BHI Policy Study

July 2010

Eliminating Property Taxes in North Dakota

David Tuerck, PhD
Paul Bachman, MSIE
Michael Head, MSEP
Brett Narloch

THE BEACON HILL INSTITUTE AT SUFFOLK UNIVERSITY

8 Ashburton Place Boston, MA 02108

Tel 617-573-8750, Fax 617-994-4279

E-mail: bhi@beaconhill.org, Web: www.beaconhill.org

Introduction

Property tax revenue provides funding for the most visible services on which citizens are most dependent: public safety, education and recreation. For local governments, the property tax evolved as a dependable way to raise revenue. Since it is hard to evade, the property tax is easy to collect and thus a stable source of revenue. In North Dakota, property taxes comprised 28.1% of state and local revenue in 2008.¹ However, recent developments suggest that local government reliance on property taxes is problematic.

The property tax remains one of the most unpopular taxes, in part, because it is a regressive tax. Property taxes fall hard on elderly citizens on fixed incomes. Moreover, a good part of the public believes that property taxes, which rely heavily on assessments, are inherently unfair.² In response, taxpayers since the late 1970s have placed constitutional or legislative limits on the ability of local municipalities to collect or increase property taxes. With North Dakota's commodity-driven economy booming and driving up the values of real estate – the debate over property taxes is now center stage.³

Empower the Taxpayers of North Dakota, a citizens group, is collecting signatures to place a voter initiative on the November 2010 ballot to abolish all local property taxes, except for special assessments. Once the signatures are collected, the ballot measure must be approved by the Secretary of State.⁴ If approved by the voters, the ballot measure would amend the state constitution and strictly limit municipalities' ability to levy property taxes on residential and commercial property in the state. Without a doubt, this measure would greatly change the nature of public finance in North Dakota. Whether it relies on new taxes or not, state government would be required to meet all the legal obligations of local government, possibly through block grants.

At a time when many states in the nation are suffering the twin terrors of paralyzing unemployment rates and large budget deficits, North Dakota's position is exceptional. In May 2010 the unemployment rate fell to 3.6%, the lowest in the nation. The strong employment picture is one reason why North Dakota is in the rare position of maintaining a surplus in its FY2009 budget. These extraordinary times offer an opportunity for North Dakotans to address fundamental tax questions that over the long-term may benefit the economy.

(accessed June 18, 2010).

¹ Cory Fong, "State and Local Taxes: An Overview and Comparative Guide 2008," (December 2008):3-4; http://www.nd.gov/tax/genpubs/2008-redbook.pdf (accessed June 18, 2010).

² David Brunori, Local Tax Policy: A Federalist Perspective (Washington, DC: Urban Institute Press, 2003): 57-70.

³ Dale Wetzel, "Tax commissioner candidate wants property tax study," *Bismarck Tribune*, May 25, 2010 http://www.bismarcktribune.com/news/article_c47b8546-6828-11df-b9fa-001cc4c002e0.html (accessed June 18, 2010).

⁴ Associated Press, "Measure to abolish property taxes to begin circulating," *Bismarck Tribune*, March 20, 2010, http://www.bismarcktribune.com/news/local/govt-and-politics/article_5453ae5c-3c12-11df-a1d7-001cc4c002e0.html

BHI developed and used its North Dakota State Tax Analysis Modeling Program (ND-STAMP) to estimate the effects that this ballot measure would have on the state economy. In the following section, we report the results as measured against a 'baseline economy' with the current tax policies in place.

Results

The elimination of property taxes at the local level would not necessarily result in a reduction of revenue. While it would pose challenges to local governments, the money used to pay property taxes does not disappear from the state economy. While services may be cut at either the local or state level, the abolition of property taxes does not necessarily mean that teachers, firefighters and police officers will be fired. Conceptually, the reduction in property taxes would provide a boost to the state's private economy leading to an increase in private employment, disposable income and investment.

BHI modeled three different scenarios using ND-STAMP to examine the effects of different levels of offsetting tax increase possibilities, should the ballot measure pass. The first option ("No Sales Tax") analyzed the elimination of all local property taxes, except for special assessments, with state government providing transfers to the local governments; it does not raise state taxes. The second option ("50% Sales Tax") assumes that state governments would increase the sales tax rates to account for half of the transfer. The final option ("100% Sales Tax") simulates a state sales tax increase to offset all of the transfers to local governments. Table 1 and Table 2 display the results.⁵

ND-STAMP shows that the elimination of the local property taxes will increase private sector jobs by 11,789 in the first year by putting more money in the hands of households. This is offset by a drop of 11,908 public sector jobs at state and local governments. The residential property tax elimination would also have a large effect on per capita disposable household income. Total real disposable income in North Dakota increases by \$877 million, or 3.66%, in the first year. Per capita real disposable income increases by 3.24%, or \$876 per person.

The elimination of the business property tax leads to a reduction in the tax burden on the capital investments. As a result, investment becomes more attractive in the state of North Dakota, with an increase in investment of \$695 million— both from businesses located inside and outside North Dakota.

⁵ We gather economic data from three sources: The U.S. Department of Labor, Bureau of Labor Statistics provides employment and wage data; the U.S. Department of Commerce provides income and investment data, and the 2009 Comprehensive Annual Financial Report for the State of North Dakota provides supplements to the other sources.

Table 1: Economic Effects, Change - Jobs

	No S	ales Tax	50% S	ales Tax	100% S	ales Tax
	2010	2015	2010	2015	2010	a 2015
Private Jobs	11,789	13,287	2,591	2,643	-5,652	-6,551
Percentage Change	4.03	4.24	0.89	0.84	-1.93	-2.09
Government Jobs	-11,908	-12,978	-8,551	-8,938	-4,492	-4,311
Percentage Change	-14.91	-15.39	-10.71	-10.60	-5.62	-5.11
Net Change in		309	-5/960	-6,295	-10,143	-10,862

The economic results change if North Dakota were to increase the state sales tax to compensate for the grants it must pay local governments in lieu of the lost property taxes. As the sales tax increases, at the margin, households have less money available to spend which partially offsets the gains to disposable income. The implementation of the higher sales tax rate reduces gains to private employment to 2,591 under the 50% Sales Tax scenario and turns the gains into losses of 5,652 jobs under the 100% Sales Tax scenario. Under these two sales tax scenarios, public employment levels improve but the loss in public employment is never eliminated. The investment increase from the elimination of the property drops only slightly in both simulations that increase the sales tax. The gains to real disposable income fall dramatically under the 50% Sales Tax simulation, and even further in the 100% sales tax simulation.

Table 2: Economic Effects, Change – Investment & Disposable Income

	No	Sales Tax	A the last the said a mile the classic bearing by the at he	per the way party that had not not some a party at some and		Sales Tax
	2010	2015	2010	2015	2010	2015
Baseline Investment, (\$m)	694.51	1058.45	673.02	1,134.03	655.49	1,108.56
Percentage Change	33.23	34.59	32.20	-4.77	31.36	32.93
Disposable Income (\$m)	876.90	1,057.81	444.35	548.69	36.74	70.09
Percentage Change	3.66	4.12	1.86	2.14	0.15	0.27
Disposable Income per Capita (\$)	875.73	1,437.72	524.89	867.79	171.88	292.75
Percentage Change	3.24	3,63	1.94	2:19	0.64	0.74

ND-STAMP allows us to calculate the dynamic revenue effects, as opposed to static effects, under the three tax changes. Table 3 and Table 4 display the results.⁶

Static estimates assume that there is no change in underlying economic activity in response to a change in tax law. For example, a static estimate of a rise in the sales tax, say 6% to 7%, would cause revenues to rise by 16.7% (= (7-6)/6). A dynamic estimate would show a smaller rise in revenue because it would capture the negative effect on the tax base of the rise in the sales tax. When North Dakota increases its sales tax, consumers buy fewer goods in North Dakota. One of the principal purposes of STAMP is to capture such dynamic effects.

Table 3: State Revenue Effects, \$millions

	No Sal 2010		50% Sal			
State Taxes	2010	#/2019 #	2010	2019	2010	2015.
Sales Tax	15.78	21.34	323.63	430.69	622.46	821.23
Income Tax	7.32	10.90	-24.63	-32.45	-44.22	-57.33
Corporate Income Tax	13.13	11.05	3.51	2.98	-2.73	-2.00
Other Revenue	29.65	66.69	22.29	97.12	13.12	103.60
Total	65.88	109.98	324.80	498.34	588.63	865.50

Under the "No Sales Tax" scenario, we find that there are small dynamic revenue gains to the personal income tax, corporate income tax and the sales tax that combine to comprise the largest portion of the \$66 million growth in state revenue in the first year. Local sales taxes and other local revenues increase by about \$6 million, following the state's upward trend in tax collections due to increased economic performance.

Table 4: Local Revenue Effects, \$millions

	No Sale	s Tax	50% Sali	es Tax	100% Sa	les Tax
	2010	-2015	2010	2015	2010	2015
Local Taxes			3401.03-01-7			
Sales Tax	2.81	3.80	-9.80	-12.23	-17.80	-21.80
Residential Property Tax	-439.98	-552.16	-440.01	-552.16	-440.04	-552.16
Business Property Tax	-417.10	-547.03	-428.15	-558.17	-435.14	-564.84
Other Revenue	3.36	4.81	-9.21	-11.90	-17.38	-22.18
Total	-850.91	-1,090.58	-887.17	-1,134.46	-910.36	-1,165.58

⁶ The 2009 Comprehensive Annual Financial Report for the State of North Dakota provides the data for state tax revenue collections and rates while the State and Local Taxes: an Overview and Comparative Guide 2008 from the State Tax Commissioner provides the local tax revenue data and also supplements the state report.

The sales tax increase scenarios show more dramatic dynamic revenue effects. While there is a large increase in sales tax revenue, the detrimental effects of increasing the sales tax outweigh the positive effects of the property tax decrease. Personal and Corporate Income tax receipts fall while local option sales taxes, and other revenues and fees at both the state and local level see diminishing returns.

Under the 2010 "100% Sales Tax" increase scenario, the sales tax is increased to offset the initial \$856 million in lost property tax revenue, but due to the dynamics only yields \$623 million, while personal and corporate income tax collections suffer. State level tax revenue increases by \$589 million, more than offset by \$910.36 revenue decrease at the local level, for a total revenue decrease of \$322 million in the first year. While the sales tax increases replace all the lost property tax revenue in a static analysis, the drop in other tax revenue collections still leaves a significant revenue reduction.

Public Sector Employment

The ND-STAMP model is constructed such that when property taxes are eliminated and the state transfers money to local governments, the state must find cuts in its budget to equal the transfer to local governments. The model assumes that the state would find most of those cuts in the state workforce, which explains why the public sector eliminates nearly 12,000 jobs in the first year.

The average public sector employee earns \$37,659⁷ in annual salary and \$14,599 in annual benefits, according to the North Dakota Office of Management and Budget.⁸ Furthermore, If 11,908 of those jobs are eliminated, like the model predicts, that is a total annual savings of \$622 million, meaning that cuts in the state's public sector workforce would be enough to pay for 79% of the cost of eliminating property taxes.

If we assume that most of those jobs will be cut at the state level, approximately 40% of the state's workforce would be trimmed, seemingly a high number. Political realities in North Dakota might suggest that cuts would be made in other areas, such as economic development, higher education, or health and human services.

⁸ The North Dakota Office of Management and Budget, "Job Seekers: Benefits." Internet. Available at http://www.nd.gov/hrms/jobs/benefits.html, (accessed on July 15, 2010).

⁷ The U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Accounts, State Annual Personal Income, Tables SA06N: Compensation by Industry, http://www.bea.gov/regional/spi/, 2010, Q1data. U.S. Department of Labor, Bureau of Labor Statistics, State and Local Employment, http://data.bls.gov:8080/PDQ/servlet/SurveyOutputServlet;jsessionid=62302f927ba861a63435. We divide total compensation of state and local government sector by employment (70,900 employees/\$2.670 billion compensation).

If the state's workforce would be trimmed by 10%, or by 2,353 employees - using the same calculations as before - a significant amount of money (\$123 million) would still be saved by the state and local governments that can be used to offset the cost of eliminating property taxes.

Prioritizing Spending

With property taxes eliminated, the entire dynamics of funding state and local governments would become more taxpayer-friendly. State legislators would be faced with tough decisions about spending. After transferring funds to local governments, the state would have to either raise taxes or cut state spending in other areas. In other words, legislators would have to prioritize spending.

The politics of spending would quickly change. Legislators would have to choose between unpopular tax increases and spending cuts. We have previously shown that up to \$622 million of the shortfall created by the transfers to local governments could be made up through eliminating public sector jobs. But where else could cuts be found?

The North Dakota Policy Council's *North Dakota Pork Report* provides some examples of wasteful spending. In total, it identifies more than \$460 million per year in wasteful spending.

Another area of cost savings could be found in the property tax system itself. Based on discussions with tax officials in North Dakota, property tax administration costs local governments approximately \$25 million per year. The \$1 billion in potential savings outlined above could pay for the shortfall without raising state taxes or tapping any future budget surpluses.

Conclusion

The elimination of local property taxes would lead to a more vibrant private sector economy. However, the elimination of property taxes would place the burden on state government which would be forced to provide block grants to local governments.. Should the state decide to compensate for the need to pay for the block grants by increasing the state sales tax, many of the private sector benefits would be tempered or become negative.

With its low unemployment, North Dakota is currently the envy of the nation. But the state cannot rest on its laurels. The opportunity for broad tax reform, if considered for its economic, and not political, merits would be a huge benefit for residents for years to come. If the state is able to account for this through cuts to waste, inefficient services and employment, as opposed

⁹ Brett Narloch, North Dakota Pork Report, 2007-09, Internet. Available at http://www.policynd.org/index.php?/site/PorkReport/.

⁰ Based on telephone conversations with officials in Grand Forks, Fargo, West Fargo and Cass County.

to significant increases to state level taxes, then North Dakota would be placing itself to come out of the economic downturn on stronger footing than before.

The positive benefits to the private sector of the state's economy brought about by eliminating property taxes are without question. If voters in North Dakota approve Empower the Taxpayers's ballot measure, pressure will build on state government to raise other taxes. That would be counterproductive and eliminate most of the benefits to the state's economy. Governments in North Dakota are well-funded; it may be time to give more of that money back.

Methodology

To identify the economic effects of the tax discounts and understand how they operate through a state's economy, BHI utilized its STAMP (State Tax Analysis Modeling Program) model. STAMP is a five-year dynamic CGE (computable general equilibrium) model that has been programmed to simulate changes in taxes, costs (general and sector specific) and other economic inputs. As such, it provides a mathematical description of the economic relationships among producers, households, governments and the rest of the world.¹¹

A CGE tax model is a computerized method of accounting for the economic effects of tax policy changes. A CGE model is specified in terms of supply and demand for each economic variable included in the model, where the quantity supplied or demanded of each variable depends on the price of each variable. Tax policy changes are shown to affect economic activity through their effects on the prices of outputs and of the factors of production (principally, labor and capital) that enter into those outputs.

A CGE model is in "equilibrium," in the sense that supply is assumed to equal demand for the individual markets in the model. For this to be true, prices are allowed to adjust within the model (i.e., they are "endogenous"). For instance, if the demand for labor rises, while the supply remains unchanged, then the wage rate must rise to bring the labor market into equilibrium. A CGE model quantifies this effect.

Finally, a CGE model is numerically specified ("computable"), which is to say it incorporates parameters that are believed to be descriptive of the actual relationships between quantities and prices. It produces estimates of changes in quantities (such as employment, the capital stock, gross state product and personal consumption expenditures) that result from changes in prices (such as the price of labor or the cost of capital) that result from changes in tax policy (such as the substitution of an income tax for a sales tax).

Because it consists of a large number of interrelated equations, a CGE model ordinarily requires the application of a nonlinear computational algorithm, typically some variation on Newton's method. STAMP requires the development and application of a sophisticated computer program for the solution of its equations.

¹¹ For a clear introduction to CGE tax models, see John B. Shoven and John Whalley, "Applied General-Equilibrium Models of Taxation and International Trade: An Introduction and Survey," *Journal of Economic Literature* 22 (September, 1984): 1008. Shoven and Whalley have also written a useful book on the practice of CGE modeling entitled *Applying General Equilibrium* (Cambridge: Cambridge University Press, 1992). See also Roberta Piermartini and Robert Teh *Demystifying Modelling Methods for Trade Policy* (Geneva, Switzerland: World Trade Organization, 2005) http://www.wto.org/english/res e/booksp e/discussion papers10 e.pdf (accessed June 18, 2010).

The Beacon Hill Institute Team

David G. Tuerck, PhD is Executive Director of the Beacon Hill Institute for Public Policy Research at Suffolk University where he also serves as Chairman and Professor of Economics. He holds a Ph.D. in economics from the University of Virginia and has written extensively on issues of taxation and public economics.

Paul Bachman, MSIE is Director of Research at the Beacon Hill Institute for Public Policy Research at Suffolk University and a Senior Lecturer in Economics Suffolk University. He holds a Master of Science in International Economics from Suffolk University.

Michael Head, MSEP is an Economist at the Beacon Hill Institute. He holds a Master of Science in Economic Policy from Suffolk University.

Brett Narloch is the Executive Director of the North Dakota Policy Council.

The authors would like to thank Frank Conte, Director of Communications at the Beacon Hill Institute, for editorial assistance.

The Beacon Hill Institute at Suffolk University in Boston focuses on federal, state and local economic policies as they affect citizens and businesses. The institute conducts research and educational programs to provide timely, concise and readable analyses that help voters, policymakers and opinion leaders understand today's leading public policy issues.

©July 2010 by the Beacon Hill Institute at Suffolk University



THE BEACON HILL INSTITUTE FOR PUBLIC POLICY RESEARCH Suffolk University

8 Ashburton Place

Boston, MA 02108

Phone: 617(573(8750 Fax: 617(994(4279

bhi@beaconhill.org

http://www.beaconhill.org