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11-3-1994

## State and Local Tax Policy; Non-Trader Use of Futures: Sell or Store


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### Recommended Citation

Fausti, Scott W. and Shane, Richard, "State and Local Tax Policy; Non-Trader Use of Futures: Sell or Store" (1994). *Economics Commentator*. Paper 310.

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## STATE AND LOCAL TAX POLICY



by

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The primary purpose of a tax is to raise funds to pay for government expenses. Expenditures include funding for education, law enforcement, highway maintenance, and the judicial system. The government may also use taxes to alter the allocation of resources in the private sector. For instance, if the government believes alcohol consumption has a negative effect on society, it can levy a tax on alcohol to reduce both production and consumption of alcohol.

### Underlying Principles of Tax Policy

Two issues must be considered when government selects its tax structure: 1) how much government revenue is needed and 2) which groups in society will bear the economic burdens from different taxes being considered. In levying specific taxes, two principles of fairness need to be considered. First, the tax burden should be distributed according to benefits received. Second, the tax burden should be distributed according to the ability of various groups to pay the tax.

State and local officials can choose from a variety of different taxes to raise government revenue, e.g., 1) sales tax, 2) income tax, 3) property tax, 4) excise tax, 5) severance tax, and 6) user fees. Each of these tax alternatives distributes the tax burden differently across society. Variation in tax burdens among tax instruments can generate a tax shifting problem as individual interest groups try to influence government to select taxes that minimize their respective tax burdens.

With regard to taxes levied on specific goods and services, "who pays the tax?" depends on whether buyers and sellers are more sensitive to tax-induced  
(Continued on next page)

## NON-TRADER USE OF FUTURES: SELL OR STORE



by

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Market analysts have all been talking about the record row crop harvest this fall. Corn yields may average 140 bushels per acre in the United States and 100 bushels per acre in South Dakota. Soybean and sunflower yields have been phenomenal. All these fundamental facts have pushed cash and futures markets to relatively low prices. Farmers are asking whether to store or sell at these low prices. Two futures market concepts can be used to help make this decision—basis and carry.

Basis is the relationship between your local cash market and the futures market price. In most areas of South Dakota, futures price is higher than cash price by a predictable amount and we say the basis is so many cents under (the futures market). If the actual basis is different from this predictable amount (normal), it may suggest selling or storing. If the basis is more than normal, storing is encouraged. If the basis is less than normal, selling is encouraged.

In one southeast South Dakota town picked at random, the cash corn price is \$1.74 per bushel and the Chicago futures price is \$2.16 per bushel. The basis is \$.42 under. A study of basis tables from past years reveals that normal basis for this location at this time of the year is \$.34 under, and by March the basis should decline to \$.25 under. This basis improvement indicates a potential payment to storage until March of \$.17 per bushel. For soybeans at the same location, normal basis is \$.47 under and current basis is \$.63 under, with expected improvement by March to \$.35 under. The expected payoff to storage from basis improvement is \$.28 per bushel.

Carry is the change in futures price from one contract month to the next. If the change is positive, a  
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changes in price. If buyers are more sensitive than sellers to a change in price, sellers pay the greatest proportion of the tax. If sellers are more sensitive to a change in price than buyers, then buyers pay the greatest proportion of the tax.

Consider the South Dakota twenty-three cent excise tax on cigarettes. Seller response to a change in the price received for cigarettes due to the tax is more sensitive than consumer demand to a change in price paid. In this situation, cigarette retailers are able to shift the majority of the tax burden to the consumer of cigarettes.

Another question that arises in a discussion over tax policy is the distribution of the tax burden across income groups: what proportions of income are paid out for any particular tax by people from different income groups? Economists categorize tax alternatives into three groups with respect to sharing tax burdens across income groups: 1) proportional tax - taxpayers pay the same percentage of income in taxes irrespective of their income level; 2) progressive tax - the higher the income, the larger is the percentage of income paid in taxes; and 3) regressive tax - the higher the income, the smaller the percentage of income paid in taxes.

An example of a regressive tax is a general sales tax. The larger the number of household necessities subject to the tax (e.g., food, clothing), the more regressive the tax. This is true because lower income households spend larger proportions of their incomes on necessities than higher income households.

An example of a proportional tax would be the social security tax. For all individuals who earn less than \$60,600, the social security tax is 6.2% of gross income, i.e., tax payments are proportional to income. However, if one includes all tax payers the social security tax becomes extremely regressive.

An example of a progressive tax is an incremental income tax. The higher one's personal income, the more one pays in taxes as a percentage of one's income. Or, the higher a corporation's income, the larger percentage of income paid as a corporate income tax.

Concerning the tax equity (ability to pay) issue, a proportional tax scheme provides an equal tax burden across income groups. However, higher income groups have higher percentages of discretionary

income (i.e., income not required for food, clothing, and other household necessities) to total income. Therefore, higher income groups can better afford to pay higher percentages of their income in taxes. Viewed from this standpoint, most people would conclude that a progressive tax scheme is more equitable than a regressive or proportional tax.

### South Dakota's Current Tax Structure

The State of South Dakota is required by law to maintain a balanced budget. The State's total projected continuing General Fund Receipts for FY1994 are \$563,872,488. The State does not raise revenues from taxes on real or household property. The State's sales and use tax is estimated to generate 52.9% of total continuing receipts or \$298,020,860 in FY1994. A "use tax" is a tax on rental transactions, etc. Video lottery would have been the next largest contributor, accounting for approximately 10% of total receipts. The remaining revenues are generated by a host of other fees and excise taxes levied by the State.

Because South Dakota's sales tax covers necessities such as food and clothing, it is especially broad-based. The broad-based approach makes this tax mechanism regressive, since lower income households spend larger proportions of their incomes on necessities than higher income households. The other instruments of taxation used by the State are specific in nature. The tax burden of these specific taxes falls upon the buyers and sellers of the specific good or service taxed. The distribution of the burden depends on which group is more sensitive to price changes.

The primary revenue raising mechanism at the local level is the real estate property tax. In 1992, local governments in South Dakota raised \$457,042,759 through property taxes. Approximately 2/3 of property tax funds went to schools and the other 1/3 was used to fund local services. With regard to the fairness issue, property taxes in South Dakota are levied at the local level. These funds remain within the community to finance local services. Thus, the local tax burden for the entire community equals the benefits received by the community.

The property tax is considered a regressive form of taxation. However, one could argue that since the property tax rate is set at a fixed percentage of the property's value, it is proportional to income. For example, poor people do not own property.

Therefore, they do not pay property taxes. However, as an individual's income increases there is a propensity to become a property owner and property tax payer.

**Considerations for the Future**

At this time, the South Dakota economy is healthy and expanding. In the current economic climate, state and local governments should not be experiencing fiscal crises. The current financial crisis at the state level is the result of the demise of video lottery. The imminent financial crisis at the local level arises from the possible passage of the property tax cap on November 8.

Obviously, these difficulties are not the result of declining economic activity in the state. Rather, they are the result of the perceived unfairness of the current tax structure at the state and local level by particular coalitions within the state. These perceived inequities are the result of the heavy dependence of government tax revenues being raised through taxes on the specific economic areas of property and gambling.

On the other hand, broad-based taxes, such as sales or income taxes, provide more stable sources of revenue than specific taxes. Broad-based taxes are also less politically controversial because no single interest group is being singled out to bear the tax burden. For example, the property tax cap measure is the result of the belief of property owners in South Dakota that they are bearing an unfair share of the tax burden at the local level. If the measure is successful, then property owners will have successfully shifted the tax burden away from their interest group.

South Dakota ranks 47<sup>th</sup> in the nation with respect to state and local taxes paid per capita. However, South Dakota is 50<sup>th</sup> in the nation with respect to income per capita. The implication is that South Dakota has a moderate tax burden and a large proportion of South Dakota's households earn low incomes relative to the rest of the nation. However, South Dakota's current regressive tax structure is placing a heavier tax burden upon the shoulders of low income households, than upon the shoulders of upper income households.

Given the regressive nature and instabilities associated with South Dakota's current tax structure, it may be time for South Dakota to consider a new approach for government financing. It seems that South Dakota has been playing the "don't tax me,

don't tax you, tax that guy behind the tree" game too long. Tax revenues pay for government services. The less tax revenue generated, the fewer government services provided. Total tax revenues raised from all sources in South Dakota sum to approximately one billion dollars. If a property tax cap of one percent is imposed and video lottery fails, then total tax revenues will decline by approximately 37%. The implication is that government services will also have to decline by 37%, with the greatest decline in the level of government services at the local level. The magnitude of this impending fiscal crisis indicates that it is time for a broad based tax scheme. Without a stable tax system, South Dakota will continue to endure the economic hardships associated with unstable tax revenue sources.

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(Shane . . . cont'd from page 1)

higher price is expected which, in effect, represents a payment for storage. If the change is negative, a lower price is expected -- based on current market information. In the following table, corn carry from December to March is \$.09 per bushel and soybean carry from November to March is \$.23.

Combining the basis improvement and carry in the market yields a potential payment to storage for corn until March of \$.26 per bushel and for soybeans of \$.51 per bushel. Both of these payments exceed the cost of storing the commodities until March. Therefore, the futures market is encouraging farmers to store corn and soybeans at this time. Most locations in eastern South Dakota currently have similar storage analysis results -- with storage encouraged. Producers should evaluate their own situations to take advantage of this type of analysis.

**FUTURES PRICE**

Mon. Corn		Mon. Soybean		Mon. Soyoil	
(\$ Per Bushel)				(\$ Per Cwt)	
DEC	2.16	NOV	5.42	DEC	25.75
MAR	2.27	JAN	5.54	JAN	24.85
MAY	2.35	MAR	5.65	MAR	24.36
JLY	2.40	MAY	5.73	MAY	24.14
SEP	2.45	JLY	5.80	JLY	23.95

With sunflowers, the futures-cash relationship (basis) is less predictable because there is no sunflower



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futures market and they are cross-hedged on the soybean oil market. The sunflower price at major markets traditionally runs around 42% of soyoil futures price. This relationship is used today in making cash bids to farmers and local elevators. However, since the initiation of the federal government's Sun Oil Assistance Program (SOAP), which began in 1988, the relationship has been around 50%. Pricing has followed the traditional relationship because of uncertainties surrounding government programs.

On Nov. 1, 1994, the Enderlin ND price for sunseed is \$9.40 per cwt and the price of nearby soyoil futures is \$25.75 per cwt. Sunseed price is 36.5% of sunoil price. If the relationship becomes more "normal" at 42%, one could expect the basis to narrow by up to \$1.40 per cwt and maybe more if the government continues to use SOAP. This relationship encourages storage.

The carry in the soyoil market contradicts the basis answer to encourage storage of sunseed (see the

previous table). The price of successive soyoil contracts is decreasing, suggesting lower prices ahead. In this situation, up to three months storage is prudent for at least part of the sunseed crop in order to take advantage of basis improvement. Long term storage is questionable at this time because of the inverted carry in the soyoil market. Producers with sunseed in storage should watch these relationships very closely and be ready to sell more of their sunseed.

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## ECONOMICS COMMENTATOR

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