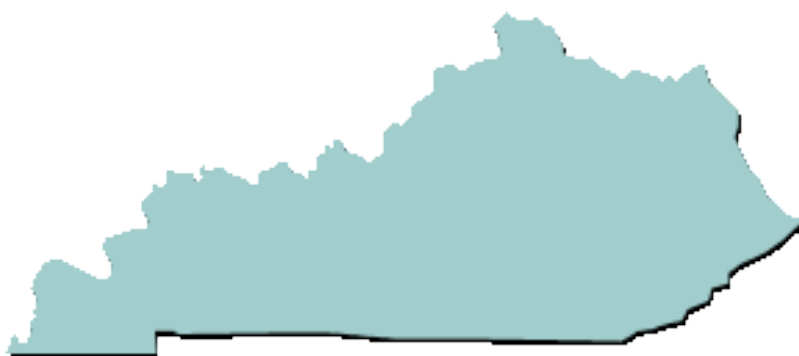


SHOULD KENTUCKY TAX PROFESSIONAL SERVICES AS A WAY TO RAISE REVENUE?

An Economic Analysis of Possible Revenue Options



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Executive Summary

Currently Kentucky is facing a budget deficit of \$108 million dollars for the fiscal year 2010. As some lawmakers search for revenue options, one possibility is to consider a sales tax on professional services.

Professional services are considered any kind of service that requires skill, knowledge, reputation, ethics, and creativity. For the purpose of this study, medical services are not included in this category. Many of the services are infrequent, such as the services of an attorney or an accountant. A professional services tax could be used for both businesses and individuals, or could make businesses tax exempt. As of 2010, three other states tax professional services: New Mexico, Hawaii, and South Dakota.

According to tax professionals, one model of analyzing a possible new tax is to examine the potential revenue, incidence, and competitiveness of the tax. The potential revenue can be estimated by finding the approximate amount of revenue spent on professional services and performing a Moving Average Forecast. This would assume 0% elasticity. A sensitivity analysis provides a range of the expected tax revenue for several assumptions of elasticity. The incidence can be analyzed by determining who will pay the tax, and then examining the equity of the tax, such as who the burden of the tax will fall on by examining the demographics of Kentucky. The competitiveness can be analyzed by analyzing the effect of a professional tax in Kentucky when the surrounding states do not.

Potential revenue was estimated to be about \$322,000,000 for the fiscal year 2010. Analysis of the incidence of the tax estimates that the burden of the tax would unfairly fall on those in the lower income bracket, and could also have a negative effect on small businesses. While the structure of the tax code could be written to exempt the professional services consumed by businesses, then the amount of revenue generated would not be as much since businesses make up at least a portion of professional service clientele. However, broadening the tax base helps keep tax rates lower. It is also important to consider that most professional services are generally considered an inelastic service, since many professional services are necessary, such as hiring an attorney or an accountant. The fact that surrounding states do not tax professional services could also drive business to neighboring states, especially in circumstances like Northern Kentucky and Cincinnati, when many professional services are located right across the river. The surrounding states have a comparable sales tax to Kentucky

After considering all possible outcomes of the tax, it is recommended that Kentucky not institute a tax on professional services, and continue to study revenue options. Even though taxing professional services could cover a significant portion of the budget deficit, there are still too many unknowns in regards to the incidence of the tax.

Identification of problem or issue

As the economy continues to struggle, many states are facing large budget deficits. Kentucky currently faces a budget deficit of \$1.4 billion for the fiscal year 2011, and \$108 million deficit for the fiscal year 2010 (Infoplease.com). Lawmakers are continuously looking for revenue options. One option that many states have considered is to tax professional services.

Professional services are considered to be any kind of service that requires skill, knowledge, reputations, ethics, and creativity. The services are considered infrequent, technical, or unique. Often times a professional service is defined by a license or certification, or certain training. Popular examples of a professional service are those of an attorney, an accountant, or an architect.

A tax on professional services is essentially a sales tax that includes a tax on services. In most states, including Kentucky, services provided by a professional are not taxed. The concern is whether a tax on professional services falls on the people that are least able to pay. For example, smaller businesses may have to increase prices for customers to cover the cost of paying a tax for a necessary professional service they receive.

A tax on professional services can also lead to disagreements about which services should be taxed. A tax on professional services should include the services of a doctor by the definition. However, taxing medical services would place a large financial burden on the medical industry, which is already an industry that is considered to be too expensive by many Americans.

While many ideas must be considered to raise revenue, in this paper I will consider whether a tax on professional services is a viable option for Kentucky. The objective is to discover how much money Kentucky would generate by taxing professional services and consider other tax issues such as incidence and stability. This information will help lawmakers decide if Kentucky should tax professional services.

Discussion of broader context

While New Mexico, Hawaii, and South Dakota currently tax professional services, Kentucky is very different demographically than these states. Kentucky is also located in a different place geographically, since the three other states are located in the western part of the country. If Kentucky instituted a professional tax, the state could serve as a model to other Southern states.

Review of literature and identification of relevant theories

A literature review of the taxation of professional services contains many relevant issues. One pertinent paper is by Dr. Dwight Denison (2004) entitled "Tax Revenue Options". Denison and his colleagues were studying revenue options to discover how New York could pay for education initiatives. Similar to Kentucky facing budget difficulties, New York was examining the taxation of professional services as an option to creating needed revenue for the state. The model described in the paper is also the model that will be used for this analysis.

Denison found that expanding the sales tax to services has a historical context of many advantages. For example, the tax creates additional revenue. The tax also increases the stability of the tax collection, since the revenue is not only coming from a

few sources. The more sources that the government can rely on for revenue, the more stable the aggregate revenue stream is. Another advantage to the taxation of professional services is the simplification of the tax administration and compliance. Instead of only taxing certain items for sale, all items would be taxed. The taxation would also foster customer fairness by treating goods and services equally (Denison paper). It is also important to note that sales tax does not grow in proportion with the economy.

However, Denison also noted that public finance experts argue that taxation on business to business transactions leads to what is termed the “pyramiding effect”. This is the result of higher production costs that result in higher consumer prices. According to Denison, the pyramiding effect “distorts the transparency and alters the incidence of the tax” (Denison, 2004, pg. 7).

Taxing professional services can also lead to inequity among business. According to Denison, if some businesses have the ability to provide the service internally, those businesses will have a competitive advantage over a firm that has to pay for someone else to provide the service and then pay the tax on it.

Denison also sees problems in administering the tax. If states that were required to tax professional services did not have to pay a tax if they used a service provider that was in a state that did not tax professional services, businesses would essentially be encouraged to use professional service providers that were out of state. This could create a problem with the competition of the tax. However, by taxing only professional services used by individuals, the problems related to businesses would be overcome. There is limit on the ability of some consumers to use professional services in other states if there are the professional are regulated by the state.

According to Denison, the incidence of taxing professional services would be similar to a sales tax in general. Since professional services are generally consumed by high-income earning individuals, there is a balance in the regressivity of the tax.

North Carolina is also currently examining the prospect of taxation on legal services. Dr. Roby D. Sawyers (2009) studied the possibility and analyzed the same issues as Denison. Sawyers cited the unfairness to smaller businesses as his main argument that services should not be taxed. He argued that larger businesses would hire professionals to perform the services while smaller businesses would have to outsource the work. The tax creates a disproportional strain on smaller businesses.

Sawyers also argued against the complexity of the tax. Since taxing professional services would surely require exemptions of some kinds, the collection of the tax would be complex and difficult to administer. This leads to higher administrative costs. He also argued that taxpayers would be confused.

Sawyers also argued that the tax was not neutral because it would prevent some citizens from much needed services. He stated that the tax could deter some individuals from relying on much needed services such as accounting help or medical care. He also cited the unfairness of having to pay a tax when the individual engaged in professional services by force rather than choice. A citizen that is sued or needs an attorney to deal with a sudden divorce did not choose to hire an attorney, but needs one. This unexpected additional cost may come at an inopportune time.

Like Denison, Sawyers also cited competitive disadvantage with surrounding states and the Pyramiding Effect as a reason not to tax professional services. He also cited that

taxpayers would be displeased that certain breaches of confidentiality would be broken, since the Department of Revenue would have access to confidential records (Sawyers).

The Pennsylvania Institute of Certified Public Accountants (PICPA) (2009) also released a study with a framework for evaluating tax proposals. Because of the large number of states with budget deficits, the Institute found it important to provide a framework for analysis for states to utilize. The ten guiding principles the Institute listed were equity and fairness, certainty, convenience of payment, economy of collection, simplicity, neutrality, economic growth and efficiency, transparency and visibility, a minimum tax gap, and appropriate government revenues.

The principle of equity and fairness as determined by the PICPA is that people with the greater ability to pay the tax should pay higher taxes than someone who has less ability to pay. However, some experts disagree about the definition of fairness and believe that fairness should include an equal tax for all people.

Certainty refers to when the tax should be paid, how it should be paid, and how the amount that is to be paid would be determined. Taxpayers must be aware of what taxes they are required to pay, and there should be no ambiguity. Certainty also increases confidence and respect for the system.

The economy of collection is the administrative costs that go into collecting a tax. The costs should be kept to a minimum, and the ability to collect the tax should be easy. This is tied in with simplicity, since the more complex the tax, the higher the administrative costs to collect it.

The tax should also be neutral according to PICPA, which means that the effects to businesses and individuals should be kept to a minimum. The tax should not strongly discourage or encourage a taxpayer to engage in the action.

PICPA also demonstrates in the framework that the tax should not hurt the economic growth of the jurisdiction. This is closely tied to the idea of competitiveness that is discussed in Denison's article, because if one state issued a tax on professional services and the other did not, it would negatively affect the state's economy.

Transparency and visibility is reflected in the awareness the taxpayer's have of taxation. Taxpayers should know the true cost of transactions (PICPA).

There should also be a minimum tax gap, which is the difference between taxes that are owed and taxes that are voluntarily paid. Appropriate government revenues refers to the fact that the government should know how much tax revenue will be collected and when. All of the above factors should be analyzed when considering implementing a new tax according to PICPA.

Currently, only Hawaii, New Mexico, and South Dakota tax professional services. In 2007, the Census found that New Mexico was ranked 7th in generated in revenue per capita, and found that Hawaii was 5th and South Dakota was 30th (Census). New Mexico has a statewide 7 percent tax on businesses (Sternberg). While South Dakota is among the middle of the ranking, Hawaii and New Mexico were among the leading states generating revenue, partially due to the taxation of professional services.

Hawaii, New Mexico, and South Dakota are not the only states that consider the taxation of professional services an advantage. A group called the Americans for Fair Taxation has published the Fair Tax White Paper, which advocates eliminating the current

tax system and taxing only the goods and services that people choose to spend money on. They consider the plan to be more transparent and equal than the current system. The plan argues that Fair Taxes creates jobs since payroll taxes would be eliminated. The plan also advocates that many studies have shown results of sales taxes being more pro-growth than income taxes.

According to the Fair Tax plan, only 38% of possible revenue is currently collected from goods and services since most states' sales tax plans provide exemptions for the taxation of services, Kentucky included. The study also cites that services account for 59.4% of American expenditures (Bruce, 2). The study claims that there is current inequity between businesses that offer products and businesses that offer services, since products are subject to a sales tax but businesses that offer services do not.

The study also argues that the many exemptions in the current system lead to higher administrative costs and inequity. By eliminating the various exemptions, the tax would be a simple set amount for all goods and services. The plan claims that this would increase equity since the tax would only be administered to goods and services that the individual could afford to purchase regardless.

Research design

The question being asked is "Should Kentucky tax professional services as a way to raise revenue?" The unit of analysis for the study is the state of Kentucky.

The structure of the design is a model will be used to evaluate whether or not Kentucky should tax professional services. The model examines the incidence, competitiveness, and revenue potential for the tax, which is similar to tax analysis literature. The incidence will examine the tax equity and the ability of Kentucky taxpayers

to pay. The competitiveness will examine the tax rate in surrounding states, as well as whether or not the states tax professional services. The revenue potential of the tax will be analyzed by examining the amount of money spent on professional services over the past three years and using a Moving Average Forecast to estimate the potential revenue for the coming years if the tax was issued.

The variables that will be analyzed will be the incidence, competitiveness, and potential revenue. The analysis will rely on data that indicates how much money Kentucky citizens spent on professional services in the past three years. The study will also rely on past tax analyses, as well as current literature to examine the questions of incidence and competitiveness. The analytical techniques will involve examining the three considerations in the model to make recommendations about whether or not Kentucky should institute a tax on professional services.

Analysis and findings

Potential Revenue

The potential revenue that Kentucky could have is found by doing a Moving Average Forecast, and operates under the assumption that there will be 0% elasticity. While the revenue from 2009 is not yet available, the Kentucky Gazette released information about the state's revenue by industry from 1995 on. For professional services, the estimated revenue for 2006 was \$5,394,000,000. The estimated revenue for 2007 was \$5,337,000,000 and for 2008 was \$5,422,000,000. The Moving Average Forecast is completed by adding up the last three years and dividing it by three. This will result in an estimate for how much revenue was created in 2009, 2010, and 2011. Therefore, by

adding \$5,394,000,000 + \$5,337,000,000 + \$5,422,000,000 and dividing by 3, the estimated revenue from 2009 would be \$5,384,333,000. For 2010, the revenue from 2007, 2008, and 2009 would be added up and divided for a forecast result. $\$5,337,000,000 + \$5,422,000,000 + \$5,384,333,000 = \$5,381,111,000$. The forecast for the amount spent on professional services in 2010 would be \$5,381,111,000. For 2011, the forecast can be found by adding up the revenue estimates from 2008, 2009, and 2010. $\$5,422,000,000 + \$5,384,333,000 + \$5,381,111,000 = \$5,395,814,000$. Therefore, the revenue estimate for 2011 for the money spent on professional services would be \$5,395,814,000.

Table 1

| | 2006 | 2007 | 2008 | 2009* | 2010* | 2011* |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Estimated Amount Spent on Professional Services | \$5,394,900,000 | \$5,227,000,000 | \$5,422,00,0000 | \$5,384,33,0003 | \$5,381,111,000 | \$5,395,814,000 |

*Estimates based on moving average calculations

Once the estimates are made for how much money was spent on professional services for each year, the sales tax of 6% can be applied. Therefore, Kentucky could generate an estimated \$322,866,000 for 2010. This can be found by taking the estimated amount spent on professional services times the tax rate. For 2011, the estimated amount of money Kentucky could generate would be \$323, 748,000. This estimate assumes that the sales tax rate remains unchanged and the consumption of professional services is unchanged.

While these are rough estimates based on forecasting, when considering a new tax, it is necessary to at least have an estimate of how much money could be generated. The

best way to estimate the amount of money generated would be to take the estimated amount of money that would be spent in the industry and multiply it by the tax rate.

Another factor in potential revenue is to consider that when the tax base is broadened, the revenue potential is considered more stable. Since more services are being taxed, the tax base is getting larger. The size of the tax base greatly affects the stability of the tax.

It is important to note that when the tax base is broadened, as it would be if a professional service was taxed, then the tax equity would be enhanced. Tax revenue is equal to the tax base times the tax rate; the larger the tax base the lower the tax rate can be to generate the same amount of tax revenue. When there are exemptions to the sales tax, professional services or otherwise, then consumers are advantaged when they purchase a tax-exempt service relative to the consumers who purchase a tax served. However, most taxes are designed to be market neutral, affecting consumers in similar ways. Taxing professional services would distribute the tax burden similarly over professional services and consumer goods.

The percentage that is spent on professional services by businesses is unknown. As previously discussed, it is desirable that the business to business transactions be tax-exempt, and the tax code could be structured to exempt businesses from paying the tax for true businesses expenses. If the tax code was structured this way, the amount of revenue generated would surely not be as much since businesses make up at least a portion of clients of professional services.

There is no way to know the exact impact of a tax on professional services. However, it can be helpful to perform a sensitivity analysis of the tax to examine the

potential revenue at various intervals in order to estimate the revenue potential. Below is a chart on the estimated revenue for 2010.

Table 2

| Proportion of Professional Services that are taxed | Base Revenue | Adjusted Revenue |
|---|---------------------|-------------------------|
| 100% | \$322,000,000 | \$322,000,000 |
| 90% | \$322,000,000 | \$289,800,000 |
| 80% | \$322,000,000 | \$257,600,000 |
| 70% | \$322,000,000 | \$225,400,000 |
| 60% | \$322,000,000 | \$193,200,000 |
| 50% | \$322,000,000 | \$161,000,000 |
| 40% | \$322,000,000 | \$128,800,000 |
| 30% | \$322,000,000 | \$96,600,000 |
| 20% | \$322,000,000 | \$64,400,000 |
| 10% | \$322,000,000 | \$32,200,000 |

This table demonstrates how much the tax revenue from professional services would decrease for a given proportion of the professional services that might be exempted because they are business to business transactions. For example, if only 70% of the current professional services would be taxable under a proposed sales tax, then the revenue generated would be \$225.4 million.

The same table can be used to adjust for changes in the demand for professional services with the imposition of a sales tax. If professional services are price sensitive and

therefore considered elastic, then the sales tax will increase the effective price causing less professional services to be consumed. Extrapolating from Table 2, if the demand for professional services causes the base to shrink by 10%, then only \$289.8 million will be generated by a tax on professional services.

Incidence and Equity

When analyzing the incidence of a new tax, it is important to consider the equity, and who will bear the burden of the tax. One important factor is to take into account the demographics of the state. Only 74% of Kentuckians are high school graduates, compared to 80% of Americans nationwide. Only 17% of Kentuckians have a Bachelors degree, as compared to nearly 25% of Americans nationwide. The median household income as of 2008 was \$41,489, compared to \$52,029 nationwide. Over 17% of the population was below the poverty level, compared to 13% nationwide (US Census Bureau). Therefore, it can be concluded that the state of Kentucky is lacking in education and has troubles with poverty. When analyzing a new tax, it is important to verify that the tax will not fall on the demographics that are already struggling because that would be inequitable.

When examining the breakdown of income groups that contributed to tax revenue in Kentucky for 2007, it was found that the lowest 20% of income earners (those that made less than \$15,000) contributed 5.6% of the revenue through sales and excise taxes. Compared to the highest 20% of earners (those that made over \$77,000), who contributed 5.3% of the tax, the sales tax is inequitable due to the fact that lower income brackets are contributed proportionally more of their money to state revenue. It is also

noted that the top 1% of income earners (those who made \$346,000 or more) only contributed .9% towards the sales tax revenue. Those who earn \$15,000 or less have less money to live on and probably spend all of their money each year. Those who are in the highest income bracket have money left over to spend on investments or non-necessity items. This information helps analyze the incidence of a professional service tax because professional services would be part of the sales tax (ITEP, 2009).

When considering the demographics of Kentucky, another way to analyze the possible tax would be to examine our demographics in comparison to those of the states that do tax professional services. New Mexico, the lowest 20% income earners (those who earn less than \$16,000) pay 9.6% of the general revenue due to sales tax. The highest 20% of income earners (those who make \$77,000 or more) contribute 8.1% towards the sales tax. Therefore, the lower income bracket is contributing much more to the sales tax revenue. In Hawaii, the lowest 20% of income earners (those who earn less than \$18,000) contribute 10% of the revenue from sales tax. However, the top 20% of income earners in Hawaii (those making more than \$85,000) only contribute 6.4% of the revenue in sales tax. In South Dakota, the third state that currently taxes professional services, the lowest 20% of income earners (those who make less than \$18,000) contribute 8.4% towards the revenue generated from sales tax. The top 20% of income earners (those making more than \$84,000) contribute 6.8% towards the revenue generated from sales tax. Therefore, in the states in which professional services are part of the sales tax, there is a bigger difference between the revenue generated from lower and higher income families. The lower income families bear more of the burden of the

sales tax than in Kentucky, where professional services are not currently taxed (ITEP, 2009).

Table 3

| | Kentucky | New Mexico | Hawaii | South Dakota |
|---|----------|------------|--------|--------------|
| Contributed revenue from bottom 20% of earners | 5.6% | 9.6% | 10% | 8.4% |
| Contributed revenue from highest 20% of earners | 5.3% | 8.1% | 6.4% | 6.8% |

When considering fairness, it is also important to consider the businesses affected by the professional services tax. Smaller businesses would have to pay the same tax on services that larger businesses would pay. However, a larger business could afford to hire staff members to perform the professional service functions in house, which would reduce the taxes they pay. Smaller businesses would still have to outsource the professional service work, which would result in the lowering of profits, or raising prices for customers. This would make it harder for smaller businesses to compete in the market, and is considered unequal. Like stated in the potential revenue section, the structure of the tax code could be written so that businesses were exempt, but then the amount of money estimated in the revenue would not be as high.

However, it is important to note that the differences in equity within the states taxation could be accounted for by what the states consider exempt. The differences may not necessarily place the burden solely on the poor.

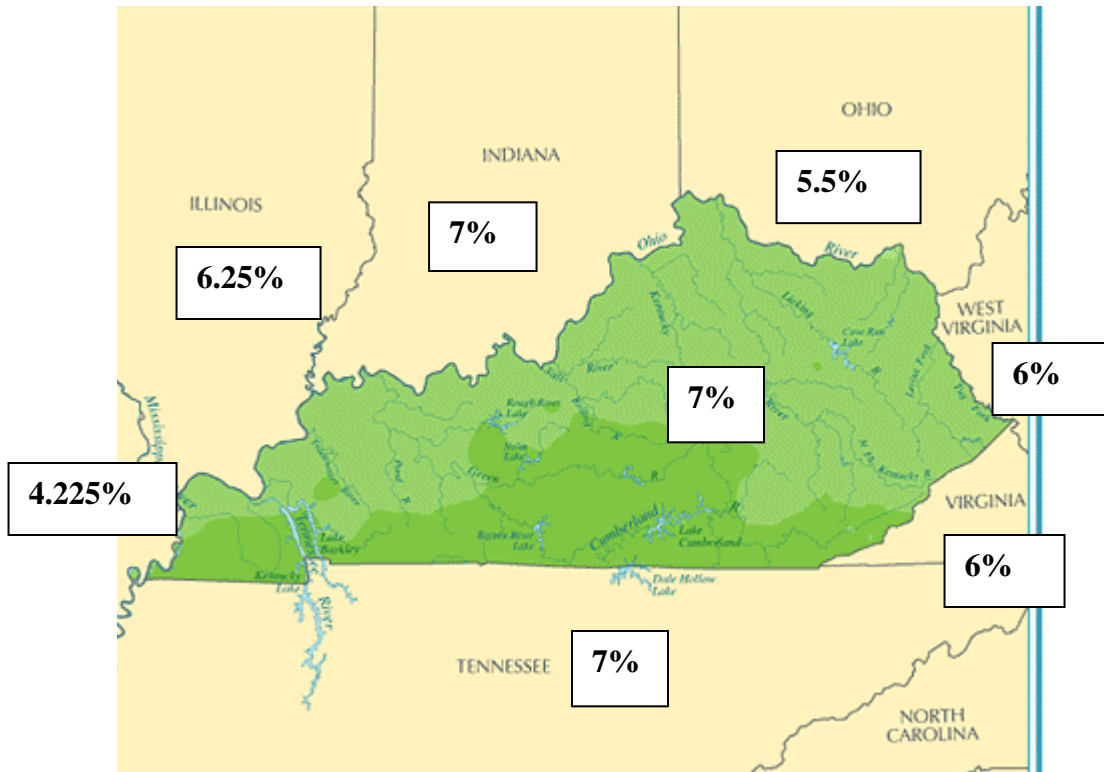
The demand for professional services may be relatively inelastic, since for some things like divorce and tax proceedings, professional services such as an attorney or an accountant are necessary. The need for these services is not likely to reduce if taxed because most of the services are necessary. However, since Kentucky is a manufacturing state and there are not many professional services offered compared to states like New York, it is important to consider the implications of taxing professional services. In 2008, it is estimated that professional services only contributed to 3.9% of Kentucky's gross state product (Kentucky Gazette). The result could have a negative result on the economy, and encourage higher earning jobs such as those of most professional services to be in states where their services will not be taxed.

Competitiveness

The competitiveness of the tax on professional services needs to take into consideration all of the surrounding states of Kentucky. If Kentucky were to tax professional services, it is important to notice that two of the three biggest cities in the state are located right across the river from another state. For example, if Covington and Northern Kentucky were required to tax professional services, many businesses and individuals could choose to hire a professional service in Cincinnati to avoid having to pay the tax. The same circumstances could happen in Louisville if people were to hire professionals in Indiana. While not all professionals may be able to provide the service to Kentuckians (for example, an attorney in Indiana might not be licensed to practice in Kentucky), it is reasonable to assume that some business would be driven across the state border.

When comparing Kentucky to the three states that tax professional services, it is beneficial to examine where their main urban areas are. In Hawaii, there are no surrounding states. Therefore, Hawaii does not have to take into consideration that taxing professional services could lead people to use services elsewhere to avoid the tax. In New Mexico, the main urban areas such as Sante Fe and Albuquerque are located in the central part of the state. Therefore, losing professional services to the surrounding states is less of an issue. However, South Dakota does have an urban area located on the border. Sioux Falls is located near the border of both Minnesota and Iowa. Yet in those areas, there are no large cities on their border where an array of professional services exists, like Covington and Northern Kentucky would face with Cincinnati.

It is also important to take into consideration the tax rate of the surrounding states. Ohio, West Virginia, Virginia, Tennessee, Missouri, Illinois, and Indiana all touch a Kentucky border. While none of these states tax professional services, their sales tax could still help provide some analytical data. Ohio has a 5.5% sales tax rate, but cities and counties can authorize an additional tax up to 2.5% to generate revenue. West Virginia has a sales tax of 6%, while Virginia's sales tax rate is 5%. Tennessee has a sales tax rate of 7%, but can tax up to 2.25% to generate local revenue. Missouri has a sales tax rate of 4.225%, but can tax up to 1% more for transportation revenue. Illinois has a sales tax base rate of 6.25%, but can be up to 9.25% in certain areas if the locals needed to generate more revenue. Indiana has a 7% sales tax rate. Since Kentucky's rate is 6%, the state is highly competitive with its sales tax, since a higher tax rate could drive border business to the other states. However, taxing professional services could have a negative outcome, since the surrounding states do not tax services.



Conclusion and recommendations

After analyzing the potential revenue, incidence, and competitiveness of a professional sales tax in Kentucky, it is my recommendation that Kentucky should not institute the tax without further research. The potential revenue that would be generated from the tax would be estimated to be around \$322,000,000 assuming 0% elasticity, which comes close to closing the gap on the budget deficit. However, there are also too many unknown or potential downfalls of the tax. Further analysis is needed in order to make a strong recommendation of implementing a tax on professional services. In addition, if businesses were exempt from paying the tax for business purposes, the potential revenue would not be as high. Business could also be driven to neighboring states, since none of the other surrounding states have a tax on professional services and have sales taxes comparable to Kentucky's. The burden of the tax will most likely fall on

those who make the least in the state, given the comparison of the sales tax burden paid in the three states that currently tax professional services. So much research is sensitive to assumptions. Given all of these reasons, a tax on professional services is not recommended at this time. I think the state should continue to consider more intensive research on this topic to further examine the consequences of a tax on professional services.

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