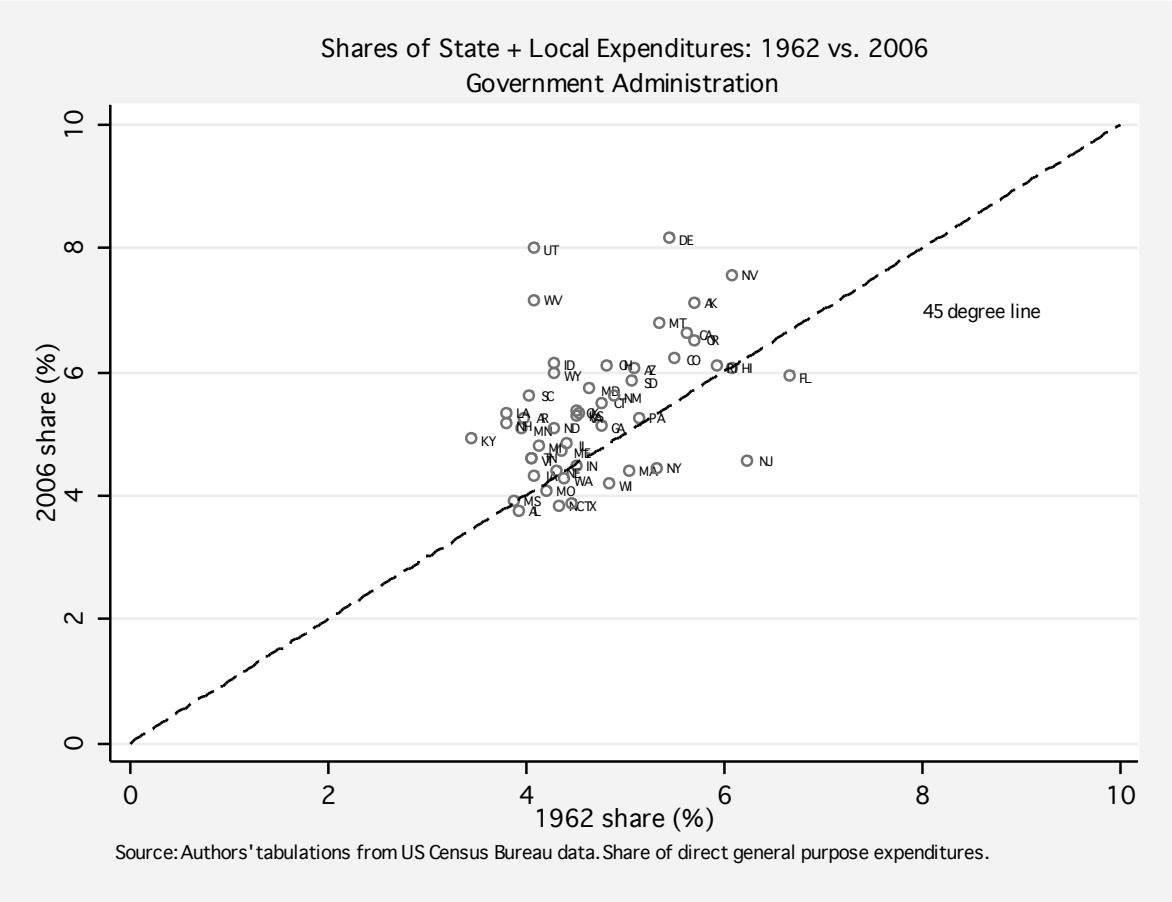


Figure 54: Government Administration as Share of Expenditures

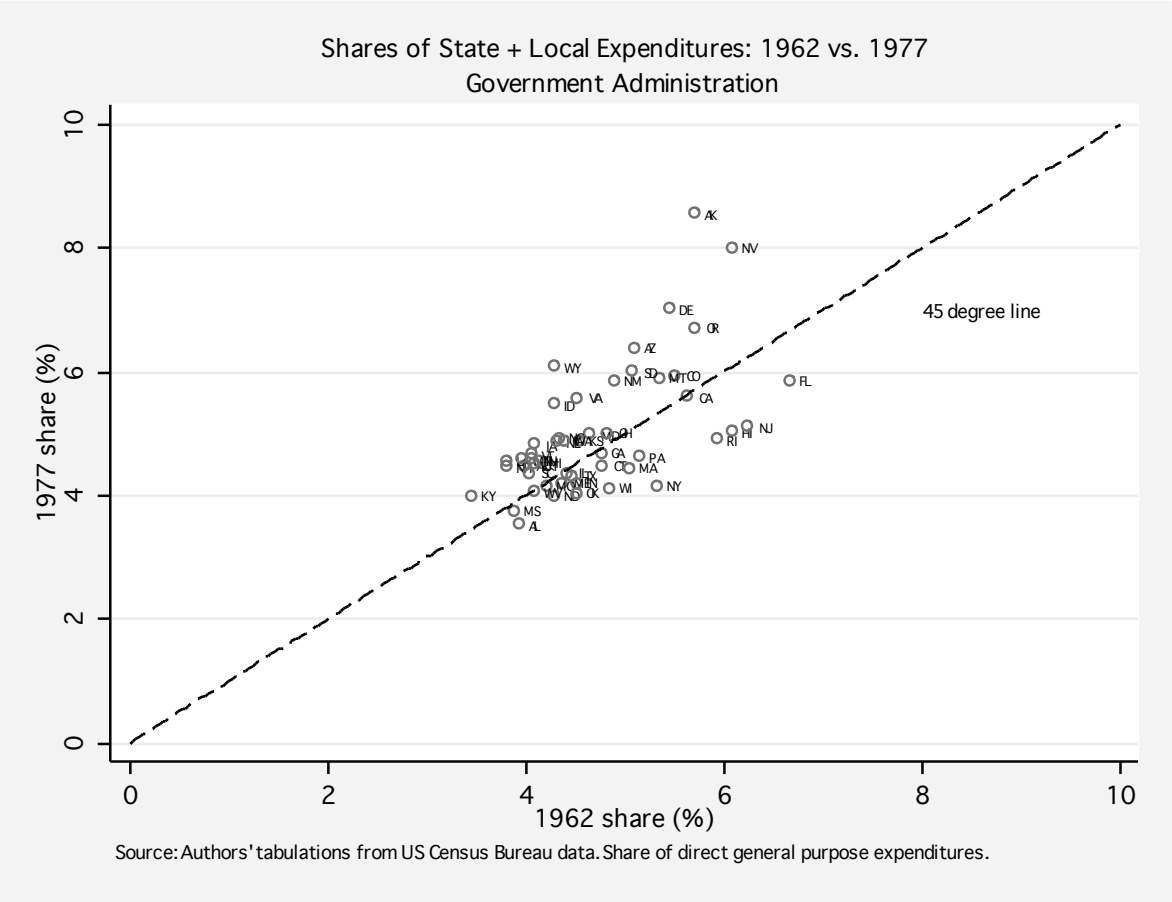
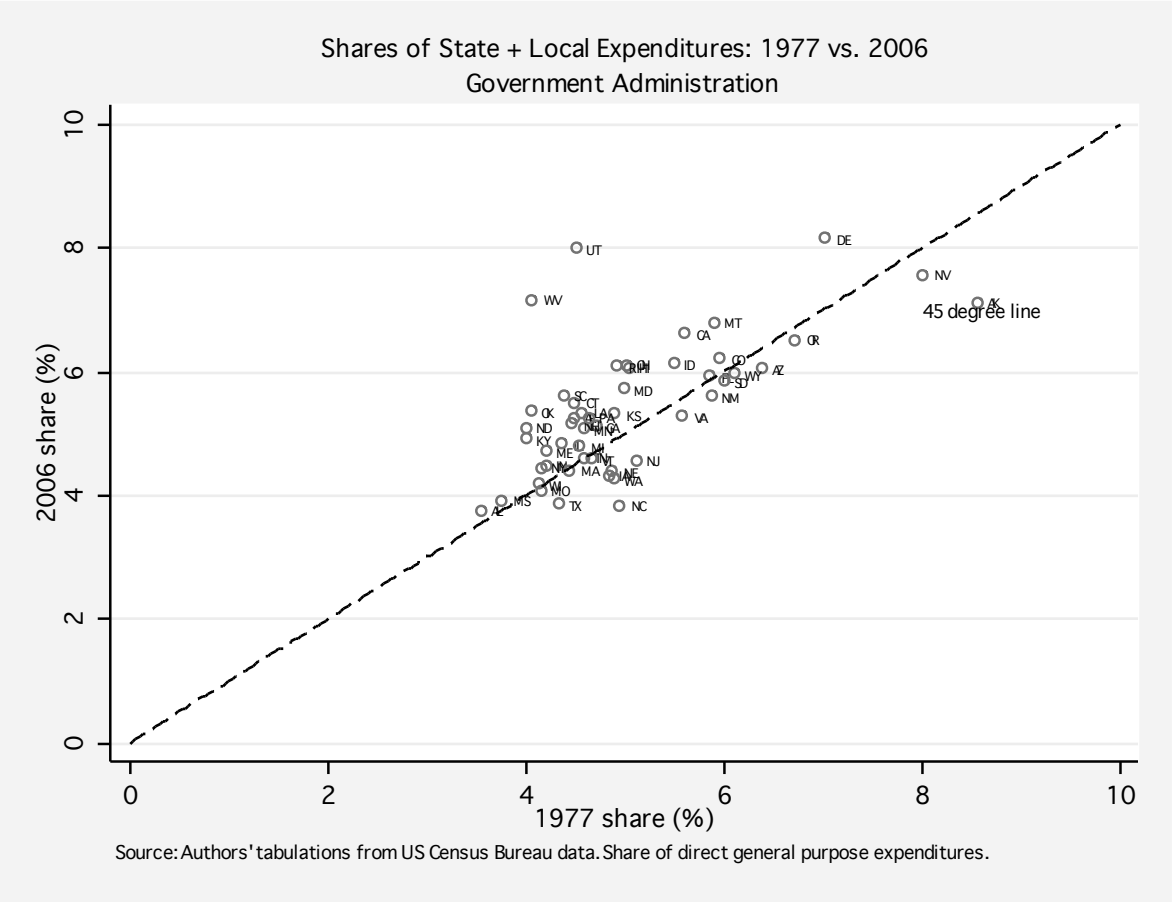


Figure 55: Government Administration as Share of Expenditures



7 Figures: Relationships Between Revenues and Expenditures

Figure 56:

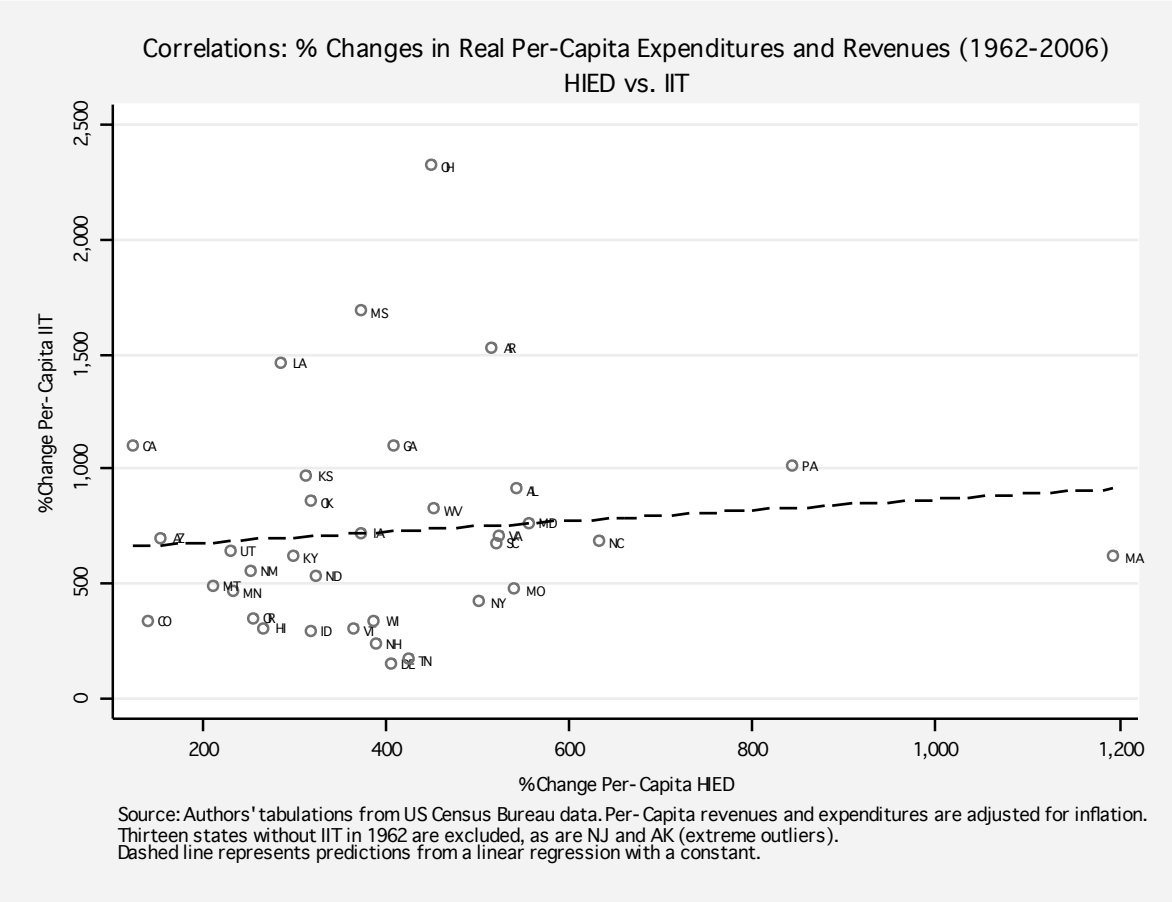
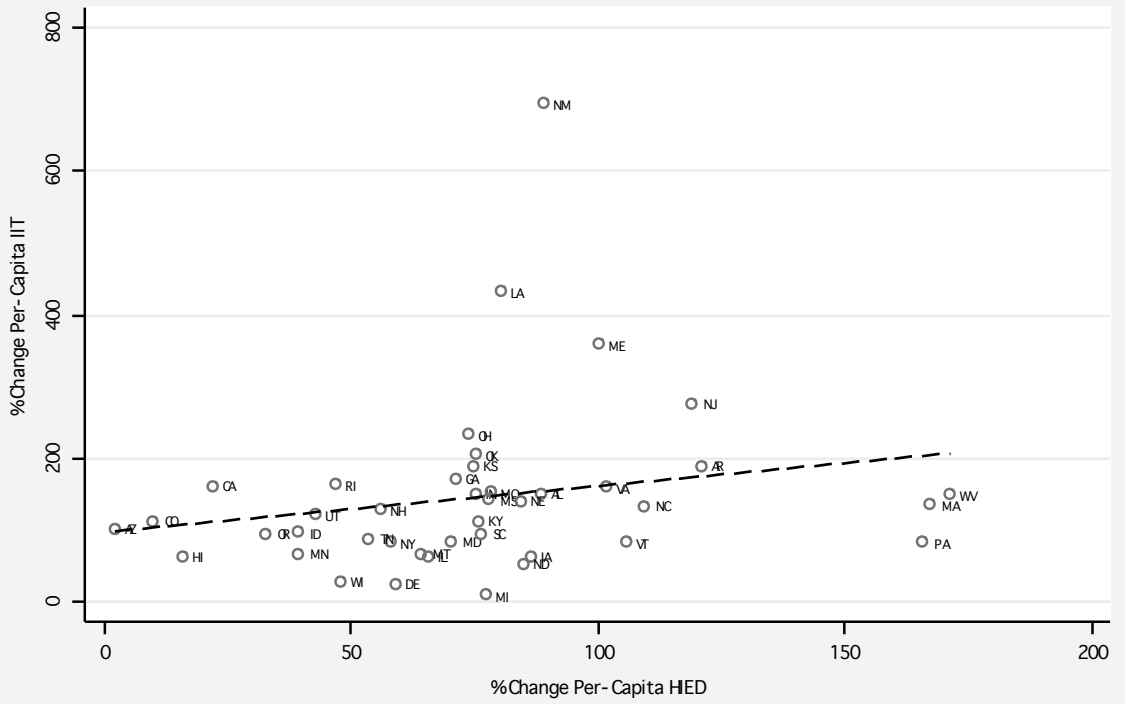

Correlations: % Changes in Real Per-Capita Expenditures and Revenues (1962-2006)
HIED vs. IIT
%Change Per-Capita IIT
0
500
1,000
1,500
2,000
2,500
200
400
600
800
1,000
1,200
%Change Per-Capita HIED
OH
MS
AR
LA
CA
GA
PA
KS
OK
AL
WV
MD
NC
MA
UT
KY
NM
ND
MT
MN
MO
NY
CO
OR
HI
ID
WI
NH
TN
Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Thirteen states without IIT in 1962 are excluded, as are NJ and AK (extreme outliers).
Dashed line represents predictions from a linear regression with a constant.

Figure 57:



Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Seven states without IIT in 2006 are excluded, as is CT (extreme outlier).
Dashed line represents predictions from a linear regression with a constant.

Figure 58:

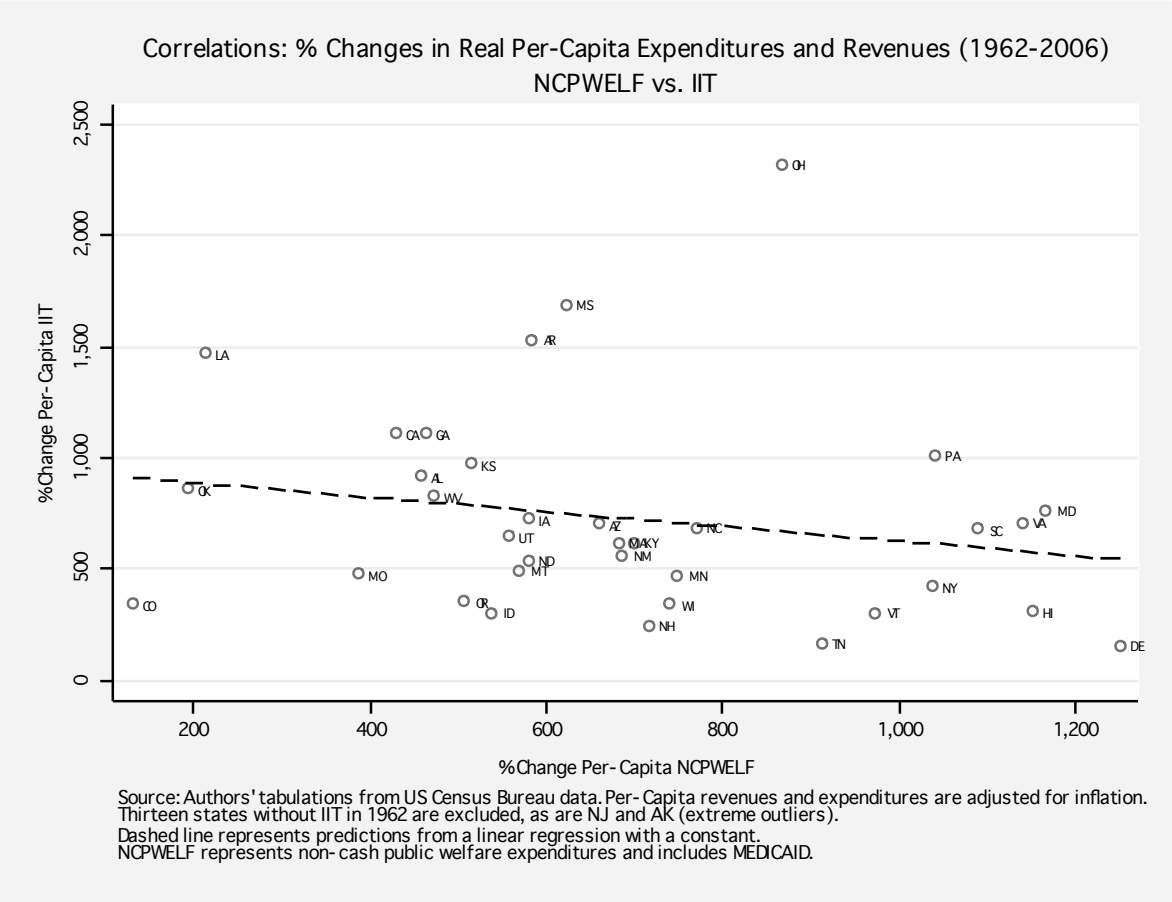
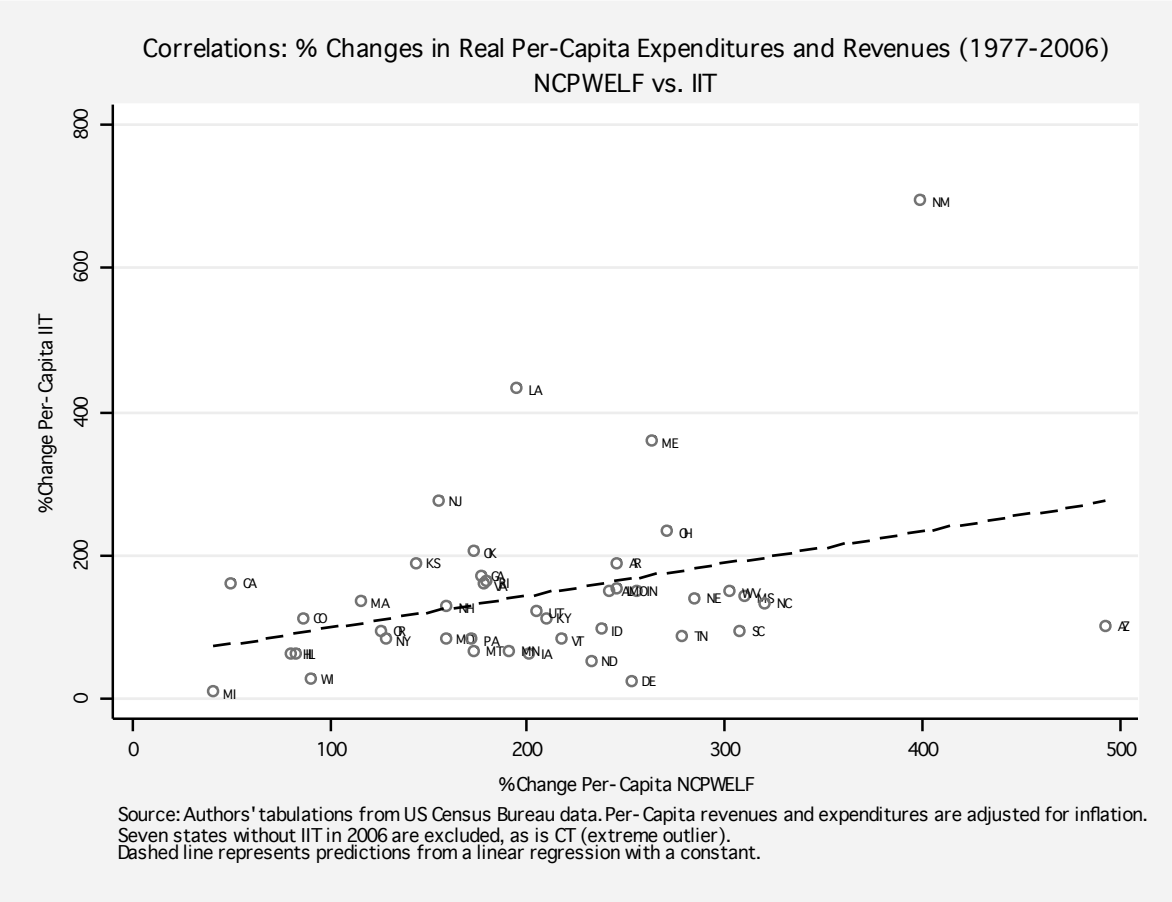

Correlations: % Changes in Real Per-Capita Expenditures and Revenues (1962-2006)
NCPWELF vs. IIT
%Change Per-Capita IIT
0
500
1,000
1,500
2,000
2,500
200
400
600
800
1,000
1,200
%Change Per-Capita NCPWELF
OH
MS
AR
LA
CA
GA
KS
AL
WV
OK
PA
MD
IA
AZ
NC
SC
VA
UT
KY
NM
ND
MT
MO
MN
NY
CO
OR
ID
WI
VT
HI
NH
TN
DE
Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Thirteen states without IIT in 1962 are excluded, as are NJ and AK (extreme outliers).
Dashed line represents predictions from a linear regression with a constant.
NCPWELF represents non-cash public welfare expenditures and includes MEDICAID.

Figure 59:



Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Seven states without IIT in 2006 are excluded, as is CT (extreme outlier).
Dashed line represents predictions from a linear regression with a constant.

Figure 60:

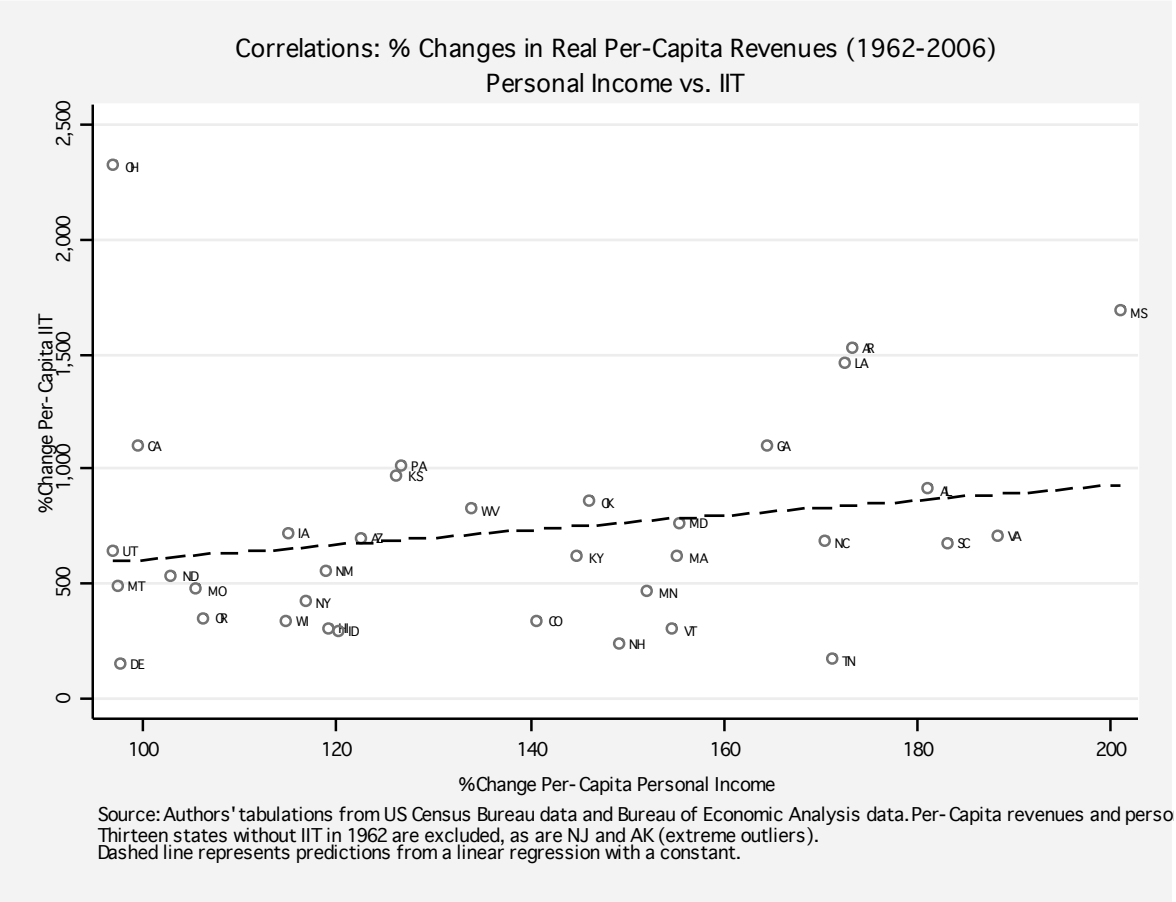

Correlations: % Changes in Real Per-Capita Revenues (1962-2006)
Personal Income vs. IIT
%Change Per-Capita IIT
0
500
1,000
1,500
2,000
2,500
100
120
140
160
180
200
%Change Per-Capita Personal Income
OH
CA
DE
UT
ND
MT
MO
OR
NY
WI
IA
AZ
NM
PA
KS
WV
OK
KY
MD
MA
MN
CO
VT
NH
NC
TN
SC
GA
AR
LA
MS
AL
VA
Source: Authors' tabulations from US Census Bureau data and Bureau of Economic Analysis data. Per-Capita revenues and perso
Thirteen states without IIT in 1962 are excluded, as are NJ and AK (extreme outliers).
Dashed line represents predictions from a linear regression with a constant.

Figure 61:

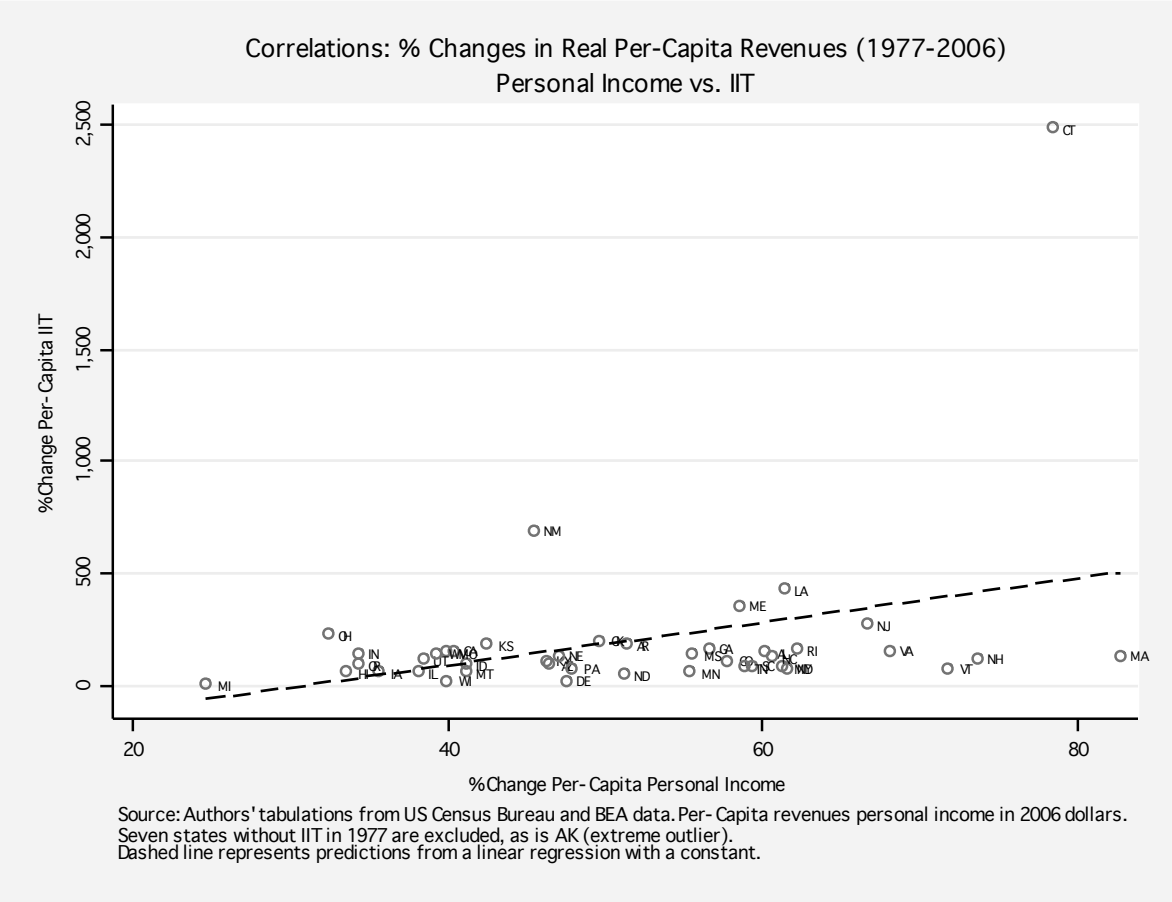

Correlations: % Changes in Real Per-Capita Revenues (1977-2006)
Personal Income vs. IIT
%Change Per-Capita IIT
0
500
1,000
1,500
2,000
2,500
20
40
60
80
%Change Per-Capita Personal Income
CT
NM
LA
ME
NJ
VA
NH
MA
RI
VT
OH
KS
MI
Source: Authors' tabulations from US Census Bureau and BEA data. Per-Capita revenues personal income in 2006 dollars.
Seven states without IIT in 1977 are excluded, as is AK (extreme outlier).
Dashed line represents predictions from a linear regression with a constant.

Figure 62:

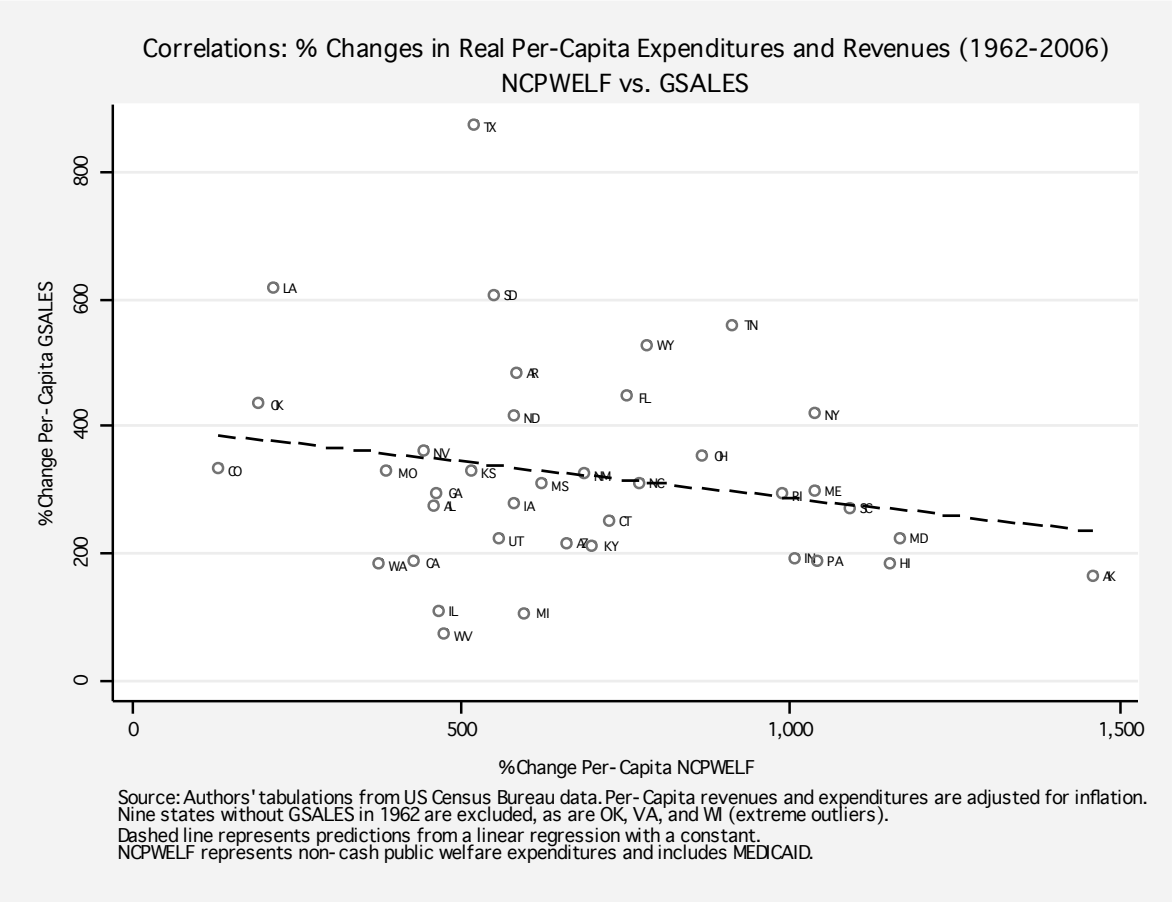

Correlations: % Changes in Real Per-Capita Expenditures and Revenues (1962-2006)
NCPWELF vs. GSALES
%Change Per-Capita GSALES
0
200
400
600
800
0
500
1,000
1,500
%Change Per-Capita NCPWELF
TX
LA
SD
TN
WY
AR
FL
OK
ND
NY
NV
OH
CO
MO
KS
NM
MS
NC
RI
ME
GA
AL
IA
SC
CT
UT
AZ
KY
MD
WA
CA
IN
PA
HI
AK
IL
MI
WV
Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Nine states without GSALES in 1962 are excluded, as are OK, VA, and WI (extreme outliers).
Dashed line represents predictions from a linear regression with a constant.
NCPWELF represents non-cash public welfare expenditures and includes MEDICAID.

Figure 63:

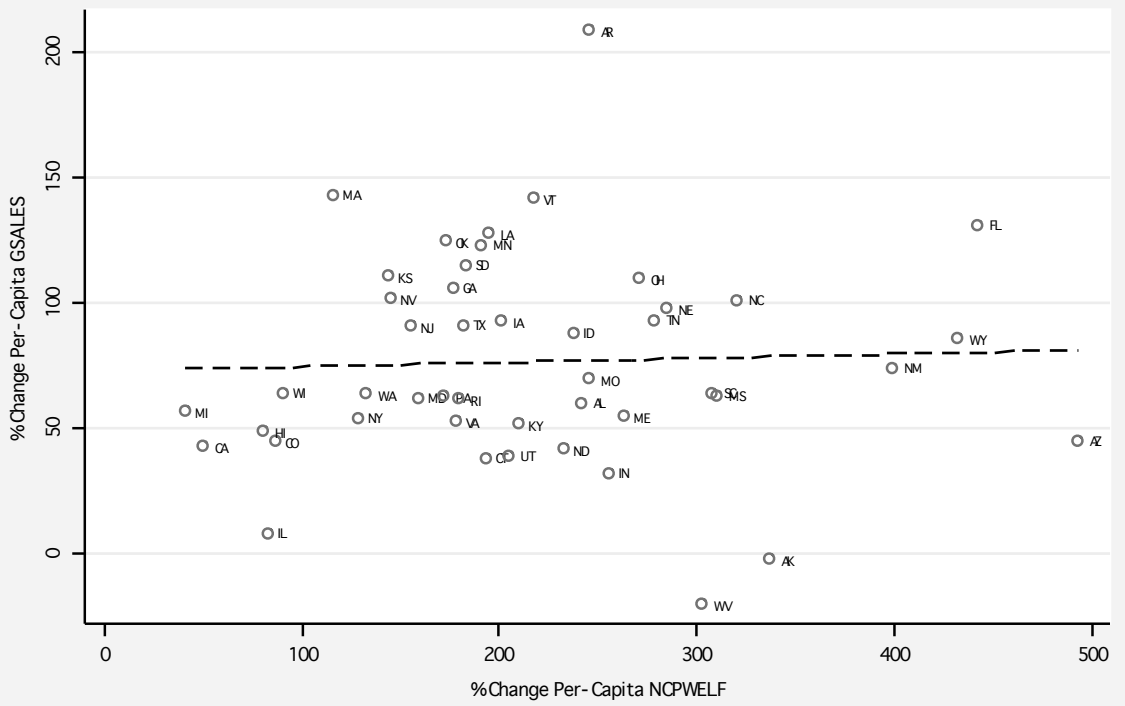
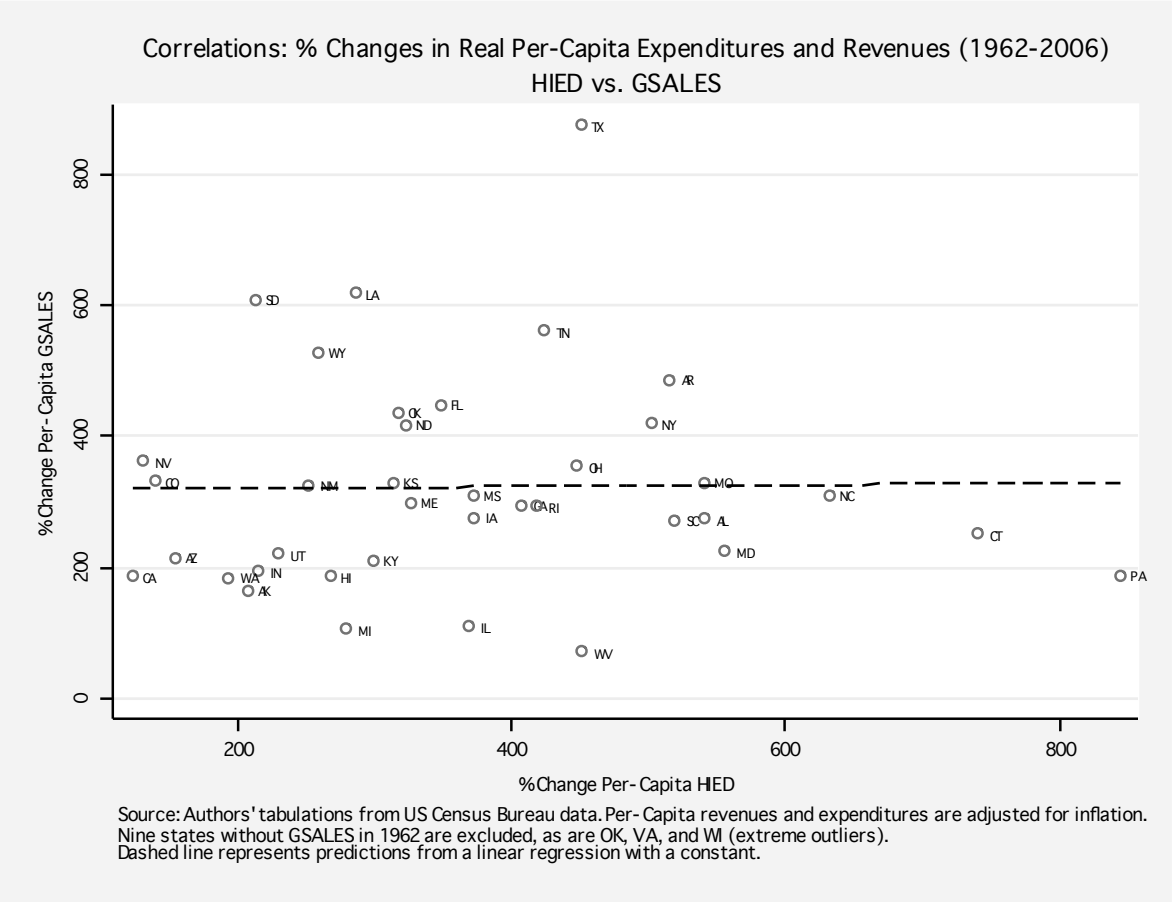
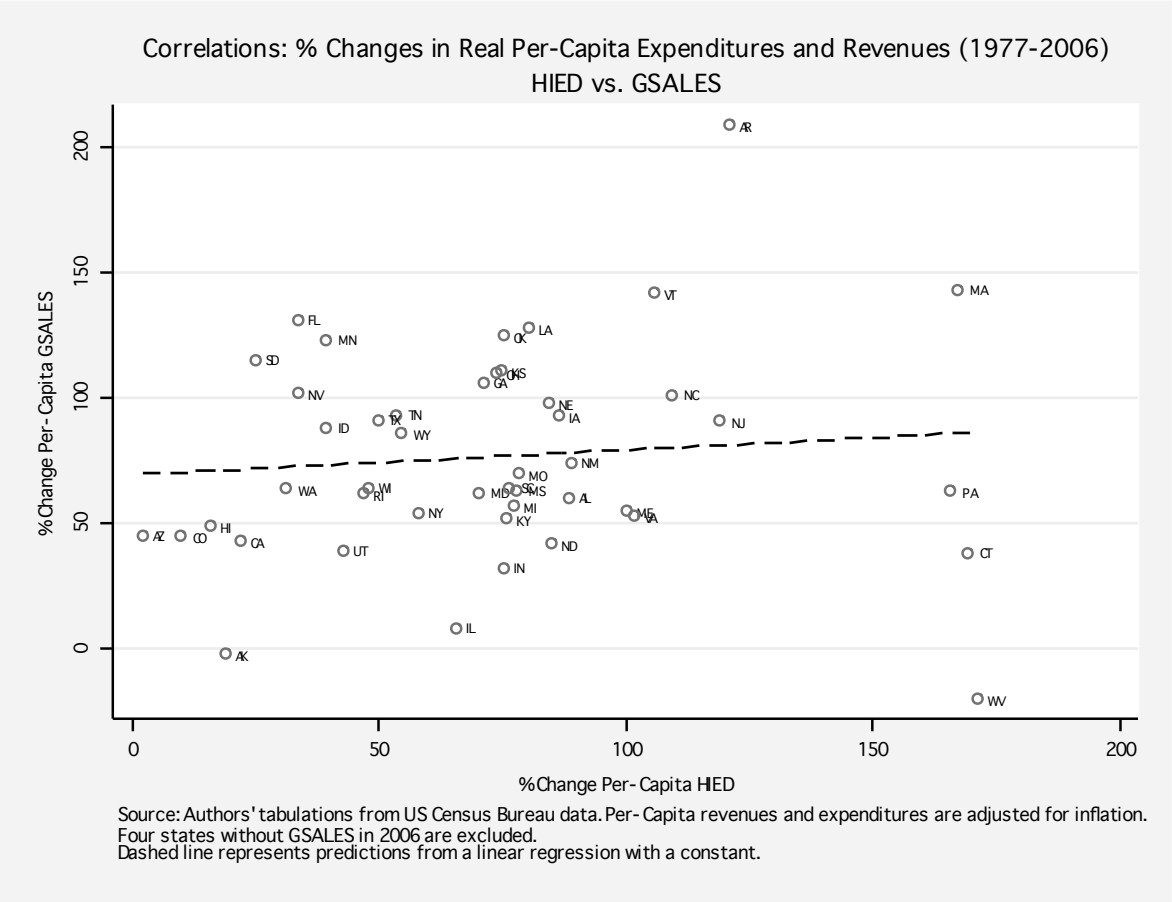

Correlations: % Changes in Real Per-Capita Expenditures and Revenues (1977-2006)
NCPWELF vs. GSALES
%Change Per-Capita GSALES
%Change Per-Capita NCPWELF
0
50
100
150
200
0
100
200
300
400
500
AR
MA
VT
FL
OK
LA
MN
SD
KS
OH
GA
NV
NC
NE
IN
NJ
TX
IA
ID
WY
NM
MO
WI
WA
MD
PA
RI
AL
SC
MS
MI
NY
VA
KY
ME
CA
HI
CO
CT
UT
ND
AZ
IN
IL
AK
WV
Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Four states without GSALES in 2006 are excluded.
Dashed line represents predictions from a linear regression with a constant.

Figure 64:



Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Nine states without GSALES in 1962 are excluded, as are OK, VA, and WI (extreme outliers).
Dashed line represents predictions from a linear regression with a constant.

Figure 65:



Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Four states without GSALES in 2006 are excluded.
Dashed line represents predictions from a linear regression with a constant.

Figure 66:

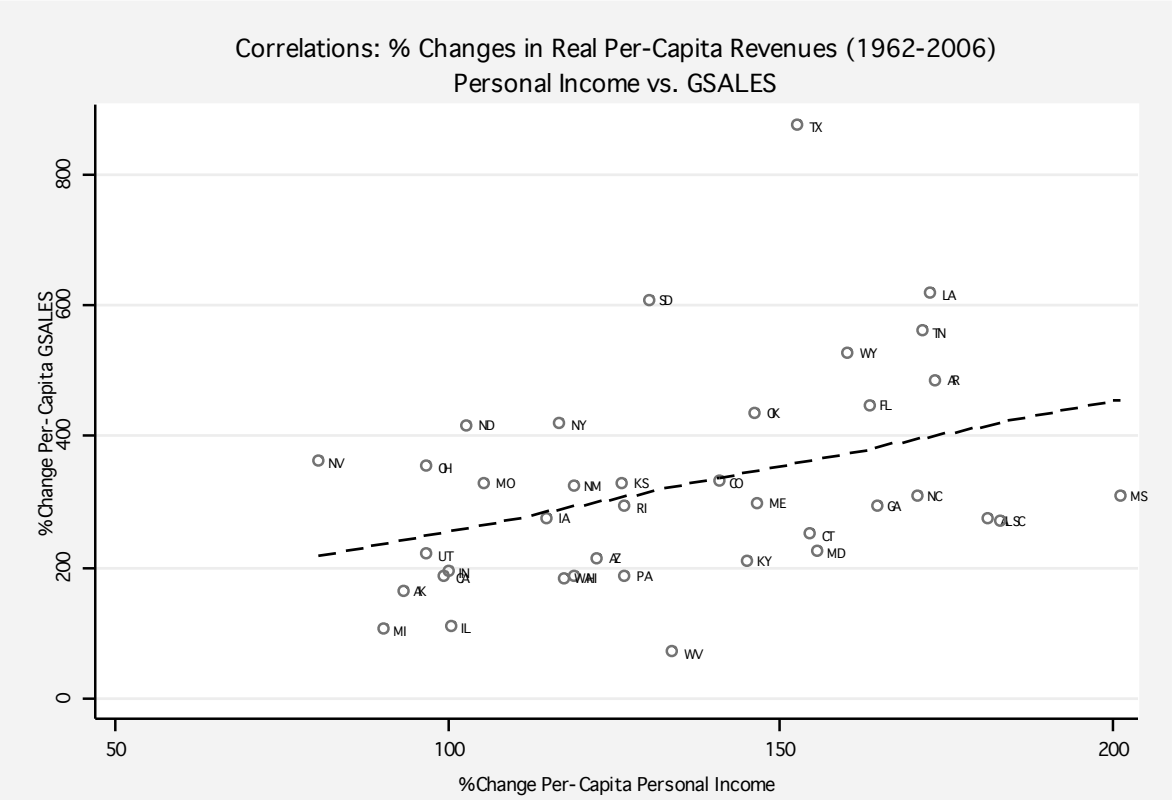
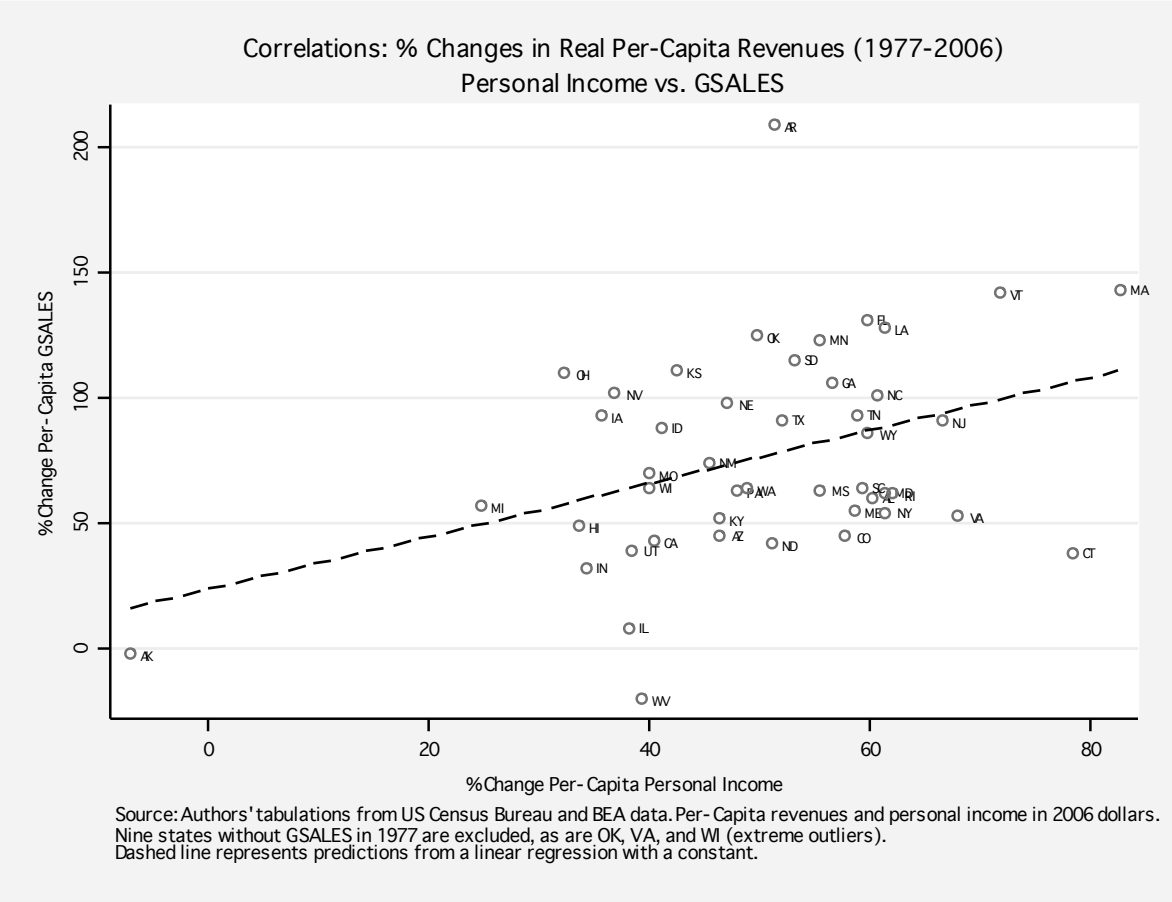

Correlations: % Changes in Real Per-Capita Revenues (1962-2006)
Personal Income vs. GSALES
%Change Per-Capita GSALES
0
200
400
600
800
50
100
150
200
%Change Per-Capita Personal Income
TX
SD
LA
TN
WY
AR
FL
OK
ND
NY
NV
OH
MO
NM
KS
CO
RI
ME
GA
NC
MS
IA
SC
CT
UT
AZ
KY
MD
IN
PA
AK
MI
IL
WV
Source: Authors' tabulations from US Census Bureau and Bureau of Economic Analysis data. Per-Capita revenues and personal in
Nine states without GSALES in 1962 are excluded, as are OK, VA, and WI (extreme outliers).
Dashed line represents predictions from a linear regression with a constant.

Figure 67:



Source: Authors' tabulations from US Census Bureau and BEA data. Per-Capita revenues and personal income in 2006 dollars.
Nine states without GSALES in 1977 are excluded, as are OK, VA, and WI (extreme outliers).
Dashed line represents predictions from a linear regression with a constant.

Figure 68:

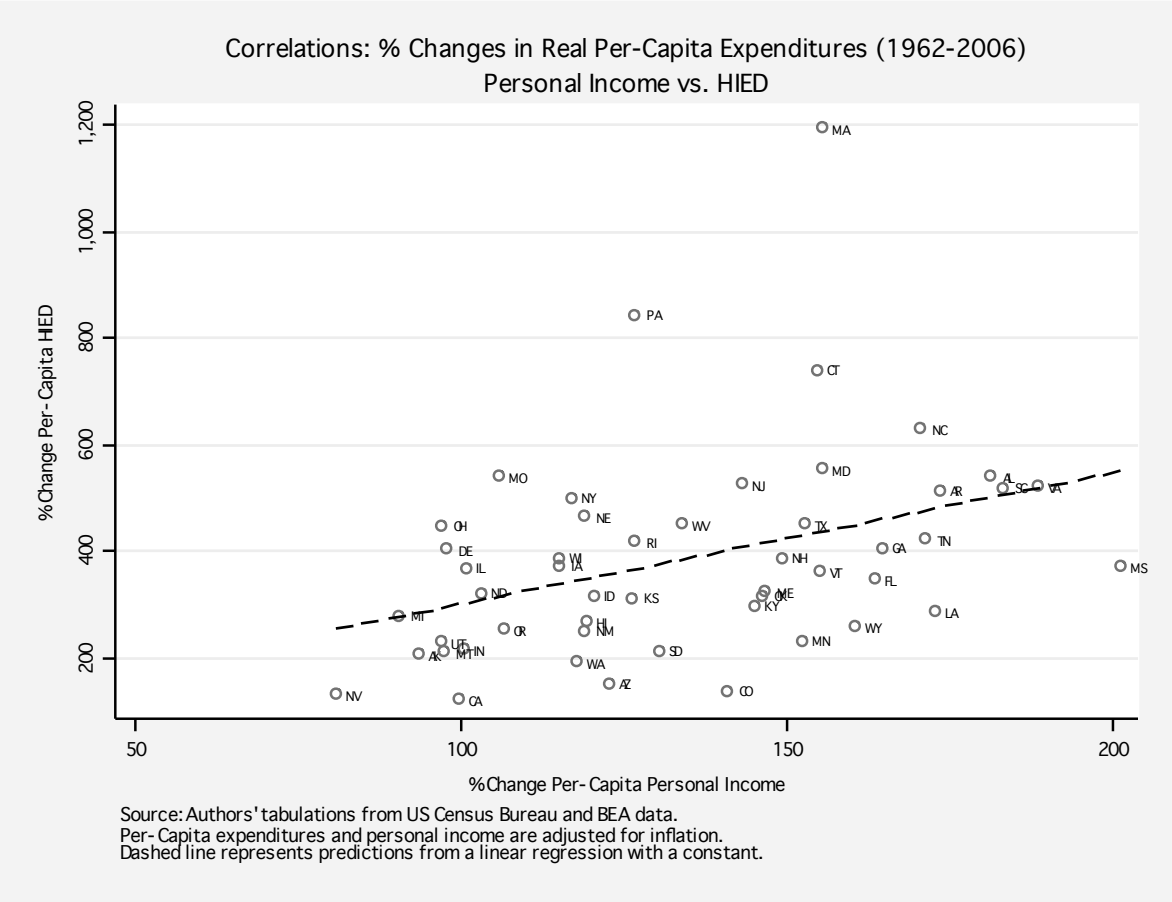

Correlations: % Changes in Real Per-Capita Expenditures (1962-2006)
Personal Income vs. HIED
%Change Per-Capita HIED
200
400
600
800
1,000
1,200
50
100
150
200
%Change Per-Capita Personal Income
MA
PA
CT
NC
MD
NJ
MO
NY
NE
WV
RI
TX
GA
TN
AR
SC
VA
AL
OH
DE
IL
WI
IA
NH
VT
FL
MS
ND
ID
KS
ME
OK
KY
LA
MT
OR
HI
NM
WY
MN
UT
AK
MI
IN
SD
WA
AZ
CO
NV
CA
Source: Authors' tabulations from US Census Bureau and BEA data.
Per-Capita expenditures and personal income are adjusted for inflation.
Dashed line represents predictions from a linear regression with a constant.

Figure 69:

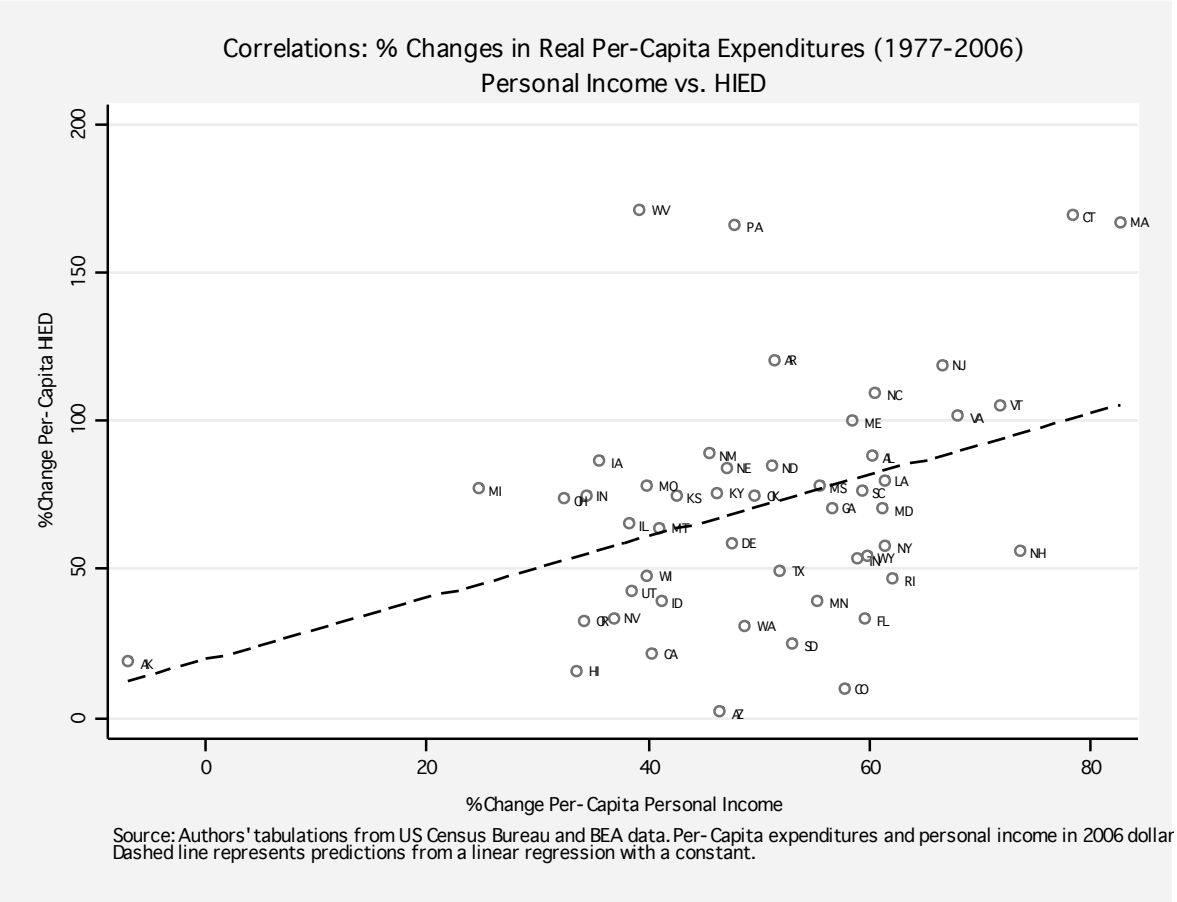

Correlations: % Changes in Real Per-Capita Expenditures (1977-2006)
Personal Income vs. HIED
%Change Per-Capita HIED
%Change Per-Capita Personal Income
0
50
100
150
200
0
20
40
60
80
WV
PA
CT
MA
AR
NJ
NC
VT
ME
VA
IA
NM
NE
ND
AL
MI
MO
KS
KY
OK
MS
LA
SC
IN
GA
MD
IL
MT
DE
NY
NH
WY
TX
RI
WI
UT
ID
MN
NV
WA
FL
SD
AK
CA
HI
CO
AZ
Source: Authors' tabulations from US Census Bureau and BEA data. Per-Capita expenditures and personal income in 2006 dollar
Dashed line represents predictions from a linear regression with a constant.

Figure 70:

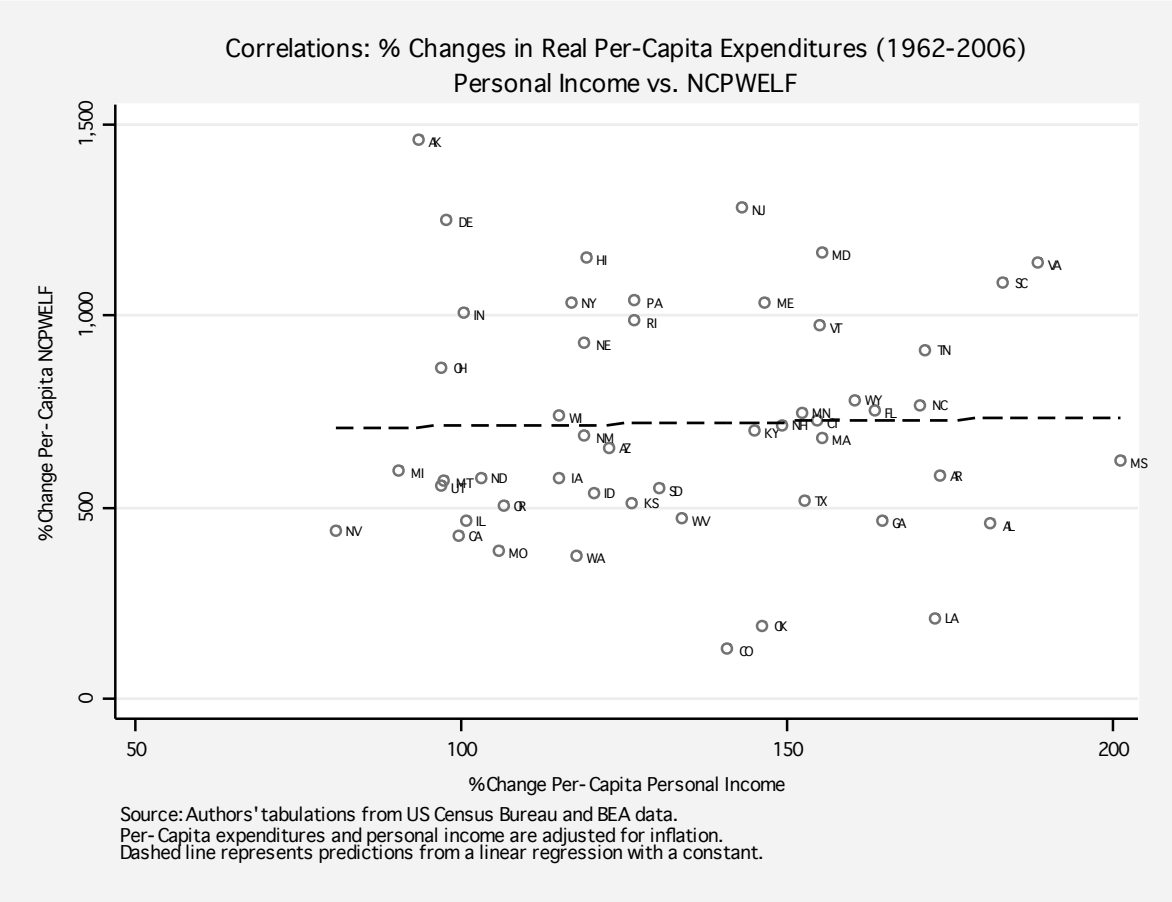
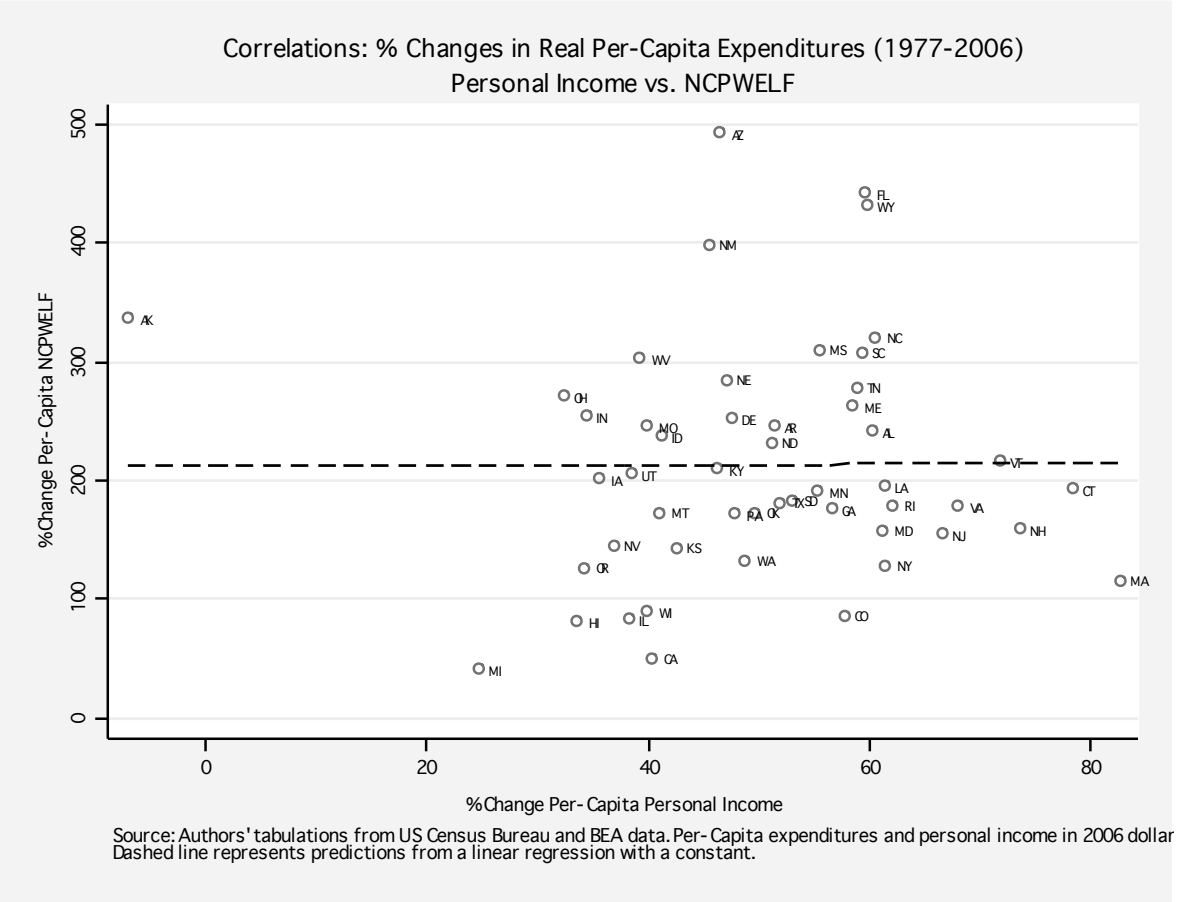
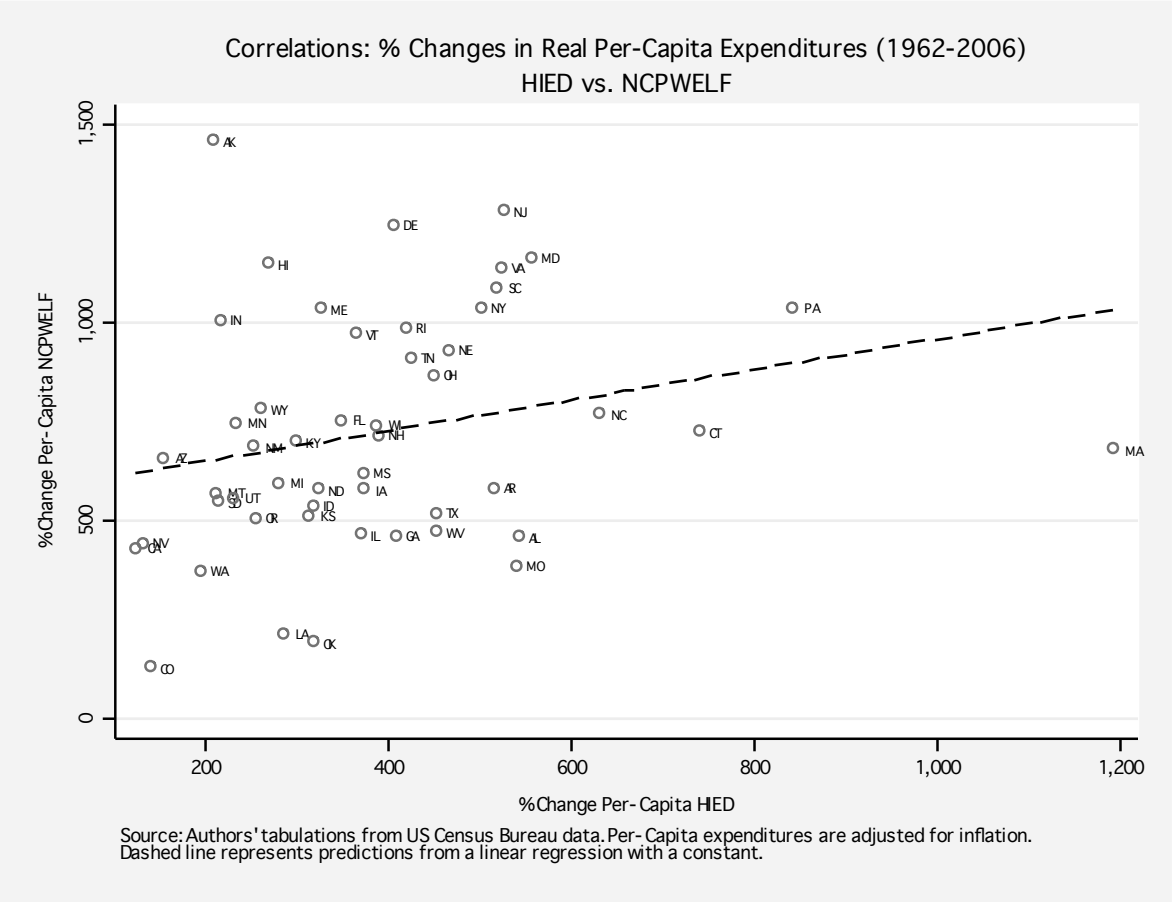

Correlations: % Changes in Real Per-Capita Expenditures (1962-2006)
Personal Income vs. NCPWELF
%Change Per-Capita NCPWELF
0
500
1,000
1,500
50
100
150
200
%Change Per-Capita Personal Income
AK
DE
HI
IN
NY
PA
RI
NE
OH
NJ
MD
ME
VT
VA
SC
TN
WY
NC
FL
MN
WI
NM
AZ
KY
NH
MA
MS
MI
UT
MT
ND
IA
ID
SD
KS
TX
AR
OR
IL
CA
MO
WA
WV
GA
AL
NV
OK
CO
LA
Source: Authors' tabulations from US Census Bureau and BEA data.
Per-Capita expenditures and personal income are adjusted for inflation.
Dashed line represents predictions from a linear regression with a constant.

Figure 71:



Source: Authors' tabulations from US Census Bureau and BEA data. Per-Capita expenditures and personal income in 2006 dollar
Dashed line represents predictions from a linear regression with a constant.

Figure 72:



Source: Authors' tabulations from US Census Bureau data. Per-Capita expenditures are adjusted for inflation.
Dashed line represents predictions from a linear regression with a constant.

Figure 73:

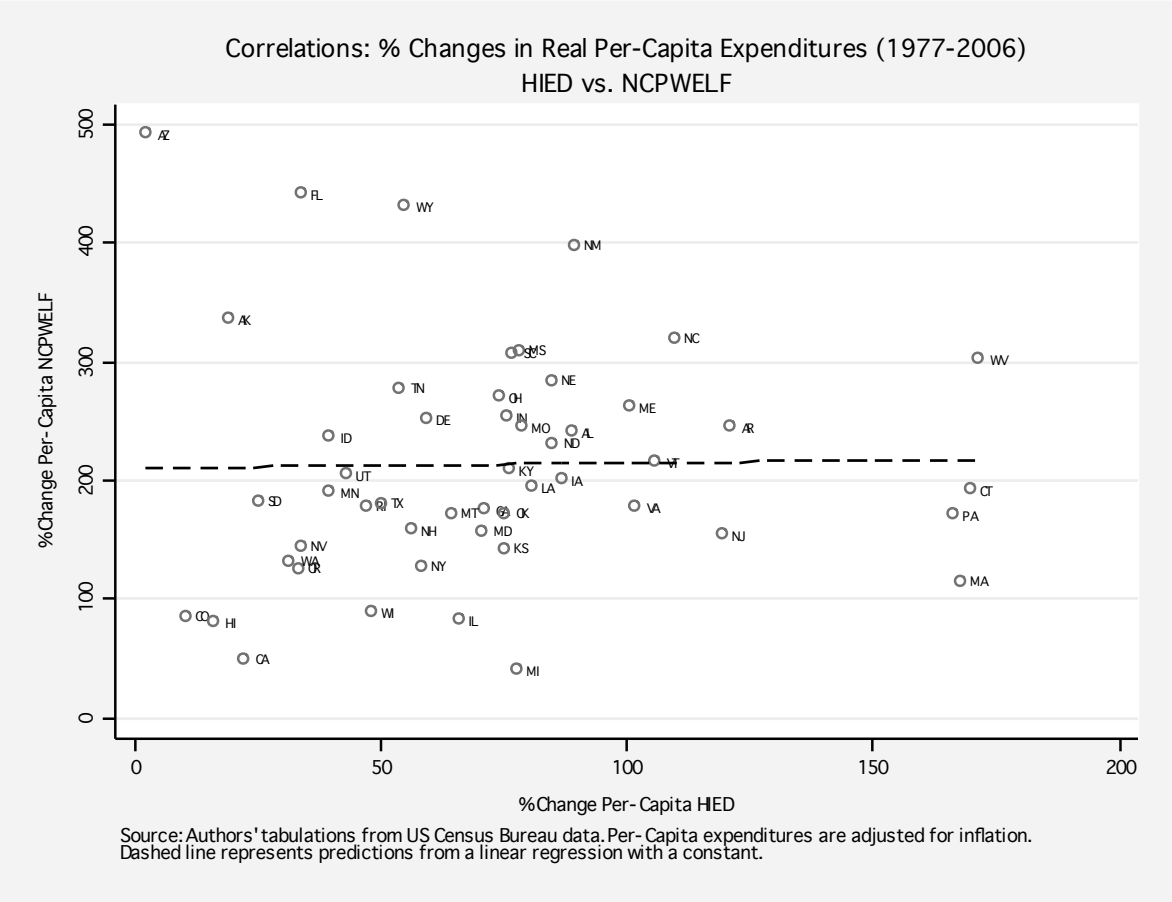
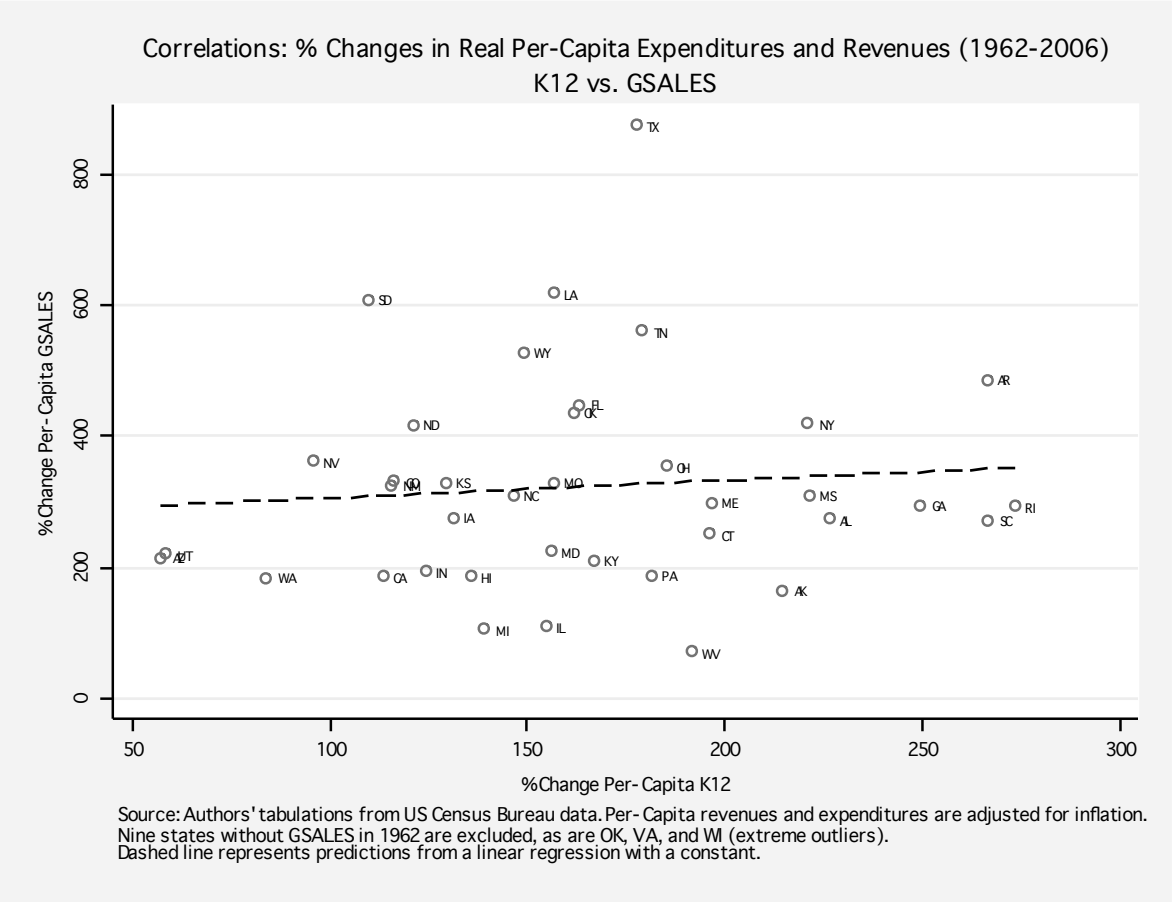
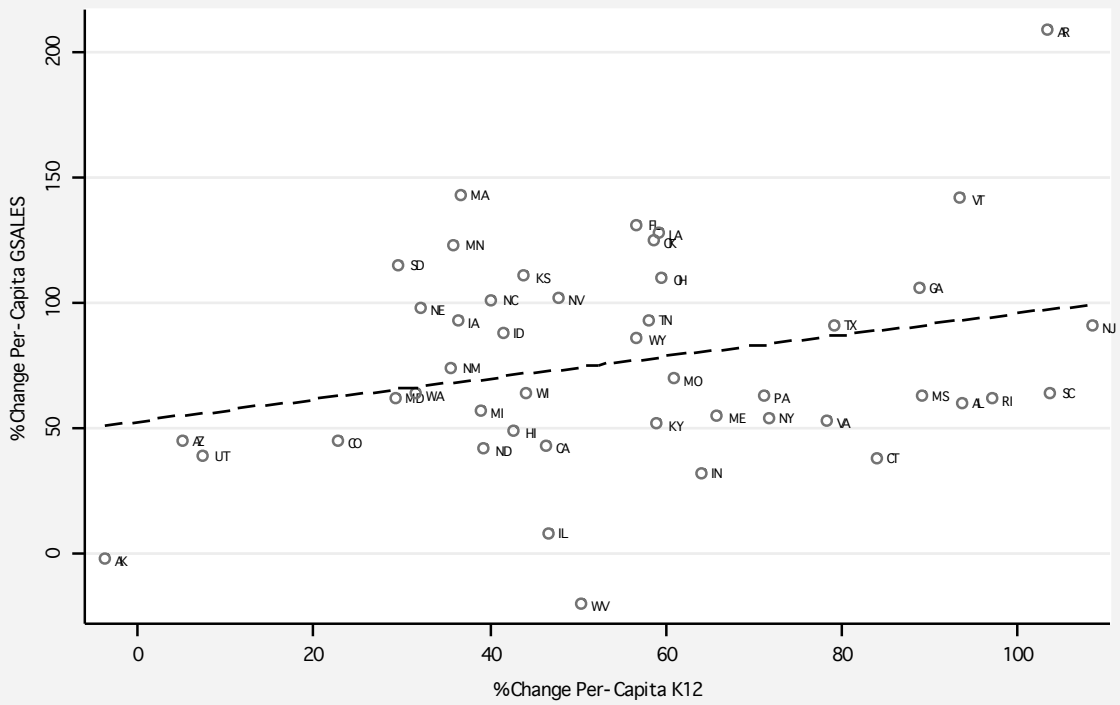

Correlations: % Changes in Real Per-Capita Expenditures (1977-2006)
HIED vs. NCPWELF
%Change Per-Capita NCPWELF
%Change Per-Capita HIED
0
100
200
300
400
500
0
50
100
150
200
AZ
FL
WY
NM
AK
NC
WV
TN
NE
DE
ME
AR
ID
MO
AL
ND
KY
LA
IA
CT
SD
MN
TX
MT
OK
VA
PA
NH
MD
NJ
NV
KS
NY
MA
WI
CO
HI
IL
CA
MI
Source: Authors' tabulations from US Census Bureau data. Per-Capita expenditures are adjusted for inflation.
Dashed line represents predictions from a linear regression with a constant.

Figure 74:



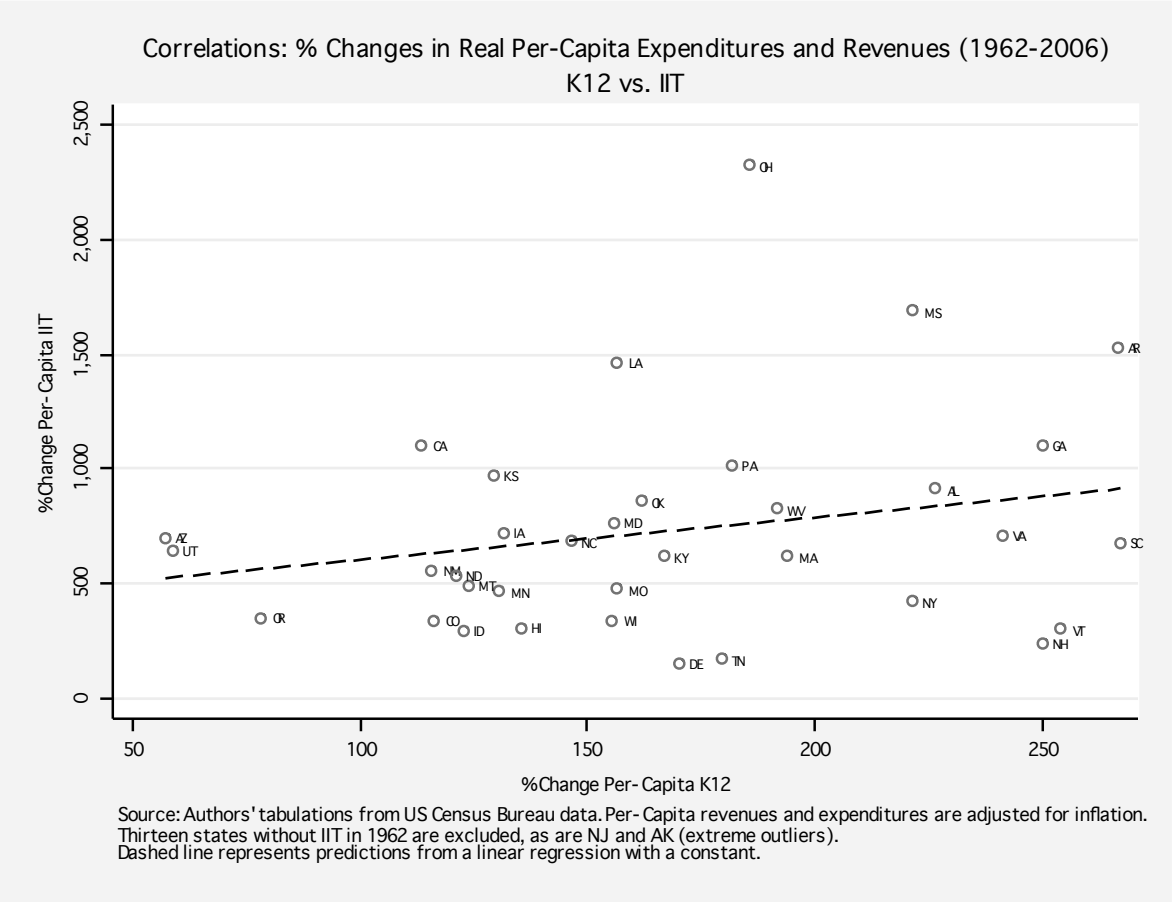
Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Nine states without GSALES in 1962 are excluded, as are OK, VA, and WI (extreme outliers).
Dashed line represents predictions from a linear regression with a constant.

Figure 75:



Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Nine states without GSALES in 1977 are excluded, as are OK, VA, and WI (extreme outliers).
Dashed line represents predictions from a linear regression with a constant.

Figure 76:



Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Thirteen states without IIT in 1962 are excluded, as are NJ and AK (extreme outliers).
Dashed line represents predictions from a linear regression with a constant.

Figure 77:

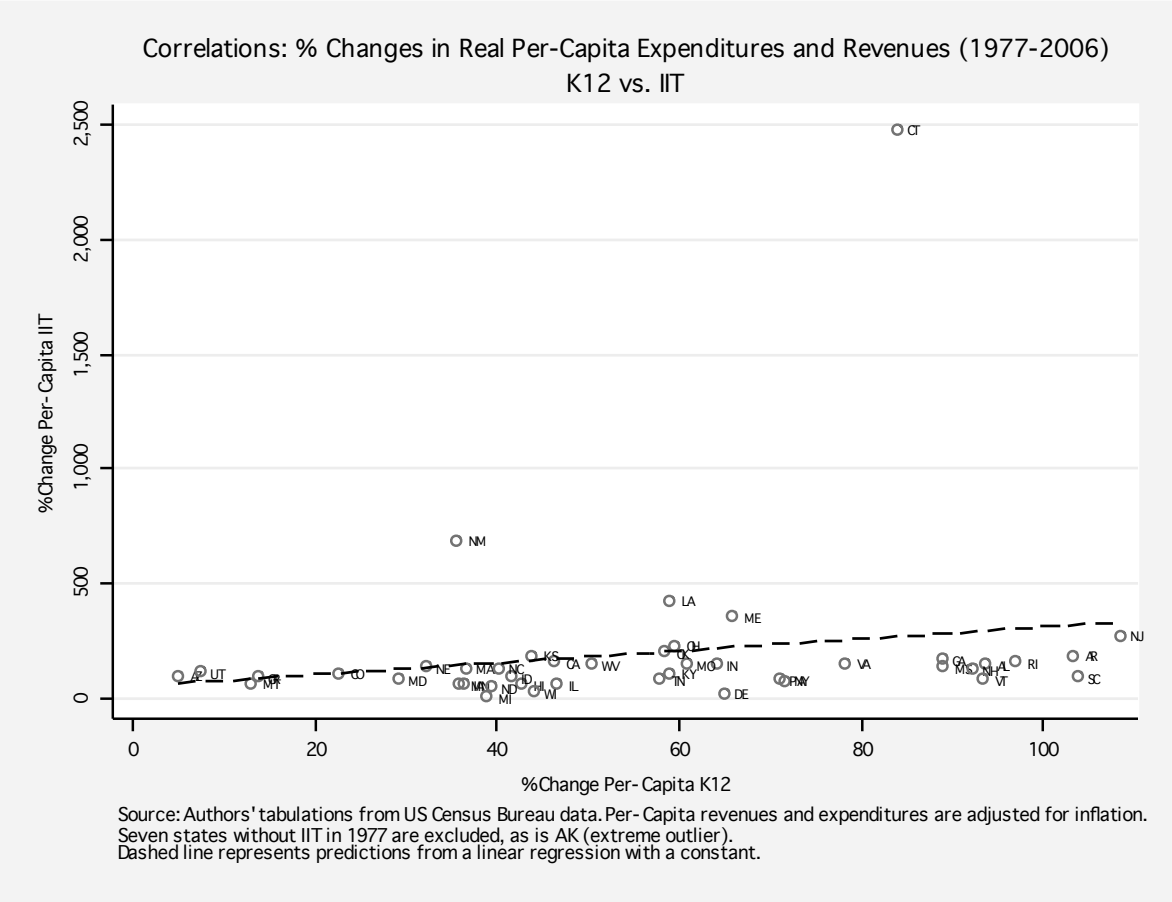

Correlations: % Changes in Real Per-Capita Expenditures and Revenues (1977-2006)
K12 vs. IIT
%Change Per-Capita IIT
0
500
1,000
1,500
2,000
2,500
%Change Per-Capita K12
0
20
40
60
80
100
CT
NM
LA
ME
NJ
AR
SC
RI
VA
DE
UT
CO
MD
NE
KS
CA
WV
IN
IL
Source: Authors' tabulations from US Census Bureau data. Per-Capita revenues and expenditures are adjusted for inflation.
Seven states without IIT in 1977 are excluded, as is AK (extreme outlier).
Dashed line represents predictions from a linear regression with a constant.

Figure 78:

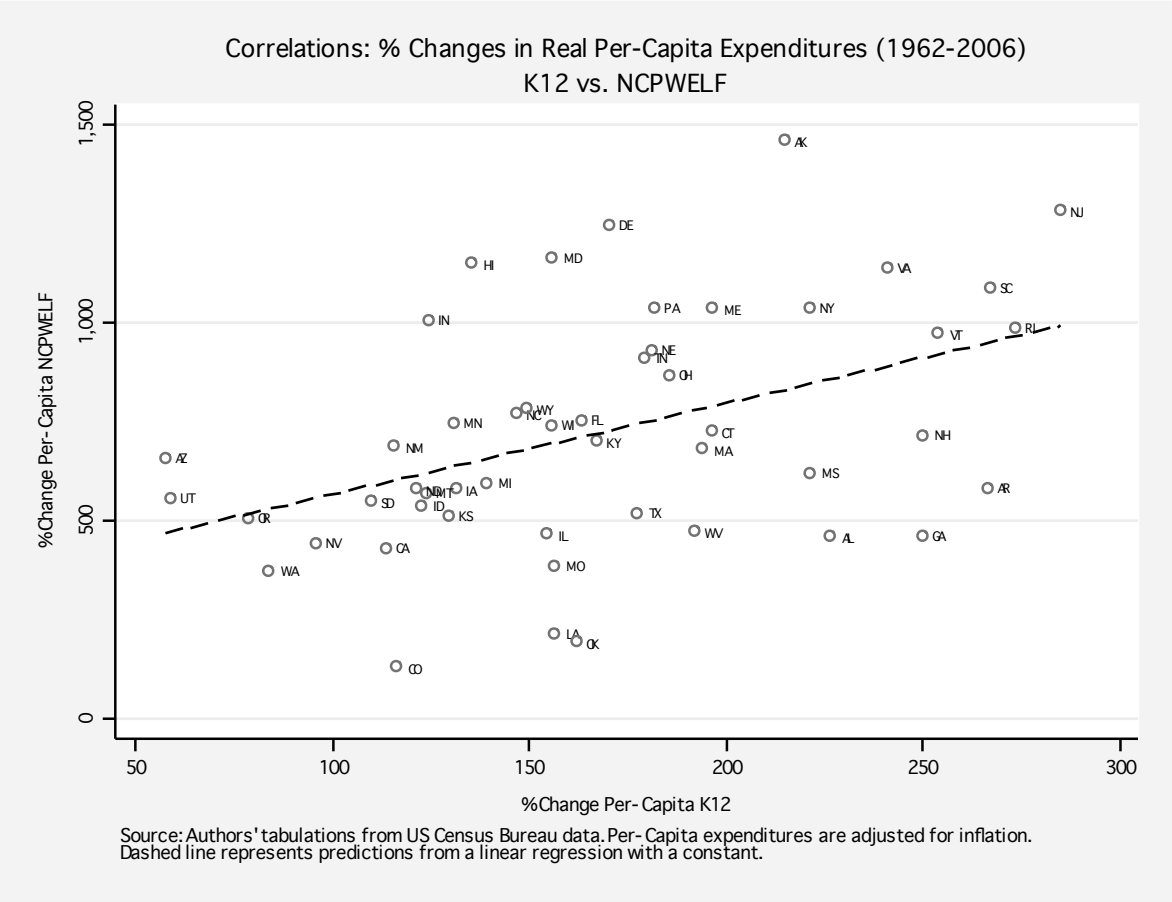
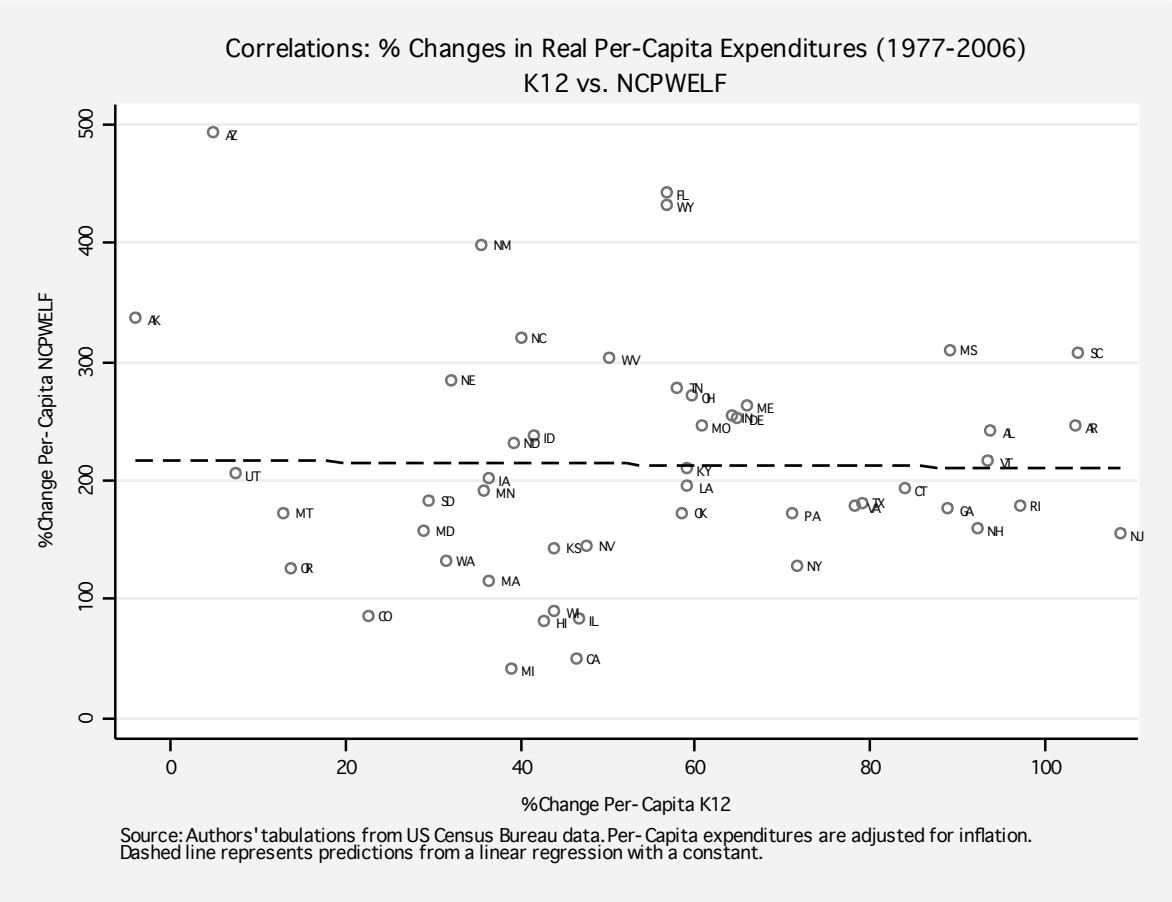

Correlations: % Changes in Real Per-Capita Expenditures (1962-2006)
K12 vs. NCPWELF
%Change Per-Capita NCPWELF
0
500
1,000
1,500
50
100
150
200
250
300
%Change Per-Capita K12
AK
NJ
DE
HI
MD
VA
SC
PA
ME
NY
IN
VT
RI
NE
IN
OH
WY
NC
MN
WI
FL
CT
NH
AZ
NM
KY
MA
MS
MI
UT
IA
AR
SD
ID
KS
TX
OR
NV
IL
WV
AL
GA
CA
WA
MO
LA
OK
CO
Source: Authors' tabulations from US Census Bureau data. Per-Capita expenditures are adjusted for inflation.
Dashed line represents predictions from a linear regression with a constant.

Figure 79:



Source: Authors' tabulations from US Census Bureau data. Per-Capita expenditures are adjusted for inflation.
Dashed line represents predictions from a linear regression with a constant.

Figure 80:

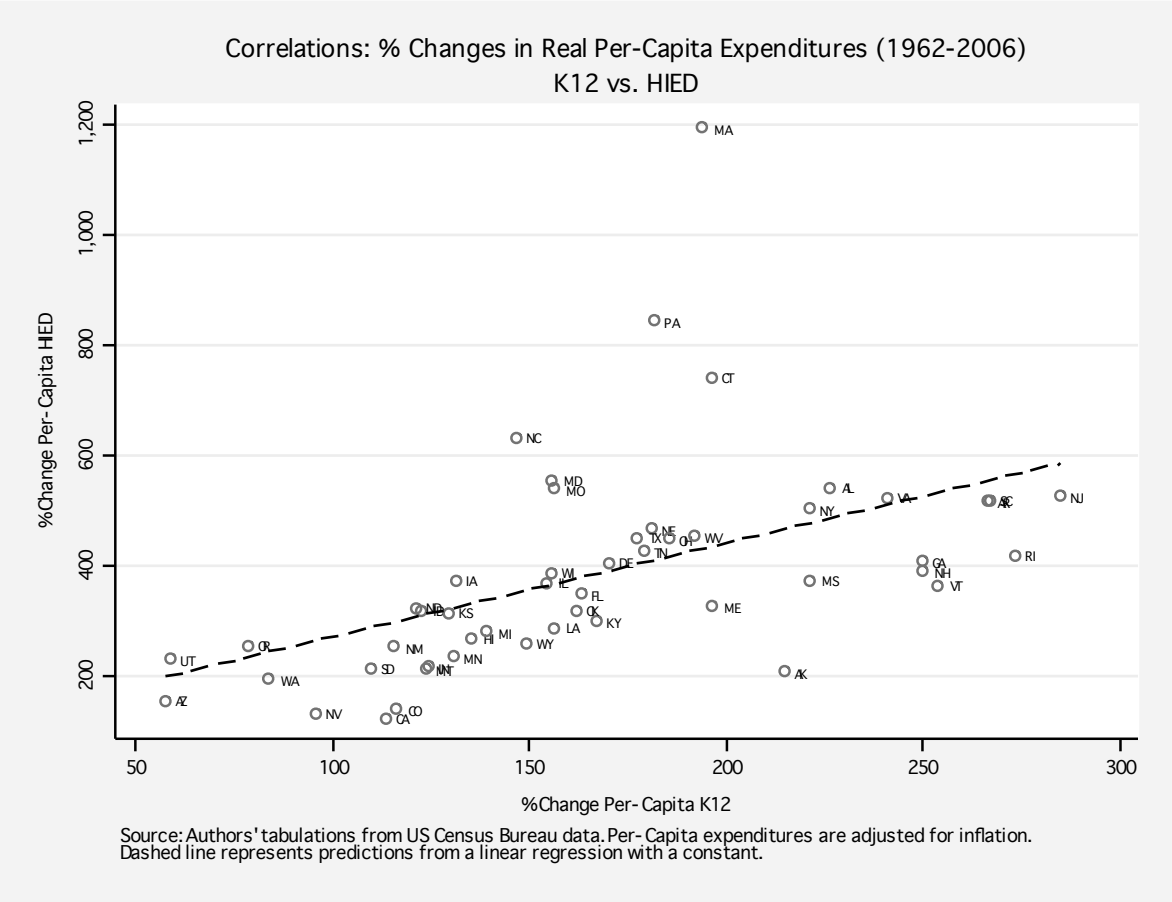
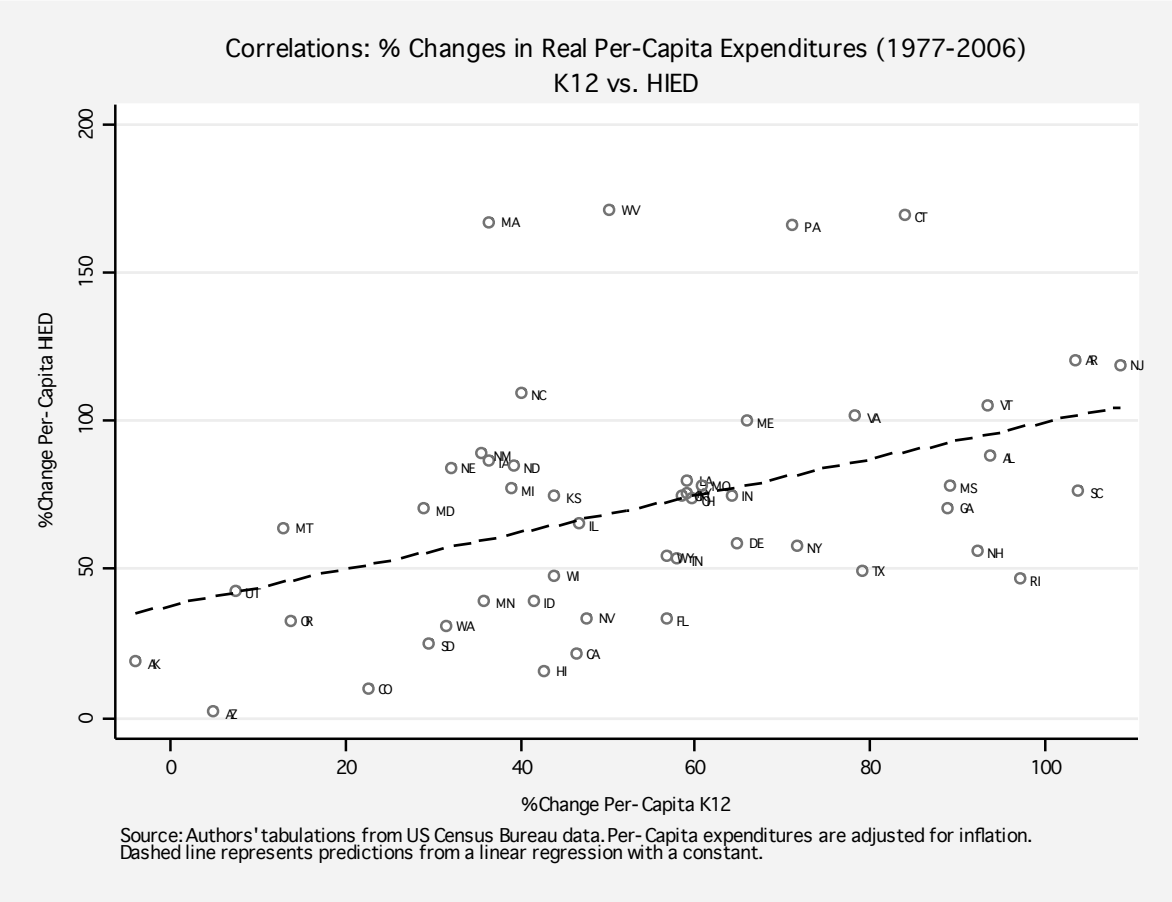

Correlations: % Changes in Real Per-Capita Expenditures (1962-2006)
K12 vs. HIED
%Change Per-Capita HIED
%Change Per-Capita K12
200
400
600
800
1,000
1,200
50
100
150
200
250
300
MA
PA
CT
NC
MD
MO
AL
NY
VA
NJ
RI
MS
ME
AK
WA
UT
OR
AZ
NV
CO
CA
IA
KS
FL
OK
KY
LA
MI
WY
MN
NM
SD
WV
DE
TN
GA
NH
VT
Source: Authors' tabulations from US Census Bureau data. Per-Capita expenditures are adjusted for inflation.
Dashed line represents predictions from a linear regression with a constant.

Figure 81:



Source: Authors' tabulations from US Census Bureau data. Per-Capita expenditures are adjusted for inflation.
Dashed line represents predictions from a linear regression with a constant.

Figure 82:

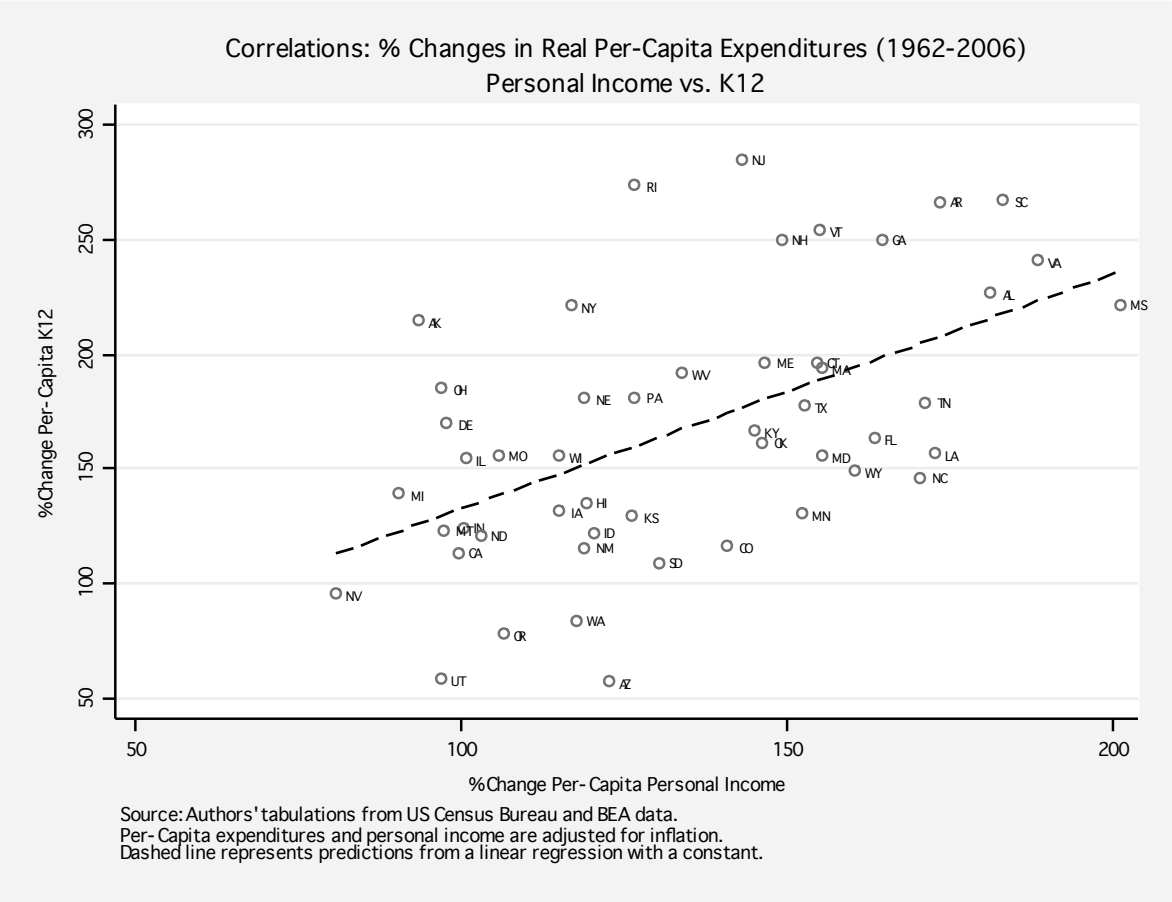
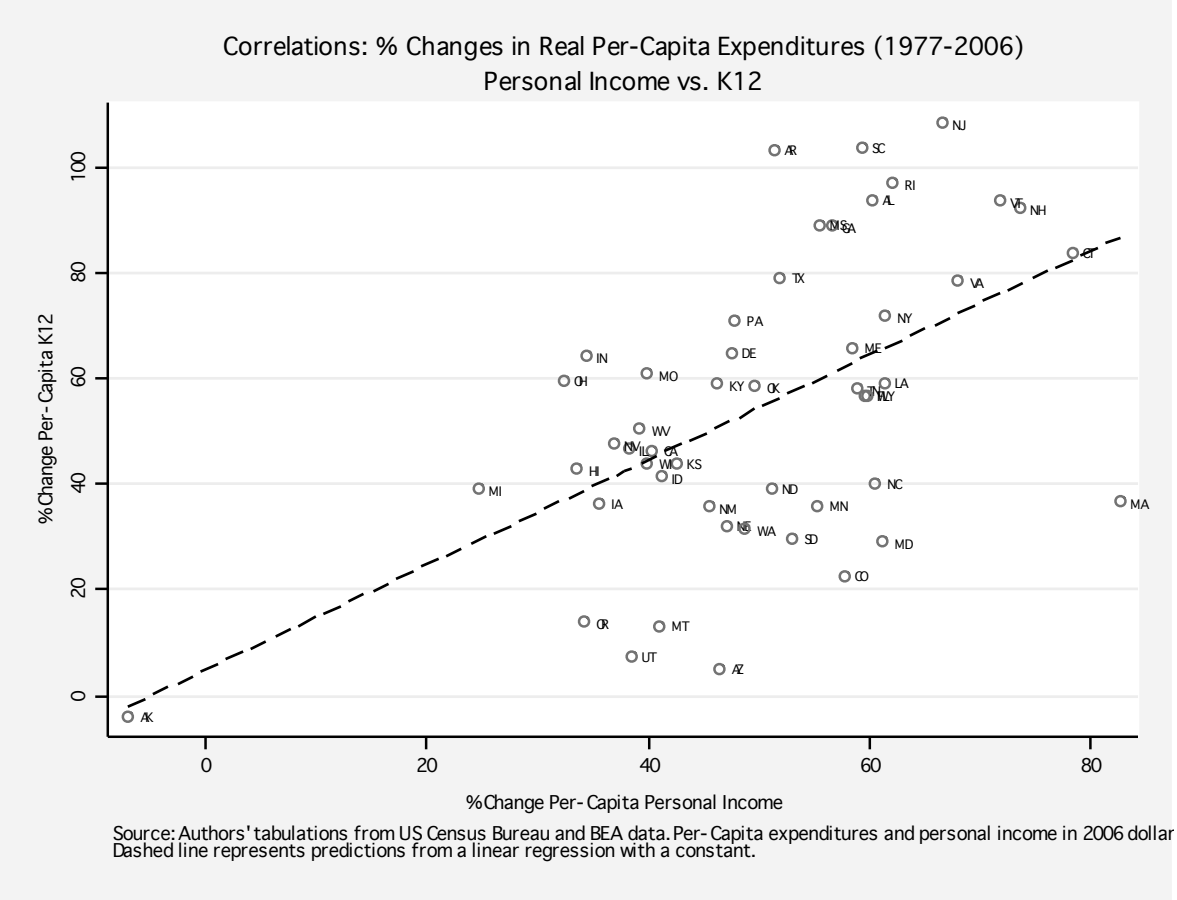

Correlations: % Changes in Real Per-Capita Expenditures (1962-2006)
Personal Income vs. K12
%Change Per-Capita K12
%Change Per-Capita Personal Income
50
100
150
200
300
250
200
150
100
50
NJ
RI
AR
SC
NH
VT
GA
VA
AL
MS
AK
NY
ME
CT
MA
WV
OH
NE
PA
TX
TN
DE
KY
OK
FL
IL
MO
WI
MD
LA
WY
NC
MI
HI
IA
KS
MN
MT
ND
ID
CA
NM
CO
SD
NV
WA
OR
UT
AZ
Source: Authors' tabulations from US Census Bureau and BEA data.
Per-Capita expenditures and personal income are adjusted for inflation.
Dashed line represents predictions from a linear regression with a constant.

Figure 83:



Source: Authors' tabulations from US Census Bureau and BEA data. Per-Capita expenditures and personal income in 2006 dollar
Dashed line represents predictions from a linear regression with a constant.

Figure 84:

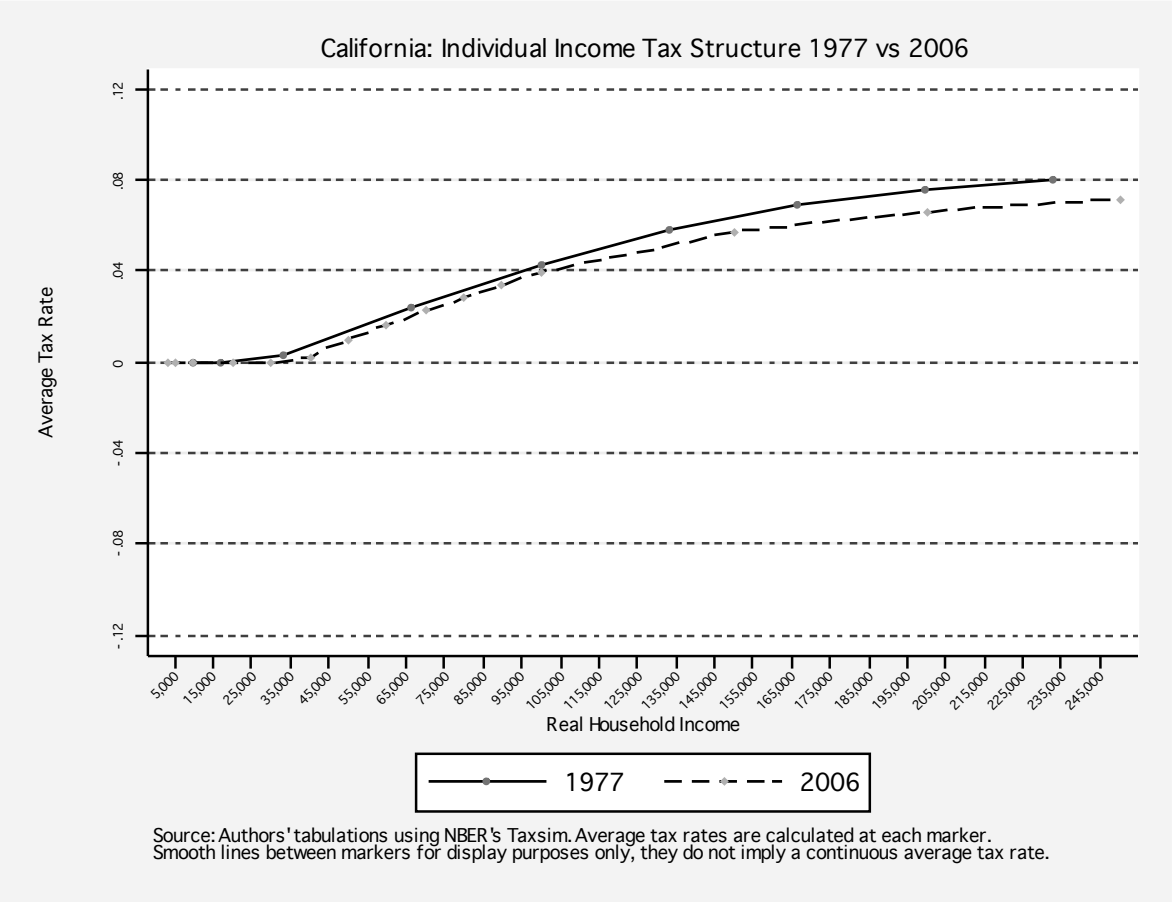

California: Individual Income Tax Structure 1977 vs 2006
Average Tax Rate
.12
.08
.04
0
-.04
-.08
-.12
5,000
15,000
25,000
35,000
45,000
55,000
65,000
75,000
85,000
95,000
105,000
115,000
125,000
135,000
145,000
155,000
165,000
175,000
185,000
195,000
205,000
215,000
225,000
235,000
245,000
Real Household Income
1977
2006
Source: Authors' tabulations using NBER's Taxsim. Average tax rates are calculated at each marker.
Smooth lines between markers for display purposes only, they do not imply a continuous average tax rate.

Figure 85:

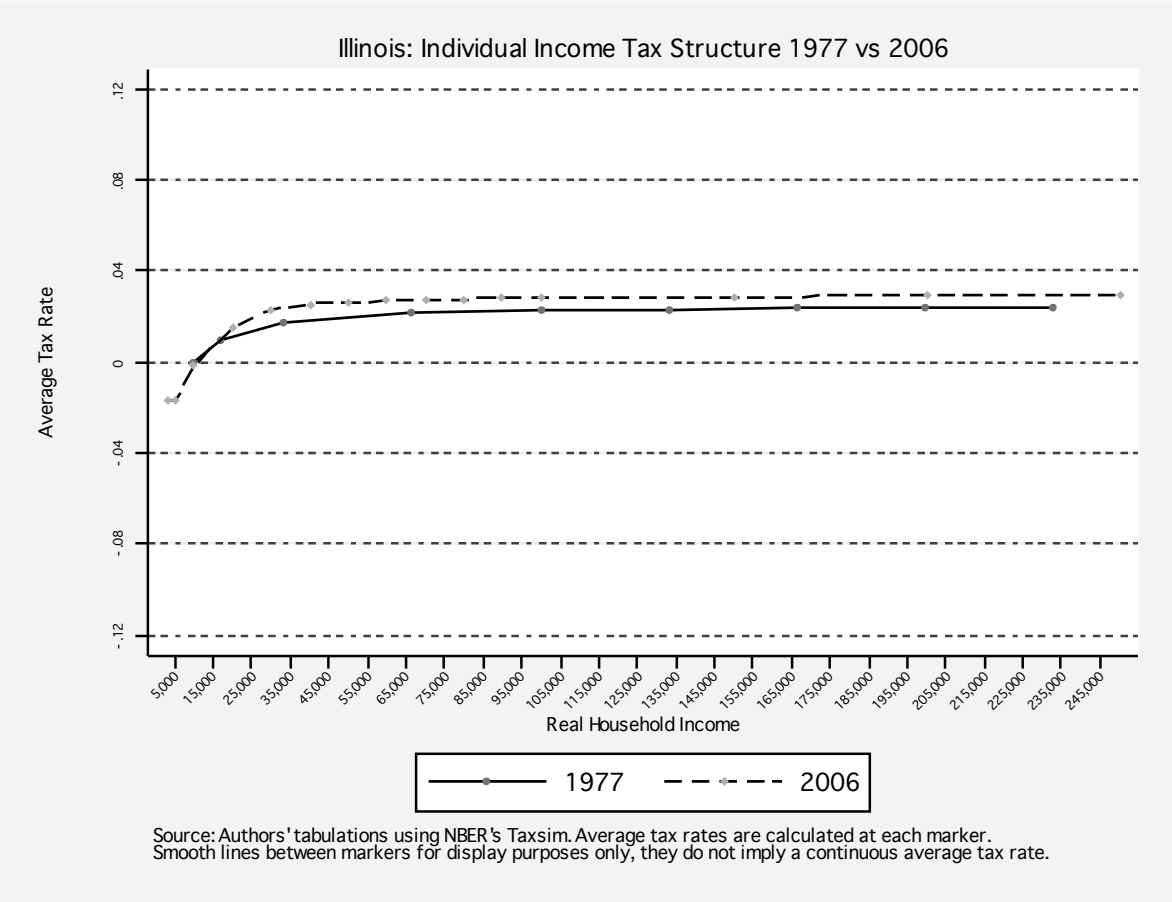

Illinois: Individual Income Tax Structure 1977 vs 2006
Average Tax Rate
.12
.08
.04
0
-.04
-.08
-.12
5,000
15,000
25,000
35,000
45,000
55,000
65,000
75,000
85,000
95,000
105,000
115,000
125,000
135,000
145,000
155,000
165,000
175,000
185,000
195,000
205,000
215,000
225,000
235,000
245,000
Real Household Income
1977
2006
Source: Authors' tabulations using NBER's Taxsim. Average tax rates are calculated at each marker.
Smooth lines between markers for display purposes only, they do not imply a continuous average tax rate.

Figure 86:

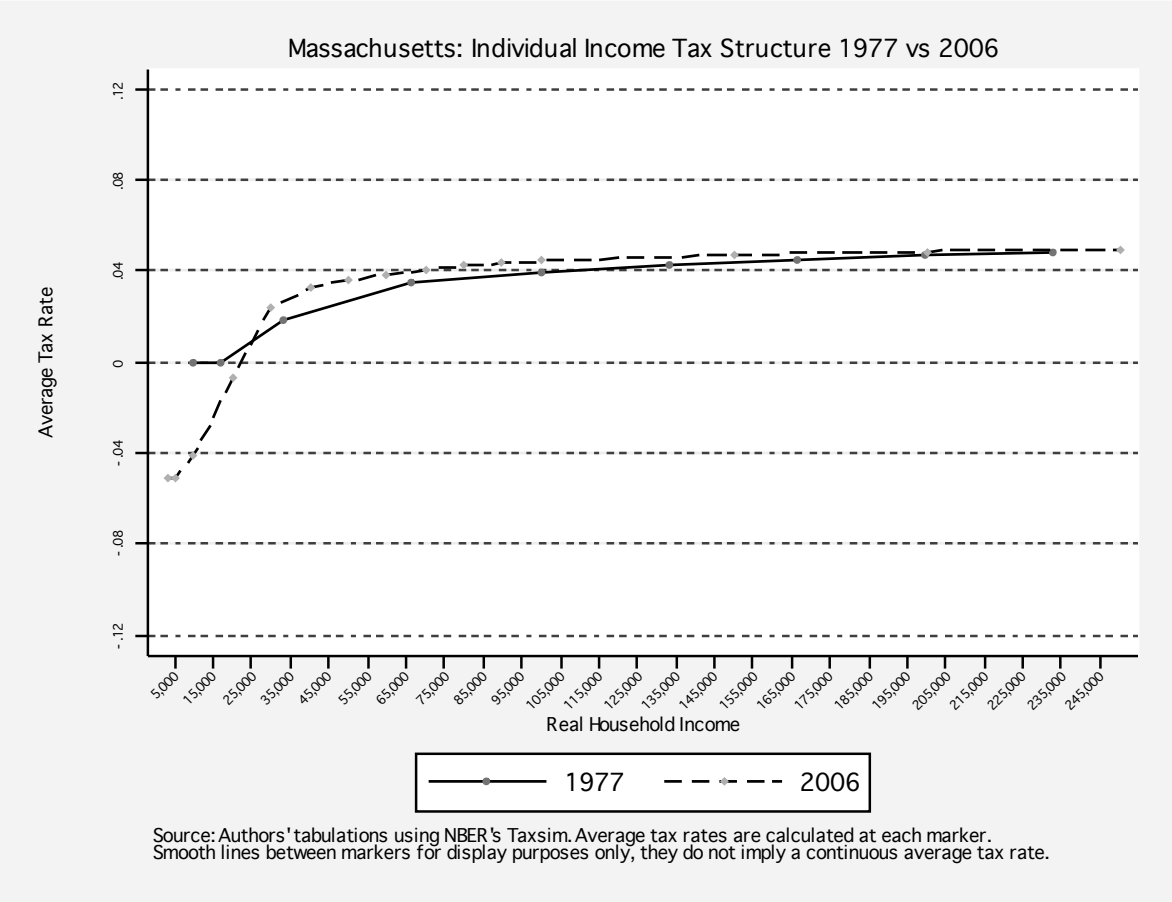

Massachusetts: Individual Income Tax Structure 1977 vs 2006
Average Tax Rate
.12
.08
.04
0
-.04
-.08
-.12
5,000
15,000
25,000
35,000
45,000
55,000
65,000
75,000
85,000
95,000
105,000
115,000
125,000
135,000
145,000
155,000
165,000
175,000
185,000
195,000
205,000
215,000
225,000
235,000
245,000
Real Household Income
1977
2006
Source: Authors' tabulations using NBER's Taxsim. Average tax rates are calculated at each marker.
Smooth lines between markers for display purposes only, they do not imply a continuous average tax rate.

Figure 87:

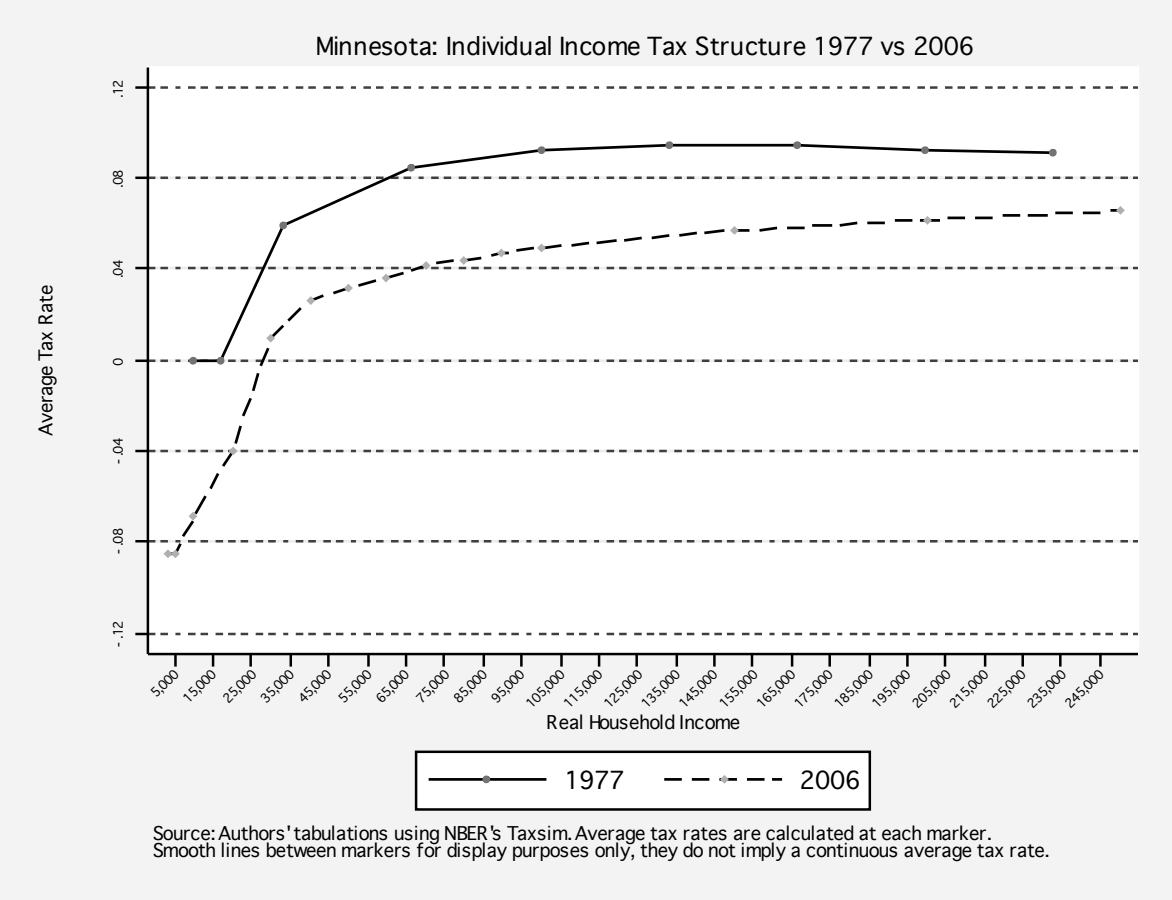

Minnesota: Individual Income Tax Structure 1977 vs 2006
Average Tax Rate
.12
.08
.04
0
-.04
-.08
-.12
5,000
15,000
25,000
35,000
45,000
55,000
65,000
75,000
85,000
95,000
105,000
115,000
125,000
135,000
145,000
155,000
165,000
175,000
185,000
195,000
205,000
215,000
225,000
235,000
245,000
Real Household Income
1977
2006
Source: Authors' tabulations using NBER's Taxsim. Average tax rates are calculated at each marker.
Smooth lines between markers for display purposes only, they do not imply a continuous average tax rate.

Figure 88:

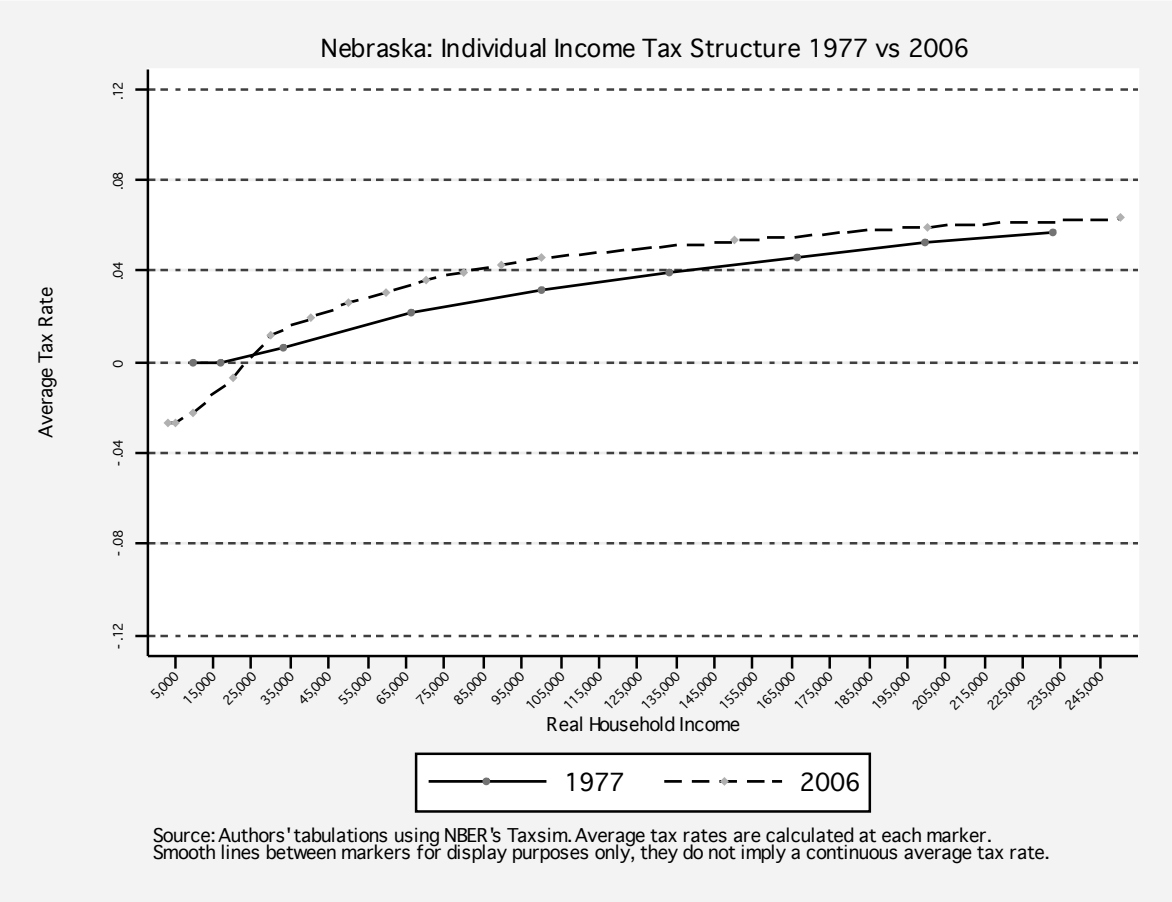

Nebraska: Individual Income Tax Structure 1977 vs 2006
Average Tax Rate
.12
.08
.04
0
-.04
-.08
-.12
5,000
15,000
25,000
35,000
45,000
55,000
65,000
75,000
85,000
95,000
105,000
115,000
125,000
135,000
145,000
155,000
165,000
175,000
185,000
195,000
205,000
215,000
225,000
235,000
245,000
Real Household Income
1977
2006
Source: Authors' tabulations using NBER's Taxsim. Average tax rates are calculated at each marker.
Smooth lines between markers for display purposes only, they do not imply a continuous average tax rate.

Figure 89:

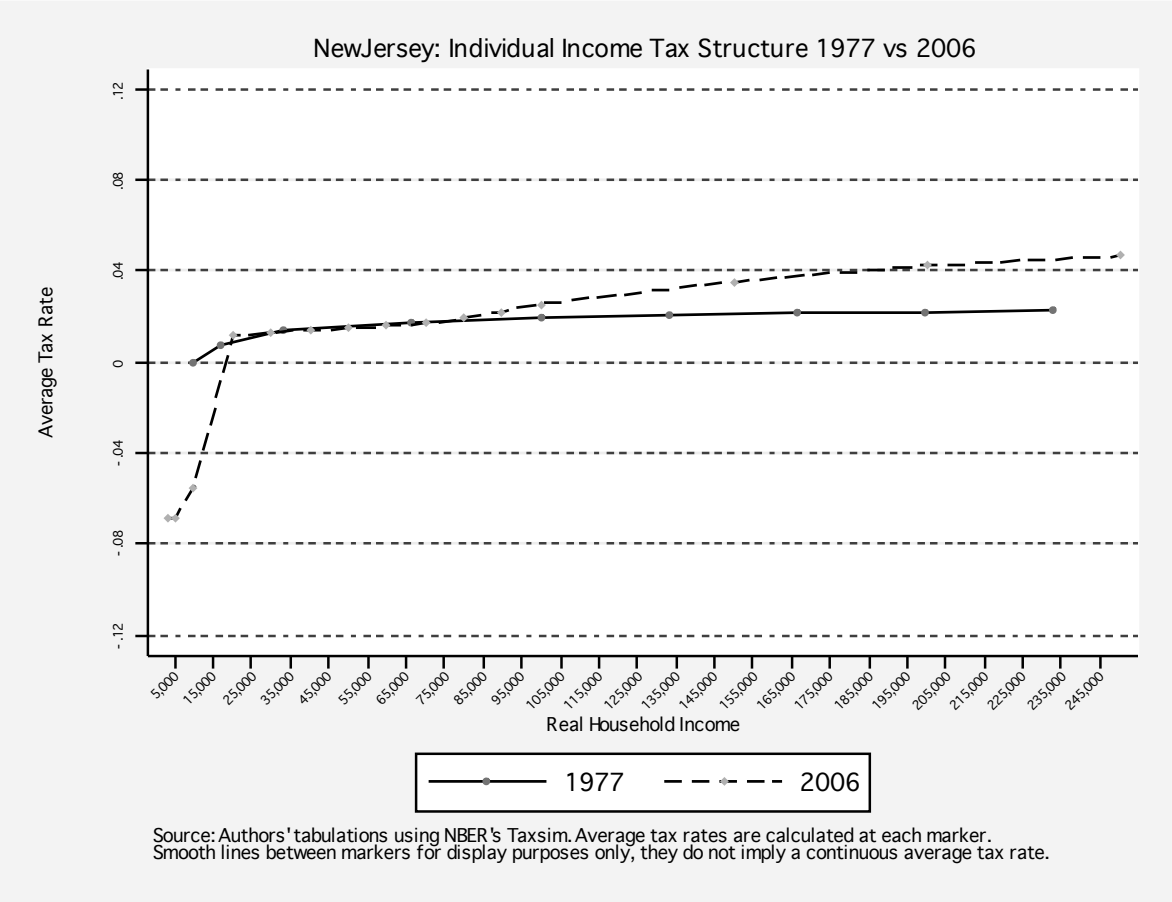

NewJersey: Individual Income Tax Structure 1977 vs 2006
Average Tax Rate
.12
.08
.04
0
-.04
-.08
-.12
5,000
15,000
25,000
35,000
45,000
55,000
65,000
75,000
85,000
95,000
105,000
115,000
125,000
135,000
145,000
155,000
165,000
175,000
185,000
195,000
205,000
215,000
225,000
235,000
245,000
Real Household Income
1977
2006
Source: Authors' tabulations using NBER's Taxsim. Average tax rates are calculated at each marker.
Smooth lines between markers for display purposes only, they do not imply a continuous average tax rate.

Figure 90:

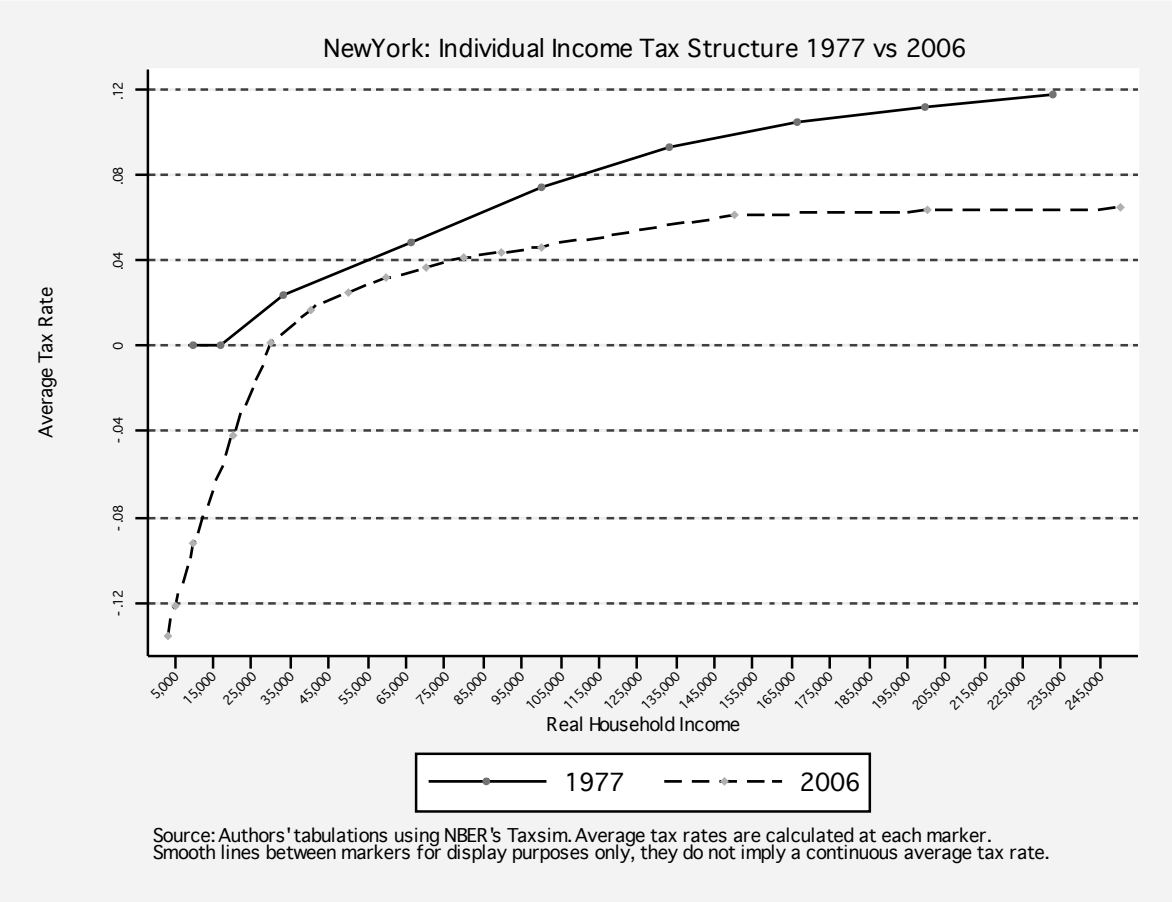

NewYork: Individual Income Tax Structure 1977 vs 2006
Average Tax Rate
.12
.08
.04
0
-.04
-.08
-.12
5,000
15,000
25,000
35,000
45,000
55,000
65,000
75,000
85,000
95,000
105,000
115,000
125,000
135,000
145,000
155,000
165,000
175,000
185,000
195,000
205,000
215,000
225,000
235,000
245,000
Real Household Income
1977
2006
Source: Authors' tabulations using NBER's Taxsim. Average tax rates are calculated at each marker.
Smooth lines between markers for display purposes only, they do not imply a continuous average tax rate.

Figure 91:

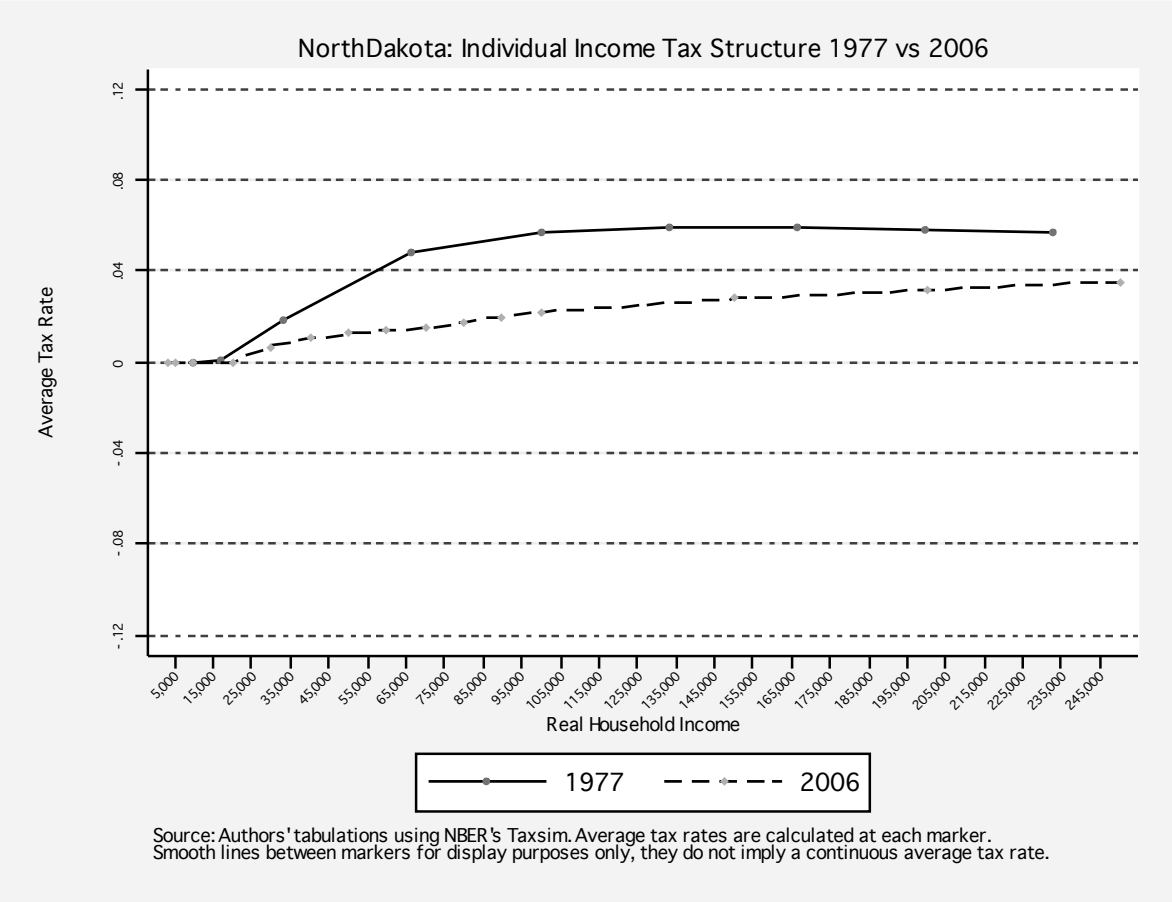

NorthDakota: Individual Income Tax Structure 1977 vs 2006
Average Tax Rate
.12
.08
.04
0
-.04
-.08
-.12
5,000
15,000
25,000
35,000
45,000
55,000
65,000
75,000
85,000
95,000
105,000
115,000
125,000
135,000
145,000
155,000
165,000
175,000
185,000
195,000
205,000
215,000
225,000
235,000
245,000
Real Household Income
1977
2006
Source: Authors' tabulations using NBER's Taxsim. Average tax rates are calculated at each marker.
Smooth lines between markers for display purposes only, they do not imply a continuous average tax rate.

Table 1:

Revenue and Expenditure Shares (2006)
State + Local Sample Summary Statistics

Category	*minimum*	*maximum*	*median*	*mean*	*std dev*
		Revenues			
PROP	8.46% NM	43.18% NH	19.54% WY	20.58%	7.06
GSALES	0%*	31.72% WA	14.87% MI	18.12%	7.68
SSALES	2.88% WY	17.10% NV	7.65% CT	7.65%	2.65
IIT	0%**	29.01% MD	15.96% RI	17.21%	7.83
CIT	0%***	9.54% AK	2.60% CT	2.99%	1.80
EDFEES	2.06% AK	10.99% ND	6.75% OR	5.82%	2.11
HOFEES	0.01% VT	16.9% SC	4.70% HI	5.05%	4.19
CHARGEO	4.31% WY	15.22% IN	7.91% AZ	8.82%	2.24
TAXO	2.2% IN	24.17% WY	5.17% KY	5.88%	4.49
MISREV	7.97% MS	46.29% AK	11.61% NY	11.66%	5.71
		Expenditures			
HIED	5.02% NY	15.28% UT	10.3% CO	9.28%	2.38
K12	19.20% AK	30.79% NJ	22.79% WV	23.64%	2.47
NCPWELF	10.95% WY	26.53% RI	16.79% AL	17.30%	3.49
MEDICAID	7.51% NV	20.99% RI	12.37% MD	12.85%	3.17
HEALTH	2.21% NH	16.78% AL	7.65% TX	8.58%	3.51
HIWAYS	4.30% MA	14.33% SD	7.17% OK	6.49%	2.27
POFICO	4.66% ND	11.34% NV	7.48% OH	8.25%	1.48
NATURE	1.25% MA	6.40% ND	2.72% KS	2.86%	1.25
GOVADM	3.76% AL	8.17% DE	5.27% AR	5.21%	1.08
SANITA	1.58% AK	3.91% HI	2.61% PA	2.89%	0.61
GEXPNEC	2.52% SC	13.55% AK	4.61% MD	5.23%	2.40

Note: Authors' tabulations based on Census Bureau data. Percentages represent the share of all state and local government general purpose own revenues or the share of all state and local government direct general expenditures. *Mean* is the population-weighted mean.

* Four states (DE, MT, NH, OR) did not have any state or local GSALES.

** Seven states (AK, FL, NV, SD, TX, WA, WY) did not have any state or local IIT. NH and TN tax only dividend and interest income.

*** Two states (NV, WY) do not have any state or local CIT.

NCPWELF represents non-cash public welfare expenditures and includes MEDICAID. POFICO includes police, fire, and correctional expenditures. CHARGEO includes all current charges that are not for hospitals or education. MISREV includes donations from private sector, fines and forfeits, interest earnings, net lotto revenue, special assessments, rents, royalties, property sales, and miscellaneous general revenue not elsewhere classified. TAXO includes death and gift tax, documentary and stock transfer tax, license taxes, severance taxes, and taxes not elsewhere classified.

Table 2:

Revenue and Expenditure Shares (1962)
State + Local Sample Summary Statistics

Category	*minimum*	*maximum*	*median*	*mean*	*std dev*
		Revenues			
PROP	12.71% HI	55.05% NJ	37.28% OR	36.68%	11.87
GSALES	0%*	30.16% HI	12.43% LA	14.84%	8.19
SSALES	9.45% OR	24.84% AL	15.83% MT	15.34%	4.12
IIT	0%**	24.58% DE	4.90% OK	7.57%	5.71
CIT	0%***	6.25% NC	2.28% MD	3.46%	1.85
EDFEES	1.63% NY	8.27% NC	5.37% OH	4.67%	1.72
HOFEES	0% AK	6.39% GA	2.15% WI	2.32%	1.56
CHARGEO	2.81% VT	13.7% ND	5.70% AL	5.83%	2.01
TAXO	4.57% HI	24.23% LA	9.32% ME	9.52%	3.86
MISREV	2.01% MA	29.59% AK	4.94% MD	5.00%	4.35
		Expenditures			
HIED	1.88% MA	12.39% NM	7.63% AK	6.64%	2.36
K12	22.27% HI	35.53% IN	28.89% FL	29.6%	3.27
NCPWELF	3.1% HI	19.38% OK	7.42% TN	8.03%	3.15
MEDICAID	.%	.%	.%	.%	.
HEALTH	3.09% SD	11.12% GA	6.61% WI	7.12%	1.68
HIWAYS	8.84% HI	34.71% VT	18.93% MO	17.53%	5.31
POFICO	3.08% ND	9.65% MA	5.51% IN	6.53%	1.61
NATURE	1.84% MA	7.59% ID	3.58% NJ	3.59%	1.27
GOVADM	3.45% KY	6.66% FL	4.52% IN	4.80%	0.74
SANITA	0.99% SD	4.76% WI	2.67% UT	3.22%	1.00
GEXPNEC	1.81% TX	12.8% HI	3.26% PA	3.79%	2.32

Note: Authors' tabulations based on Census Bureau data. Percentages represent the share of all state and local government general purpose own revenues or the share of all state and local government direct general expenditures. *Mean* is the population-weighted mean.

* Nine states (DE, ID, MA, MN, MT, NE, NH, NJ, VT) did not have any state or local GSALES.

** Thirteen states (CT, FL, IL, IN, ME, MI, NE, NV, RI, SD, TX, WA, WY) did not have any state or local IIT. NH and TN tax only dividend and interest income.

*** Fourteen states (FL, IL, IN, ME, MI, NE, NH, NM, NV, OH, TX, WA, WV, WY) do not have any state or local CIT.

See notes from Table 1 for additional notes on categories. MEDICAID does not exist in 1962.

Table 3:

Real Per Capita Revenue and Expenditure Levels (2006)
State + Local Sample Summary Statistics

Category	*minimum*	*maximum*	*median*	*mean*	*std dev*
		Revenues			
PROP	$420 AL	2,371 NJ	1,074 MD	1,198	473
GSALES	0*	1,853 WA	841 MO	1,024	409
SSALES	272 GA	974 NV	394 AK	433	143
IIT	0**	2,002 NY	835 ID	1,041	500
CIT	0***	1,214 AK	144 AZ	184	177
EDFEES	201 FL	650 VT	350 AR	324	103
HOFEES	0.4 VT	1,334 WY	262 MO	280	246
CHARGEO	205 MS	1,026 AK	429 MI	515	171
TAXO	120 GA	2,348 WY	283 IL	341	434
MISREV	353 MS	5,891 AK	656 IN	678	770
		Expenditures			
HIED	$412 FL	1,071 VT	675 AR	641	161
K12	1,217 TN	2,655 AK	1,562 CO	1,671	314
NCPWELF	713 NV	2,230 NY	1,143 OK	1,240	348
MEDICAID	485 NV	1,695 NY	843 WI	916	282
HEALTH	137 NH	1,752 WY	516 AK	605	277
HIWAYS	291 GA	1,926 AK	466 WA	453	255
POFICO	318 WV	833 CA	480 TX	586	128
NATURE	98 RI	627 WY	196 IA	201	108
GOVADM	228 TX	985 AK	360 MA	371	129
SANITA	102 NV	306 NY	183 LA	206	50
GEXPNEC	169 SC	1,873 AK	317 CO	385	283

Note: Authors' tabulations based on Census Bureau data. *Mean* is the population-weighted mean. All figures are in 2006 dollars.

* Four states (DE, MT, NH, OR) did not have any state or local GSALES.

** Seven states (AK, FL, NV, SD, TX, WA, WY) did not have any state or local IIT. NH and TN tax only dividend and interest income.

*** Two states (NV, WY) do not have any state or local CIT.

See notes from Table 1 for additional notes on categories.

Table 4:

Real Per Capita Revenue and Expenditure Levels (1962)
State + Local Sample Summary Statistics

Category	*minimum*	*maximum*	*median*	*mean*	*std dev*
		Revenues			
PROP	$178 AL	1,093 MA	664 OH	682	257
GSALES	0*	652 WA	205 TN	265	150
SSALES	186 OR	533 NV	263 SD	266	60
IIT	0**	493 DE	79 OK	146	116
CIT	0***	115 NY	40 OK	65	34
EDFEES	40 NY	151 CO	89 OH	79	26
HOFEES	0 AK	143 WY	36 TX	39	26
CHARGEO	42 NC	272 ND	92 NH	107	51
TAXO	75 GA	418 LA	153 CO	167	79
MISREV	32 WV	721 AK	85 NY	91	106
		Expenditures			
HIED	$43 MA	300 CA	153 MS	145	68
K12	401 AR	889 WY	629 IL	636	124
NCPWELF	71 VA	390 OK	159 GA	173	62
MEDICAID	.	.	.	.	.
HEALTH	70 SD	265 NY	134 MO	154	47
HIWAYS	255 HI	1,012 WY	390 TN	370	164
POFICO	58 MS	244 NV	112 ME	144	47
NATURE	38 SC	201 WY	77 ME	80	43
GOVADM	55 SC	207 AK	97 MI	105	34
SANITA	23 SD	112 WA	61 UT	69	24
GEXPNEC	32 AR	370 HI	69 FL	84	67

Note: Authors' tabulations based on Census Bureau data. *Mean* is the population-weighted mean. All figures are in 2006 dollars.
* Nine states (DE, ID, MA, MN, MT, NE, NH, NJ, VT) did not have any state or local GSALES.
** Thirteen states (CT, FL, IL, IN, ME, MI, NE, NV, RI, SD, TX, WA, WY) did not have any state or local IIT. NH and TN tax only dividend and interest income.
*** Fourteen states (FL, IL, IN, ME, MI, NE, NH, NM, NV, OH, TX, WA, WV, WY) do not have any state or local CIT.
See notes from Table 1 for additional notes on categories. MEDICAID does not exist in 1962.

Table 5:

Coefficients of Variation (1962, 1977, 1992, 2006)
State + Local Sample Summary Statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Category	*1962*	*1977*	*1992*	*2006*	$\Delta 1962-77$	$\Delta 1977-2006$	$\Delta 1962-2006$
				Revenues			
PROP	.34	.35	.36	.36	.01	.01	.02
GSALES	.48	.36	.34	.37	-.12	.01	-.11
SSALES	.26	.29	.37	.33	.03	.04	.07
IIT	.66	.47	.43	.35	-.19	-.12	-.31
CIT	.47	.38	.44	.57	-.09	.19	.10
EDFEES	.33	.35	.36	.32	.02	-.03	-.01
HOFEES	.64	.67	.80	.84	.03	.17	.20
CHARGEO	.34	.34	.26	.27	0.0	-.07	-.07
TAXO	.39	.57	.64	.66	.18	.09	.27
MISREV	.72	.37	.46	.44	-.35	.07	-.28
				Expenditures			
HIED	.32	.26	.26	.24	-.06	-.02	-.08
K12	.11	.10	.12	.11	-.01	.01	0.0
NCPWELF	.40	.33	.26	.20	-.07	-.13	-.20
MEDICAID	.	.41	.29	.24	.	-.17	.
HEALTH	.25	.32	.40	.43	.07	.11	.18
HIWAYS	.26	.34	.27	.30	.08	-.04	.04
POFICO	.28	.22	.24	.20	-.06	-.02	-.08
NATURE	.33	.32	.35	.40	-.01	.08	.07
GOVADM	.16	.20	.16	.20	.04	0.0	.04
SANITA	.35	.34	.28	.23	-.01	-.11	-.12
GEXPNEC	.57	.38	.64	.46	-.19	.08	-.11

Note: Authors' tabulations based on Census Bureau data. Columns (1) through (4) display the coefficient of variation for various revenue and expenditure shares across states for each year. The coefficient of variation is the ratio of the standard deviation to the mean. Columns (5) through (7) report level changes in the coefficient variation over three different time periods.
States without any revenues or expenditures classified under any category are excluded from the calculation of the mean and standard deviation of shares. See notes from Table 1 for additional notes on the definitions of categories. MEDICAID does not exist in 1962.