
Distributional and Economic Effects of Pennsylvania's Local Property Taxes

Robert P. Strauss*

March 20, 2000

Testimony at
Equity Funding Hearing
Senate Education Committee
Room 8EB
Capitol East Wing
The Capitol
1:00-5:00 PM
March 22, 2000
Harrisburg, Pennsylvania

* The author is Professor of Economics and Public Policy at The H. John Heinz III. School of Public Policy and Management, Carnegie-Mellon University, Pittsburgh, Pennsylvania, 15213-3890. *E-Mail Address:* RS9F@Andrew.CMU.Edu; *Home Page:* <http://www.heinz.cmu.edu/~rs9f/> The findings, views and opinions are solely those of the author and do not represent those of Carnegie-Mellon University or its Board of Trustees.

Contents

1	Introduction	3
2	Some Definitions and Facts about Property Taxes and Economic Development in Pennsylvania	5
2.1	Some Definitions and Pennsylvania's Tax Structure	5
2.2	A Definition of Economic Development and A Long View of Pennsylvania's Economy	6
3	How Local Property Taxes affect Our Standard of Living	9
3.1	Why We Tax Ourselves	9
3.2	Do Local Property Taxes Affect Household and Business Location Decisions?	9
3.3	Defining Distributional Effects and The Case of Local Real Estate Taxes	11
3.3.1	Defining Equity for Tax Analysis Purposes	11
3.3.2	Is the Local Real Estate Tax Progressive, Regressive or Proportional?	12
3.3.3	Widow Jones vs. The Smith Family's Property Taxes	13
4	Why Do Taxpayers Hate the Property Tax So Much?	16
4.1	Four Reasons for Public Outcry against the Property Tax	16
4.2	The Rising Residential Share in Pennsylvania Counties	18
4.3	The Rising Residential Share of Assessed Value in Pennsylvania School Districts	20
5	The Quality of Residential Property Assessment: Allegheny County	24
5.1	Property Tax Horizontal Inequities: 1994 Data	24
5.2	Property Tax Horizontal Inequities: 1998 Data	26
6	If We Had A Clean Piece of Paper to Redesign Education Finance, then What?	29
6.1	A Purely Normative Analysis of Educational Finance	29
6.2	Realism and the Property Tax	30
6.3	Replacing the School Property Tax with An Income Tax	31
6.4	The Political Economy of Moving from the Property Tax to the Income Tax	32
7	Some Final Things to Think About	34
8	References	36

List of Tables

1	Hypothetical Table of Data Showing Regressivity of Property Tax	13
2	Residential Property's Share of Total Assessed Value in 18 States	17
3	Shift in Composition of Pennsylvania's Property Tax Base: County Aggregates 1977-94	18
4	Shift in Composition of Pennsylvania's School District Property Tax Base: 1977-94 .	20
5	Quality of 1994 Assessments in Allegheny County: Distribution of Assessed to Actual Sales Price Ratios	26
6	Quality of 1998 Assessments in Allegheny County: Distribution of Assessed to Actual Sales Price Ratios	28

List of Figures

1	Pennsylvania Per capita Income and Wages as % of US	8
2	Pennsylvania's Population Share of US: 1929-97 (1929=100%)	10

1 Introduction

Chairman Rhoades, and members of the Senate Education Committee, I want to thank you for the opportunity to testify before you this afternoon on the economic and distributional effects of real estate taxes in Pennsylvania. As you may know, I have since moving in 1979 to Carnegie-Mellon been involved in numerous tax policy projects. Their overall purpose has been to rationalize the way local governments, especially school districts, finance themselves, with the overall objective of improving not only the fairness by which local services are financed, but also improving the certainty by which local governments are funded, and, ultimately, the attractiveness of Pennsylvania as place to invest, work, and live.

Either I have been unsuccessful in finding acceptable solutions to local finance problems, or they keep cropping up faster than one can do anything about them! Here is a list of my involvements in various local finance reform efforts primarily in Pennsylvania (but also in New York State):

- Director of Research Pennsylvania Tax Commission, 1979-81
- Member, Allegheny County Tax Study Commission, 1984
- Member, Pennsylvania Local Tax Reform Commission, 1987
- Member, Property Tax Transition Team, Allegheny County, 1996
- Member, Property Tax Transition Team, Allegheny County, 2000
- Member, Panel on School Finance, New York Board of Regents, 1995
- Member, School Finance Technical Advisory Panel, New York Board of Regents, 2000-.

My scholarly and public policy interests in local finance derive from two federal experiences early in my career:

- authoring the federal revenue sharing legislation in the early 1970's; that entailed successfully devising a formula to allocate \$5.3 billion annually to each of the states, District of Columbia, and all of the municipal and county governments in the United States (about \$84 billion overall before Congress eliminated the program in the 1980's due to chronic federal budget deficits).

Working first at the US Treasury, and then for the Congress upon the program's renewal, figuring out how to reasonably allocate monies to 38,000 governments and find the sufficient votes in a bicameral legislature sharpened my political (and computer programming) skills.

- while working for the tax committees of the Congress, being responsible for much of the federal help that bailed out New York City in the 1970's; this taught me much about the realities of what can happen when government avoids the inevitable, and how rancorous local fiscal politics can get.

Beyond these public appointments, I have given various speeches and talks about local taxation within Pennsylvania, as well as advised elected officials and fiscal organizations in other states about how they might emerge from the Property Tax Briar Patch politically intact. Most of these are on my home page at CMU.

Two years ago this month I was invited by some of your colleagues in the Pennsylvania House to share my thoughts on Senate Bill 2, and probably helped the House forestall some very questionable ideas about local tax reform by providing a candid appraisal and some ideas about alternatives.

To my surprise, my presentation to the House was followed by a written accusation to my dean, by the author of Senate Bill 2, that I was, among other things, puerile and sexist.

As a devoted husband, and a devoted father of two teenage daughters and teenage son, this struck me as odd as it did to your colleague, Senator Vince Fumo of Philadelphia. He subsequently pointed out in writing to my dean that the author of those accusations undoubtedly protested too much, and that the bulk of my remarks (carried on PCN I hasten to add) contained suggestions on how to make Senate Bill 2 better.¹

To finally clear up what was a major misunderstanding, let me state for the record that all references in my oral and written remarks two years ago were to the central character in the movie, Buffy the Vampire Slayer, not the central character in the TV series (also called Buffy the Vampire Slayer). Indeed, I was unaware that there was a TV series until my 13 year old daughter explained that to me. For the uninitiated, in the movie, the central character is a sympathetic figure who is well-intentioned, but quite headstrong and occasionally misguided, while in the TV series the central character comes across primarily as a ditz.

While Act 50, which resulted from Senate Bill 2 being unraveled in the House, remains Pennsylvania's answer to the real estate tax crisis, I would be remiss if I did not comment now, as I did 2 years ago, that getting it wrong or botching it can prove politically costly. Indeed, the \$100 rebate that has been cobbled together is symptomatic of the accuracy of that prediction. Further, I predict that the political end game resulting from trying to Slay the Property Tax, but failing, is far from over.²

Perhaps later we can rejoin some of these issues, for they are not unrelated to the topic before us this afternoon.

My task is to comment on the economic and distributional effects of local real estate taxes. Given this panel meets after lunch, and I am the last speaker, I will try to be candid, helpful, and hopefully lively enough to maintain your attention.

My remarks below are organized as follows. Section 2 provides some initial definitions and background about the local property tax in Pennsylvania; Section 3 contains the economics of how local property taxes (and services) affect decision making and property values themselves; Section 4 reviews the reasons why I think Pennsylvanians dislike the local property tax so intensely, and in particular provides data on how dramatically residential property has grown as the primary source of local property tax base in 60% of Pennsylvania's school districts; Section 5 explains why poor assessment quality is another reason that tax payers are upset, and particularly in Allegheny County where assessment quality data are available by local school district; Section 6 goes through a normative analysis of how local schools **should** be financed were a state to answer that question from scratch; and Section 7 provides my views on how Pennsylvania might move forward from where it currently is in terms of state law governing the property tax as well as state law surrounding local school finances.

¹For the curious, you can find my speech and aforementioned letters on my world wide web home page, <http://www.heinz.cmu.edu/~rs9f> Item 3, Online Papers and Speeches, and choose "Is Senate Bill 2 True Local Tax Reform? or will Buffy the Property Tax Slayer Slay You, Me, and the Pennsylvania Economy?"

²See the discussion below in Section 3.3.3 below.

2 Some Definitions and Facts about Property Taxes and Economic Development in Pennsylvania

2.1 Some Definitions and Pennsylvania's Tax Structure

Property taxation in Pennsylvania historically has meant:

- The imposition of real estate taxes by counties, municipalities and school districts;
- The imposition of personal property taxes by counties, Philadelphia, Pittsburgh, and the Pittsburgh Public Schools (until repealed in 1996 after the *Fulton* decision and awaiting the outcome of the *Annenberg* case.);
- The centralized imposition of a 30 mil real estate tax on the book value of regulated utility property, and formula redistribution of the proceeds (PURTA).

Effective this year, production facilities of formerly regulated electric utilities are now subject to local appraisal and taxation. This creates significant revenue losses to municipalities and school districts who formerly received shared centrally imposed utility taxes, and creates potentially large windfalls to a handful of jurisdictions containing these production facilities and whose county assessors can figure out how locally to assess complex utility property.

While small in overall dollars compared to state-wide property taxes, this alteration in the taxation of public utilities represents a 19th century solution to a 21st century public policy problem, and moves Pennsylvania farther away from best practice when it comes to real estate taxation among the states.

The obvious solution to deregulation would have been for:

- (i) the state to continue to assess production facilities, but at market value to reflect the new economic reality³
- (ii) continue to levy a fixed millage and redistribute according to the historical formula, and possibly (iii) provide state aid, declining over time, to recipient governments to make up the local revenue loss.

Lowering the fixed millage could readily have made the utilities as happy as they wanted to be and everybody wanted to make them, and forestalled what is now beginning to happen. Undoubtedly you will be hearing from local governments shortly about just what transpired last summer. I might add that this sort of policy confusion does little to signal to companies around the country that they might (now) have a friend in Pennsylvania. Rather, they might readily interpret they are being told that they are free to badger the local property assessor for more friendly treatment. Most businesses and their tax departments these days have better

³I had heard that nobody could figure out how to get around uniformity clause problems that might evolve from treating production facilities differently from those still subject to regulation, e.g. market vs. book. Shame on my former students who populate the staffs of Harrisburg! One can imagine continuation of the old system but a refund to owners of production facilities in the form of a payment (state refundable credit based on the difference between book and market value), and taking into account a possibly lower millage that might be desired on production facilities. This state payment could be wrapped up as "a competitive energy energy assistance payment" or some such high sounding mechanism devoted to furthering the Commonwealth.

things to do than spend inordinate amounts of time and money trying to romance their local assessor.

- The imposition by the state of Capital Stock and Franchise Tax on the apportioned property of domestic and foreign corporations is the other major property tax, albeit not a local one.

While not a (local) real estate tax *per se*, the measure of *actual value* based half on capitalized income and half on shareholder's equity are measures of business property, and at 12 mils sufficiently high to dissuade capital intensive firms from locating here. I mention the Capital Stock and Franchise Tax to you this afternoon because it truly is a property tax, one that is very onerous and visible, and likely the single largest impediment at the state level to improving the standard of living in Pennsylvania. You have also committed yourselves to revisit this issue in the not too distant future.

I hope you are aware that the pending *PPG* decision has very substantial implications for local taxation (and economic development). It is likely that the temporary patch you enacted last year failed to address the local effect of the *PPG* decision. Since this observation may not be the conventional wisdom here in Harrisburg (sentiment generally is that you forestalled the state problem and there are no local issues), let me explain this further.

One can find throughout Pennsylvania's local tax statutes favorable tax treatment for manufacturing through the mechanism of various manufacturing exemptions.

What the *PPG* decision seems to do is eliminate any state manufacturing exemption, and thereby invite further litigation to eliminate the *local* safe havens manufacturing enjoys from broad application of local taxes. One industry which historically has enjoyed this safe haven is the newspaper publishing industry. My reading of the *PPG* decision is that it eliminates local exemptions as well because they are discriminatory. It is therefore imaginable that once the City of Pittsburgh figures out that it can collect the Mercantile Privilege Tax from the *Pittsburgh Post-Gazette*, it likely will do so. The City of Pittsburgh certainly will need the revenues.

2.2 A Definition of Economic Development and A Long View of Pennsylvania's Economy

Economic development usually signifies the progress or improvement in the standard of living of a community as evidenced by the income and wealth of its inhabitants/citizens. When we talk about an economy developing, we imagine people working at higher paying jobs, living in better homes, driving new or newer cars, taking longer vacations, and enjoying better health and nutrition. Implicit in such a definition is the idea of a reference point against which such progress can be measured. Implicit comparisons might involve either the passage of time, and/or comparisons across communities.

Moreover, we likely view overall population growth to be indicative that others are attracted to such an area by the improved living standards and the availability of employment opportunities which the developing area affords viz. a viz. other areas which are developing less quickly.

There are many ways one can characterize the standard of living of Pennsylvanians, and one can readily point to areas that are doing especially well and areas that are faring poorly. From the perspective of the Commonwealth, what matters probably most is the overall average standard of living. Given short notice, I turned to available federal data sources to take a long look at the per

capita personal income and per capita wages and salaries of Pennsylvanians as a central indicator of standard of living for the period 1929-97.⁴

Personal income includes not only wage and salary disbursements but also income from capital (interest, dividends, rents and royalties), sole proprietor's income, and transfer payments less contributions for Social Security. Wage and salary income is much closer to the concept of income from employment, although it does not include sole proprietor's income.

The story that Figure 1 tells is somewhat discouraging. Compared to the US average, Pennsylvania's per capita wages and salaries have fallen below the US average since 1977, and while starting to recover from a low in 1985, actually began to fall off again since 1993. Pennsylvania's personal per capita income has fared a bit better, and since the late 1980's, it has been slightly (1 or 2%) above the US average.⁵ What is striking about taking a long look at the trend in this measure of the standard of living is that there has been a long term secular decline. Just before the Great Depression Pennsylvania's per capita income and wages were 10 to 15% above the national average, and since then there has been a long term decline. After World War II there was a rebound between 1947 and 1953, but the erosion continued after that, being more pronounced for wages and salaries than personal income.

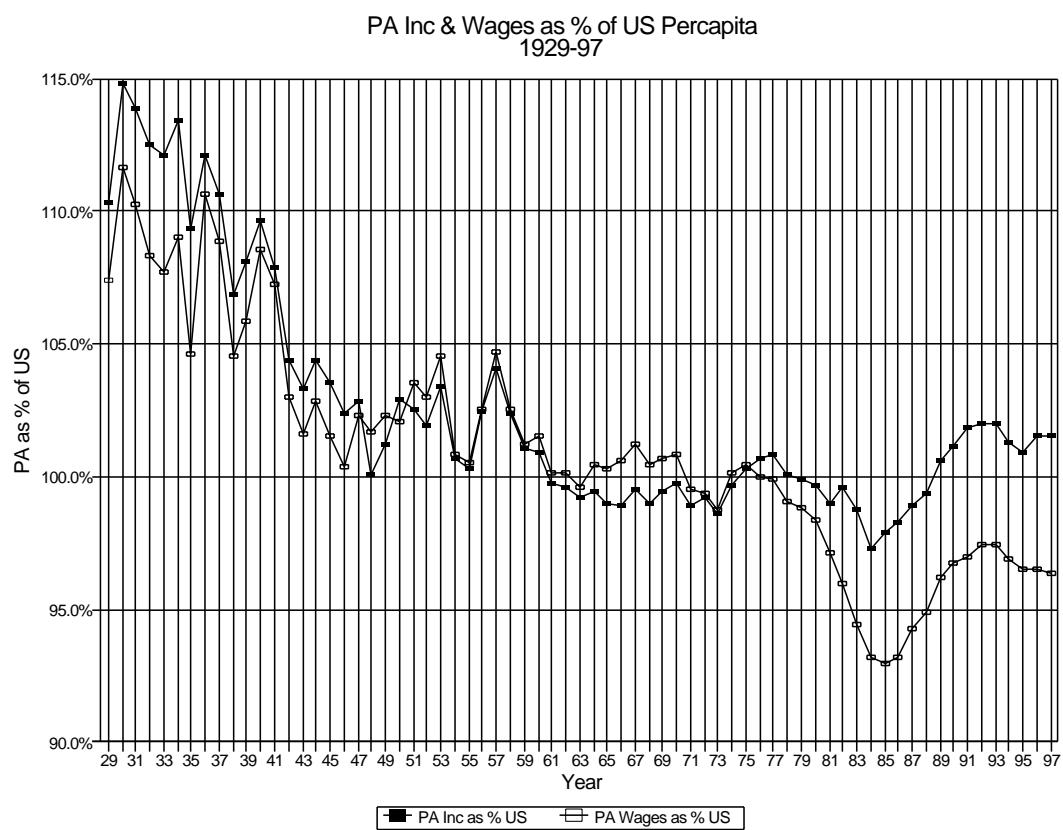
If we examine the long-term pattern of population in the Commonwealth, we find that it has been quite flat for a very long time. In 1929, Pennsylvania with 9.7 million residents accounted for 8% of the US population. Since the 1950's our population has remained flat, and we now account for only about 4.5% of the US population. Figure 2 shows what has happened to Pennsylvania's population share. Except for the upturn after World War II which ended in 1947, our share of the US population has continued to decline. This gets reflected every 10 years in the decline in our representation in the US House of Representatives, and we will lose House seats again after the 2000 Census.

I do not think these few statistics are necessarily surprising. They confirm the general notion that Pennsylvania's economy is sluggish or moribund, especially west of the Susquehanna, and that other parts of the US are enjoying far more than we are the fruits of the longest economic expansion in the history of the US economy.

⁴See US Department of Commerce, Bureau of Economic Affairs, *State Personal Income 1929-97*, CD ROM, October, 1999

⁵Given that Pennsylvania has a much higher than average elderly population, using resident population as a denominator may understand per person what is being earned.

Figure 1: Pennsylvania Per capita Income and Wages as % of US



3 How Local Property Taxes affect Our Standard of Living

3.1 Why We Tax Ourselves

The reason society taxes itself is to provide public services which the private market place, left to its own devices, will not provide and to correct some of the harsh results of the market place by providing both a safety net for the unfortunate and to make sure that young people, irrespective of their family's income or wealth, are educated so when they reach adult age they can be both responsible, informed citizens, and also gainfully employed.

There are two reasons I emphasize the rationale for taxation at the outset. First, all of us would like not to pay taxes so we can have more money for ourselves. However, we also do not want to forego the public services we, our families, and/or neighbors need and enjoy.

Throughout the US tax reform is often by implication taken to mean a reduction in taxes at least for me and maybe you. Given the necessity for state and local governments to balance their budgets, we can not all both enjoy tax cuts and if services are to be maintained at municipal, school district, county or state levels.

Second, and of at least equal importance, is the observation that public services must be provided in return for the voluntary payment of taxes by taxpayers. When citizens lose confidence in the capacity of a government to provide services in return for taxes, at a minimum voluntary compliance will suffer. Ultimately, people and business talk with their feet and find someplace else to work and live where promises made are promises kept.

3.2 Do Local Property Taxes Affect Household and Business Location Decisions?

When a business is seeking to expand employment and/or physical plant, it behooves it and its owners to review whether or not where it is doing business is the best place to add these resources. Attitude surveys of executives over the years indicate that the level of taxation is always on the list, as are things like proximity to markets, labor, transportation and utility costs. Other factors such as "quality of life" are typically mentioned along with such tangible factors like weather and "cost of living."

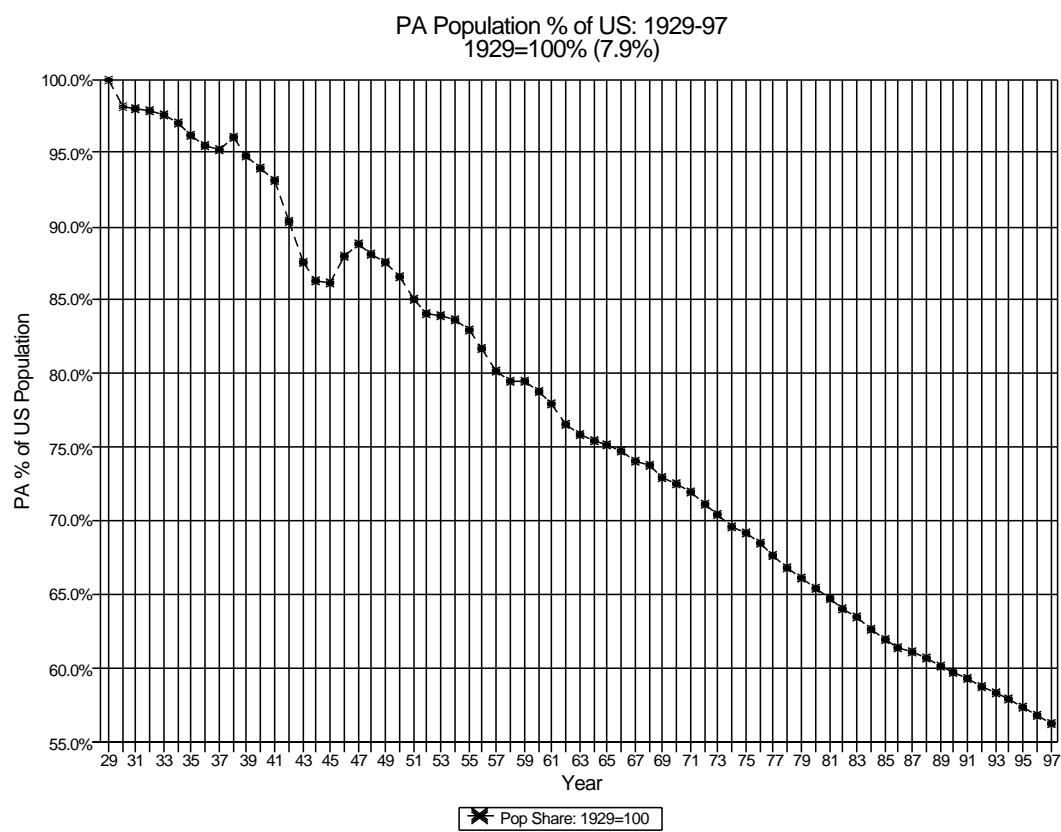
Business magazines and location consultants come up with ratings like "business climate" and changes in business climate, and state officials, especially governors, take these ratings seriously.⁶

To my knowledge no business magazine has asked the more sensible question: "Do you feel you and your employees are getting quality services in return for the taxes you pay?" That might be more meaningful.

Economic theory tells us that in the short run, both capital and labor are immobile, so that an increase in local taxes, holding everything else constant, and ignoring the services provided for such increased taxes, will not cause labor or capital to leave the high tax community for somewhere else. Over time, however, it is reasonable to expect cost conscious companies and employees to relocate, and carefully done studies show that companies over time will move their assets, and employees will move from higher taxing jurisdictions to lower taxing jurisdictions.

⁶Universities, too, are victims or beneficiaries of such ratings games as well. Were the Heinz School not rated number 4, and public finance rated number 6 by US News and World Reports, I would not mention it. The CMU Trustees evidently like such ratings, as they can take credit for such notoriety; however, I do not think it affects the way compensation is determined, or affects their concern about whether or not the School is underfunded in the annual budget lottery with the rest of the University.

Figure 2: Pennsylvania's Population Share of US: 1929-97 (1929=100%)



When we enquire what theory tells us about into how local taxes **and** local services affect location decisions, we find that the conclusion about mobility becomes less clear. If the services are valued at the amount of the taxes paid, then mobility may not occur at all. Arms length housing prices (and apartment rents) will reflect the netting out effects which property taxes (which by themselves depress on a capitalized basis the price of homes), and local service quantity and quality (especially schools), add to the price (also on a capitalized basis) of a home.

Let me give you an example of negative capitalization. Some years ago, when the federal courts forced the jointure of several suburban school districts outside Pittsburgh to form the Woodland Hills School District, home prices fell, according to some observers, by 25% in the richer suburban districts. Owners were concerned that the shot gun marriage of poor and rich districts would dilute the quality of education, and reduce the demand for houses in the rich districts.

A very careful investigation of household location decisions in suburban New Jersey by Prof. Thomas Nechyba of Duke University and myself⁷ revealed that a 1% increase in per-pupil spending was associated with an increase of 1.6 to 3.1 % in the odds of someone wanting to move there, given their income and housing needs. I hasten to add that for the communities in question, there was a **perfect** correlation between per-pupil spending and SAT scores, something that does not always prevail.

Lest you think that school quality is something home buyers do not consider, or is just a phenomenon I bumped into by chance in suburban New Jersey, I suggest you talk to your local Coldwell Banker Real Estate Agent.⁸ For a nominal fee, any agent can receive, updated quarterly, a CD which contains every school district in the US, the average home price, SAT scores, and local property taxes. The contents of the quarterly CD is of intense interest to home buyers, and this turns out to be an important marketing tool.

3.3 Defining Distributional Effects and The Case of Local Real Estate Taxes

Care is needed when talking about distributional effects of taxes, for two reasons: one intellectual, and one political. At the intellectual level, the topic quickly can get confusing as one starts the discussion with dollars paid, and then moves on to compare percentage **rate** of taxes imposed, and then moves on to comparing to the dollars paid in relation to something else like ability to pay (household income).

At the political level, candidates for elected office routinely claim that they will (with my vote on election day) make sure that current unfairness I am being subjected to will be corrected. Notice how our presidential candidates have been promising to cut our taxes through "real" tax reform.

At the state and local level cutting taxes has to be weighed against cutting services. However, tax reform usually is heard by the electorate to mean tax cuts rather than a rearrangement of tax burdens in a more rational and ethical manner. We all hear what we want to I guess.

In your letter of invitation, you asked me to comment on the regressivity of local property taxes, so let me first explain ways to characterize fairness of taxes, and then talk about when the local property tax is regressive, and when it is not.

3.3.1 Defining Equity for Tax Analysis Purposes

⁷Nechyba and Strauss(1997).

⁸I am indebted to my wife, Celeste Strauss, one such local Coldwell Banker agent, for pointing this out to me.

The equity or fairness of a tax has two meanings in terms of the legal design of the tax:

- Equal Treatment of Equals.—given two taxpayers with identical abilities to pay (they live next door to each other and their houses and land are identical), we enquire if (1) the tax system they must comply with extracts the same tax from each; this technically involves questions of whether or not the tax is horizontally equitable; as long as the taxpayers are living in the same taxing jurisdiction, the Pennsylvania Constitution says they must face the same rate of tax.

If we are talking about local wage taxes, the rate each taxpayer faces is the same, and the dollar result is the same.

If we are talking about local real estate taxes, the manner in which their identical houses are assessed can lead to disparate and unfair results. More on this later when I talk about why homeowners hate the local real estate tax so much.

- How Unequals Are Treated By The Tax System.

—progressively? (Does the rate of tax rise with income?)

—proportionately? (Is the rate of tax constant across incomes?)

—regressively? (Does the rate of tax statutorily fall as income rises?)

Given two taxpayers with differing abilities to pay (e.g. income of household one is twice as large as the income of household two), how does the tax system treat each? The Pennsylvania Constitution says, with the exception of the poor, that our income tax rates can not vary with income, and as a result of court decisions, exemptions and deductions which might accomplish this indirectly, are not permitted.

In the case of the local real estate tax, you have amended the Constitution to permit homestead exemptions if voters vote to do so.

3.3.2 Is the Local Real Estate Tax Progressive, Regressive or Proportional?

In a state with a very heavy elderly population, it is commonplace to claim that the local property tax is regressive. Consider the following thought-experiment and table of data. I send some CMU graduate students into a Pennsylvania county, and tell them to ask a sample of the residents what their income is, and what property taxes they paid. The respondents go to their records, and write down their Pennsylvania taxable income, and their property taxes paid. The graduate students collect the data and bring it back to the University for analysis.

Imagine the graduate students' data collection effort leads to Table 3.3.2. The results of the data collection effort show, in col (5) that the effective rate of tax declines as income rises, even though the amount of property tax paid goes up a bit in each income class. Did the graduate students find the property tax rosetta stone? Is this what all the complaining is always about?

Table 1: Hypothetical Table of Data Showing Regressivity of Property Tax

(1)	(2)	(3)	(4)	(5)
Pa Taxable Income Class	Average Income	Average Real Estate Taxes	Average Effective Tax Rate (%)	
1 \$0-\$999	\$750	\$1,200	160.0%	
2 \$1,000-\$4,999	\$2,500	\$1,800	72.0%	
3 \$5,000-\$9,000	\$7,500	\$2,300	30.7%	
4 \$10,000-\$14,999	\$12,500	\$2,700	21.6%	
5 \$15,000-\$19,000	\$17,500	\$3,200	18.3%	
6 \$20,000-\$29,999	\$25,000	\$4,000	16.4%	
7 \$30,000-\$49,000	\$40,000	\$5,200	13.0%	
8 \$50,000-\$100,000	\$75,000	\$6,500	8.7%	

Some of you may ask, precisely where in this county did the students collect the data? Suppose the County has 5 school districts, and 25 municipalities. Two of the school districts have shopping malls inside their taxing boundaries as do two municipalities. Another school district has a big chemical plant, but it has been closed for a year.

The students get embarrassed when asked. Obviously millages and assessed values will vary. What a mess! (Probably, they had not taken any courses from me yet, they just did this as a project).

But, I am willing to concede that if the students went out and concentrated on a sample of households in the same municipality, and therefore in the same school district, one might find, again, data such as that portrayed in Table 3.3.2. Is the local property tax, as assessed in that county, and given the millages of that municipality and school district, still regressive when comparing the taxes due against Pennsylvania taxable income?

Perhaps the trick in the data has to do with using Pennsylvania taxable income as the measure of ability to pay. As I understand our personal income tax, Pennsylvania taxable income does not include Social Security or private pension payments. No wonder those income intervals look so low.

To which you might well respond, "Professor Strauss, do you think we are so crazy as to think about including Social Security and private pension payments into Pennsylvania taxable income? This is an election year, and those people vote. Let us leave the measure of ability to pay alone, and assume that income is properly measured."

3.3.3 Widow Jones vs. The Smith Family's Property Taxes

Before we conclude that the property tax in this example is truly regressive, perhaps we should look at two taxpayers who filled out the survey form: Widow Jones and The Smith Family.

Consider Widow Jones, living in her \$300,000 house that her late husband, Edward, left her and her four grown children (\$300,000 in true market value, \$75,000 in assessed value (25% assessment ratio). Widow Jones has income from investments that her late husband made of \$14,999/year, and pays \$3,000/year in combined real estate taxes or 20% of her Pennsylvania Taxable Income.⁹

⁹She probably also gets \$9,000/year in Social Security and another \$24,000 in retirement income from her husband's pension; however, let's just assume she has \$14,999 of income/year.

Next, consider down the street, Frank and Sally Smith, who run an E-Business, also have the same house, 3 school age children, and also pay \$3,000 annually in real estate taxes. They have salaries which combine to \$150,000/year in Pennsylvania taxable income, and thus pay only 2% of their income in property taxes.

If we look carefully at the real estate tax, it is the same dollar amount for Widow Jones and the Smith family.

Is the property tax *per se* proportional? When viewed against the value of the property, Yes.

Is the property tax regressive? When the taxes due (\$3,000) are compared to Pennsylvania Taxable Income? Yes.

Further, Widow Jones will tell you that the property taxes will drive her out of her family home. But how did she ever get into such a big house to begin with? When her beloved Edward was alive, his income was high, and they raised a family there. When he was alive, suppose he too made \$150,000/year. Then, they paid 2% of *current* income in property taxes. Over time, the long run payments of property taxes will reflect what their housing needs and tastes (and what their income allows them to afford) are. The right way to look at the distributional effects of the property tax are to compare the long-run property taxes paid to the long-run income earned.

The usual wisdom about the long-run distributional effects of the property tax is that it depends in the long-run on the income elasticity of demand for housing. If the income elasticity of demand for housing is greater than unity, then the property tax is progressive. If the income elasticity of demand is less than unity, then it is regressive. Most long run estimates of this crucial are about 1.15.

Now, you may wonder what planet I am living to say that the property tax could well be, in the long-run, progressive. What about the Widow Jones problem? To which I might observe to Widow Jones:

" ...that's a mighty big house you live in, Mrs. Jones. Don't you expect the police and fire to take very good care of such a big house? Shouldn't those services be paid for by the person who enjoys them? Those were very fine schools you sent your children to, and you should be willing to support others go to such fine schools, shouldn't you?"

To which you may be thinking, these damn college professors, especially those from private colleges and universities. Every time you ask them a question, they come up with the wrong answer! Worse, this Professor has written and spoken against the property tax in support of public education for decades. And now he is babbling that the property tax is progressive in the long-run.

Rest assured, political cover to worry about the effect of the property tax on the elderly will follow. However, the property tax problems of the elderly have to be seen for what they are: Widow Jones primary problem is financial illiquidity more than anything else. The problem is less one of distribution than illiquidity.

Second, there is a solution that only requires a one-time injection of cash. The correct answer, in my view, in terms of state policy is to capitalize a revolving fund at the state level which creates a partial property tax exemption for the elderly when property taxes as a percentage of their income rise above what one thinks is unacceptable (15%?), and the payment to the local governments of the excess property tax in conjunction with Mrs. Jones agreeing to give the state a lien against her property as she exempts out of "excess property taxes."¹⁰ When Mrs. Jones passes, her estate pays off the lien back to the revolving fund, and the balance of monies is divided among her children etc.

¹⁰I would imagine that such a program could be run through the existing property tax rent rebate program and thereby not run afoul of the Uniformity Clause.

Vermont has done this for years. There they fight over how much of the local revenue loss should be made up by the state out of the revolving fund.

Capitalization of such a lien system might be a better one time use of the state surplus about to be spent on \$100 property tax rebates, by the way, and still be politically popular. After all, everybody loves their parents and grandparents. Everybody wants them to be able to live in the family house in their twilight years to host Thanksgiving and Christmas dinners with their kids and grandchildren running around. Nobody wants their parents and grandparents chased by onerous local property taxes out of the family home to live in an apartment or on the street. Moreover, this sort of policy initiative, once capitalized, would go on **forever** and thereby allow those who voted for it here in Harrisburg with the foresight to have used a one-shot surplus to take credit **forever**.

4 Why Do Taxpayers Hate the Property Tax So Much?

4.1 Four Reasons for Public Outcry against the Property Tax

Above I have gone through an economic analysis of real estate taxes in the state, and while I am willing to concede they are possibly regressive in the short run, that hardly explains why people are upset about them. Here I wish to explain the property tax revolt. Three reasons are usually offered:

1. property taxes have likely grown more rapidly in the 1970's, 1980's and 1990's in key regions of states than personal income has grown;
2. while real per pupil spending has generally risen, outcome results such as test scores have not which in turn has tempered public support for education;¹¹
3. school age population as a percentage of the total population has experienced a long term decline until recently with the implication that its political constituency has gotten smaller as contrasted with those over age 65.

While each of these factors may be at work, I would like to forward a fourth reason for increased taxpayer sensitivity to rising property taxes. In particular, there has been a long-term increase in the *relative* tax burden of residential real estate viz. a viz. commercial and industrial real property that has had distinct, political effects. Since home owners tend to be voters, it is this increased relative burden which has prompted the property tax revolt, and has created strong interest in many states to move from the local property tax to broad based income and/or consumption taxes as happened in Michigan in 1993 and Oregon in 1994.

Several factors have slowed the growth in commercial and industrial property assessments viz. a viz. their residential counterparts. First, they are technically more difficult to accomplish. Second, if one looks at post-WWII federal tax policy, it has been designed with few exceptions to encourage investment in equipment rather than plant. Since federal marginal income tax rates historically have dominated business planning decisions, it should not be surprising that the plant component of investment has generally lagged. Third, if one examines long-term demographic trends, the post-WWII era witnessed an explosion in family formation and subsequent home ownership that was encouraged by favorable federal tax treatment of mortgage interest payments as well as local property taxes. Fourth, the difficulties of US manufacturing in the 1970's and 1980's was ultimately reflected in the sluggish or declining assessed values of industrial real estate.

With regard to commercial real estate, the shortened federal tax lives of real property under the Accelerated Cost Recovery System in 1981 created an enormous commercial property boom which began to reduce residential properties burden in many states. However, since the creation and imposition of the passive loss rules on loss income from real estate in the Tax Reform Act of 1986, investment in commercial real estate has languished, and so have their assessed values.

Table 2 shows the results of measuring the shift in the composition of the property tax base in 18 states, including Pennsylvania. Remember, if local budgets grow faster than state and federal aid, it follows that the local school property tax must make up the short-fall.

¹¹See Hanushek *et al* (1994) for a review of management and effectiveness issues. For evidence on the conjecture that the quality of school teachers, as measured by teacher test scores, affects pupil performance, see Strauss and Sawyer (1986), and Ferguson (1991).

So, if the local base is increasingly residential, then home owners pay an increasing share of each additional dollar raised. This creates a political reaction by taxpayers and also by school boards who hear the complaints. It is not surprising that statistical analysis of New York and Pennsylvania spending patterns show that as the local property tax base becomes increasingly residential, the willingness of the local electorate to spend on public education declines markedly.

Table 2: Residential Property's Share of Total Assessed Value in 18 States

Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8
	Time Period of Data	Lowest Residential Share	Year of Lowest Share	Highest Residential Share	Year of Highest Share	% Points of Change	% Change in Res. Share
(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Colorado	1984-95	54.1%	1984	70.8%	1995	16.7%	30.9%
Illinois (EV)	1981-92	49.6%	1981	53.1%	1992	3.5%	7.1%
Indiana	1972-92	44.9%	1972	48.0%	1992	3.1%	6.9%
Iowa	1981-94	43.6%	1981	47.7%	1994	4.1%	9.4%
Kansas	1976-94	41.1%	1976	73.3%	1994	32.2%	78.3%
Maryland	1962-93	71.5%	1962	74.1%	1993	2.6%	3.6%
Massachusetts	1983-95	64.4%	1983	78.5%	1995	14.1%	21.9%
Michigan	1966-94	59.2%	1966	70.9%	1994	11.7%	19.8%
Minnesota (MV)	1974-92	49.4%	1974	56.3%	1994	6.9%	14.0%
Missouri	1979-94	33.5%	1984	43.3%	1994	9.8%	29.3%
Nebraska	1989-94	34.5%	1990	37.6	1994	3.1%	9.0%
New Mexico	1979-94	29.1%	1981	48.1%	1994	19.0%	65.3%
Nevada	1989-92	36.9%	1989	45.0%	1992	8.1%	22.0%
Oregon	1976-93	34.6%	1976	46.7%	1993	12.1%	35.0%
Pennsylvania	1977-92	62.5%	1977	67.3%	1990	4.8%	7.7%
Texas	1983-94	33.0%	1983	41.3%	1994	8.3%	25.2%
Washington	1989-94	59.5%	1989	64.3%	1994	4.8%	8.1%
Wisconsin	1951-92	49.6%	1951	66.5%	1992	16.9%	34.1%

Source: Robert P. Strauss, "Why Property Taxpayers Hate the Property Tax So Much," *State Tax Notes*, 13, June 16, 1997, 1802-1806.

4.2 The Rising Residential Share in Pennsylvania Counties

In conjunction with developing Table 2, I obtained historical data from our State Tax Equalization Board by county area. Table 3 shows the at the county level the percent residential in 1977 and 1994, the change from 1977 to 1994, and the percent change. The counties are ranked from largest increase in residential property tax burden to the lowest.

Between 1977 and 1994, Wayne County's residential property tax share of the assessed base went from 48.8% to 66.4%—I would conjecture that Wayne's homeowners are absolutely incensed at the change.

Right behind Wayne County, ranked number 2 in terms of increased relative burden on residential property, is Susquehanna County: it went from 50 to 63% residential. The shift in Bucks and Beaver counties were also quite large but reflect very different economic situations: in Bucks the population and residential housing stock grew dramatically from 1977 to 1994, while in Beaver, the population was stagnant and major industrial facilities closed their doors with the result that the same number of residents had to shoulder a higher share of a (growing) property tax bill. These figures may well explain the pressure for these hearings.

Note that in some areas of the state, the residential share actually declined. Philadelphia, as usual, provided no property tax data to STEB, so I could not do the calculations for it.

Table 3: Shift in Composition of Pennsylvania's Property Tax Base: County Aggregates 1977-94

Rank	County	% Resid.'77	% Resid.'94	'94-'77	% Chg. Resid.
1	Wayne County	48.8%	66.4%	17.6%	36.0%
2	Susquehanna County	50.4%	63.7%	13.3%	26.4%
3	Pike County	56.6%	69.9%	13.3%	23.4%
4	Bucks County	61.3%	75.4%	14.1%	22.9%
5	Beaver County	59.8%	72.7%	12.9%	21.6%
6	Lancaster County	58.2%	70.3%	12.1%	20.8%
7	Perry County	56.6%	68.0%	11.3%	20.0%
8	Schuylkill County	61.7%	71.9%	10.2%	16.5%
9	Monroe County	59.8%	69.5%	9.8%	16.3%
10	Chester County	63.3%	73.0%	9.8%	15.4%
11	Elk County	61.3%	70.7%	9.4%	15.3%
12	Montgomery County	60.9%	69.9%	9.0%	14.7%
13	Berks County	62.1%	70.3%	8.2%	13.2%
14	Carbon County	64.5%	72.7%	8.2%	12.7%
15	Lebanon County	62.9%	70.3%	7.4%	11.8%
16	Juniata County	57.0%	63.7%	6.6%	11.6%
17	Washington County	59.0%	65.6%	6.6%	11.3%
18	Northampton County	66.0%	73.0%	7.0%	10.7%
19	Crawford County	55.1%	60.9%	5.9%	10.6%
20	Adams County	53.1%	58.6%	5.5%	10.3%
21	Jefferson County	57.8%	63.3%	5.5%	9.5%
22	Lawrence County	62.5%	68.0%	5.5%	8.8%
23	Lycoming County	65.6%	70.7%	5.1%	7.7%
24	Butler County	59.0%	63.3%	4.3%	7.3%
25	Armstrong County	59.8%	64.1%	4.3%	7.2%

[continued on next page]

Rank	County	% Resid.'77	% Resid.'94	'94-'77	% Chg.	Resid.
26	Erie County	59.8%	64.1%	4.3%	7.2%	
27	Snyder County	57.0%	60.5%	3.5%	6.2%	
28	Montour County	57.4%	60.9%	3.5%	6.1%	
29	Delaware County	69.9%	73.8%	3.9%	5.6%	
30	York County	62.5%	65.6%	3.1%	5.0%	
31	Somerset County	57.0%	59.8%	2.7%	4.8%	
32	Bedford County	54.3%	56.6%	2.3%	4.3%	
33	Blair County	64.1%	66.8%	2.7%	4.3%	
34	Allegheny County	64.5%	67.2%	2.7%	4.2%	
35	Venango County	60.9%	63.3%	2.3%	3.8%	
36	Franklin County	64.8%	67.2%	2.3%	3.6%	
37	Fayette County	63.7%	65.6%	2.0%	3.1%	
38	Dauphin County	56.6%	58.2%	1.6%	2.8%	
39	Indiana County	59.8%	61.3%	1.6%	2.6%	
40	Clarion County	51.6%	52.7%	1.2%	2.3%	
41	Mckean County	59.4%	60.5%	1.2%	2.0%	
42	Lehigh County	64.5%	65.6%	1.2%	1.8%	
43	Centre County	57.4%	58.2%	0.8%	1.4%	
44	Clinton County	59.4%	59.8%	0.4%	0.7%	
45	Westmoreland County	69.9%	69.5%	-0.4%	-0.6%	
46	Mercer County	59.8%	59.0%	-0.8%	-1.3%	
47	Cambria County	66.0%	64.5%	-1.6%	-2.4%	
48	Clearfield County	62.5%	60.9%	-1.6%	-2.5%	
49	Cameron County	63.3%	60.9%	-2.3%	-3.7%	
50	Greene County	29.7%	28.5%	-1.2%	-3.9%	
51	Union County	62.5%	59.8%	-2.7%	-4.4%	
52	Cumberland County	67.6%	64.5%	-3.1%	-4.6%	
53	Huntingdon County	58.2%	55.5%	-2.7%	-4.7%	
54	Northumberland County	65.2%	61.7%	-3.5%	-5.4%	
55	Warren County	63.3%	59.8%	-3.5%	-5.6%	
56	Mifflin County	68.4%	64.1%	-4.3%	-6.3%	
57	Luzerne County	72.7%	67.6%	-5.1%	-7.0%	
58	Sullivan County	53.1%	49.2%	-3.9%	-7.4%	
59	Lackawanna County	70.3%	63.7%	-6.6%	-9.4%	
60	Fulton County	53.5%	47.3%	-6.3%	-11.7%	
61	Wyoming County	60.9%	53.1%	-7.8%	-12.8%	
62	Tioga County	54.3%	45.9%	-8.4%	-15.5%	
63	Potter County	56.6%	47.1%	-9.6%	-16.9%	
64	Columbia County	65.6%	51.6%	-14.1%	-21.4%	
65	Bradford County	66.4%	44.5%	-21.9%	-32.9%	
66	Forest County	61.7%	33.4%	-28.3%	-45.9%	
67	Philadelphia	26.2%	0.0%	.	.	

Source: Calculations with STEB data.

4.3 The Rising Residential Share of Assessed Value in Pennsylvania School Districts

In preparation for this afternoon's testimony, I revisited the STEB data which I used to generate Table 3, and performed the identical calculations by school districts. Remarkably, there are many more districts which experienced a marked increase in proportion of residential property over 1977-94: fully 325 or better than 3/5 or 60% of Pennsylvania's school districts had positive increases of some sort. Ten districts had a 50% or greater increase in the proportion of assessed value that was residential between 1977-94. The Duquesne City School district experienced a 71.3% increase, while Aliquippa Borough School District experienced a 73.5% increase.

Table 4 displays districts which had a 10% relative increase or more in the fraction of assessed value between 1977 and 1994 that was residential. In Schuylkill County, two (Tri-Valley and Blue Mountain) of the top 20 districts can be found and four (Williams Valley and Schuylkill Haven) of the top 60 districts can be found. I would be surprised if these districts have not been visiting to express the sort of resistance to higher property taxes they are hearing from homeowners.

Table 4: Shift in Composition of Pennsylvania's School District Property Tax Base: 1977-94

Rank	County	MSA	SD	% Chg Res	% Res 1977	% Res 1994
1	Beaver County	Beaver	Midland Boro S D	169.9%	20.4%	55.1%
2	Allegheny County	Pittsburgh	Steel Valley S D	126.9%	36.3%	82.4%
3	Berks County	Reading	Twin Valley S D	126.6%	27.9%	63.3%
4	Allegheny County	Pittsburgh	Clairton City S D	114.5%	35.0%	75.0%
5	Adams County	York	Fairfield Area S D	73.6%	35.5%	61.7%
6	Somerset County	Johnstown	Shanksville-Stnycrk S D	73.6%	35.5%	61.7%
7	Beaver County	Beaver	Aliquippa Borough S D	73.5%	42.8%	74.2%
8	Erie County	Erie	Iroquois S D	72.1%	42.0%	72.3%
9	Allegheny County	Pittsburgh	Duquesne City S D	71.3%	39.5%	67.6%
10	Franklin County	Non-MSA	Fannett Metal S D	55.3%	40.2%	62.5%
11	Delaware County	Philadelphia	Chichester S D	51.3%	37.7%	57.0%
12	Wayne County	Non-MSA	Western Wayne S D	48.3%	46.9%	69.5%
13	Chester County	Philadelphia	Avon Grove S D	43.7%	55.5%	79.7%
14	Bucks County	Philadelphia	Council Rock S D	40.9%	62.1%	87.5%
15	Beaver County	Beaver	Center Area S D	40.4%	45.9%	64.5%
16	Schuylkill County	Non-MSA	Tri-Valley S D	40.2%	49.6%	69.5%
17	Washington County	Pittsburgh	California A S O	39.6%	52.3%	73.0%
18	Carbon County	Allentown	Jim Thorpe AREA S D	39.4%	53.5%	74.6%
19	Schuylkill County	Non-MSA	Blue Mountain S D	39.4%	51.6%	71.9%
20	Montgomery County	Philadelphia	Spring Ford AREA S D	39.3%	47.7%	66.4%
21	Montgomery County	Philadelphia	Pottsgrove S D	39.3%	56.6%	78.9%
22	Perry County	Harrisburg	West Perry S D	38.1%	46.1%	63.7%
23	Susquehanna County	Non-MSA	Elk Lake S D	38.1%	38.5%	53.1%
24	Bucks County	Philadelphia	Pennsbury S D	38.0%	55.5%	76.6%
25	Montgomery County	Philadelphia	Pottstown S D	37.8%	49.6%	68.4%
26	Cambria County	Johnstown	Conemaugh Valley S D	37.6%	52.0%	71.5%
27	Susquehanna County	Non-MSA	Mountain View S D	34.5%	46.5%	62.5%
28	Lancaster County	Lancaster	Manheim Central S D	33.8%	56.6%	75.8%
29	Lehigh County	Allentown	Northwestern Lehigh S D	33.3%	50.4%	67.2%
30	Washington County	Pittsburgh	Bethlehem-Center S D	33.3%	51.6%	68.8%
31	Lancaster County	Lancaster	Pequea Valley S D	33.1%	53.1%	70.7%

[continued on next page]

Rank	County	MSA	SD	% Chg Res	% Res 1977	% Res 1994
32	Lancaster County	Lancaster	Solanco S D	32.6%	53.9%	71.5%
33	Montgomery County	Philadelphia	North Penn S D	32.5%	48.6%	64.5%
34	Montgomery County	Philadelphia	Upper Dublin S D	31.7%	56.6%	74.6%
35	Wayne County	Non-MSA	Wallenpaupack Area S D	31.4%	53.5%	70.3%
36	Chester County	Philadelphia	Unionville-Chadds FORD	31.1%	59.0%	77.3%
37	Montgomery County	Philadelphia	Jenkintown S D	31.0%	49.8%	65.2%
38	Wayne County	Non-MSA	Wayne Highlands S D	30.8%	46.9%	61.3%
39	Bucks County	Philadelphia	Bensalem Township S D	30.2%	42.0%	54.7%
40	Beaver County	Beaver	Ambridge Area S D	30.0%	62.5%	81.3%
41	Chester County	Philadelphia	Downington Area S D	29.9%	61.3%	79.7%
42	Chester County	Philadelphia	Coatesville Area S D	29.5%	58.2%	75.4%
43	Washington County	Pittsburgh	Bentworth S D	29.5%	44.3%	57.4%
44	Northampton County	Allentown	Bethlehem Area S D	28.7%	58.6%	75.4%
45	Allegheny County	Pittsburgh	Sto-Rox S D	27.4%	52.7%	67.2%
46	Montgomery County	Philadelphia	Wissahickon S D	27.4%	52.7%	67.2%
47	Schuylkill County	Non-MSA	Williams Valley S D	27.2%	66.0%	84.0%
48	Berks County	Reading	Reading S D	27.2%	57.4%	73.0%
49	Bucks County	Philadelphia	New Hope-SOLEBURY S D	27.0%	63.7%	80.9%
50	Susquehanna County	Non-MSA	Susquehanna Comm S D	26.9%	52.3%	66.4%
51	Beaver County	Beaver	Big Beaver FALLS A S D	26.1%	52.3%	66.0%
52	Bucks County	Philadelphia	Palisades S D	25.8%	60.5%	76.2%
53	Mercer County	Sharon	Jamestown Area S D	25.4%	53.9%	67.6%
54	Northampton County	Allentown	Wilson Area S D	25.2%	60.5%	75.8%
55	Allegheny County	Pittsburgh	Deer Lakes S D	25.0%	67.2%	84.0%
56	Bucks County	Philadelphia	Bristol Boro S D	24.6%	52.3%	65.2%
57	Adams County	York	Bermudian Springs S D	24.6%	50.8%	63.3%
58	Beaver County	Beaver	Rochester Area S D	24.5%	59.0%	73.4%
59	Schuylkill County	Non-MSA	Schuylkill Haven A S D	24.2%	64.5%	80.1%
60	Pike County	Non-MSA	Delaware Valley S D	24.1%	56.6%	70.3%
61	Delaware County	Philadelphia	Chester-Upland S D	23.8%	50.8%	62.9%
62	Lycoming County	Williamsport	East Lycoming S D	23.6%	57.8%	71.5%
63	Allegheny County	Pittsburgh	Northgate S D	23.6%	64.5%	79.7%
64	Monroe County	Scranton	Pocono Mountain S D	23.3%	57.0%	70.3%
65	Allegheny County	Pittsburgh	East Allegheny S D	23.1%	55.9%	68.8%
66	Bucks County	Philadelphia	Pennridge S D	22.9%	64.8%	79.7%
67	Montgomery County	Philadelphia	Hatboro-Horsham S D	22.6%	47.5%	58.2%
68	Lancaster County	Lancaster	Donegal S D	22.6%	57.0%	69.9%
69	Dauphin County	Harrisburg	Steelton-Highspire S D	22.3%	47.3%	57.8%
70	Allegheny County	Pittsburgh	Allegheny Valley S D	22.3%	48.2%	59.0%
71	Blair County	Altoona	Williamsburg Comm S D	22.0%	51.6%	62.9%
72	Washington County	Pittsburgh	Trinity Area S D	21.4%	49.2%	59.8%
73	Perry County	Harrisburg	Greenwood S D	21.2%	51.6%	62.5%
74	Lancaster County	Lancaster	Eastern Lancaster CO SD	21.2%	53.5%	64.8%
75	Northampton County	Allentown	Easton Area S D	21.1%	62.9%	76.2%
76	Allegheny County	Pittsburgh	Woodland Hills S D	21.1%	59.4%	71.9%
77	Chester County	Philadelphia	Oxford Area S D	20.8%	48.8%	59.0%
78	Montgomery County	Philadelphia	Perkiomen Valley S D	20.8%	69.5%	84.0%
79	Somerset County	Johnstown	Rockwood Area S D	20.7%	52.7%	63.7%
80	Allegheny County	Pittsburgh	Highlands S D	20.7%	64.1%	77.3%
81	Lawrence County	Non-MSA	Union Area S D	20.7%	75.4%	91.0%
82	Bucks County	Philadelphia	Quakertown Comm S D	20.7%	58.6%	70.7%

[continued on next page]

Rank	County	MSA	SD	% Chg Res	% Res 1977	% Res 1994
83	Lancaster County	Lancaster	Conestoga Valley S D	20.5%	43.8%	52.7%
84	Lancaster County	Lancaster	Lancaster S D	20.0%	52.7%	63.3%
85	Lebanon County	Harrisburg	Northern Lebanon S D	19.9%	59.0%	70.7%
86	Lancaster County	Lancaster	Hempfield S D	19.7%	61.3%	73.4%
87	Susquehanna County	Non-MSA	Blue Ridge S D	19.7%	55.5%	66.4%
88	Crawford County	Non-MSA	Penncrest S D	19.3%	47.5%	56.6%
89	Susquehanna County	Non-MSA	Montrose Area S D	19.1%	53.1%	63.3%
90	Berks County	Reading	Boyertown Area S D	18.8%	64.5%	76.6%
91	Schuylkill County	Non-MSA	North Schuylkill S D	18.8%	68.8%	81.6%
92	Indiana County	Non-MSA	United S D	18.5%	50.8%	60.2%
93	Lycoming County	Williamsport	Montgomery Area S D	18.4%	57.4%	68.0%
94	Lancaster County	Lancaster	Penn Manor S D	18.0%	69.5%	82.0%
95	Chester County	Philadelphia	Phoenixville Area S D	17.9%	69.9%	82.4%
96	Berks County	Reading	Daniel Boone AREA S D	17.8%	68.0%	80.1%
97	Elk County	Non-MSA	St Marys AREA S D	17.5%	60.2%	70.7%
98	Schuylkill County	Non-MSA	Pottsville Area S D	17.5%	62.5%	73.4%
99	Armstrong County	Non-MSA	Leechburg Area S D	17.4%	60.5%	71.1%
100	Franklin County	Non-MSA	Greencastle-Antrim S D	17.2%	50.0%	58.6%
101	Bucks County	Philadelphia	Central Bucks S D	17.1%	68.4%	80.1%
102	Susquehanna County	Non-MSA	Forest City REGN S D	17.1%	57.0%	66.8%
103	Elk County	Non-MSA	Johnsonburg Area S D	17.0%	59.8%	69.9%
104	York County	York	South Eastern S D	17.0%	59.8%	69.9%
105	Lancaster County	Lancaster	Ephrata Area S D	17.0%	66.8%	78.1%
106	Indiana County	Non-MSA	Penns Manor AREA S D	16.8%	55.9%	65.2%
107	Lycoming County	Williamsport	Montoursville Area S D	16.7%	68.0%	79.3%
108	Allegheny County	Pittsburgh	Quaker Valley S D	16.5%	68.8%	80.1%
109	Lancaster County	Lancaster	Warwick S D	16.3%	69.5%	80.9%
110	Berks County	Reading	Kutztown Area S D	16.2%	55.5%	64.5%
111	Montgomery County	Philadelphia	Bryn Athyn S D	16.0%	58.6%	68.0%
112	Greene County	Non-MSA	Jefferson-Morgan S D	15.9%	44.1%	51.2%
113	Lancaster County	Lancaster	Elizabethtown Area S D	15.9%	66.4%	77.0%
114	Berks County	Reading	Brandywine Hgts AREA SD	15.9%	64.1%	74.2%
115	Lancaster County	Lancaster	Manheim Twp S D	15.8%	59.4%	68.8%
116	Lebanon County	Harrisburg	Eastern Lebanon CO S D	15.6%	57.4%	66.4%
117	Montgomery County	Philadelphia	Souderton Area S D	15.6%	67.6%	78.1%
118	Bucks County	Philadelphia	Neshaminy S D	15.5%	62.9%	72.7%
119	Berks County	Reading	Tulpehocken Area S D	15.4%	55.9%	64.5%
120	Crawford County	Non-MSA	Conneaut S D	15.2%	53.9%	62.1%
121	Clarion County	Non-MSA	Redbank Valley S D	15.2%	48.8%	56.3%
122	Carbon County	Allentown	Palmerton Area S D	15.2%	64.5%	74.2%
123	Mercer County	Sharon	Farrell Area S D	15.2%	38.7%	44.5%
124	Chester County	Philadelphia	Octorara Area S D	15.1%	54.3%	62.5%
125	Washington County	Pittsburgh	Avella Area S D	15.1%	38.9%	44.7%
126	Erie County	Erie	Union City AREA S D	15.0%	52.0%	59.8%
127	Monroe County	Scranton	East Strousbg AREA S D	14.8%	60.5%	69.5%
128	Berks County	Reading	Wyomissing Area S D	14.8%	71.1%	81.6%
129	Lawrence County	Non-MSA	New Castle AREA S D	14.7%	55.9%	64.1%
130	Montgomery County	Philadelphia	Lower Merion S D	14.6%	69.5%	79.7%
131	Berks County	Reading	Fleetwood Area S D	14.3%	57.4%	65.6%
132	Schuylkill County	Non-MSA	Shenandoah Valley S D	14.3%	62.9%	71.9%
133	Lehigh County	Allentown	Whitehall Coplay S D	14.1%	52.7%	60.2%

[continued on next page]

Rank	County	MSA	SD	% Chg Res	% Res 1977	% Res 1994
134	Montgomery County	Philadelphia	Colonial S D	14.1%	52.7%	60.2%
135	Beaver County	Beaver	Beaver Area S D	13.9%	70.3%	80.1%
136	Snyder County	Non-MSA	Midd-West S D	13.9%	53.5%	60.9%
137	York County	York	Spring Grove AREA S D	13.8%	62.1%	70.7%
138	Washington County	Pittsburgh	Ringgold S D	13.8%	65.2%	74.2%
139	Blair County	Altoona	Claysburg-Kimmel S D	13.6%	54.7%	62.1%
140	Butler County	Non-MSA	South Butler CO S D	13.5%	57.8%	65.6%
141	Schuylkill County	Non-MSA	Tamaqua Area S D	13.5%	63.7%	72.3%
142	Berks County	Reading	Conrad Weiser A S D	13.4%	64.1%	72.7%
143	Lycoming County	Williamsport	Jersey Shore AREA S D	13.4%	67.2%	76.2%
144	York County	York	South Western S D	13.3%	61.7%	69.9%
145	Bucks County	Philadelphia	Morrisville Boro S D	13.0%	71.9%	81.3%
146	Berks County	Reading	Oley Valley S D	13.0%	66.0%	74.6%
147	Lebanon County	Harrisburg	Lebanon S D	12.9%	57.4%	64.8%
148	Greene County	Non-MSA	Southeastern Greene S D	12.9%	36.3%	41.0%
149	Allegheny County	Pittsburgh	West Jefferson HILLS SD	12.9%	63.7%	71.9%
150	Allegheny County	Pittsburgh	Wilkinsburg Borough S D	12.9%	66.8%	75.4%
151	Montgomery County	Philadelphia	Norristown Area S D	12.7%	64.5%	72.7%
152	Jefferson County	Non-MSA	Brookville Area S D	12.5%	53.1%	59.8%
153	Cumberland County	Harrisburg	Big Spring S D	12.4%	53.5%	60.2%
154	Juniata County	Non-MSA	Juniata County S D	12.3%	57.0%	64.1%
155	Chester County	Philadelphia	Kennett Consolidated S D	12.2%	60.9%	68.4%
156	Beaver County	Beaver	Hopewell Area S D	12.0%	71.5%	80.1%
157	Erie County	Erie	North East S D	11.9%	52.7%	59.0%
158	Montgomery County	Philadelphia	Cheltenham Twp S D	11.7%	69.9%	78.1%
159	Bedford County	Non-MSA	Northern Bedford CO S D	11.6%	50.4%	56.3%
160	Venango County	Non-MSA	Franklin Area S D	11.6%	57.4%	64.1%
161	Cumberland County	Harrisburg	South Middleton S D	11.3%	58.6%	65.2%
162	Adams County	York	Littlestown Area S D	11.3%	62.5%	69.5%
163	Indiana County	Non-MSA	Purchase Line S D	11.2%	48.8%	54.3%
164	Delaware County	Philadelphia	Ridley S D	11.0%	64.1%	71.1%
165	Perry County	Harrisburg	Newport S D	10.8%	57.8%	64.1%
166	Lancaster County	Lancaster	Columbia Boro S D	10.7%	65.6%	72.7%
167	Allegheny County	Pittsburgh	South Fayette TWP S D	10.7%	62.1%	68.8%
168	Chester County	Philadelphia	West Chester AREA S D	10.5%	66.8%	73.8%
169	Montgomery County	Philadelphia	Upper Perkiomen S D	10.5%	63.3%	69.9%
170	Beaver County	Beaver	Monaca S D	10.5%	67.2%	74.2%
171	Butler County	Non-MSA	Butler Area S D	10.5%	59.8%	66.0%
172	Lebanon County	Harrisburg	Cornwall-Lebanon S D	10.4%	63.7%	70.3%
173	Schuylkill County	Non-MSA	Minersville Area S D	10.3%	71.9%	79.3%
174	Lancaster County	Lancaster	Cocalico S D	10.1%	62.1%	68.4%
175	Allegheny County	Pittsburgh	South Allegheny S D	10.1%	77.7%	85.5%

Source: Author's tabulations.

5 The Quality of Residential Property Assessment: Allegheny County

Earlier, in Section 4, I explained why nationally homeowners dislike the local property tax so much and have shown how marked the shifts towards residential property have been here in Pennsylvania.

There is another reason, not peculiar to Pennsylvania, why the property tax is intensely disliked. However, this reason is actually more important in Pennsylvania than in other states which have eliminated or substantially reduced the role of the property tax in school finance (Michigan and Oregon come to mind). The fifth reason for taxpayer dislike of the local property tax has to do with the low quality of assessments throughout Pennsylvania.¹²

The last time the Census Bureau measured the quality or fairness of residential assessments, Pennsylvania ranked 44th, just before New York in terms of the extent to which identical properties' assessments within the same taxing jurisdiction can vary.

The International Association of Assessing Officers suggests that a high quality assessment system is one in which variation from the stated or predetermined ratio should be 5 to 15%.¹³

I am afraid the Pennsylvania House and Senate know better than I do how bad the assessments are in the state, and it is precisely because they are so bad that you likely choose to let the problem fester. What happens, of course, is that somebody else has had to address the assessment problem. Over time the assessment of real estate in Pennsylvania has become a ward of the local courts. In Allegheny County, twice in the last 25 years a local judge has put himself in charge of assessments, and wrested away control of assessments from the Board of Property Assessments, Appeals and Review. In both cases I would venture to say that the judges quickly wearied of these new found responsibilities.

How bad are assessments? Let us look at the data for the 1990's in Allegheny County. I should note parenthetically that assessments in Allegheny County are **better**, according to Penn State's Environmental Resources Research Institute, than the bulk of the counties in Pennsylvania. So what we see below, while deeply troubling, is still better than most of the state, but worse than most of the Nation.

5.1 Property Tax Horizontal Inequities: 1994 Data

Five years ago, at the request of the late Tom Foerster, I did a rather in-depth analysis of the quality of assessments by school district, and reproduce one of the tables below. Recall that up until 1999, Allegheny County had a predetermined ratio of 25%. Late in 1999 the Board of Property Assessment, Appeals and Review raised it to 100%.

Column (3) of Table 5 shows by school district¹⁴ how many residential properties transacted in 1994; the remaining columns show the effective assessment ratio (ratio of assessed value to actual selling price) for the distribution of effective assessment ratios, ranked from lowest to highest. If

¹²Some years ago I had the privilege of addressing the New York Board of Regents on the issue of teacher hiring practices in Pennsylvania and remarked that while our teachers unions were tougher than theirs, New York held the edge in having worse property assessments than Pennsylvania. Nobody thought either remark was funny; however, nobody disputed the accuracy of both observations. Interestingly, the New York Board of Regents has just authorized a study of teacher supply and demand patterned after my work for the Pennsylvania State Board some years ago.

¹³See IAOO, Improving Real Property Assessment, A Reference Manual, p. 5. This standard is usually stated in terms of a percentage deviation from the median assessment ratio.

¹⁴Please note that in this table, Duquesne School District data was combined with Clairton.

assessments were being performed perfectly, than the table would be filled with 25.0% throughout. It obviously is not.

For example, Allegheny Valley SD had 170 residential sales in 1994. The median or 50'th percentile assessment ratio was 20.0%, rather than the predetermined ratio of 25%. This means that if one ranked the 170 properties from lowest to highest ratio, the 85'th property had a ratio of 20%.

If one were to look earlier in the distribution of ratios to the 42nd property or 25'th percentile, it had a ratio of 15.8% or 36.8% ($25.0 - 15.8\% = 9.2\% / 25\% = 36.8\%$) below the stated 25% predetermined ratio. If one looks beyond the median to the 128'th ratio at the 75'th percentile, one finds that the ratio is 21.7%; close to the median but below the predetermined ratio of 25.0%. A few school districts (Clairton and Wilkinsburg) have evidence of over-assessments, both had the top 1/4 of their sales above 25%.

If the distribution of ratios was simply low with little dispersion, say at 20% plus or minus .5%, then the assessments would be fair. But, any skim of the table reveals very wide dispersion in the assessment results.

Table 5: Quality of 1994 Assessments in Allegheny County: Distribution of Assessed to Actual Sales Price Ratios

	1996 Median Pa. Taxable Inc.	No. of 1994 Sales	25'th %	50'th %	75'th %
Allegheny Valley	\$16,270	170	15.8%	20.0%	21.7%
Avonworth	\$25,374	159	13.7%	17.1%	22.0%
Baldwin Whitehall	\$18,216	392	17.5%	19.4%	22.0%
Bethel Park	\$22,492	438	16.0%	18.0%	19.9%
Brentwood Boro	\$19,004	129	15.9%	17.7%	21.8%
Carlynton	\$18,323	185	14.8%	17.0%	21.9%
Chartiers Valley	\$18,922	405	15.8%	18.1%	20.8%
Claирton City	\$11,138	130	18.0%	23.7%	31.4%
Cornell	\$16,767	103	16.7%	20.8%	25.2%
Deer Lakes	\$19,727	229	15.8%	18.2%	21.7%
Duquesne City	\$9,467
East Allegheny	\$14,462	199	15.5%	18.5%	23.5%
Elizabeth Forward	\$17,320	208	13.5%	16.8%	21.4%
Fox Chapel Area	\$21,472	461	14.6%	18.1%	22.0%
Gateway	\$19,121	432	16.9%	19.1%	20.9%
Hampton Township	\$27,167	221	13.9%	17.2%	20.9%
Highlands	\$14,536	296	15.0%	18.5%	24.5%
Keystone Oaks	\$19,520	303	14.7%	17.3%	20.7%
McKeesport Area	\$12,090	531	16.7%	21.9%	25.0%
Montour	\$23,116	354	16.1%	19.0%	22.1%
Moon Area	\$27,415	408	17.0%	19.7%	21.9%
Mount Lebanon	\$26,777	564	16.3%	19.2%	21.8%
North Allegheny	\$29,728	849	17.4%	20.5%	23.1%
North Hills	\$22,228	541	17.4%	19.5%	22.0%
Northgate	\$18,053	201	15.7%	19.0%	22.3%
Penn Hills Township	\$17,917	659	17.7%	19.9%	23.7%
Pine-Richland	\$26,349	252	16.7%	21.1%	23.0%
Pittsburgh	\$15,635	4,304	15.4%	19.4%	25.0%
Plum Borough	\$24,464	357	16.6%	18.5%	22.0%
Quaker Valley	\$21,534	234	17.9%	21.0%	24.4%
Riverview	\$18,100	145	16.1%	19.8%	23.4%
Shaler Area	\$19,575	543	16.0%	18.8%	22.2%
South Allegheny	\$12,764	156	15.7%	19.0%	23.5%
South Fayette Townsh	\$27,101	194	17.4%	19.4%	21.7%
South Park	\$26,321	185	16.7%	18.8%	22.0%
Steel Valley	\$12,921	249	15.4%	18.4%	23.1%
Sto Rox	\$12,264	187	17.3%	21.5%	26.8%
Upper Saint Clair To	\$29,876	292	17.8%	19.6%	21.8%
West Allegheny	\$26,167	266	18.8%	21.9%	24.0%
West Jefferson Hills	\$20,618	211	16.4%	19.5%	21.3%
West Mifflin Area	\$14,610	251	16.3%	18.9%	22.3%
Wilkinsburg Borough	\$17,523	288	19.0%	23.1%	28.8%
Woodland Hills	\$16,076	732	16.4%	20.0%	25.0%

5.2 Property Tax Horizontal Inequities: 1998 Data

Through happenstance last year, 1998 sales data turned up at the University, and I was able to analyze it for the testimony this afternoon. Table 6 displays the same calculations show in Table 5 based on 1998 sales data. For the 1998 data, I have also shown the 10'th and 90'th percentiles of

the distribution of effective assessment ratios.

The variations are very, very large and explain why the assessment system is in judicial receivership. The effective assessment ratios in Duquesne City vary from 14.1% at the 10'th percentile to 97.5% at the 90'th percentile! In Clairton City, the effective assessment ratios vary from 11.2% to 45.3%. For those who represent areas of Allegheny County or have followed the chaos there over the past five years, you know that the assessment process is a hot button topic.

I could go on, but I urge the Committee to ponder very carefully the extreme variations in effective sales ratios in Table 6. Combined with the aforementioned long-term drift in greater reliance on residential property, the assessments are the ingredients for a very major explosion in taxpayer sentiment.

This summer Allegheny County will receive for all 500,000 properties the estimated market values from Sabre Systems which has been hired to do the reappraisal effectively under court supervision. While it is evident that properties are generally badly underassessed in Allegheny County, it is also very clear that coming up with reasonable estimates of market values for unsold properties will cause huge increases in property taxes for those who have been underassessed, and huge reductions in property taxes for those who have been overassessed. I seriously doubt that the newly elected home rule officials or judge really understand what lies before them despite having been told.

Table 6: Quality of 1998 Assessments in Allegheny County: Distribution of Assessed to Actual Sales Price Ratios

	1996 Median Pa. Taxable Inc.	No. of 1998 Sales	10'th %	25'th %	50'th %	75'th %	90'th %
Allegheny Valley	\$16,270	167	11.2%	13.9%	17.6%	21.8%	25.8%
Avonworth	\$25,374	149	9.2%	12.9%	15.5%	18.8%	22.0%
Baldwin Whitehall	\$18,216	420	12.8%	16.2%	18.5%	21.0%	24.2%
Bethel Park	\$22,492	450	13.8%	15.5%	17.4%	19.1%	21.2%
Brentwood Boro	\$19,004	133	13.8%	15.5%	17.3%	20.1%	22.7%
Carlynton	\$18,323	175	11.0%	13.3%	16.4%	19.8%	30.0%
Chartiers Valley	\$18,922	378	7.5%	14.1%	16.7%	19.0%	23.0%
Clairton City	\$11,138	110	11.2%	15.0%	18.2%	29.4%	45.3%
Cornell	\$16,767	114	10.7%	13.3%	16.7%	22.5%	39.0%
Deer Lakes	\$19,727	160	5.3%	11.6%	15.9%	18.0%	23.7%
Duquesne City	\$9,467	100	14.1%	17.9%	28.6%	53.3%	97.5%
East Allegheny	\$14,462	199	9.7%	13.7%	16.7%	21.8%	30.5%
Elizabeth Forward	\$17,320	182	8.5%	12.0%	15.8%	18.6%	25.1%
Fox Chapel Area	\$21,472	411	11.8%	14.9%	18.1%	21.0%	25.0%
Gateway	\$19,121	382	12.2%	14.7%	17.3%	19.5%	23.0%
Hampton Township	\$27,167	271	9.5%	14.2%	17.1%	20.3%	23.4%
Highlands	\$14,536	256	10.9%	13.5%	16.6%	22.1%	31.9%
Keystone Oaks	\$19,520	294	12.2%	14.1%	16.7%	19.9%	22.8%
McKeesport Area	\$12,090	484	11.3%	14.4%	18.4%	28.5%	55.4%
Montour	\$23,116	355	10.3%	14.9%	17.9%	20.8%	24.2%
Moon Area	\$27,415	425	0.7%	14.2%	17.8%	20.1%	22.3%
Mount Lebanon	\$26,777	619	13.4%	15.8%	18.3%	21.4%	24.3%
North Allegheny	\$29,728	934	6.4%	15.9%	19.5%	22.2%	24.8%
North Hills	\$22,228	542	13.4%	16.0%	18.6%	21.2%	24.2%
Northgate	\$18,053	179	11.7%	14.3%	17.8%	23.8%	36.9%
Penn Hills Township	\$17,917	633	14.8%	16.9%	19.4%	22.8%	29.3%
Pine-Richland	\$26,349	308	0.1%	11.5%	17.3%	22.1%	24.4%
Pittsburgh	\$15,635	4,100	10.9%	13.9%	17.9%	24.6%	40.5%
Plum Borough	\$24,464	322	9.9%	15.1%	17.0%	20.2%	25.2%
Quaker Valley	\$21,534	271	11.1%	14.3%	18.2%	21.1%	25.3%
Riverview	\$18,100	139	2.7%	14.2%	17.7%	21.6%	28.0%
Shaler Area	\$19,575	507	12.3%	15.3%	17.8%	20.6%	25.8%
South Allegheny	\$12,764	148	11.0%	13.4%	16.7%	22.2%	37.0%
South Fayette Townsh	\$27,101	234	0.1%	15.2%	18.4%	20.2%	21.6%
South Park	\$26,321	159	13.3%	15.8%	17.8%	19.9%	22.1%
Steel Valley	\$12,921	247	11.7%	14.6%	18.0%	24.9%	43.5%
Sto Rox	\$12,264	171	13.1%	15.6%	20.0%	28.4%	43.0%
Upper Saint Clair	\$29,876	401	13.8%	16.6%	19.4%	21.9%	24.9%
West Allegheny	\$26,167	274	0.2%	12.7%	19.1%	21.5%	23.8%
West Jefferson Hills	\$20,618	241	9.5%	14.7%	17.7%	20.5%	25.7%
West Mifflin Area	\$14,610	253	12.6%	15.0%	17.6%	21.5%	33.2%
Wilkinsburg Borough	\$17,523	264	13.2%	18.4%	21.6%	33.4%	61.8%
Woodland Hills	\$16,076	729	12.9%	16.0%	19.4%	24.3%	36.3%

6 If We Had A Clean Piece of Paper to Redesign Education Finance, then What?

Above I have analyzed Pennsylvania's real estate taxes from economic, fairness, and historical points of view. Now, I would like to change the point of view to a purely normative one, and ask the question, if we were to rewrite from scratch how we finance just public education in Pennsylvania, how might we think about it?

The conclusion I reach from first principles is that an income tax rather than a property tax is the intellectually correct answer.¹⁵ Finally, you may be thinking, the Professor has returned to familiar themes!

However, several things should be kept in mind as you read these arguments: First, we do not have a clean piece of paper to work from, we have the mess above I have empirically documented. Second, county and municipal government, which raise something on the order of \$2.5 billion or 33% of Pennsylvania's \$8 billion in local property taxes, will still need to collect property taxes to pay for county and municipal services.¹⁶

6.1 A Purely Normative Analysis of Educational Finance

Public support of k-12 education has been traditionally argued in the U.S. as the single most important way that children of any socioeconomic background can further themselves, and through their subsequent efforts in the world of work, further economic growth. Not only are there likely to be economic benefits which will accrue to children of various backgrounds which can not be readily predicted by their parents, society, or private capital markets, but, as Weisbrod (1964) argued, education generates externalities through a better educated public which improves the overall quality of life for all.

Public education thus functions as a form of insurance to ensure that the private sector will be as productive as possible, and also as a way to create future public benefits for society. We obligate ourselves through state and local taxation to support the costs of public education for these efficiency and public goods purposes. Moreover, public education is viewed by many as a "Merit Good" whose uniform provision reflects our distributional values.

If one agrees that public education represents an important form of income redistribution, it follows that it should be financed out of broad, ability to pay taxes.¹⁷ Under this theory of taxation, each of us should sacrifice according to our ability to pay to support such redistributive or "Merit Goods." Typically, a broad income or consumption tax is viewed as the appropriate instrument to effect ability to pay taxation.

Municipal services, which are of narrow benefit, on the other hand should be financed by local property taxes.

It is quite apparent that, while income and/or broad consumption taxation is a rational source of school finance, this analysis says nothing about whether or not there should be a division of responsibility between state and local government to finance public education, and what role, if any, there should be for the real property tax.

¹⁵This section of my remarks is drawn largely from Strauss(1995).

¹⁶These are 1995 figures and the dollar amounts are no doubt higher with the passage of five years.

¹⁷If the reader finds this unpersuasive, perhaps favoring the opposite, benefit taxes or charges on a voluntary basis to finance income redistributive services, indicates why the first argument is meritorious.

However, if redistribution is a primary purpose of public education, it follows that the higher level of government (the state) has a primary responsibility to ensure that the pattern of educational services is consistent with distributional values. Given the uneven distribution of wealth, income, and differential problems of educating children, this usually leads to the conclusion of either full or very substantial state funding of local public education, and the use of equalizing state aid to poor local districts. Of course, the resulting pattern of services, taxes, and housing are important to families making location decisions. For these reasons one may argue for a *fixed* local income tax rate rather than variable ones in support of merit goods to forestall families moving because of favorable tax rates imposed to support redistributive services.¹⁸ The primary rationale for a local contribution at a fixed rate of tax in conjunction with state equalizing aid is encourage local accountability which the payment of local taxes presumably engenders.

As a historical matter, local school districts were devised as an administrative means for states, often legislatures, to honor their constitutional obligations for providing “thorough and efficient” education to young people. Local school boards were devised to be instrumentalities of state government to implement state policy. To that end, taxing power was also accorded, and in the Great Depression, as states moved to excise and consumption taxes, the local property tax was reserved as the primary source of local school finance.

The chief virtues of the local property tax are usually argued to be its stability of tax base¹⁹, the fact that it already is in place, and, for some, its ability to reach to business at the local level.²⁰

Aside from the problems of ensuring equitable and timely assessment practices, the local property tax is not usually viewed as an ability to pay revenue source. Indeed, the argument most often used for the property tax is that it is a benefit tax which best measures the use of municipal, as contrasted with educational, services.²¹

6.2 Realism and the Property Tax

Another objection to reliance on the local school property tax involves the empirical question of whether or not high wealth districts will always be able to spend more per pupil than any matching program of state aid can successfully induce poor districts to spend to adequate levels. As Feldstein (1975) pointed out, and a number of researchers have found²² the use of a district power equalizing formula that provides more generous matching rates to poorer districts will not in

¹⁸See Nechyba(1995) for the most recent analysis of “sorting out” by families shopping among areas for local public services and housing when the public service in question is a local public good rather than a merit good or one involving income redistribution.

¹⁹However, see Strauss(1995a) for an empirical, comparative analysis of New York State’s property and income tax bases, and the finding that the local property tax base was actually *more* volatile than would have been a local income tax base.

²⁰See Ladd and Harris(1995) on this; they also fashion the argument for state-wide taxation of non residential property in the support of public education with empirical analysis for New York.

²¹Helen Ladd argues that because public education may positively be capitalized into housing values, i.e. Rosen and Fullerton(1977), the local property tax is logical source of educational finance. Of course, poor education or low test scores can be negatively capitalized and thereby reduce housing values. In this case, it is not clear to me how persuasive the argument becomes.

Ladd and Harris(1995) also fashion the argument for state-wide taxation of non residential property in the support of public education with empirical analysis for New York. Also, see Ladd(1976) for an earlier analysis in the Massachusetts’ context. Also, see Netzer(1966) for a general discussion of the advantages and disadvantages of the property tax, and Netzer, Berne, and Stiefel(1995) that details a variety of problems with the current New York property tax. Lankford and Wyckoff(1995) discuss the distributional aspects of New York’s property tax.

²²See, for example, DiPasquale(1979)

most circumstances overcome the wealth elasticity demand for educational spending. That is, the income effects will generally be stronger than the relative price effects with the result that fiscal equalization, or post-fisc equity, will not be fully achieved. For power equalizing to be effective, the elasticity of per-pupil spending with regard to wealth must be zero.²³

As I have demonstrated above empirically, horizontal equity issues also arise once one recognizes the role of non-residential property in school finance. For some local school districts, the residential property tax is the minor source of local revenue, while the tax on commercial and industrial property is the major source of local school finance.

The presence of major utilities or shopping centers confer tax windfalls to local residents and their children, in the sense that the local costs of public education are borne by the owners and customers of these facilities rather than the residents of the school district. As a result, residents bear little of the costs of education, and can, with very low millages, provide very substantial resources to public education. Others in districts with more residential property or agricultural property, by contrast, must directly bear the burden of local school finance. Such circumstances raise questions of fairness and horizontal equity.

6.3 Replacing the School Property Tax with An Income Tax

Using an income tax to replace all or the residential portion of the local school property tax can be done entirely at the state level, or in conjunction with reforms of state school aid formulas. Replacement of the local school property tax with a foundation aid formula and a fixed, flat rate local income tax can insure that fiscal equalization, in the sense of providing the resources to support base-line educational services, can be achieved. Under a foundation grant program, the local, mandatory contribution, aid to the i 'th district, A_i , is the difference between the number of students (often weighted) multiplied times the state-defined foundation amount, F , and a state-mandated (minimum) local contribution: $t * Base_i$ where $Base_i$ is total community taxable income or adjusted gross income, and t is a mandated income tax rate:

$$A_i = [F * ENR_i] - [t * Base_i] \quad (1)$$

As of 1992, 38 states used some form of a foundation program; 23 had a mandatory local effort (a local minimum tax rate is set), while 15 did not require local effort.²⁴

Under the foundation grant and local income tax approach, the crucial determination that needs to be made involves ascertaining what each district's per pupil spending needs are, the foundation amount, and then comparing this guaranteed level of spending with local resources to find a residual which the state makes up with current or augmented state resources.

It should be emphasized that the foundation amount should be a scientific measure of the resources needed to educate a child in grades K-12 to achieve at an acceptable level of performance. Indeed, one can imagine that an actual foundation amount would vary across districts once hard data were developed on what is necessary to attract and retain quality teachers, desired minimum and maximum class sizes, the sorts of capital and other operating services necessary to obtain desired levels of outcomes, differential costs of living between urban and rural areas, and the nature of the student body. That is, one can imagine determining F_i for each i 'th district by taking into account the above considerations which affect the costs of providing educational services.

²³See Reschovsky(1994) for a thoughtful review of varying concepts of fiscal equalization and school resources.

²⁴See Gold *et al* (1992), Table 4, p. 18.

6.4 The Political Economy of Moving from the Property Tax to the Income Tax

Whether one replaces the school property tax with an income tax based on the normative and behavioral arguments in Section 6.1, the above-described economic pressures encourage state legislatures to reduce or eliminate school property taxes. However, the actual shift away from property to income taxes will ultimately raise questions about the increased first-round burden of school finance which falls on households.

While it is certain that households pay business taxes one way or another, either in their role as consumers, employees (and as actual or potential pension beneficiaries), and/or as owners of corporate interests, this perceived shift in burden will cause problems for elected officials.

Several responses to this shift are possible. First, whether what we now observe represents a proper distribution of financial burden is correct or desirable is not at all clear. Certainly, forcing households to pay relatively more than they do currently may encourage greater care and interest in the spending of local school monies. If the arguments in Section 6.1 are persuasive, then it could also be the case that business property is currently “over-taxed” in the support of local education, and the increased burden on households that results from moving to an income tax is appropriate.

On the other hand, elected officials of any political persuasion may find the shift from industrial and commercial property to households to be untenable, and argue for shifting to an income tax but, at the same time, retaining local business property taxes. If one does wish to maintain the current (or pre-reform) balance between business and household taxation²⁵, one may classify the local property tax, and replace only the residential property tax with a local income tax, or one can provide some form of property tax exemption (usually called a homestead exemption) which will have the general effect of reducing household but not industrial or commercial property taxes.²⁶

Classification usually means that the assessment ratio applied to market value can vary by type of property or the property tax rate on assessed value can vary by type of property.²⁷

As you are well aware, the business community often finds offensive the differential classification of real property in terms of tax rates or stated assessment ratios. Their concern revolves around the possibility that business property will be more heavily taxed than before once it is isolated from residential property.

There are a number of techniques to forestall such subsequent fiscal shifts. One way is to provide through state law mandatory assessment ratios for different types of property, and provide for reasonable standards of evidence upon appeal. Alternatively, if 100 percent market value is the assessment standard, then state limitations on differential millages can be provided through law, again with reasonable standards of evidence upon appeal. To the extent that movement from the residential property tax to a local income tax is at the discretion of local school districts, then

²⁵The issue of balance has been of legislative concern in other states.

For example, Illinois has a constitutional provision that puts a maximum on the ratio of the state corporate net income tax rate to the personal income tax rate. In Pennsylvania, the issue of relationship between business and personal income taxes was part of the political agreement underlying a constitutional amendment permitting a state personal income tax in 1972.

²⁶See Strauss(1993) for an analysis of the effects on school finances of a homestead exemption in Allegheny County, and Strauss(1995) for an analysis of the effects of replacing the residential school property tax with a local income tax and a foundation program for all school in New York State.

²⁷The Census Bureau(1994) reports as of 1991 that 14 states permit differential assessment ratios or equalization categories—Alabama(3), Arizona(13), Colorado(3), Kansas(4), Louisiana(5), Michigan(6), Mississippi(5), Missouri(3+), Montana(9), North Dakota(4), South Carolina(7), Tennessee(3), Utah(2) and Wyoming(2). California has 2 standards for assessment that looks at date of ownership. Massachusetts and the District of Columbia permit different tax rates, while Minnesota applies “percentage adjustments” to market value data to achieve classification.

one can require that personal income tax receipts be offset, dollar for dollar, by local residential property tax reductions, and/or provide for a limited amount of revenue growth (inflation plus enrollment growth rates, for example).

As may be obvious to some, the wholesale replacement of the local property tax by local income taxes will move the relative burden of school finance further to households as contrasted to the non-household sector since there will be no corresponding local (or state) non-household income tax increase to compensate for the non-household property tax decrease.

The second approach, constitutionally approved here, but not implemented to any discernible degree so far, is to provide for a homestead exemption. This approach works like a standard deduction in the federal personal income tax.

7 Some Final Things to Think About

I hope this review of the local property tax in Pennsylvania has proven helpful, and would like to close with a few thoughts about where I think the Commonwealth might think about going in terms of school finance policy.

First, the long-run decline in our average, relative standard of living reflects monumental economic forces which a state, let alone a region or municipality can NOT effectively repeal. Government can enable improvements in our standard of living by providing valuable public services (education, transportation, and public safety), and financing these services on a simple, transparent basis through taxes and fees. Business and households can decide to stay or move here if the combination of public spending and taxes "work." Conversely, business and households will move on, in the long-run, if the combination of public spending and taxes "do not work."

Second, my sense of opinion here in Pennsylvania is that the public does not like the effects of the property tax. The various data I have reviewed with you explain why they do not like it.

Third, it is my impression when speaking with tax executives from major US corporations around the country that they know about the property tax mess here in Pennsylvania, and it is a major impediment to their investing in the state. They also know about the Capital Stock and Franchise tax and what it means for them to have a presence here. The issues surrounding the property tax are not little secrets that I am sharing with you that only we, residents and voters in the state, just figured out.

Some may argue that by providing long-term property tax exemptions or Tax Increment Financing that the horrors of the local property tax can be overcome, and investors will flock to these tax havens with employment opportunities to follow. Perhaps. On the other hand, the more thoughtful may wonder if the ineptitude or worse that led to such a bad property tax system is matched on the spending side of the public budget. Then what? Roads that don't work? Schools that don't work?

Fourth, given what I know about the statutory basis under which public education operates in Pennsylvania, I am not sanguine about the Commonwealth taking on a greater responsibility for financing public education (say the magic 50%), as well as bringing up the resource base that poor districts have, without some fairly major changes in the statutes that govern public education.

Some rich districts squander taxpayers money and some poor districts squander taxpayers money. And, some rich districts do outstanding things with taxpayers money, and some poor districts do outstanding things with taxpayers money. But, as I said some years ago, if the state were to put more state tax dollars into public schools, under the guise of reducing the local property tax, and do nothing else, it likely will simply improve the quality of automobiles teachers drive. It will not deal with the vast inequities in the assessment of local property tax, and unless you do something really dramatic like eliminate the school and municipal property tax, it will do nothing for Widow Jones.

When Widow Jones and her children figure out that she still has to sell her house and move into an apartment, even after you have declared victory and a new age, what will happen? When she can no longer have the children and grandchildren over for Thanksgiving and Christmas, because you did not get it right, then maybe they will start wondering who they should vote for next time.

Fifth, the hard work to fixing the property tax does not require any original thinking, just political will. The 1981 *Final Report of the Pennsylvania Tax Commission*, and the 1987 *Final Report and Recommendations of the Pennsylvania Local Tax Reform Commission*, both of which I drafted and got various people to endorse, contain good advice:

1. separation of the assessment function from the appeals function
2. 100% market value standard
3. state standards, evaluations and sanctions
4. mandatory reassessment when assessment quality deteriorates
5. state assistance for collection, processing, maintenance and analysis of local property data

To these I would add the capitalization of a state property tax circuit breaker that provides for elderly tax property tax forgiveness and the collection of liens on such properties when they are transacted.

Sixth, let me simply offer to the Committee a promise to return, if you so invite me, with a list and explanation of accountability proposals which would warrant the state becoming more fiscally involved in supporting the costs of public education.

Thank you for the opportunity for testifying before you this afternoon. I am happy to answer any questions you may have on my remarks.

8 References

- Berne, Robert and Leanna Stiefel, "Concepts of Equity and Their Relationship to State School Finance Plans," *Journal of Educational Finance*, 5 (Fall, 1979), 109-132.
- DiPasquale, Denise (1979). *State Aid to Local School Districts: A Comparative Analysis*. Unpublished PhD. Dissertation, MIT, 1979.
- Feldstein, Martin S. (1975), "Wealth Neutrality and Local Choice in Public Education," *American Economic Review*, 65, 1 (March, 1975), 75-89.
- Ferguson, Ronald (1991), "Paying for Public Education: New Evidence on How and Why Money Matters," *Harvard Journal of Legislation*, 28, (2), Summer, 465-498.
- Gold, Steven D., David M. Smith, Stephen B. Lawton, and Andrea C. Hyary [editors] (1992), *Public School Finance Programs of the United States and Canada: 1990-91*, (American Education Finance Association and the Center for the Study of the States).
- Gold, Steve D.(1994), *Tax Options for States Needing More School Revenue*. (Washington, D.C.: National Education Association).
- Hanushek, Eric A. et al (1994). *Making Schools Work: Improving Performance and Controlling Costs*. (Washington, D.C.: The Brookings Institution).
- Henahan, Ruth L. (1992), "New York," in Gold, Steven D., David M. Smith, Stephen B. Lawton, and Andrea C. Hyary [editors] (1992), *Public School Finance Programs of the United States and Canada: 1990-91*, (American Education Finance Association and the Center for the Study of the States), 391-407.
- Kierney, C. Philip, "Reducing Local School Property Taxes: Recent Experiences in Michigan," Policy Brief prepared for the New York Stated Board of Regents, New York Education Department, Albany, New York.
- Ladd, Helen F. (1976), "State-wide Taxation of Commercial and Industrial Property for Education", *National Tax Journal* 29 no. 2, 143-53.
- Ladd, Helen and Ed Harris (1995), "State-wide Taxation of Non residential Property for Education," Policy Brief prepared for the New York Stated Board of Regents, New York Education Department, Albany, New York.
- Lankford, Hamilton and James Wyckoff (1995), "Taxpayer Burden and Local Educational Finance in New York," Policy Brief prepared for the New York Stated Board of Regents, New York Education Department, Albany, New York.
- Monk, David H. (1990), *Education Finance: An Economic Approach*, (New York: McGraw-Hill)
- Nechyba, Tom (1994), *Fiscal Federalism and Local Public Finance: A General Equilibrium Approach with Voting*, unpublished PhD. thesis, University of Rochester, April, 1994.
- Nechyba and Strauss(1998) "Community Choice and Local Public Services: A Discrete Choice Approach," with Thomas Nechyba, *Regional Science and Urban Economics* 28, 1 (January, 1998), 51-74. (NBER Working Paper 5966).

Netzer, Dick (1966). *Economics of the Property Tax*. (Washington, D.C.: The Brookings Institution).

Netzer, Dick, Robert Berne, and Leanna Stiefel (1995), "New York State's Property Tax," Policy Brief prepared for the New York State Board of Regents, New York Education Department, Albany, New York.

Odden, Allan (1995), "Finding Resources by Changing Management and Organization," Policy Brief prepared for the New York State Board of Regents, New York Education Department, Albany, New York.

Reschovsky, Andrew (1994), "Fiscal Equalization and School Finance," *National Tax Journal*, XLVII, 1 (March, 1994), 185-197.

Rosen, Harvey, and David J. Fullerton (1978), "A Note on Local Tax Rates, Public Benefit Levels and Property Values," *Journal of Political Economy*, 85, 2 (April, 1977), 433-440.

Senate Fiscal Agency (1994). *Michigan School Finance Reform: Analysis of the Enacted School Finance/Education Reform Package*. (Lansing, Michigan: The Agency.).

Strauss, Robert P. (1993), "Reforming School Finance in Illinois: Principles, Practicalities, and Politics," *State Tax Notes*, 5, 7 (August 16), 351-360.

Strauss, Robert P. and Elizabeth Sawyer (1986), "Some New Evidence on Teacher and Student Competencies," *Economics of Education Review*, 5, 1, 41-48.

Strauss, Robert P. (1995a), "Reducing New York's Reliance on the School Property Tax," *Journal of Education Finance*, 21, 1 (Summer), 123-53.

Strauss, Robert P. (1995b) "School Finance Reform: Moving from the School Property Tax to the Income Tax," *Proceedings*, National Tax Association-Tax Institute of America, San Diego, California (October, 1995), 84-91.

Strauss, Robert P. (1997), "Why Property Taxpayers Hate the Property Tax So Much," *State Tax Notes*, 13, June 16, 1997, 1802-1806.

U.S. Bureau of the Census, Governments Division (1994). *1992 Census of Governments: Taxable Property Values, Volume 2*.

Weisbrod, Burton A. (1964), *The External Benefits of Public Education* Industrial Relations Section, Princeton University.