Establishing Broward County as a world-class tourism and business destination requires unique, high quality, and affordable infrastructure developments and tourism attractions. Achieving this vision presents Broward County with unique financial challenges and opportunities. Strong population growth provides Broward County with a rare opportunity to effectively finance (with mainly consumption-based taxes) development projects, while being able to export some of the tax burdens to non-residents. We suggest a mix of funding strategies that address business and economic development objectives mentioned in the Vision Broward Taskforce’s policy recommendations.

Despite its known challenges, strong population growth is indeed a luxury for most U.S. states. Population growth presents a great opportunity since it is typically accompanied by consumption growth as well as property value growth, which creates a very attractive tax base for a number of revenue sources particularly consumption based taxes, property taxes, and various user charges.\(^1\) Computed sales tax capacity and sales tax effort indices for Broward County and its neighboring counties indicate an above average tax revenue potential for consumption based taxes. However, the same two indices for the property tax suggest that Broward County has an average tax capacity, but above average utilization of the property tax.

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\(^1\) Tosun (2003) discusses the advantages of population and population growth in revenue generation in West Virginia municipalities. A comparison of U.S. states show that municipalities with larger populations tend to maintain significantly larger municipal general revenue per capita than smaller municipalities.
Tourism is mentioned as a vital sector for the Broward County economy. Thus, our funding proposals focus on this sector. Mainly, certain consumption-based taxes and local value added tax (VAT) are identified as main tax revenue sources and development impact fees and user fees as non-tax revenue sources. To provide a better policy guideline, our proposals are classified as short run and long run solutions. While the attributes of a good financing system can be numerous, the state and local public finance literature typically focuses on three criteria: economic efficiency, equity, and revenue adequacy (Bahl, 2004).² Thus the funding options examined in this paper are evaluated according to these criteria.

1. Characteristics of Broward and Neighboring Counties

Judging by their geographic locations, Broward County is likely to face significant competition from the similarly positioned neighboring counties Miami-Dade, Palm Beach and to some extent Collier. Looking at the demographic and economic data reveals how these four neighboring counties stack against each other.

Although population growth has its own challenges, it is really a luxury for most U.S. states and is critical for consumption and property tax revenues. From 1990 to 2000, population increased by 16% in Miami-Dade, 29% in Broward, 31% in Palm Beach, 65% in Collier, and 23.5% in entire Florida. Population of the United States grew by 13.1% during the same period. From 2000 to 2003, Broward remained the third fastest growing county among the four neighbors as its population increased by 7% as shown in Figure 1. Once again, Broward County outpaced the state of Florida (6.5%) and the United States (3.3%) in population growth. Collier County still had the

² The literature also used, to lesser extent, other criteria such as administrative simplicity and tax compliance.
highest growth in population (14%) between 2000 and 2003 just as it did between 1990 and 2000. It appears that high population growth in Collier County is mainly due to retirees. In 2000, 25% of population in Collier County was over sixty-five compared to only 16% in Broward County as shown in Figure 1. In addition to a low share of older people in 2000, Broward County exhibited a high proportion of people below eighteen (24%), second only to Miami-Dade’s 25%. In comparison, the state of Florida had 17.6% of population over 65 and 22.8% of population above eighteen. In 2000, Broward also had the second highest share of population below poverty (12%) among its four neighbors. In comparison, the state of Florida had 12.5% of population below poverty in 1999.

**Figure 1: Population Characteristics of Four Florida Counties**

![Figure 1: Population Characteristics of Four Florida Counties](http://quickfacts.census.gov/qfd/)


In 2000, Broward County had the highest population density among the four neighboring counties (1,347 persons per square mile). In 1999, Broward had the third highest income per capita ($23,170) and median household income ($41,691) falling behind Collier and Palm Beach counties. Despite the third place in the income
statistics, Broward County ($12,174) was second to Collier County ($13,624) in 1997 retail sales per capita as shown in Figure 2. While Broward County was above Florida ($38,819) and below the United States ($41,994) in median household income, it was above both Florida ($21,557) and the United States ($21,587) in income per capita.

**Figure 2: Income and Retail Data for Four Florida Counties**


Income and demographic data for Broward County suggests that we should expect high demand for housing and consequently strong growth in real property values in this county. Indeed, the figures in Figure 3 indicate that Broward County’s real property values grew at an increasing rate from 2000 to 2003. During 2002-03, Broward’s real property values increased by 18.23 percent—the highest real property growth among the four neighboring counties in that period.
In recent years, Broward County experienced above state average population growth (although lower than in Palm Beach and Collier counties), relatively large young labor force, and robust consumption per capita. Young and growing labor force, robust consumption, and strong real property value growth paint a positive outlook for the capacity to generate sufficient consumption and property tax revenues.

**Indicators of Revenue Potential: Fiscal Capacity and Tax Effort Indices**

While government officials are interested in how much revenue they can collect from a given tax mix, they are also interested in fiscal capacity and tax effort. Tax capacity and tax effort indices enable policymakers to compare their states or localities in terms of fiscal adequacy. The term tax capacity refers to the ability of state governments to raise revenue. Tax effort, on the other hand, is simply the proportion of tax capacity being utilized (i.e. revenues collected divided by tax capacity). Although tax capacity and tax effort indices are not perfect measures of revenue...
potential and its utilization, they do provide policymakers with useful and (somewhat) objective basis for interstate or interjurisdictional comparisons.

We build on the earlier work by the U.S. Advisory Commission on Intergovernmental Relations (ACIR) and Tannenwald (2002) in developing our own county level tax capacity and tax effort indices. Like Tannenwald (2002), we use the familiar representative tax system (RTS) methodology, but for comparing the property and sales and use taxes across Florida’s counties rather than states. The RTS methodology is based on estimating an ideal comprehensive tax base, standard tax rate, and per capita yield that a uniform and representative tax system would generate in each state (County in our case). An ideal comprehensive tax base must be void of various tax deductions, exemptions, and exclusions. Simply, it should be broad enough to include all economic activities that are feasibly taxable and exclude those that are not. To calculate the per capita yield of a hypothetical representative tax base, we also need to know the standard tax rate. In our case, the standard rate equals to the ratio of Florida’s actual tax collections to the value of its standard tax base. Despite data limitations that make our indices imperfect, our tax capacity and tax effort indices are still useful for a county level comparison of tax adequacy.

To calculate the county level tax capacity index for the property tax or the sale and use tax, we take each county’s ideal comprehensive tax base per capita and divide it by Florida’s total comprehensive tax base per capita. However, estimating the sales and use tax base at the county level turned out to be a little bit more challenging compared to the property tax case. For the sales and use tax base estimation, we took each county’s gross sales figures (available on Florida’s Department of Revenue
website) and added them to the out of state gross sales, which we distributed across Florida’s counties according to their gross sales shares in Florida’s total gross sales.

Of course, this is not a perfect measure of the sales and use tax base, but this is what can be done with the available to us data.

So how does Broward County compare to its neighbors in terms of fiscal capacity and effort? Table 1 shows tax capacity and tax effort indices for the property tax and sales and use tax for Broward and three neighboring counties in Florida.

### Table 1. Tax Capacity and Tax Effort Indices: Property Tax, Sales and Use Tax

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tax Capacity</td>
<td>Tax Effort</td>
</tr>
<tr>
<td>Broward</td>
<td>1.00</td>
<td>1.22</td>
</tr>
<tr>
<td>Collier</td>
<td>2.47</td>
<td>0.80</td>
</tr>
<tr>
<td>Miami-Dade</td>
<td>0.94</td>
<td>1.16</td>
</tr>
<tr>
<td>Palm Beach</td>
<td>1.30</td>
<td>1.11</td>
</tr>
<tr>
<td>State of Florida</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Methodology is explained in Tannenwald (2002).


How should one interpret these indices? Basically, both fiscal capacity and tax effort measures are indexed to the state average, which is set to 100 percent. If a county’s fiscal capacity exceeds (precedes) one hundred percent, it means that its tax capacity is above (below) Florida’s average tax capacity. Similarly, if a county’s tax effort exceeds (precedes) one hundred percent, it means that this county’s tax effort is above (below) Florida’s average tax effort.

According to the figures in Table 1, Broward County has exactly the average property tax capacity and above average property tax effort (in fact, the highest property tax effort among the listed neighboring counties). When it comes to the sales and use tax, however, Broward’s tax capacity is, in fact, the highest among the shown
counties (well above the state average) and its tax effort is the second lowest among the shown counties. These indices suggest that Broward County may have a greater potential for revenue generation through consumption based taxes rather than property based taxes.

2. Local Government Finance: A Brief Review

The literature on local government finance lists property tax, sales and excise taxes, income and business taxes and user fees as main own-source revenue options for local governments. In his recent book, *Local Tax Policy: A Federalist Perspective*, Brunori (2003) makes a compelling argument that the property tax is the most important revenue source for local governments. Many government services that achieve redevelopment of communities and high quality of life are directly funded by the property tax. Brunori (2003) points out that while improving public perceptions and curtailing tax limitation laws and exemptions are the desired changes, they might be hard to implement in the short-run. The property tax remains a very visible tax and can be devastating to the individuals with fixed incomes (especially seniors) making the property tax very unpopular.³ Property tax rate and assessment limitations in Florida create an important challenge for extensive use of this revenue source in the future. In addition, our tax capacity and tax effort calculations shown in Table 1 suggest that further utilization of the property tax may be difficult in Broward County.

The next popular alternative, local sales and excise taxes are criticized mainly on the grounds that they increase the regressivity of the local revenue structure and lead to harmful interjurisdictional competition (Mikesell, 2004 and Brunori, 2003).

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³ See Brunori (2003), Fisher (1996) and Raphaelson (2004) for detailed arguments on this and other aspects of the property tax.
However, exportability of these taxes highlights the importance particularly for localities with tourism potential. For example, Zodrow (1999) uses tax exporting as one of the main criteria to evaluate alternative tax systems. On the other hand, excessive tax exporting is thought to be inefficient (Bird 1993). Brunori (2003) argues that exporting should conform to the benefits-received principle. Studies by Fujii, Khaled and Mak (1985) and Pollock (1991) are good examples of estimation of sales tax exporting.

Local income and business taxes and user fees are also considered significant revenue sources. Some of the arguments are similar to those for local sales and excise taxes. While local income and business taxes are criticized on the basis of interjurisdictional competition, user fees are thought to increase the regressivity of the revenue structure (Brunori, 2003; Bierhanzl and Downing, 2004). Finally, local value added tax (VAT) is a tax that has not yet been considered in local government finance. We discuss the viability of this tax for Broward County. We give more details on the relevant academic literature in evaluating various revenue instruments in subsequent parts of the paper.

3. Business Development Through Tourism

Policy Recommendation Four of the VisionBROWARD Business Development Task Force refers to regional tourism as an economic driver for Broward County. Therefore, the task force aims at further capitalizing on this economic driver by establishing Broward County as a world-class destination for tourism. To achieve this goal, the task force recommends, among other things, to invest in tourism attractions that could draw visitors from all over the world, enhance transportation accessibility to
South Florida, and invest in education. Our contribution is to investigate the appropriate funding sources (solutions) required to put this task force recommendation into life.

3.1. Short Run Solutions

Tourism is the driving force for the Broward County economy. Hence tourism should also be seen as a vital source in revenue generation. Consumption based taxes and user fees are quite appropriate in generating revenue from the tourism sector. This of course leads to tax exporting. Tax exporting is defined as “the process by which a tax levied by one jurisdiction is shifted (“exported”) to a taxpayer of another jurisdiction (Phares, 1999). Study of tax exporting can be seen as an extension of the tax incidence analysis. While tax incidence studies address the question “who bears the burden of a tax?”, analyses of tax exporting go one step further and ask specifically whether the ones who bear the burden are residents of the jurisdiction under study. The most trivial way of exporting is through nonresident purchases of goods and services. States of Hawaii and Florida are major exporters of tourism related taxes (Phares 1999).

State and local public finance literature argues that tax exporting leads to a suboptimal level of government services. However, in the case of Broward County, tax exporting is in line with the benefits-received principle of taxation. The large influx of visitors to Broward County imposes a burden on local governments in terms

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4 Fujii, Khaled and Mak (1985) shows that Hawai exports a substantial portion of its hotel room occupancy tax.
5 See Brunori (2003) for a discussion on this.
of wide variety of government services provided to these visitors.⁶ These visitors should be taxed in proportion to the benefits they receive. It would be unfair to burden local residents with taxes or fees that finance services to tourists. Thus, the goal of business development through the enhancement of the tourism sector requires a set of easily exportable taxes. In this regard, a local option sales tax, hotel/motel tax (or bed tax), restaurant tax, local alcohol tax, local gasoline tax, local cigarette tax and various tourism related fees and charges are the likely candidates for funding.⁷

3.1.1. Local Excise Tax Options

These are taxes with fairly narrow bases. They are regressive revenue instruments and are not very effective in revenue generation due to small tax base and competition. Revenues from these excise taxes are usually earmarked for specific government services. While this is a good selling point from the perspective of policymakers to convince the voters of their usefulness, earmarking reduces local fiscal flexibility.

Hotel/Motel Tax and Restaurant Tax

Broward County imposes a 5% Tourist Development Tax, also called a “Bed Tax”, on accommodations rented for a period of six months or less. This tax is in addition to the 6% state sales tax. Together with a local restaurant tax, these tourist taxes have the most potential for tax exporting. Such exporting conforms to the benefits-received principle to the extent that revenues collected from these taxes match

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⁶ Research indicates that people notice and appreciate government spending the most in areas like transportation, crime prevention, and infrastructure improvement (Freire and Polese, 2003). Thus, effective government spending in these areas is warranted.

⁷ An additional source is lottery revenues. While Florida lottery revenues are earmarked for education funding, many states use a portion of these revenues for general tourism spending and even for local government initiatives. Video lottery is a recent addition to the state lottery structures which generates substantial revenue for state and local governments. Tosun and Skidmore (2004) show empirically the impact of video lottery on lottery revenue performance in West Virginia counties.
tourism related services and infrastructure expenditures. However, these taxes are more likely to be utilized by tourism destination municipalities within a county (such as Broward). In non-tourist localities, low-income households would bear a greater portion of the tax burden and this would make the revenue structure in those localities more regressive.

A related tax on soft drinks, called “soda tax” or “pop tax”, is also used by some state and local governments. For example, West Virginia uses a state soft drinks tax to finance the West Virginia Medical School.

Local Alcohol Tax

A local beer, wine or liquor tax can generate additional revenue for municipalities or counties. These taxes can be particularly effective in raising revenues in tourism destination cities. A local beer tax can also generate significant revenue in cities with moderate to large college populations. However, these taxes may lead to significant local competition especially for cities that have similar tourist attractions. According to Federation Tax Administrators (FTA), Florida has higher beer, wine and liquor tax rates than the U.S. median rates for these taxes. Thus a local alcohol tax would make the total state and local tax rate on alcohol in Florida relatively high which may in turn hurt the tourism industry in the state and in Broward County. Furthermore, a local alcohol tax would increase the overall regressivity of the local revenue system. Young and Bielinska-Kwapisz (2002) show that excise taxes on alcohol can be over-shifted to consumers by raising the retail price by more than the full amount of the tax. This would put a greater burden on the consumers of alcohol than previously suggested.

8 Updated state excise tax rate comparisons can be found at http://www.taxadmin.org/fta/rate/tax_stru.html.
Another caveat of a local beer tax or excise beer taxes in general is revenue erosion due to inflation. Beer taxes are levied on a per-gallon or per-barrel basis rather than on the percentage of the price. Thus, tax collections do not increase with inflation. Tosun and Yakovlev (2003) showed that per capita beer barrel tax collections in West Virginia declined between 1997 and 2002 when they are adjusted for beer price increases in that period. The authors compared this to West Virginia wine and liquor tax collections, which kept up with wine and liquor price increases between 1997 and 2002. The key difference is that, unlike the beer tax, the wine and liquor tax is an ad valorem tax imposed as a percentage of the retail purchase price. Therefore, a local beer tax imposed on a per-gallon or per-barrel basis would be subject to similar revenue erosion in the presence of beer price increases.

**Local Gasoline Tax**

A local gasoline tax is a revenue option that is used currently by a number of states including Florida and Broward County. A local gasoline tax can be earmarked for street and other transportation expenditures of county and municipal governments.

A local gasoline tax, however, raises many issues regarding equity and revenue adequacy. While it is considered a fair tax from the benefits-received perspective (Goldman, Corbett and Wachs, 2001), it is also argued that it may intensify fiscal disparities between regions (NCSL, 1997). It would favor cities that are close to major roads and highways.\(^9\) Thus, the local gasoline tax may lead to regional inequities. In terms of revenue adequacy, the local gasoline tax has the same

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\(^9\) NCSL (1997) argues that these cities would have an additional benefit of exporting the local gasoline tax to non-residents. On the other hand, cities that are not strategically located would not benefit from the same strong tax base and their residents would bear the burden of this tax.
weakness as other excise taxes like beer tax and cigarette tax. It is levied on a per-gallon basis and is subject to revenue erosion due to inflation.

**Local Cigarette Tax**

While a local cigarette or tobacco tax is considered a popular option, especially in recent years, there are concerns related particularly to fairness and revenue adequacy. For one thing, the burden of a cigarette tax is likely to be borne by lower income households. This would make the local revenue system more regressive. The experiences of states with cigarette taxes also show that tax collections are negatively affected by reduced smoking. In addition, the real value of tax collections decline due to inflation. Similar to the beer tax mentioned above, a cigarette tax levied on a per-pack basis does not keep up with increasing prices over time. These concerns bring into question the revenue adequacy of a local cigarette tax. Municipalities or counties cannot rely on a local cigarette tax as an adequate revenue source in the longer term. Additionally, a local cigarette tax on top of the state tax can lead to rate differences between bordering counties. This would affect these counties mainly through reduced cross-border sales to non-residents. This would in turn have a negative effect on the cigarette tax revenue collection.

**Tourism Related User Fees and Charges**

It should be noted that Florida ranks below the U.S. average in state and local user charges and miscellaneous revenue per capita and per $1,000 personal income (NCSL, 1999). Thus, there seems to be room for expanding user fees in Florida localities. In addition, population growth in Broward County is expected to generate

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10 However, Florida has relatively low state cigarette tax rate, ranking only 41st among the U.S. states (http://www.taxadmin.org/fla/率/cigarette.html).
stable consumption growth, which makes these taxes attractive. Some of the tourism related user fees that can be utilized are municipal golf course fee, community pool entrance fee and beach front parking fee.

**Regional Assets Tax**

As Policy Recommendation Four asserts regional tourism is “an economic driver for Broward County”. Protecting and enhancing its natural resources are also cited as a vital goal. A regional assets tax can be seen as a step towards that goal. For this financing method to work, a regional assets district is formed with a full list of regional assets that will be covered in financing. Then a county tax is imposed to fund these assets within the district. Allegheny County in Pennsylvania started a regional assets district in 1994 to finance mainly cultural assets in the Pittsburgh region. A 1% countywide local sales tax was enacted to finance this district. County and municipalities share the revenues according to a formula.\(^{11}\)

**Development Impact Fees**

One of the available property based financing instruments is development impact fees. Development impact fees are defined as “one-time payments from property developers to municipal, county or school district governments for off-site improvements necessitated by new development.” (NCSL, 1999, pp.9) Impact fees typically finance housing and transportation infrastructure projects. Impact fees have become popular particularly in Arizona, California and Washington (NCSL, 1999, pp.10). These fees allow new developments to pay for their own infrastructure improvements, which conform to the benefits-received principle of taxation. Impact

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fees can also expand the property tax base by enabling new property developments. But development impact fees also create inequities between existing and new residents. All residents benefit from site improvements that are funded by impact fees; however, the incidence of these fees is only on new homebuyers, landowners or homebuilders. Thus, existing property owners get an indirect subsidy. Another important criterion to consider about impact fees is tax incidence. Dresch and Sheffrin (1997) showed in a study on California that the incidence of the impact fees depends on the market. They showed that the incidence falls mostly on landowners and developers in economically distressed markets. On the other hand, in areas with expensive housing, the incidence falls on new residents. According to figures shown in Feiock’s 2004 study on Florida counties, development impact fees make only 0.52% of Broward County’s total own source revenue. This is the fourth lowest percentage share among Florida counties. Hence, there seems to be room for using this revenue instrument for development and revitalization projects (including ones that are directly tourism related) throughout Broward County.

### 3.1.2. Viable Short Run Options for Broward County

Based on the discussion of potential short-run or temporary revenue options, hotel/motel and restaurant tax, and tourism user fees have greater exportability potential and should be seen as direct tourism related revenue sources. On the other hand, there are three important challenges involved with these taxes. First, these taxes and user fees are mainly regressive revenue instruments. Second, it is becoming more and more difficult to tax certain goods and services due to mobility of the base. Third,

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12 Yinger (1998) uses a bidding framework to show that development impact fees partially fall on landowners.
13 A complete list of these user fees will be presented in the full version of this paper.
the limit to tax exporting is tax competition. There is sometimes only a fine line between exporting taxes and exporting jobs. Hence these taxes should be seen as a short term funding solutions and should only be seen complementary to more stable and longer-term revenue sources such as the revenue options discussed in the next section. In addition, increased use of development impact fees and a regional assets tax can also be viable options for Broward County in securing funding for efforts to maintain tourism resources in the region.

3.2. Long Run Solutions: Local Sales, Gross Receipts or VAT?

3.2.1. Local Option Sales Tax

Local sales and use taxes are considered the most popular among the local option taxes (NCSL, 1997). They can work similar to a state sales tax, and can take the form of an entirely locally administered tax or simply a piggy back tax where a portion of the state sales tax is reserved for cities and counties. A local sales tax can enhance revenue generation and ranks higher in revenue adequacy due to a broader tax base compared to the excise taxes mentioned above. However, it raises serious equity issues. Sales taxes are considered to be regressive because low-income households spend larger portion of their incomes on general consumption items compared to higher-income households. A local sales tax imposed in addition to the state sales tax would increase the regressivity of both state and local tax system. Additionally, the inability to tax services and Internet sales are particularly important in the shrinking of the tax base. Finally, increasing competition between jurisdictions over tax bases significantly limit the viability of this revenue option.
3.2.2. Gross Receipts Tax

A local gross receipts tax is imposed on business activities or occupations within localities. For example, West Virginia Business and Occupation (B&O) is a gross receipts tax used by municipalities. As a “turnover”\(^{14}\) tax, B&O tax leads to “pyramiding” of the tax since it is paid at each stage of the production of a good or service. Turnover taxes are thought to be inefficient and were replaced by alternative taxes in many countries.\(^{15}\) They lead to effective tax rates that can be significantly greater than the official nominal rates depending on the number of stages of production. Turnover taxes also give incentives to vertical integration and generate a competitive advantage to vertically integrated firms.

With such characteristics, B&O tax can affect business decisions significantly and put a greater than expected burden on businesses. However, this tax can be shifted on to consumers through higher prices. To the extent that it is shifted to consumers, it will increase the regressivity of the municipal or county tax systems. In addition, when the B&O tax is imposed on business activity within the corporate limits of a municipality, businesses that are located outside the municipal limits do not pay this tax. Hence, it violates horizontal equity by discriminating against businesses within municipal limits. While the B&O tax is a broad-based tax that generates significant revenue, it performs poorly in terms of both efficiency and equity and has been either replaced by other taxes or eliminated from local financing structures.\(^{16}\)

3.2.3. Local Value Added Tax

\(^{14}\) A turnover tax is imposed on the gross sales instead of the value added.

\(^{15}\) In Europe, turnover taxes were replaced by the value added tax (VAT) which is explained as another option below.

\(^{16}\) West Virginia recently enacted a local sales tax option for municipalities to replace its problematic local B&O tax.
VAT is a tax on value added which is the difference between what is received from the sales of goods or services and what is purchased as inputs. While nationally imposed VAT is quite widespread as a general sales tax, VAT can also be applied at the subnational level.\textsuperscript{17} For example, while the United States lacks a national VAT, it has pioneered the implementation of a subnational VAT owing to Michigan’s experience with it as early as 1953. On the other hand, Canada has a national VAT and a subnational, or provincial, VAT at the same time. Therefore, despite a common wisdom that VAT is an instrument of a central government, it can well be implemented at the subnational level.\textsuperscript{18} A subnational VAT as a business tax is based on the benefits-received principle, in which businesses are taxed on the benefits they receive from public services. After its early experience with the so-called business activities tax, which was a form of VAT, Michigan started using its current VAT, the single business tax (SBT), in 1976. In 1993, New Hampshire started using a business enterprise tax (BET) and became the second state with a subnational VAT. In addition, many other states considered adopting VAT without success. For example, VAT proposals in West Virginia failed in both 1967\textsuperscript{19} and 1999.

VAT is imposed on both capital and labor and on both corporate and non-corporate businesses\textsuperscript{20}. Therefore, VAT does not discriminate between factors of production or between different forms of business organizations. Proponents of VAT argue that it is a stable source of revenue for governments. This is mainly due to its

\textsuperscript{17} VAT is essentially equivalent to a tax on final consumption of goods and services, and hence is dubbed a “general sales tax.” There are more than 100 countries that impose a national VAT. In fact, the United States is the only country that does not use a national VAT.

\textsuperscript{18} This is called the “dual-VAT system. See Bird (2001) for a discussion of Canada’s experience with a dual-VAT.

\textsuperscript{19} See Papke (1967) and Bahl and Davis (1967) for a description and evaluation of the 1967 tax reform package.

\textsuperscript{20} Excluding certain non-profit businesses such as 501(c)(3) organizations.
broad tax base. Unlike a profits tax, VAT also has wages and other compensations in its tax base, which makes it a more stable revenue source. However, it is subject to business cycles, and hence it may still be less stable than some other state and local taxes such as the property tax. In addition, the experiences of European countries and Michigan show that the VAT tax base can erode over time due to various special provisions in the tax code. In other words, VAT, like many other state and local taxes, can be susceptible to political interventions. Nevertheless, it is widely argued that VAT is a more stable revenue source than most business taxes such as the state corporate income tax.

There are administrative costs of employing a new tax instrument. In order to analyze full costs and benefits of enacting a VAT, one needs to consider the additional administrative costs of implementing the VAT. Since American states do not have ample experience with VAT, its implementation can be associated with a costly transition period in terms of administrative changes.

**Types of VAT**

There are two types of VAT: consumption-type VAT and income-type VAT. Consumption-type VAT differs from income-type VAT with respect to its tax base. The first two columns in Table 2 compare the tax bases of these VAT types.

**Table 2: Structure of Tax Bases of Different Types of VATs**

<table>
<thead>
<tr>
<th></th>
<th>Income-Type VAT</th>
<th>Consumption-Type VAT</th>
<th>New Hampshire BET</th>
<th>Michigan SBT</th>
<th>West Virginia SBT (Proposed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages &amp; compensation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rent</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Interest</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
As the table shows, the key difference between the tax bases comes from the treatment of investment. By excluding capital expenditures in its base, a consumption-type VAT taxes consumption but not investment. On the other hand, an income-type VAT includes capital expenditures in its tax base. Therefore, it taxes both consumption and investment. While consumption-type VAT is seen as a consumption or sales tax, income-type VAT is basically regarded as a business income tax. However, they are both levied at the production, or origin, side rather than the sales, or destination, side of business transactions. This makes these subnational VATs fundamentally different from state and local retail sales tax. Thus, one can argue that a subnational VAT is a complement to, rather than a substitute for, state retail sales tax (Ebel, 1999).

Income and consumption-type VATs can generally be calculated by an addition or a subtraction method. In the first method, different components of the value added are combined together to form the tax base. In the subtraction method, total value of input purchases is subtracted from the total value of sales. While administrative characteristics may be different, these two methods give identical tax bases.21

**VAT Experiences of Michigan and New Hampshire: Lessons for Florida**

Michigan and New Hampshire are the only American states that currently employ a VAT in their tax systems. Michigan’s SBT was adopted in 1976 as a

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21 A third alternative is the credit-invoice method. In this method, VAT is paid on all sales and purchases. However, the taxes paid on purchases are credited against the tax liability of the firm from its sales. While this method first became popular in Europe, it is currently used in many countries that employ national VAT. However, it has not become popular in the case of subnational VATs.
consumption-type VAT. New Hampshire, on the other hand, adopted its BET in 1993 as an income-type VAT. In 1998, the Governor’s Commission on Fair Taxation recommended the implementation of a SBT in West Virginia. The proposed West Virginia SBT was a consumption-type VAT, and had more similarities with Michigan’s SBT than with New Hampshire’s BET. The tax bases of these VATs are shown in the last three columns of Table 2. New Hampshire’s BET mainly follows an income-type VAT, while Michigan’s SBT follows a consumption-type VAT. However, neither of these VATs includes rent paid. Table 2 shows that the base of the proposed West Virginia SBT also includes rent, and therefore is identical to the base of a consumption-type VAT. Furthermore, New Hampshire’s BET, Michigan’s SBT and the proposed West Virginia SBT all use the addition method to calculate the value added.

In Michigan, the SBT replaced a profits-based business tax structure. While it brought stability to the business tax revenues initially, its base eroded substantially due to numerous exemptions, deductions and credits. Figure 4 shows the changes in the share of SBT in total state tax revenues.

**Figure 4: Michigan Single Business Tax**  
*(Percentage Share of Total State Tax Revenues)*

Source: State of Michigan Comprehensive Annual Financial Reports.
There is a clear downward trend in the SBT share between 1980 and 1999. In 1999, SBT revenue accounted for 11.7% of total state tax revenues. This share was approximately 20% in 1980. In addition, according to a bill signed in 1999, the current SBT rate of 2.1% will be reduced annually by 0.1% until it is completely phased out over the next 22 years. The complexity of SBT calculations caused by various exemptions, deductions and credits and political opposition spawned by the broad base of SBT seem to have led to the approaching demise of this tax instrument in Michigan.

New Hampshire’s experience with VAT is more recent. Unlike Michigan, BET was enacted to complement the “business profits tax” (BPT), which is, in essence, a profits tax on corporations\(^\text{22}\). Initially, BET was imposed on the base shown in Table 2, at a rate of 0.25%. While this rate was raised to 0.5% by 2000, the BPT rate fell from 8% to 7\(^\text{\%}\).\(^\text{23}\) These rate changes are reflected in Figure 5, which shows the changes in the shares of BET and BPT in total state tax revenues.

\textbf{Figure 5: New Hampshire Business Enterprise Tax and Business Profits Tax (Percentage Share of Total State Tax Revenues)}

Source: New Hampshire Department of Revenue Administration, Annual Reports.

\(^{22}\) While BPT is imposed on corporations and unincorporated businesses, the bulk of it is collected from corporations. See Kenyon (1996) for a discussion on this issue.

\(^{23}\) Effective July 1, 2001, BET rate is applied at a 0.75% rate. At the same time BPT rate went back up, first to 8\(^\text{\%}\) and then to 8.5\(^\text{\%}\) effective July 1, 2001.
The BET share increased from 4.2% in 1994 to 20.9% of total state tax revenues in 2003. This translates into 397% growth in the entire period or 22.1% annual average growth. The share of BPT, on the other hand, exhibited a decline in the same period, dropping from 23.0% in 1994 to 17.4% in 2003. This translates into a 24.6% decrease in the entire period or a 1.9% annual average decrease. It appears that BET is replacing BPT as the major source of business tax revenues. New Hampshire’s BET is an interesting example where we see a VAT used as a complement rather than as a substitute for a profits-based tax. It has not yet been prone to the weaknesses that Michigan SBT exhibited such as the erosion of its base through numerous exemptions, deductions and credits. It is far superior in terms of neutrality and stability to its alternatives like the corporate franchise tax or alternative minimum tax.

3.2.4. Viability of a VAT in Broward County

From the arguments in previous sections, a local VAT would be a preferable long-term revenue source. It has a broader tax base than a local sales tax and can be levied at a lower rate than a sales tax. As a tax on value added of the business rather than on gross sales, it doesn’t lead to tax pyramiding as business receipts tax does. Such a tax is imposed on both corporations and unincorporated businesses. As a unique business tax, it is based on the benefits-received principle, in which businesses are taxed on the benefits they receive from public services. In addition, Fox, Luna and Murray (2002) argue that a subnational VAT that uses an addition method would be administratively easy since informational requirements from businesses would be similar to those for a state corporate franchise tax. Hence, an income-type VAT, similar to New Hampshire’s BET, can be a stable revenue source for Broward County.
4. Conclusion

This paper examines and makes recommendations on several feasible short and long run solutions to business and economic development in Broward County, Florida. Although achieving these policy recommendations may require overcoming fiscal and political challenges, we believe that Broward County should consider adopting the proposed revenue instruments that allow capitalizing on its strengths such as population, sales and property value growth. Strong population growth provides Broward County with a rare opportunity to effectively finance development projects through consumption taxes, local VAT, user fees and charges, while being able to export some of the tax burdens to non-residents. We suggest using among the regional assets tax, hotel/motel tax and restaurant tax, tourism user fees and development impact fees as the short run solutions and a local VAT as a long run solution.
References


