

Observations and proposals for Tax Reform in Utah

The State of Utah faces fiscal challenges that complicate providing appropriate public services to Utah individuals and families. Such challenges are common in the public fisc and evolve over time and eventually motivate stakeholders, to examine existing tax schemes. Utah is not alone in confronting the developing fiscal challenges.¹

The following comments represent initial conclusions with respect to developing a tax scheme that is consistent with both normative and positive policies that inform tax design.

State Revenue and Expenditure Imbalance

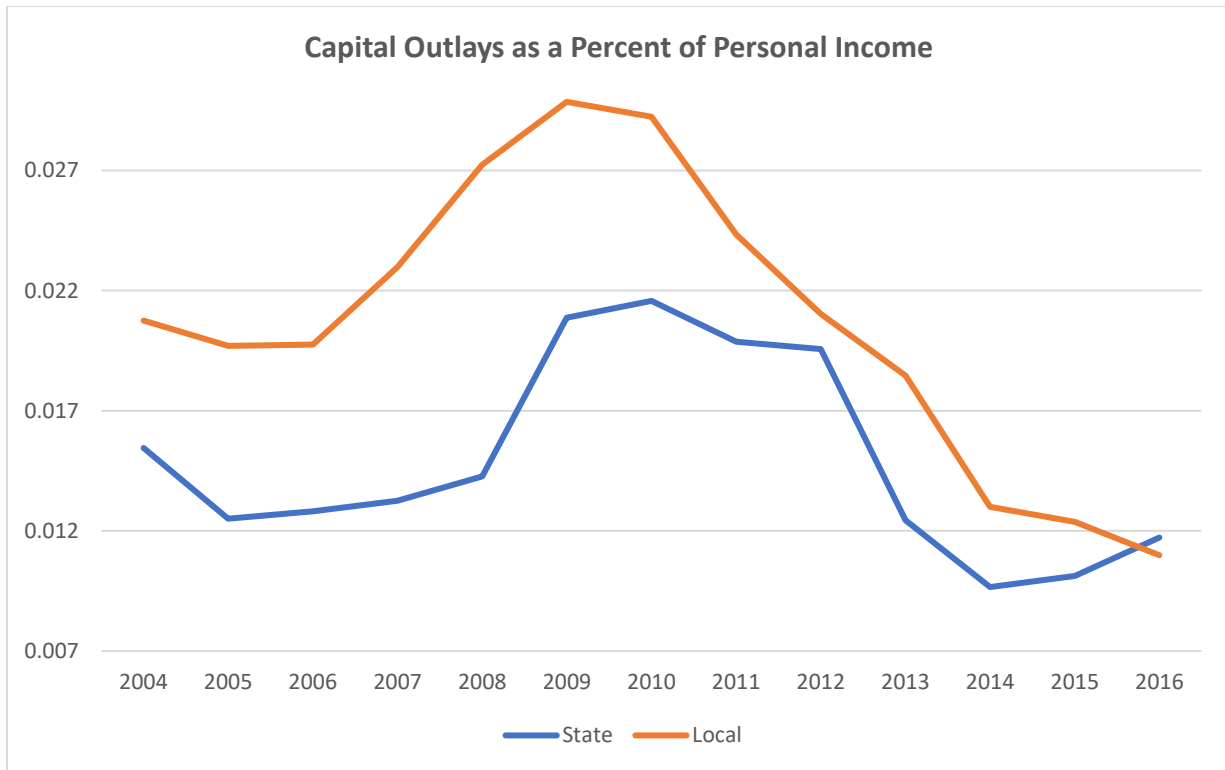
Utah faces an increasing divergence in the general fund between annual revenues and annual expenditures. The demands to fund public services exceed the revenue required to fund the demands.² One solution to this problem is for State leaders to reduce spending. For several reasons reducing expenditures is never an easy exercise:

- Research published by the Rockefeller Institute (Albany University) reports that Utah is characterized as a low tax and low spending state. If this research is correct cutting expenditures is more difficult in Utah than other states. It appears our elected officials have already made careful and informed decisions on spending levels. At the same time, Utah is also growing in both population and income levels. As population grows the need for additional schools, highways, and public service employees, etc., also grows.
- Figure 1 suggests that Utah elected officials have been careful in at least when it comes for expenditures on infrastructure. Figure 1 shows that both the State and local governments in Utah have been reducing their expenditures on **infrastructure** since 2009 and the downward trend has been dramatic. A suggestion to further reduce expenditures for infrastructure is Utah would cause Utah to fall behind building needed transportation facilities, water facilities, and schools, etc.

Figure 1

¹ Alm, James, and Steven Sheffrin, (2013). "Can Tax Reform Solve the "Fiscal Trilemma?". *Public Finance Review*, 41(6): 711-720.

² Not everyone concurs that the Utah is facing a revenue crisis. Testimony and materials presented during the public hearings reflected the view of individuals and groups that Utah government has sufficient revenue to meet the needs of its citizens. A prevalent argument was that the state sales tax revenue was growing. However, the observations and data on the increase in sales tax revenue did not account for increases in state population or for price changes. Another argument was that the *Wayfair* decision would result in substantial increases in sales tax revenue. This decision will benefit state sales tax collections but it does not completely solve the problems of collection sales tax revenue from e-commerce.



- Economists describe services supplied by governments as **normal goods** implying that individuals and families want more of not less of these goods as disposable income increases.³ As family income increases Utah citizens want better public safety, better K-12 education, better higher education opportunities, better libraries, and better recreation opportunities. The desire for more public goods and services is not related to a growing population but as personal income increases the demand for such items increases.
- There is also the issue of the “**Baumol Disease**”. William Baumol posited that public sector firms do not benefit from increases in productivity associated with capital investment.⁴ Conversely, many private firms can substitute capital for labor and in doing so make labor more productive. The increase in the productivity of the private sector workers is rewarded with higher wages. The challenge to the public sector from this process is that as wages increase in the private sector, they also increase in the public sector but do so without increases in productivity. Wages in the public sector follow

³ There are also goods and services that demand declines as income increases. Such goods are referred to as inferior goods.

⁴ Baumol, William. (1967). “Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis”, *The American Economic Review*, June (57): 415-26.

wages in the private sector and the result that even without increasing the number of public employees the cost of government will increase.⁵

What is the problem of funding needed services in Utah?

The *Tax Foundation* looked at the current fiscal situation in Utah and identified the challenge in Utah to not be a revenue problem but a balance problem. The lack of balance occurs for the following reason. In Utah K-12 education and a growing share of higher education is financed by the state personal and corporate income taxes. The income tax streams are constitutionally required to fund education. The property tax also plays a role in funding K-12 education and the K-12 funding scheme is intended to equalize educational resources in the state's school districts.

The remaining balance of state government is funded by revenue from the state retail sales tax. The bifurcation of funding, income tax for education and state retail sales tax, is a core problem that contributes to the balance issue raised by the Tax Foundation. The income tax in Utah grows more rapidly than increases in state personal income. Recent estimates published in the *National Tax Journal* suggests that a one percent increase in state personal income results in a 1.07 percent increase in state income tax collections. The same article reported a that much different pattern exists for the state sales tax. A one percent increase in state personal income results in only a 0.80 percent increase in state sales tax collections.⁶

This difference in the rate of growth in the two major sources of state revenue is illustrated in Figure 2 that compares the eleven-year (2008 – 2018) rate of growth of the income and sales tax to the state Coincident Indicator. The Coincident Indicator (CI) is generated by the Federal Reserve Bank of Philadelphia and combines into a single statistic; farm payroll employment, average hours worked in manufacturing, unemployment rate, and deflated wage and salary. I suggest this is an excellent indicator of state economic activity and change. The comparison in Figure 2 is made in nominal terms and but it does control for population growth.

Figure 3 makes a similar comparison but controls for inflation.

⁵ Consider comparing a Kindergarten class from 30 years ago to a Kindergarten class taught today. The educational process is remarkable similar regardless of the year. There have been very modest capital investments to improve the educational outcomes the process continues to be driven by a teacher using techniques that would be familiar to most adults taught three decades ago. But the cost of putting the Kindergarten teacher in the classroom has increased as general wages have gone up.

⁶ Anderson, John E., and Shafiun N. Shimul. (2018). "State and Local Property, Income, and Sales Tax Elasticity: Estimates from Dynamic Heterogeneous Panels"? *National Tax Journal*, 71(3): 521-546.

Figure 2

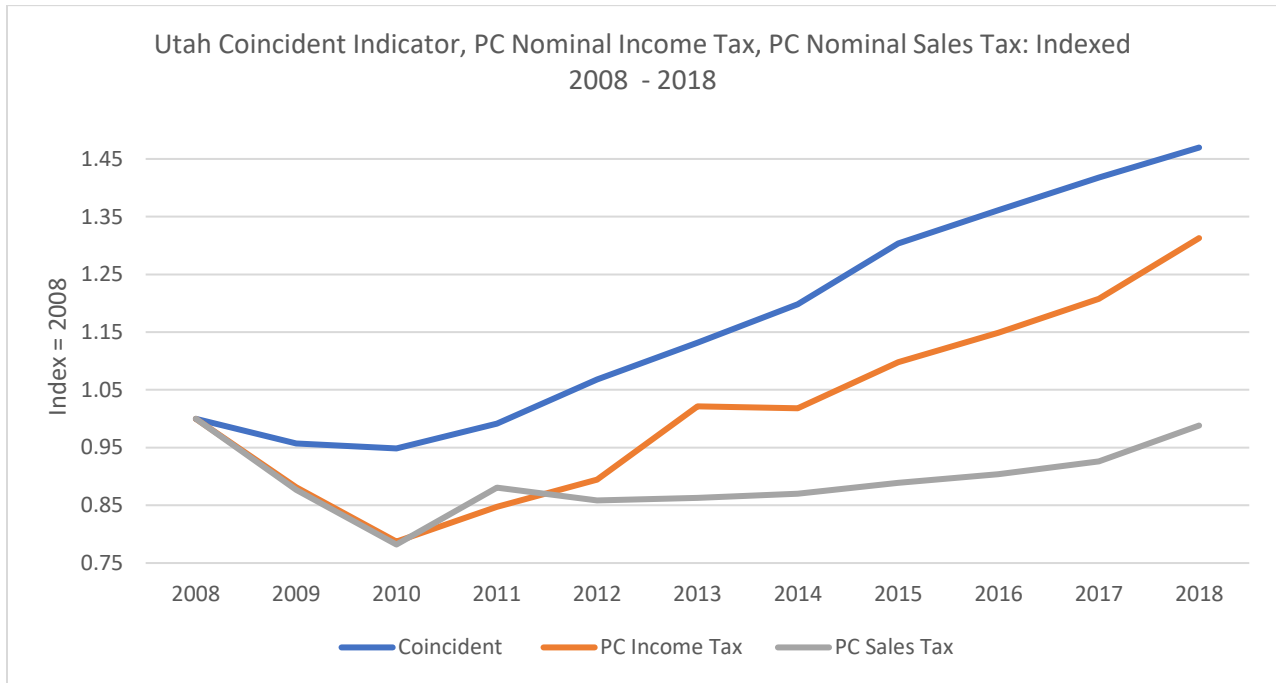
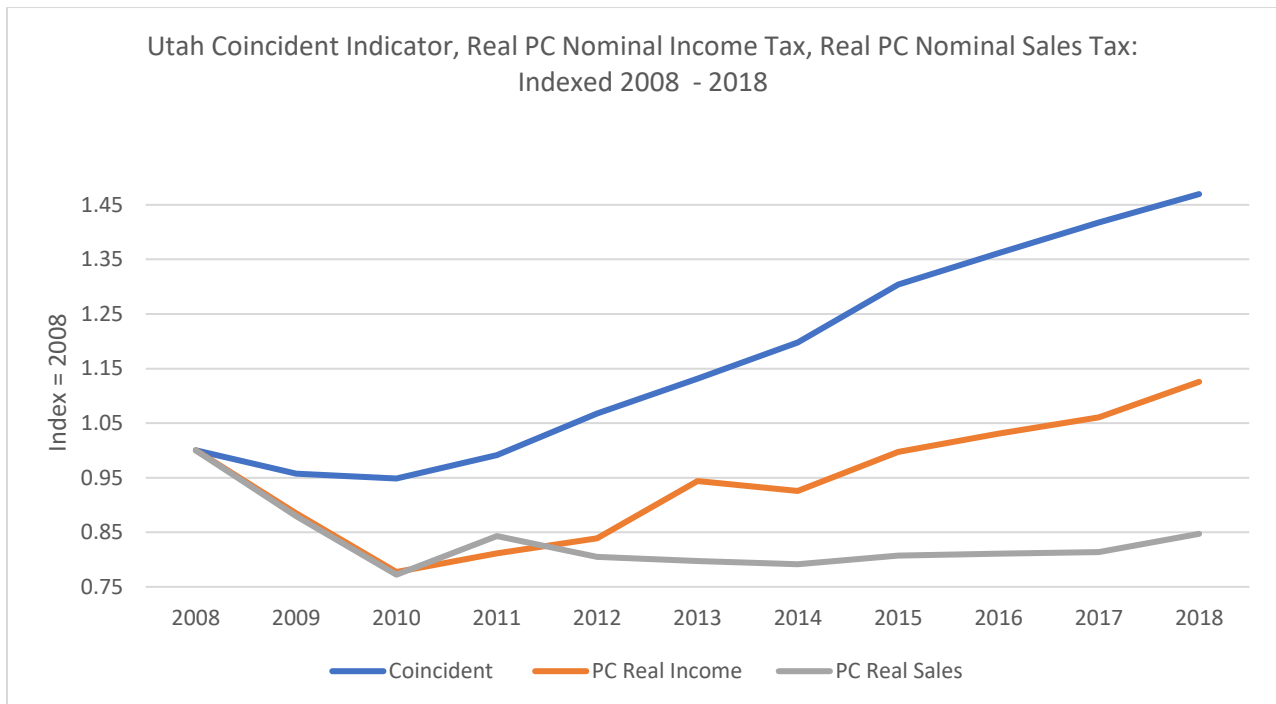


Figure 3



It is apparent that state revenues, while increasing, are not keeping pace with the growth in the Utah economy when compared to the CI. This observation is expressly distinct after controlling for inflation (Figure 3). The indexed trend line for sales tax shows that in real per capita terms the sales tax has declined from 2008 by 15 percent. At the worst of the great recession the decline was as much as 25 percent. Since the state retail sales tax is the primary source of state general funds the ability to fund the general operations of state government in Utah is not keeping pace with the growth in the state's economy in either nominal or real terms.

Solutions: Remove the Constitutional Earmarking of the Income Tax

Removing the Constitutional requirement that the income tax be used solely for supporting education is way for the State General Fund to reap the benefits of the more responsive income tax. Utah policy makers have discussed this idea for a number of years.

Removing Constitutional constraints on the use of tax revenues offers policy-makers freedom to provide funds to the most beneficial services provided by the state. Constitutional constraints may force elected officials to fund services that are no longer needed or are actually detrimental to the efficient function of society. The advantages of removing the Constitutional limits include the following:

- The allocation of tax revenues is a role that is normally reserved for elected policy-makers. This freedom allows policy-makers to respond to changing needs in the state. For example, as state population ages the mix of services provided by the state will likely be altered.
- Freedom for elected officials to take advantage of the different rates of growth for various sources of revenue.
- Allow elected officials to employ the portfolio principle to adjust tax schemes when business cycles create asymmetric volatility in taxes.⁷ A portfolio of taxes facilitates the blending of taxes that have different rates of growth during a typical business cycle. For example during an economic downturn the corporate income tax will decline very rapidly. Conversely, the property tax will decline much slower. If both taxes are included in the revenue stream the different rates of decline will moderate the change in the flow of funds.
- The goal of state tax policy is that the rate of growth in expenditures should be equal to the rate of growth in state revenues.
- Fox and Murray made the following observation that can be used to clarify or define the concept of revenue adequacy. *"An adequate tax can be defined as one where the long-*

⁷ Cornia, Gary, and Ray D. Nelson. (2010). "State Tax Revenue Growth and Volatility." *Regional Economic Development*, Federal Reserve Bank of St. Louis, 6(1): 23-51

run total income elasticity of tax revenues equals the long-run total income elasticity of expenditures.... The tax is inadequate if the demand for public services has a higher total income elasticity,” ... (pg. 22).⁸ This outcome is currently not possible in Utah.

Utah has faced a difficult challenge recovering from the reductions in K-12 spending that occurred during the great recession. Figure 4 shows the per pupil trend in K-12 spending from 2008-18. Over the ten-year period shown in Figure 4 there has been a significant increase in financial support for K-12 education, but the state has not fully recovered from the reduction in spending that accompanied the great recession. The reported trend illustrates that even with earmarked funds spending on K-12 education is a challenge. Figure 4 shows the overall state trend but the trends for each school district should also be examined. It would not be unreasonable to expect that the impact of the great recession differs between school districts. For example, rural school districts and urban districts face very different expenditure needs and very different local abilities to fund education.

Figure 4

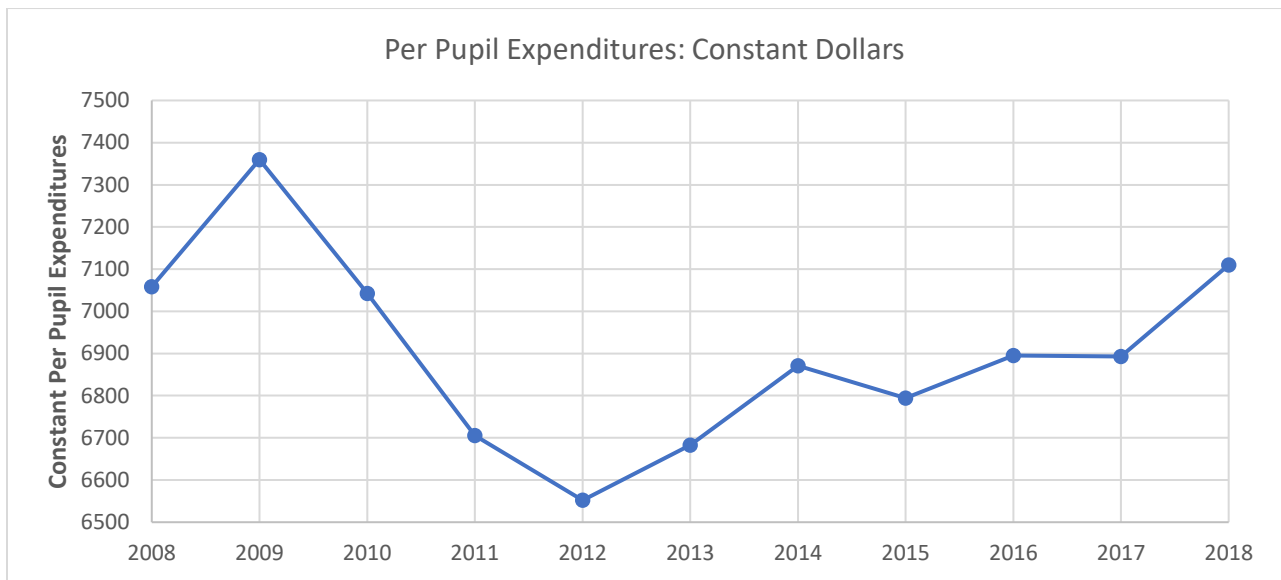


Figure 4 highlights that there are also fundamental questions that need to be addressed when considering a policy that would remove the requirement that personal income taxes only be used to fund K-12 education. The state is still catching up to 2008-9 expenditure levels.

One option that should be explored is using a more stable source of revenue like the property tax to fund K-12. This would reduce the funding disruptions that follow business cycle downturns.

⁸ Fox, William F., and Matthew Murray. (1988). "Economic Aspects of Taxing Services", *National Tax Journal*, 41(1): 19-36.

This policy would require an increase in the property tax. Increasing the proportion of K-12 funding coming from the stable property tax would improve funding stability. It would also allow a reduction in the support coming from the less stable income tax.

There are disadvantages to removing the Constitutional restriction:

- Figure 4 clearly illustrates the policymakers struggle to maintain per pupil expenditures over time.
- Utah spends the least amount revenue per student of the other 49 states and the District of Columbia. Utah also spends a very large portion of its tax revenue on K-12 education. The simple demographic fact is that Utah must educate a larger portion of its citizens when compared to other states. Changing funding requirements for K-12 has many moving parts that need evaluation.
- Funding K-12 education is the biggest fiscal challenge or constraint facing Utah citizens. Most states because of declining birth rates are currently experiencing reductions in K-12 enrollment but Utah is experiencing an increase in K-12 enrollment. Our birth rate has declined but is still above the national average.
- In a global economy adequately educated and trained workers are critical to the economic vitality of a state. Interrupting the current system for funding education faces substantial policy questions.
- While the evidence that funds for education are correlated with better educational outcomes is in constant academic dispute states do not appear to be willing to gamble on their emerging workforce by unilaterally reducing the funding for K-12 education. Reductions in funding do occur during business cycles but every state tries to replace the funds that are lost. This pattern has and is happening in Utah following the Great Recession.
- Designing a grant system that would protect K-12 schools from changes or reductions in spending and also fund growing student populations demands is difficult. This might be an opportunity to design a grant system that is articulated so that districts and schools that face different educational processes would receive differential levels of funding. At this point a discussion around how to protect K-12 funding has not occurred. This includes funding for capital construction. A number of recent articles in “first rate” academic journals offer results that capital investments to improve K-12 facilities does marginally improve student performance and also significantly increases the value of surrounding homes.

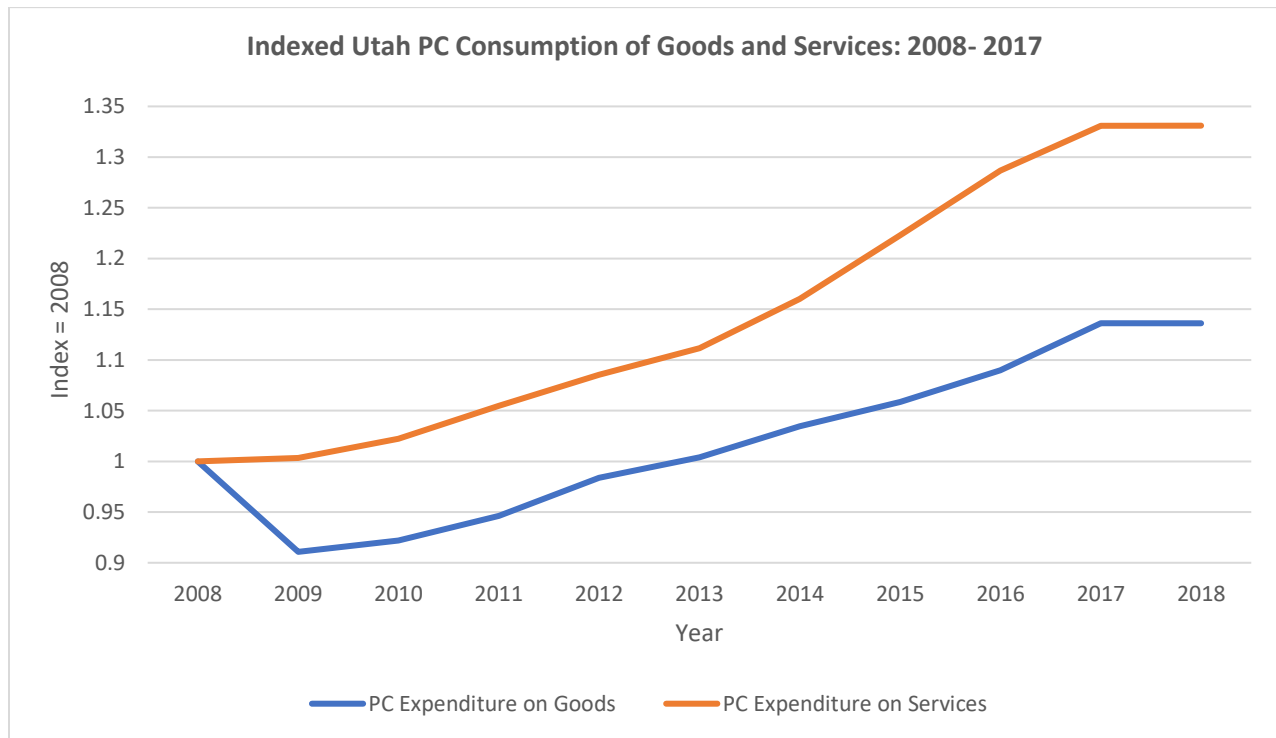
- The Utah State Auditor is in the process of developing what appears to be a unique data set that would allow data mining to pinpoint areas of need and or success in K-12 education. The data may actually allow classroom level measures. Any reconfiguration of K-12 funding should be postponed until the Auditors work is completed, beta tested for stability, and hopefully implemented.

Solutions: Increase the Sales Tax Base

Elected officials might carefully consider expanding the sales tax base. Expanding the sales tax base concerns would reduce some of issues around revenue adequacy. When the sales tax was adopted in the 1930s the base was comprised primarily of goods. The changing consumption patterns in the United States and in Utah have left the retail sales tax in its current condition unable to provide adequate revenue. In Utah the majority of consumption is for services and services are generally not subject to the sales tax. Figure 5 illustrates the trend in the purchase of goods and services by Utah consumers over the period 2008-18. The trend line reflects the per capita rate of growth (indexed to 2008) of purchases of services and goods in Utah.

During the period of the great recession the change in consumption patterns (observable volatility) between the purchase of goods and services is striking. Figure 4 shows that services are more stable during economic downturns than goods. These divergent trend lines not only illustrate that the rate of growth between good and services but that Utah is applying the tax against the most unstable portion of personal consumption. Such a policy undermines revenue stability during economic cycles.

Figure 5



Impose the full State Sales Tax rate on Food

The state sales tax on food purchased for home consumption was reduced in 2006. The state sales tax on food needs to be increased. The decision to reduce the state sales tax on food was well meaning, but has proven to be a shortsighted fiscal decision.

There are a variety of reasons to recommend replacing the sales tax on food:

- The loss of the state sales tax on food is now costing the State of Utah approximately \$225 million a year in tax revenue. During the time this exemption has been in place the total forgone revenue is in the billions of dollars. Losses in revenue of this magnitude suggest that some needed state expenditures have been forgone, including funding for infrastructure.
- The current exemption is not carefully designed or targeted. Exempting food purchased in grocery stores does not account for differences in the wealth of Utah citizens. Wealthy individuals and families receive the same benefit from the exemption as more deserving

poor individuals and families. This outcome undermines faith in the fairness of the state system of revenue. A careful review of the current policy results in the conclusion that tax fairness is not being promoted.

- Because of this exemption in nominal terms the revenue from the state sales tax is declining and purchasing power of the state is eroding.
- Based on the experience in other states because of the erosion of the sales tax base rates will eventually increase. Virtually every state that opted to remove the sales tax on food eventually increased the tax rate on the remaining taxable items.
- The removal of the sales tax on food is not the only reason for the decades long increase in state national sales tax rates but the policy contributes to the upward trend in the tax rate. Removal of the sales tax on food is one of the reasons that the average state sales tax rate is increasing in the United States. Higher sales tax rates create distortions in purchasing decisions. Cornia, *et. al*, examined the responsiveness of the purchase of goods and services to differing sales tax rates in Utah. They found consumers would travel to purchase large ticket items, e.g. automobiles, home appliances, and electronic goods, in communities with lower local option sales tax rates.⁹
- If food is not fully taxed it is only a matter of time before Utah will face a critical decision to cut basic services that are now funded by the sales tax or increase the sales tax rate.
- Including food in the state sales tax base broadens the tax base and will modestly improve the instability of the state sales tax. A sales tax like all taxes is responsive to business cycles and declines as the economy declines.

Opponents to returning the state sales tax base correctly maintain that a sales tax on consumption is regressive, and this change will further disadvantage low income Utah individuals and families. (Food purchased in stores has an inelastic demand and this suggests that sales tax rate increases will be passed forward to consumers.) This concern is a concern for tax fairness and the argument has merit, but current federal policy and modest policy adjustments to the Utah tax system can eliminate this concern.

Reducing the regressive outcome of the sales tax:

⁹ Cornia, Gary, Scott Grimshaw, Ray Nelson, and Larry Walters. (2010). "The Effect of Local Option Sales Taxes on Local Sales." *Public Finance Review*, 38(6): 659-681.

- Individuals and families that participate in SNAP (food stamps) are exempted from the sales tax by federal law. This means that exempting food from the sales tax does not advantage those receiving SNAP benefits.
- Johnson and Sheffrin report that in Mississippi and the city of New Orleans individuals and families covered by SNAP were not paying sales tax on food and did not benefit from the exemption of food from the sales tax base. They conclude that exempting food from the sales tax is a costly exclusion. It is open to question if Utah results would compare to the findings in either Mississippi or New Orleans, but such an analysis is needed.¹⁰
- Furthermore, they argue that excluding food from the sales tax base results in higher tax rates that ultimately hurt the poor when they purchase other taxable goods. A poor individual may face a lower sales tax burden on food purchased but because of higher rates he may pay a higher sales tax on clothing, household appliances, etc.
- What about individuals and families that do not purchase food using the SNAP program? This problem can also be addressed by coupling the sales tax with the income tax. Low-income individuals and families not receiving SNAP benefits can receive a credit against their personal income tax to offset the state sales tax on food. For those not owing any state personal income tax the credit can be a refund (negative tax). Several states follow this model, e.g., Idaho.
- States could also develop a credit card or identification scheme that individuals and families could use to receive a sales tax reduction when purchasing food.
- Finally, it is important to always keep in mind that there is no free lunch. Omitting the tax on food means there will be less public services offered by the state. The forgone revenue likely results in fewer state services that directly benefit low-income individuals and families.

Extend the state sales tax to services

There are arguments that sales taxes should be extended to services that are purchased by consumers. There are strong policy reasons to pursue the taxation of services. These include the following:

- As shown in Figure 4 the rate of growth in the consumption of services has exceeded the rate of growth in the purchase of goods. The economy is changing, and the tax base is changing.

¹⁰ Johnson, Anna L., and Steven M. Sheffrin. (2016). "Rethinking the Sales Tax Food Exclusion with SNAP Benefits", *State Tax Notes*, January 11: 149-158.

- Services appear to be more stable during economic cycles than goods. Large ticket goods such as home appliances are especially vulnerable to economic cycles and that increases the instability of the sales tax.
- Collecting taxes on goods and services may unfairly favor services over goods. Some researchers have concluded that omitting services from the sales tax gives them a distinct advantage and may have increased the growth of the service sector.
- Taxing services would likely reduce the regressive burden of the sales tax. Evidence suggests that services are more likely to be used by higher income individuals and families. If the pattern of well to do have a higher propensity to use services taxing them would make the sales tax fairer given the general discomfort with regressive taxes.
- A sales tax on services would produce significant increase in revenue depending on services that included in the base.
- Revenue windfalls from extending the sales tax to services would need to be offset by reductions in the rate of taxation.

There are also disadvantages to taxing services that require caution before being imposed.

- Retail sales tax policy should only tax final consumption of goods and services. A policy that imposes a retail sales tax on services at different stages of production becomes a cascading tax and results in economic inefficiency.
- Taxing services, and for that matter goods, at various stages of production not only creates a cascading tax it also provides an incentive for firms to vertically integrate to avoid the tax. This is most likely only technically available to large firms resulting in small firms facing the cascading tax. Vertical integration to avoid taxes is likely to create economic inefficiencies.
- Taxing services *may have* an influence on the location of economic activity and result in lower levels of employment and production in the state. However, the evidence that sales taxes on services would create relocation of firms has generally not been reported. This does not mean it would not happen but there is so little taxation of services that empirical comparisons are not available.
- Administration of a sales tax on services could be difficult for a state revenue department. It would require registering vendors and educating vendors. After the implementation of the sales tax on services the state would need an aggressive process to monitor compliance. States that have considered taxing services were faced with substantial administrative issues.

- Compliance for taxpayers would also be problematic. Many taxpayers that provide services to both businesses (B-to-B) and to final consumers would need to determine the nature of the transaction. B-to-B transactions should not be taxed. Final consumer transactions should be taxed. Making the distinction between B-to-B and final consumption would be complex.
- It is reasonable to expect legal challenges. The sales tax already has a rich history of litigation. Firms that would argue the service they provided was for a non-taxable event and state revenue departments would see the service as a final product to a consumer.
- Firms that provide products to in-state and out-of-state consumers would only be required to collect the sales tax on services consumed in the state. Likewise out-of-state firms that sold tax services to Utah residents would be required to collect and remit the sales tax to Utah. A properly designed sales tax on services would be a tax on the final destination of the service. In this respect the sales tax on services would be similar to the corporate income tax that is only based on in-state sales. Arguments for a corporate income tax that is allocated based on in-state sales can also be extended to arguing for a destination tax on services.

There are services that need a cautious review to evaluate the possibility of imposing a sales tax. These include transportation, e.g., Uber type services, and digital downloads. Exactly how these types of services are to be taxed is not clear at this time.¹¹ I generally favor taxation on final consumption whether it is a good or a service but I am not prepared to offer a hard and fast recommendation until there is a better understanding of the administrative and compliance challenges.

Adopt a State Levy on Property to Fund Infrastructure

Utah faces a challenge to fund infrastructure. The need is for improved roads and public facilities continues to increase. Continued investment in state infrastructure is critical for the economic growth of Utah. Currently the pressure to fund infrastructure has been relieved by earmarking revenue from the sales tax to fund transportation. There is, in my view, a much more efficient way to fund needed state infrastructure. The state should consider a modest property tax increase to support infrastructure needs. Up until the 1950s Utah did employ a property tax in Utah to support investment in state infrastructure.

Table 1 offers an example of imposing a statewide property tax on assessed property in Utah. Tax rates that would generate 100 and 200 million dollars. It also extends the analysis to speculate on the tax increase for specific homes. The cost of such a tax on a daily basis is minimal when compared to many daily purchases individuals make.

¹¹ The number of services identified on the NAIC list approaches 200 entries. There is a profusion of services that need to be examined in terms of the appropriate application of the sales tax.

Table 1

Total Revenue Generated for Infrastructure	Market Value of Home	Taxable Value of Home (Reflects the 45 % reduction in MV)	Annual Tax	Monthly Cost of Tax	Daily Cost of Tax
\$100 Million	\$200,000	\$137,500	\$48.26	\$4.02	0.14
	\$300,000	\$220,000	\$77.22	\$6.44	0.22
	\$700,000	\$385,000	\$135.14	\$11.22	0.38
\$200 Million	\$200,000	\$137,500	\$96.55	\$8.05	0.26
	\$300,000	\$220,000	\$154.49	\$12.87	0.42
	\$700,000	\$385,000	\$270.35	\$22.53	0.74

The arguments to impose a property tax to fund infrastructure can be summarized as follows:

- Utah’s property tax burden is in the bottom fifth of all states. There is room for property tax increases.
- The property tax is the tax that creates the least amount of distortion in the economy. In more technical terms the property tax minimizes the dead-weight loss that is associated with the imposition of a tax.
- Investing in infrastructure, like transportation, has been shown in a variety of economic studies to increase the value of surrounding real estate. The increases in property value occurs with the development of parks, K-12 schools, improved public safety facilities. The property tax has a direct connection to the increase values. Frankly, the sales tax does not have this same connection to increased housing values.

Imposed a fee on the area of land to fund infrastructure

A related suggestion is to consider a fee on land in Utah. The fee would should be based on the **area** of a plot of land. The fee could be adjusted for the location of the land such as a distinction between rural and urban counties. It could also be adjusted for the use of the land.

The fee would be very small but would likely generate substantial revenue for infrastructure construction. It would not be imposed on improvements that have been constructed.

User charges and fees

State and local governments in Utah often hear the recommendation that they operate like a business. The advantage of a business firm is that it receives market feedback from the prices it charges. Prices reflect how customers value a good or service. If the price is too high in the view of the consumer the firm will adjust prices or choose to operate. Prices are powerful tools that motivate the consumer and the firm. They have the advantage of having the marginal benefit of goods equal the marginal cost of producing a good. When marginal benefits equal marginal cost economic efficiency is achieved. When prices are subsidized economic efficiency is violated.

Governments have the opportunity to operate like a firm when they offer and sell services that can be measured and metered or price. The best example is water. User charges on water can provide funding for capital expenditures and operating expenses. There is no justification to use other sources of revenue support, like the property tax, to fund water in Utah.

There are multiple other examples where user charges can be implemented.

A careful examination of where user charges can be implement is essential. Likewise, existing user charges must be examined to determine is the pricing policy is correct. Correct does not imply prices should always be raised it also implies that some prices need a reduction.

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