CP0002
Replace School Property Tax with Expanded Sales Tax

Economic Impact on Florida

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CP0002 Basic Program

Swap Sales Tax for School Tax Property Tax

- Eliminate ad valorem property tax set as the required local effort ("RLE") for all school districts
  - Cuts property taxes by about $8 Billion
- Replace the $8 Billion in revenue with higher sales tax revenues from:
  - Increase in sales tax rate by 1 cent
  - Repeal of some sales tax exemptions
  - Taxation of some services

Economic Impact of Shifting $8 Billion in Property Taxes to Sales Taxes

- Lower property taxes result in:
  - Increased disposal income for owner occupied dwelling units
  - Increased net operating income for all rental and income producing property
  - Increased value of all property in Florida increasing wealth
  - Higher investment in Florida real estate
  - Increases in spending based on higher wealth levels
- Higher sales taxes result in:
  - Higher prices for existing and for newly taxed items
  - Lower demand for existing and for newly taxed items
- Net impact on Florida's economy depends upon the balance of the positive and negative effects of the swap
  - In part this depends upon the incidence of the costs and benefits
    - How much will Floridians pay?
    - How much will non Floridians pay?
  - In part this also depends upon the dynamic impact on investment, effects form increased wealth and the reduction in demand for newly taxed goods and services
- There are no free lunches in economics – the "dismal science"

How Can the Swap Create Wealth and Stimulate Investment?

- Consider the economics of any income producing property in Florida
  - Income producing property trades in the market place based on its ability to generate net operating income ("NOI")
  - The value of income producing property is equal to the NOI divided by a capitalization rate or "Cap Rate".
  - Cap Rates are widely published and range from about 6% to about 12% depending upon:
    - The type of property (apartments, shopping centers, offices, single family homes)
    - The ability of the renter to pay rent
- Example of valuing a grocery anchored shopping center
  - NOI = $2,000,000
  - Cap Rate = 10%
  - Value of the Center = $20,000,000 (NOI/Cap Rate)
- What happens to the shopping center if the swap is enacted?
  - Property taxes fall by 7 mills ($7/$1,000) or $140,000
  - At a 10% Cap Rate the value of the center increased $1,400,000
  - Or some portion is passed to tenants making them more profitable

Eliminating RLE Cuts Property Taxes by $8 Billion

- All Florida property becomes more valuable at a lower tax rate
- Eliminating $8 Billion in taxes creates approximately $80 Billion in increased values and higher wealth for property owners assuming a 10% Cap Rate
- Florida property becomes instantly more profitable
  - This will stimulate construction of non residential property since it is now more valuable to own
  - This creates jobs and incomes
  - Those who own Florida property are wealthier by $80 Billion
  - This will stimulate spending in Florida
  - Lower property taxes will result in higher levels of population growth

Macro Impacts of the Elimination of the RLE

- Stimulus depends upon:
  - Net tradeoff for household budgets:
    - Lower property taxes increase disposable income
    - Higher sales tax rate, elimination of some exemptions, and imposition of some new service taxes decrease disposable incomes
  - Elasticity of demand from an increase in wealth
  - The percentage of wealth that is spent in Florida
  - The elasticity of construction/investment in Florida real estate from the tax reduction
  - The elasticity of population growth
- Estimated the impacts using econometric model of Florida's economy

Higher Sales Taxes Offset Gains from Eliminating RLE

- Replacing $8 Billion in property taxes
- Repeal some sales tax exemptions:
  - Maintain exemptions for food, prescription drugs, health services, residential rent, electricity, and heating fuel
  - Repeal exemptions “not in public interest”
- Tax some services
- Increase the sales tax rate by 1 cent
- The Legislature will determine the mix, so precise mix of replacements cannot be known with certainty
- For our analysis assumed that most of the impact from the changes falls on households

Other Considerations

- Competitive position of Florida is improved
  - Property taxes are the 2nd biggest fix expense of most any business
  - Lower property taxes make Florida more competitive
  - Sales tax rates are relatively unimportant in location decisions by businesses
  - Tax on services is on services rendered in Florida by any provider
    - Thus, Florida based business are not put at a competitive disadvantage
    - There will be somewhat lower levels of sales due to higher taxation
- To keep modeling simple and precise we assumed incidence of the new taxes would fall on households

Important Calculations

Analysis of Effective Millage Rates 2007	Millage Rates
Required Local Effort Effective Millage (DOR)	4.56
Total Effective Millage Rate (DOR)	16.88
	========
Reduction Tax Rate from Elimination of RLE	**27.02%**

Tax Swap Amounts	Values
RLE Eliminated	$7,900,000,000
Value of 1 Cent Sales Tax	$3,930,300,000
	==========
Amount Needed from New Sources @ 6 cents	**$3,969,700,000**

FLORIDA SALES TAX RETURN DATA
DOR ADMINISTERED TAXES/DOR ACCOUNTS
MONTHLY STATISTICS
TAX COLLECTIONS BY TYPE OF BUSINESS

FOR All BUSINESSES
STATE TOTALS
VALIDATED TAX RECEIPTS DATA FOR: JULY, 2006 thru JUNE, 2007

TYPE OF BUSINESS	GROSS SALES	STATE SALES TAXES TAXABLE SALES	STATE SALES & USE TAXES	Percent Taxed
1 GROCERY STORES	52,190,203,766	15,621,615,947	913,061,076	29.93%
2 MEAT MARKETS	170,487,868	19,041,752	1,119,821	11.17%
3 SEAFOOD DEALERS	266,588,240	29,580,386	1,785,963	11.10%
4 VEGETABLE AND FRUIT MARKETS	272,850,177	42,371,740	2,608,907	15.53%
5 BAKERIES	677,484,724	268,837,693	16,302,194	39.68%
6 DELICATESSENS	821,987,719	535,450,859	32,738,757	65.14%
7 CANDY AND CONFECTIONARY	1,109,908,967	510,112,413	30,503,743	45.96%
8 RESTAURANTS AND LUNCHROOMS	30,529,541,205	28,106,352,402	1,704,629,344	92.06%
9 TAVERNS, NIGHT CLUBS	2,939,090,259	2,641,476,360	161,971,752	89.87%
10 CLOTHING STORES	11,563,462,007	10,005,925,654	602,202,135	86.53%
11 SHOE STORES	1,730,263,424	1,574,576,611	94,641,403	91.00%
17 FEED AND SEED STORES	1,363,367,922	525,838,067	31,752,894	38.57%
18 HARDWARE PAINTS MACHINERY	5,765,893,003	3,405,530,772	204,859,816	59.06%
19 FARM IMPLEMENT DEALERS	5,270,401,447	3,529,656,345	211,911,005	66.97%
20 GENERAL MERCHANDISE STORES	98,134,892,678	45,686,052,156	2,736,147,972	46.55%
21 SECOND-HAND STORES	1,876,545,317	810,043,548	48,796,225	43.17%
22 DRY GOODS STORES	425,814,266	291,168,195	17,074,672	68.38%
23 MOTOR VEHICLE DEALERS	84,212,573,810	47,535,990,688	3,116,373,273	56.45%
24 AUTO ACCESSORIES, TIRES, PARTS	9,157,499,567	4,248,741,564	255,217,723	46.40%
25 FILLING AND SERVICE STATIONS	14,261,099,956	1,357,024,195	80,604,313	9.52%
STATE TOTAL *	**920,831,251,711**	**354,780,635,472**	**21,757,056,659**	**38.53%**

First 25 categories for illustrative purposes along with the totals

Impact on Households

Net Impact on Households Cosumer Expenditure Survey BLS	All consumer units	Under 25 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and older
Average Annual Household Expenditues	$48,398	$28,181	$47,582	$57,476	$57,563	$50,789	$35,058
Less Housing Expenditures (not now taxed)	-16,366	-9,355	-17,139	-20,303	-18,377	-16,529	-11,787
Less Healthcare Expenstures (not now taxed)	-2,766	-706	-1,652	-2,284	-2,757	-3,556	-4,331
	======	======	======	======	======	======	======
Net Average Household Expensitures Taxed	$29,266	$18,120	$28,791	$34,889	$36,429	$30,704	$18,940
Effective Percent of Gross Sales That are Taxable from DOR	38.53%	38.53%	38.53%	38.53%	38.53%	38.53%	38.53%
1 Cent Increase in Sales Tax Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	======	======	======	======	======	======	======
Increase in Sales Taxes Paid by Households	$113	$70	$111	$134	$140	$118	$73
Increase in New Taxes on Households from Elimination of Exemtions and Taxes on Services	$280	$144	$250	$329	$327	$297	$241
Change in property tax from elimination of RLE	-$446	-$97	-$322	-$523	-$549	-$519	-$425
	======	======	======	======	======	======	======
Net Impact of Swap on Florida Households	**-$53**	**$117**	**$39**	**-$60**	**-$82**	**-$103**	**-$111**

Average Florida household would benefit directly by $53 from swap

Impact of Swap on Commercial Construction Activity

- Quantified impact on commercial properties with an econometric model
- Selected 2002-2003 period for analysis
  - Pre boom
  - Limited impact fees in place
- Pooled-time series and cross-sections for all 67 counties
  - Avoids complications from variations in interest rates, national business cycles, and other confounding effects over time
  - Focuses on variations across counties from different millage rates and population growth over a limited time period
- Volume of new construction put in place from DOR/Property Appraiser Database by property types is the dependent variable
- Square Feet Space = F (millage rates, population growth)

Econometric Model Results Commercial Construction

Coefficient	Model							
	Local Retail	Regional Retail	Office	Industrial	Warehouse	Hotel	Hospital	Institutional
Millage Change	-0.163	-0.260	-0.126	-0.122	-0.088	-0.453	-0.228	-0.343
T Statistic >2 is significant	*-12.461*	*-2.076*	*-2.772*	*-5.452*	*-3.569*	*-5.085*	*-83.761*	*-9.014*
Population Change	42.168	40.460	39.487	9.294	71.319	24.611	28.409	97.058
T Statistic >2 is significant	*76.627*	*12.022*	*18.961*	*4.626*	*14.586*	*5.227*	*3.978*	*15.206*
Observations	2	2	2	2	2	2	2	2
Cross Sections	61	61	59	57	55	28	15	62
R square	0.610	0.467	0.551	0.051	0.524	0.265	0.606	0.592
F statistic	54.153	31.244	42.961	1.594	33.711	4.801	6.654	52.242
Log Likelihood	-260.262	-293.745	-267.490	-241.873	-301.462	-126.430	-38.523	-366.192

- Model very reliable for all categories except industrial (F-statistic greater than 4)
- Coefficients on millage and population highly significant (T-statistic >2)
- Magnitude of coefficients reasonable and correct in sign
  - Higher millage would mean less construction
  - Higher population growth would mean more construction

Impact of Swap on Florida's Population Growth

- Net migration affected by program
- Net migration modeled from 1995-2006
- Net migration is a function of:
  - Mortgage rates using 10-Year Treasury Bond
    - Higher rate means lower migration
  - Florida millage rate levied (DOR)
    - Higher millage means less migration
  - Average value of Home in U.S. (Census)
    - Higher U.S. value means more migration
  - Average taxable value of Florida homesteaded property (DOR)
    - Higher values in Florida makes Florida homes less affordable

Econometric Model for Net Migration to Florida

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.965
R Square	0.931
Adjusted R Square	0.891
Standard Error	16,190.55
Observations	12

ANOVA

	df	*SS*	*MS*	*F*
Regression	4	24577648732	6144412183	23.43998454
Residual	7	1834936589	262133798.4	
Total	11	26412585321		

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	1,285,047.76	424,586.34	3.03	0.01920686
10 Year T Bond	-47,341.05	11,842.90	-4.00	0.005206984
Florida Millage Rate	-31,875.85	19,439.69	-1.64	0.145068839
Avg Value U.S. Home	445,990.13	226,497.79	1.97	0.089613857
Taxable Value Fla Home	-0.95	0.42	-2.29	0.055511616

Model fits data very well explaining over 90% variation over time. All signs are as expected and magnitude reasonable.

Construction Impacts Summary
Year 5 Flow Levels

Increase in Construction	Local Retail	Regional Retail	Office	Industrial	Warehouse	Hotel	Institutional	Total
Impact from Lower Millage	74,465	118,742	57,468	55,566	39,927	206,669	156,558	709,394
Impact from Population Growth	1,618,825	1,553,254	1,515,917	356,806	2,737,942	944,797	3,726,054	12,453,596
	=========	=========	=========	=========	=========	=========	=========	=========
Volume	1,693,290	1,671,997	1,573,385	412,372	2,777,869	1,151,466	3,882,612	13,162,990
Value/Square Foot	$275	$325	$275	$175	$150	$200	$150	$208
Total New Value	**$465,654,755**	**$543,398,943**	**$432,680,777**	**$72,165,108**	**$416,680,305**	**$230,293,270**	**$582,391,756**	**$2,743,264,915**

Residential Construction Estimates	Values
Population growth projected	56,739
New housing units	21,014
New second homes	2,101
	=======
Total new dwelling units	23,116
Average value per new unit	$300,000
Value of new residential construction	**$6,934,730,071**

Construction flows are at year 5 levels. Volumes increase with a lag and over time.

Industry Effects Estimated With RIMS II I/O Model for Florida

- RIMS II Input-Output Model
  - Developed and maintained by U.S. Department of Commerce
  - Model estimates the economic impacts of various policy changes on states and regions of the U.S.
  - Models are available for all states and regions
  - Florida model utilized
- RIMS II 60-sector model used for analysis
- Program tradeoff explicitly analyzed
  - RLE reduction increases population growth, construction activity and disposable incomes
  - Tax increases reduce disposable income and increase prices and reduce expenditures for newly taxed goods and services and for those goods and services for which the tax increases

Example of RIMS II Analysis
Year 1 Program Impacts

		Final Demand Multiplier			Impact		
	Final Demand Change	Output	Earnings	Employment	Output	Earnings	Employment
Increase in Disposable Income	$ 2,837,511,344	2.7574	0.401	12.8989	$ 7,824,153,781	$ 1,137,842,049	36,601
New Construction	$ 33,836,119	2.899	0.7302	20.5159	$ 98,090,908	$ 24,707,134	694
Total Increase Due to Ad Valorem Decrease					$ 7,922,244,689	$ 1,162,549,183	37,295

		Final Demand Multiplier			Impact		
Various Industries	Final Demand Change	Output	Earnings	Employment	Output	Earnings	Employment
1. Crop and animal production	$ -	2.1863	0.4323	19.9186	$ -	$ -	-
2. Forestry, fishing, and related activities	$ -	2.8733	0.7177	34.8208	$ -	$ -	-
3. Oil and gas extraction	$ -	1.8355	0.3351	9.7848	$ -	$ -	-
4. Mining, except oil and gas	$ -	2.1586	0.4472	9.5861	$ -	$ -	-
5. Support activities for mining	$ -	2.1834	0.4196	11.5494	$ -	$ -	-
6. Utilities*	$ (2,896,400,000)	1.6381	0.264	5.0262	$ (4,744,592,840)	$ (764,649,600)	(14,558)
7. Construction	$ -	2.899	0.7302	20.5159	$ -	$ -	-
50. Waste management and remediation services	$ (230,000,000)	2.486	0.5421	14.6166	$ (571,780,000)	$ (124,683,000)	(3,362)
51. Educational services	$ -	3.0323	0.7942	29.1515	$ -	$ -	-
52. Ambulatory health care services	$ -	2.9926	0.838	20.945	$ -	$ -	-
53. Hospitals and nursing and residential care facilitie	$ -	3.0396	0.7977	23.8576	$ -	$ -	-
54. Social assistance	$ -	2.8301	0.7438	35.8651	$ -	$ -	-
55. Performing arts, museums, and related activities	$ -	2.8696	0.7673	28.0758	$ -	$ -	-
56. Amusements, gambling, and recreation	$ (159,000,000)	2.6513	0.6166	24.4669	$ (421,556,700)	$ (98,039,400)	(3,890)
57. Accommodation	$ -	2.5777	0.589	20.1248	$ -	$ -	-
58. Food services and drinking places	$ -	2.6049	0.5756	27.809	$ -	$ -	-
59. Other services*	$ (161,000,000)	2.7754	0.6642	24.6979	$ (446,839,400)	$ (106,936,200)	(3,976)
60. Households	$ (957,408,803)	2.7574	0.401	12.8989	$ (2,639,959,034)	$ (383,920,930)	(12,350)
Total					$ (8,824,727,974)	$ (1,478,229,130)	(38,136)
Net					$ (902,483,285)	$ (315,679,947)	-841

This is a portion of the RIMS II Output

Summary of Economic Impacts from Swap
(Dollars in $B 2007)

Category	Year 1	Year 2	Year 3	Year 4	Year 5
Population	567	11,348	28,369	42,554	56,739
Employment	-841	13,081	34,653	53,149	72,465
Disposabale Income $B	$0.23	$0.57	$1.11	$1.56	$2.04
Construction Spending $B	$0.03	$0.68	$1.69	$2.54	$3.38
Gross Regional Output $B	-$0.90	$1.12	$4.22	$6.92	$9.79

Conclusions / Observations

- Swapping $8 Billion in Real Estate Taxes for $8 Billion in Sales Taxes will be beneficial for Florida's Economy and Citizens
  - Program increases wealth
  - Program increases economic growth
  - Program stimulates investment in Florida
- Why do these conclusions differ from those based on the REMI Model?
  - Significant differences in estimated impact on investment and on construction activity
  - Significant differences in projected population growth
  - Significant differences in the incidence of the increased sales taxes