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How the Increase in Remote Employees Due to COVID-19 has Impacted Local Income Tax Revenues for U.S. Cities

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Title of Capstone Project: How the Increase in Remote Employees Due to COVID-19 has Impacted Local Income Tax Revenues for US Cities

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How the Increase in Remote Employees Due to COVID-19 has Impacted Local Income Tax Revenues for U.S. Cities

Pearson, Brian

PA681-210 Capstone Project

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Introduction

This research paper will discuss COVID-19's impact on remote work and its effect on local income taxes for cities across the United States. The paper specifically will be looking into how the increase in remote workers has affected revenue and policy changes for local income taxes since the pandemic. Before the pandemic, most US citizens with jobs had to be on-site, but COVID-19 seems to have changed how businesses are operating for the foreseeable future. A lot of businesses across the country have shifted to having more of their employees working fully remote or partially remote (hybrid) schedules. This has caused issues for cities that rely on local income tax revenues because in most circumstances local income taxes are subjected to either the employee's work location or their residence. For example, if the employer's on-site office is in downtown Philadelphia, but the employee lives in a nearby city and commutes into the office most of the time, then they would be subject to paying Philadelphia's local income tax. If the employee was required work a fully remote schedule, then they would no longer be subjected to paying Philadelphia's local income tax. Considering majority of non-public facing employers began allowing their employees to work remotely during the pandemic, this in theory should have caused some revenue issues for bigger cities that have a lot of commuters who are nonresidents of these cities. This research paper will investigate the financial implications of the increase in remote work and see if any of these cities have implemented new policies to prevent revenue losses. The hypothesis is that if the number of employers who allow their employees to work remotely increases, then cities' local income tax revenues will decrease due to the decrease in their tax base if they are taxed based on workplace location and residence.

To investigate this hypothesis, four cities were chosen to compare. Each city's local income tax policies and financial information were examined to assess how big cities were impacted by remote workers. There were four cities selected to study their local income tax policies and gather financial information to get an idea of how big cities have adjusted to the increase in remote workers. The four cities selected are New York City, NY, Detroit, MI, Washington DC, and Philadelphia, PA. These cities were chosen based on their population size and because they all provide monthly or quarterly financial reports. These financial reports will be used to review and compare local income tax revenues from 2018-2022 to see if there have been any increases or decreases in local income tax revenue. If the only information available was yearly Annual Comprehensive Financial Reports (ACFRs) then there would not be enough information available to examine the month-to-month changes that occurred during the COVID-19 pandemic. Pinpointing the actual effect remote work has had on local income tax revenue will most likely occur from 2021 to the present because of the increase in the unemployment rate during the initial shut down of the pandemic in 2020. The local income tax revenue should be lower at the start of the pandemic because people lost their jobs and were no longer having to pay the local income tax. By 2021, jobs were starting to come back, and the unemployment rate was getting back to pre-pandemic levels.

Literature Review

COVID-19 caused many issues for local government revenue sources during the height of the pandemic. The city unemployment rates increased, taxpayers passed away, taxpayers were able to work remotely, and bigger cities saw residents move away to smaller cities. All of these had a great impact on local income tax revenue, but remote work appears to have played a major role in affecting revenue. The number of remote workers in the United States increased like they had never done before. The shutdowns by businesses and quarantines for citizens across the country caused many businesses that were not customer-facing to allow their employees to work remotely. Prior to COVID-19, 47% of U.S. employees never worked remotely during their work week (Sava, 2022). During 2020 after COVID-19 hit the U.S., 44% of U.S. employees were working remotely five or more days a week (Sava, 2022). This trend continued in 2021, as nearly three times as many employees were working remotely full time than the number during 2019 (Roy, 2022). Additionally, a survey done by The Conference Board says that 77% of people are expecting to work remotely a minimum of three days per week post pandemic (Wrike, 2023). Two questions this research paper aims to find out more about are: did this increase in remote workers impact the revenues for cities that implement local income taxes and did this increase in remote workers cause any changes to their tax and/or public policies?

One of the biggest impacts COVID-19 had on America was what it did to businesses and their remote work policies. The number of companies that have now started to allow their employees to work either fully remote or as hybrid employees has risen drastically since the pandemic. When the country shutdown in March 2020, businesses across the country learned that a lot of their employees were able to be just as, if not more, productive from their homes as they were at their on-site office locations. What started as a temporary solution to a medical emergency has become what seems to be a permanent change to how American businesses are treating work locations. This decision by these companies and businesses may end up having a negative impact on cities that use local income taxes as a main revenue source.

The reason remote workers can have such an impact on this revenue source is because local income taxes are a way for cities to get a large source of revenue and even get money from nonresidents if their policies allow. In the instance of nonresidents being subjected to the local income tax, the cities can implement this tax based on the employees' on-site work location. Now that a lot of these nonresident employees can work remotely, these cities are no longer able to tax them based on their work location since they are nonresidents who no longer commute to these cities for work. This “changes where people live or work, altering which jurisdictions receive local income tax revenue depending on whether those taxes are employment-based payroll taxes or residence-based income taxes” (Agrawal & Shybalkina, 2023).

Another key issue that comes with the increase in remote workers is the employees that are eligible for remote work. “Telework disproportionately benefits high-income workers, which raises equity issues” (Agrawal & Butikofer, 2022). “High-income taxpayers can now more easily choose to live and work in different jurisdictions, possibly taking advantage of different productive amenities in the employment state and different consumption amenities in the residence state” (Agrawal && Butikofer, 2022). Lower-income taxpayers do not have the same mobility as higher-income taxpayers, which means cities will be able to hold onto the lower income tax base, but the higher-income tax base has an opportunity to leave their city (Agrawal & Butikofer, 2022).

There have been many studies on how cities have struggled to get their downtown economy back to pre-pandemic levels, but there have not been many studies that focus solely on local income tax revenues. Most studies focus on state income taxes because there are many situations that deal with taxpayers crossing state lines for work and this issue has been discussed for years. Local income taxes are not implemented by every city in the country and some states do not allow their municipalities to implement local income taxes. In fact, only 16 of the 50 states allow municipalities to impose an income tax (Moreno, 2023). This along with the recency of the COVID-19 pandemic create limitations to the research that can be gathered for this research paper.

The reality is starting to hit local governments that this remote work issue doesn't appear to be going away anytime soon so there are now discussions on how cities can combat this issue. A couple of the cities used in this study have already increased their tax rates to try and increase their local income tax revenue. The additional research used to provide context for these local income tax revenue figures will also be used to discuss how cities should go about dealing with this financial issue and how they have already started dealing with the issue.

This research paper and the information used throughout are used to show the impact the increased number of remote workers has had on local governments and what is being done by these local governments to adapt to this issue.

Research Design

To find the information needed to answer these research questions, this research paper used an observational case study method. Research on the effects of COVID-19 on local governments' financial policies is somewhat limited due to the lack of data and recent nature of the event. This research paper assesses how the rise in remote workers has affected local governments' local income tax revenue and if there have been any policy changes to counteract the decline in revenue. As described earlier, to do this, four different densely populated cities were researched to see what the financial impact remote workers have had and if any policy changes these cities have made can be recommended to smaller local governments.

First, there needed to be a decision on which cities were going to be used for this research paper. The criteria for the city selection process were the cities needed to densely populated, had local income taxes, and had monthly and/or quarterly financial revenue reports. The population was an important factor because it would help see how this issue was affecting larger scaled cities and usually these cities have more information available. Bigger cities have a larger government staff to provide more frequent financial updates and more local news outlets that can provide more information on what is going on in their local government. Requiring the cities selected to have income taxes was needed to be relevant for this research paper. Lastly, the quarterly and/or monthly financial reports were a crucial piece in the city selection process. The reason is because the research aims to compare monthly and quarterly statements over a span of five years to be able to see the impact of COVID-19 and the increase in remote work more clearly. For example, when everything shutdown in March of 2020, these reports will provide the information to see if there were shifts in revenue numbers and the financial impact this had on local income tax revenues. This research will specifically be using the monthly and quarterly reports for each city from January 2018 through December of 2022.

The four cities I chose were New York City, NY, Detroit, Michigan, Washington D.C., and Philadelphia, PA. Washington D.C., Detroit, and Philadelphia have monthly reports available. New York City was the only one with only quarterly reports, but the population of the City made them an appealing city to study for this research paper. Along with these financial reports there will be other sources used to get the context of the data being reviewed from these reports. These four cities were chosen as the case studies to research based on their population size, availability of quarterly or monthly financial reports, and if their city implemented local income taxes.

The data from the financial reports was used to determine if there was a decrease in revenue due to the increase in remote workers for these cities. Due to the increase in remote workers for these cities, keeping in mind that during this same time period, the unemployment rate increased during the COVID-19 shutdowns which also impacted local income tax revenue for these cities. The data collection used for these cities is from 2018-2022 to see if there were any long-standing differences between pre- and post-pandemic times, which could also be considered a historical research design. Using the data from prior to and post 2020 should help determine more clearly if remote work had a negative impact on local income tax revenues.

Figure 1: City Unemployment Rates in July of Each Year

	2018	2019	2020	2021	2022
New York City	4.40%	3.80%	16.90%	9.80%	4.90%
Washington D.C.	6.00%	5.90%	9.40%	7.60%	4.70%
Philadelphia	4.60%	5.90%	15.50%	8.40%	5.60%
Detroit	5.00%	11.30%	28.60%	15.60%	8.20%

Figure 1 highlights the reasoning for a decrease in local income tax revenues at the height of the pandemic. The Figure shows the unemployment rates for each city in July of each year used in this study. July of 2020 had the highest unemployment rates for each city in July of the years studied. As the Figure shows, the unemployment rate either went back down to a pre-pandemic level or almost did.

Figure 2: Loss in Population

City	Loss in Population From 2020 to 2021
New York City	-300,000
Washington D.C.	-20,000
Philadelphia	-27,546
Detroit	-18,000

Another factor that played into the decreased revenue of local income taxes for cities was the loss in population. Figure 2 above highlights the decrease in each city's tax base due to residents moving out of each city. Losing this much of their population between 2020 and 2021 for each city had a negative impact on local income tax revenue and prevented growth.

This research paper also uses the descriptive research design method to find out if there were any public and/or tax policy changes for these four cities or other local governments across the country. Researching local articles and national articles to see if there were any changes made to localities allowed the "where," "when," "how," and "what" questions to be answered. Thankfully, the observational case study method aims to help answer the question of "why" these policy changes were made. The main limitation for collecting this information is the newness of the issue. Some cities may have not made any changes to their policies due to this issue being so new to localities and the lack of proactiveness of public policy makers due to the limited amount of hard data related to this issue available.

The questions of whether the increase in remote workers influenced local income tax revenues and if this increase caused public and/or tax policies to change are to be researched through the case study, historical, and descriptive research design methods.

New York City, New York

Background

New York City, New York is the most populated city in the United States with over 8 million residents in 309 square miles (New World Encyclopedia, 2022). Considered the finance capital of the U.S., New York City is the home to many high-income individuals. The City is also one of the few major cities across the country that has local income taxes. New York City was "the first city to ever adopt a local income tax ordinance in 1934, but developed cold feet and repealed the tax before it took effect in 1935" (Walczak, 2023). Roughly 31 years later, New

York City adopted municipal income taxes in 1966 (Walczak, 2023). Residents of New York City are the only ones subjected to their local income tax and their tax rates are not based off a flat tax rate for everyone. Nonresidents who commute into the City for work are not subjected to the local income tax. The City implements a more progressive version of the local income tax that has the residents making a higher income have a higher tax rate. Below Figure 3 identifies the different local income tax rates for the City:

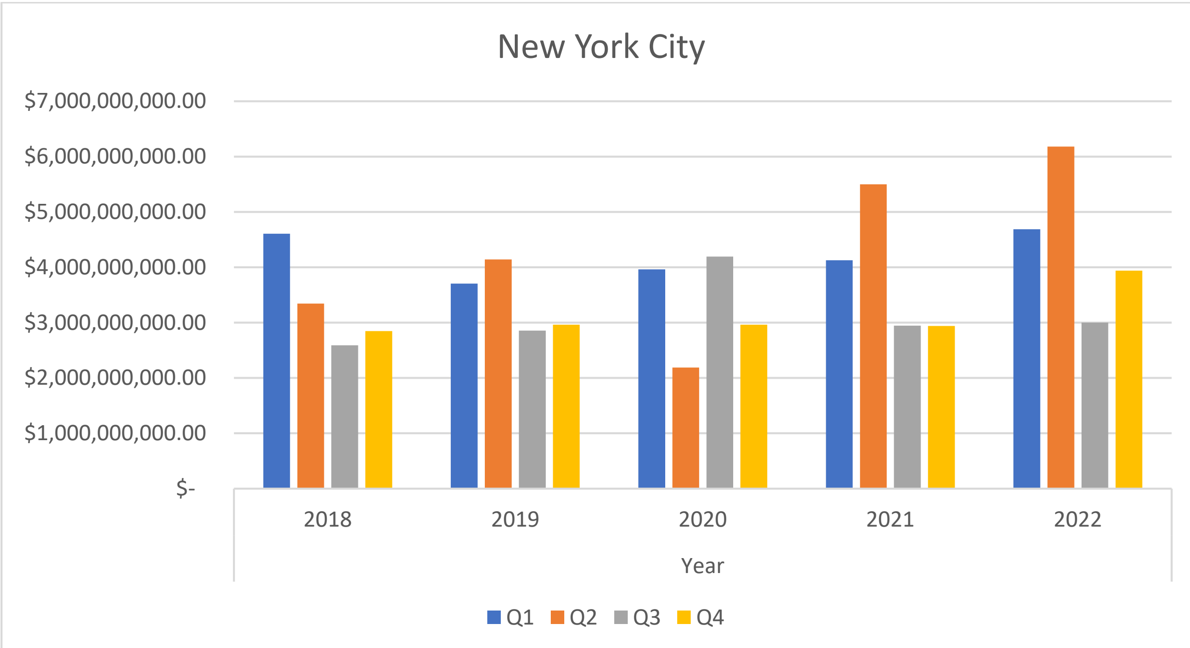
Figure 3: NYC Local Income Tax Rate Schedule

Income (Single	Tax Rate
Less than $12,000	3.078%
$12,000-$25,000	$369 plus 3.762% of the excess over $12,000
$25,000-$50,000	$858 plus 3.819% of the excess over $25,000
$50,000+	$1,813 plus 3.867% of the excess over $50,000

Data

Figure 4 provides data and information gathered from New York City's website to show the income tax revenues from 2018-2022.

Figure 4: NYC's Quarterly Local Income Tax Revenue 2018-2022



The provided data differs from other cities because New York City only provides quarterly revenue reports to the public. The second quarter of 2020 (April-June) had the biggest impact on the City's local income tax revenue, which would make sense. This is most likely due to the beginning of COVID-19 shutdowns, the delay in tax filings, and the increase in the unemployment rate for the City. The delay in income tax filings would also line up with the massive increase in revenue for the third quarter of 2020. When looking at the data above it may appear as though the local income tax revenue is doing well or even better than prior to COVID-19. Based on other data found when reviewing the City's Annual Comprehensive Financial Reports (ACFR) this is "due to an increase in taxable non-wage income, resulting from fiscal initiatives, such as enhancements to unemployment insurance benefits, taken in response to COVID-19" (NYC ACFR, 2022).

Policy

As mentioned previously, New York City's local income tax is only for residents of the City. It does not apply to nonresidents who commute to the City for work. One interesting note about the local income tax for New York City is that even if a resident does not work in the City, they are still subjected to the income tax. The City's local income tax policy does not have any specifications on different rules for remote workers. Based on the information provided by the New York City government, if a nonresident works remotely for a company based in New York City they are not subjected to the City's local income tax.

Discussion

New York City's local income tax rate is higher than the other cities' local income tax rates included in this study but is also less strict than at least one other city used for this research project. Like a lot of other big cities across the country, there was a mass exodus of residents during the COVID-19 pandemic which lowered the city's local income tax base (Popken, 2020). Once COVID-19 restrictions were put in place many residents were not able to reap the social benefits of their city lifestyles (Popken, 2020). Many of them realized they could get more living space in suburban or rural homes (Popken, 2020). Daryl Fairweather, chief economist at Redfin, said, "Wealthy people are doing well, and more affluent people are able to work remotely" (Popken, 2020). The danger of the tax policy that is currently in place is the negative effect it could have on tax revenue for the City in the future. As with most employers that offer remote or hybrid work opportunities, the employees that are given these options are mostly white-collar employees. Due to New York City being a City with a heavy population of white-collar employees, this poses a potential issue. If these white-collar employees move away from New York City because they are no longer obligated to work in the City, then the tax base will shrink even more. The upcoming years for New York City will be interesting because as commercial real estate leases start to end. It will be intriguing to see how many businesses keep on-site locations versus allowing their employees to work remotely full-time. If the rate of remote and hybrid work remains the same and residents start to move out of the City, then New York City should look to make changes to their local income tax policy for remote and hybrid employees.

Philadelphia, PA

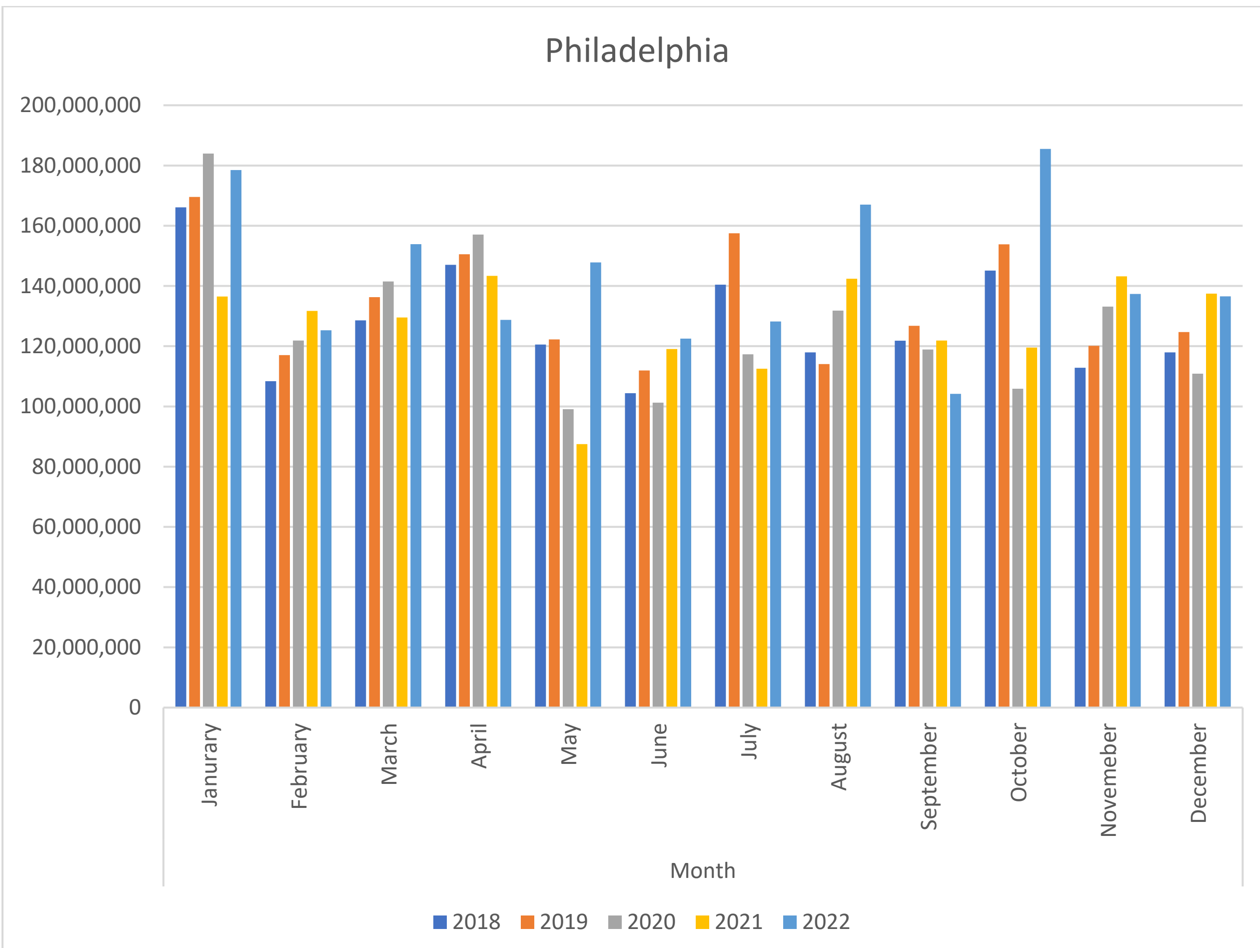
Background

The City of Philadelphia has a population of 1,567,258 and is one of the biggest cities in the United States (Philadelphia Census, 2022). Philadelphia is one of three cities (Philadelphia, New York City, and Louisville) in the U.S. that tax corporate income, personal income, property, and sales (Murrell, 2019). Their local income tax is referred to as a "wage tax". The wage tax was implemented in Philadelphia in 1939 and is now the City's largest revenue provider (Sterling Act, 1999). Almost 50 percent of the City's revenue comes from wage taxes (Murrell, 2019). The current wage tax rate for the City is 3.79 percent for residents and 3.44 percent for nonresidents (Pew, 2023). There is a program for citizens who have a lower income to reduce their wage tax rate from 3.79 percent to 1.5 percent (Pew, 2023). One interesting note about the City's wage tax is that retirees' retirement benefits and Social Security payments are not subjected to the wage tax (Pew, 2023).

Data

Figure 5 provides data from Philadelphia's website to show the City's wage tax revenue from 2018-2022:

Figure 5: Philadelphia Monthly Local Income Tax Revenues 2018-2022



As you can see from the information above there was a dip in wage tax revenue during the height of the COVID-19 pandemic. In March of 2020 the COVID-19 shutdown and stay at home orders began, but they did not impact the wage tax revenues until May of 2020 (Philadelphia Press Release, 2020). In 2020, the months of May, June, July, September, October, and December had lower wage tax revenues than in those same months in 2018 and 2019. These decreases could be due to both the increase in nonresident remote workers and decrease in jobs. You can see in the chart above that the City struggled to get back to where their revenues were prior to the pandemic until 2022. This bounce back was mainly due to the increase in jobs available and the unemployment rate for the City going back to where it was pre-pandemic. When assessing the impact of remote workers on wage tax revenues for the City of Philadelphia it is important to know the tax policy.

Policy

The City's wage tax policy is outlined on the City's government website. The Wage Tax Policy and Earnings Tax Policy are similar, except the difference is the Wage Tax is withheld from paychecks and the Earnings Tax is self-reported (Wage Tax, 2023). A portion of the policy refers to the Earnings tax. According to the website, the Earnings Tax is a tax on "salaries, wages, commissions, and other compensation paid to a person who works or lives in Philadelphia" (Wage Tax, 2023). A person is required to pay the Earnings Tax if they are a: "Philadelphia resident with taxable income who does not have the City Wage Tax withheld from their paycheck or a nonresident who works in Philadelphia and does not have the City Wage Tax withheld from their paycheck" (Wage Tax, 2023). Usually, the Earnings Tax is to be filed and paid for if a Philadelphia resident works for an out-of-state employer (Wage Tax, 2023). Out-of-state employers are not required to withhold the Philadelphia Wage Tax if they do not have a physical work location in the state of Pennsylvania (Wage Tax, 2023). "The City of Philadelphia is not a party to any reciprocal tax agreements with any other municipality. Residents of Philadelphia who are employed out-of-state may be required to file and pay a local income tax in that jurisdiction in addition to the Philadelphia Earnings Tax" (Wage Tax, 2023). A person is not subjected to the Wage Tax if "an employer requires an individual to work outside of Philadelphia" (Drexel, 2021). However, if a person elects to work remotely for their own convenience, then the person is subjected to the Wage Tax (Drexel, 2021).

Discussion

Based on the data and the policy it makes sense as to how the City of Philadelphia was able to bounce back from the COVID-19 local income tax issues. The data shows there was a dip in revenue for roughly 12-18 months, but it has now rebounded to pre-pandemic levels. The policy seems to be more strict and less lenient than other local income tax policies by other cities. The concern lies with the future of the City's local income tax revenue. Philadelphia is already considered a high tax City and with the increase in remote workers there is a fear that businesses will give up their offices at downtown locations and allow their employees to work remotely permanently. This will cause revenue issues because if these businesses move out of the City completely and their employees are remote employees who are nonresidents of Philadelphia then the City will lose income tax revenue. The City of Philadelphia will need to either adjust their Wage and Earnings Tax policies or find ways to ensure these businesses do not move their physical locations out of the City completely.

Detroit, Michigan

Background

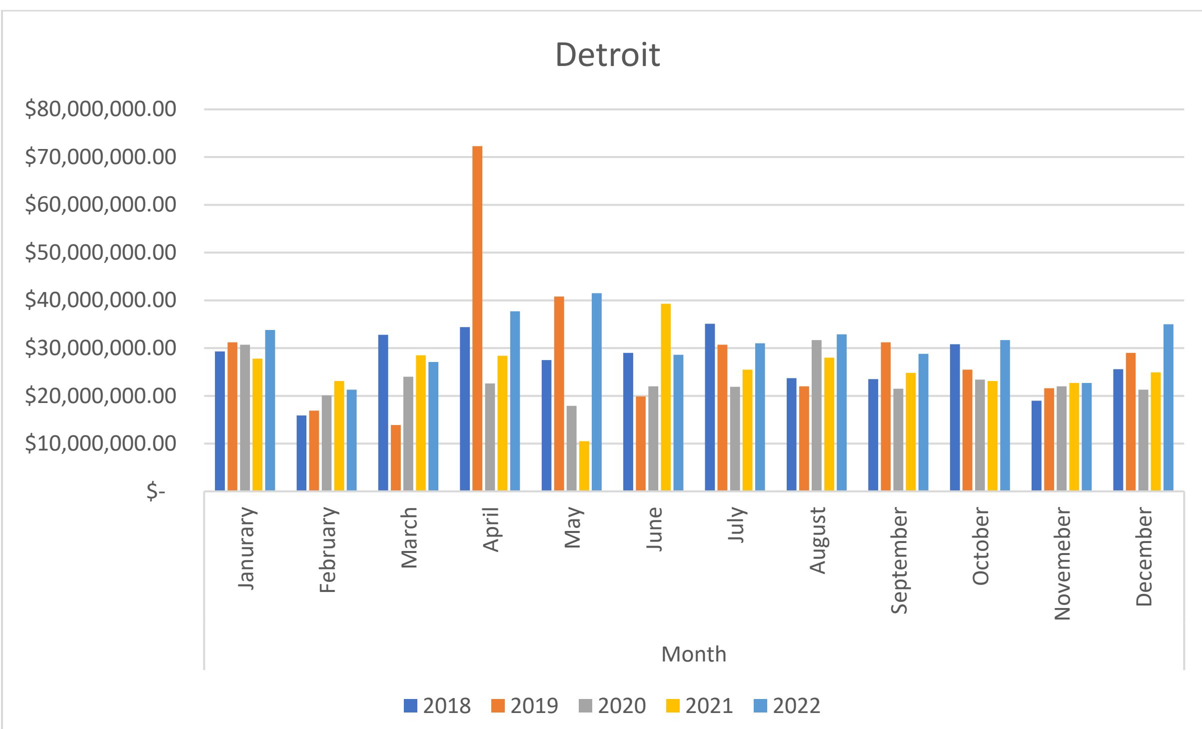
Detroit, Michigan is the largest city in the state of Michigan and is listed as the tenth-largest city in the United States (CityTownInfo, 2023). It has a population of roughly 677,155 (CityTownInfo, 2023). The City is known for being one of the largest manufacturing cities in the country (CityTownInfo, 2023). It is the home of three of the biggest car manufacturers in the

U.S.: Chrysler, Ford, and General Motors (CityTownInfo, 2023). Detroit has had a local income tax since July of 1962 (City Council, 1968). The local income tax was enacted due to the City of Detroit having financial issues (City Council, 1968). The local income tax applies to both residents of the City, whether they work in the City or not, and nonresidents who work in Detroit (Detroit Tax Guide, 2022). The local income tax rates of Detroit as of 2022 are flat tax rates of 2.4 percent for residents of the City and 1.2 percent for nonresidents of the City (Detroit Tax Guide, 2022). There is no increase or decrease in the local income tax rate for both residents and nonresidents based on how much money they make.

Data

Figure 6 below provides data from Detroit's website to show the City's local income tax revenue from 2018-2022:

Figure 6: Detroit's Monthly Local Income Tax Revenue 2018-2022



As shown by the data above, the COVID-19 pandemic had a major impact on local income tax revenue. During the months of April, May, July, September, and December in 2020 the revenues were lower than 2018 and 2019. By February of 2021, the revenue numbers bounced back which would indicate a good sign for the City. This dip in revenue in 2020 and bounce back in 2021 would most likely be due to the increase of the unemployment rate in 2020 and the decrease of the unemployment rate in 2021. The information that stands out in this chart above is the lack of consistent growth even after the pandemic and unemployment rate decrease of 2021 and 2022. In 2021, only three of the months' revenues were higher than any other year and in 2022, only four of the months' revenues were higher than any other year. Compare this to 2019, where seven of the twelve months had a higher income tax revenue than 2018. This would imply that the income tax revenue is not growing as consistently as the City would like it to.

Policy

As mentioned previously, the local income tax impacts both residents and nonresidents of Detroit. The residents are impacted whether they work in the City or not. The nonresidents are only impacted if their main work location is in Detroit. This is where the issue of the increase in remote workers comes into play. The City has an entire FAQ page dedicated to answering telecommuting employee income tax questions on their website. They define telecommuting (remote work) and provide answers as to whether a resident or nonresident is subjected to the City's local income tax. If a resident of Detroit is working remotely and their main work location is the City of Detroit, then they are subject to the City's income tax. If a nonresident is working remotely and their remote work location is outside of Detroit's city limits, then they are not subject to the City's local income tax. This decision to not subject nonresidents to the local income tax, even if they are employed by a company based in Detroit, was made because "there is no provision in the City Income Tax Act (CITA) that permits cities to tax wages earned outside of the city" (Telecommuting FAQ, 2023). There is a statement in CITA that says, "nonresidents are taxed on salary, bonus, wage, commission, and other compensation for services rendered as an employee for work done or services performed in the city" (Telecommuting FAQ, 2023). This also means that if nonresidents are working a hybrid schedule, then they only must pay local income taxes for the income they earn on the days worked in Detroit. Nonresidents who work fully remote or hybrid schedules are supposed to log their workdays and their employers should provide a letter saying the dates the employee worked remotely as back up documentation if there is a dispute over the employee's local income tax (Telecommuting FAQ, 2023).

Discussion

Detroit is the one city in this study that appears to have implemented some sort of new policy directly relating to the increase in remote workers. The City also has provided a lot of helpful information to both their residents and nonresidents to determine whether they should be subjected to local income taxes or not. This may end up being a disadvantage for the City and damage their financial situation in the future. The rise in the number of employees that can work fully remote, or hybrid schedules does not appear to be lowering. This means the City will miss out on the extra 1.2 percent of income taxes on all nonresidents that are working remotely for companies based in Detroit. Another issue is most of the employees who are eligible to work remotely are considered "white-collar" employees and typically earn higher incomes than "blue-collar" employees. For example, General Motors "stopped withholding City of Detroit income taxes beginning in January 2021 for its white-collar workers at its world headquarters in the Renaissance Center in Detroit" (Tomper, 2021). This is because they allowed their employees to work remotely and no longer forced them to come to their on-site location in Detroit. This telecommuting local income tax policy may have long term implications for the City's revenue for years to come if there are not changes made to the policy or enforcements from the City to urge their bigger employers to get employees back to their work locations in Detroit.

Washington D.C.

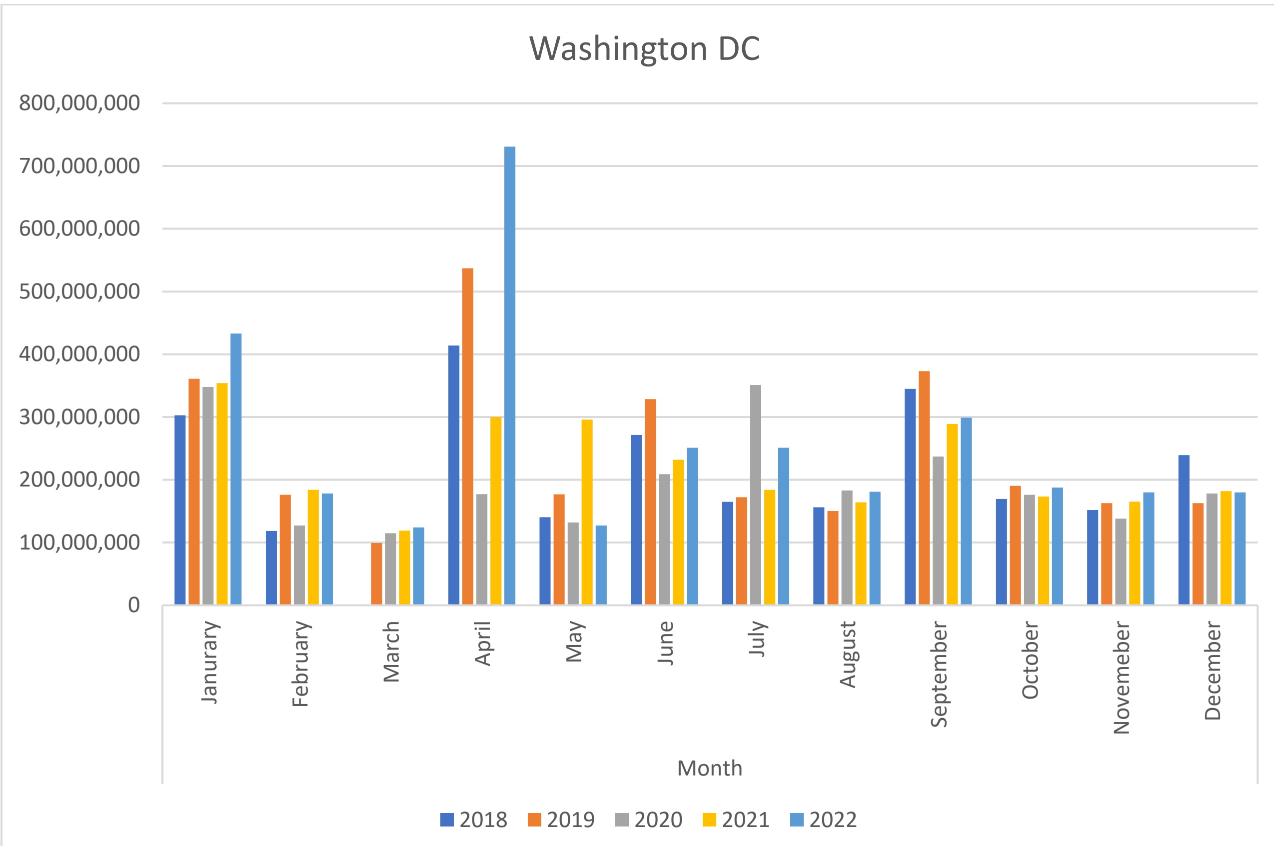
Background

Washington D.C. is one of the more popular and densely populated cities in the United States. There are roughly 671,803 citizens of Washington D.C. (DC Census, 2022). Not to mention there are thousands of people who commute to Washington D.C. for work and tourist travel every day. There are an estimated 810,000 people who worked for a Washington D.C. business establishment in 2019 (D.C. Policy, 2023). Just over half a million people commuted to Washington D.C. for work during that time frame (D.C. Policy, 2023). Washington D.C. is more unique than the other cities researched for this paper because they have both state and local government responsibilities (Rivlin, 24). The City can impose local and sales taxes, but it is unable to impose an income tax on nonresidents that are working in the Washington DC area (Rivlin, 24). This has been an issue for the Washington D.C. tax revenue base because more than 66 percent of income that is earned in the City comes from nonresidents that commute to work (Rivlin, 24). This means that unlike other cities that do implement income taxes on nonresidents who commute to work, the City is only making one-third of the potential revenue they could be making (Rivlin, 24). Washington D.C. does not have a flat local income tax rate like other cities. The more progressive local income tax rates are based on the resident's income and range from 4 percent all the way up to 10.75 percent (DC Tax Foundation, 2023). This allows for the tax burden of residents to be fairer and more balanced (Kohanzadeh, 2018).

Data

Figure 7 below provides data from Washington D.C.'s website to show the City's monthly local income tax revenue from 2018-2022:

Figure 7: Washington D.C.'s Monthly Local Income Tax Revenue 2018-2022



The data above shows how the COVID-19 pandemic had such a negative effect on the City's local income tax revenues. In 2020, the revenues of the months January, February, April, May, June, September, October, and November were all lower than 2019's revenue totals for those same months. There was a rebound in 2021, but the revenue amounts were still lower than 2019's monthly totals for five of the twelve months. The impact of nonresidents not being subjected to the local income tax could have had something to do with these numbers along with the increase in remote and hybrid workers. The Decennial Census estimates over 20,000 residents moved out of Washington D.C. between 2020 and 2021 (DME, 2019).

Policy

As mentioned previously, Washington D.C.'s local income tax rates are based on the resident's income. This tax does not apply to nonresidents who work in the City. Below Figure 6 breaks down the tax rates into the following tiers for taxable income based on the tax changes made in 2021 (Lee, 2022):

Figure 8: Washington D.C. Local Income Tax Rate Schedule

Taxable Income	Tax rate
$0-10,000	4%
$10,000-40,000	6%
$40,000-60,000	6.50%
$60,000-250,000	8.50%
$250,000-500,000	9.25%
$500,000-1,000,000	9.75%
$1,000,000+	8.95%

Washington D.C. also provides the District Income Tax Credit (EITC) that "assists residents who work but have low earnings, through a refundable income tax credit" (Kohanzadeh, 2018). The income tax policy only applies to remote workers who are residents of the Washington D.C. area. Since COVID-19, the only local income tax changes the City has made are that they increased the local income tax rates for each tier and split up, or added, new tiers. There was no adjustment made to the local income tax policy based on the increase in remote work and nonresidents no longer traveling to the City for work.

Discussion

Washington D.C. is a unique city to look at for this research. Due to their limitations on taxing nonresidents for local-income tax, it appears this City will be affected negatively by the increase in remote workers. The increase in income tax rates may have negative effects in the future because there is a fear that residents who are able to work remotely may move away from the City so they will no longer have to pay the higher income tax rates. Washington D.C. in 2023 ranked 48th best in terms of their income taxes when being compared to states (Fritts, 2023). The difficult issue about using Washington D.C. for this research is that although it is a city, it can also apply taxes like it is a state and is often compared to state income tax policies. As mentioned previously, the tiered income tax revenue is beneficial to them because most cities do not implement this method of taxation. Even with this advantage of a tiered income tax system, the disadvantage of not capitalizing on nonresident income outweighs the positive.

Comparison of the Cities

Each of the four cities researched throughout this paper has different policies and restrictions on what their policies can allow for local income taxes. Comparing the different policies and local income tax revenues of each city before and after COVID-19 is critical to this research. Determining which cities were most impacted or least would be the best place to start.

First, the local income tax revenues for each city were heavily impacted within the first quarter (or few months) after the initial shutdowns caused by COVID-19. Below are a few tables showing the initial impact the COVID-19 shutdowns had on local income tax revenues. The tables show the percentage increase or decrease from 2019 to 2020.

Figure 9: Philadelphia Differential

Philadelphia Months	Difference From 2019 to 2020
April	4.35%
May	-18.97%
June	-9.53%
July	-25.52%

Figure 10: New York City Differential

New York Quarter	Difference from 2019 to 2020
Quarter 2 (April-June)	-47.14%

Figure 11: Washington D.C. Differential

Washington D.C. Months	Difference From 2019 to 2020
April	-67.05%
May	-25.36%
June	-36.37%
July	103.77%

Figure 12: Detroit Differential

Detroit Months	Difference From 2019 to 2020
April	-68.74%
May	-56.13%
June	10.55%
July	-28.66%

Based on the information provided from the tables above there is evidence that each city had mostly a negative impact from the initial shutdowns of COVID-19. There are many factors that could be the reason as to why this occurred. Those reasons are delays in local income tax collections, more people were laid off, people moved out of the cities and were no longer subjected to the tax, and nonresidents began working from home.

In 2021, Philadelphia was the only city that had three out of the same four months that went down from 2020's revenue numbers. This information is interesting because based on each of the cities' local income tax policies, it would be safe to say Philadelphia has the strictest. The only way a remote worker who is nonresident of the City of Philadelphia but works for a business based in the City to not be subjected to the local income tax is if "an employer requires the remote worker to work remote" (Drexel, 2021). During this time, many businesses were making their white-collar workers stay remote which would seem to explain why this lowered for Philadelphia.

Figure 13: City Tax Policies

City	Tax Policy
New York City	"All city residents' income, no matter where it is earned, is subject to New York City personal income tax. Nonresidents of New York City are not liable for New York City personal income tax." (NYC Tax FAQs, 2023)
Washington D.C.	The local income tax only applies to residents of Washington D.C. Nonresidents who commute to the city do not pay the local income tax. (TaxSlayer, 2023)
Philadelphia	"All Philadelphia residents owe the City Wage Tax, regardless of where they work. Nonresidents who work in Philadelphia must also pay the Wage Tax." (Drexel, 2023)
Detroit	"All residents of the City of Detroit whether or not they work inside the City of Detroit and all nonresidents of the City of Detroit who have the City of Detroit as their predominant place of employment." (Michigan Department of Treasury, 2022)

When reviewing Figure 13, as mentioned previously Philadelphia appears to have the strictest local income tax policy when it comes to remote workers, it would be safe to say Washington D.C. and New York City have the least strict. Washington D.C. and New York City do not tax nonresidents even if they commute into the city for work or work remotely. The difference between these cities and the others though is their tiered local income tax system. Their ability to have different tax rates for residents based on incomes is what has allowed both to bounce back from the COVID-19 pandemic because they have been able to implement higher income tax rates on their higher-income citizens. These cities have also raised their local income tax rates since the Covid-19 pandemic to counteract the impact of residents moving out of these big cities and working remotely.

Detroit has the biggest disadvantage due to their local income tax policy. They can tax residents and nonresidents only if the nonresidents perform their work or services in the City of Detroit. This is where the rise in remote work can have a negative effect on the City's local income tax revenue. If other big businesses and companies in Detroit, follow in General Motors footsteps and allow their white-collar employees to work fully remote or hybrid work schedules in the future then the City could have big financial distress. Especially if those white-collar employees already live, or will move, outside of the City. This will decrease the City's tax base and cause revenue deficits.

Recommendations

After looking at how these four different cities in the United States dealt with the increase in remote work due to the COVID-19 pandemic, it is safe to say each one will most likely make further changes going forward to lessen the impact on their local income tax revenue. The different ways these cities can make changes to their policies are increasing the local income tax rates and offering or repealing tax abatements for bigger businesses. New York City and Washington D.C. both increased their tax rates which helped them get back to higher revenues than before the pandemic and bounce back from the initial hit of pandemic. The main issue with increasing these tax rates though is they may encourage residents of these cities to move away. In all four cities researched, their local income tax policy says that either nonresidents cannot be taxed or are taxed at a lower rate than residents. Thus, raising income taxes will work in some instances, but not in others.

The use of tax abatements for big businesses and companies that are based in these cities that have local income taxes would be an interesting way to try increase the tax base. This idea was explored by Jo Constantz and Sarah Holder in an article for the publication Bloomberg.

“Many tax incentives and tax abatements hinge on employees coming to the office” (Constantz and Holder, 2023). “Officials are deciding whether to enforce them as downtowns bear the cost of remote and hybrid work arrangements” (Constantz and Holder, 2023). “These tax abatements and incentives are worth billions of dollars and if threatened to be taken away from big companies and businesses, they may be more likely to force their employees back to their work locations” (Constantz and Holder, 2023). Most of these tax abatement and tax incentive contracts were created prior to the pandemic and did not take remote work into consideration (Constantz and Holder, 2023). Due to this, there were already incentives set up to require workers to come into their on-site locations (Constantz and Holder, 2023). The article brings up an interesting point. These cities should not eliminate remote and hybrid work completely but should adapt to the times and enforce stricter minimum standards. For example, Detroit’s local income tax policy applies to nonresidents who work in the City. If they required businesses like General Motors to have their employees on-site for at least 60 percent of the work week for them to receive tax incentives, then this would help urge businesses to bring workers back to the office. It will also allow businesses to remain competitive with other businesses that allow employees to work hybrid schedules. Another interesting idea comes from Miami, where in 2021 they started requiring companies to sign five-year leases for office space (Constantz and Holder, 2023). This kind of policy for a city that charges local income tax would be beneficial because the business would not lease an office space unless they want employees to be working in the space as well. As with any new tax policy changes, there is a fine line that needs to be taken into consideration (Constantz and Holder, 2023). These cities want employees to come back and work on-site in their cities, but they do not want to make policies so strict on businesses that they take their on-site locations to other cities with less strict policies (Constantz and Holder, 2023).

Conclusion

This study focused on the increase in remote work due to COVID-19 and the effect remote work has had on local income taxes for cities in the United States. Although this study had a lot of great information and can be used for studies in the future, there were also limitations. Some of those limitations are the recency of COVID-19, the lack of studies on local income taxes, and the timing of this study. Due to COVID-19 being so recent, it is hard to find solidifying data that proves the hypothesis of this paper to be correct. This also plays into the second limitation listed because researchers have focused more on state income tax revenues instead of local income tax revenues. As previously mentioned, this is most likely due to the lack of municipalities that can implement local income taxes as a revenue source. Finally, the timing of this study is a limitation because it could be too soon after the events of COVID-19 to determine the longstanding effects remote work has had on local income taxes. The data clearly shows there was an impact on the revenue for the first few years after the pandemic, but there is not a way to fully determine the long-term ramifications of remote work.

There are a couple of suggestions for future research that is to be conducted that deals with this topic. The first suggestion would be to wait five to ten years before conducting another research study like this one. The more time that will pass after COVID-19 the more information there will be about the impact of remote work. Right now, remote work is popular, and many businesses allow their employees to either work remotely full-time or on hybrid schedules. In five years, this may change and no longer be the case or everyone will be working remotely full-time. Also, the cities that are negatively impacted by the increase in remote workers may also develop new policies that can combat the issue. The second suggestion would be to study the impact the increase in remote workers has had on smaller cities. Researchers would most likely not have access to monthly and quarterly reports for the smaller cities, but waiting another five to ten years before conducting the research could allow the researchers to have more information to investigate the impact of the increase in remote workers.

Knowing the limitations of this research and suggested directions of future research is vital to the purpose of this research study. Municipalities that can enforce local income taxes heavily rely on them as a source of revenue. The impact of the increase in remote and hybrid workers has had on the tax base for these municipalities is undeniable. As cities move forward with the new reality of remote and hybrid workers there will need to be tax policy changes made to adapt to the new environment. Otherwise, the cities will suffer financially if they are unable to recover their losses in local income tax revenue.

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