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February 23, 2021

Dear Colleagues:

I am pleased to provide you with the New York State Assembly Ways and Means Committee's Economic and Revenue Report for 2021. This report continues our commitment to provide clear and accurate information to the public by offering overviews of the national and state economies, as well as the state's revenue forecast for State Fiscal Years (SFY) 2020-21 and 2021-22.

The Committee forecasts that the state and national economies will continue their recovery from the COVID-19 recession. However, forecasting risks remain high, especially as it relates to the continued impact of the pandemic on certain businesses, the uncertainties regarding vaccine distribution, and questions surrounding the size, composition, and timing of additional federal stimulus support.

The Committee projects that total All Funds receipts will reach \$196.818 billion in SFY 2020-21, which represents an increase of \$19.383 billion, or 10.9 percent, from SFY 2019-20. The Committee's estimate is \$1.669 billion above the Executive's estimate for SFY 2020-21. The Committee projects that All Funds receipts will total \$196.348 billion in SFY 2021-22, a decrease of \$470 million, or 0.2 percent, from SFY 2020-21. The Committee staff forecast is \$3.534 billion above the Executive's forecast for SFY 2021-22. These differences are largely attributable to differences in economic projections and how these translate into tax receipts.

The assessments and projections presented in this report are reviewed by an independent panel of economists. Assembly Speaker Carl Heastie and I would like to express our appreciation to the members of our Board of Economic Advisors. Their dedication and expertise continue to be an invaluable resource to refine and improve our forecasts. While the Board has served to make the work of our staff the best in the state, they are not responsible for the numbers or views expressed in this document.

I wish to acknowledge the dedicated and talented staff of the Assembly Ways and Means Committee and the many hours of work that went into producing this report. They play a vital role in our state's budget process.

As we continue our efforts toward enacting an on-time budget that is fair and equitable for all New Yorkers, I look forward to working with each of you.

Sincerely,

A handwritten signature in black ink that reads "Helene E. Weinstein". The signature is written in a cursive, flowing style.

HELENE E. WEINSTEIN

NEW YORK STATE ECONOMIC AND REVENUE REPORT

FISCAL YEARS 2020-21 AND 2021-22

February 2021

CARL E. HEASTIE

Speaker

New York State Assembly

HELENE E. WEINSTEIN

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ECONOMIC FORECAST HIGHLIGHTS

United States

- As the U.S. economy has been ravaged by the COVID-19 pandemic, national output, as measured by inflation-adjusted **Gross Domestic Product**, contracted by an estimated 3.5 percent in 2020, the sharpest yearly contraction since the 1930's. With the pace of vaccinations expected to pick up in the next few weeks and additional fiscal stimulus actions assumed to be implemented in the coming months, the national economy is forecast to rebound by 5.5 percent in 2021 and 4.3 percent in 2022. The recovery will be broad-based, and the level of overall economic activity will surpass its pre-pandemic peak in the second quarter of 2021.
- **Personal consumption spending**, adjusted for inflation, declined an estimated 3.9 percent in 2020, following an increase of 2.4 percent in 2019. The decrease in consumer spending was primarily in response to state and local directives which sought to limit the spread of COVID-19. The economic fallout from these directives on households and businesses outweighed the impact of billions of dollars in federal government transfers to households. Consumer spending is projected to grow 5.7 percent in 2021 as more fiscal stimulus is provided to households, and by another 4.9 percent in 2022 as employment and income rise.
- Growth in **private investment spending** is expected to rebound in the forecast period after an estimated 5.3 percent decline in 2020. But the recovery is expected to be uneven due to the nature of the pandemic—the nonresidential structures sector will likely continue to struggle until the virus is controlled, while the information-processing equipment sector will continue to benefit from increasing demand for newer technology-based equipment. Overall private investment spending is forecast to grow 12.7 percent in 2021 and 6.9 percent in 2022.
- **Total government spending** grew an estimated 1.1 percent in 2020, from 2.3 percent in 2019, propped up by higher nondefense and defense spending as the federal government took actions to thwart the economic fallout from the pandemic. Total government spending is forecast to increase 3.5 percent in 2021 as more federal government stimulus is injected into the economy. In 2022, with many of the pandemic initiatives taken by the federal government expiring, total government spending is projected to contract by 0.7 percent.

- As economic activities almost came to a standstill and the global economy entered recession in 2020, world trade fell significantly. U.S. **exports** decreased by an estimated 13.0 percent in 2020, while imports declined by an estimated 9.3 percent. With the U.S. and world economies recovering, trade impacting the U.S. is projected to grow significantly throughout the forecast period. U.S. exports are forecast to grow 10.0 percent in 2021 and another 8.3 percent in 2022. Imports are forecast to grow 15.6 percent in 2021, and 7.1 percent in 2022.
- In 2020, **corporate profits** decreased by an estimated 8.2 percent, as sales revenue plummeted while wages and other labor costs did not decline as much from the initial impact of the pandemic. With the economy forecast to recover and additional subsidies expected from the federal government, corporate profits are forecast to increase 8.2 percent in 2021 and 4.8 percent in 2022.
- Nonfarm payroll **employment** fell 5.7 percent in 2020, reflecting job losses from the economic fallout from stay-in-place orders, social distancing recommendations, and business closures. With the labor market and economy expected to improve, employment is forecast to increase 2.4 percent in 2021 and 3.9 percent in 2022.
- The **Federal Reserve** has responded to the COVID-19 pandemic with a revival of the Great Recession-era policy tools: it slashed the federal funds rate, the overnight interbank interest rate that it controls, to near zero percent and pumped liquidity into the market through various lending facilities to support the smooth functioning of financial markets. The federal funds rate is expected to remain near zero percent in the next two years. Due to the Federal Reserve's quantitative easing, the **10-year Treasury yield** is expected to remain relatively low in the next two years, although it will gradually start rising as inflation expectations start kicking in.
- Slack in the labor market and increased competition among firms for reduced business during the pandemic are putting downward pressure on consumer price inflation. However, the tariffs from recent trade frictions and the weakening of the U.S. dollar value are causing the prices of imported goods to advance faster. Also, with the pace of global economic recovery expected to pick up in the second half of this year, the global prices of crude oil and other commodities will likely advance faster in the next two years, leading to increases in the prices of consumer goods and services. Overall, **CPI inflation** is forecast to increase to 2.2 percent in 2021 and 2.3 percent in 2022, after declining to 1.3 percent in 2020, the lowest since 2015.

- Despite the near-term volatility and investors' worry about increasing disconnect between the equity valuation and economic fundamentals, stock prices are forecast to continue to gain in 2021, as interest rates are expected to remain at record low levels and economic recovery from the pandemic to continue. However, as inflation expectations start kicking in, driving interest rates higher, gains in stock prices will likely slow in 2022, with the yearly average gain in the **S&P 500 Stock Price Index** forecast to slow to 3.0 percent after increasing 10.5 percent in 2020 and 18.4 percent in 2021.
- The COVID-19 pandemic and the uncertainty surrounding policy responses present **risks** to the Committee's economic forecast, and thus, the Committee's receipts outlook. Should the pace of vaccinations not accelerate or should the spread of the virus proceed unabated, economic growth in 2021 would fall short of expectations. A more damaging risk would be a permanent change in consumer behavior leading to lasting disruptions of certain industries, perpetuating job losses and income inequality. Also, should additional fiscal stimulus actions not be implemented in the next few months, the economic growth outlook for 2021 would be less optimistic than called for in the current forecast. However, if the third-round fiscal stimulus package under debate turns out to be larger than assumed in the current forecast, the economic growth forecast for 2021 would be more optimistic.

U.S. Forecast Comparisons

- The NYS Assembly Ways and Means Committee's forecast for overall national economic growth for 2021 is 5.5 percent. The Committee's forecast is 1.0 percentage point above the Division of Budget. It is 0.6 percentage point above the Blue Chip Consensus and Moody's Analytics forecasts. The Committee's forecast is 0.2 percentage point below the IHS Markit forecast.
- The NYS Assembly Ways and Means Committee's forecast for overall national economic growth for 2022 is 4.3 percent. The Committee's forecast is 1.1 percentage points above the Division of Budget; 0.5 percentage point above the Blue Chip Consensus forecast, 0.2 percentage point above the IHS Markit forecast; and 0.9 percentage point below the Moody's Analytics forecast.

U.S. Real GDP Forecast Comparison				
	Actual 2019	Estimate 2020	Forecast 2021	Forecast 2022
Ways and Means	2.2	(3.5)	5.5	4.3
Division of the Budget	2.2	(3.4)	4.5	3.2
Blue Chip Consensus	N/A	N/A	4.9	3.8
Moody's Analytics	2.2	(3.5)	4.9	5.2
IHS Markit	2.2	(3.5)	5.7	4.1

Sources: NYS Assembly Ways and Means Committee; NYS Division of Budget, FY 2022 Executive Budget Amendments, February 2021; Blue Chip Economic Indicators, February 2021; Moody's Analytics, February 2021; IHS Markit, February 2021.

New York State

- The COVID-19 pandemic brought U.S. and New York State economies into a recession in 2020. After growing 1.0 percent in SFY 2019-20, **total nonfarm employment in the State** is estimated to fall sharply by 12.0 percent in State Fiscal Year (SFY) 2020-21. As the economy recovers, nonfarm employment is forecast to grow 8.4 percent in SFY 2021-22 and 4.2 percent in SFY 2022-23.
- **Wages** fell in 2020 as more than a million jobs were lost during the pandemic. Total wages in New York State are estimated to fall 2.8 percent in SFY 2020-21, following a growth of 4.5 percent in SFY 2019-20. Total wages are forecast to grow by 7.1 percent in SFY 2021-22 and 5.9 percent in SFY 2022-23.
- After growing solidly at 6.0 percent in SFY 2019-20, variable wages are estimated to decline 7.4 percent in SFY 2020-21 and forecast to grow by 11.9 percent in SFY 2021-22. Base wages are forecast to grow by 6.4 percent in SFY 2021-22 and 5.6 percent in SFY 2022-23.
- The current economic climate presents particular challenges and **risks to the New York State forecast**. The key risks to the national economy also apply to the State forecast. In addition, Wall Street and the financial markets play a central role in the State economy. As such, ongoing technological changes as well as the speed of recovery have critical implications for the economic and fiscal health of the State.

NYS Forecast Comparisons

- The NYS Assembly Ways and Means Committee estimates total nonfarm payroll employment in New York State will decline 12.0 percent in SFY 2020-21, which is 0.2 percentage point above the forecast of the Division of Budget. The Committee forecasts total wages in the State will fall by 2.8 percent in SFY 2020-21, which is 0.3 percentage point below the Division of Budget forecast.
- The NYS Assembly Ways and Means Committee’s forecast for total nonfarm payroll employment growth for SFY 2021-22 is 8.4 percent, 0.3 percentage point lower than the forecast of the Division of Budget. The Committee’s forecast for wage growth in SFY 2021-22 is 7.1 percent, 1.9 percentage point higher than the Division of Budget forecast.

New York State Economic Forecast Comparison (Percent change from prior State Fiscal Year)			
	Actual SFY 2019-20	Estimate SFY 2020-21	Forecast SFY 2021-22
Employment			
Ways and Means	1.0	(12.0)	8.4
Division of the Budget	1.0	(12.2)	8.7
Wages			
Ways and Means	4.5	(2.8)	7.1
Division of the Budget	4.5	(2.5)	5.2
<i>Sources: NYS Assembly Ways and Means Committee staff; NYS Division of Budget, FY 20222022 Executive Budget Legislation Amendments, February 22, 2021.</i>			

REVENUE FORECAST HIGHLIGHTS

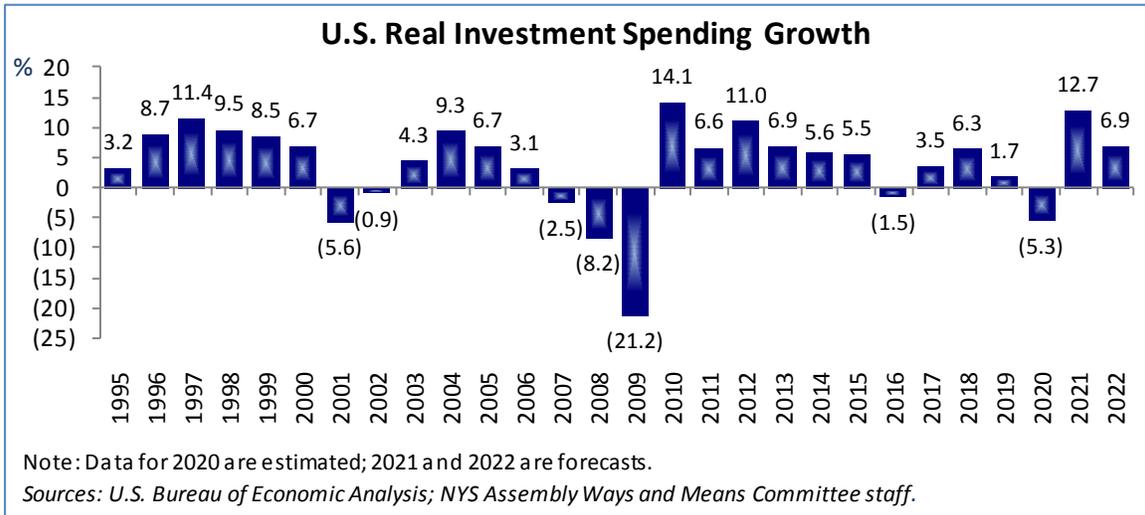
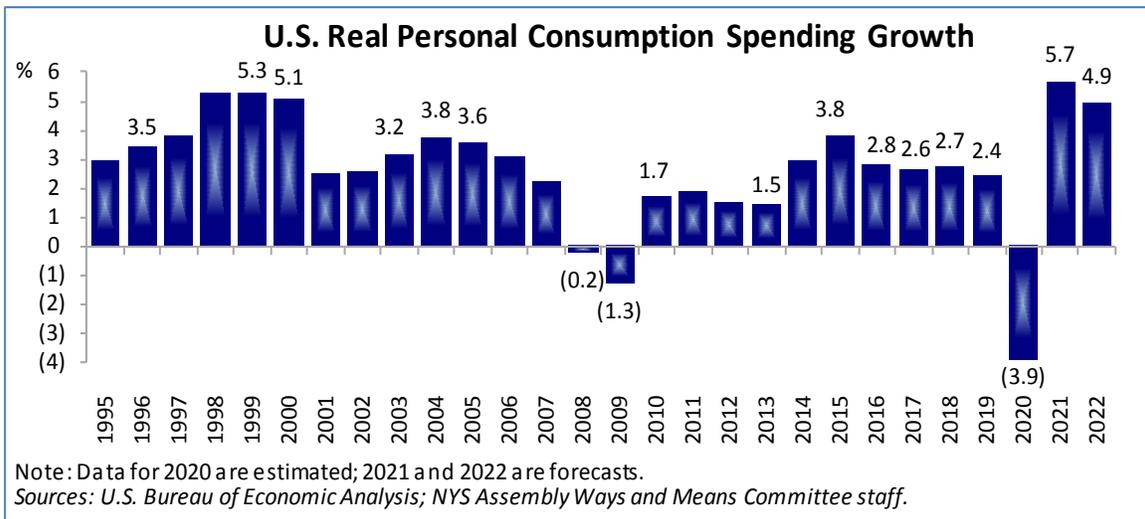
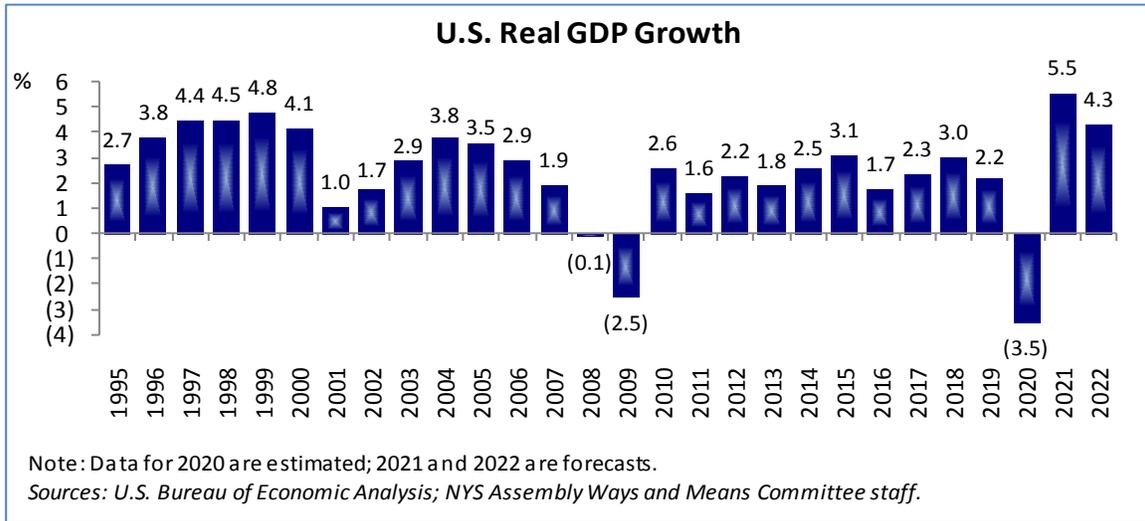
All Funds Tax Receipts State Fiscal Year 2020-21

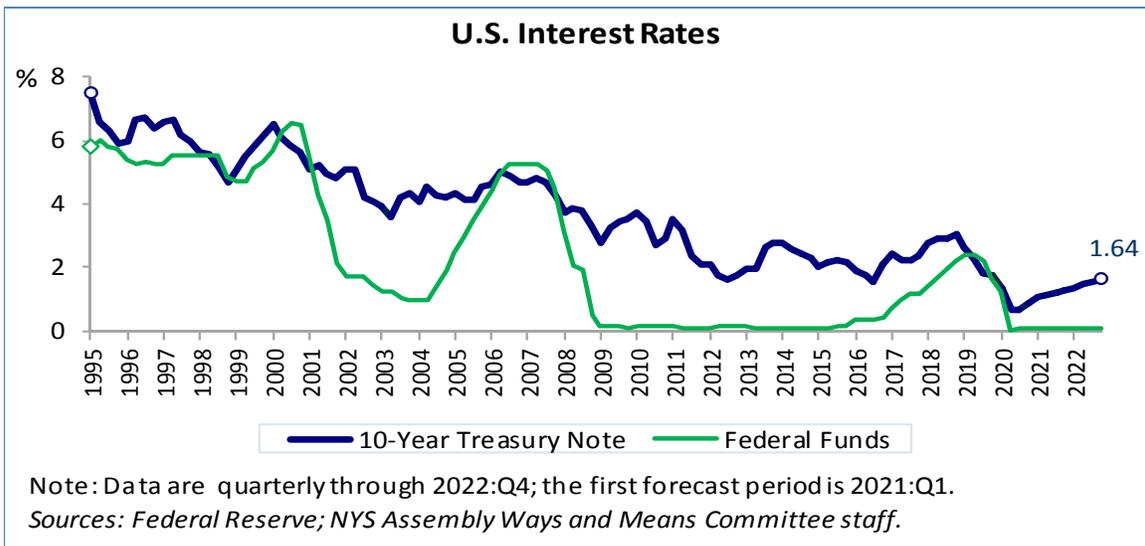
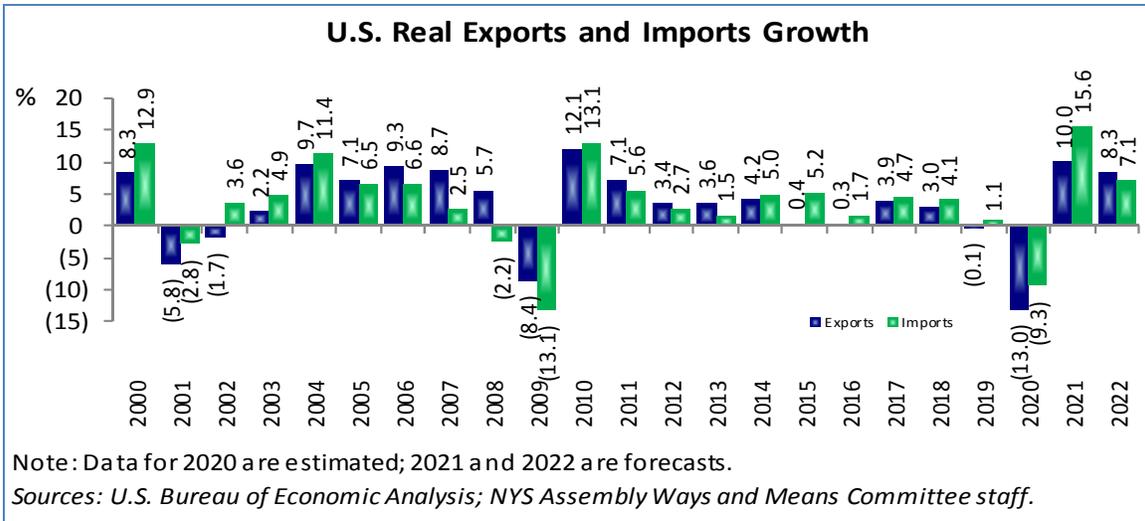
- **All Funds revenues** are estimated to total \$196.818 billion in State Fiscal Year (SFY) 2020-21 with year-to-year growth of 10.9 percent, or an increase of \$19.383 billion, related to receipt of extraordinary federal aid.
- The Assembly Ways and Means Committee projection of **All Funds tax revenue** for SFY 2020-21 is \$81.045 billion, representing a decrease of 2.2 percent, or \$1.844 billion, from SFY 2019-20.
- The decrease in tax receipts is primarily related to a \$1.881 billion decrease in **Sales Tax collections** and a \$647 million decrease in **Business Tax collections**, partially offset by an increase of \$648 million in **Personal Income Tax (PIT) collections**.
- The Committee's estimates reflect the effects of the brief but severe recession caused by the COVID-19 pandemic, which severely limited the State's economic activity and, at its peak, resulted in the loss of almost two million jobs in New York.
- The Committee's All Funds revenue estimate is \$1.669 billion above the Executive's estimates, predominately related to a \$1.266 billion positive variance in PIT collections.

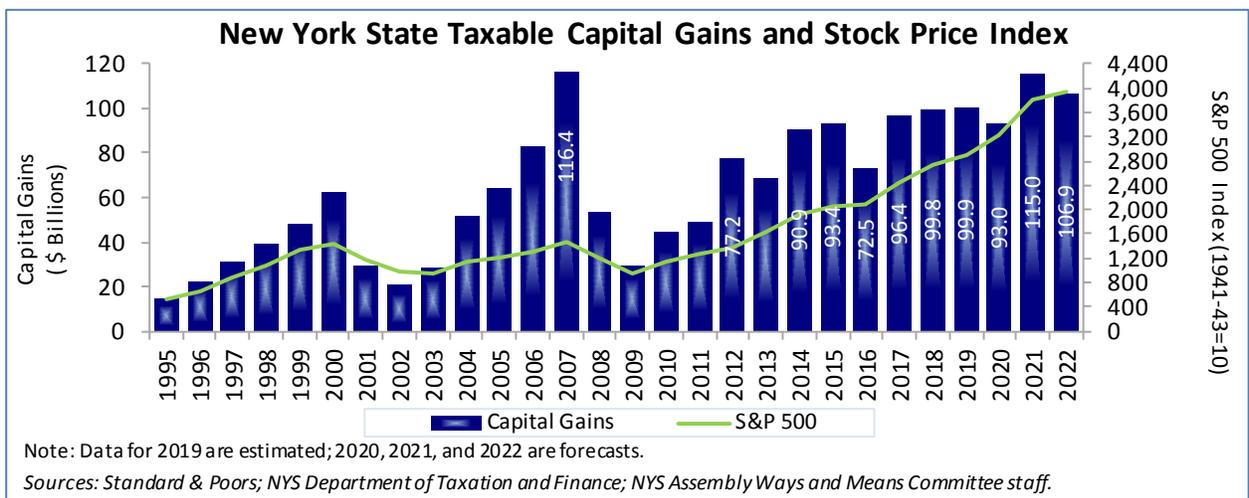
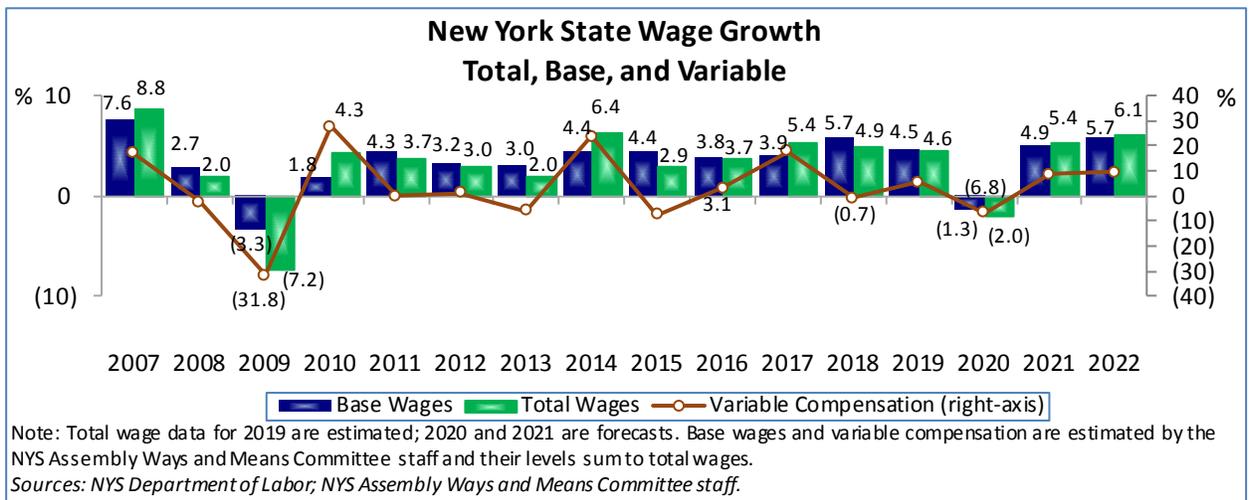
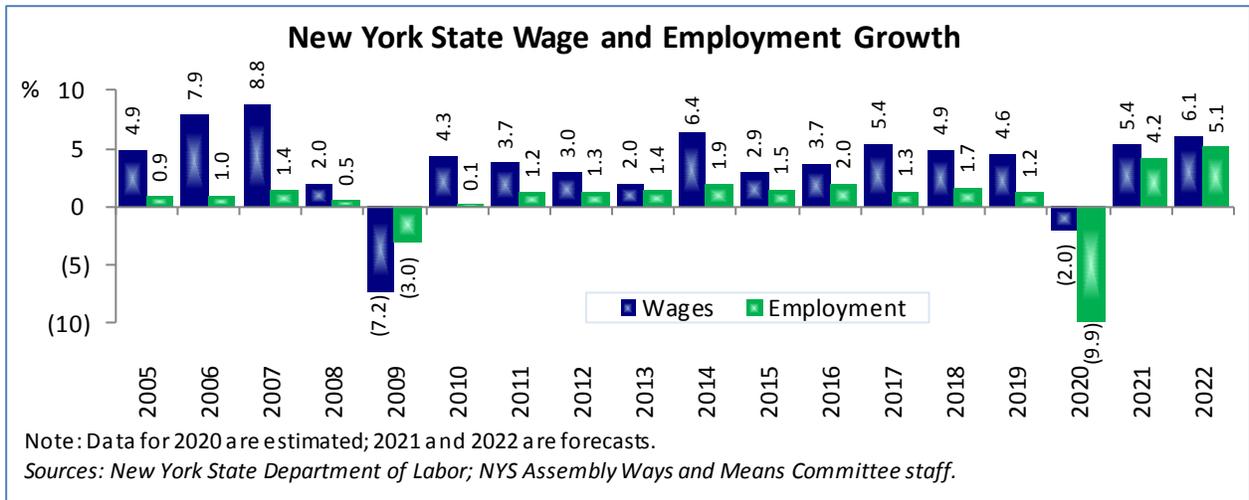
All Funds Tax Receipts State Fiscal Year 2021-22

- The Committee expects **All Funds revenues** to decrease by 0.2 percent, for a total of \$196.348 billion, in SFY 2021-22, primarily related to a \$3.971 billion decrease in **Federal Funds Receipts** and a \$4.788 billion decrease in **Miscellaneous Receipts**, partially offset by a \$6.041 billion increase in **PIT collections** and a \$1.241 billion increase in **User Taxes collections**.
- The Committee expects a 9.3 percent increase in **All Funds tax receipts** in SFY 2021-22, for a total of \$88.588 billion.
- The Committee's All Funds revenue forecast is \$3.534 billion above the Executive's estimates, predominately related to a \$2.838 billion positive variance in PIT collections.

ECONOMIC FORECAST AT A GLANCE







REVENUE FORECAST AT A GLANCE

SFY 2020-21 All Funds Estimate Summary					
(\$ in Millions)					
	2019-20	2020-21			Diff.
	Actual	Estimate	Change	Growth	Exec.
Personal Income Tax	\$53,660	\$54,308	\$648	1.2%	\$1,266
User Taxes	18,021	16,036	(1,985)	(11.0%)	35
Business Taxes	8,996	8,349	(647)	(7.2%)	171
Other Taxes	2,212	2,352	140	6.3%	227
Total Tax Collections	\$82,889	\$81,045	(\$1,844)	(2.2%)	\$1,699
All Funds Miscellaneous Receipts	25,893	28,996	3,103	12.0%	(27)
Gaming	3,573	2,681	(892)	(25.0%)	(3)
Total w/Miscellaneous Receipts & Gaming	\$112,355	\$112,722	\$367	0.3%	\$1,669
Federal Funds	65,080	84,096	19,016	29.2%	-
Total All Funds Receipts	\$177,435	\$196,818	\$19,383	10.9%	\$1,669
* Totals may not add up due to rounding.					

SFY 2021-22 All Funds Forecast Summary					
(\$ in Millions)					
	2020-21	2021-22			Diff.
	Estimate	Forecast	Change	Growth	Exec.
Personal Income Tax	\$54,308	60,348	\$6,041	11.1%	\$2,838
User Taxes	16,036	17,277	1,241	7.7%	192
Business Taxes	8,349	8,803	454	5.4%	365
Other Taxes	2,352	2,159	(193)	(8.2%)	86
Total Tax Collections	\$81,045	\$88,588	\$7,543	9.3%	\$3,482
All Funds Miscellaneous Receipts	28,996	24,206	(4,790)	(16.5%)	21
Gaming	2,681	3,428	746	27.8%	32
Total w/Miscellaneous Receipts & Gaming	\$112,722	\$116,221	\$3,499	3.1%	\$3,534
Federal Funds	84,096	78,662	(5,434)	(6.5%)	-
Total All Funds Receipts	\$196,818	\$194,883	(\$1,935)	(1.0%)	\$3,534
* Totals may not add up due to rounding.					

ECONOMIC FORECAST TABLES

U.S. Economic Outlook					
(Percent Change)					
	Actual 2018	Actual 2019	Estimate 2020	Forecast 2021	Forecast 2022
Real GDP	3.0	2.2	(3.5)	5.5	4.3
Consumption	2.7	2.4	(3.9)	5.7	4.9
Investment	6.3	1.7	(5.3)	12.7	6.9
Exports	3.0	(0.1)	(13.0)	10.0	8.3
Imports	4.1	1.1	(9.3)	15.6	7.1
Government	1.8	2.3	1.1	3.5	(0.7)
Federal	2.8	4.0	4.4	8.0	(5.0)
State and Local	1.2	1.3	(0.9)	0.6	2.3
Personal Income	5.3	3.9	6.3	4.7	(0.5)
Wages & Salaries	5.0	4.7	0.6	6.4	5.8
Corporate Profits	6.1	0.3	(8.2)	8.2	4.8
Productivity	1.4	1.7	2.6	1.7	1.8
Employment	1.6	1.3	(5.7)	2.4	3.9
Unemployment Rate*	3.9	3.7	8.1	5.7	4.5
CPI-Urban	2.4	1.8	1.3	2.2	2.3
S&P 500 Stock Price	12.1	6.1	10.5	18.4	3.0
Treasury Bill Rate (3-month)*	2.0	2.1	0.4	0.3	0.4
Treasury Note Rate (10-year)*	2.9	2.1	0.9	1.2	1.5
* Annual average rate.					
Note: Personal income and corporate profits growth rates are based on nominal values.					
Sources: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; Federal Reserve; Standard & Poor's; NYS Assembly Ways and Means Committee staff.					

New York State Economic Outlook					
(Percent Change)					
	Actual	Actual	Estimate	Forecast	Forecast
	2018	2019	2020	2021	2022
Employment	1.7	1.2	(9.9)	4.2	5.1
Personal Income	4.0	4.1	5.4	4.9	0.5
Total Wages	4.9	4.6	(2.0)	5.4	6.1
Base Wages	5.7	4.5	(1.3)	4.9	5.7
Variable Compensation	(0.7)	5.3	(6.8)	8.6	9.4
New York Area CPI	1.9	1.7	1.7	2.2	2.2

Note: Base wages and variable compensation are estimated by the NYS Assembly Ways and Means Committee staff and sum to total wages. New York area CPI is based on the New York-Northern NJ-Long Island, NY-NJ-CT-PA CPI-U series from the U.S. Bureau of Labor Statistics.

Sources: U.S. Bureau of Economic Analysis; NYS Department of Labor; U.S. Bureau of Labor Statistics; NYS Assembly Ways and Means Committee staff.

New York State Economic Outlook					
State Fiscal Year					
		Actual	Forecast	Forecast	Forecast
		2019-20	2020-21	2021-22	2022-23
Employment	Percent Change	1.0	(12.0)	8.4	4.2
	Level (Thousands)	9,530.5	8,390.9	9,092.3	9,472.9
Personal Income	Percent Change	4.2	6.5	3.1	1.0
	Level (Billions)	1,388.3	1,478.8	1,524.2	1,539.4
Total Wages	Percent Change	4.5	(2.8)	7.1	5.9
	Level (Billions)	725.9	705.4	755.2	800.1
Base Wages	Percent Change	4.3	(2.2)	6.4	5.6
	Level (Billions)	639.4	625.3	665.4	702.5
Variable Compensation	Percent Change	6.0	(7.4)	11.9	8.7
	Level (Billions)	86.5	80.2	89.7	97.5
New York Area CPI	Percent Change	1.8	1.5	2.3	2.3
	Index Level (1982-84=100)	279.8	284.0	290.5	297.1

Note: Employment level is in thousands; wage and personal income levels are in billions of dollars.

Sources: U.S. Bureau of Economic Analysis; NYS Department of Labor, QCEW; U.S. Bureau of Labor Statistics; NYS Assembly Ways and Means Committee staff.

U.S. ECONOMIC FORECAST ANALYSIS

COVID-19 pandemic and a sharp contraction of the economy

COVID-19 has been ravaging the world, infecting more than 111 million people and killing at least 2.5 million as of February 21. In the U.S. alone, so far more than 28 million people have contracted the disease and more than 500,000 people have died of it.

With the nation forced into an abrupt lockdown between late March and May 2000, sales and output plummeted, and mass layoffs and furloughs ensued. An unprecedented 25.4 million Americans became jobless in March and April alone. As a result, U.S. non-transfer personal income plunged 55.4 percent at an annualized rate in April, following a 28.2 percent decline in March.

In the second quarter of 2020, as sales stalled, the national output, as measured by inflation-adjusted Gross Domestic Product, plummeted by 31.4 percent at an annualized rate to a level not seen since the first quarter of 2015 (see Figure 1). The contraction was the sharpest quarterly contraction on record, making the 8.4 percent decline in the fourth quarter of 2008 during the Great Recession look rather mild. The contraction was also broad-based with the largest share accounted for by consumer spending (24.0 percentage points), followed by exports (9.5 percentage points), business capital spending (3.7 percentage points), and inventory investment (3.5 percentage points). While state and local governments accounted for 0.4 percentage points of the overall decline in the second quarter, the federal government made a positive 1.2 percentage point contribution, as it ramped up spending to deal with the worsening COVID-19 situation.

Responses by the Federal Reserve and Congress

The Federal Reserve also responded with a revival of the Great Recession-era policy tools: it slashed the federal funds rate, the overnight interbank interest rate that it controls, to near zero percent and pumped liquidity into the market to help credit continue to flow.¹ Congress responded with a series of bills, including the Coronavirus Aid, Recovery, and Economic Security (CARES) Act that provided various income support programs and stopgap

¹ For more details on various credit facilities that the Federal Reserve has adopted in response to the pandemic, go to <https://www.federalreserve.gov/newsevents/pressreleases.htm> and check for the items dated between March and April, 2020.

measures including stimulus checks for households, rent and mortgage moratoriums, forgivable paycheck protection program loans, and expanded unemployment insurance payments. Helped by these government actions and the gradual reopening of businesses, beginning in June, the economy started to rebound but recovery has been slow.

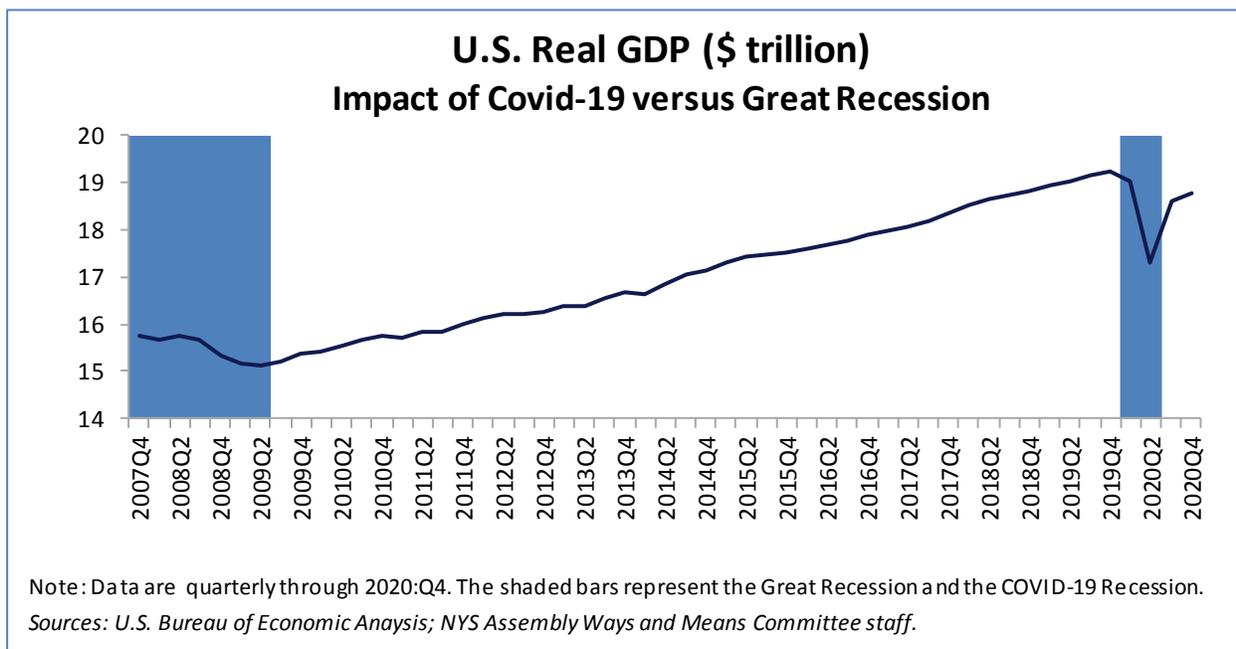


Figure 1

The COVID-19 recession has been unequal

The COVID-19 recession has been unequal in many respects. Some parts of the economy were dealt a more severe initial blow from the pandemic than other parts. Some parts of the economy have since recovered fast and strongly, while other parts continue to struggle. The distinction appears to hinge on the nature of the pandemic and the kind of businesses impacted by it. For example, industries where social distancing is relatively easier to achieve and companies that benefit from people working from home—online retailers, electronics and appliance stores, building material stores, food and beverage retailers, truck and courier companies, and financial service firms—suffered less from the pandemic’s initial blow and have recovered faster. As economic activities by these companies and industries have been facilitated by advanced information/communications technology, firms that are specialized in such technology have also benefited from the pandemic.

Industries that are not easily adaptable to social distancing and benefit little from those working from home—accommodations and food services; arts, entertainment and recreation; administrative and waste services; personal services, repair and maintenance, and other services—were hit hardest by the pandemic. These four categories of service-providing industries alone lost 11.3 million jobs in March and April, accounting for more than half of all the jobs lost in the national private sector. These industries are generally associated with lower-paying jobs. On the other hand, finance and insurance; utilities; management of companies and enterprises; professional and technical services; wholesale trade; mining; and information, which are concentrated with higher-paying jobs, together lost 2.4 million jobs, accounting for 11.4 percent of all the private sector jobs lost in March and April. Moreover, according to the U.S. Bureau of Economic Analysis (BEA), the finance and insurance industry is the only private sector that made a positive contribution to the percent change in U.S. real GDP in the second quarter (see Figure 2).

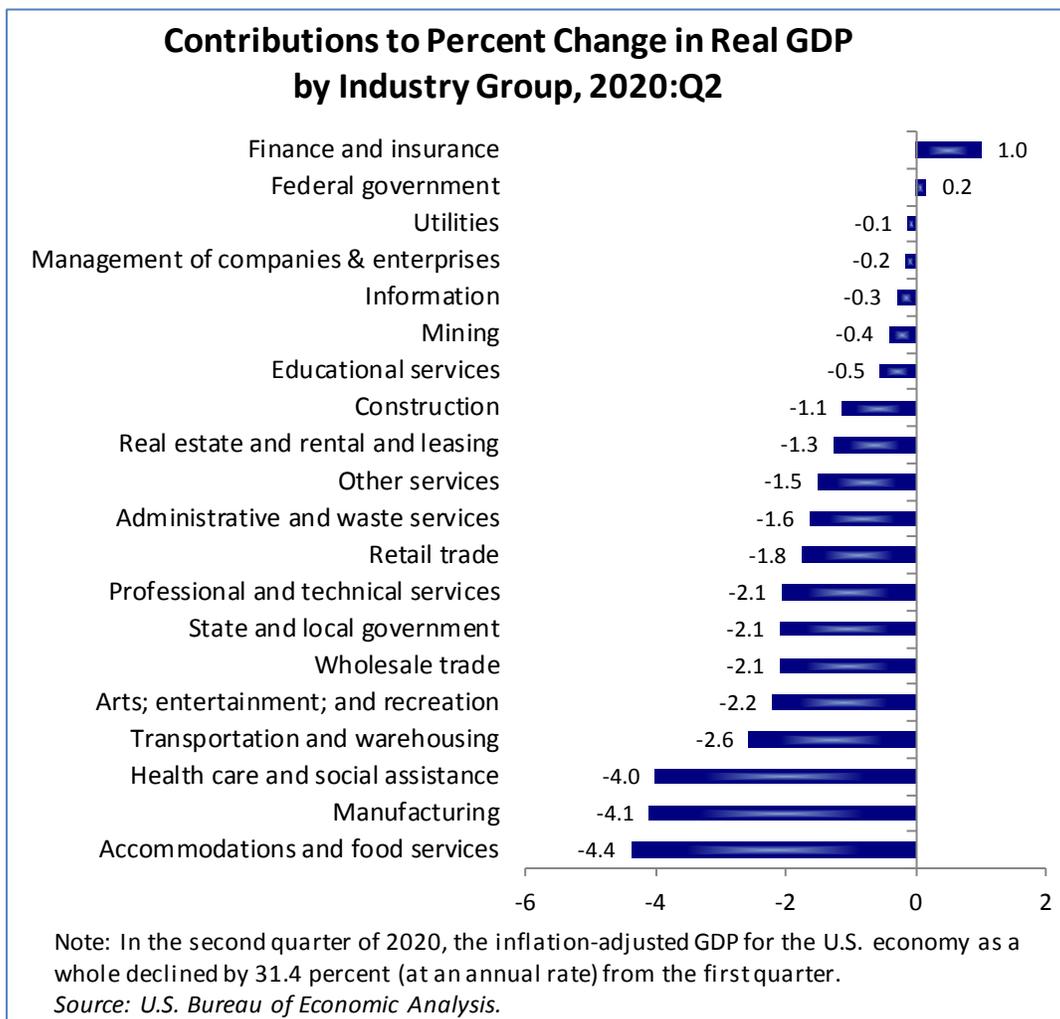


Figure 2

The economy rebounded strongly in the third quarter but the recovery has since slowed

In the third quarter, helped by pent-up demand, various federal fiscal stimulus programs, and the Federal Reserve's aggressive monetary policy actions, the U.S. economy recovered strongly in sales, employment, and income. According to the BEA, national output increased an estimated 33.1 percent at an annualized rate. The U.S. labor market also recovered strongly in the third quarter of 2020, although, as of September, payroll employment was still 10.7 million below the pre-pandemic level in February 2000.

With demand waning and COVID-19 infection cases continuing to climb, the pace of economic recovery is slowing, compared with prior months. As seen in the leisure and hospitality sector, reopenings have been tempered and in some cases rolled back, hindering a stronger rebound. As a result, U.S. GDP growth, after adjusted for inflation, markedly slowed to a modest 4.0 percent in the fourth quarter of 2020. Monthly gains in U.S. employment also slowed in the fourth quarter, with the number of payroll jobs in December still 9.6 million below the pre-pandemic peak level. The pace of the national economic recovery is expected to remain slow in the first quarter of 2021. Economic growth is forecast to accelerate in the second half of 2021 under the assumption that the public will regain confidence, with the wide availability and application of effective vaccines.

The automobile market

Of special note is the recovery in the automobile market, which has been fast and strong after new vehicle sales plummeted by 32 percent in March 2020 and another 23 percent in April. As of December, new vehicle sales reached 97 percent of the pre-pandemic level. The quick recovery in the automobile market has been primarily due to the nature of the pandemic. Individuals have switched from public and group transportation to private vehicles. This has taken the form of purchasing an extra vehicle or upgrading an existing one. This shift in demand for private vehicles over public transportation is likely to last until effective vaccines are available on a large scale.

The housing market

Another sector that deserves mentioning is the housing market. Buoyed by homebuyer confidence and low mortgage interest rates, the housing market has also rebounded quickly and strongly from the initial blow of the pandemic. Housing starts, sales and permits continue to increase, reaching the highest levels since 2006. Also, home improvement projects have

been encouraged by sheltering at home. However, the housing market recovery will likely be limited as supply constraints such as the shortage of buildable lots persist.

Assumptions for the forecast

The forecast presented in this report is built on several assumptions. The world economy continues to struggle to recover from the pandemic. The current forecast assumes that the COVID-19 infection cases will remain elevated around the globe during the cold months, forcing business openings and individual gatherings to be limited. The pace of vaccinations has been slower than expected, but it is assumed to pick up in the coming weeks.

With a new administration and Congress in place, additional fiscal policy actions are likely in the coming months, in addition to the \$908 billion package that was enacted in December 2020.² The current forecast assumes that the amount of stimulus checks for individuals will increase to \$2,000 from the \$600 that was already included in the December package. It is also assumed that the emergency unemployment insurance programs will be extended through September; funding for COVID vaccination, testing and mitigation will be provided in the amount of \$150 billion in 2021; and state and local governments will receive \$350 billion of additional federal aid in 2021, although the bulk of this aid money is assumed to show up in the national product accounts in 2022.

The Federal Reserve has kept the federal funds rate near zero percent since March 2020. The Fed is expected to maintain this target rate until the economy is near full employment and inflation firmly exceeds its 2 percent target, which is not expected to occur until late 2022 at the earliest. It is also expected that most of the Federal Reserve's other accommodating monetary policy actions—various lending facilities and the quantitative easing programs that purchase term Treasury securities—will prove effective in supporting the smooth functioning of financial markets and encouraging spending by consumers and businesses by keeping longer-term interest rates low.

² On January 2021, the President-elect Biden's transition team proposed the American Rescue Plan, a \$1.9 trillion dollar fiscal stimulus package. The Plan includes \$465 billion for \$1400 additional "recovery rebates" for qualifying individuals, \$350 billion for the extension of emergency unemployment insurance programs through September, \$350 for aid to state and local governments, \$160 billion for funding for COVID vaccine, testing and mitigation, \$170 billion for funding for school reopenings and other school expenses, \$120 billion for expansion of refundable Child Tax Credit, \$30 billion for support for rent and small landlords, \$25 billion for support to childcare providers, and \$200 billion for other.

The U.S. dollar value has retreated from its pandemic highs as its safe-haven demand has abated. The U.S. dollar is assumed to depreciate further this year and in 2022. In terms of inflation-adjusted, trade-weighted world GDP, the global economy contracted by an estimated 4.5 percent in 2020, dealing a severe blow to global trade in goods and services. Once the pandemic recedes, the world economy is expected to rebound by 4.0 percent in 2021 and another 3.2 percent in 2022, supporting U.S. economic growth through an increase in foreign demand for U.S. exports.

Global oil prices fell to below \$30 per barrel in the second quarter of 2020, as plummeting global demand and the price war between Saudi Arabia and Russia created an unprecedented surplus of oil. Prices have rebounded from their pandemic lows to around \$40 per barrel for West Texas Intermediate, as the worst of the global downturn is over and global demand for oil has firmed in line with global economic recovery. The recovery in global oil prices has also been helped by the reduction of supply as is evidenced by the decreasing number of oil and gas rigs in operation. In the second half of 2021, supported by the recovering global economy in combination with rationalized supply, oil prices will start rising further to around \$50 per barrel, helping U.S. drilling and production to stabilize.

Outlook for the U.S. economy

Against this backdrop and under the set of assumptions mentioned above, the U.S. economy, measured by inflation-adjusted GDP, is forecast to rebound by 5.5 percent in 2021 and 4.3 percent in 2022, after declining an estimated 3.5 percent in 2020 (see Figure 3). The recovery will be broad-based, and the level of overall economic activity will surpass its pre-pandemic peak in the second quarter of 2021. Consumer spending on services, which is most subject to social distancing, is not expected to reach its previous peak level until the first quarter of 2022.

As sales and output recover, payroll employment is also forecast to recover by 2.4 percent in 2021, after declining an estimated 5.7 percent in 2020. With recovery from the pandemic in full swing, employment growth is forecast to accelerate to 3.9 percent in 2022.



Figure 3

After growing an estimated 6.4 percent in 2020, personal income is forecast to increase further by 4.7 percent in 2021, as individuals receive more rebate checks and unemployment insurance payments. With the massive amounts of transfer payments received from the government during 2020 and 2021 expected to be unwound in 2022, personal income will decline 0.5 percent in 2022, despite a 4.1 percent increase in non-transfer income. As sales revenue plummeted from the initial blow of the pandemic by more than wages and other production costs declined, corporate profits decreased by an estimated 8.2 percent in 2020. With the economy forecast to recover and additional corporate subsidies expected from the federal government this year, corporate profits are forecast to increase by 8.2 percent in 2021 before decelerating to 4.8 percent growth in 2022.

With slack in the labor market, inflation expectations will likely remain low in 2021, putting downward pressure on the yield on U.S. Treasury securities. On the other hand, the projected sharp increase in federal budget deficits puts upward pressure on the Treasury yield. In the near term, the downward pressure will likely dominate, causing the yield on ten-year Treasury notes to remain low in tandem with low short-term rates. As the economic recovery continues and mounting federal debts weigh on the bond market, inflation expectations will likely start kicking in, gradually driving interest rates higher in 2022. On a yearly average basis, the ten-year yield is expected to rise to 1.5 percent in 2022 from 1.2 percent in 2021 and 0.9 percent in 2020.

Although increased competition among firms for reduced business has put downward pressure on consumer price inflation during the pandemic, there are also forces that put upward pressure on CPI as well. For example, as a result of the tariffs from recent trade frictions, importers have been passing higher costs on to consumers. Also, as the U.S. dollar value is expected to retreat from the recent highs, the prices of imported goods will likely advance faster in the forecast period. With the pace of global economic recovery expected to pick up in the second half of this year, the global prices of crude oil and other commodities will likely increase faster in 2021 and 2022, leading to an uptick in the growth of the prices of consumer goods and services. Overall, the CPI inflation is forecast to increase to 2.2 percent in 2021 and 2.3 percent in 2022, after declining to 1.3 percent in 2020, the lowest since 2015.

Consumer Spending

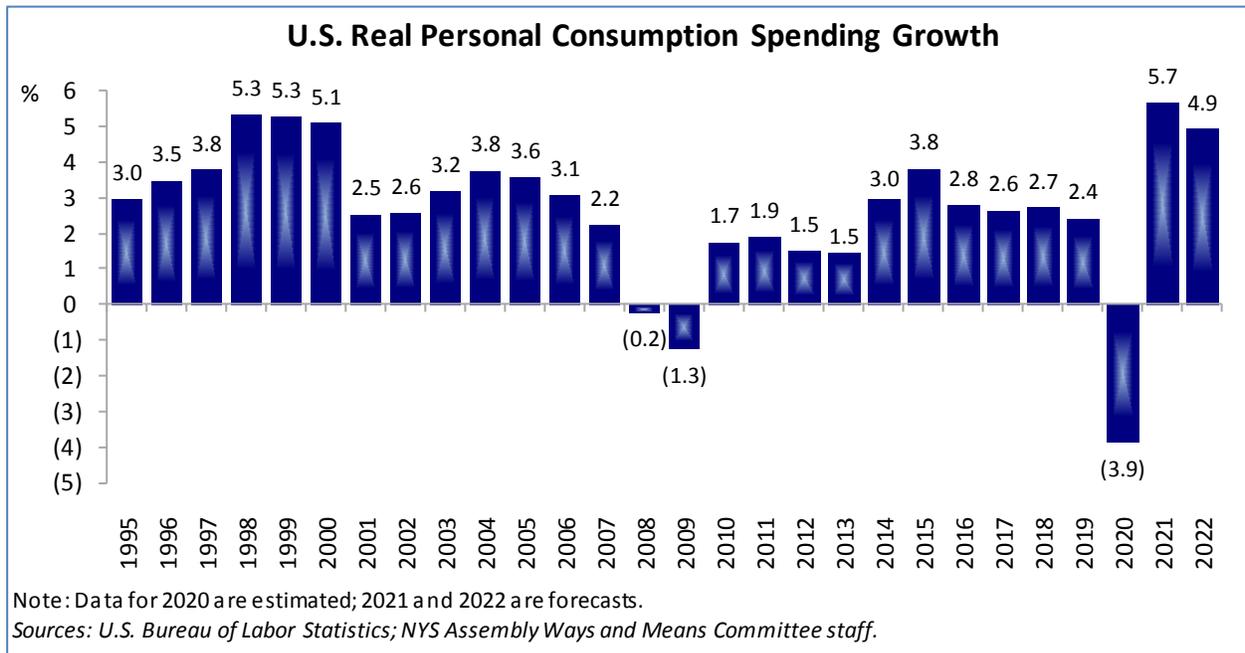


Figure 4

Key Points

- **Consumer spending declined an estimated 3.9 percent in 2020. This is the largest yearly decline since the 1930's;**
- **However, consumer spending will contribute to the economic recovery over the next two years;**
- **Consumer spending will be supported by recovery in employment as well as transfer income from the federal government;**
- **The elevated personal savings rate, which reflects more cautious consumer spending behavior, will help boost consumer spending once the virus is under control.**

Consumer spending plummeted in the second quarter of 2020 in response to the coronavirus pandemic. All nonessential businesses moved employees to remote work, furloughed or laid off employees, or closed outright. Simultaneously, stay-at-home orders went into effect leading to the stoppage of most everyday activities, such as shopping, travelling, driving or dining out. Even routine medical care was difficult to attain.

Though consumer spending surged in the third quarter as stay-at-home orders were lifted, consumer spending particularly in the service sector has shown some weakness. Spending on food services and accommodations, as well as transportation services have been hardest hit as consumers continue to restrict their activities due to the uncertainty surrounding COVID-19. Spending on nondurable goods spiked in March 2020 as consumers hoarded certain items and flooded to online retailers. Spending on nondurable goods has since tapered, and is being restrained by significantly lower spending on energy-related goods. However, spending on motor vehicles and parts, the primary driver of spending on durable goods has accelerated, surpassing pre-COVID-19 levels after plunging in the second quarter. With spending on consumer services accounting for more than 60 percent of total personal consumption spending, its weak recovery will curtail growth in overall consumer spending going forward.

Legislation passed by the federal government to limit the adverse impact of the coronavirus pandemic on the economy boosted household finances.³ The transfers received per person were vast, ranging from a \$1,200 stimulus check sent to income eligible individuals, supplemental unemployment insurance benefits, supplemental food benefits, and healthcare payouts to veterans and hospitals. Disposable income, adjusted for inflation, grew by a record 15.0 percent in April 2020 from a month earlier. Households initially saved most of these payouts, resulting in a sharp rise in the personal savings rate to 33.7 percent in April 2020, an historic high.

In December, legislation was again passed to inject more money into the economy as economic growth slowed.⁴ This time around, each eligible person received a \$600 check and unemployment benefits were extended along with other food assistance programs. In the American Rescue Plan, President Biden's Administration has proposed another \$1,400 in additional funds to individuals, as well as allotted money for unemployment benefits, health care, and food assistance programs.⁵ These forms of additional fiscal stimulus will keep the personal savings rate elevated, though below the April 2020 peak.

After falling 33.2 percent in the second quarter of 2020, consumer spending rebounded sharply in the following quarter but remained below pre-pandemic levels. Furthermore,

³ See the CARES Act, Public Law 116-136, 116th Congress of the United States, passed on March 27, 2020.

⁴ See the Consolidated Appropriation Act, 2021, Public Law 116-260, 116th Congress of the United States., passed on December 27, 2020.

⁵ Garen E. Dodge and Susan Gross Sholinsky, "What's In President-Elect Biden's COVID-19 Rescue Plan," The National Law Review, January 19, 2021, <https://www.natlawreview.com/article/what-s-president-elect-biden-s-covid-19-american-rescue-plan>.

personal consumption spending slowed markedly in the fourth quarter of 2020 and the slow pace will likely continue in the first half of 2021. This recent and near-term growth pattern in consumer spending is a result of pandemic-related relief unwinding, consumers becoming more cautious as infection rates remain elevated, and uncertainty surrounding the labor market and school openings. In addition, the payback of released pent-up demand in motor vehicles and parts contributed to the slowdown in the fourth quarter. Overall, personal consumption spending declined an estimated 3.9 percent in 2020, following an increase of 2.4 percent in 2019 (see Figure 4). This is the largest yearly decline in consumer spending since the 1930's.

Headwinds on fundamentals veer to the downside, given the uncertainties related to the coronavirus pandemic. The possibility exists that more states could revert once again to stay-at-home orders and other mandates as many have suffered from significant upticks in their infection rates recently. Nonetheless, with household net worth expected to grow over the forecast period, the labor market to improve, wages and salaries to increase, inflation to remain in check, and additional stimulus likely, personal consumption spending is forecast to increase 5.7 percent in 2021, and then by 4.9 percent in 2022 (see Figure 4).

Pandemic relief impact on disposable income growth

In 2020, disposable personal income grew an estimated 6.1 percent after adjusting for inflation, as record transfer receipts mitigated declines in wages and salaries. Disposable income is projected to increase 2.2 percent in 2021 as wages and salaries and transfer income rise. With no additional benefits expected from the government in 2022, disposable income is projected decline, but a higher savings rate buffers any fallout in consumer spending that might result.

Data on new orders point to more measured gains in consumer spending

Pre-pandemic, new orders on consumer goods, a leading indicator of personal consumption spending, suggested consumer spending was slowing. After nosediving during the initial months of the pandemic, however, new orders increased quickly and strongly in the summer months of 2020, signaling a speedy recovery in consumer spending in the near term. New orders are still increasing but have slowed lately, indicating a slowdown in consumer spending growth in the next few months

The pandemic has taken its toll on sentiment

The University of Michigan Consumer Sentiment Index slid to a nine-year low in April 2020 as stay-at-home orders were implemented in the midst of rising death tolls and infection rates (see Figure 5). Households' favorability ratings have since improved as current economic conditions have gotten better with the reopening of businesses. With uncertainties still high, households continue to view their well-being less favorably than prior to February 2020.

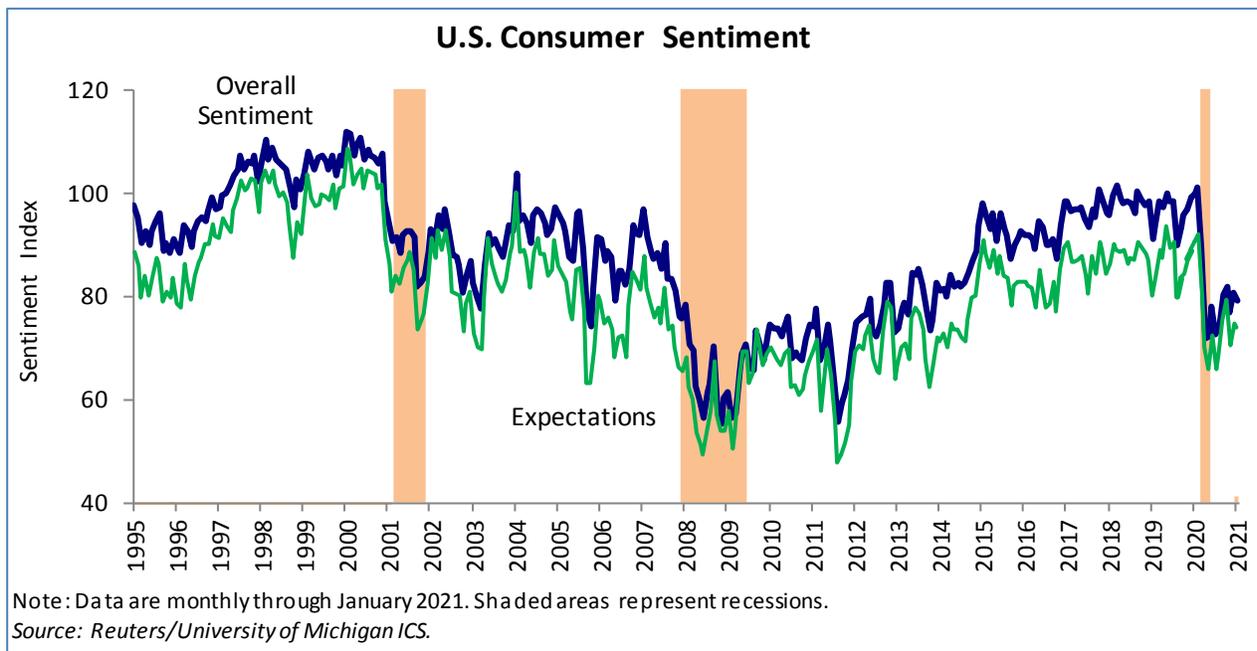


Figure 5

Household wealth has increased despite the pandemic

The overall progression of the pandemic as well as the federal government policy response, has increased volatility in equity markets. Equity prices declined in March 2020 as investors reacted to the potential economic fallout from state and local government directives. For the first quarter of 2020, households' net worth declined 6.1 percent from the fourth quarter of 2019. As the federal government moved to bolster credit markets and injected billions of dollars into the economy, the financial markets rebounded and households' net worth regained its losses from the previous quarter. Further gains occurred in the third quarter as mandates were lifted and many people went back to work. With the federal government ramping up vaccination efforts, the economic recovery is expected to gain more traction in the

coming months. As a result, equity prices and household net worth will likely gain further, helping support strong growth in consumer spending in 2021.

Banks are less willing to lend

Banks' willingness to make loans to consumers declined sharply in the first half of 2020 (see Figure 6).⁶ The credit requirements that had already been stringent were tightened further even as households' finances had been improving. In fact, banks were lending only to borrowers who had stellar credit-standing. One rationale for banks' unwillingness to lend was the uncertainty surrounding the economic fallout from the pandemic and the resulting impact on households' finances. Though there has been some improvement since, banks have reported weak demand for consumer loans. Clearly, tight credit conditions and weak demand for loans do not bode well for consumer spending.

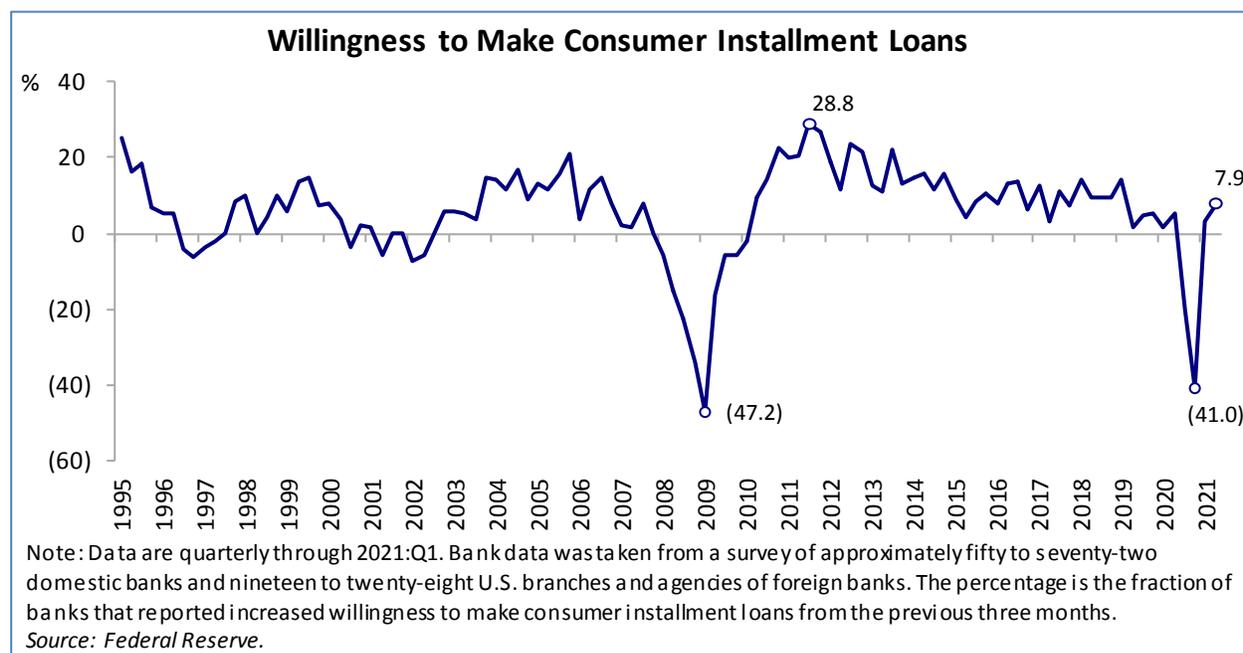


Figure 6

Households' financial positions remain healthy as a result of Federal stimulus

Households' financial situation seems to remain strong, but the true picture may be blurred by the pandemic-related relief that has boosted their income (see Figure 7). For

⁶ See January 2021 Senior Loan Officer Opinion Survey on Bank Lending Practices, Federal Reserve Board, February 1, 2021, <https://www.federalreserve.gov/data/sloos/sloos-202101.htm>.

example, the debt-to-income ratio which has been gradually falling since the second quarter of 2007 dropped steeply in the second quarter of 2020 as pandemic-related assistance boosted household incomes. While delinquency rates had been ticking up pre-pandemic, they were at their lowest in the second quarter of 2020, likely as a result of the requirements placed on banks to waive mortgage and student loans payments as a pandemic-related relief to individuals. Similarly, the financial obligation ratio, which measures the percentage of disposable income obligated to debt payment, fell to 13.7 percent in the same quarter, the lowest rate on record, largely reflecting moratoriums on mortgages and rents. Nonetheless, the improving trend in households' financial position that was in place before the pandemic will help households to withstand, at least short-term, COVID-19 related uncertainties and support their consumption spending.

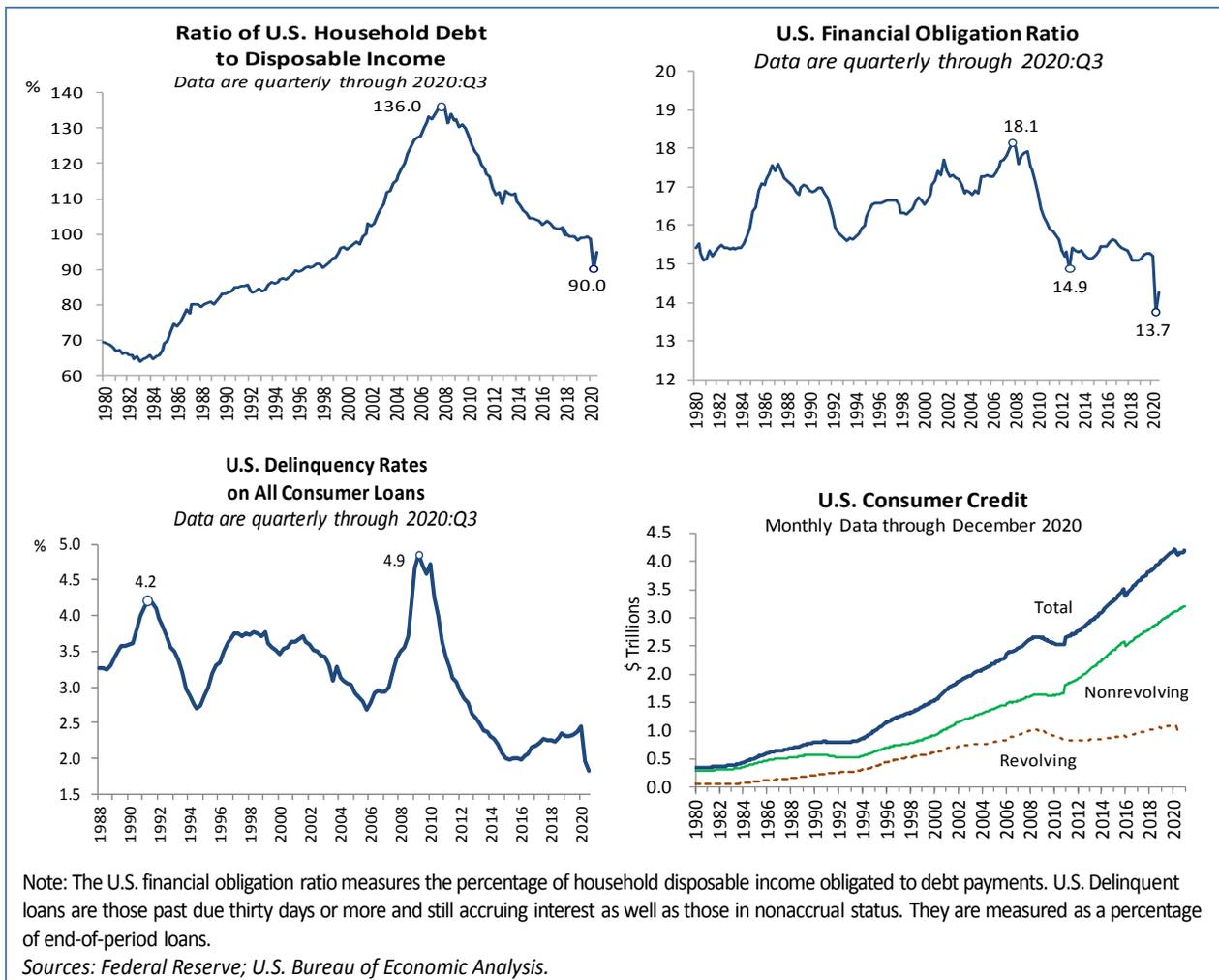


Figure 7

Overall consumer spending outlook

The sharp rebound in consumer spending in the third quarter of 2020 was largely due to extraordinary growth in spending on goods, as spending on durable and nondurable goods exceeded their pre-pandemic levels. Massive transfer payments from the federal government and forced thrift led to a build-up in demand in the second quarter. As stay-at-home orders went into effect in March 2020, consumers stocked up on food and other necessities driving up spending on nondurable goods in the first quarter of 2020. Spending on gasoline fell, while sales at grocery stores and online outlets accelerated as people remained at home, mitigating some loss in spending on nondurable goods in the second quarter. Once reopenings began, spending on motor vehicles boomed, resulting in record spending on durable goods. Similarly, noticeable increases in spending were observed in clothing, footwear and gasoline as people emerged from isolation.

Generally, big-ticket items are the first to be curtailed by consumers in an economic downturn, while spending on services lags. However, government payouts and pent-up demand have spurred spending on these big ticket items, shifting somewhat the dynamics of consumer spending patterns. After increasing an estimated 6.4 percent in 2020, spending on durable goods is forecast to grow 11.0 percent in 2021 as pent-up demand is released, people become inoculated, and personal savings are spent. Consumer spending is projected to increase 3.7 percent in 2022. Spending on nondurable goods increased an estimated 2.6 percent in 2020, followed by projected growth of 5.7 percent in 2021 and 2.2 percent in 2022.

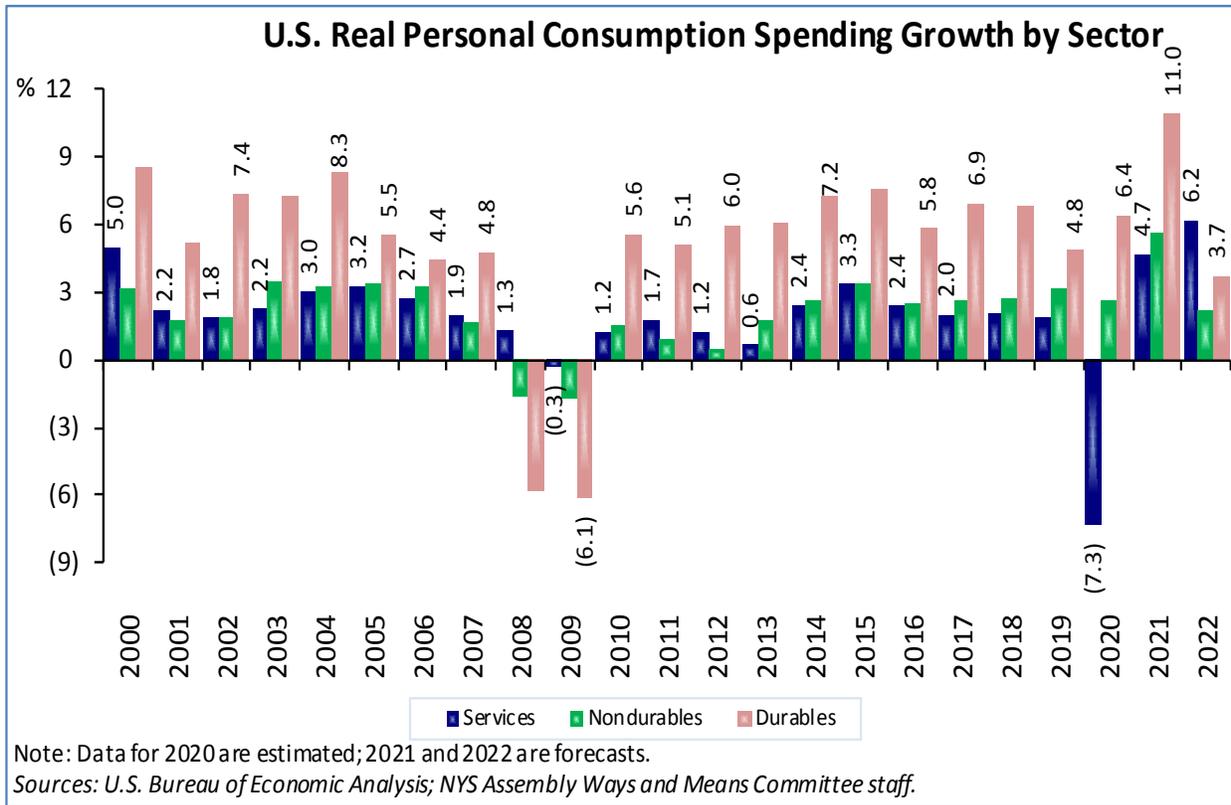


Figure 8

Spending on services has been disproportionately impacted by the pandemic because of social-distance recommendations, stay-at-home orders, and remote learning and work. Any businesses deemed nonessential were shuttered in the early phase of the pandemic. Even in the reopening phase, many of these businesses have faced restrictions from state and local governments. Attractions that usually drew huge crowds remain closed; reopening restrictions on restaurants have led to some closures, with some limited to take-out orders; most hotels are closed or if occupied remain substantially below capacity because most entertainment attractions are closed; air travel has been decimated with airlines requesting financial assistance from the federal government; and even in a pandemic, spending on healthcare services has declined as many elective procedures have been deemed nonessential or created undue risks to providers and patients.

Consequently, spending on services fell 41.8 percent in the second quarter of 2020. While spending grew robustly in the third quarter, recovery of service spending will be especially slow over the forecast period, with spending on some services not returning to their pre-pandemic level until 2022. Spending on services is estimated to have fallen 7.3 percent in 2020, and projected to increase 4.7 percent in 2021 and 6.2 percent in 2022 (see Figure 8).

Business Investment



Figure 9

Key Points

- **Growth in private investment spending is expected to rebound in the forecast period after a sharp decline caused by the pandemic;**
- **Recovery is expected to be uneven due to the nature of the pandemic—the nonresidential structures sector will likely continue to struggle, while the information-processing equipment sector will continue to benefit from increasing demand for newer technology-based equipment.**

Even before the COVID-19 pandemic, growth in private investment spending cooled to a mere 1.7 percent on a yearly average basis in 2019, after accelerating to 6.3 percent in 2018. The deceleration in 2019, which marked the second slowest yearly gain since the Great Recession, was attributed to slowing growth of sales, the uncertainties caused by trade frictions, and the failed deliveries of Boeing 737 Max planes. The stimulus effects of the 2017 Federal Tax Cuts and Jobs Act (TCJA) on business investment spending were also less than expected, as firms used the windfall from the tax cuts to buy back stocks, make interest payments and pay down the debt accumulated during the Fed's era of quantitative easing, instead of funding more productive investment projects.

The deterioration in investment spending growth in 2019 was also broad-based. Spending on residential as well as nonresidential structures was particularly weak, declining an estimated 1.7 percent and 0.6 percent, respectively. The year 2019 marked the first time since 2010 that residential investment spending declined for two consecutive years. Declining affordability due to rising home prices was largely responsible. An increasing shortage of construction workers and buildable lots was also a contributing factor. Business spending on equipment was also weak, increasing a mere 1.8 percent after a healthy 7.3 percent increase in 2018. One bright spot was robust and steady growth in business expenditures on intellectual property products such as software and research and development activities.

In the second quarter of 2020, COVID-19 inflicted severe damage to private investment spending (see Figure 10). Overall spending other than spending on inventory investment declined by 29.2 percent at an annualized rate and all major sectors were hit hard—spending on business equipment other than information-processing equipment such as computers fell by 35.9 percent, spending on nonresidential structures by 33.4 percent, spending on residential investment by 37.9 percent, and spending on intellectual property, research and development by 7.7 percent. Inventory investment also declined significantly, by \$207 billion in the second quarter. The only exception was spending on computers and other information-processing equipment, which increased by 29.0 percent in the second quarter as sheltering at home as well as working from home encouraged demand for these products.

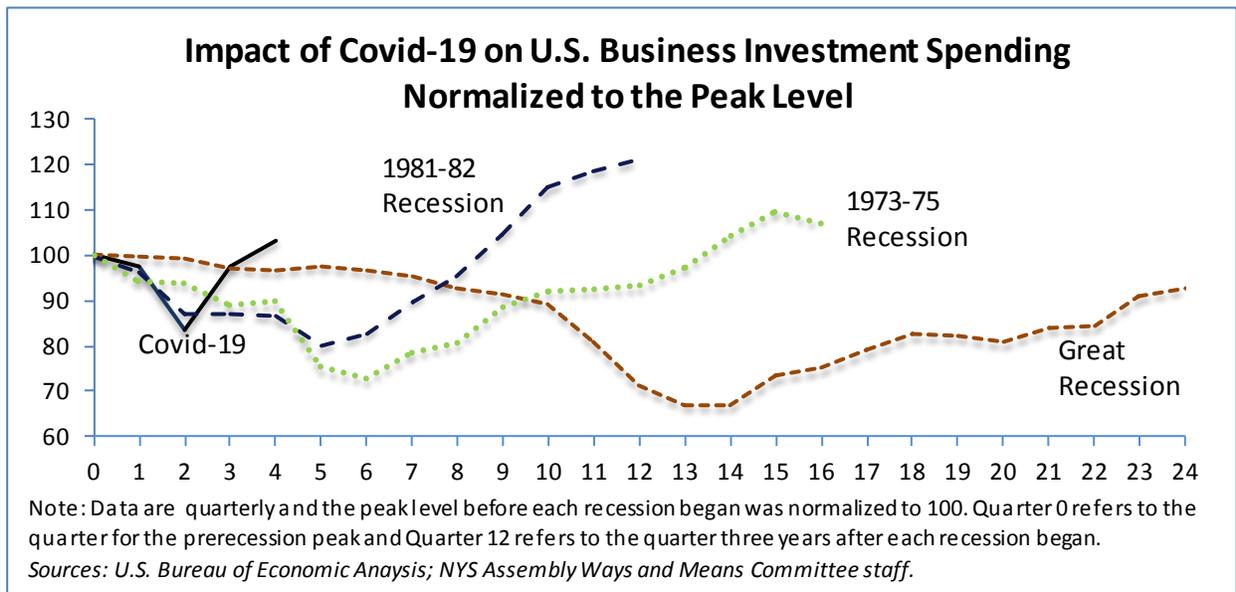


Figure 10

Total business investment spending rebounded strongly in the third quarter of 2020, reaching its pre-pandemic level. In particular, inventory investment spending increased by a sizable \$284 billion, almost completely reversing the decline in the second quarter. Also, helped by record low mortgage interest rates and revived homebuyer confidence, residential investment spending recovered sharply by an annualized rate of 63.0 percent, exceeding its pre-pandemic peak level. Sheltering at home as well as people's desire for a safer living environment may have encouraged home sales, improvement projects, and new construction activity reflecting a shift from urban apartments to suburban homes. Business spending on equipment also recovered strongly in the third quarter. In particular, with demand for virtual office space rising in the midst of the pandemic, business spending on computers and other information processing equipment surged by 48.0 percent, reaching a record high. The recovery in transportation equipment spending was also remarkable. After declining by an annualized 31.1 percent in the first quarter and 84.9 percent in the second quarter, it surged by 258.5 percent in the third quarter.

Spending on nonresidential structures remains weak, as both supply and demand for new commercial and industrial space are anemic due to sheltering at home and social distancing. In particular, new-office construction activity has moderated considerably as an increasing number of firms reevaluate their need for office space. Lodging construction activity has also softened as travel remains much restrained by the pandemic. In addition, with global energy prices only partially recovered from the pandemic lows, gas and oil field activity remains depressed, straining expenditures on drilling equipment and structures. Tightening lending conditions for commercial real-estate loans also weighs on business spending on structures.

Continued recovery in final sales and output in 2021 and 2022 will support growth in business investment spending. However, recovery in business spending is expected to be uneven due to the nature of the pandemic—the nonresidential structures sector will likely continue to struggle, while the information-processing equipment sector will continue to benefit from increasing demand for newer technology-based equipment. Once the virus is under control and vaccines are widely adopted, demand for travel will come back strongly, supporting robust growth in business spending on transportation equipment and lodging construction.

There are also downside risks to the recovery in private investment spending, including the rising number of infection cases in many parts of the world. Another potential downside risk to business investment spending is presented by rising corporate debts. During the expansion before the pandemic, U.S. businesses borrowed massive amounts in the form of

bonds and loans at bargain financing costs and used the borrowed money for new product launches, stock buybacks, acquisitions, and dividend payouts. As a result, the nonfinancial corporate debt of large U.S. companies surged in recent years, exceeding \$10 trillion or 49 percent of U.S. GDP in 2019, the highest ratio since 1947 when data series began.⁷ As corporate debts and loans have increased faster during the pandemic, these numbers are on their way to new record levels, putting increased financial strain on corporate investment decision making.

Overall private investment spending is forecast to rebound 12.7 percent in 2021, a sharp turnaround from an estimated 5.3 percent plunge in 2020. Part of this rebound in 2021 is attributed to an expected strong gain in inventory investment from a dismal level in 2020. As such, in 2021, growth in business investment spending outside the inventory investment is forecast to be a more moderate 8.2 percent, supported largely by a robust 12.8 percent increase in equipment spending and an 11.5 percent increase in residential investment spending (see Figure 11). For the reasons mentioned above, spending on nonresidential structures will likely remain depressed in 2021, declining 4.6 percent in 2021 after plunging by an estimated 10.5 percent in 2020. With spending on equipment and construction expected to firm up, growth in overall business spending will continue to improve by 6.9 percent in 2022.

⁷ Board of Governors of the Federal Reserve System, Z.1 Financial Accounts of the United States; Federal Reserve Bank of St Louis, FRED Economic Data, series BCNSDODNS. Total nonfinancial corporate debt, including the debt of small and medium sized businesses, family businesses and nonlisted businesses, stood at \$15.6 trillion or 74 percent of U.S. GDP.

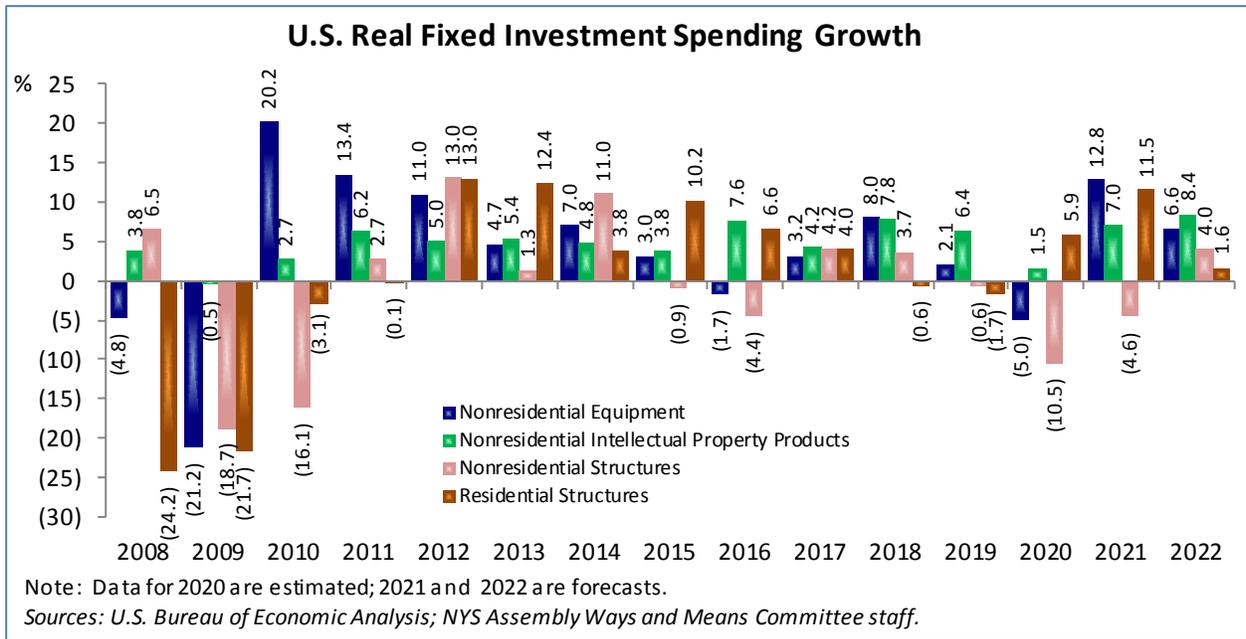


Figure 11

Government Spending

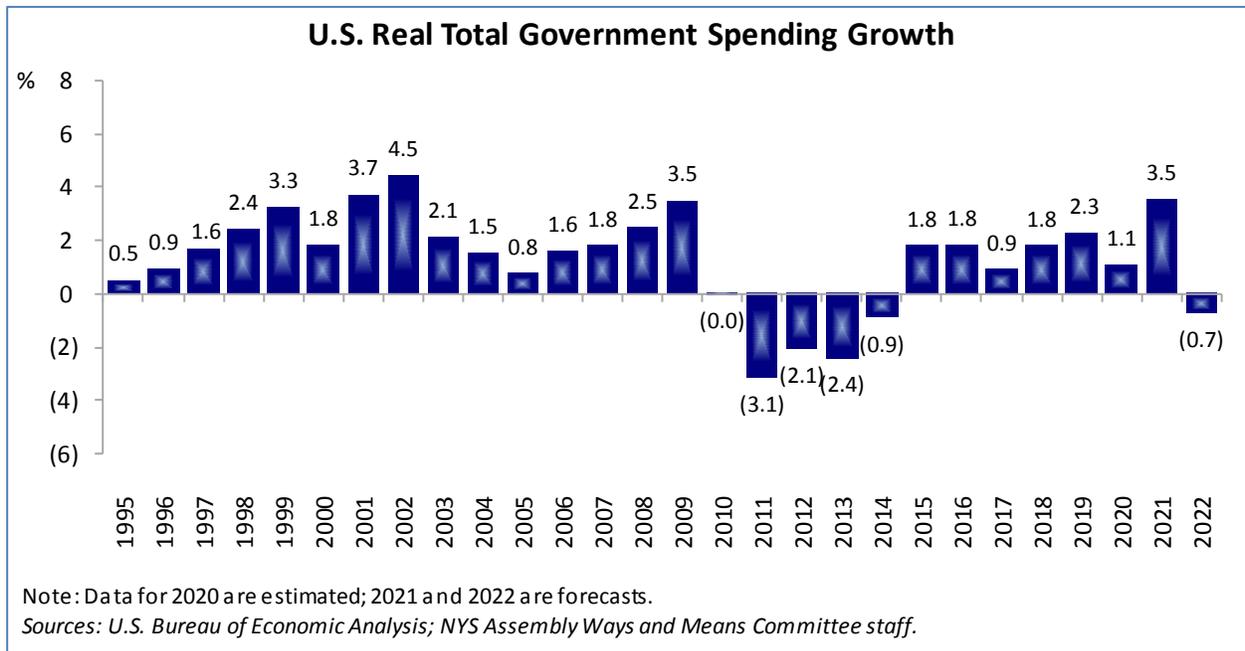


Figure 12

Key Points

- **Federal government spending was the driver of total government spending growth in 2020 as spending was accelerated to stem the economic fallout from COVID-19;**
- **State and local government spending will contribute to overall economic growth in 2021 after falling in 2020.**

Total government spending, adjusted for inflation, grew 2.3 percent in 2019, following a 1.8 percent increase in the previous year, primarily due to higher federal government spending. This acceleration in federal government spending was authorized by legislation set forth by the Budget Control Act of 2018 which substantially increased defense spending.⁸ State and local government spending also contributed to total government spending growth but far more modestly.

⁸ See The Bipartisan Budget Act of 2018; Public Law 115-123, 115th Congress, February 9, 2018, and *Bipartisan Budget Act of 2018, Cost Estimate*; Congressional Budget Office, February 8, 2018, <http://www.cbo.gov/publication/53556>.

This trend will continue over the forecast period as the actions taken by the federal government to thwart the economic fallout from the coronavirus pandemic have resulted in an enormous increase in federal government outlays.⁹ On the other hand, as state and local governments have sought to control the spread of the virus with limited resources, many have begun to cut spending as the costs of the pandemic set in. Hence, growth in total government spending slowed to an estimated 1.1 percent in 2020, propped up by higher nondefense and defense spending but restrained by cuts in state and local government spending. Total government spending is forecast to increase 3.5 percent in 2021 with additional fiscal stimulus expected from the federal government. In 2022, total government spending is projected to decline 0.7 percent as pandemic-related federal government spending recedes (see Figure 12).

Federal government spending

Federal government spending grew an estimated 4.4 percent in 2020, after accelerating 4.0 percent in 2019 (see Figure 13). Federal government spending in 2020 was helped by the Budget Control Act of 2019 (BCA-19) that authorized spending levels above fiscal year 2019. Also, the 2020 Census pushed nondefense employment levels higher, leading to higher spending. In addition, the federal government response to the economic fallout of the pandemic escalated spending growth substantially, particularly in nondefense federal spending on intermediate services, in the second quarter of 2020.¹⁰ Such services include the subsidies provided for mass transits, hospitals, and the administration of the massive pandemic relief package.

In 2021, federal government spending is forecast to increase 8.0 percent, as the federal government continues to respond to the pandemic by allocating more funds to the different sectors of the economy. Federal spending is forecast to fall 5.0 percent in 2022, reflecting diminishing appropriation levels as well as the unwinding of the coronavirus relief packages.

⁹ See Coronavirus Aid, Relief, and Economic Security Act, CARES Act, Public Law 116-136, 116th Congress of the U.S.; The Consolidated Appropriations Act, 2021, Public Law 116-260; and several additional laws that provided a wide range of relief to businesses, hospital, states, and households.

¹⁰ Spending on nondefense intermediate services by the federal government increased an eye popping 432.8 percent in the second quarter of 2020, following a decline of 4.3 percent in the previous quarter. See U.S. Bureau of Analysis, *Table 3.10.1. : Percent Change From Preceding Period in Real Government Consumption Expenditures and General Government Gross Output*, <https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>; accessed September 25, 2020.

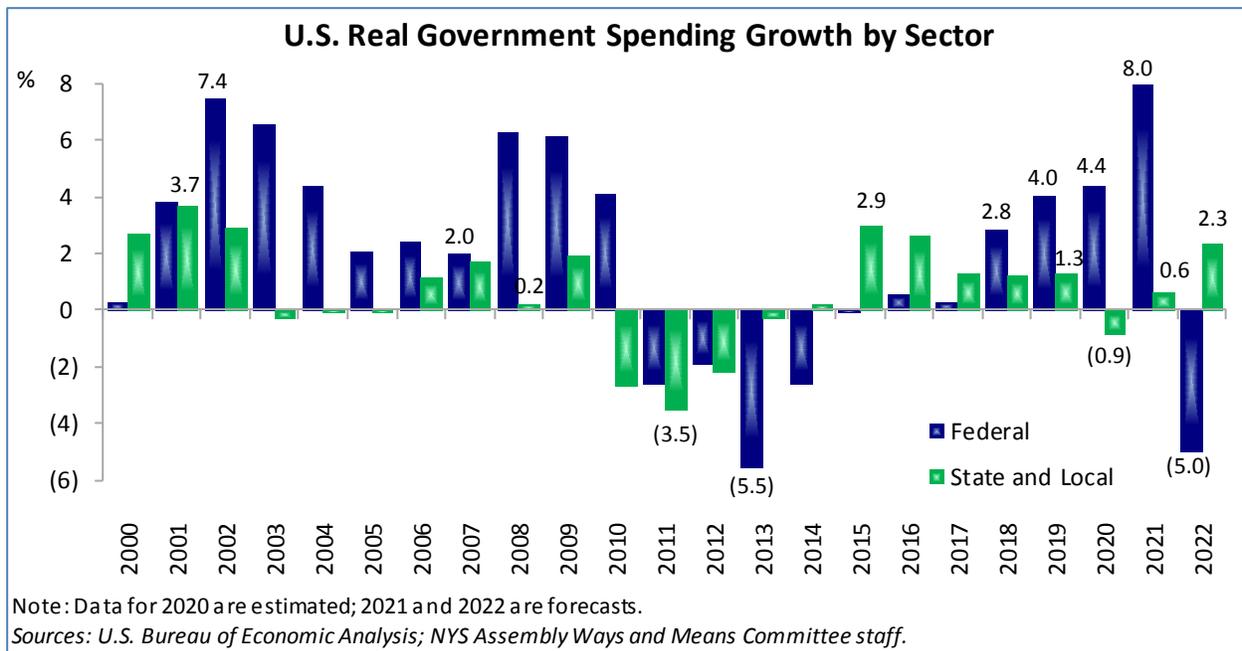


Figure 13

The federal government continues to amass debt. In federal fiscal year 2020, the total national debt accumulated was close to \$27 trillion as a result of continually accruing deficits. In 2020, the federal government unleashed trillions of dollars in stimulus payments to households, unemployment insurance assistance, loans to businesses, and grants to states. As a result, the federal budget deficit swelled to over \$3.1 trillion in fiscal year 2020 or to 14.9 percent of U.S. GDP (see Figure 14).¹¹ The budget gap in federal fiscal year 2019 was \$984 billion or 4.6 percent of GDP. With additional fiscal actions enacted in December 2020 and more fiscal stimulus programs expected in 2021, the federal budget deficit and debt will likely worsen further in fiscal year 2022 before improving in the future years. In fact, the Congressional Budget Office (CBO) projects that the federal budget deficit will be 10.3 percent of U.S. GDP in 2021.¹²

The federal government’s accrual of more debt raises concerns about federal spending on interest payments and the impact on economic growth over time. According to the CBO, rising debt will likely lead to higher borrowing costs and higher inflation.¹³ As more federal

¹¹ See U.S. Department of Treasury, Final Monthly Treasury Statement-Receipts and Outlays of the United States Government for Fiscal Year 2020 through September 30, 2020, and Other Periods, Bureau of the Fiscal Service, September 2020, <https://www.fiscal.treasury.gov/reports-statments/mts/current.html>.

¹² Congressional Budget Office, the Budget and Economic Outlook; 2021 to 2031, February 2021, <https://www.cbo.gov/publication/56970>.

¹³ Ibid footnote 9.

funds are steered toward interest payments, the federal government has less flexibility to address fiscal crises, resulting in a decline in the value of Treasury securities.

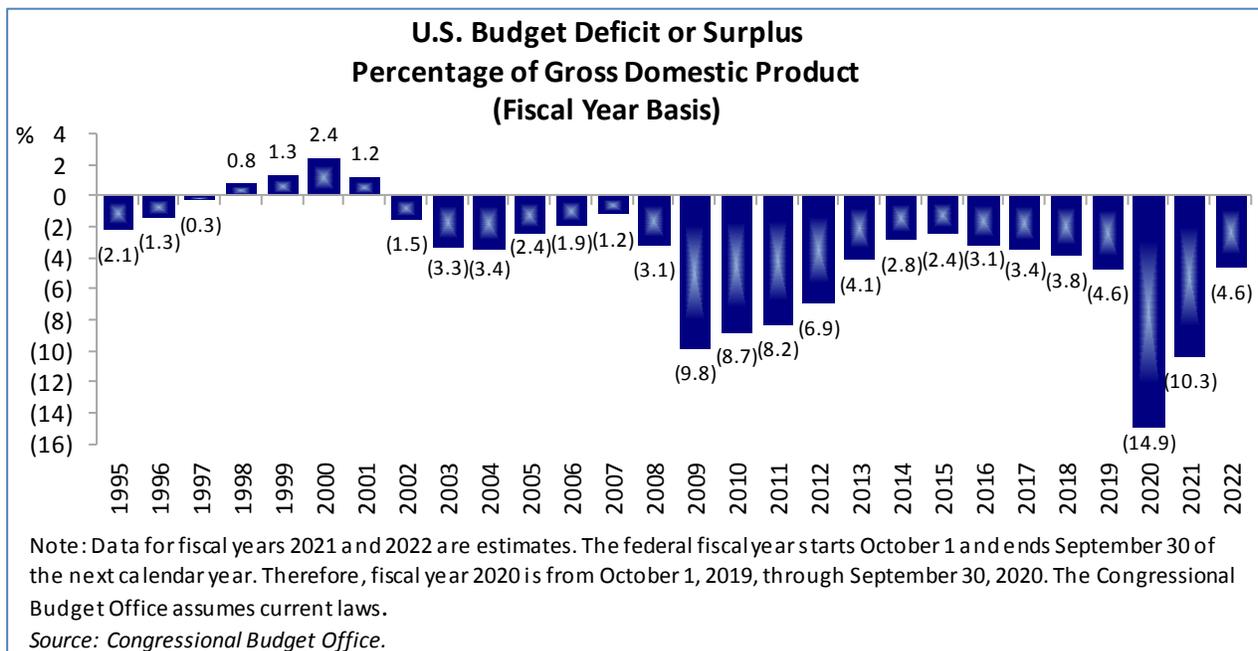


Figure 14

State and local government spending

The coronavirus pandemic has brought havoc to state and local government finances. As many states implemented stay-in-place orders, businesses shuttered, and employees were laid off, states' coffers suffered as revenue sources from consumers and businesses shrunk. As thousands of their residents became ill or died, many states utilized their reserved funds to ward off the virus while trying also to meet budgeted spending obligations. Absent unrestricted aid from the federal government, many states have had to revise their budgets, making spending cuts or borrowing in order to meet balanced budget requirements. Though local governments rely mainly on property taxes to fund expenses, they depend heavily on their respective state governments to fund education, public assistance programs, and health care services. Hence, local governments have also begun making cuts to their workforce and have delayed or abandoned construction projects.

In the second quarter of 2020, personal income tax collection fell 4.4 percent from a year earlier. Employment fell in local governments by 8.6 percent between March 2020 and May 2020 or by 1.3 million jobs at the height of the pandemic. State government employment

declined 4.7 percent or by 243,000 jobs between February 2020 at its peak and May. While some of these state and local government workers have returned to work, employment still remains below their recent peak as of January 2021. Sales tax collections declined 9.1 percent, as personal consumption spending, unadjusted for inflation, fell 9.6 percent in the second quarter of 2020 from a year ago. Corporate tax receipts fell 21.1 percent over the same period.

On the other hand, property tax collection rose 3.4 percent as the housing market has remained resilient.¹⁴ Of concern, however, is the economic impact on the commercial real estate market. Data already suggest the prices have begun to fall in commercial real estate, which accounts for more than one-half of state and local government property tax receipts, due to business closures and a move towards remote work.¹⁵

While personal income tax collections rebounded in the third quarter of 2020, sales tax revenues continued to decline. With the recent escalation of COVID-19 cases nationwide, the federal government extended unemployment benefits to millions of individuals through March 2021. The Biden proposal also includes assistance to many of the unemployed, which should help to support revenue in 2021.

State and local government spending fell significantly in the first half of 2020 as compensation fell with the reduction in workforce and as spending was reined in for public infrastructure. This trend persisted for the rest of 2020, resulting in state and local government spending decreasing an estimated 0.9 percent in 2020. President Biden's proposal includes aid to states that can be used to meet budget shortfalls and otherwise prop up their spending. With more meaningful assistance from the federal government, state and local government spending is predicted to increase by 0.6 percent in 2021 (see Figure 13).

State and local governments will likely prioritize core services such as K-12 education and health care once COVID-19 is under control. Furthermore, as revenue continues to improve, states and localities will align spending with receipts. Therefore, state and local government spending is forecast to increase by 2.3 percent in 2022.

¹⁴ Bureau of Economic Analysis, State and Local Government Current Receipts and Expenditures, Table 3.3, accessed on September 29, 2020, <https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>.

¹⁵ See Michael Pugliese and Hope Mathews, "State and Fiscal Outlook: An Update," *Special Commentary*, Wells Fargo, September 11, 2020.

Exports and Imports

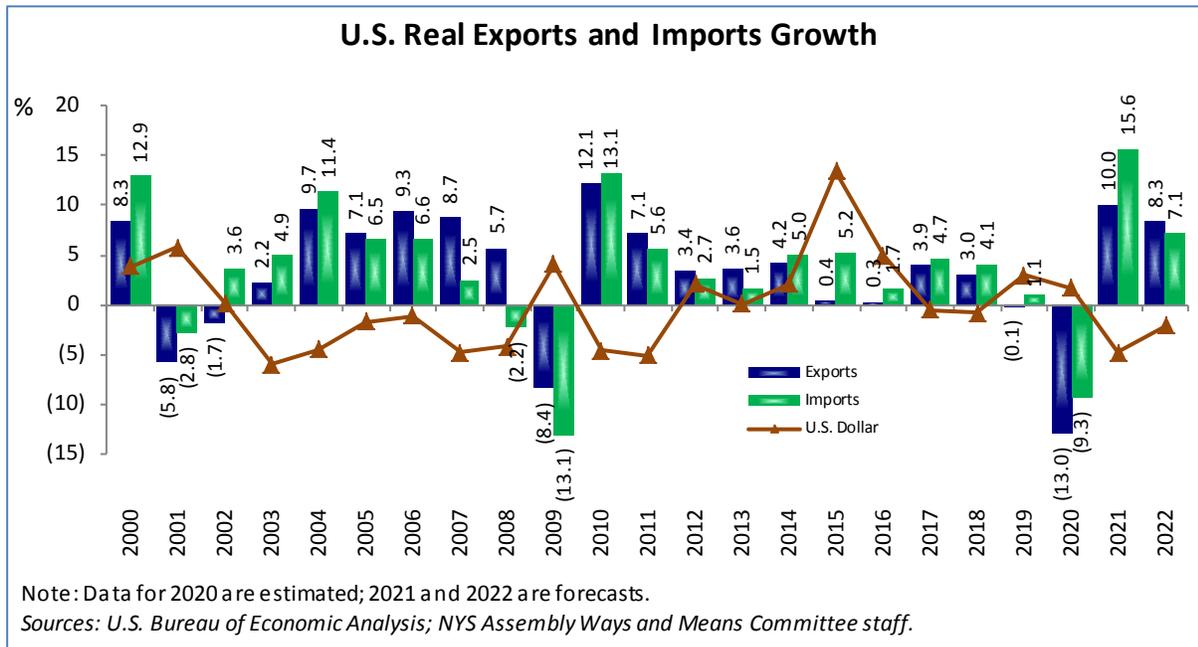


Figure 15

Key Point

- **The pandemic has brought the world into the deepest recession since the Second World War;**
- **World trade has recovered in recent months but only partially.**

Global growth and the value of the U.S. dollar are the two main factors that affect U.S. exports. If the economies of U.S. trading partners expand, their demand for U.S. exports will increase. If the U.S. dollar gets stronger, demand for U.S. exports will fall as U.S. goods become more expensive to foreigners. In addition, strong domestic demand in the U.S., all else equal, would support an increase in U.S. imports.

The COVID-19 pandemic has plunged the world economy to its deepest recession since the Second World War

The COVID-19 pandemic and the economic shutdown across the globe disrupted economic activities worldwide, and plunged the world economy into recession in 2020. According to the World Bank, the global economy is estimated to have contracted 4.3 percent

in 2020, after growing 2.3 percent in 2019. While the aggregate Gross Domestic Product declined by an estimated 2.6 percent in emerging-market and developing economies in 2020, it declined at a much faster rate in advanced economies, an estimated 5.4 percent. This is the deepest recession since the Second World War.¹⁶ The global economy is expected to rebound in 2021, but the speed of recovery remains uncertain.

Impact of COVID-19 pandemic on world trade

The COVID-19 pandemic has disrupted the global economy and brought the world into recession, which led to a sharp decline in international trade in the first half of 2020 (see Figure 16).



Figure 16

World merchandise exports fell 14.0 percent in the first half of 2020 from the same period in 2019. The steepest declines were recorded in North America (by 17.4 percent) and Europe (by 14.3 percent), while Asia was relatively less affected with an 8.7 percent decline.¹⁷ This is, however, milder than the collapse of international trade during the Great Recession, when world trade fell by 21.5 percent during the fourth quarter of 2008 and the first quarter of 2009 over the same period of the prior year. In the United States, exports of goods fell 13.2 percent in 2020 from 2019, while imports of goods fell 6.6 percent during this period. As

¹⁶ World Bank, Global Economic Prospects, January 2021,

¹⁷ World Trade Organization, World Trade Statistics.

the cross-border flow of services including international tourism shrank sharply, U.S. exports and imports of services declined by larger magnitudes in 2020, an estimated 20.4 percent and 21.8 percent, respectively.

U.S. dollar soared during the pandemic

In the early phase of the COVID-19 pandemic when uncertainty was mounting around the globe, investors shifted their investment to dollar denominated assets, which are considered as safe haven. As a result, the U.S. dollar appreciated strongly in early 2020, gaining 6.6 percent from January to April to the highest level in 17 years. Since then, the U.S. dollar value has been falling as the confirmed COVID-19 cases continue to rise in the U.S. (see Figure 17).

The value of the U.S. dollar will likely continue to depreciate as the vaccines have arrived and hopes of return to normalcy are rising and the pandemic started to subside. The dollar is forecast to decline 4.8 percent in 2021 and 2.1 percent in 2022, after gaining an estimated 1.6 percent in 2020.

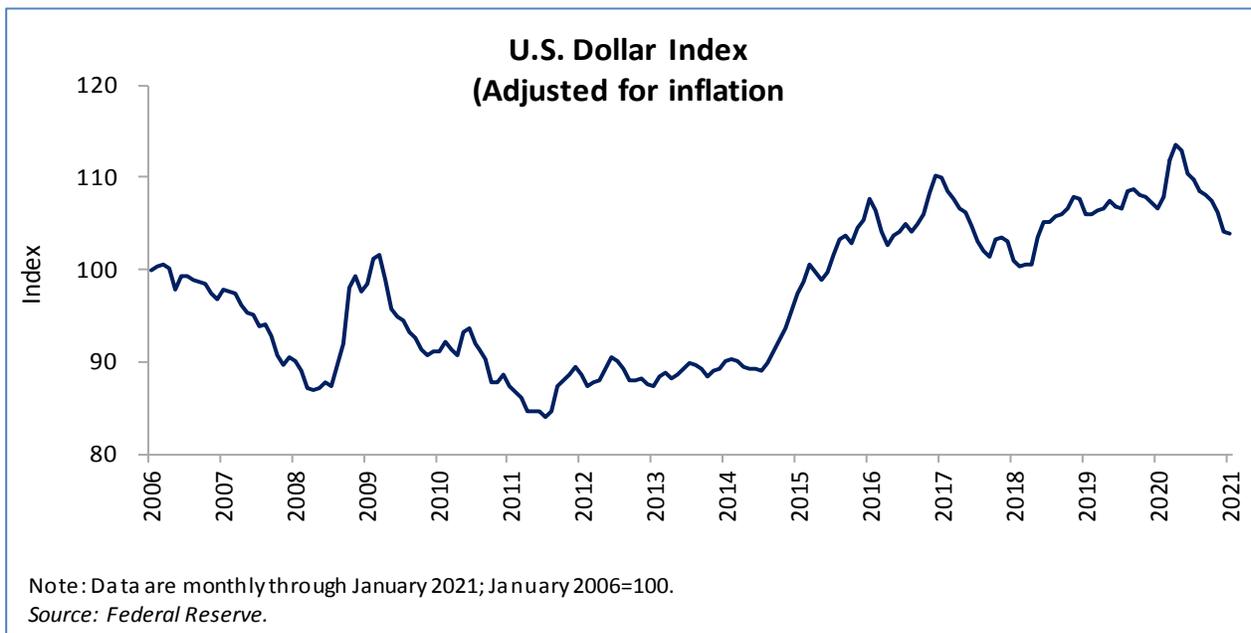


Figure 17

As the world is in a recession, U.S. exports have declined by an estimated 13.0 percent in 2020, after falling 0.1 percent in 2019. Similarly, imports are estimated to have fallen 9.3 percent in 2020, after increasing 1.1 percent in 2019. As U.S. exports declined faster than

U.S. imports, U.S. trade deficit increased from \$576.9 billion in 2019 to \$678.7 billion in 2020 (see Figure 18).

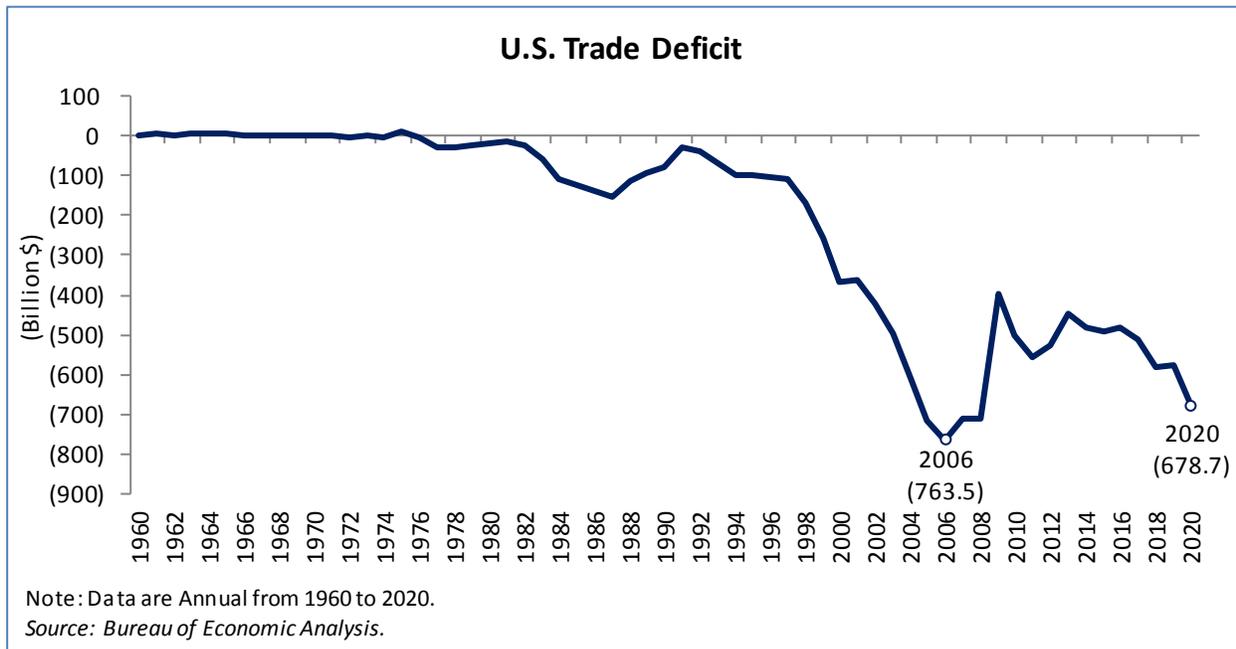


Figure 18

With the U.S. dollar expected to depreciate and the pandemic expected to subside globally in 2021, U.S. trade is likely to recover strongly in 2021. The resumed delivery of Boeing 737 max aircrafts will also help boost U.S. exports in 2021. With strong recovery expected in U.S. consumer and business spending, U.S. imports will also likely improve strongly in 2021. U.S. exports are forecast to grow 10.0 percent in 2021 and another 8.3 percent in 2022. Imports are forecast to grow 15.6 percent in 2021, before slowing to 7.1 percent in 2022 (see Figure 15).

Employment



Figure 19

Key Point

- **Employment growth over the forecast period will be determined mainly by the recovery in the service-providing industries that were disproportionately hard hit by the pandemic.**

In April of 2020 employment fell by 22.4 million jobs from its peak in February, as companies shuttered and sent nonessential workers home in response to state and local government directives to control the spread of the coronavirus. The unemployment rate jumped to 14.8 percent in the same month, up from 3.5 percent in February. During the Great Recession, job losses totaled 8.7 million from peak to trough over a twenty-month period. Industries that have been especially hard hit by the economic fallout include leisure and hospitality, retail trade, transportation and utilities, manufacturing, and other services. Employment remained 9.9 million jobs below its February 2020 peak in January 2021. While employment rose sharply in May and June as many businesses were allowed to reopen, the pace in job gains has since slowed actually falling in December 2020. As a result, U.S. payroll employment declined 5.7 percent in 2020, following an increase of 1.3 percent in 2019 (see Figure 19).

The jobs lost because of COVID-19 will not likely be fully recouped until the end of 2022. The issue lies mainly in the service-producing sector which has experienced far slower job gains than the pace they were shed. Not surprising, social distancing protocols make it quite difficult for some industries to gain a strong footing in the labor market. Many of these businesses relied on attendee capacity to turn a profit, whether at a restaurant, movie theaters, hotel, air travel or a concert. Many of these businesses have likely closed permanently. Hence, employment growth is forecast to increase to 2.4 percent in 2021 and by another 3.9 percent in 2022 as companies continue to weigh profitability and safely having their employees return to work.

The labor market recovery

The number of workers filing for unemployment insurance benefits for the first time surged to 6.9 million in the last week of March 2020 at the height of layoffs due to the coronavirus pandemic (see Figure 20). Since pandemic-related layoffs began, 78.9 million people have filed for benefits for the first time. Initial filings have dropped but remain elevated, significantly above the previous peak during the same week of 2009. However, about 4.5 million people are still collecting unemployment insurance benefits in the week ending January 30, 2021. At its peak in the first week of May 2020, more than 24.9 million people were collecting benefits once they were made available. Correspondingly, during the Great Recession, 6.6 million people collected benefits once they had been made available in the last week of May 2009, the peak.

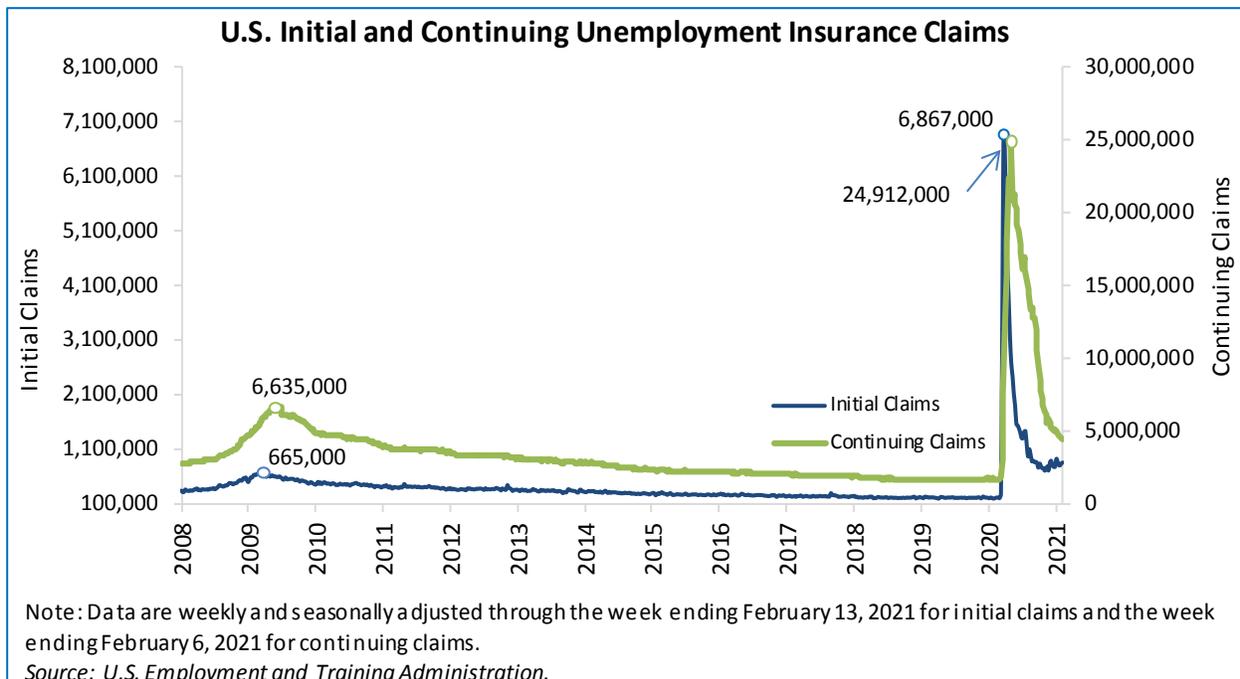


Figure 20

The U.S. economy went from operating at full employment in the past two years to experiencing record unemployment rates in 2020. The pace at which unemployment dissipates will be determined largely by the course of COVID-19 and the effectiveness of vaccines. Though the expectation is that economic activities will continue to advance, the unemployment rate is anticipated to remain elevated in 2021. On a yearly average basis, the unemployment rate is forecast to fall to 5.7 percent in 2021 from 8.1 percent in 2020, and fall to 4.5 percent in 2022 (see Figure 21). Underemployment, referring to the workers who are marginally attached to the labor force and those working part-time for economic reasons, spiked in April, reaching a historic high of 22.8 percent. The underemployment rate has since fallen but remains elevated.

Consistent with other labor market indicators, the employment-to-population ratio fell to a dismal 51.3 percent in April 2020. This was the lowest level ever recorded from data available back to the 1940s. A corresponding 60.2 percent of people in the labor force were employed, down from over 63 percent. While the labor force participation rate and the employment-to-population ratio have improved, they remain below the pre-pandemic levels. In addition, job openings and labor turnover data mirrored other indicators as stay-in-place orders became effective. Job openings and hires plunged, and the number of people quitting their jobs dropped in April 2020. Job openings remain below their pre-pandemic levels. Job gains have slowed, but are expected to improve going forward into 2021.

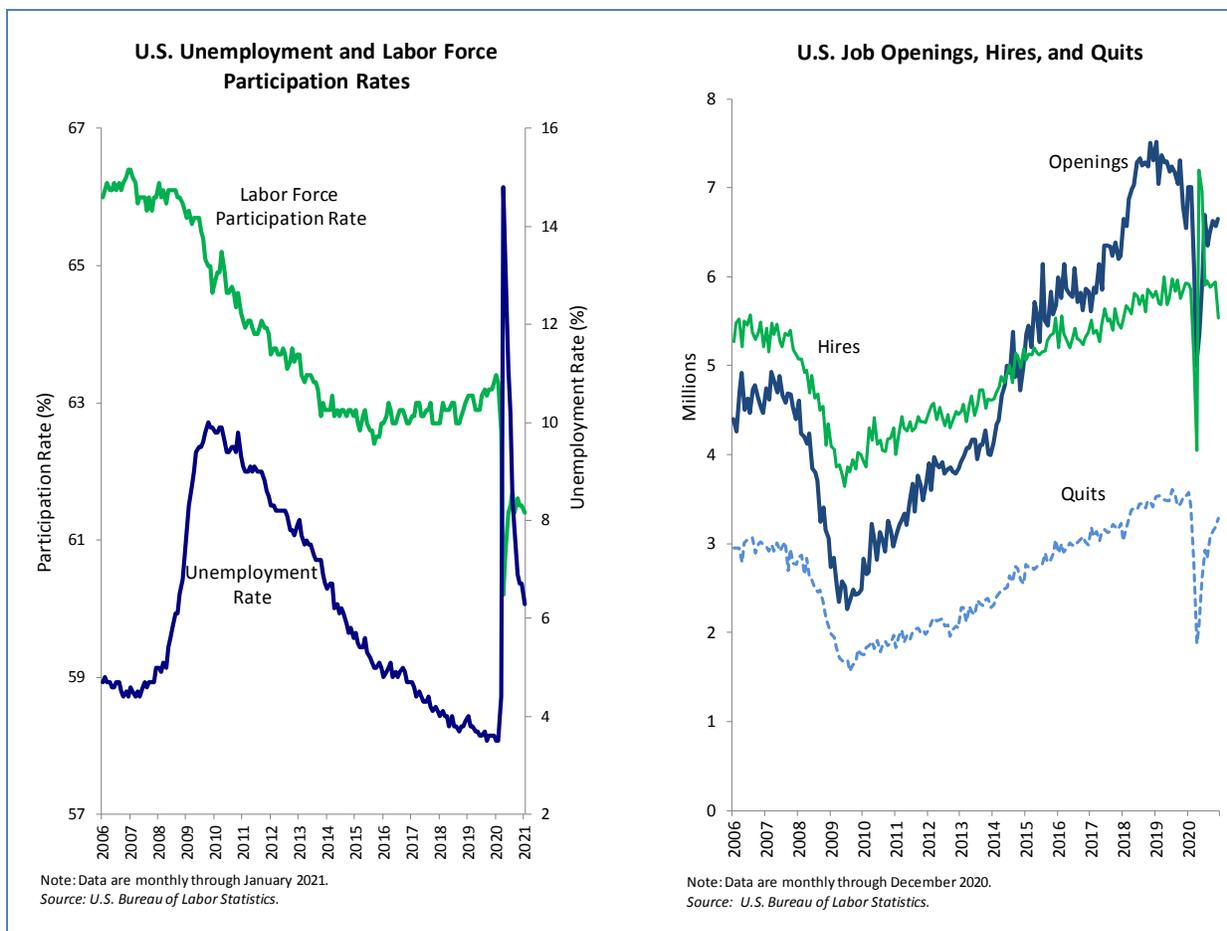


Figure 21

Sectoral allocation of jobs provides insights into future labor market

The recovery in employment will primarily depend on the service-providing sector which accounted for 88.7 percent of the total jobs lost in March and April of 2020. The leisure and hospitality industry lost 8.2 million jobs, of which 6.1 million jobs were associated with losses in food services and drinking places, and accommodations comprising the rest (see Figure 22). Many hotels and restaurants' employees remain on furlough or have lost their jobs because their companies have closed. Employment in leisure and hospitality is forecast to increase 5.9 percent in 2021 and 13.1 percent in 2022, after losing 19.4 percent in 2020.

The education and healthcare industry shed 2.8 million jobs and have recouped about 53 percent as of January 2021. The industry's employment fell an estimated 3.8 percent in 2020, and is projected to increase by 2.2 percent in 2021 and another 3.4 percent in 2022 (see Table 1). Even in a health care crisis many healthcare jobs were lost as the services that were not deemed essential and that required close contact fell under state and local

government directives. Similarly, schools and related services moved towards virtual learning and buildings were closed.

Retail trade was also hit hard losing 2.4 million jobs as stores from auto dealers to department stores sent employees home. Online stores have fared better, as many consumers shifted to shopping online while they were directed to stay at home. Retail trade employment has gained back more than eighty percent of its jobs lost. Employment in retail trade fell for the third year in a row in 2020, but is forecast to rebound over the forecast period, though remaining below pre-pandemic levels.

The industries that have fared better during the pandemic are those that have been able to transition quickly to virtual work. These industries have been generally high-wage, and contact with customers can also be done virtually. One of these is the finance and insurance industry which has already surpassed the 39,900 jobs lost in March and April 2020 (see Figure 22). Of all industries, it is the only one that posted positive employment growth in 2020. However, over the forecast period the industry will expectedly grow more slowly than others.

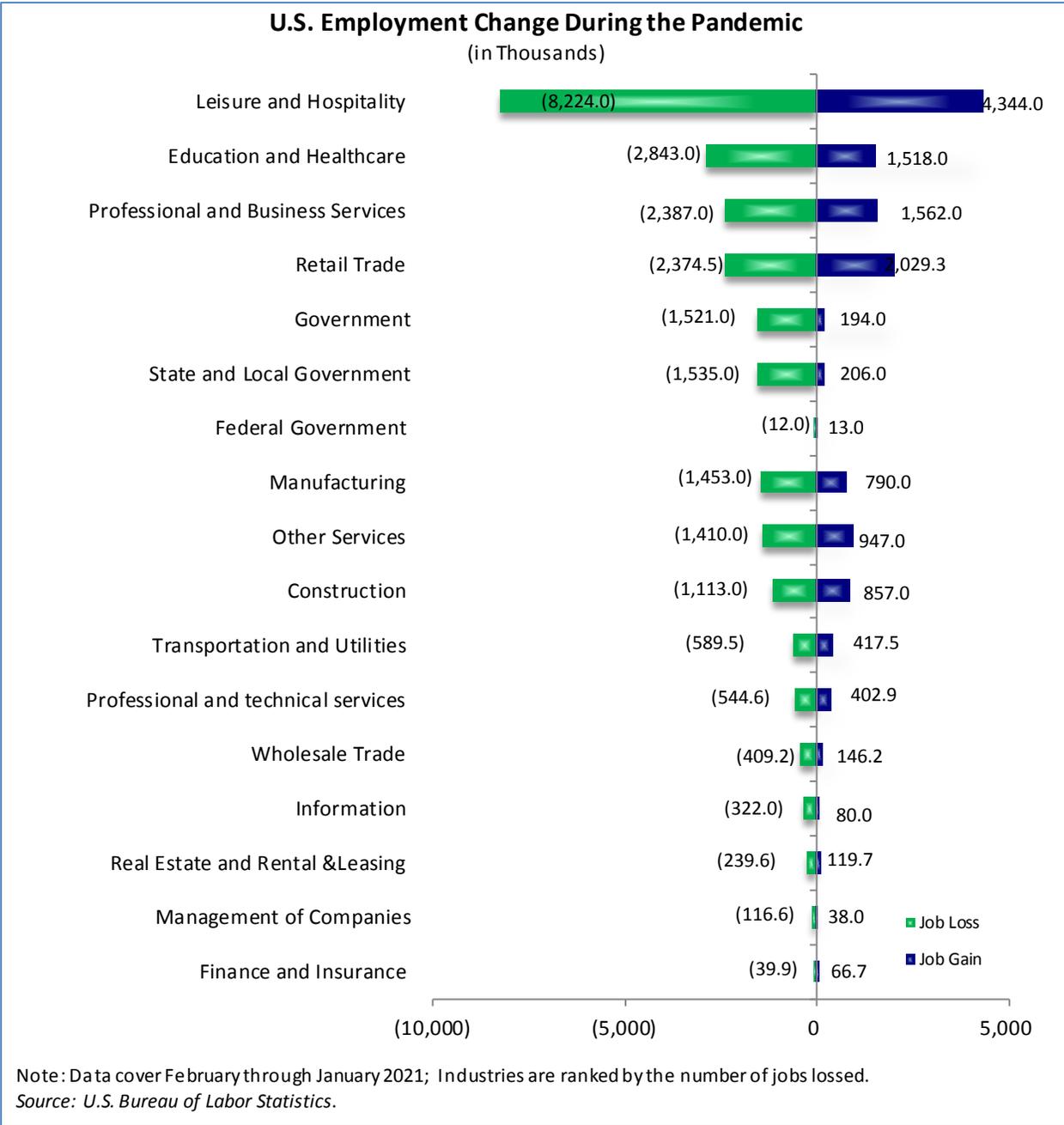


Figure 22

In February 2020, manufacturing employment was still 873,000 jobs lower than its pre-Great Recession peak; and construction employment was 1.4 million lower. Construction and manufacturing job losses during the pandemic were 2.6 million. Both industries have regained a total of 1.6 million jobs. With the job losses anticipated to outweigh gains, construction and manufacturing employment fell in 2020, rebounding in 2021 and 2022. The gains in construction employment are expected to surpass pre-COVID-19 levels.

Table 1

U.S. Employment by Sector (Percent Change)					
	Actual 2018	Estimate 2019	Forecast 2020	Forecast 2021	Forecast 2022
Total	1.6	1.3	(5.7)	2.4	3.9
Finance & Insurance	1.2	1.5	1.1	1.2	1.5
Professional Services	2.5	2.7	(1.1)	2.8	2.7
Transportation & Utilities ³	4.3	3.9	(1.9)	3.6	3.7
Management of Companies	2.9	1.9	(2.8)	1.6	2.6
Construction	4.6	2.8	(2.9)	3.2	4.4
Government	0.4	0.7	(3.1)	0.2	3.4
Federal	(0.2)	1.1	3.5	(1.5)	0.2
State and Local	0.5	0.7	(4.0)	0.4	3.9
Education and Health Care ²	1.9	2.2	(3.8)	2.2	3.4
Real Estate, Rental, & Leasing	2.9	3.0	(4.1)	2.6	3.6
Wholesale Trade	0.5	0.8	(4.2)	1.2	2.7
Retail Trade	(0.4)	(1.0)	(4.8)	3.2	1.4
Manufacturing ⁴	2.3	1.0	(5.5)	1.3	1.9
Information	0.9	0.9	(5.8)	(0.0)	2.5
Other Services ¹	1.4	0.6	(8.9)	3.4	3.9
Leisure & Hospitality	1.5	1.8	(19.4)	5.9	13.1
¹ Including administrative, support, and waste management services.					
² Includes only private employment. Public education and health care employment is included in the government sector.					
³ Transportation, warehousing, and utilities.					
⁴ Including mining and logging.					
<i>Sources: U.S. Bureau of Labor Statistics; NYS Assembly Ways and Means Committee staff.</i>					

Employment losses in the government sector will be driven by losses in state and local government employment. States have had to make cuts to their budgets because of the adverse economic impact of the pandemic on tax collections and the lack of assistance from the federal government. As part of these cuts, states and particularly local governments have reduced their workforce. Hiring for the 2020 Census boosted federal government employment in 2020. The federal government did not start shedding jobs until September 2020. With state and local governments expected to increase their number of workers, total government employment is forecast to rise 0.2 percent in 2021 then grow 3.4 percent in 2022 (see Table 1).

Personal Income

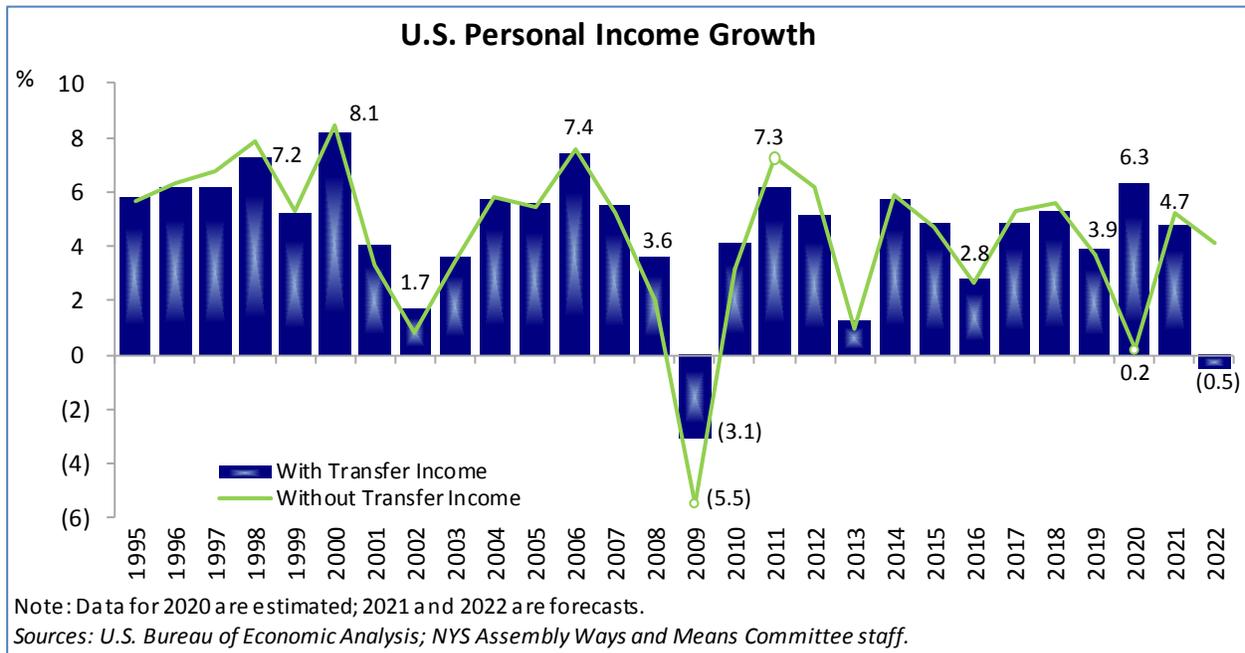


Figure 23

Key Points

- Changes in personal income have primarily been driven by pandemic-related changes in transfer income and this pattern will continue in 2021 and 2022;
- Wages and salaries, the largest component of personal income, will be supported by high-wage industries as these jobs are more adaptable to working from home than those in low-wage industries.

Personal income grew an estimated 6.3 percent in 2020, following a 3.9 percent increase in 2019, despite growth in wages and salaries, its largest component, being almost flat. The acceleration in growth was primarily attributed to massive transfer payments to individuals and businesses by the federal government as part of the response to stave off the economic fallout from the coronavirus pandemic. These transfer payments amounted to hundreds of billions of dollars that provided direct support to farmers and ranchers; provided forgivable loans to small businesses and nonprofit institutions to make payroll and cover other expenses; suspended the two percent reduction reimbursements paid to Medicare service providers; expanded unemployment insurance benefits; provided direct economic impact payments for

individuals; provided funds for coronavirus-related illness to hospitals and other healthcare providers; suspended student loan interest; and provided payments to supplement wages from the Disaster Relief Fund (see Table 2).¹⁸ Personal income with these transfer payments excluded grew only an estimated 0.2 percent in 2020 (see Figure 23). In 2021, personal income is forecast to increase 4.7 percent as wages and salaries accelerate and pandemic-related transfer payments to households and businesses continue. Personal income is projected to decline 0.5 percent in 2022 as transfer payments unwind.

Wages and salaries, the largest component of personal income, are estimated to have increased only 0.6 percent in 2020, following growth of 4.7 percent in 2019. The downward pressure on wages stems from high employment losses as measures taken to combat the coronavirus by state and local governments led to many individuals being laid off. However, the decline in wages and salaries growth is lessened as most of the job losses that occurred were in low-paying industries such as food services and accommodations; arts, entertainment and recreation; administrative and waste services; personal services, repair and maintenance; and all other services. These are industries that are not easily adaptable to social distancing and benefit little from working at home. Though high-paying industries also lost jobs, employees benefitted from being able to work from home. High-wage industries include finance and insurance, utilities, construction, professional and technical services, mining, and management of companies and enterprises. As a result, these high-wage jobs somewhat buffered the drop in wages and salaries from other industries. Thus, the outlook for wages and salaries is optimistic. In particular, wages and salaries are forecast to increase 6.4 percent in 2021 and rise by another 5.8 percent in 2022 as state and local governments continue to lift restrictions on businesses and more people return to or find work.

The massive transfer payments to households by the federal government largely account for an estimated 36.6 percent increase in personal transfer income in 2020, a record high. This is following a 5.2 percent increase in 2019. Households received \$300 billion in direct economic stimulus payments legislated by the Coronavirus Aid, Relief, and Economic Security (CARES) Act, of which \$273 billion was paid out in the second and third quarters of 2020 (see Table 2). The CARES Act provided support for three different unemployment programs. An outlay of \$268 billion was allocated for the Pandemic Unemployment Compensation Payments (PUC) which gave unemployment insurance recipients an additional \$600 per week in addition

¹⁸ See *Effects of Selected Federal Pandemic Response Program on Personal Income, August 2020*, U.S. Bureau of Economic Analysis, October 1, 2020, <https://www.bea.gov/recovery>; also see *The Coronavirus Aid, Relief, and Economic Security Act*, Public Law 116-136, 116th Congress of the United States.

to their regular state unemployment benefits. Temporary unemployment benefits were also given to people who would not have otherwise qualified for state unemployment insurance compensation such as the self-employed and gig workers – the Pandemic Unemployment Assistance Program (PUA). Under the Pandemic Emergency Unemployment Compensation (PEUC), a thirteen week extension of unemployment benefits was provided for people who had exhausted all regular and extended unemployment benefits. In addition, \$127 billion has been allocated to be distributed through the Department of Health and Human Services for healthcare services provided due to COVID-19.¹⁹ With additional fiscal stimulus anticipated for households again in 2021, transfer income is projected increase 3.1 percent.²⁰ As the various transfer payments dissipate, transfer income is forecast to plummet 17.4 percent in 2022.

Proprietors' income is estimated to have increased 2.3 percent in 2020, following growth of 4.5 percent in 2019. Proprietors' income would have declined significantly without the Paycheck Protection Program (PPP) which provided forgivable loans to assist small businesses and nonprofit institutions as they dealt with the economic fallout from the coronavirus pandemic. The Paycheck Protection Program and Healthcare Act authorized \$310 billion and the CARES Act authorized \$350 billion. In addition, as part of the CARES Act, farmers and ranchers received some help through the Coronavirus Food Assistance Program (see Table 2).²¹ In 2021, proprietors' income is projected to accelerate 7.0 percent as additional federal funds are pumped into the PPP to help struggling businesses.²² In 2022 as the impact of the PPP and food programs dissipates, proprietors' income is forecast to decelerate 1.5 percent in 2022.

Dividend income is estimated to have decreased 1.4 percent in 2020, following a 1.1 percent decline in 2019, as corporate profits fell. The economic fallout from Covid-19 adversely affected the corporate bottom line as many businesses suffered from the pandemic. Dividend income is projected increase 3.8 percent in 2021 as corporate profits are expected to recover and some companies take advantage of low interest rates, borrowing to make payouts.

¹⁹ See Effects of Selected Federal Pandemic Response Programs on Personal Income, 2020Q3 Advance, U.S. Bureau of Economic Analysis, October 29, 2020, <https://www.bea.gov/sites/default/files/2020-10/effects-of-selected-federal-pandemic-response-programs-on-personal-income-2020q3-adv.pdf>.

²⁰ See the Consolidated Appropriation Act of 2021, Public Law 116-260, 116th Congress of the United States; which includes an additional \$600 per person, extend unemployment benefits of up to \$300 per week through March 24, 2021, \$25 billion in emergency assistance to renters, and \$13 billion for nutrition assistance for food-insecure households.

²¹ Ibid footnote 18; see also the Paycheck Protection Program and Healthcare Enhancement Act of 2020, Public Law 116-139, 116th Congress of the United States, signed into law April 24, 2020.

²² Ibid footnote 20; the appropriation bill includes \$284 billion for the PPP.

In 2022, dividend income is forecast to grow 4.7 percent as corporate profits are expected to continue to gain.

With interest rates at record low levels, interest income decreased by an estimated 2.3 percent in 2020, after growing 2.2 percent in 2019. Over the forecast period, interest income is forecast to continue declining as interest rates are expected to remain low. A low interest rate environment has facilitated households, businesses, and government entities to refinance loans at lower rates, adversely impacting interest income. Particularly in 2022, as businesses begin to repay loans borrowed through the PPP and other short term loans that have help them through the pandemic, the amount of outstanding loans will likely decline. This will also push interest income lower.

Table 2

Distribution of Selected Federal Pandemic Relief Programs on Personal Income	
	\$ Billions
Coronavirus Aid Relief and Security Act (March 2020)	
Coronavirus Food Assistance Program	25
Paycheck Protection Program (PPP)	349
Increase in Medicare Reimbursements	17
Unemployment Benefits	268
Recovery Rebate: \$1200 per individual in qualifying households plus \$500 per child	293
Housing Support	12
Student Loan Forbearance	30
Total	1,260
Paycheck Protection Program and Healthcare Enhancement Act (April 2020)	
Paycheck Protection Program (PPP)	321
Coronavirus Response and Relief Supplemental Appropriations Act (December 2020)¹	
Food Assistance Programs	26
Recovery Rebate: \$600 per individual in qualifying households	166
Extended Unemployment Insurance Benefit of \$300 through March 24, 2021	121
PPP Loans Forgiveness	261
Emergency Rental Assistance	25
Total	599
American Rescue Plan (Biden Proposal, January 2020)	
Recovery Rebate: \$1400 per individual in qualifying households	465
Extended Unemployment Insurance Benefit of \$400 through September 2021	350
Expand Refundable Child Tax Credit	120
Support for Rent and Small Landlords	30
Total	965
¹ This is part of the Consolidated Appropriation Act of 2021, Public Law 116-260, December 27, 2020. Source: <i>Committee for a Responsible Federal Budget.</i>	

Corporate Profits

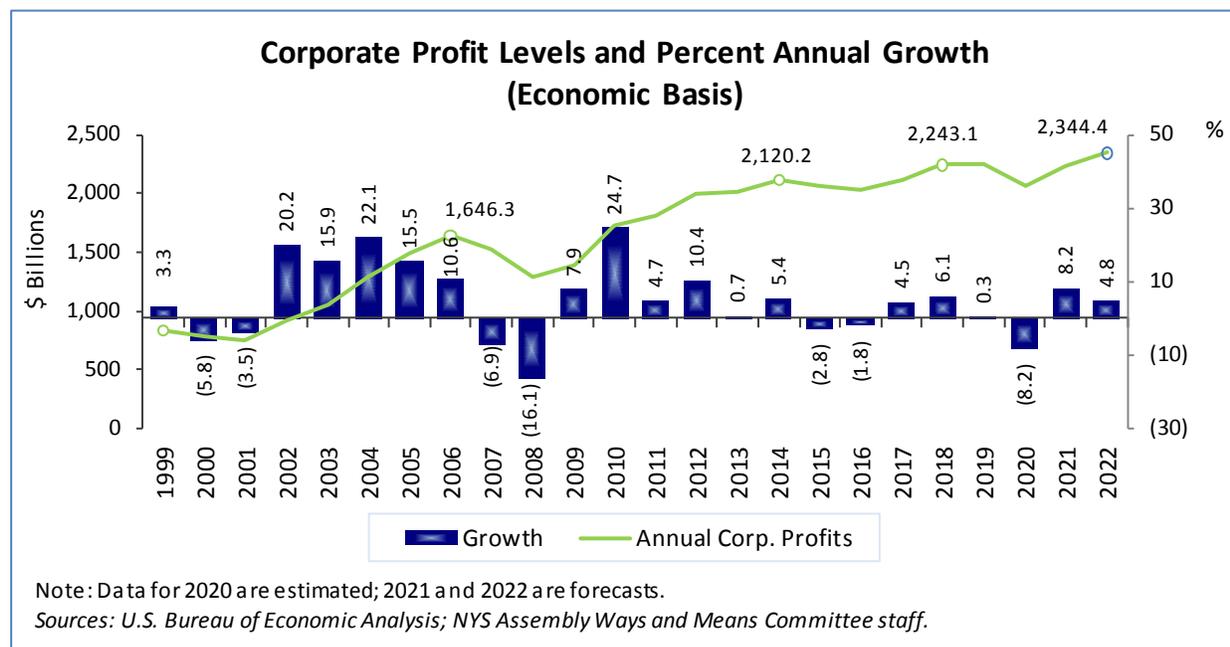


Figure 24

Key Points

- In 2020, corporate profits decreased by an estimated 8.2 percent, as sales revenue plummeted while wages and other production costs did not decline as much from the initial impact of the pandemic;
- With subsidies expected from the federal government, corporate profits are forecast to increase 8.2 percent in 2021 before decelerating in 2022;
- Corporate profits' share of national income has been declining over the last eight years, but will remain temporarily elevated during the first half of 2021 as a result of pandemic-related corporate subsidies from the federal government.

After two straight years of growth, corporate profits changed little in 2019 (see Figure 24). Weakening pricing power and sales growth were major contributing factors. Diminishing benefits from the Federal Tax Cuts and Jobs Act of 2017 were also responsible. In 2020, despite sizable subsidies from the federal government in the third quarter, corporate profits decreased by an estimated 8.2 percent. It was because revenues plummeted, while the costs of production, particularly wages and other labor costs, did not decline proportionately. With the economy forecast to recover and additional corporate subsidies expected from the federal

government, corporate profits are forecast to increase by 8.2 percent in 2021 before decelerating to a moderate 4.8 percent growth in 2022.

The share of corporate profits in national income trended upward after 1990, quickly regaining ground after each recession. It peaked at 14.5 percent in the fourth quarter of 2011, the highest on record (see Figure 25). As steady gains in wages and salaries have pushed up the share of labor income in recent years, the profits' share has been trending down over the last eight years, reaching an eleven-year low of 11.1 percent in the first quarter of 2020. It is expected to remain temporarily elevated during the first half of 2021 as a result of pandemic-related corporate subsidies from the federal government. The labor income share, in contrast, reached a 40-year high of 67.8 percent in the second quarter of 2020, but the spike was a mere reflection of a sharp decline in corporate profits in the midst of the pandemic. During the forecast period, the labor's share is expected to decrease toward the level seen in the recent decades, as businesses will likely be keen on managing labor costs to remain globally competitive once the pandemic is overcome.

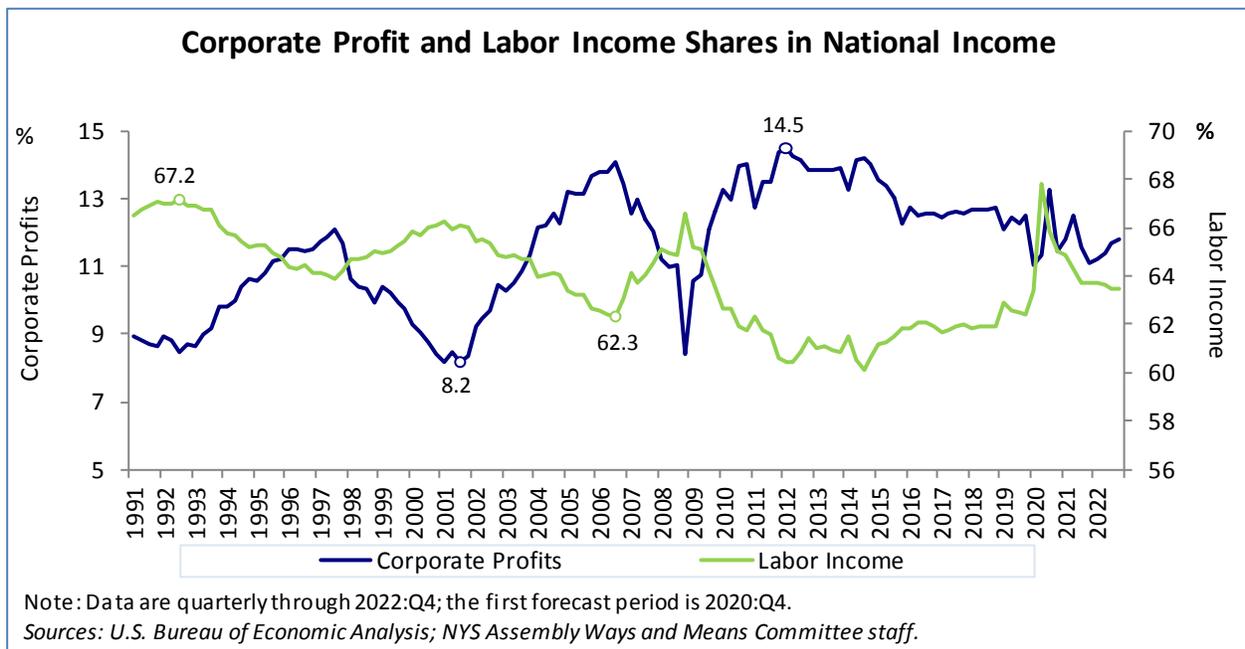


Figure 25

Consumer Prices

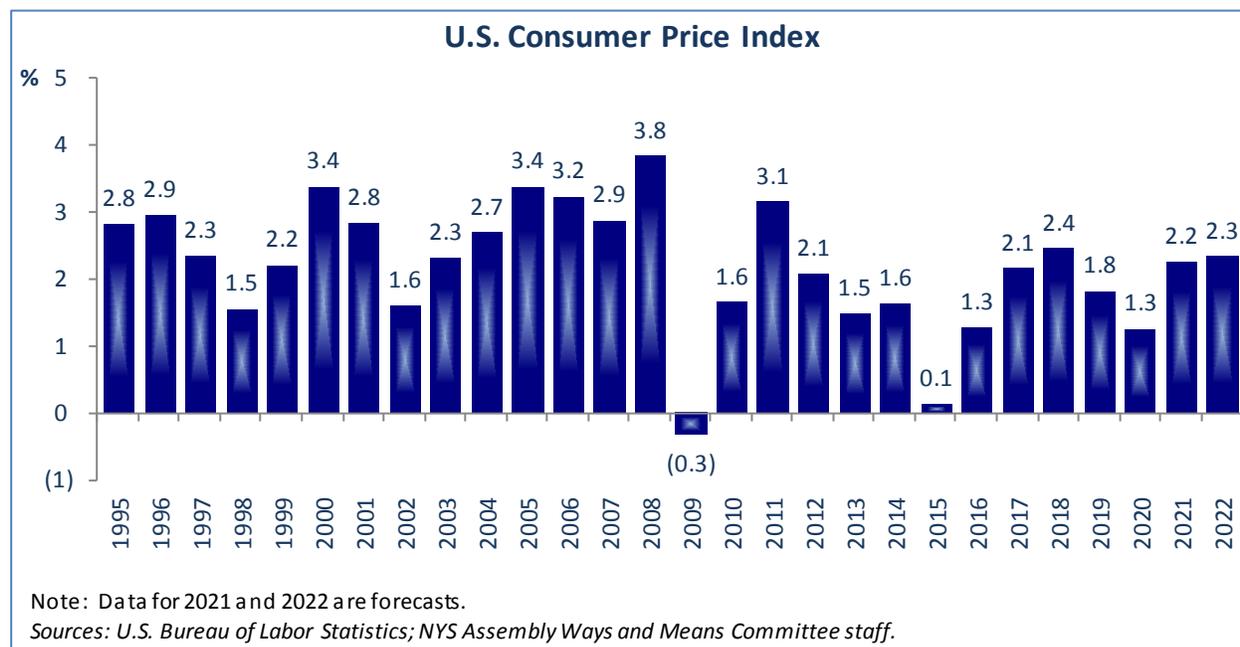


Figure 26

Key Points

- **Consumer prices are expected to advance moderately through 2022;**
- **After declining sharply in the first quarter of 2020, energy prices have risen but only partially so far.**

From 1991 to 2008, the Consumer Price Index (CPI) grew at an average annual rate of 2.7 percent. Following the Great Recession, the CPI grew on average 1.8 percent per year (see Figure 26). This downshift in overall CPI inflation was due to slower growth in the prices of food, medical care services, and shelter and a decline in energy prices.

As demand for goods and services plummeted during the initial months of the pandemic, prices of not only finished goods and services but also commodities including gas and oil fell sharply. Those prices have advanced from the initial retreats, but only partially to date. The services component of the CPI, which accounts for 63.7 percent of total CPI, was increasing at a steady pace until 2019, but its trend reverted to a slower rate in 2020 as demand for services declined sharply in the wake of the pandemic (see Figure 27). The nondurable goods component, which accounts for 27 percent of total CPI, dropped in early

2020, after moving almost sideways in the prior two years. It has since rebounded close to the pre-pandemic level. The durable goods component had been on a long-term downward trend, but the trend has reversed in recent months as demand has soared.

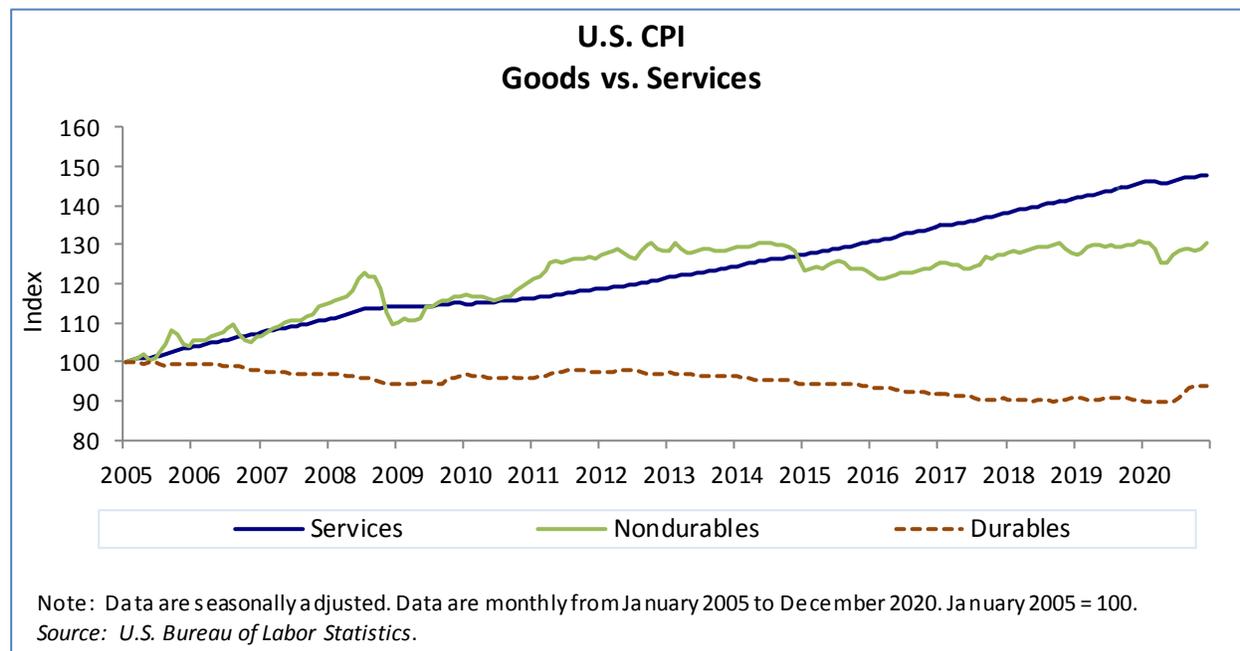


Figure 27

Although slack in the labor market and increased competition among firms for reduced business during the pandemic are putting downward pressure on consumer price inflation, there are also forces that put upward pressure on it. For example, as a result of the tariffs from recent trade frictions, importers have been passing higher costs on to consumers. Also, as the U.S. dollar value is expected to retreat from the recent highs, the prices of imported goods will likely advance faster in the forecast period. With the pace of global economic recovery expected to pick up in the second half of this year, the global prices of crude oil and other commodities will likely increase faster during the forecast period, leading to an uptick in the growth of the prices of consumer goods and services.

Overall, the CPI inflation is forecast to increase to 2.2 percent in 2021 and 2.3 percent in 2022, after declining to 1.3 percent in 2020, the lowest since 2015.

Equity Markets

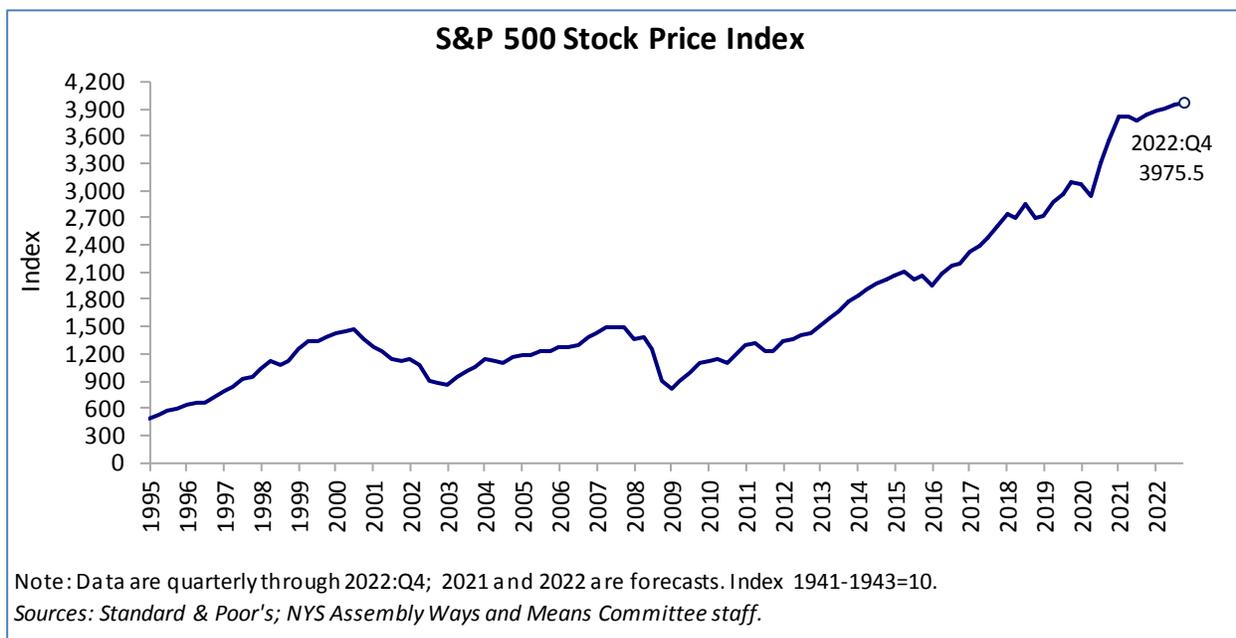


Figure 28

Key Point

- **Despite the near-term volatility, stock prices are forecast to continue to gain in the next two years, as interest rates are expected to remain at record low levels and recovery from the pandemic to continue.**

During the 10-year bull market in the 1990's, the S&P 500 Stock Price Index had risen 17.4 percent on an annualized monthly average basis prior to a 56 percent crash in 2000. The price/earnings ratio (P/E) ratio, which hovers around the high teens in normal times, reached 28 prior to the crash of 2000. The 2003-2007 bull market ended with a 51 percent crash after gaining 13.9 percent on an annualized monthly average basis (see Figure 28).

In March 2020, the S&P 500 Stock Price Index plunged 19.1 percent from its January pre-pandemic peak. From there, stock prices have steeply rebounded, betting initially on the hope that the virus would miraculously recede with the arrival of warm weather, later on the belief that massive fiscal stimulus packages would mend the economic wounds, and more lately betting on the promise of a quick discovery of a vaccine. In August, the S&P 500 Index rose to a record high level, gaining 27.9 percent from its pandemic low. As a result, the P/E ratio rose to around 29 in August.

In September and October 2020, investors became increasingly wary as the COVID-19 infection cases continued to rise in many regions of the country, and as a result stock prices suffered from increased volatility and retreated from the August highs. With renewed optimism among investors from the discovery and emergency authorization of vaccines and the second round of fiscal stimulus in December 2020, stock prices have been advancing further.

Despite the near-term volatility and investors' worry about increasing disconnect between the equity valuation and economic fundamentals, stock prices are forecast to continue to gain in 2021, as interest rates are expected to remain at record low levels and economic recovery from the pandemic to continue. But as inflation expectations start kicking in, driving interest rates higher, gains in stock prices will likely slow in 2022, with the yearly average gain in the S&P 500 Stock Price Index forecast to slow to 3.0 percent, after increasing 10.5 percent in 2020 and 18.4 percent in 2021.

Monetary Policy

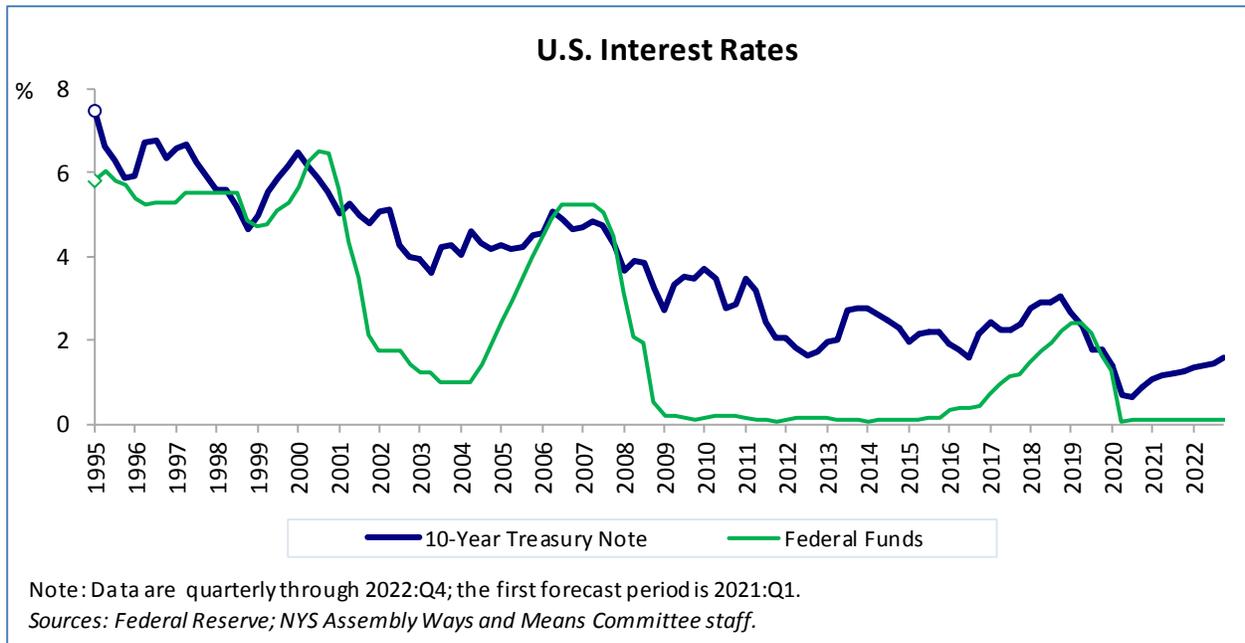


Figure 29

Key Points

- **The federal funds rate is expected to remain near zero percent in the next few years;**
- **Due to the Federal Reserve’s quantitative easing, the 10-year Treasury yield is expected to remain relatively low in the next two years, although it will likely rise gradually as inflation expectations pick up.**

The Federal Reserve has responded to the COVID-19 pandemic with a revival of the Great Recession-era policy tools: it slashed the federal funds rate, the overnight interbank interest rate that it controls, to near zero percent and pumped liquidity into the market through various lending facilities to support the smooth functioning of financial markets. The Fed is expected to maintain the near zero percent target policy until the economy is near full employment and inflation firmly exceeds its 2 percent target, which is not expected to occur in the next two years (see Figure 29). In an attempt to encourage spending by consumers and businesses by keeping longer-term interest rates low, the Federal Reserve has also aggressively implemented the quantitative easing programs that purchase term Treasury securities as well as mortgage-backed securities.

With slack in the labor market and increased competition among firms for reduced business, inflation expectations will likely remain low in 2021, putting downward pressure on the yield on U.S. Treasury securities. On the other hand, the projected sharp increase in federal budget deficits puts upward pressure on the Treasury yield. In the near-term, the downward pressure will likely dominate, causing the yield on ten-year Treasury notes to remain low in tandem with low short-term rates. As economic recovery continues and mounting federal debts weigh on the bond market, inflation expectations will likely start kicking in, gradually driving interest rates higher in 2022. On a yearly average basis, the ten-year yield is expected to rise to 1.5 percent in 2022 from 1.2 percent in 2021 and 0.9 percent in 2020.

NEW YORK STATE ECONOMIC FORECAST ANALYSIS

New York is the third largest state economy in the United States (behind California and Texas), with a Gross Domestic Product of \$1.5 trillion in 2019.²³ The State’s total non-farm payroll employment is 9.5 million, spread over all sectors, with the highest concentrations in education and health, government, and finance and insurance.

Both employment and wages fell as the pandemic triggered a recession

New York State employment had been growing steadily since the end of the Great Recession until the pandemic hit in March. The private employment in the State was at a record-high level prior to the pandemic. The same was also true for wages. But COVID-19 hit New York particularly hard in early 2020. As strict control measures were implemented to contain the spreading of the disease, economic activity was brought to a near standstill and record layoffs ensued.

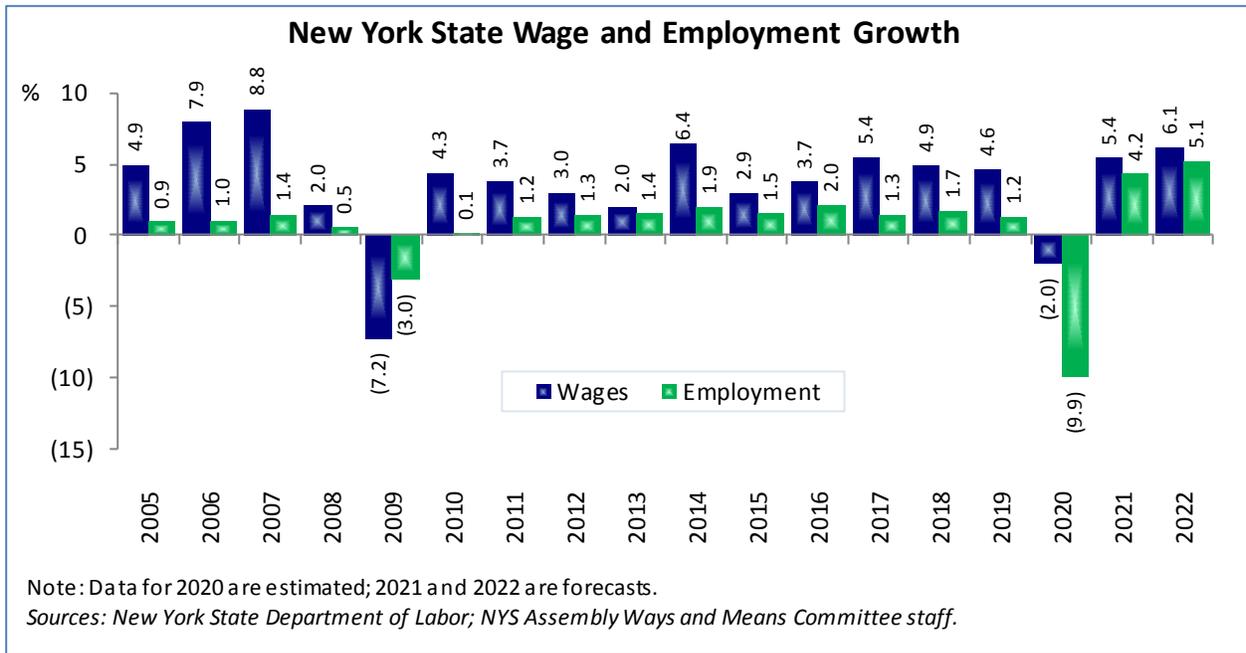


Figure 30

²³ U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Accounts, <http://www.bea.gov/regional/index.htm>, last accessed: October 1, 2020.

Employment and wages in the State fell sharply during the early phase of the pandemic and have since been recovering, although they are well below a full recovery. Both employment and wages are forecast to rebound in 2021 and 2022 as the pandemic is controlled and the economy recovers from its recession (see Figure 30).

Employment

Before the COVID-19 pandemic, the New York State economy had been benefitting from the continued recovery in the national economy since the Great Recession. Total nonfarm employment in the State had been growing continuously for ten years from 2010 to 2019. However, as non-essential workers and businesses were temporarily suspended to slow the spread of the disease, 1.9 million jobs were lost in the State from February 2020 to April 2020. On a yearly average basis, total nonfarm employment in the State is estimated to have fallen by 9.9 percent in 2020.

Employment started to recover with the reopening of businesses in June 2020. Although it remains well below the previous peak, with vaccinations under way, employment in all sectors is expected to continue to recover throughout the forecast period. Nonfarm employment is forecast to grow 4.2 percent in 2021 and another 5.1 percent in 2022.

Among all sectors, leisure and hospitality and retail trade were hit the hardest by the pandemic, as the majority of jobs in these sectors were considered non-essential and were subjected to strict regulations. Leisure and hospitality lost a significant number of jobs during the pandemic due to social distancing regulations, travel bans and mandated closures of nonessential businesses. Employment in this sector fell more than 60 percent from February 2020 to April 2020. Although employment in this sector has since rebounded strongly, it is estimated that the sector lost 32.2 percent of its employment in 2020. As travel services resume, employment in this sector is expected to grow strongly by 13.1 percent in 2021 and 18.2 percent in 2022.

Even before the pandemic, employment in the retail trade sector fell for two consecutive years from 2018 and 2019 due in part to the increase in online sales. With retail stores closed during the pandemic, even more people have turned to online shopping. Online sales accounted for less than 5 percent of total retail sales in the first quarter of 2012. This share rose to 11.8 percent in the first quarter of 2020 before jumping to 16.1 percent in the second quarter of 2020 after the pandemic hit. Shares of online sales dropped slightly to 14.3 percent in the third quarter of 2020 as businesses reopened.²⁴ As E-commerce is less labor intensive than physical store retailing, rising online sales have had a net negative effect on retail

²⁴ U.S. Census Bureau, "Quarterly E-Commerce Report," Third Quarter 2019, https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf, last accessed: October 10, 2020.

trade employment. Many retailers have filed bankruptcies or closed stores in response to the pandemic. As a result, employment in this sector is not expected to rebound as strongly as the leisure and hospitality sector. Employment in the retail trade sector is estimated to have fallen 12.2 percent in 2020, and expected to grow 5.3 percent in 2021 and another 4.4 percent in 2022.

The construction sector also lost a significant number of jobs during the early phase of the pandemic, losing more than 40 percent from February to April of 2020. Employment in this sector, however, recovered quickly as activities in residential market rebounded strongly following the first wave of the pandemic. Employment in the construction sector is estimated to have fallen 10.7 percent in 2020 and forecast to recover throughout the forecast period (see Table 3).

Table 3

New York State Nonfarm Employment by Sector (Percent Change)					
	Recession 2009	Actual 2019	Estimated 2020	Forecast 2021	Forecast 2022
Total	(3.0)	1.2	(9.9)	4.2	5.1
Leisure & Hospitality	(0.9)	0.1	(32.2)	13.1	18.2
Other Services ¹	(5.0)	2.3	(16.6)	6.4	7.4
Retail Trade	(3.8)	(1.7)	(12.2)	5.3	4.4
Transportation & Utilities ²	(4.2)	3.7	(11.5)	5.0	6.8
Construction	(10.0)	1.4	(10.7)	5.0	4.3
Wholesale Trade	(6.3)	(1.2)	(9.7)	4.5	4.0
Management of Companies	(0.7)	0.4	(9.5)	4.7	5.1
Manufacturing ³	(10.9)	(0.9)	(8.5)	1.5	1.9
Real Estate, Rental, & Leasing	(3.8)	0.4	(6.8)	4.1	4.2
Education & Health Care ⁴	1.7	3.5	(5.6)	4.3	3.6
Information	(4.0)	0.7	(4.3)	1.7	1.9
Professional Services	(4.3)	1.3	(3.1)	2.6	2.2
Government	(0.2)	0.5	(2.9)	0.9	4.2
Finance & Insurance	(7.2)	1.0	(1.3)	1.3	1.1
Note: Industries are ranked by 2020 employment growth; rankings are based on two decimal places.					
¹ Including administrative, support, and waste management services.					
² Transportation, warehousing, and utilities.					
³ Including mining.					
⁴ Includes only private employment. Public education and health care employment is included in the government sector.					
Sources: NYS Department of Labor; NYS Assembly Ways and Means Committee staff.					

The education and health care sector, the largest in the State, was the only sector that gained employment during the Great Recession, supported by the growing demand for healthcare from aging baby boomers. This sector has not been immune from the pandemic, as many healthcare facilities and schools were closed or saw reduced operations. Employment in the education and health care sector is estimated to have fallen by 5.6 percent in 2020 and forecast to rebound in 2021 and 2022.

Personal Income and Wages

Personal income in New York State grew 4.1 percent in 2019, after growing 4.0 percent in 2018 driven mainly by wage growth. Although the pandemic and social distancing have brought economic activity to a near standstill, personal income is estimated to have grown strongly by 5.4 percent in 2020 due to enormous transfer payments related to the federal government response to the pandemic. Without such payments, personal income would have fallen by 1.9 percent in 2020. Personal income is forecast to grow 4.9 percent in 2021 as additional transfer payments have been distributed to individuals from the second stimulus package that was implemented in December 2020 and yet another fiscal package is expected in 2021. Personal income growth is forecast to slow to 0.5 percent in 2022 as various government support programs come to an end (see Figure 31).

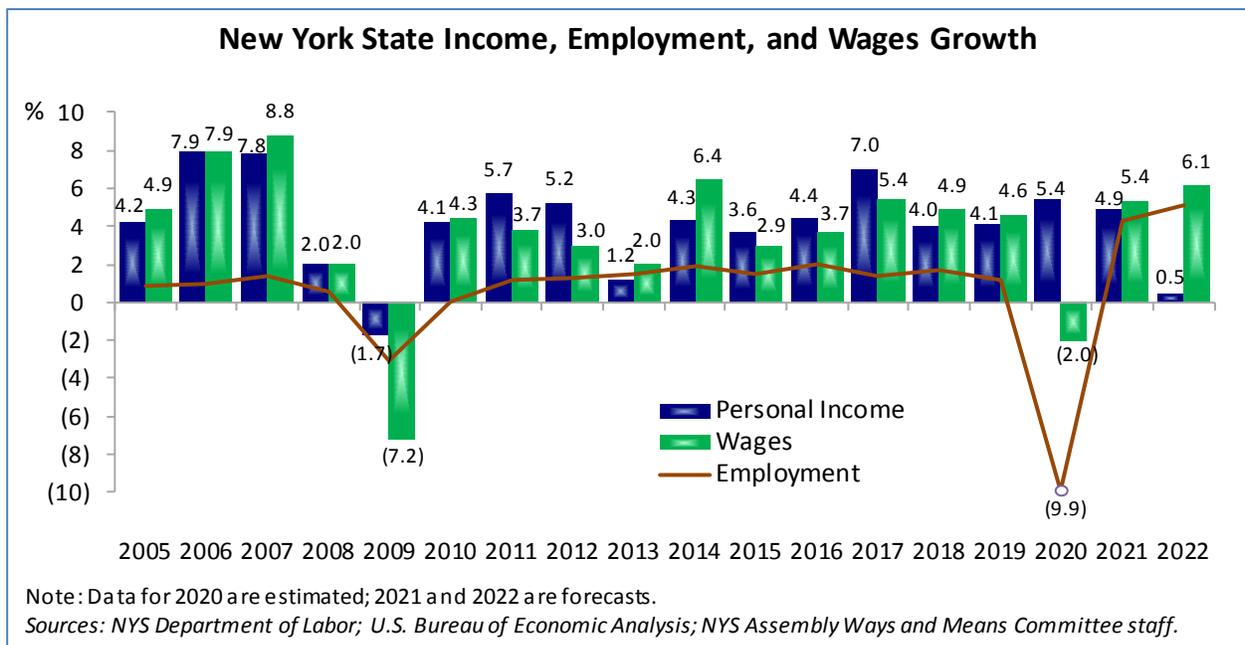


Figure 31

Wages account for about 52 percent of New York State’s personal income and wage growth remains key to the State’s fiscal outlook. The State has typically benefitted from strong growth in variable wages (bonuses) in the financial sector, as their increases help drive total wage growth. Recently, steady employment growth had contributed to steady growth in base wages. However, this has changed during the pandemic.

Much of New York State’s variable compensation is concentrated in the financial sector, particularly the securities industry which accounted for about one third of the total variable wages paid in the State in 2019. In 2007, before the Great Recession, the percentage of the State’s total variable compensation paid in the securities industry was over 50 percent.

The COVID-19 pandemic has triggered unprecedented layoffs and furloughs. As a result, both variable wages and base wages are estimated to have declined in 2020. However, the rate of decline in wages has been much slower than in employment, as employment losses during the current pandemic have been disproportionately concentrated in lower-paying industries such as leisure and hospitality. In addition, unlike during the Great Recession years, wages in the finance and insurance sector are estimated to have increased in 2020 as the industry has benefited from record low interest rates and its fee revenues from trading and underwriting have increased sharply. After growing 4.6 percent in 2019, total wages are estimated to have fallen by 2.0 percent in 2020, with base wages falling 1.3 percent and variable wages declining by 6.8 percent. Wage growth is forecast to rebound to 5.4 percent in 2021 and another 6.1 percent in 2022, driven by growth in both base wages and variable wages, as overall economic growth is projected to accelerate (see Figure 32).

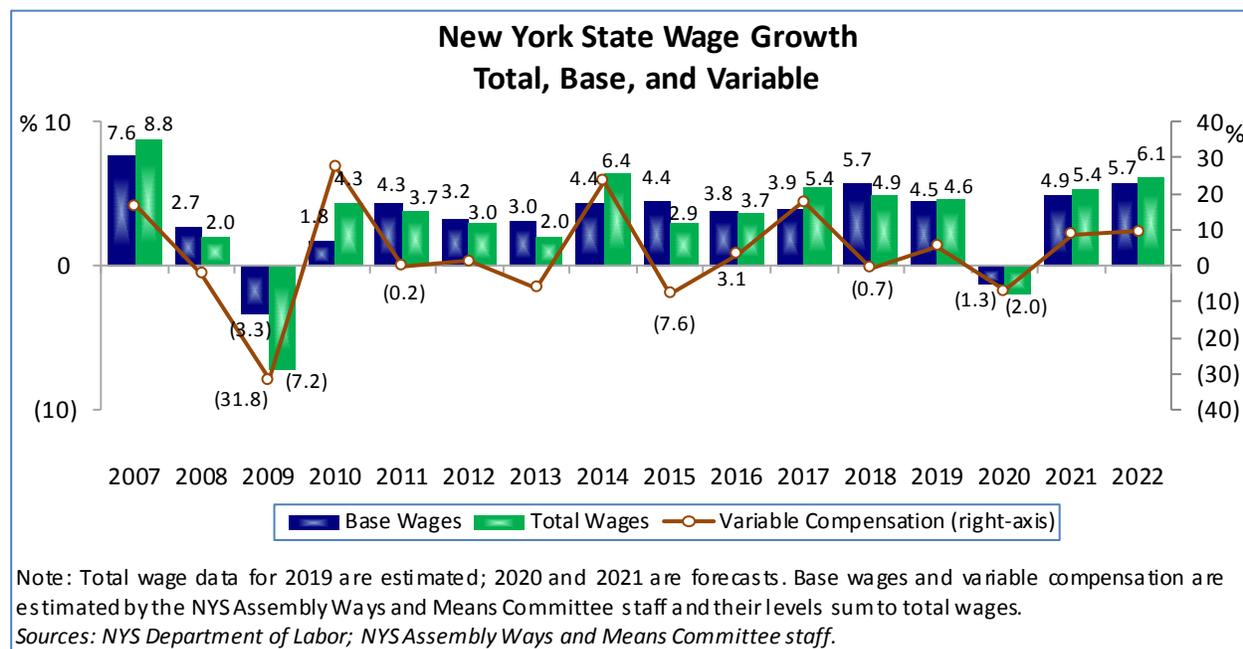


Figure 32

After growing 7.2 percent in 2019, personal transfer income, which is comprised of transfer receipts from the government and businesses, jumped 41.5 percent in 2020 as receipts from the federal government rose significantly due to various government assistance programs

designed to help those impacted by the COVID-19 pandemic. Personal transfer income is forecast to grow another 5.5 percent in 2021 due to the additional fiscal stimulus programs. Transfer income in the State is forecast to fall 11.6 percent in 2022 with the government assistance programs expected to fade out (see Figure 33).

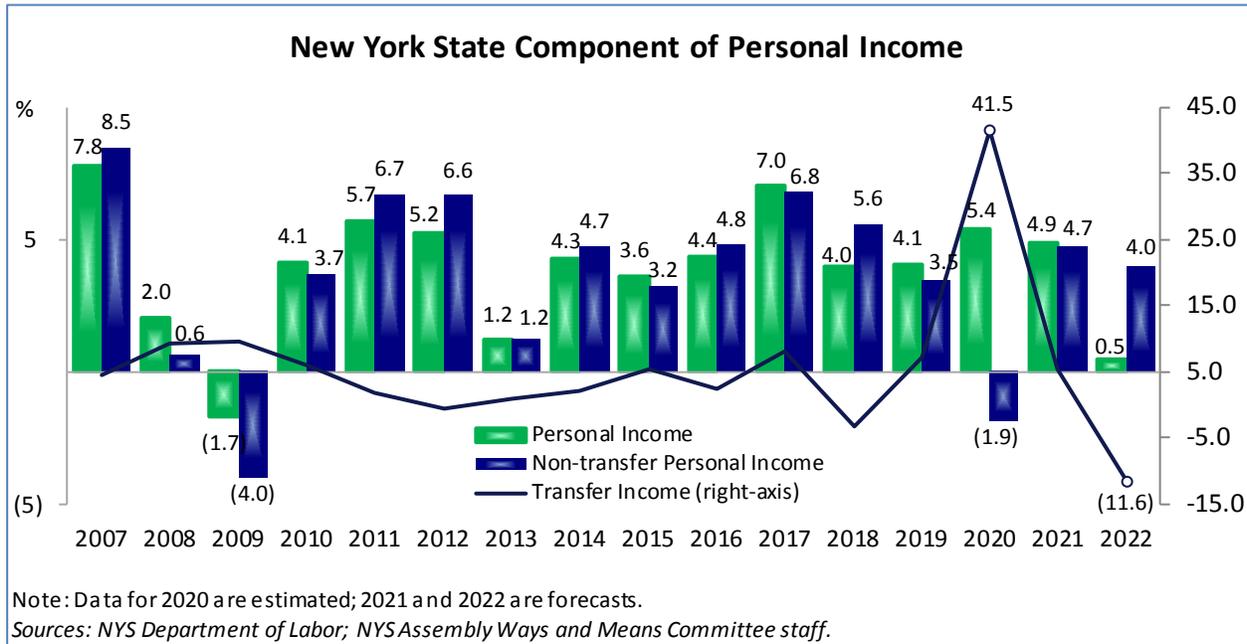


Figure 33

All other components of personal income fell in 2020. Dividend, interest and rental income, the second largest component of personal income at about 17 percent, is estimated to have decreased by 1.5 percent in 2020 as interest rates fell to record low levels and the recession caused corporate profits and dividend payments to decline. Dividend, interest and rental income is forecast to grow throughout the forecast period as corporate profits are expected to improve and interest rates start rising.

Capital Gains

Capital gains are generally contingent upon the performance of the financial and housing markets and the overall economy. Gains are only realized when an asset is sold for more than its acquisition cost. Households' assets may include their homes, other real estate, stocks, government and corporate bonds, mutual funds, and privately owned businesses. Upon selling an asset, households may be liable to pay taxes on realized gains or, conversely, they may be entitled to a tax deduction in case of a capital loss. Consequently, they may choose to advance or delay the disposition of an asset depending on the economic outlook or announced change in the tax environment. For example, if households anticipate higher future tax rates on capital gains realizations, they have an incentive to exercise the option of taking gains in the year before the higher tax rates become effective. Conversely, if households expect lower rates in the future, they have an incentive to delay realizing capital gains until after the rates are implemented.

As investors reacted to policies regarding tariffs and varying economic indicators, realized capital gains grew by an estimated 0.1 percent in 2019 or to \$99.9 billion, following an estimated increase of 3.5 percent in 2018. The onset of the coronavirus pandemic sent financial markets into a tailspin resulting in declines in the Standard and Poor's 500 Index in the first and second quarters of 2020. Consumer and business sentiments dropped, corporate profits fell, and many economic activities came to a near standstill.

As state and local governments began lifting mandates, and the federal government poured trillions of dollars in assistance to households and companies; the financial market responded positively. In fact, equity prices grew 65.5 percent in the third quarter of 2020, then another 31.1 percent in the fourth quarter as measured by the S&P 500 Index. Meanwhile, the housing market held up well supported by low mortgage rates even as banks tightened lending standards. With interest rates at historic lows, investors flocked to the stock markets seeking higher returns. In addition, high market volatility from uncertainty surrounding the efficacy of vaccines for COVID-19, the outcome of the elections, and the outlook of fiscal policy resulted in much higher than normal trading volumes in the stock market. Increased trading volume was indicative of investors taking short term gains. When equity prices began plunging in March, it was likely that many investors who had made purchases pre-pandemic began selling in large numbers, incurring big losses. As a result, despite equity prices being anticipated to increase year-over-year in 2020, capital gains are estimated to decrease by 6.9 percent.

Stock market volatility will moderate over the forecast period as people get vaccinated, with new leadership in the federal government, and the likelihood of more fiscal stimulus to households, businesses, and state governments. Multiple new strains of COVID-19 threaten contagion efforts, which could negatively impact the economic recovery and financial market gains. Capital gains are projected to increase 23.7 percent in 2021 (see Figure 34). In 2022, capital gains are forecast to decrease 7.0 percent as economy growth slows.

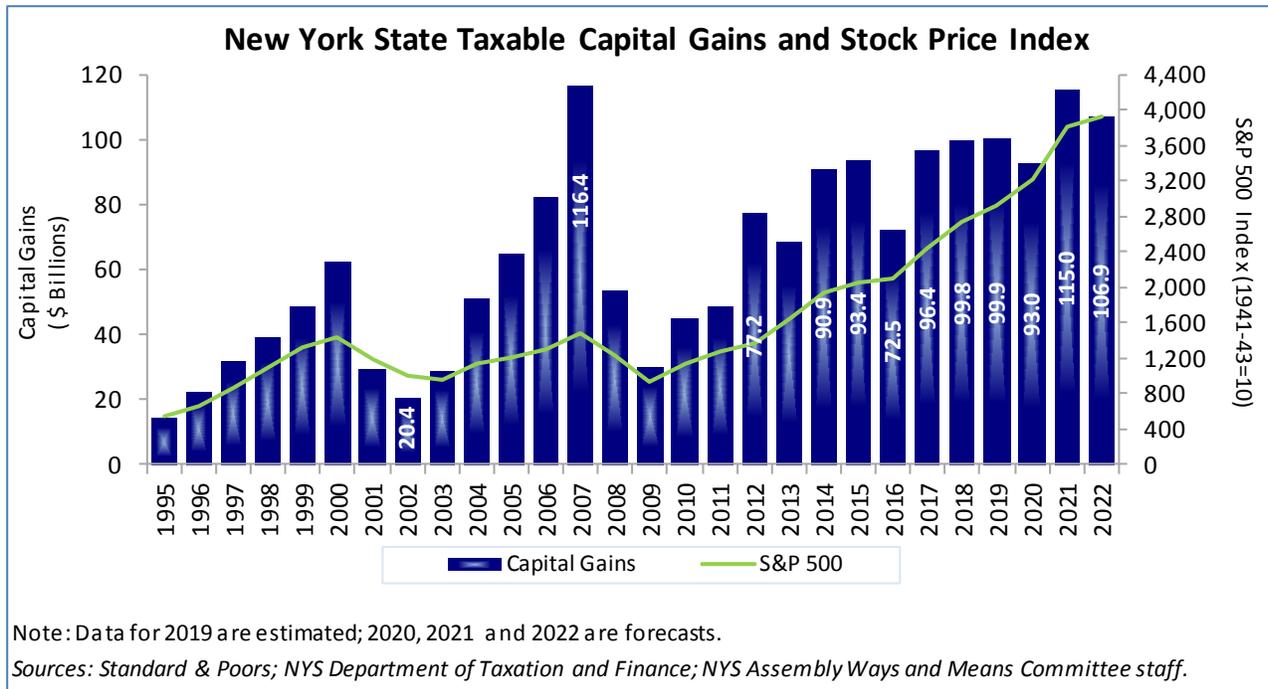


Figure 34

Finance and Insurance Sector

Although employment in the finance and insurance sector has declined in the past decades, it remains an important sector in the New York State economy. While representing only 5.4 percent of the State’s nonfarm employment, the sector accounted for over 17 percent of the State’s total wages and more than half of variable wages in 2019. Employment in this sector fell sharply during the Great Recession, and has never recovered fully due largely to structural changes such as automation in the industry and the migration of many activities to other states. Employment in this sector fell sharply once again during the COVID-19 pandemic. As of December 2020, the sector lost 4.4 percent of its employment, compared to the end of 2019 (see Figure 35).

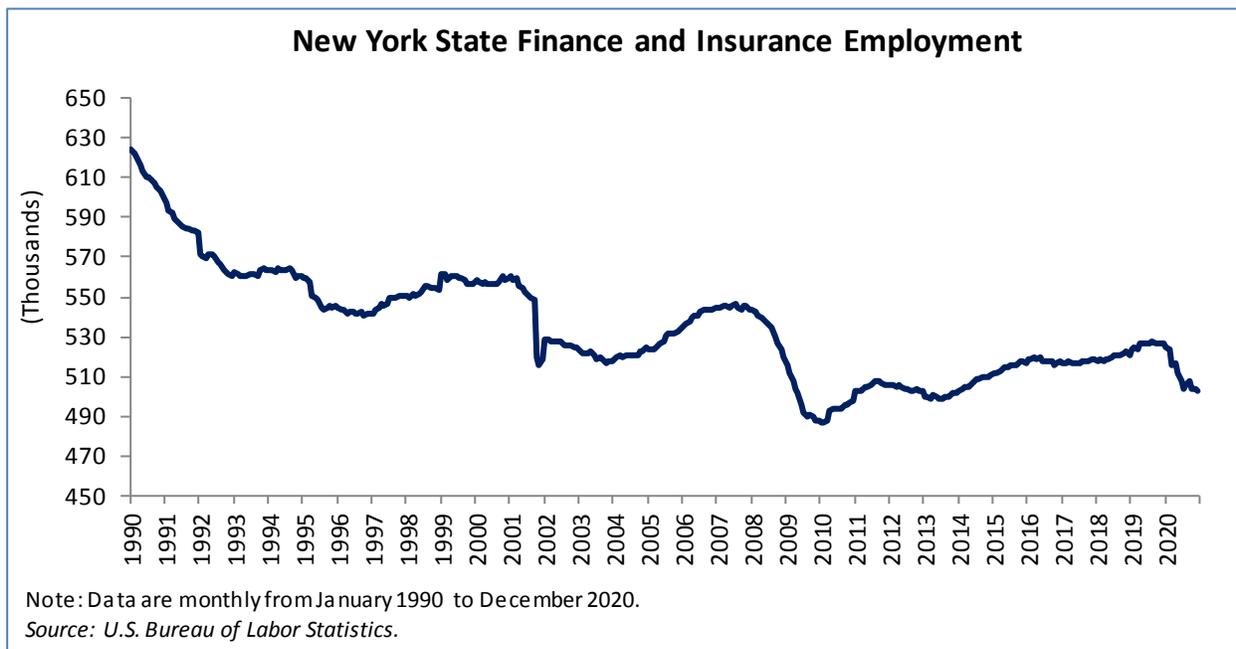


Figure 35

The COVID-19 pandemic has led to increased uncertainty in the global financial market and left many businesses strapped for cash. Faced with financial strain, companies have issued debt to shield themselves while others have gone public. This led to record corporate debt issuance in 2020. As a result, investment banking fees jumped 18 percent in 2020 and reached a record of \$127.5 billion.²⁵

²⁵ Thomson Reuters Deals Intelligence, Global Investment Banking Review, Full Year 2020.

After softening during the first half of 2020, global initial public offering (IPO) activity rose in the second half of 2020, totaling \$222.3 billion for 2020. It was a 25 percent increase from 2019 and the strongest year for global IPOs since 2014.²⁶ Worldwide M&A activity, however, fell 5 percent in 2020.²⁷

High economic uncertainty has also led to increased volatility in the financial market. Since the pandemic began, the standard deviation of the S&P 500 Index has almost doubled the level seen in 2019. Short term investors were cashing in on the market movement. As a result, income from trading and underwriting fees rose significantly. This led to record profits for the industry. According to the Office of the New York State Comptroller, securities industry profits totaled \$27.6 billion in the first half of 2020, an 82 percent increase from the first half of 2019. As profits grew, compensation set aside for workers also increased by 4.8 percent through the first half of 2020.²⁸

²⁶ Thomson Reuters Deals Intelligence, Global Equity Capital Market Review, Full Year 2020

²⁷ Thomson Reuters Deals Intelligence, Global Mergers & Acquisitions Review, Full Year 2020

²⁸ Office of the New York State Comptroller, "The Securities Industry in New York City," October 2020, <https://www.osc.state.ny.us/files/reports/osdc/2020/pdf/report-6-2021.pdf>

RISKS TO THE FORECAST

The COVID-19 pandemic and the uncertainty surrounding policy responses present risks to the Committee's economic forecast, and thus, the Committee's receipts outlook. Should the pace of vaccinations not pick up or the spread of the virus not start relenting in the next few weeks as assumed in the forecast, economic growth in 2021 would fall short of expectations. A more critical risk would be a permanent change in consumer behavior leading to lasting disruptions of certain industries, perpetuating job losses and income inequality. On the other hand, if the vaccination efforts should proceed more smoothly than expected, it would help release pent-up demand for services sooner, in particular, in high-contact industries such as amusement, accommodations, food services, public transportation, and tourism. Also, should additional fiscal stimulus actions not be implemented in the next few months as assumed in the current forecast, the economic growth outlook for 2021 and 2022 would be less optimistic than called for in the current forecast. However, if the third-round fiscal stimulus package under debate turns out to be larger than assumed in the current forecast, the economic growth forecast for 2021 would be more optimistic.

Longer term, the sharply increasing fiscal deficit carries its own downside risks. The federal government has racked up more than \$3 trillion worth of deficits in fiscal year 2020. Moreover, according to the Congressional Budget Office, the federal government is expected to incur annual deficits of more than \$1 trillion every year through at least 2030. The deteriorating fiscal position of the U.S. government has led to significant concern among investors, which will potentially put upward pressure on the yields on U.S. Treasury securities once the pandemic recedes.

In an attempt to keep their economy from the damaging effects of COVID-19 pandemic, many countries have resorted to various fiscal stimulus measures, resulting in an immense fiscal strain on government finances. This fiscal strain is more pronounced in some of the countries in southern Europe that failed to deleverage following the Great Recession. Emerging market economies also face a strain caused by the commodity prices that have plummeted. A sovereign debt crisis either in Europe or in the emerging market economies could easily spiral out of control and ignite a broader contagion and a global economic contraction.

One potential downside risk to business investment spending is presented by rising corporate debts. During the expansion before the pandemic, U.S. businesses borrowed massive amounts in the form of bonds and loans at bargain financing costs. As a result, the nonfinancial corporate debt of U.S. large companies surged in recent years, exceeding \$10 trillion or

49 percent of U.S. GDP in 2019, the highest ratio since 1947 when data began.²⁹ As corporate debts and loans have increased faster during the pandemic, these numbers are on their way to even higher record levels, putting increased financial strain on corporate investment decision making. More worth noting is the deteriorating quality of these growing debts. Nearly a third of corporate debts are in the form of leveraged loans and below-investment-grade bonds, and the list of leveraged loans deemed of concern by rating agencies is increasing, with 20 percent of those loans due by the end of 2020 and 46 percent by the end of 2021.³⁰ This deterioration in debt quality leaves the corporate sector more exposed to potential economic downturn—even more so, as the operations of many corporations remain disrupted by the pandemic and thus their financial strain could more easily trigger a tidal wave of defaults.

²⁹ Board of Governors of the Federal Reserve System, Z.1 Financial Accounts of the United States; Federal Reserve Bank of St Louis, FRED Economic Data, series BCNSDODNS. Total nonfinancial corporate debt, including the debt of small and medium sized businesses, family businesses and nonlisted businesses, stood at \$15.6 trillion or 74 percent of U.S. GDP.

³⁰ Mayra Rodriguez Valladares, U.S. Corporate Debt Continues to Rise as Do Problem Leveraged Loans, <https://www.forbes.com/sites/mayrarodriguezvalladares/2019/07/25/u-s-corporate-debt-continues-to-rise-as-do-problem-leveraged-loans/#6fd91ba43596>, accessed January 25, 2020.

NEW YORK STATE EMPLOYMENT AND WAGES BY INDUSTRY AND REGION DURING THE PANDEMIC

Employment by Industry

Total nonfarm employment in the State had been growing steadily for ten years following the Great Recession until the COVID-19 pandemic hit the State in March 2020. As the disease spread quickly in downstate, the Governor implemented “New York State on Pause”, an Executive Order which temporarily suspended the work of non-essential employees and businesses to slow the contagion of the virus. Since then, the disease has spread in other states, and many states have also implemented social distancing and travel bans of various degree. These policies brought the economy almost to a standstill and pushed the world and U.S. economies into a recession in 2020. As a result, employment in both the State and the nation fell sharply during the early phase of the pandemic. However, as New York was among the states that were hit the hardest by the disease, employment in the State declined more steeply in the Spring of 2020 than in the rest of the nation in almost all sectors.

From February to April 2020, nonfarm employment in the State fell by 1.9 million or 19.8 percent, compared to 14.5 percent for the nation. This is the worst employment loss among the last four recessions. However, the recovery so far has been faster than the similar stage of the previous recoveries. From April to November 2020, nonfarm employment in the State rose by almost 932,200 jobs or 11.8 percent, although the recovery stalled in December with 37,200 jobs lost largely in service-providing industries. After the 2001 recession, it took 73 months to recover all of the 298,000 jobs that were lost during the downturn. Employment recovery following the 1990-1991 recession was even slower; after over 100 months, nonfarm employment in the State was still below its prior peak (see Figure 36).

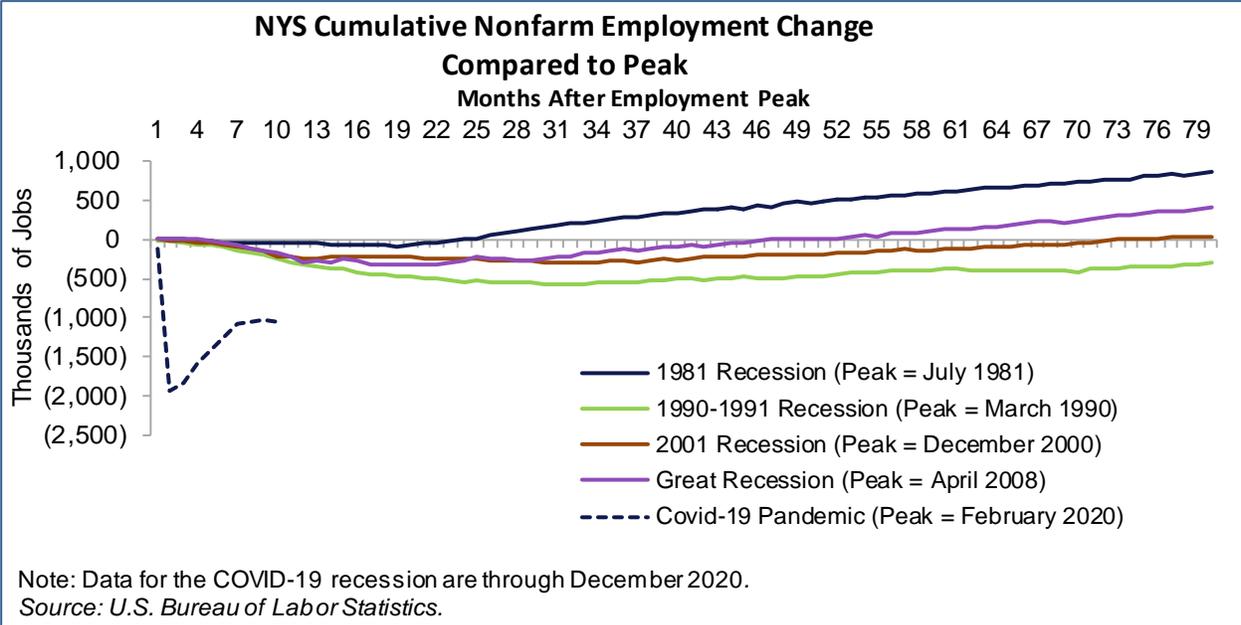


Figure 36

Social distancing regulations, the mandated closures of non-essential businesses, and the travel ban forced theaters, cultural institutions and restaurants to close and caused demand for travel services to plunge. As a result, the leisure and hospitality sector was hit the hardest during the pandemic, both in New York State and in the nation, losing almost 65 percent of its employment from February to its trough in April. The sector, however, recovered quite strongly, gaining more than 70 percent from its recent trough to December 2020. The construction sector also lost a significant number of jobs during the outbreak, but has also strongly rebounded (see Table 4).

Table 4

New York State vs. U.S. Employment Change by Sector (Percent Change)						
	During the Pandemic February 2020 to Trough		From Trough to December 2020		From February 2020 to December 2020	
	New York State	U.S.	New York State	U.S.	New York State	U.S.
Total Nonfarm	(19.8)	(14.5)	11.2	9.5	(10.7)	(6.5)
<i>Private</i>	<i>(22.5)</i>	<i>(16.3)</i>	<i>13.6</i>	<i>11.7</i>	<i>(12.0)</i>	<i>(6.5)</i>
<i>Goods Producing</i>	<i>(29.2)</i>	<i>(11.8)</i>	<i>29.5</i>	<i>8.8</i>	<i>(8.3)</i>	<i>(4.0)</i>
<i>Service Providing</i>	<i>(18.9)</i>	<i>(15.0)</i>	<i>9.7</i>	<i>9.6</i>	<i>(11.0)</i>	<i>(6.8)</i>
Leisure & Hospitality	(64.6)	(49.3)	72.8	51.6	(38.8)	(23.2)
Construction	(40.8)	(14.2)	56.3	13.1	(7.5)	(3.0)
Other Services ¹	(28.0)	(19.6)	17.4	16.1	(15.4)	(6.7)
Transportation & Utilities ²	(26.7)	(9.6)	21.0	8.9	(11.3)	(1.6)
Retail Trade	(25.5)	(15.2)	23.3	14.9	(8.1)	(2.6)
Manufacturing ³	(18.4)	(10.6)	11.6	7.1	(9.0)	(4.2)
Wholesale Trade	(15.3)	(6.7)	7.2	2.6	(9.2)	(4.2)
Real Estate, Rental, & Leasing	(12.7)	(10.0)	6.6	4.9	(6.9)	(5.5)
Education & Health Care ⁴	(12.4)	(11.3)	5.1	6.8	(7.9)	(5.3)
Government	(10.4)	(6.5)	7.6	0.6	(3.6)	(5.9)
Federal Government	(0.6)	(0.4)	0.1	1.9	(0.5)	1.4
State Government	0.0	(4.7)	(1.0)	(2.6)	(1.0)	(7.2)
Local Government	(14.4)	(8.5)	11.5	1.8	(4.6)	(6.9)
Management	(9.4)	(4.5)	2.2	1.3	(7.4)	(3.2)
Professional Services	(8.7)	(5.8)	1.9	4.0	(7.0)	(2.1)
Information	(5.0)	(11.4)	3.5	2.4	(1.6)	(9.3)
Finance & Insurance	(3.8)	(0.7)	(0.1)	1.1	(3.9)	0.4

Note: Industries ranked by percent State employment lost during the pandemic.
¹ Does not include administrative, support, and waste management services.
² Transportation, warehousing, and utilities.
³ Does not include mining.
⁴ Includes only private employment. Public education and health care employment is included in the government sector.
Source: Bureau of Labor Statistics.

Nonfarm employment in New York State fell by 1.9 million or 19.8 percent in March and April 2020. Leisure and hospitality, other services, and education and healthcare lost the largest number of jobs and accounted for more than half of the State’s total employment. From February to April 2020, the leisure and hospitality sector lost over 600,000 jobs and accounted for 32.1 percent of the State’s total nonfarm employment loss. The finance and insurance sector, on the other hand, lost the least number of jobs at 6,400 or 0.3 percent (see Figure 37).

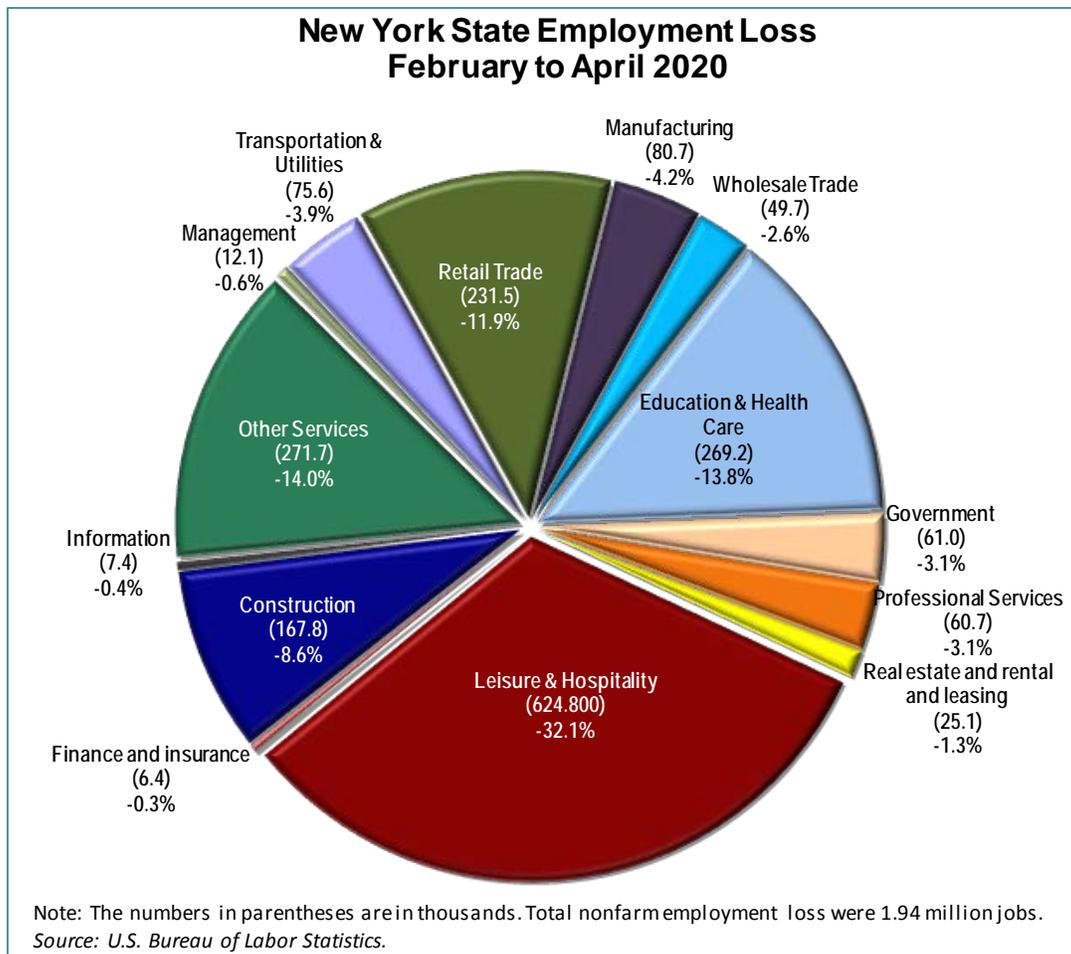


Figure 37

Employment loss during the pandemic was much faster and more severe than during the Great Recession, especially in New York State. While New York had fared better than the nation during the Great Recession, the State incurred a larger employment loss than the nation during the early phase of the pandemic, with 19.8 percent lost in the State, compared to 14.5 percent nationwide. The pandemic also led to a more wide-spread job loss. The education and healthcare sector was spared during the Great Recession, while all sectors lost jobs during the pandemic. The losses were also more pronounced during the pandemic, especially for low-wage sectors such as leisure and hospitality. Most sectors lost a larger number of jobs during the pandemic than during the Great Recession, with the exception of the information, and finance and insurance sectors (see Table 5).

Table 5

New York State vs. U.S. Employment Change by Sector (Percent Change)					
	Average Wage 2019	During the Great Recession		From February 2020 to Trough	
		New York State	U.S.	New York State	U.S.
Total Nonfarm	75,458	(3.8)	(6.3)	(19.8)	(14.5)
<i>Private</i>	<i>76,175</i>	<i>(4.3)</i>	<i>(7.6)</i>	<i>(22.5)</i>	<i>(16.3)</i>
<i>Goods Producing</i>	<i>71,180</i>	<i>(13.2)</i>	<i>(19.7)</i>	<i>(29.2)</i>	<i>(11.8)</i>
<i>Service Providing</i>	<i>76,650</i>	<i>(2.7)</i>	<i>(3.8)</i>	<i>(18.9)</i>	<i>(15.0)</i>
Leisure & Hospitality	35,843	(0.3)	(4.5)	(64.6)	(49.3)
Construction	75,669	(12.9)	(26.4)	(40.8)	(14.2)
Other Services ¹	52,355	(5.1)	(9.2)	(28.0)	(19.6)
Transportation & Utilities ²	62,155	(5.1)	(8.1)	(26.7)	(9.6)
Retail Trade	38,457	(3.9)	(7.5)	(25.5)	(15.2)
Manufacturing ³	69,175	(13.3)	(16.6)	(18.4)	(10.6)
Wholesale Trade	88,330	(7.9)	(9.9)	(15.3)	(6.7)
Real Estate, Rental, & Leasing	76,746	(4.7)	(9.5)	(12.7)	(10.0)
Education & Health Care ⁴	54,642	2.4	4.5	(12.4)	(11.3)
Government	71,371	(1.3)	0.4	(10.4)	(6.5)
Federal Government	81,652	(0.9)	4.9	(0.6)	0.6
State Government	72,674	(2.3)	(0.0)	0.1	(4.7)
Local Government	70,022	(1.2)	(0.3)	(14.4)	(8.5)
Management	155,094	(2.6)	(2.4)	(9.4)	(4.6)
Professional Services	120,134	(7.0)	(5.0)	(8.7)	(5.8)
Information	135,888	(5.7)	(9.5)	(5.0)	(11.3)
Finance & Insurance	236,479	(4.9)	(5.7)	(3.8)	(0.7)

Note: Industries ranked by percent employment lost during pandemic. During the Great Recession, nonfarm employment in the U.S. peaked in January 2008 and the lowest was in February 2010. In New York State, nonfarm employment peaked in June 2008 and the lowest was in October 2009.

¹ Does not include administrative, support, and waste management services.

² Transportation, warehousing, and utilities.

³ Does not include mining.

⁴ Includes only private employment. Public education and health care employment is included in the government sector.

Source: Bureau of Labor Statistics.

Leisure and hospitality employment had grown more rapidly following the Great Recession than any other sector and had become one of the main drivers of New York State's employment growth in recent years until the pandemic hit. From 2009 to 2019, employment in this sector grew the fastest, 35 percent, and contributed nearly one-quarter of New York State's employment growth. As a result, the share of leisure and hospitality employment in the State's total payroll employment increased from 8.3 percent in 2008 to 10.2 percent in 2019, with the sector's rank moving up from sixth to third.

The leisure and hospitality sector, however, was hit the hardest when the pandemic hit the State in March, 2020. Its share in the State's total employment shrank by almost half as it lost the largest number of jobs during the pandemic. The share of leisure and hospitality employment fell from 10.2 percent in the second quarter of 2019, prior to the pandemic, to 5.4 percent in the second quarter of 2020 (see Figure 38).

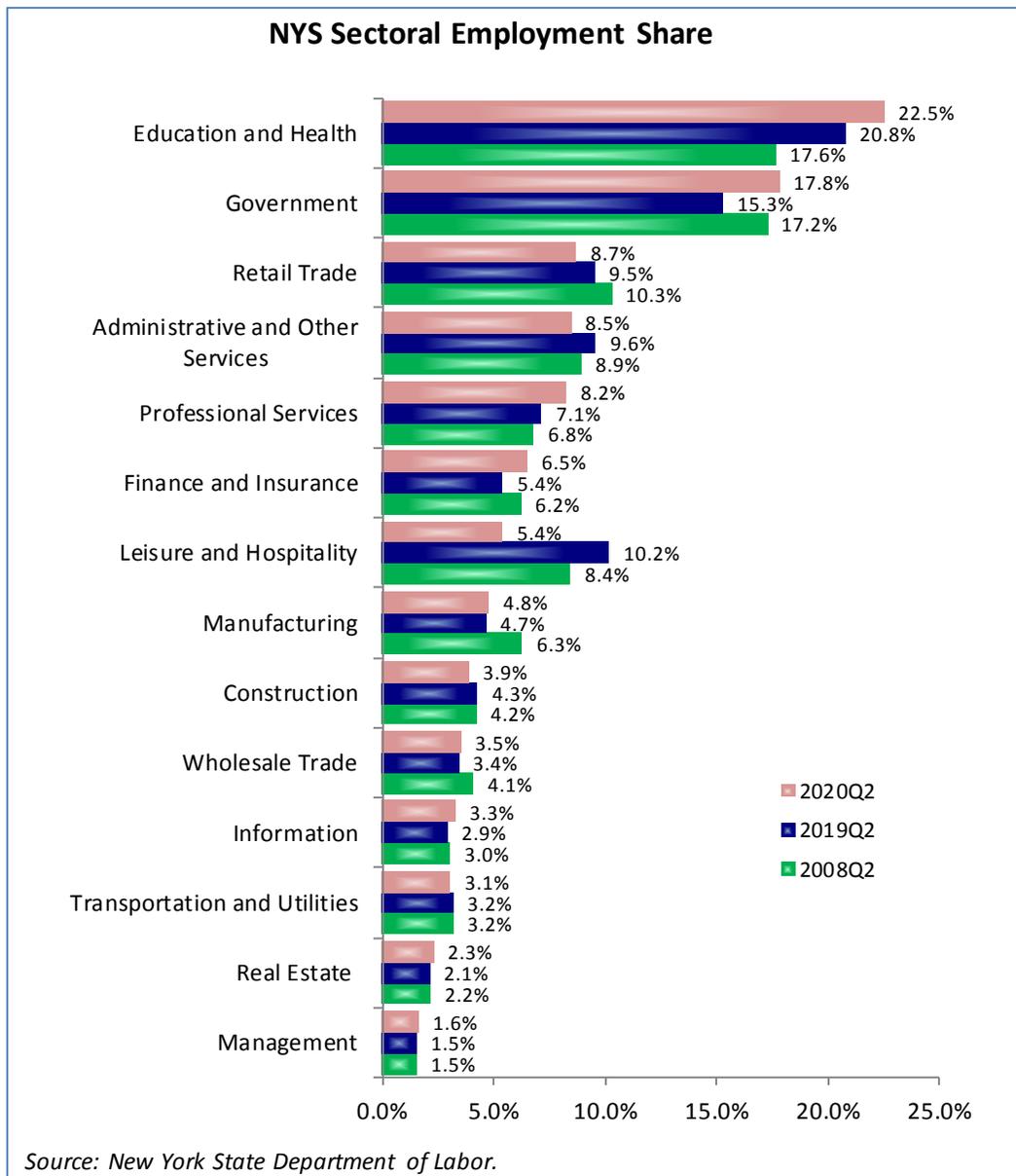


Figure 38

Employment by Region

With over four million jobs, New York City accounted for over 45 percent of the State’s total nonfarm employment in 2019, the largest region in the State. The North Country, with 147,000 nonfarm jobs, had the smallest employment. Across regions, most jobs are concentrated in education, health, and government, while the smallest numbers are found in management of companies, real estate, rental, and leasing industries.

Downstate regions have been hit harder during the pandemic

Downstate regions have been hit harder than upstate regions during the pandemic. From the second quarter of 2019 to the second quarter of 2020, New York City lost 818,100 nonfarm jobs, an 18.3 percent loss. The Long Island region was hit particularly hard, losing 20.1 percent of its nonfarm jobs. The Western New York region suffered the most among upstate regions, losing 18.8 percent of its nonfarm jobs during the pandemic (see Table 6).

Table 6

New York State Nonfarm Change by Region (Percent Change)				
	During the Great Recession 2008Q3 to 2009Q3		During the Pandemic 2019Q2 - 2020Q2	
	Level	Percent	Level	Percent
New York State	(313.3)	(3.7)	(1,724.7)	(18.0)
New York City	(138.6)	(3.8)	(818.1)	(18.3)
Long Island	(45.6)	(3.8)	(262.7)	(20.1)
Mid Hudson	(34.7)	(4.0)	(171.6)	(18.2)
Capital	(14.5)	(2.9)	(76.9)	(14.5)
Mohawk Valley	(4.7)	(2.7)	(26.2)	(15.3)
North Country	(4.7)	(3.1)	(23.0)	(15.5)
Central New York	(12.8)	(3.7)	(54.6)	(15.7)
Southern Tier	(11.6)	(3.9)	(42.5)	(15.0)
Western New York	(20.6)	(3.3)	(119.8)	(18.8)
Finger Lakes	(18.3)	(3.4)	(88.4)	(15.8)

Source: New York State Department of Labor.

Regional unemployment

Historically, the rate of unemployment in New York City has consistently been higher than in the rest of the State. During the Great Recession, the unemployment rate in New York City reached 10.1 percent from October 2009 to January 2010, compared to 8.9 percent for the State as a whole and 8.0 percent for the rest of the State over the same period. Since then, the unemployment rate in all areas in the State had been falling until the pandemic hit. In February 2020, before COVID-19 struck, the unemployment rate in New York City was 3.4 percent, compared to 3.9 percent for the rest of the State, and 3.7 percent for New York State as a whole.

The unemployment rate in all regions in New York State also rose rapidly during the early months of the outbreak. Since then, the unemployment rate has been falling. As New York City became the U.S. epicenter of COVID-19 early on, its unemployment rate was the highest in the State. The unemployment rate in New York City rose to its peak of 20.4 percent in June 2020, before falling to 11.0 percent in December 2020. Similarly, the unemployment rate in Long Island and Hudson Valley regions, two other regions in downstate, fell from their recent peak of over 14 percent to 5.5 percent and 5.8 percent in December 2020, respectively. Upstate regions performed much better than downstate during the pandemic, with only the Western New York region seeing its unemployment rate rise to 18.7 percent at the peak before falling to 7.5 percent in December 2020. The unemployment rates in all other upstate regions were below 7 percent in December 2020 (see Figure 39).

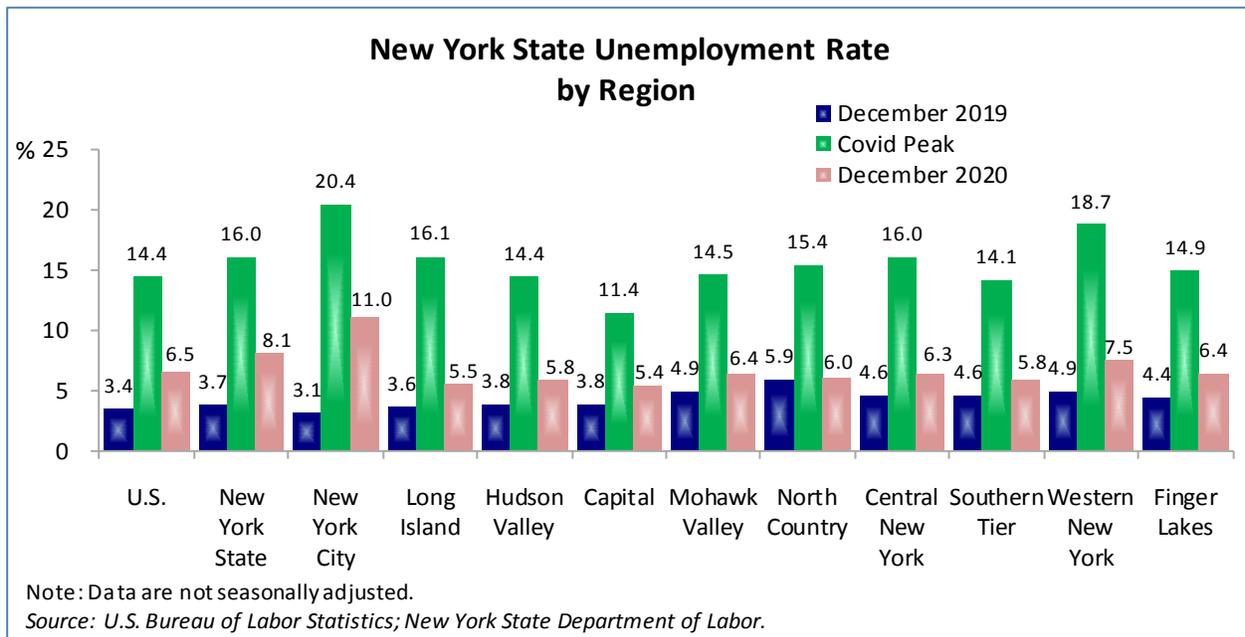


Figure 39

Wages by Industry

Average wages in New York State vary widely across sectors. The average wage for nonfarm workers in New York State was \$75,458 in 2019, an increase of 24.8 percent from \$60,471 in 2008. At the same time, the average wage for the private sector in New York State rose 22.3 percent from \$62,305 to \$76,175. The five highest paying sectors in New York State in 2019, before the pandemic hit, were finance and insurance, management of companies, information, professional services, and wholesale trade. The two lowest paying sectors were the retail trade and leisure and hospitality sectors. The finance and insurance sector had the highest average wage of \$236,479 in 2019, while the leisure and hospitality sector had the lowest average pay of only \$35,843.

Other than the management sector, average wages in almost all sectors continued to increase during the COVID-19 pandemic. As a result, the ranking of the average wages across industries remains almost the same before and after the pandemic, especially for those sectors with the lowest average wages. Unlike during the Great Recession, when the majority of jobs lost were in relatively high paying sectors, most job losses during the pandemic were in low paying sectors such as leisure and hospitality, retail trade, and other services as many of those jobs are considered nonessential (see Table 7). Three of the five highest paying sectors lost the lowest proportions of their payroll jobs among the private sectors during the pandemic.

Table 7

New York State Average Wage by Sector						
	Average Wage				Employment Loss	
	2008	2019	2019Q2	2020Q2	During the	During the
	(\$)	(\$)	(\$)	(\$)	(%)	(%)
Nonfarm	60,471	75,458	70,117	79,171	(3.7)	(16.7)
Private	62,305	76,175	69,010	78,963	(4.2)	(19.0)
Finance & Insurance	207,410	236,479	167,668	175,879	(8.4)	(1.8)
Information	88,260	135,888	124,725	140,310	(5.1)	(11.8)
Management of Companies	133,192	155,094	142,076	139,966	(2.2)	(10.4)
Professional Services	88,234	120,134	111,180	119,540	(5.9)	(7.0)
Wholesale Trade	69,450	88,330	86,227	87,876	(7.2)	(14.3)
Government	51,421	71,371	76,276	80,136	(0.8)	(4.1)
Real Estate, Rental, & Leasing	55,100	76,746	69,544	73,725	(4.1)	(11.0)
Construction	59,119	75,669	72,605	73,486	(10.8)	(20.6)
Manufacturing ¹	57,259	69,175	66,969	71,958	(12.3)	(13.9)
Transportation & Utilities ²	50,222	62,155	61,871	65,723	(4.9)	(22.1)
Education & Health Care ³	43,407	54,642	54,124	59,522	1.6	(12.6)
Other Services ⁴	37,712	52,355	49,361	56,324	(5.5)	(22.1)
Retail Trade	29,516	38,457	38,163	41,531	(4.0)	(23.3)
Leisure & Hospitality	26,385	35,843	34,154	36,221	(0.8)	(52.8)

Note: Industries are ranked by 2020Q2 average wage.

¹ Including mining.

² Transportation, warehousing, and utilities.

³ Includes only private employment. Public education and health care employment is included in the government sector.

⁴ Including administrative, support, and waste management services.

Source: NYS Department of Labor.

The COVID-19 pandemic hit New York State harder than the Great Recession. Wages in New York State fell \$49.8 billion, or 7.4 percent, during the pandemic, compared to the loss of \$24.9 billion (5.4 percent) during the Great Recession. The leisure and hospitality sector suffered the most during the pandemic, losing more than half of its employment and wages from the second quarter of 2019 to the second quarter of 2020. On the other hand, the finance and insurance sector, the sector that was hit the hardest during the Great Recession, gained 3.3 percent in wages in the second quarter of 2020 over the same period a year ago (see Table 8). Wages in the information, professional services, and government sectors also increased in the same period.

Table 8

New York State Wage Change by Sector				
	During the Great Recession 2008Q3 to 2009Q3		During the Pandemic 2019Q2 to 2020Q2	
	Level (Billion \$)	Percent	Level (Billion \$)	Percent
Total Nonfarm	(24.9)	(5.4)	(49.8)	(7.4)
Leisure and Hospitality	(0.8)	(4.1)	(17.9)	(53.9)
Administrative and Other Services ¹	(2.0)	(7.1)	(7.8)	(17.3)
Construction	(2.0)	(9.2)	(7.4)	(25.0)
Retail Trade	(1.4)	(5.3)	(6.4)	(18.5)
Wholesale Trade	(2.1)	(8.9)	(3.9)	(14.0)
Management	(0.8)	(5.2)	(3.0)	(14.4)
Transportation and Utilities ²	(0.6)	(4.5)	(3.0)	(15.9)
Manufacturing ³	(3.5)	(11.9)	(2.8)	(9.5)
Education and Health ⁴	2.7	4.2	(2.4)	(2.2)
Real Estate, Rental, & Leasing	(0.6)	(6.7)	(0.8)	(5.8)
Government	0.9	1.3	0.4	0.4
Information	(1.6)	(7.3)	1.3	3.8
Professional Services	(3.0)	(6.3)	1.4	1.8
Finance & Insurance	(10.5)	(14.5)	2.9	3.3

Note: Industries are ranked by level loss during the pandemic.
¹ Including administrative, support, and waste management services.
² Transportation, warehousing, and utilities.
³ Including mining.
⁴ Includes only private employment. Public education and health care employment is included in the
Source: NYS Department of Labor.

As with the average wage, contributions to the total amount of wages paid in New York State also varied across industries. In the second quarter of 2019, prior to the pandemic, the government sector contributed the most to the State’s total wages, accounting for 16.6 percent. The education and health sector was the second, with 16.0 percent; then the finance and insurance sector, 12.9 percent. The remaining industries contributed 54.5 percent of the State’s total wages.

The sectoral contribution to the State’s total wages remained relatively unchanged during the pandemic, with the exception of the leisure and hospitality sector. The leisure and hospitality sector’s share of total State wage was down by almost half during the pandemic, falling from 4.9 percent in the second quarter of 2019 to 2.5 percent in the second quarter of 2020 (see Figure 40).

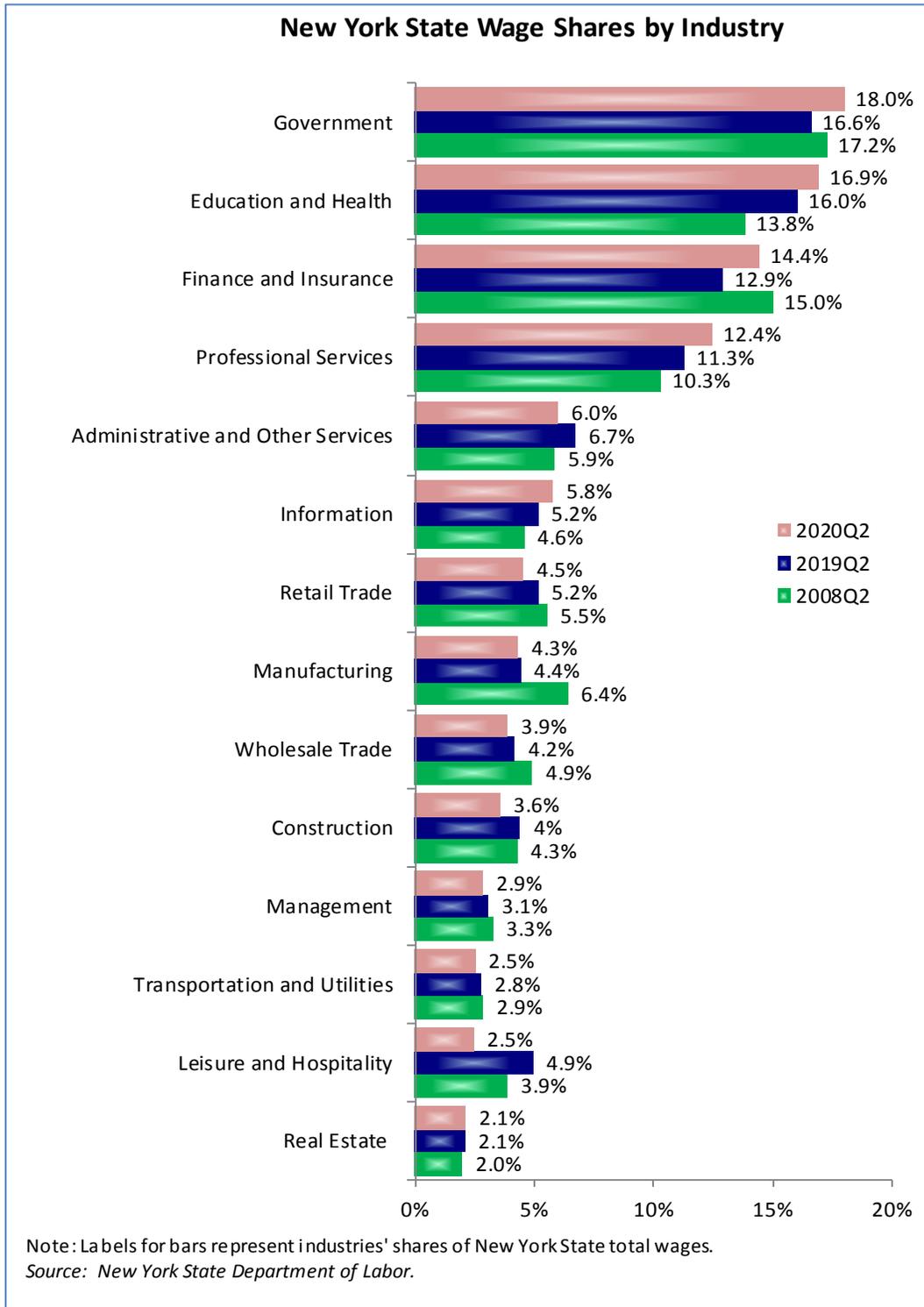


Figure 40

Wages by Region

Annual average wages in New York City have always been the highest in the State due to the concentration of high-paying jobs in the finance and insurance and professional services sectors. Prior to the Great Recession, the average wage in New York City was over \$80,000, more than double the average wage in most upstate regions (with the exception of the Capital and Finger Lakes regions). In 2019, the average wage in New York City was \$95,636. The region with the lowest average wage in 2019 was the Mohawk Valley at \$43,872. The pattern of the average wage across regions remained relatively unchanged during the pandemic (see Figure 41).

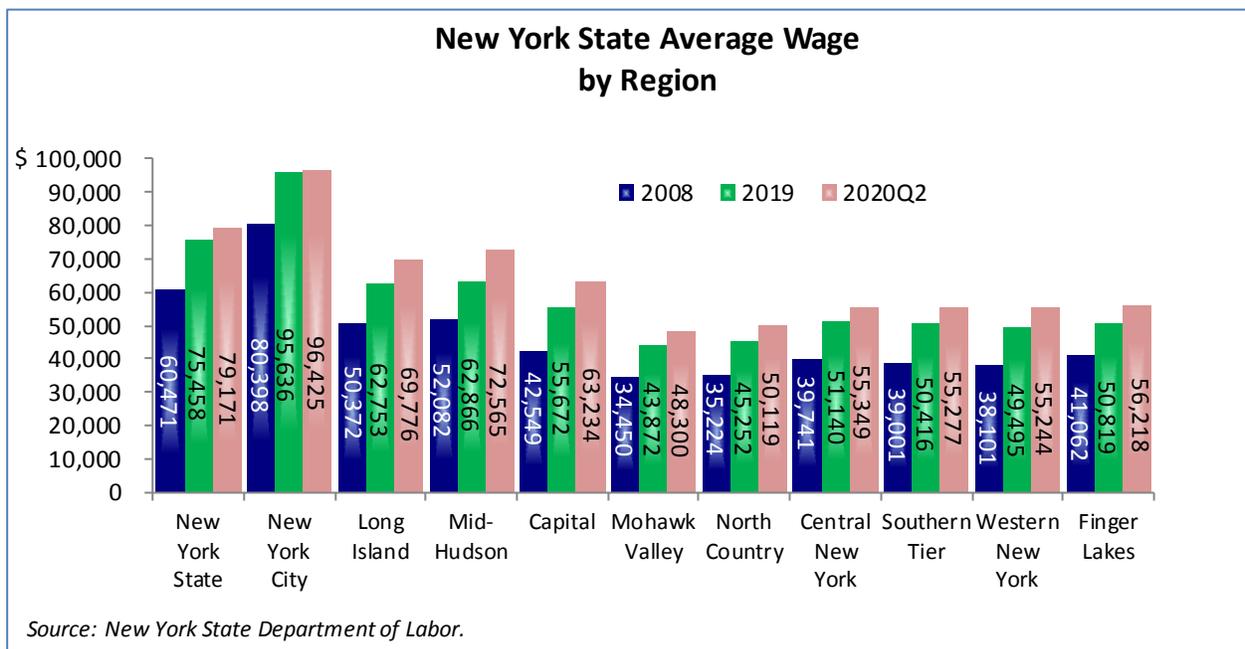


Figure 41

As employment in the Long Island region was hit the hardest during the pandemic. The region lost \$7.7 billion in wages, or 9.5 percent of its total nonfarm wages, from the second quarter of 2019 to the second quarter of 2020. Wages in the Capital region was impacted the least by the pandemic. This is due partly to its large share of government and education and health sectors, which have performed relatively well during this crisis.

Table 9

New York State Wage Change by Region				
	During the Great Recession 2008Q3 to 2009Q3		During the Pandemic 2019Q2 to 2020Q2	
	Level (Billion \$)	Percent	Level (Billion \$)	Percent
New York State	(24.9)	(5.4)	(49.8)	(7.4)
New York City	(16.7)	(6.8)	(28.7)	(7.5)
Long Island	(2.6)	(4.4)	(7.7)	(9.5)
Mid Hudson	(2.2)	(5.2)	(2.6)	(4.3)
Capital	(0.2)	(1.0)	(1.1)	(3.6)
Mohawk Valley	(0.1)	(1.2)	(0.6)	(7.3)
North Country	(0.1)	(1.3)	(0.6)	(8.2)
Central New York	(0.4)	(2.7)	(1.4)	(7.7)
Southern Tier	(0.4)	(3.4)	(0.9)	(6.4)
Western New York	(0.8)	(3.5)	(2.7)	(8.7)
Finger Lakes	(0.9)	(4.2)	(1.8)	(6.3)

Source: NYS Department of Labor.

IMPACT OF COVID-19 ON NEW YORK STATE ECONOMY

On December 31, 2019, Wuhan Municipal Health Commission reported a cluster of cases of pneumonia in Wuhan, Hubei Province in China. A novel coronavirus was eventually identified as “severe acute respiratory syndrome coronavirus 2” or “SARS-CoV-2” and the disease was finally named “Coronavirus Disease of 2019” or “COVID-19”.³¹ The disease spread rapidly throughout China and other countries across the globe via international travel in early 2020.

By March 11, 2020, there were 118,319 confirmed cases of COVID-19 in 114 countries and territories. As a result, the World Health Organization made the assessment that COVID-19 could be characterized as a pandemic, the first pandemic since the H1N1 pandemic in 2009.³² Since then, the disease has continued to spread. As of February 21, 2021, there were over 111 million cases and more than two million deaths in over 200 countries or territories, of which over 28 million cases and over 500,000 deaths were in the U.S.³³ and over 600,000 cases in New York State. While it is more deadly, it is not as widespread as the previous flu pandemic.³⁴

In the United States, a Washington state resident returning from Wuhan, China became the first person to be diagnosed with COVID-19 on January 20, 2020. New York reported its first case on March 1, 2020, and became one of the earliest states that were struck by the COVID-19. New York was among the states that were hit the hardest, especially in downstate regions as New York City became the U.S. epicenter of COVID-19 in March and April 2020 (see Figure 42).

³¹ World Health Organization, Naming the Coronavirus Disease (COVID-19) And the Virus That Causes It, [https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-\(covid-2019\)-and-the-virus-that-causes-it](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it).

³² World Health Organization, Coronavirus disease 2019 (COVID-19) Situation Report – 51, https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10.

³³ World Health Organization, Coronavirus disease (COVID-19) Weekly Epidemiological Update, January 17, 2021, https://www.who.int/docs/default-source/coronaviruse/situation-reports/weekly_epidemiological_update_23.pdf?sfvrsn=6ac0778_8&download=true

³⁴ The CDC estimated there were 60.8 million cases (range: 43.3-89.3 million), 274,304 hospitalizations (range: 195,086-402,719), and 12,469 deaths by the H1N1 virus in the U.S. during the 2009 pandemic.

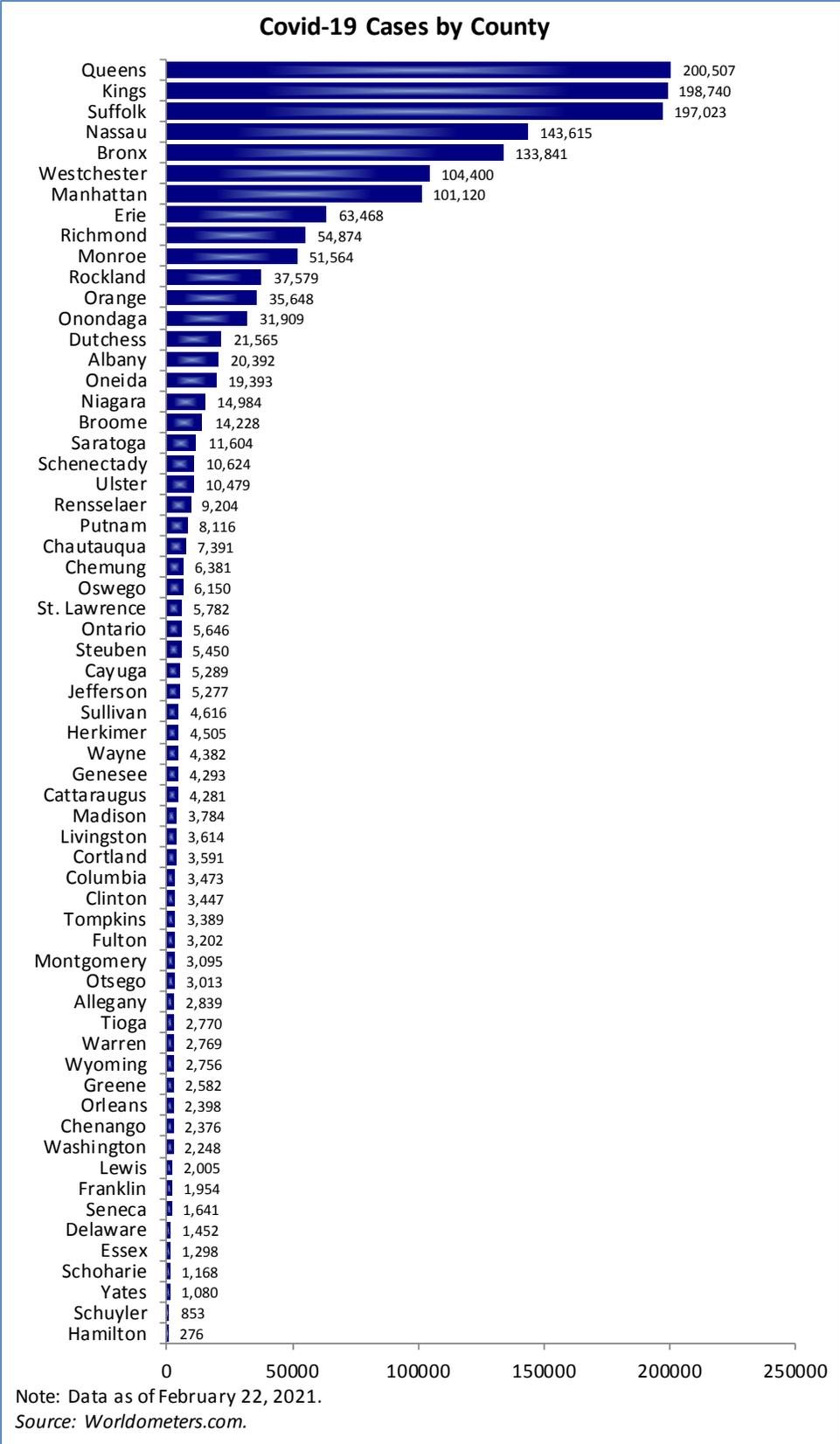


Figure 42

After the first case of COVID-19 was confirmed in New York State on March 1, 2020, the number of confirmed cases increased rapidly (see Figure 43). By March 20, cases in New York State totaled 7,113.³⁵ In downstate, 4,419 cases were in New York City, 1,091 cases were in Westchester County, and 754 cases were in Nassau County. As a result, New York State led the nation in the number of cases and became the epicenter of COVID-19 for a period of time.

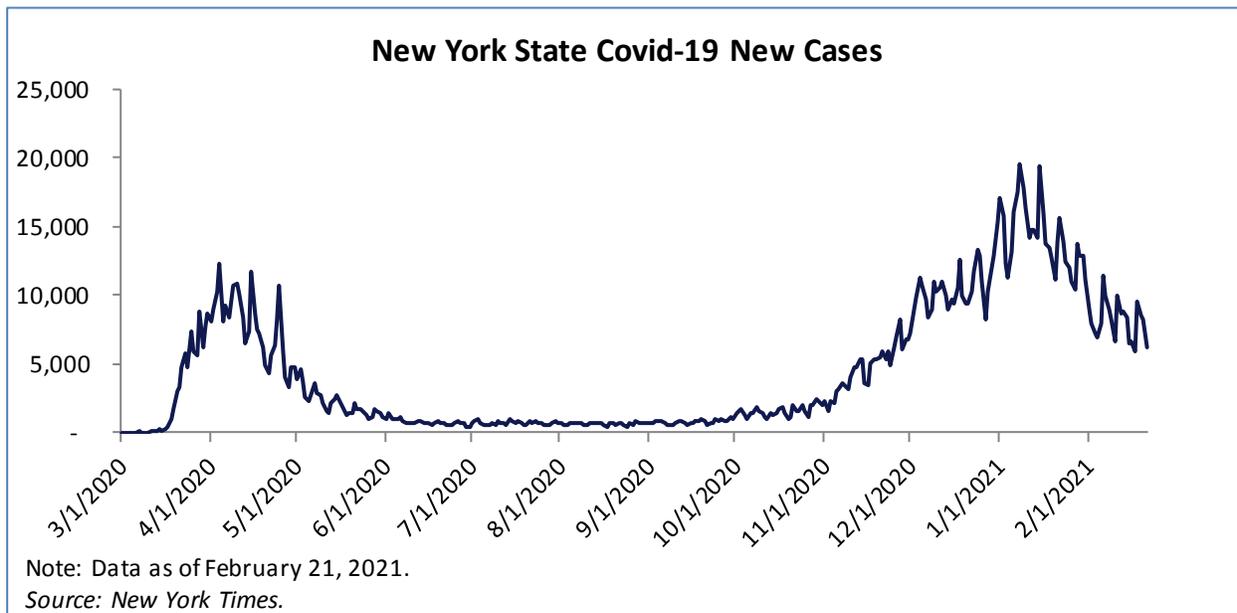


Figure 43

In order to slow down the spreading of the disease, the governor signed the “New York State on PAUSE” executive order on March 20, 2020, requiring all non-essential businesses statewide to close in-office personnel functions effective at 8 pm on Sunday March 22, 2020.³⁶ With many other measures implemented to reduce the spread of the disease, by April the number of new COVID-19 cases had decreased from their peak levels. Despite these measures, New York is now ranked fourth in COVID-19 cases behind California, Texas, and Florida.

³⁵ New York Times, Covid in the U.S.: Latest Map and Case Count, <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html>.

³⁶ The order also suspended all elective surgeries and ban non-essential gatherings of any size. It also instituted 6-foot social distancing requirements and bans contact recreational activities. <https://www.governor.ny.gov/news/governor-cuomo-issues-guidance-essential-services-under-new-york-state-pause-executive-order>, Data as of September 23, 2020.

As the pandemic worsened, countries and territories around the world as well as states in the U.S. have implemented lockdowns of various degrees to slow the spreading of the virus. These policies have disrupted economic activity and have had a significant impact on the economy.

This section takes a look at the impact of COVID-19 on New Yorkers and different sectors in New York State. While some sectors, like the residential real estate market, seem to have recovered well following the worst of the pandemic, others such as tourism and commercial real estate have been slower to recover.

Economic Insecurities

The COVID-19 pandemic has brought the world into a recession as social distancing and stay-at-home policies have disrupted economic activities. As a result, millions of people have lost their jobs and are facing economic and financial insecurities.

Financial insecurity

The unprecedented economic impact of COVID-19 led to widespread financial insecurity for many Americans, especially for hourly, low-wage, and temporary workers. Many of them have no access to sick pay or unemployment benefits, and were already living paycheck-to-paycheck. For many, the economic fallout from the pandemic will continue to be severe.

Prior to the pandemic, about 45 percent of Americans considered themselves as financially secure, while 12 percent rated themselves as not financially secure. In addition, about 33 percent were within three missed paychecks of having to either borrow money or skip paying bills. Since the pandemic, the number of people who consider themselves as financially secure has fallen to 35 percent, and 19 percent say they are not financially secure.³⁷

Another survey by the National Public Radio, the Robert Wood Johnson Foundation, and Harvard T.H. Chan School of Public Health also indicates that many Americans faced serious financial problems since the pandemic, with almost half of households across the nation (46 percent) reporting that they faced serious financial problems during the coronavirus outbreak (see Table 10). This includes 31 percent of people who reported to have used up all or most of their savings. In addition, about one in five U.S. households reported to have serious problems paying their credit card bills, loans, or other debt, and paying their mortgage or rent.

New York City fared worse than the nation as a whole by all but two measures: serious problems affording medical care and serious problems making car payments. Over half of New York City households reported that they were in serious financial problems (53 percent) and 34 percent indicated that they used up most or all of their savings.

³⁷ The Northwestern Mutual Life Insurance Company, Planning & Progress Study 2020, <https://news.northwesternmutual.com/planning-and-progress-2020>.

Table 10

Serious Financial Problems Among U.S. Households During the Coronavirus Outbreak (in Percent) U.S. vs. New York City		
Issues	Percent Yes	
	U.S.	New York City
Serious financial problems (NET)	46	53
Used up all/most of savings	31	34
Serious problems paying credit cards/loans/debt	21	28
Serious problems paying mortgage/rent	19	28
Serious problems paying utilities	18	20
Serious problems affording food	16	19
Serious problems affording medical care	15	14
Serious problems making car payments	14	10
Other serious financial problems	14	17

Note: Data for the U.S. are based on survey of 3,454 individuals. Data for New York City are based on survey of 512 individuals.

Sources: NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Coronavirus on Households Across America; The Impact of Coronavirus on Households in Major U.S. Cities*. September, 2020.

Minority and low-income households were doing worse than their white and high-income counterparts, with 60 percent of Black and 72 percent of Latino households reporting that they had serious financial problems, compared to 36 percent for White households. Meanwhile, 71 percent of households with annual income lower than \$30,000 said they were facing serious financial problems. In addition, half of the City households (50 percent) reported having lost their jobs, being furloughed, or having wages or hours reduced since the start of the coronavirus outbreak.³⁸

Food insecurity

Many households across the country are facing food insecurity during the pandemic, as business closures and regulations imposed by the authorities have caused the loss of jobs and income. This problem was more pronounced in New York City than in the nation. In New York City, 20 percent of households reported having missed or delayed paying major bills to ensure

³⁸ National Public Radio, the Robert Wood Johnson Foundation, and Harvard T.H. Chan School of Public Health, *The Impact of Coronavirus on Households in Major U.S. Cities*, September 2020, https://www.rwjf.org/content/dam/farm/reports/surveys_and_polls/2020/rwjf462578.

sufficient food was available, compared to 17 percent nationwide. Nineteen percent of households in New York City indicated that they had serious problems affording food, compared to 16 percent of households throughout the rest of the nation (see Table 11).

Table 11

Problems Affording Food Among U.S. Households During the Coronavirus Outbreak (in Percent) U.S. vs. New York City		
Issues	Percent Yes	
	U.S.	New York City
Missed/delayed paying major bills to ensure household members had enough to eat	17	20
Serious problems affording food	16	19
Serious problems not getting enough to eat every day	7	9
Note: Data for the U.S. are based on survey of 3,454 individuals. Data for New York City are based on survey of 512 individuals.		
<i>Sources: NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, The Impact of Coronavirus on Households Across America; The Impact of Coronavirus on Households in Major U.S. Cities. September, 2020.</i>		

According to the Household Pulse Survey, families with children are more likely to face food insecurity. During the weeks of January 20 to February 1, 2021, about 15.1 percent of households with children nationwide reported that their households sometimes or often did not have enough food to eat in the last seven days. This is much higher than the rate for households without children, which was 8.8 percent. New York State fared about the same as the nation in terms of food security with 15.3 percent of households with children and 13.1 percent of households without children indicating they often did not have enough food. Education also played a role to the degree of food insecurity. Those who had less than a high school diploma were more than three times as likely to face food insecurity as those with high school or above. In New York State, 23.3 percent of households with less than a high school diploma sometimes or often did not have enough food to eat in the last seven days, relative to 13.2 percent for household with a high school or above (see Figure 44).

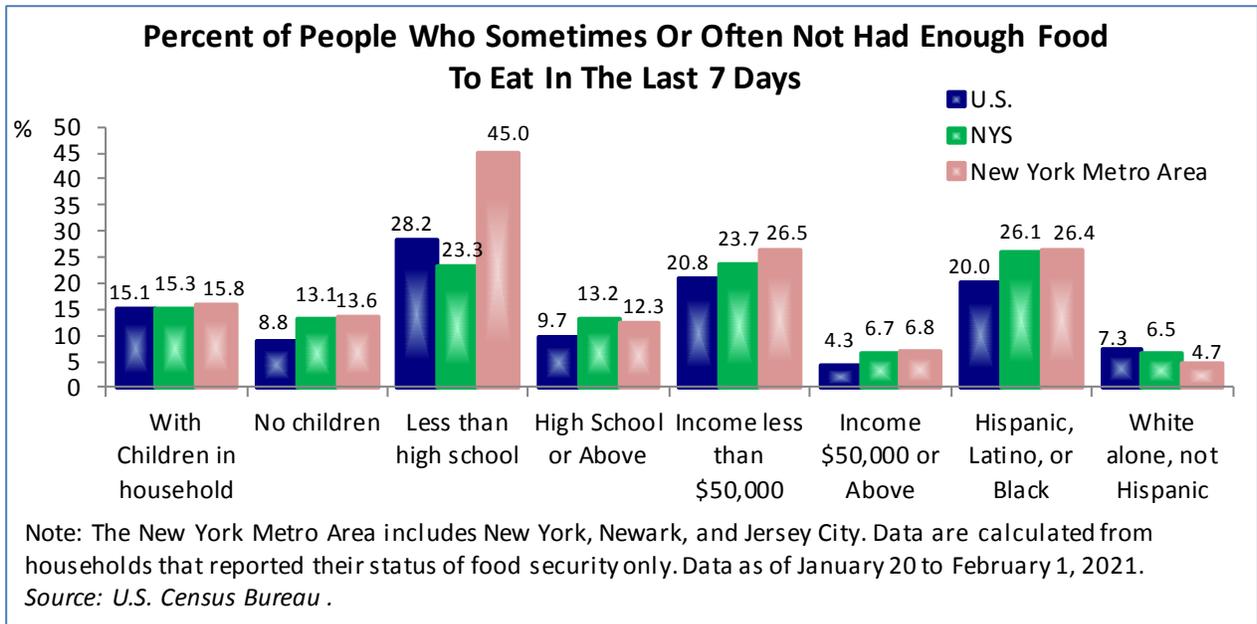


Figure 44

Housing insecurity

More households in New York-Newark-Jersey City metro area were facing housing insecurity than in the nation with about 28 percent of households reporting they were having serious problems paying for their housing, compared to 19 percent nationwide. In addition, one in five households in the State reported they had fallen behind on their mortgage or rent or having serious problems paying for their utilities, while only 11 percent of households around the nation had fallen behind on their mortgage or rent (see Table 12).

Table 12

Serious Housing Problems Among U.S. Households During the Coronavirus Outbreak (Percent) U.S. vs. New York City		
Issues	Percent Yes	
	U.S.	New York City
Serious problems paying mortgage/rent	19	28
Fallen behind on mortgage/rent payments	11	20
Serious problems paying utilities	18	20
Serious heating/cooling, mold, pests, water, or environmental problems	11	15
Serious problems living in severely cramped housing situation	6	10

Note: Data for the U.S. are based on survey of 3,454 individuals. Data for New York City are based on survey of 512 individuals.

Sources: NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Coronavirus on Households Across America*; *The Impact of Coronavirus on Households in Major U.S. Cities*. September, 2020.

Household Pulse data also indicate that millions were falling behind on their housing payment, with households in New York State less likely to have missed their last monthly payment than national average. As of January 20 to February 1, 2021, about 13.1 percent of homeowners with a mortgage payment in the State fell behind on their housing payments in the previous month, which is higher than the national rate of 10.1 percent. In addition, renters were more likely to fall behind on their housing payments than homeowners, with 18.1 percent of renters nationwide and 29.6 percent of renters in the State failing to make their payments last month.³⁹

Homeowners with no children in New York State were more likely to fall behind on their mortgage. During the weeks of January 20 to February 1, 2021, about 11.3 percent of homeowners with children in the State and 14.4 percent of homeowners with children in New York-Newark-Jersey City metro area fell behind on their mortgage in the prior month, compared to 14.2 percent and 15.3 for households with no children, respectively. Minority and low-income households were more likely to have difficulty paying their mortgage. In New York State, 34.9 percent of households with income less than \$50,000 were having difficulty paying

³⁹ U.S. Census Bureau, Household Pulse Survey: January 20 to February 1, 2021, <https://www.census.gov/data/experimental-data-products/household-pulse-survey.html>, last accessed February 18, 2021.

their mortgage, while about 8.7 percent of those households with income over \$50,000 reported to have had this problem (see Figure 45).

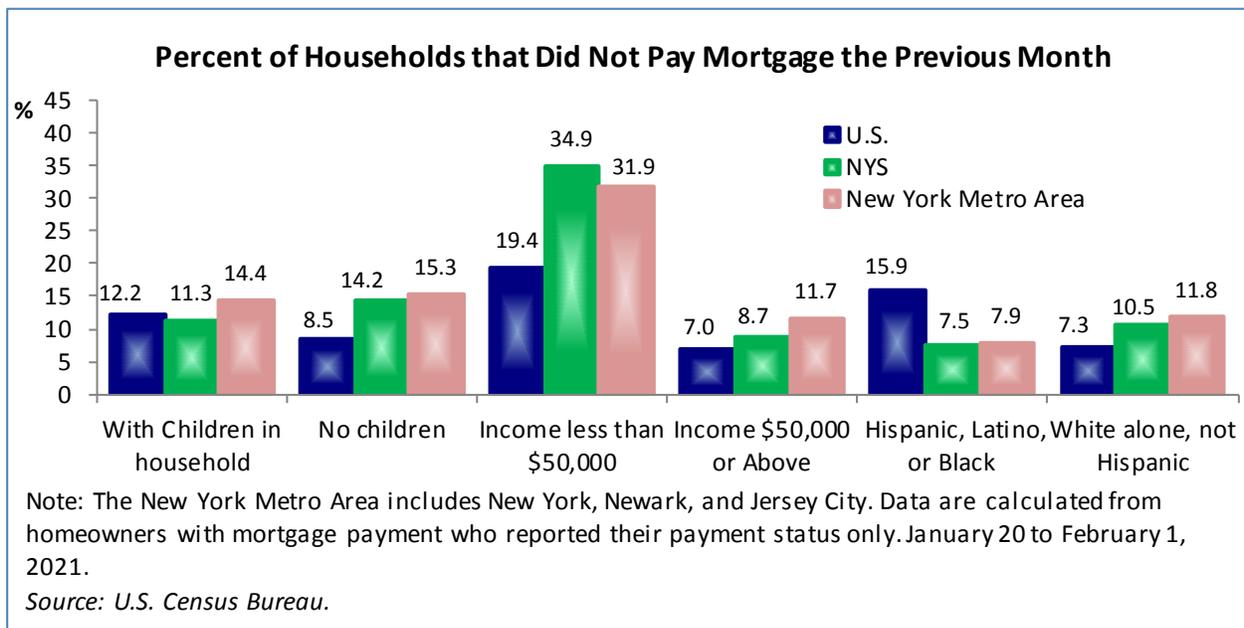


Figure 45

Unlike homeowners, renters with children were more likely to miss their rent payment. During the weeks of January 20 to February 1, 2021, 26.2 percent of renters with children nationwide reported that they had missed last month rent payment, compared to 12.8 percent of renters with no children. In New York State, 42.5 percent of renters with children said they had fallen behind in last month rent, while 22.4 percent of renters without children did. Low-income and minority households were also more prone to miss their rent and mortgage payments (see Figure 46).

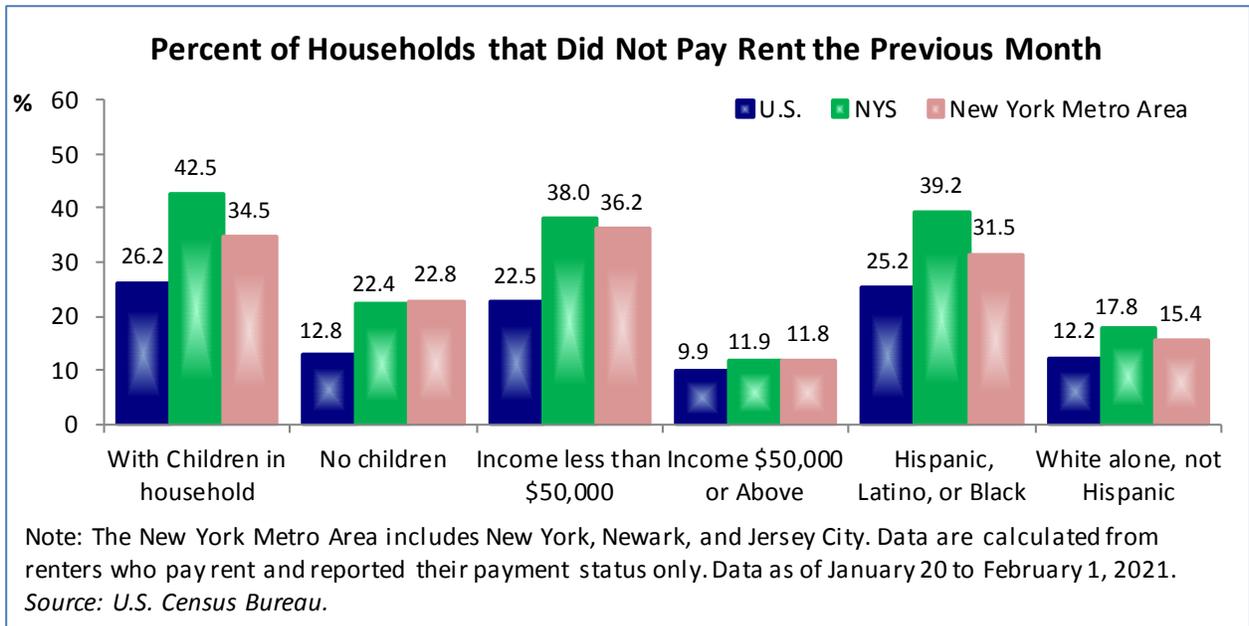


Figure 46

Health and Health Care

The United States health care system capacity is lower than in many major countries, with a smaller healthcare workforce and acute hospital bed capacity. However, the U.S. has a lower occupancy rate of hospital beds and relatively greater ability to provide radiography (CT) scans, as well as a higher number of intensive care (ICU) beds. Thus, despite its limitations, the U.S. might be in a better position to deal with public health emergencies.⁴⁰

New York State has higher healthcare capacity than the nation in some categories. The State also has a smaller proportion of adults who are at risk of becoming seriously ill if they get infected COVID-19. In 2018, 36.9 percent of adults in New York State were at risk of serious illness if infected with coronavirus. This is slightly lower than the national rate of 37.6 percent.⁴¹ New York State has a larger number of hospital beds per 10,000 population at 28.5 beds, which is slightly higher than the national rate of 23.5 beds. The State, however, has slightly fewer ICU beds at 2.3 beds per 10,000 residents, compared to 2.7 beds nationally (see Figure 47).

⁴⁰ The Commonwealth Fund, “How the U.S. Compares to Other Countries in Responding to COVID-19: Populations at Risk, Health System Capacity, and Affordability of Care,” April 7, 2020, <https://www.commonwealthfund.org/blog/2020/how-us-compares-other-countries-responding-COVID-19-populations-risk-health-system>.

⁴¹ According to the Kaiser Family Foundation, those who are at risk of serious illness if infected with coronavirus were people who have an elevated risk of serious illness if they are infected with coronavirus. This includes older people and younger adults with serious medical conditions, such as heart disease, diabetes, lung disease, asthma and obesity.

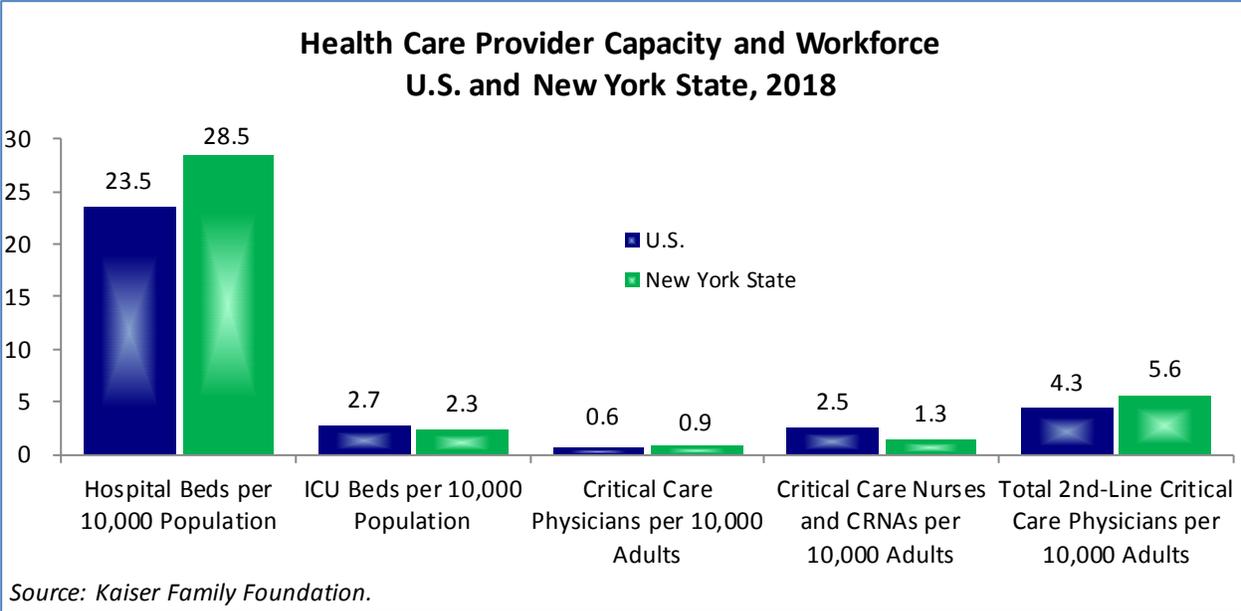


Figure 47

Even when people are not infected, many still are affected by the pandemic, as health care facilities have been closed or operated at a reduced capacity and elective surgeries have been prohibited. More than half of U.S. households reported that they were either unable to get medical care for serious problems or unable to get surgeries or elective procedures for important health problems. In addition, 15 percent of households nationwide reported that they were having serious problems affording medical care (see Table 13).

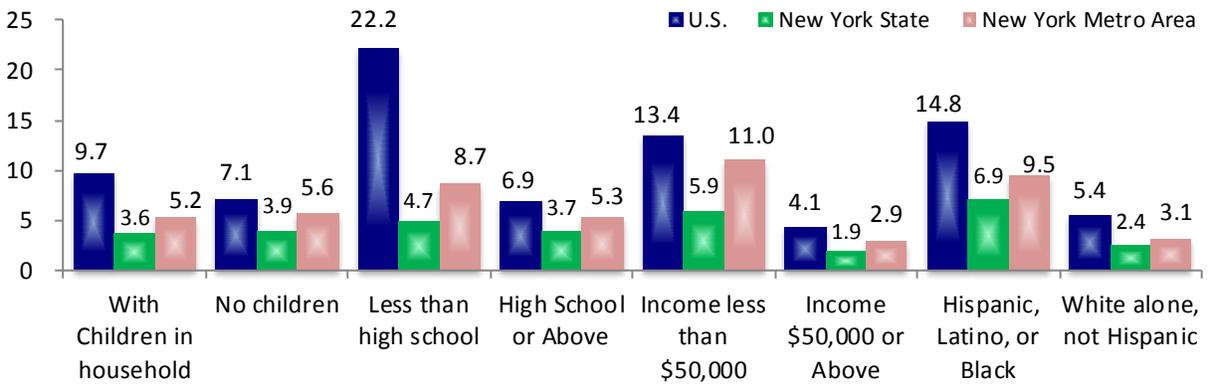
Table 13

Negative Health Consequences Among U.S. Households During the Coronavirus Outbreak (Percent) U.S. vs. New York City		
Issues	Percent Yes	
	U.S.	New York City
Unable to Get Medical Care for Serious Problems	57	59
Unable to Get Surgeries or Elective Procedures for Important Health Problems	54	56
Anyone in their household has been unable to get prescription drugs to manage a major health issue	9	7
Serious problems being able to afford medical care	15	14

Note: Data for the U.S. are based on survey of 3,454 individuals. Data for New York City are based on survey of 512 individuals.
Sources: NPR/Robert Wood Johnson Foundation/Harvard T.H. Chan School of Public Health, *The Impact of Coronavirus on Households Across America*; *The Impact of Coronavirus on Households in Major U.S. Cities*. September, 2020.

Once again, minorities and low-income households are more likely to face serious problems affording health insurance than other socio economic groups, both in the State and the nation. In New York State, 5.9 percent of New York households with annual income less than \$50,000 were without health insurance during the week of January 20 to February 1, 2021, compared to just 1.9 percent for those households with income over \$50,000 (see Figure 48). Similarly, Hispanic, Latino and Black households were more than twice as likely to be uninsured as their White counterparts.

**Percent of People Who are Uninsured
U.S., New York State, and New York-Newark-Jersey City Metro**



Note: The New York Metro Area includes New York, Newark, and Jersey City. Data are calculated from households that reported their health insurance status only. Data as of January 20 to February 1, 2021.
Source: U.S. Census Bureau.

Figure 48

Office Market

The pandemic has led companies to lay off their workers, many of whom use office space. In addition, the ongoing government-mandated shutdowns and shelter-in-place orders, have had significant impact on office demand. As a result, demand for office space has fallen. Total office vacancy rate in the nation rose from 14.3 percent in the fourth quarter of 2019 to 17.1 percent in the fourth quarter of 2020, while the vacancy rate in Manhattan increased from 7.8 percent to 12.1 percent during this period. Manhattan's direct average market rent was \$82.4 per square foot in the fourth quarter of 2020, more than twice the national average of \$36.8 per square foot (see Figure 49).

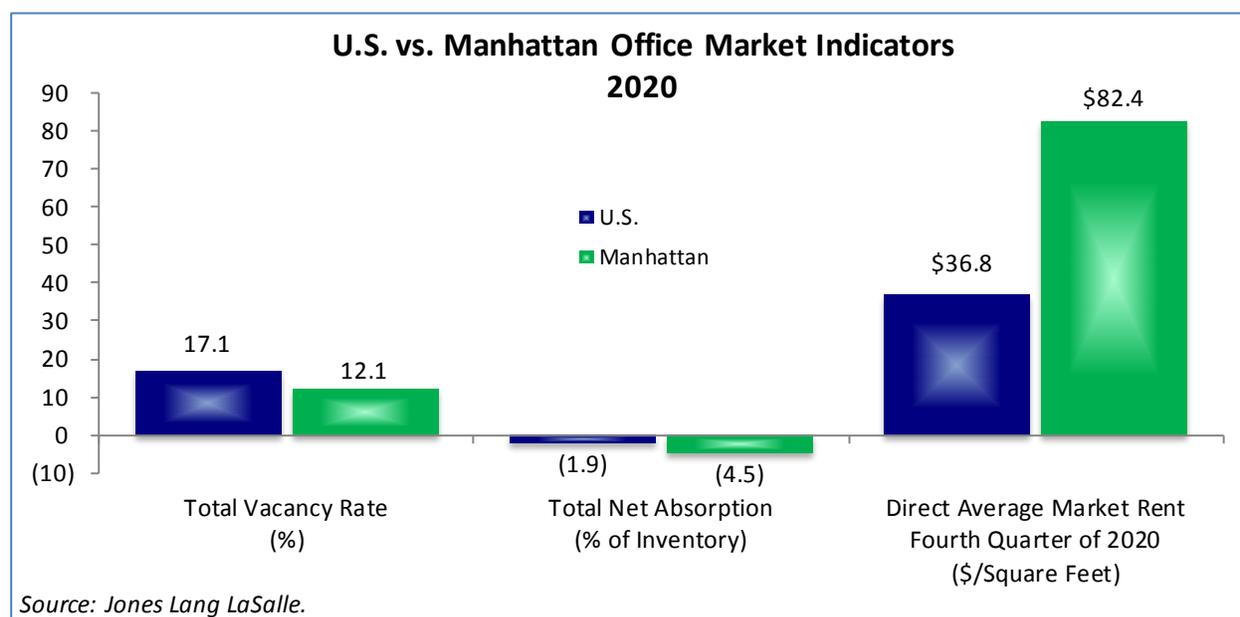


Figure 49

Manhattan is the largest office market in the United States, with over 450 million square feet of office space and additional 19.5 million square feet under construction.⁴² After a strong leasing year in 2019 with net absorption of 4.9 million square feet, office leasing activity in Manhattan has fallen sharply since the pandemic started.⁴³ Net absorption for office space in Manhattan was negative 20 million square feet in 2020. As a result, the overall Manhattan office vacancy rate rose from 7.7 percent in 2019 to 12.1 percent in 2020. Despite slow leasing

⁴² Jones Lang LaSalle, United States Office Outlook – Q4 2020.

⁴³ Net absorption is the total amount of space that tenants physically moved into minus total amount of space that tenants physically moved out of.

activity, the direct average market rent in Manhattan remains stable at around \$82 per square foot (see Figure 50).

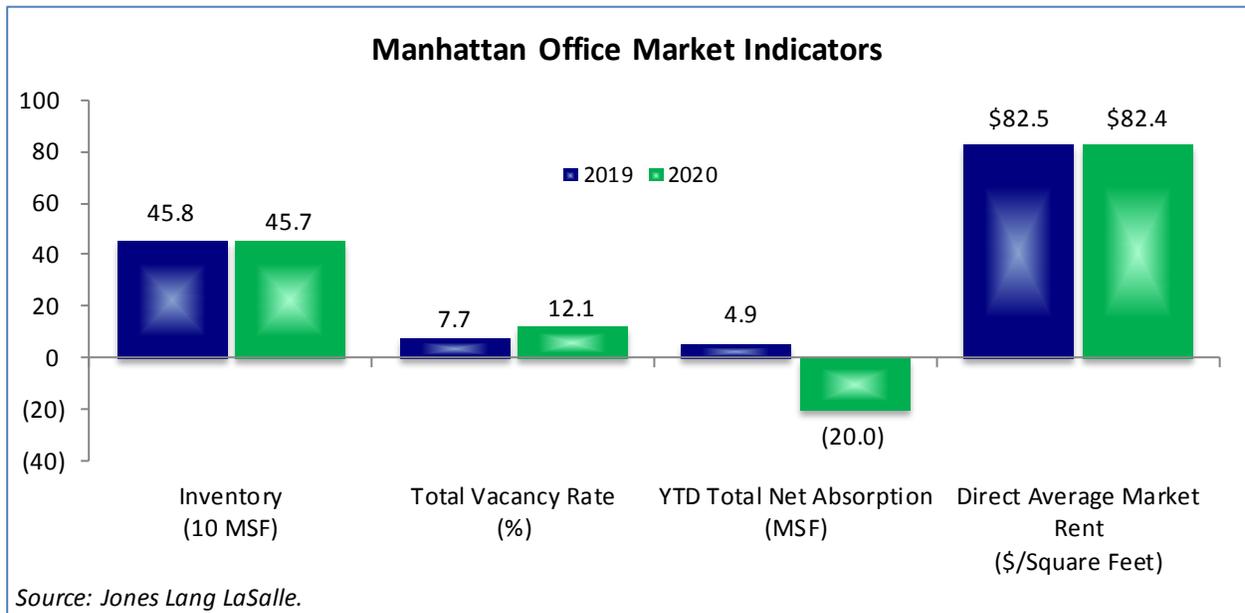


Figure 50

Although employment in most sectors is expected to grow in 2021 and 2022, the recovery of office employment does not necessarily mean an increase in office space leasing. If firms find that work-from-home is indeed an efficient way of doing business, they might permanently shift to work from home and reduce their need for office space. As a result, the demand for office space might not increase even when office employment rises. This may have adverse impact on the New York City economy.

Tourism

The U.S. travel and tourism industry generated over \$2.6 trillion in travel-related economic output in 2019, with domestic and international travelers spending \$1.1 trillion in travel and supporting nine million U.S. jobs. Travel and tourism contributed about 2.9 percent of national GDP and travel and tourism exports accounted for 11 percent of all U.S. exports and nearly a third (32 percent) of all U.S. services exports.⁴⁴

Since the outbreak of COVID-19, countries have implemented various degrees of travel restrictions, business closures, and social distancing policies in order to combat the disease. This has had a huge impact on the tourism industry worldwide. According to the World Tourism Organization, international tourist arrivals declined by 74 percent, globally in 2020 (see Figure 51). This translates into a loss of about \$1.3 trillion in export revenue from international tourism compared to the same period in 2019, more than eleven times the loss in international tourism receipts during the global economic crisis in 2009.⁴⁵

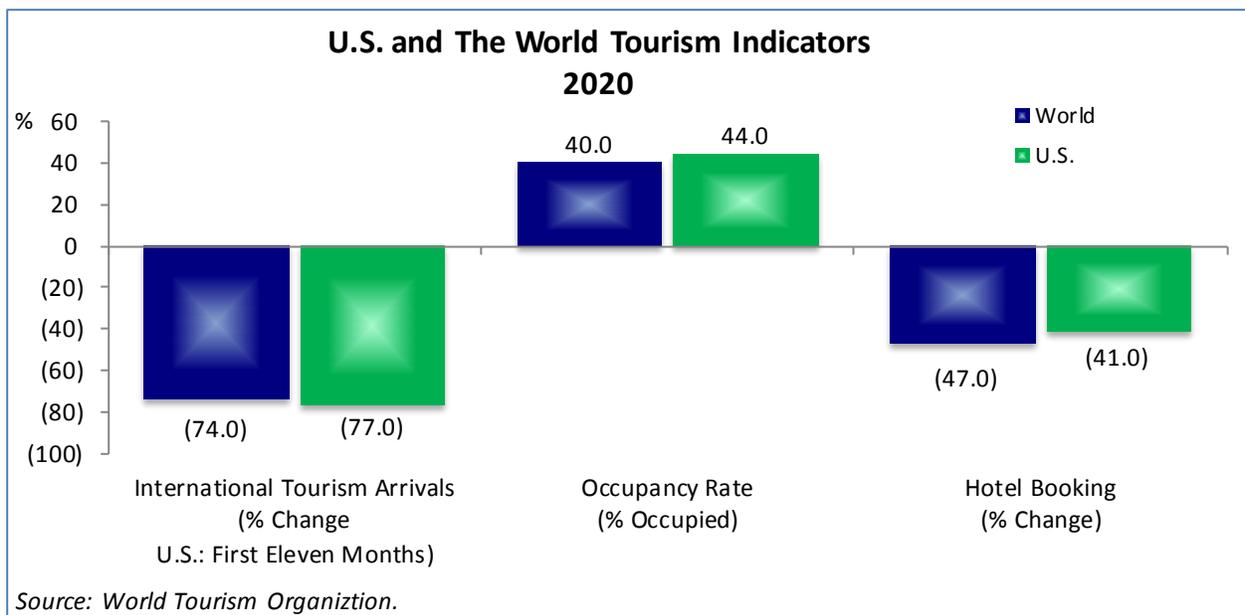


Figure 51

⁴⁴ U.S. Travel Association, “U.S. Travel and Tourism Overview (2019),” March 2020, https://www.ustravel.org/system/files/media_root/document/Research_Fact-Sheet_US-Travel-and-Tourism-Overview.pdf.

⁴⁵ World Tourism Organization, World Tourism Barometer, vol. 19, issue 1, January 2021.

Similarly, international tourist arrivals for the U.S. fell 77 percent in the first eleven months of 2020, compared to the same period in 2019, while hotel booking fell by 41 percent for the year. Recent indicators show some improvement in the tourism industry as hotel booking, occupancy rate, and checkpoint travel numbers have improved slightly (see Figure 52).

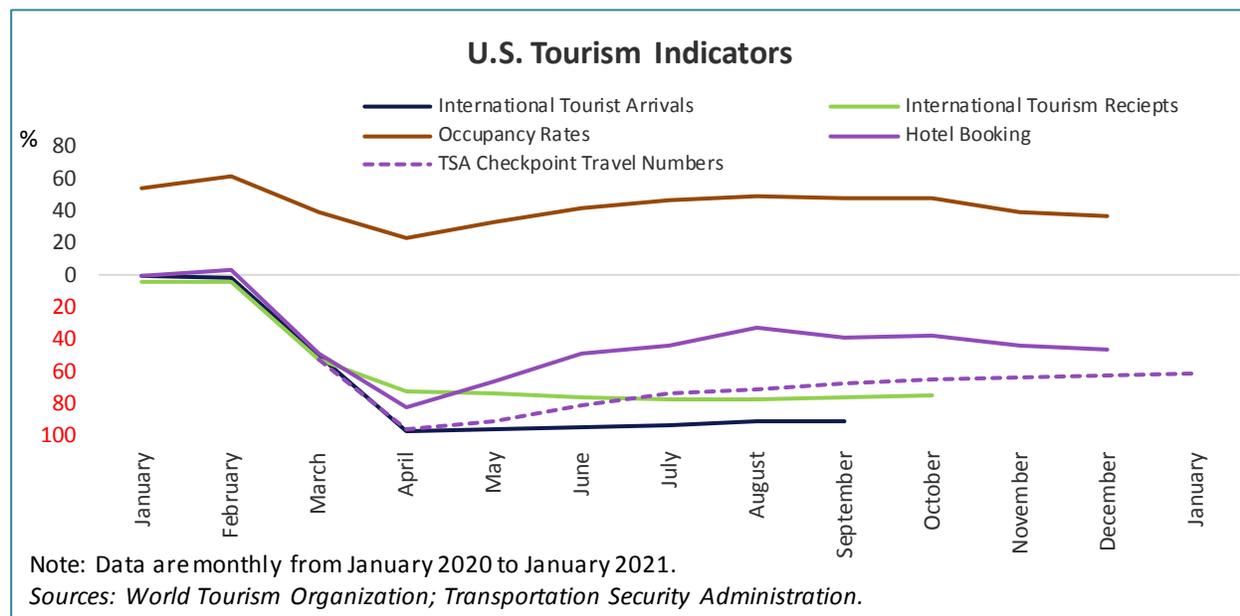


Figure 52

The sector that was impacted most by the decline in tourism was the hotel industry. In 2019, the occupancy rate for the U.S. hotel industry averaged 66.1 percent, while the average daily rate (ADR) and the revenue per available room (RevPAR) were \$131.2 and \$86.8, respectively. Industry performance started to fall in March 2020, and seemed to have bottomed out in April, with the occupancy rate falling by over 40 percentage points to only 24.5 percent. Similarly, the average daily rate fell 44.2 percent to \$73.2 and the revenue per available room dropped 77.9 percent to just \$17.9 (see Figure 53). However, recent indicators showed a slight decline .

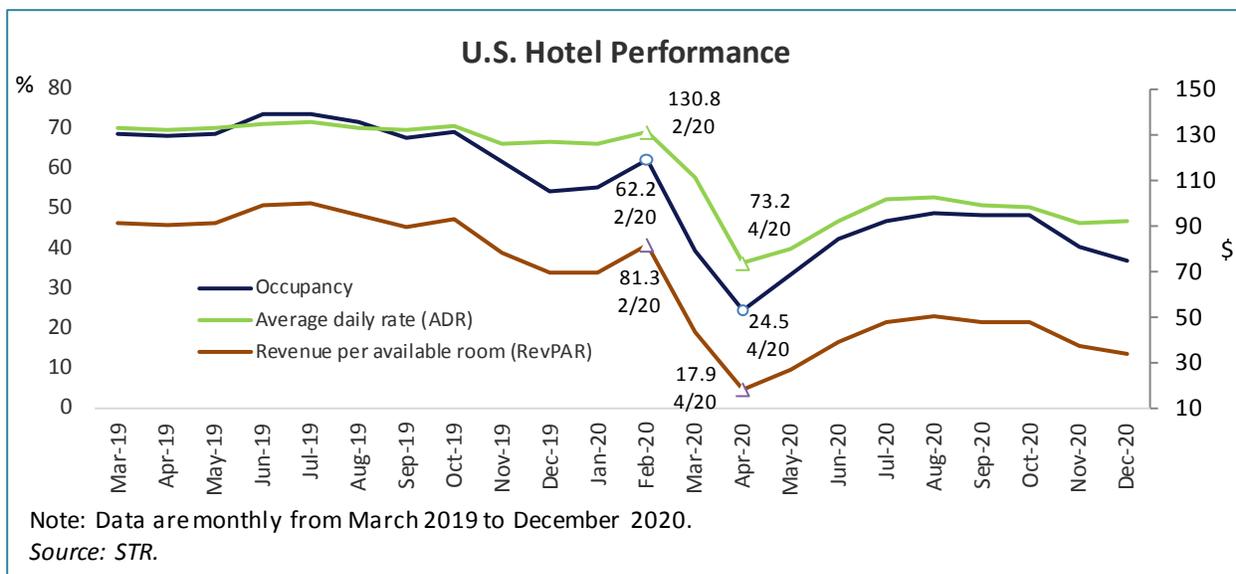


Figure 53

As in the nation, travel and tourism is an important sector in the State. It is estimated that travel and tourism generated more than \$15 billion in tax revenue, and employed over 500,000 jobs, or about 6.7 percent of the State’s total private employment in 2018.⁴⁶ The falling number of tourists led to massive job cuts in the hotel industry. According to the American Hotel and Lodging Association, it is estimated that New York State could lose over 500,000 hotel supported jobs⁴⁷ and about \$1.3 billion dollars in tax revenue due to this pandemic.⁴⁸

Within the State, Manhattan was particularly hard hit by the decline of tourism. New York City is one of the major tourist destinations in the world. In 2019, over 66 million people visited New York City, of which 13.5 million were international visitors.⁴⁹ Almost 40 million hotel nights in New York City were sold in 2019, an about 2.3 percent increase from 2018. The demand for hotel rooms in the City remained strong in the first two months of 2020, with a

⁴⁶ U.S. Travel Association, The economic impact of the travel industry https://www.ustravel.org/sites/default/files/media_root/economic-impact-map/states/current/Travel_Impact_NY.pdf, last access September 25, 2020.

⁴⁷ American Hotel and Lodging Association, OXFORD ECONOMIC STUDY DATA STATE BY STATE BREAKDOWN: JOB LOSS FIGURES FOR HOTEL INDUSTRY FROM CORONAVIRUS PANDEMIC, https://www.ahla.com/sites/default/files/Compiled%20State%20Job%20Loss%20Impact-COVID_0.pdf.

⁴⁸ American Hotel and Lodging Association, \$16.8 BILLION LOSS IN STATE, LOCAL TAX REVENUE FROM HOTELS IN 2020 DUE TO COVID-19 <https://www.ahla.com/press-release/report-168-billion-loss-state-local-tax-revenue-hotels-2020-due-COVID-19>.

⁴⁹ NYC & Company, Inc., “NYC & Company Annual Report 2019-2020,” <https://indd.adobe.com/view/a614092f-2162-4a39-97c3-f4d67b0cbe0b>.

total of 5.7 million hotel nights were sold, an increase of 6.9 percent from the same period in 2019.

As the pandemic hit the State and the Governor implemented “New York on Pause” policies that shut down all nonessential businesses, the demand for hotel rooms in the City plunged. There were only 1.2 million hotel room nights sold in March 2020, a decline of 62.6 percent from March 2019.⁵⁰ As of early September, approximately 61,450 hotel rooms, or about 58 percent of total inventory, in Manhattan were closed, with approximately 2,700 rooms closed permanently.⁵¹

Hotel industry performance in Manhattan fell sharply in the first half of 2020, compared to the same period in the prior year, slightly worse than the nation. The hotel occupancy rate in Manhattan fell by 58.5 percent from the first half of 2019 to the first half of 2020, compared to 52.5 percent nationwide. The average daily rate in Manhattan fell by 55.7 percent (38.6 percent nationwide) and the revenue per available room dropped 81.6 percent (70.3 percent nationwide) during this period (see Figure 54).

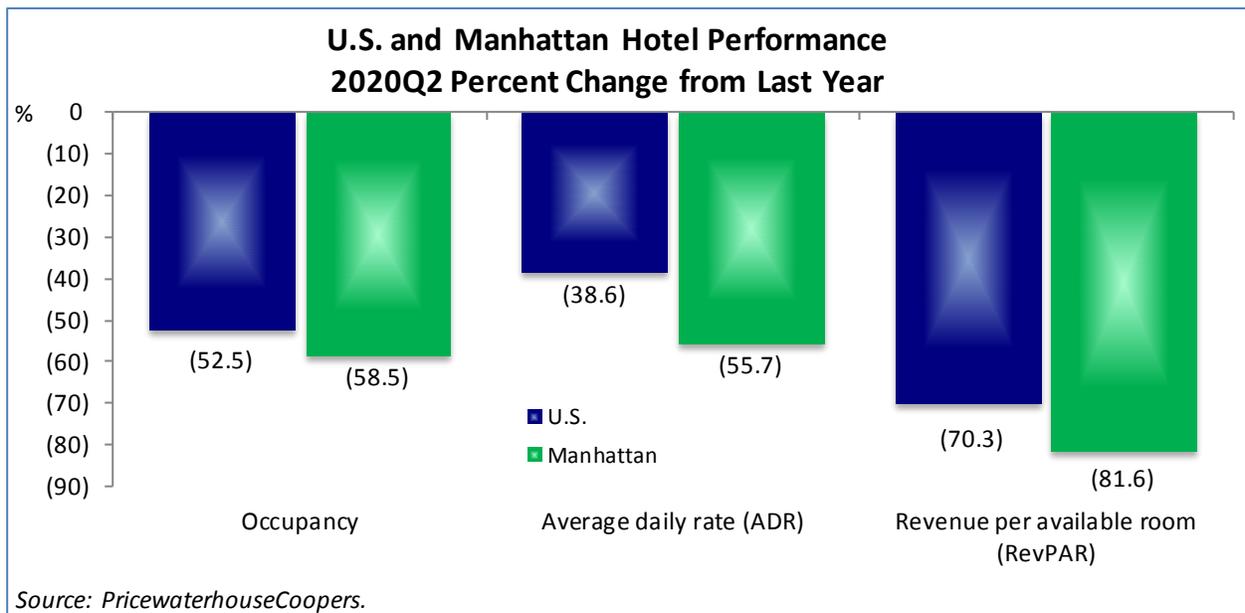


Figure 54

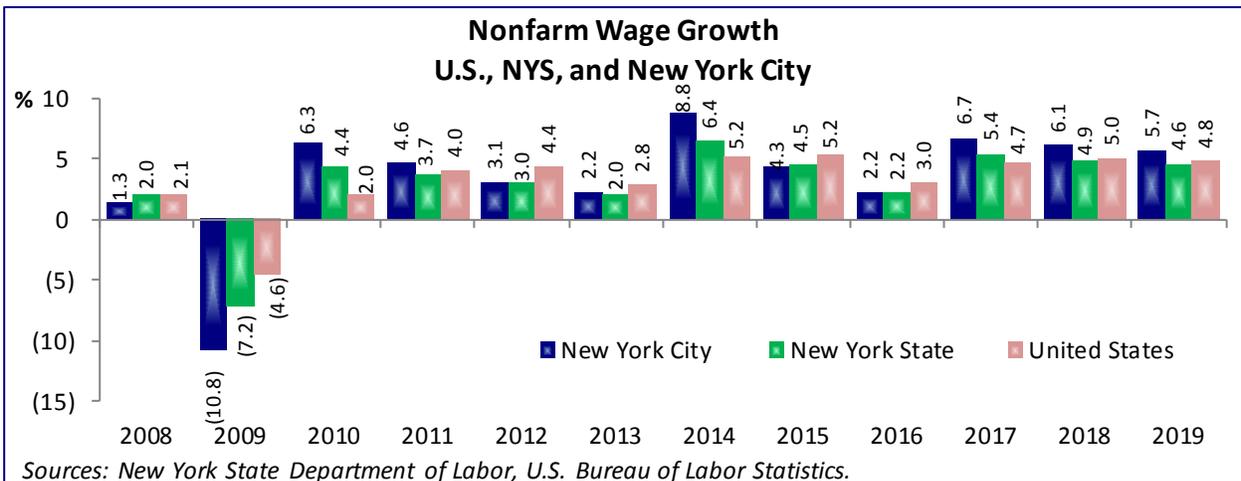
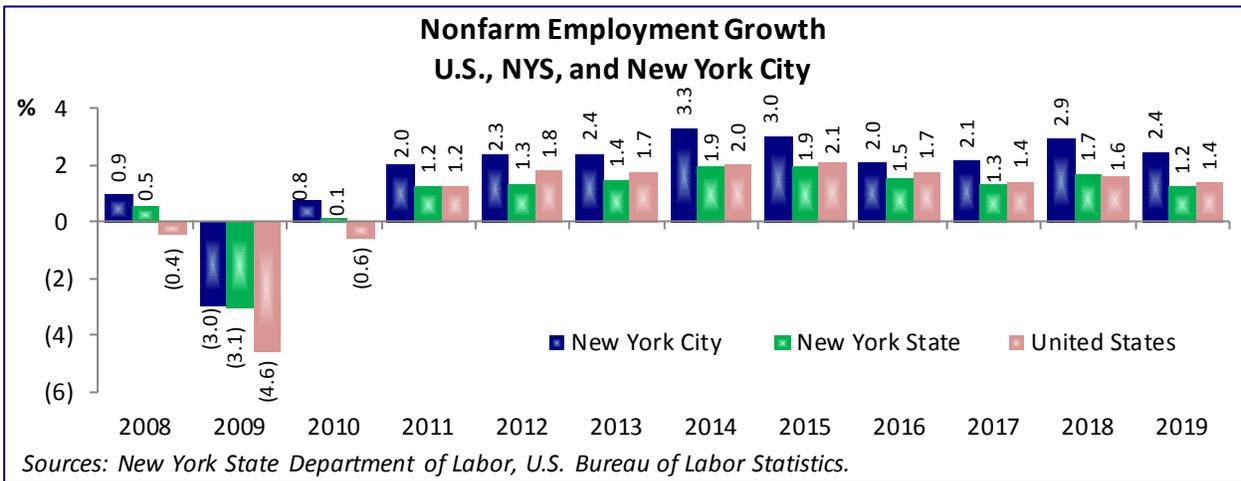
⁵⁰ NYC & Company, Inc., “NYC Hotel Occupancy, ADR & Room Demand - 5 Year Trend Report,” https://assets.simpleviewinc.com/simpleview/image/upload/v1/clients/newyorkcity/FYI_Hotel_reports_March_2020_9afc1fca-79c1-47a9-8a21-fdefa3c4ffcb.pdf.

⁵¹ PricewaterhouseCoopers, Manhattan Lodging Index: Second Quarter 2020, <https://www.pwc.com/us/en/industries/hospitality-leisure/assets/q2-2020-manhattan-lodging-index-report.pdf>.

NEW YORK STATE REGIONAL SNAPSHOTS

New York City

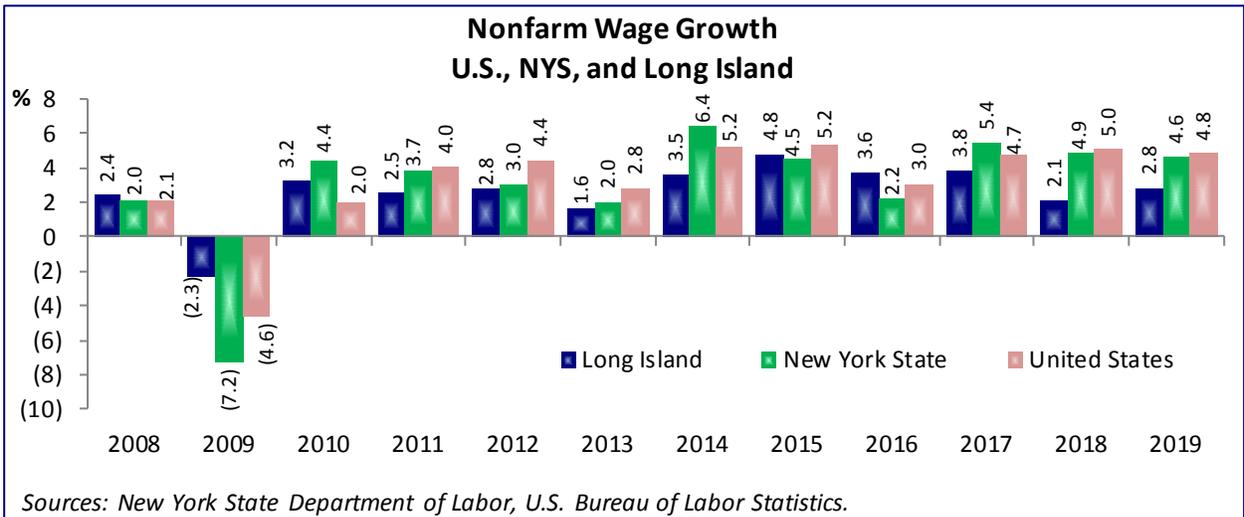
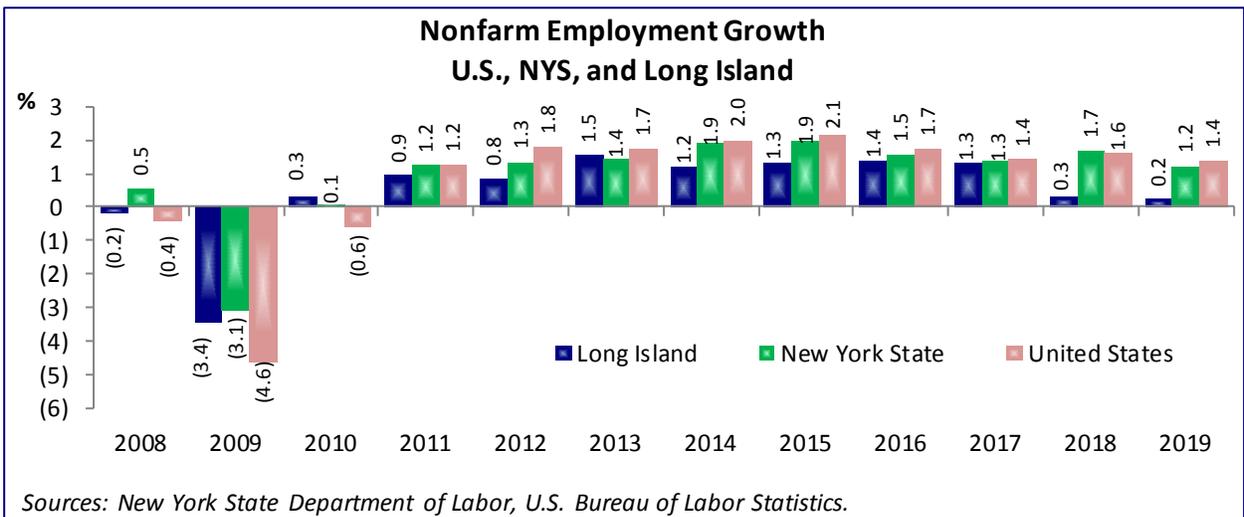
Key Economic Indicators 2019			
Employment (million)	4.482	Share of State Personal Income (%)	48.0
Share of State Employment (%)	47.1	Per Capita Personal Income	\$80,321
Unemployment Rate (12/2020) (%)	11.0	Population (million)	8.34
Total Wages (billion)	\$428.6	Share of State Population (%)	42.9
Share of State Wages (%)	59.7	Population Growth (%)	(0.6)
Average Wage	\$95,636	Persons in Poverty	1,320,177
Personal Income (billion)	\$669.6	Poverty Rate (%)	15.8
Largest Employers (August 2016): <i>American Airlines; Columbia University; JP Morgan Chase Bank; Memorial Sloan Kettering Cancer Center; Morgan Stanley Children's Hospital; Mount Sinai Hospital; New York-Presbyterian University Hospital; Nielsen Company; Northwell Health, Inc.; Verizon</i>			
Sources: U.S. Census Bureau; New York State Department of Labor; U.S. Bureau of Economic Analysis.			



Long Island

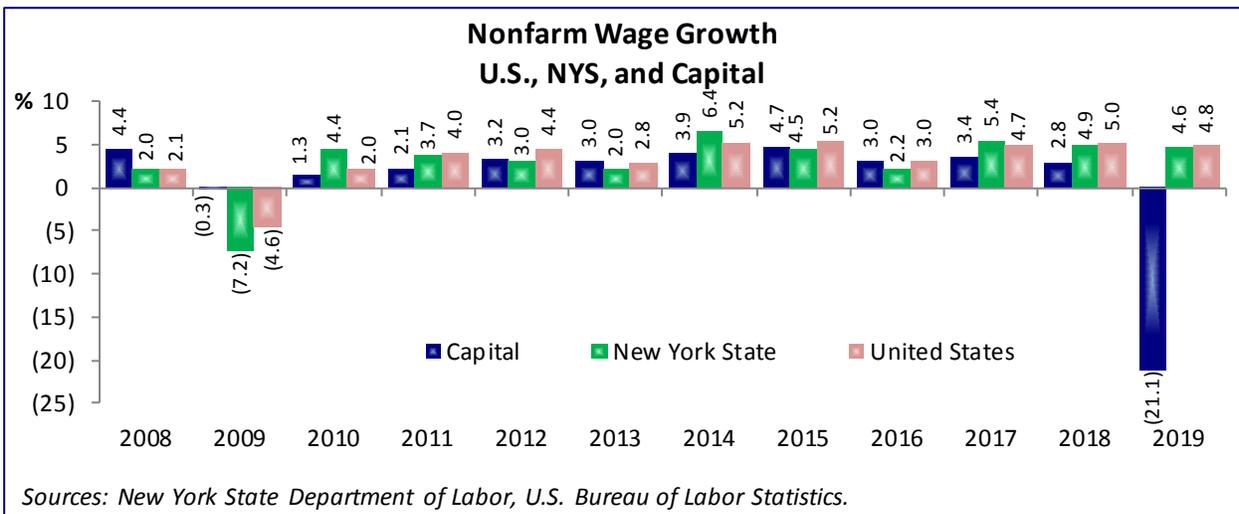
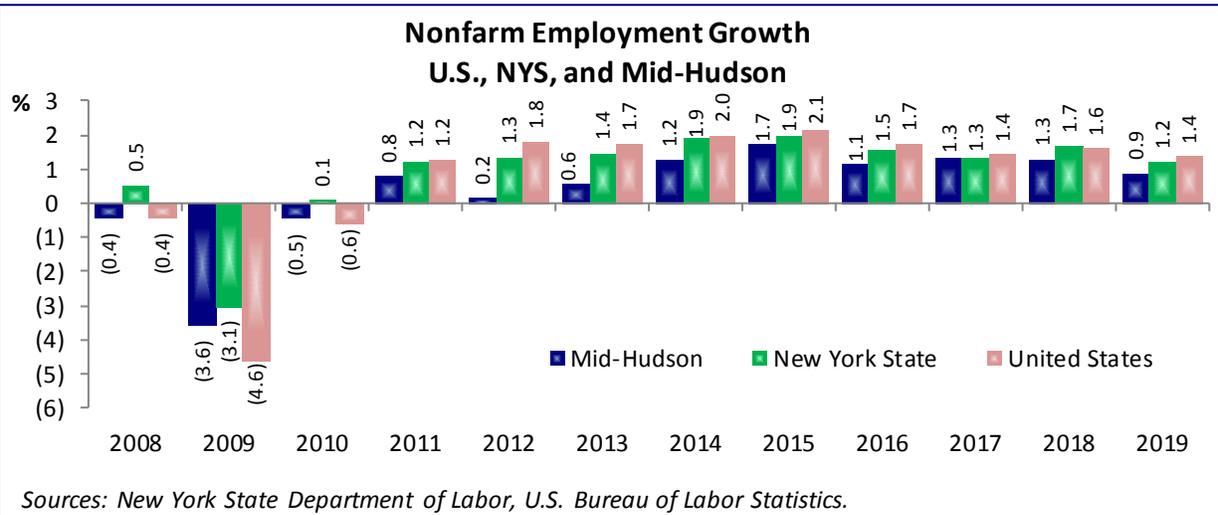
Key Economic Indicators 2019

Employment (million)	1.293	Share of State Personal Income (%)	16.7
Share of State Employment (%)	13.6	Per Capita Personal Income	\$82,126
Unemployment Rate (12/2020) (%)	5.5	Population (million)	2.83
Total Wages (billion)	\$81.1	Share of State Population (%)	14.6
Share of State Wages (%)	11.3	Population Growth (%)	(0.6)
Average Wage	\$62,753	Persons in Poverty	172,355
Personal Income (billion)	\$232.7	Poverty Rate (%)	6.1
Largest Employers (August 2016): <i>Broadridge Financial Solutions, Inc.</i> ; <i>Good Samaritan Hospital Medical Center</i> ; <i>Hofstra University</i> ; <i>Home Depot</i> ; <i>King Kullen</i> ; <i>Northwell Health, Inc.</i> ; <i>Prestige Employee Administrators</i> ; <i>ProHEALTH Care, Inc.</i> ; <i>Stop & Shop Supermarkets</i> ; <i>Winthrop-University Hospital</i>			
Sources: U.S. Census Bureau; New York State Department of Labor; U.S. Bureau of Economic Analysis.			



Mid-Hudson

Key Economic Indicators			
2019			
Employment (million)	0.934	Share of State Personal Income (%)	13.5
Share of State Employment (%)	9.8	Per Capita Personal Income	\$77,682
Unemployment Rate (12/2020) (%)	5.8	Population (million)	2.32
Total Wages (billion)	\$58.7	Share of State Population (%)	11.9
Share of State Wages (%)	8.2	Population Growth (%)	0.1
Average Wage	\$62,866	Persons in Poverty	226,494
Personal Income (billion)	\$180.5	Poverty Rate (%)	9.7
Largest Employers (August 2016): <i>Crystal Run Healthcare; Home Depot; IBM Corp.; Nyack Hospital; Orange Regional Medical Center; Regeneron Pharmaceuticals, Inc; ShopRite Supermarkets; Stop & Shop Supermarkets; Wal-Mart Stores, Inc.; Westchester Medical Center</i>			
Sources: U.S. Census Bureau; New York State Department of Labor; U.S. Bureau of Economic Analysis.			



Capital District

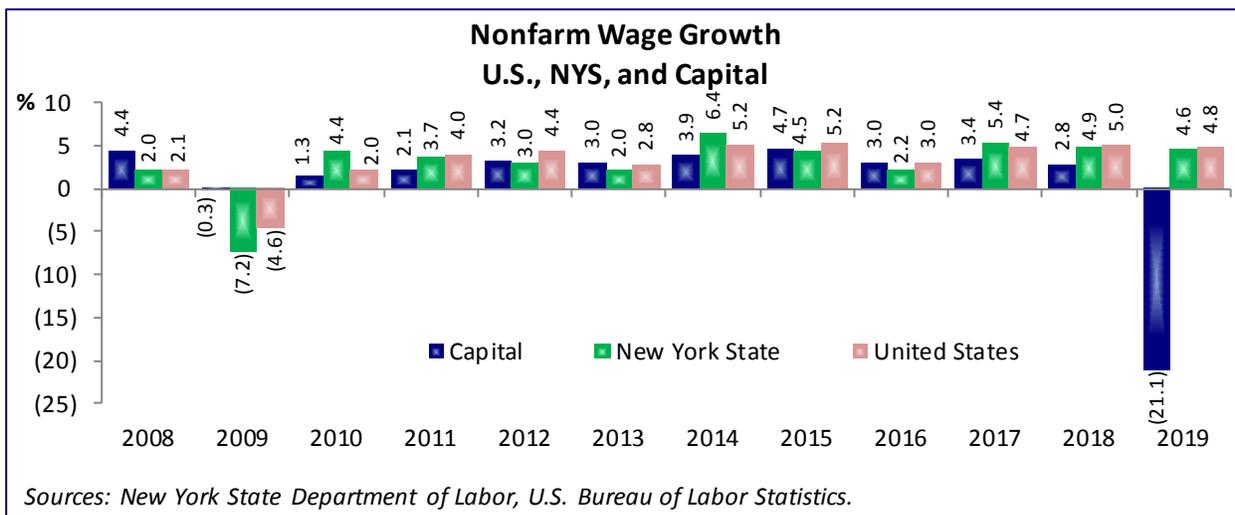
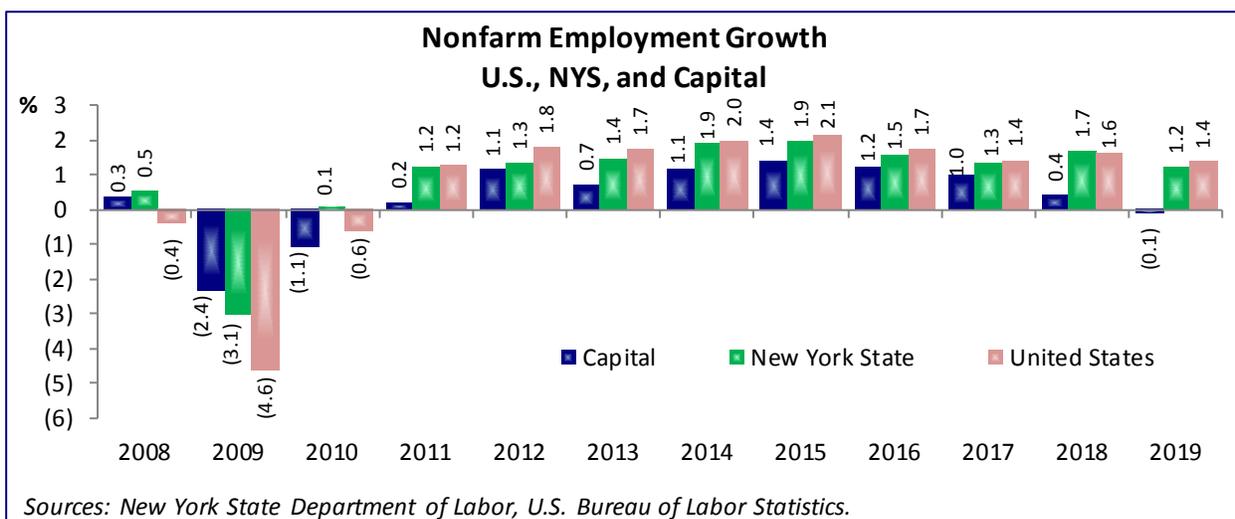
Key Economic Indicators

2019

Employment (million)	0.526	Share of State Personal Income (%)	4.6
Share of State Employment (%)	5.5	Per Capita Personal Income	\$59,236
Unemployment Rate (12/2020) (%)	5.4	Population (million)	1.08
Total Wages (billion)	\$22.3	Share of State Population (%)	5.6
Share of State Wages (%)	3.1	Population Growth (%)	(0.2)
Average Wage	\$42,364	Persons in Poverty	108,109
Personal Income (billion)	\$64.0	Poverty Rate (%)	10.0

Largest Employers (August 2016): *Albany Medical Center Hospital; Bechtel Marine Propulsion Corp.; Ellis Hospital; General Electric Co.; Glens Falls Hospital; Hannaford Supermarkets; Price Chopper; Rensselaer Polytechnic Institute; St. Peter's Hospital; Walmart*

Sources: U.S. Census Bureau; New York State Department of Labor; U.S. Bureau of Economic Analysis.



Mohawk Valley

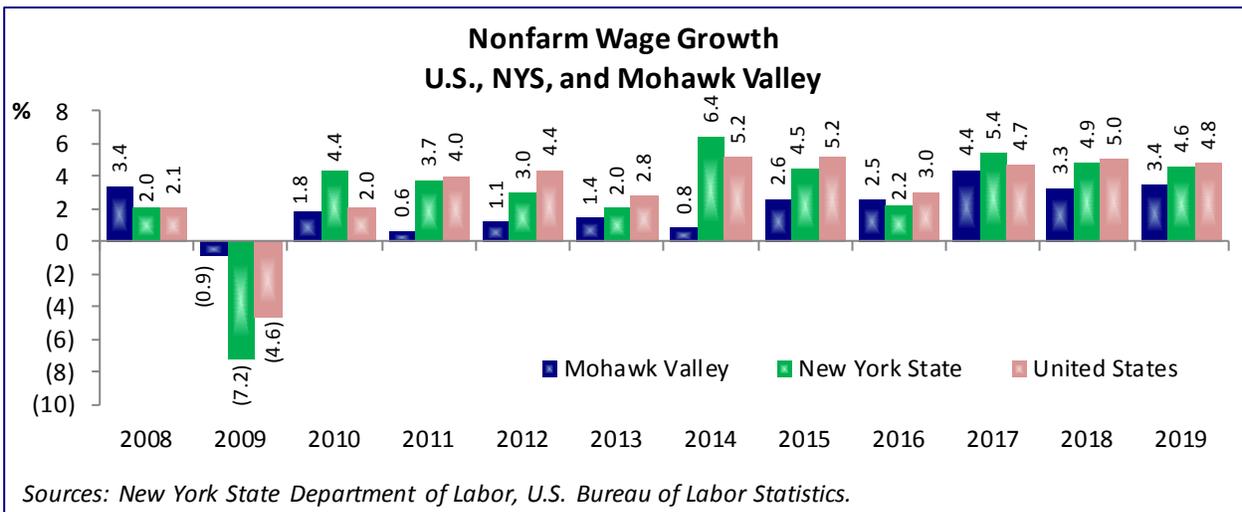
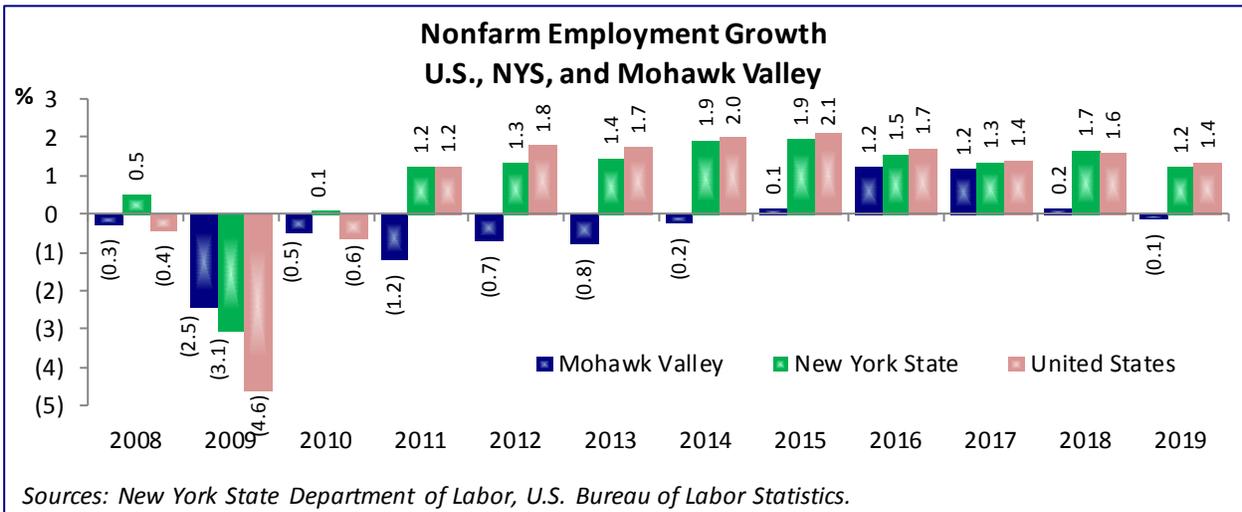
Key Economic Indicators

2019

Employment (million)	0.168	Share of State Personal Income (%)	1.4
Share of State Employment (%)	1.8	Per Capita Personal Income	\$45,611
Unemployment Rate (12/2020) (%)	6.4	Population (million)	0.43
Total Wages (billion)	\$7.4	Share of State Population (%)	2.2
Share of State Wages (%)	1.0	Population Growth (%)	(0.4)
Average Wage	\$43,872	Persons in Poverty	60,039
Personal Income (billion)	\$19.5	Poverty Rate (%)	14.0

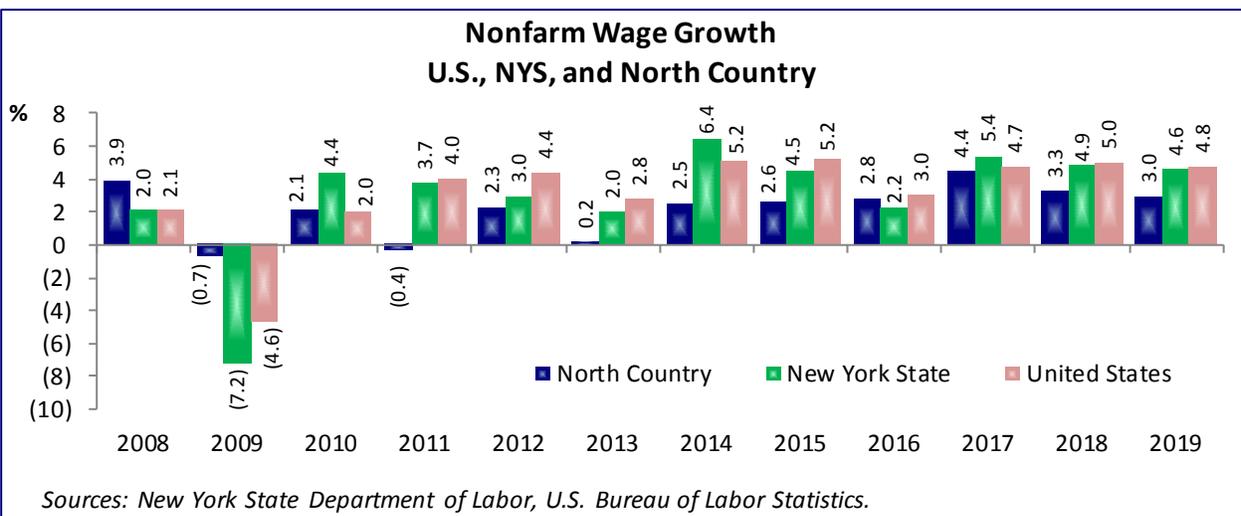
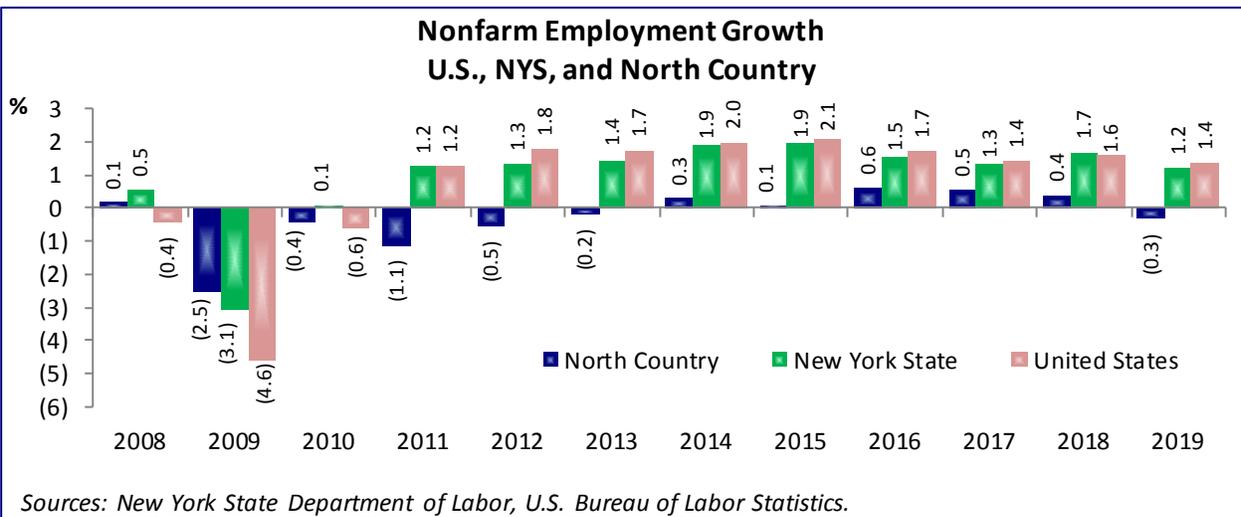
Largest Employers (August 2016): A. O. Fox Hospital; Bassett Healthcare Network; Faxton-St Luke's Healthcare; Hannaford supermarket; Metropolitan Life Insurance Co.; Price Chopper; St. Elizabeth Medical Center; St. Mary's Hospital; Utica National Insurance Group; Wal-Mart Stores, Inc.

Sources: U.S. Census Bureau; New York State Department of Labor; U.S. Bureau of Economic Analysis.



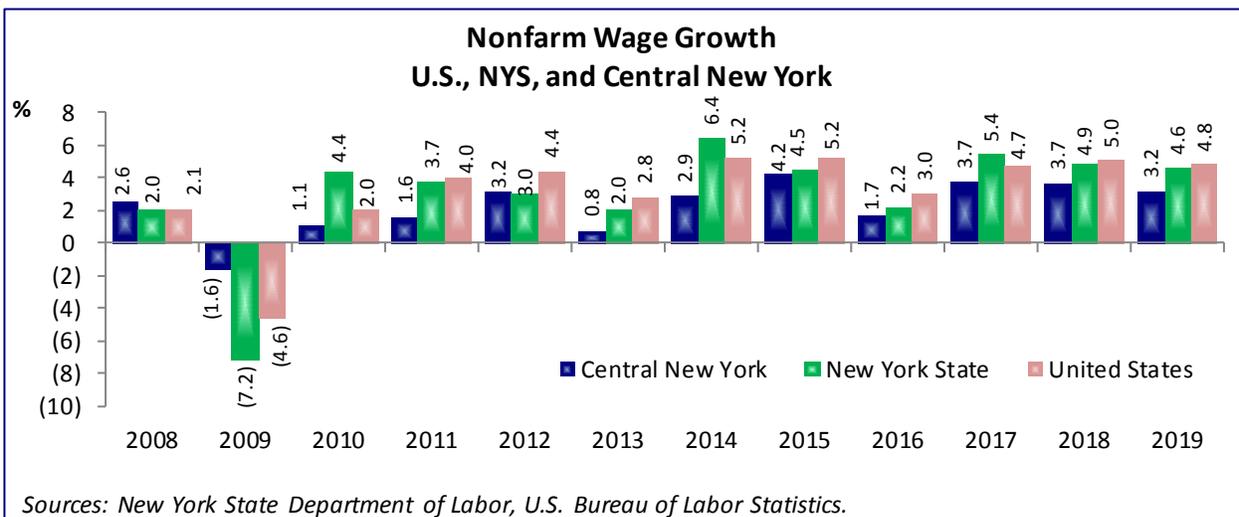
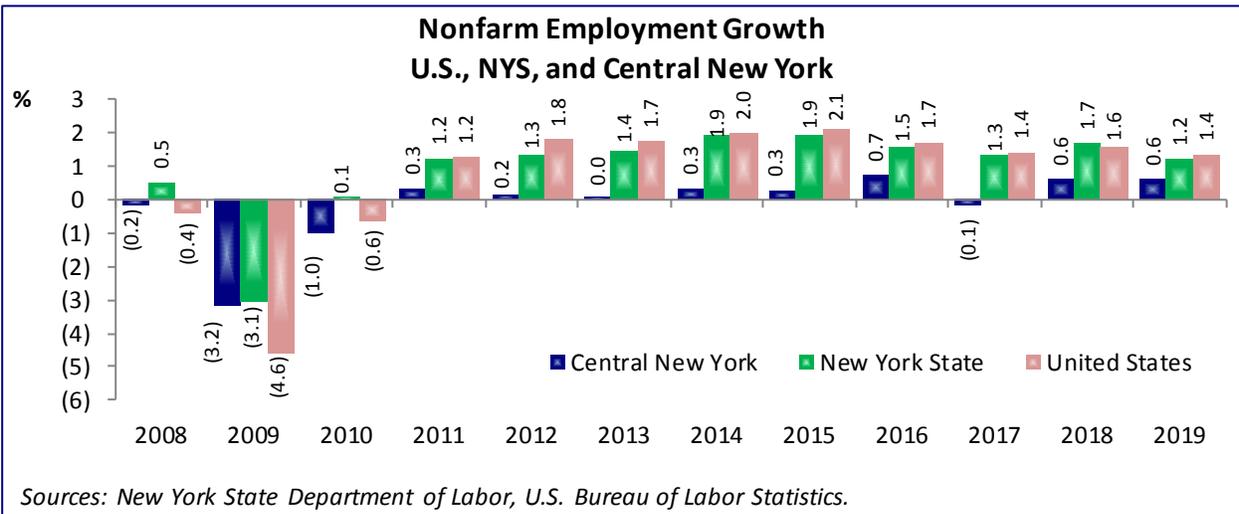
North Country

Key Economic Indicators			
2019			
Employment (million)	0.147	Share of State Personal Income (%)	1.3
Share of State Employment (%)	1.5	Per Capita Personal Income	\$44,591
Unemployment Rate (12/2020) (%)	6.0	Population (million)	0.41
Total Wages (billion)	\$6.7	Share of State Population (%)	2.1
Share of State Wages (%)	0.9	Population Growth (%)	(0.9)
Average Wage	\$45,252	Persons in Poverty	60,029
Personal Income (billion)	\$18.3	Poverty Rate (%)	14.6
Largest Employers (August 2016): <i>Canton-Potsdam Hospital; Champlain Valley Physicians Hospital Medical Center; Clarkson University; Claxton-Hepburn Medical Center; Kinney Drugs; Price Chopper; St. Lawrence University; Samaritan Medical Center; Walmart</i>			
Sources: U.S. Census Bureau; New York State Department of Labor; U.S. Bureau of Economic Analysis.			



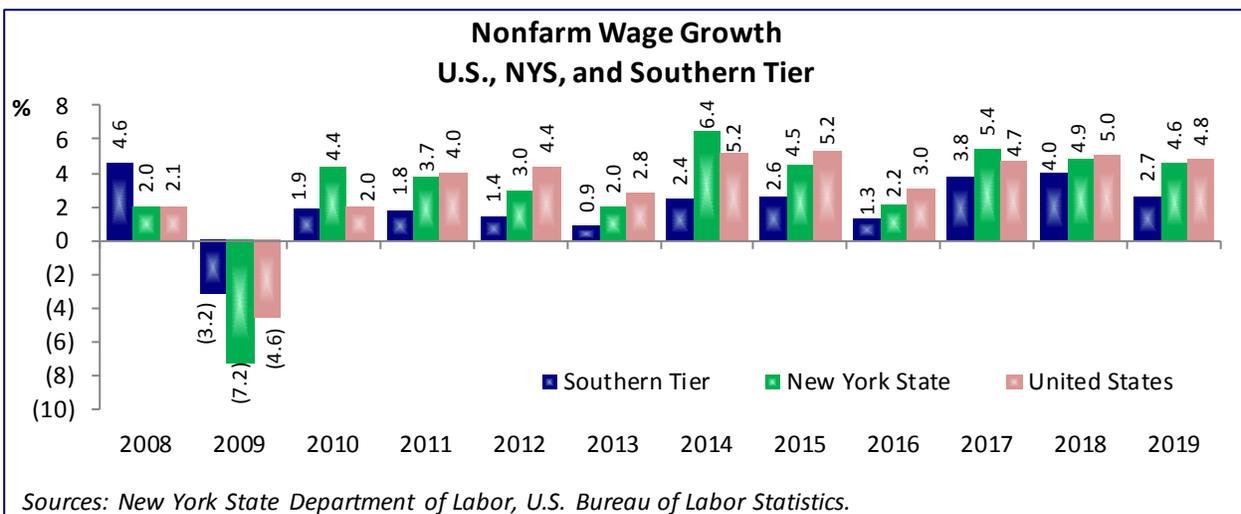
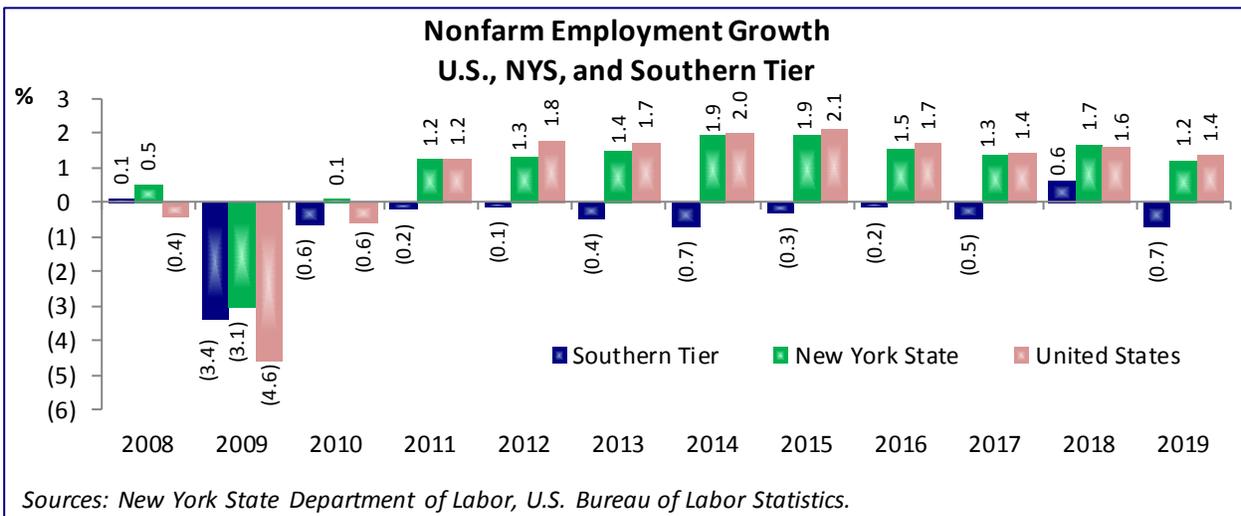
Central New York

Key Economic Indicators			
2019			
Employment (million)	0.344	Share of State Personal Income (%)	2.8
Share of State Employment (%)	3.6	Per Capita Personal Income	\$50,701
Unemployment Rate (12/2020) (%)	6.3	Population (million)	0.77
Total Wages (billion)	\$17.6	Share of State Population (%)	4.0
Share of State Wages (%)	2.5	Population Growth (%)	(0.3)
Average Wage	\$51,140	Persons in Poverty	103,030
Personal Income (billion)	\$39.2	Poverty Rate (%)	13.3
Largest Employers (August 2016): <i>Crouse Hospital; Lockheed Martin Corp.; Loretto Health and Rehabilitation Center; National Grid; Price Chopper; Syracuse University; Tops Friendly Markets; Wal-Mart Stores, Inc.; Wegmans Food Markets</i>			
Sources: U.S. Census Bureau; New York State Department of Labor; U.S. Bureau of Economic Analysis.			



Southern Tier

Key Economic Indicators			
2019			
Employment (million)	0.279	Share of State Personal Income (%)	2.3
Share of State Employment (%)	2.9	Per Capita Personal Income	\$46,000
Unemployment Rate (12/2020) (%)	5.8	Population (million)	0.69
Total Wages (billion)	\$14.1	Share of State Population (%)	3.5
Share of State Wages (%)	2.0	Population Growth (%)	(0.6)
Average Wage	\$50,416	Persons in Poverty	182,001
Personal Income (billion)	\$31.7	Poverty Rate (%)	26.4
Largest Employers (August 2016): <i>Amphenol Aerospace; Arnot Ogden Medical Center; BAE Systems Inc.; Cornell University; Ithaca College; Lockheed Martin Corp.; Lourdes Hospital; United Health Services; Wal-Mart Stores, Inc.; Wegmans Food Markets</i>			
Sources: U.S. Census Bureau; New York State Department of Labor; U.S. Bureau of Economic Analysis.			



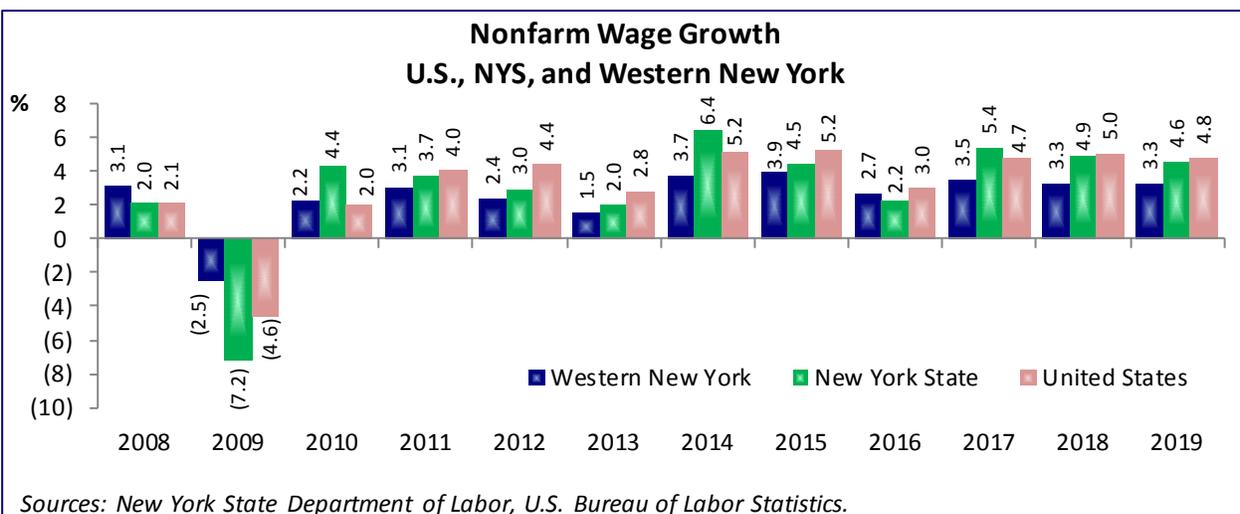
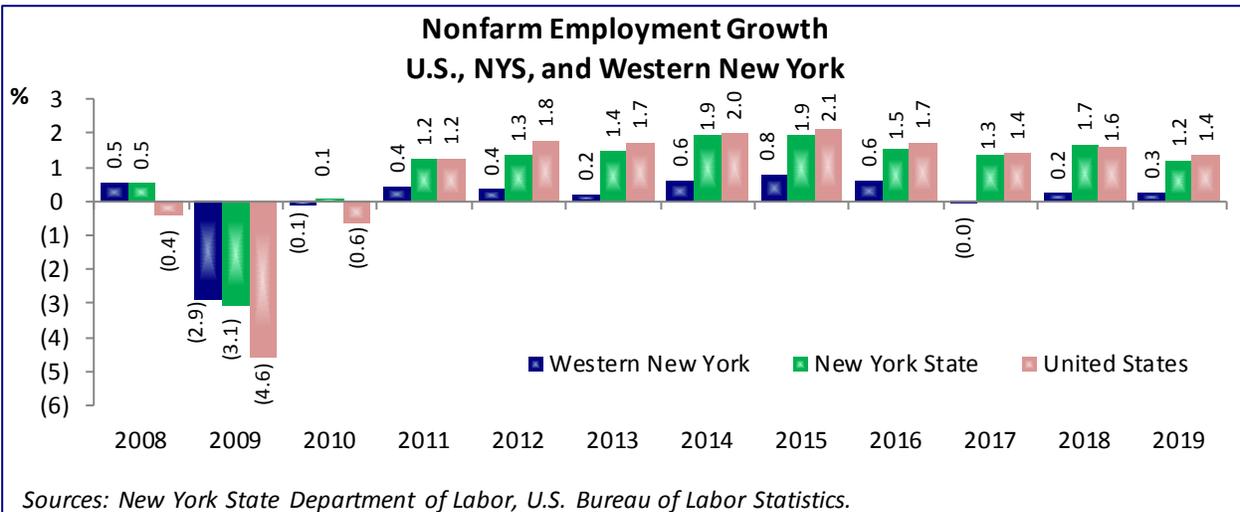
Western New York

Key Economic Indicators 2019

Employment (million)	0.632	Share of State Personal Income (%)	5.0
Share of State Employment (%)	6.6	Per Capita Personal Income	\$50,287
Unemployment Rate (12/2020) (%)	7.5	Population (million)	1.38
Total Wages (billion)	\$31.3	Share of State Population (%)	7.1
Share of State Wages (%)	4.4	Population Growth (%)	(0.2)
Average Wage	\$49,495	Persons in Poverty	139,461
Personal Income (billion)	\$69.2	Poverty Rate (%)	10.1

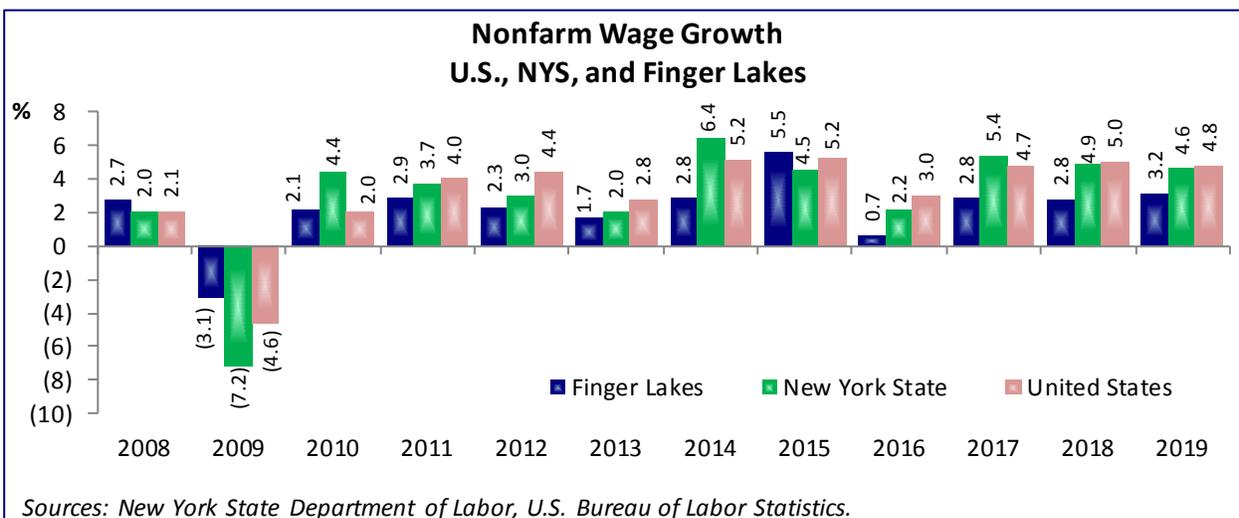
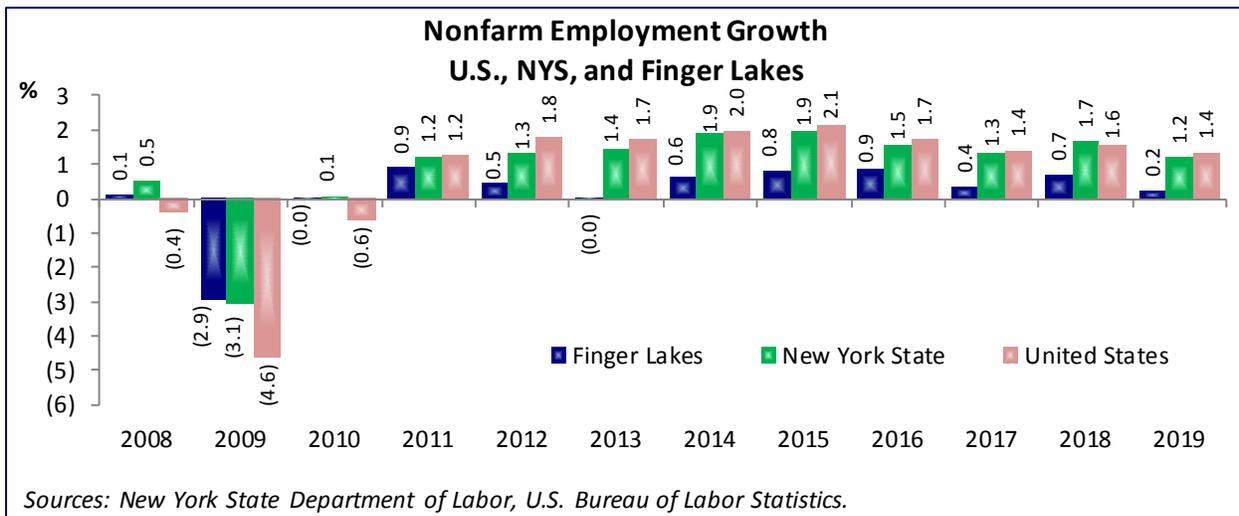
Largest Employers (August 2016): *BlueCross BlueShield of Western New York; Computer Task Group, Inc.; General Motors; Kaleida Health; M&T Bank Corp.; Mercy Hospital of Buffalo; People Inc.; Tops Friendly Markets; Wal-Mart Stores, Inc.; Wegmans Food Markets*

Sources: U.S. Census Bureau; New York State Department of Labor; U.S. Bureau of Economic Analysis.



Finger Lakes

Key Economic Indicators			
2019			
Employment (million)	0.554	Share of State Personal Income (%)	4.5
Share of State Employment (%)	5.8	Per Capita Personal Income	\$52,200
Unemployment Rate (12/2020) (%)	6.4	Population (million)	1.20
Total Wages (billion)	\$28.1	Share of State Population (%)	6.2
Share of State Wages (%)	3.9	Population Growth (%)	(0.2)
Average Wage	\$50,819	Persons in Poverty	149,335
Personal Income (billion)	\$62.7	Poverty Rate (%)	12.4
Largest Employers (August 2016): <i>Carestream Health, Inc.; Rochester General Hospital; Rochester Institute of Technology; Sutherland Global Services; Tops Friendly Markets; Unity Hospital of Rochester; University of Rochester/Medical Center; Wal-Mart Stores, Inc.; Wegmans Food Markets; Xerox</i>			
Sources: U.S. Census Bureau; New York State Department of Labor; U.S. Bureau of Economic Analysis.			



REVENUE FORECAST

Overview – Revenue Summary

State Fiscal Year 2020-21

All Funds Revenues

The NYS Assembly Ways and Means Committee estimates that All Funds revenues will total \$196.818 billion in State Fiscal Year (SFY) 2020-21, an increase of 10.9 percent, or \$19.383 billion, largely attributable to an increase in federal funds receipts and miscellaneous receipts, related to the extraordinary State and federal actions taken in response to the COVID-19 pandemic.

All Funds Tax Receipts

The NYS Assembly Ways and Means Committee’s All Funds tax revenue estimate for SFY 2020-21 is \$81.045 billion, representing a decrease of 2.2 percent, or \$1.844 billion, from SFY 2019-20 (see Table 14).

The Committee’s All Funds tax revenue estimate is \$1.669 billion above the Executive’s estimate. This variance is primarily related to higher revenue estimates in personal income tax and user taxes.

Table 14

SFY 2020-21 All Funds Estimate Summary					
(\$ in Millions)					
	2019-20	2020-21			Diff.
	Actual	Estimate	Change	Growth	Exec.
Personal Income Tax	\$53,660	\$54,308	\$648	1.2%	\$1,266
User Taxes	18,021	16,036	(1,985)	(11.0%)	35
Business Taxes	8,996	8,349	(647)	(7.2%)	171
Other Taxes	2,212	2,352	140	6.3%	227
Total Tax Collections	\$82,889	\$81,045	(\$1,844)	(2.2%)	\$1,699
All Funds Miscellaneous Receipts	25,893	28,996	3,103	12.0%	(27)
Gaming	3,573	2,681	(892)	(25.0%)	(3)
Total w/Miscellaneous Receipts & Gaming	\$112,355	\$112,722	\$367	0.3%	\$1,669
Federal Funds	65,080	84,096	19,016	29.2%	-
Total All Funds Receipts	\$177,435	\$196,818	\$19,383	10.9%	\$1,669
* Totals may not add up due to rounding					

Personal Income Taxes

The NYS Assembly Ways and Means Committee estimates that PIT receipts will total \$54.308 billion in SFY 2020-21, representing an increase of 1.2 percent or \$648 million, above last year's level. Gross receipts are expected to decrease by 0.9 percent, or \$612 million, from SFY 2019-20, including an 8.5 percent, or \$511 million, decrease in prior year estimated payments. Total refunds are anticipated to decrease by 11.1 percent, or \$1.26 billion, primarily related to a \$903 million decrease in advanced credit payments.

PIT receipts have been dramatically affected by the COVID-19 pandemic which, at its peak, resulted in almost two million New Yorkers losing their jobs. Despite an improving economy, the State continues to experience an elevated unemployment rate and employment remains around one million jobs below its peak level. However, PIT collections have been somewhat supported by tax withholding associated with enhanced unemployment insurance benefits; however, the collection of estimated payments has been depressed as market volatility has limited realization of capital gains.

User Taxes

User taxes are estimated to total \$16.036 billion in SFY 2020-21, a decrease of 11.0 percent, or \$1.985 billion from SFY 2019-20 levels. Sales tax revenue is estimated to decrease by \$1.881 billion, or 11.8 percent, related to the impact of the COVID-19 pandemic on consumer spending.

Consumer spending declined substantially in the second quarter of 2020, related to stay-at-home orders, social distancing recommendations, and some business closures. In addition, most nonessential businesses moved employees to work remotely, which further depressed economic activity. Consumer demand has recovered over the remainder of 2020, as some of these restrictions were lifted, and this has allowed for a rebound of user tax collections.

Business Taxes

Overall, business taxes are estimated to decrease by 7.2 percent, or \$647 million, from SFY 2019-20 levels. Corporate franchise taxes are estimated to decrease by \$302 million, or 6.3 percent, while insurance taxes, utility taxes and petroleum business taxes are projected to decrease by \$505 million collectively. The Committee accepts the Executive's assumptions with regard to audit collections as well as the impact of recent tax law changes.

Other Taxes

Other taxes are estimated to total \$2.352 billion, an increase of \$140 million, or 6.3 percent over SFY 2019-20 levels. This increase reflects a \$328 million, or 30.7 percent, increase in estate and gift tax collections, partially offset by a \$183 million, or 16.3 percent, reduction in real estate transfer taxes.

Gaming

The Committee anticipates an overall fiscal year decrease in gaming receipts of \$892 million, or 25 percent, for a total of \$2.681 billion, predominantly related to occupancy restrictions placed on casinos and video lottery terminal facilities in response to the COVID-19 pandemic.

Revenue Table, State Current Fiscal Year 2020-21

Table 15

All Funds Collections SFY 2020-21 (\$ in Millions)					
	2019-20	2020-21	Change	Growth	Diff.
	Actual	Estimate			Exec.
Personal Income Tax	53,660	54,308	648	1.2%	\$1,266
Gross Receipts	64,985	64,373	(612)	(0.9%)	1,249
Withholding	43,118	43,217	99	0.2%	1,336
Estimated Payments	17,025	16,383	(643)	(3.8%)	34
Vouchers	10,996	10,864	(132)	(1.2%)	35
IT 370s	6,029	5,519	(511)	(8.5%)	(2)
Final Payments	3,454	3,507	53	1.5%	24
Delinquencies	1,388	1,266	(122)	(8.8%)	(145)
Total Refunds	11,325	10,065	(1,260)	(11.1%)	(17)
Net Collections	53,660	54,308	648	1.2%	1,266
User Taxes and Fees	18,021	16,036	(1,985)	(11.0%)	35
Sales and Use Tax	15,932	14,051	(1,881)	(11.8%)	21
Motor Fuel Tax	512	423	(89)	(17.4%)	(3)
Cigarette & Tobacco Tax	1,035	1,026	(9)	(0.9%)	7
Vapor Tax	10	32	22	218.6%	5
Highway Use Tax	142	132	(10)	(7.3%)	1
Alcoholic Beverage Tax	259	272	13	4.9%	(1)
Opioid Tax	19	30	11	57.9%	-
Medical Cannabis Excise Tax	6	9	3	50.0%	1
Auto Rental Tax**	106	63	(43)	(40.7%)	6
Business Taxes	8,996	8,349	(\$647)	(7.2%)	171
Corporate Franchise Tax	4,824	4,522	(302)	(6.3%)	219
Utility Tax	705	614	(91)	(12.8%)	9
Insurance Tax	2,306	2,109	(197)	(8.6%)	(34)
Bank Tax	0	160	160	100.0%	-
Petroleum Business Tax	1,161	944	(217)	(18.7%)	(23)
Other Taxes	2,212	2,352	\$140	6.3%	227
Estate and Gift Tax	1,070	1,398	328	30.7%	185
Real Estate Transfer Tax	1,124	941	(183)	(16.3%)	43
Employer Compensation Expense Program	2	3	1	50.0%	-
Pari Mutuel Tax	14	10	(4)	(30.7%)	(1)
Other Taxes	2	0	(2)	(100.0%)	-
Total All Funds Taxes	\$82,889	\$81,045	(\$1,844)	(2.2%)	\$1,699
All Funds Miscellaneous Receipts**	25,893	28,996	3,103	12.0%	(27)
Gaming	3,573	2,681	(892)	(25.0%)	(3)
Total Taxes & Gaming & Miscellaneous Receipts	\$112,355	\$112,722	\$367	0.3%	\$1,669
Federal Funds	65,080	84,096	\$19,016	29.2%	-
Total All Funds Receipts	\$177,435	\$196,818	\$19,383	10.9%	\$1,669
* Totals may not add up due to rounding					
**The SFY 2019-20 budget provided a portion of these revenues directly to the MTA.					

State Fiscal Year 2021-22

Key economic indicators point to an ongoing but slowing recovery from the COVID-19 pandemic. Following a 3.5 percent decrease in 2020, the Committee projects GDP to grow by 5.5 percent in 2021 and 4.3 percent in 2022 (see the Economy section).

All Funds Revenues

The Committee expects a 0.2 percent decrease in All Funds revenues for SFY 2021-22, reflecting a \$6.041 billion increase in PIT collections and a \$1.241 billion increase in user tax collections, offset by a \$4.788 billion reduction in miscellaneous receipts and a \$3.971 billion decrease in federal funds.

Including estimates for miscellaneous receipts and federal grants, the total receipts for SFY 2021-22 are forecast at \$196.348 billion. The Committee's forecast is \$3.534 billion above the Executive's forecast.

All Funds Tax Receipts

The Committee expects a 9.3 percent increase in All Funds tax receipts in SFY 2021-22, for a total of \$88.588 billion. The Committee's tax receipts forecast is \$3.482 billion above the Executive's forecast. The Committee's net personal income tax (PIT) forecast is \$2.838 billion above the Executive's PIT forecast.

Table 16

SFY 2021-22 All Funds Forecast Summary					
(\$ in Millions)					
	2020-21	2021-22			Diff.
	Estimate	Forecast	Change	Growth	Exec.
Personal Income Tax	\$54,308	60,348	\$6,041	11.1%	\$2,838
User Taxes	16,036	17,277	1,241	7.7%	192
Business Taxes	8,349	8,803	454	5.4%	365
Other Taxes	2,352	2,159	(193)	(8.2%)	86
Total Tax Collections	\$81,045	\$88,588	\$7,543	9.3%	\$3,482
All Funds Miscellaneous Receipts	28,996	24,208	(4,788)	(16.5%)	21
Gaming	2,681	3,428	746	27.8%	32
Total w/Miscellaneous Receipts & Gaming	\$112,722	\$116,223	\$3,501	3.1%	\$3,534
Federal Funds	84,096	80,125	(3,971)	(4.7%)	-
Total All Funds Receipts	\$196,818	\$196,348	(\$470)	(0.2%)	\$3,534

* Totals may not add up due to rounding.

Personal Income Taxes

Overall, personal income taxes, the largest component of all tax collections, are forecast to total \$60.348 billion, which is \$6.041 billion, or 11.1 percent, above the SFY 2020-21 estimates. Total New York State wages are forecast to grow at 7.1 percent in SFY 2021-22, and variable wages (bonuses) are expected to increase by 11.9 percent.

To maintain comparability with the Executive forecast, the Committee adjusts its PIT forecast up by \$1.912 billion, related to PIT budget proposals, including a high income surcharge (\$1.537 billion) and a one-year delay in the middle class tax cut (\$394 million). Without these adjustments, net PIT collections are forecast to increase by 8.5 percent, or \$4.596 billion above SFY 2020-21.

User Taxes

All Funds user taxes are forecast to total \$17.277 billion, 7.7 percent above SFY 2020-21 estimates. This forecast reflects the Committee's projection that consumer spending will rebound strongly following the COVID-19 pandemic.

Business Taxes

Business taxes are forecast to total \$8.803 billion in SFY 2021-22, an increase of \$454 million from the current year closeout on an All Funds basis. This increase is primarily related to a \$375 million, or 8.3 percent, increase in corporate franchise tax receipts and a \$131 million cumulative increase in collections from insurance taxes, utility taxes and petroleum business taxes.

Other Taxes

Other taxes, which consist primarily of the estate tax and real estate transfer taxes, are forecast to decrease by 8.2 percent in SFY 2021-22, to a level of \$2.159 billion, primarily related to a \$288 million reduction in estate and gift tax collections.

Gaming

Gaming receipts are forecast to increase by 27.8 percent, or \$746 million, in SFY 2021-22 for a total of \$3.428 billion. Lottery receipts are expected to increase by 6.9 percent; casino revenues are projected to increase by 113.8 percent, to \$137 million; and video lottery terminal

revenues are projected to increase by \$470 million, or 127.1 percent. These dramatic increases reflect the reopening of the State's economy following the COVID-19 pandemic.

Revenue Table, Upcoming Fiscal Year 2021-22

Table 17

All Funds Collections SFY 2021-22					
(\$ in Millions)					
	2020-21	2021-22			Diff.
	Estimate	Forecast	Change	Growth	Exec.
Personal Income Tax	\$54,308	\$60,348	\$6,041	11.1%	\$2,838
Gross Receipts	64,373	71,240	6,868	10.7%	3,201
Withholding	43,217	47,133	3,916	9.1%	2,516
Estimated Payments	16,383	18,181	1,798	11.0%	239
Vouchers	10,864	12,239	1,375	12.7%	(666)
IT 370s	5,519	5,942	423	7.7%	905
Final Payments	3,507	4,361	854	24.3%	379
Delinquencies	1,266	1,566	300	23.7%	68
Total Refunds	10,065	10,892	827	8.2%	363
Net Collections	54,308	60,348	6,041	11.1%	2,838
User Taxes and Fees	16,036	17,277	1,241	7.7%	192
Sales and Use Tax	14,051	15,194	1,144	8.1%	157
Motor Fuel Tax	423	506	83	19.7%	5
Cigarette & Tobacco Tax	1,026	990	(36)	(3.5%)	8
Vapor Tax	32	25	(6)	(20.2%)	9
Highway Use Tax	132	144	12	9.5%	6
Alcoholic Beverage Tax	272	276	5	1.7%	5
Opioid Tax	30	35	5	16.7%	1
Medical Cannabis Excise Tax	9	10	1.0	11.1%	2
Adult Use Cannabis	0	20	20.0	100.0%	-
Auto Rental Tax	63	77	14	22.6%	(1)
Business Taxes	8,349	8,803	454	5.4%	365
Corporate Franchise Tax	4,522	4,897	375	8.3%	443
Utility Tax	614	629	15	2.4%	21
Insurance Tax	2,109	2,143	34	1.6%	(67)
Bank Tax	160	107	(53)	(33.1%)	-
Petroleum Business Tax	944	1,027	82	8.7%	(32)
Other Taxes	2,352	2,159	(193)	(8.2%)	86
Estate and Gift Tax	1,398	1,110	(288)	(20.6%)	52
Real Estate Transfer Tax	941	1,027	85	9.1%	34
Employer Compensation Expense Program	3	6	3	100.0%	-
Pari Mutuel Tax	10	14	4	44.3%	-
Other Taxes	0	2	2	100.0%	-
Total All Funds Taxes	\$81,045	\$88,588	\$7,543	9.3%	\$3,482
All Funds Miscellaneous Receipts	28,996	24,208	(4,788)	(16.5%)	21
Gaming	2,681	3,428	746	27.8%	32
Total Taxes & Gaming & Miscellaneous Receipts	\$112,722	\$116,223	\$3,501	3.1%	\$3,534
Federal Funds	84,096	80,125	(3,971)	(4.7%)	-
Total All Funds Receipts	\$196,818	\$196,348	(\$470)	(0.2%)	\$3,534
* Totals may not add up due to rounding					

Risks to the Revenue Forecast

The current forecast for revenues is predicated on certain key assumptions related to fiscal and monetary policy, as well as global economic and geopolitical fundamentals as enunciated in the Economy section of this report.

As with the economic forecast, the Committee's revenue projections are largely dependent on the State's ability to mitigate the impacts of COVID-19, including the continued containment of the virus and the effective dissemination of vaccines. In addition, there are a variety of federal programs, including extended unemployment insurance benefits, which are scheduled to expire at the end of SFY 2020-21. The expiration of these programs could put additional pressure on the State's revenue outlook.

The Federal tax reforms enacted in December 2017 implemented a fundamental transformation of corporate taxation in the U.S. as well as of personal income taxes, and continues to present numerous challenges to the State related to conformity with its key provisions. The State has also experienced some changes in taxpayer behavior as a result of the federal tax reform, especially those related to the limitation on State and local tax (SALT) deductions. The Committee's forecast assumes that the recent changes in the timing of collections will stabilize. However, it is currently unclear how these, or other, behavioral changes will impact future collections.

EXECUTIVE REVENUE ACTIONS

Personal Income Tax (PIT) Proposals

- **Temporary PIT High Income Surcharge:** The Executive proposes to establish a new progressive PIT surcharge on taxpayers with incomes over \$5 million, which would be effective for tax years 2021 through 2023. These taxpayers would be authorized to voluntarily prepay their 2022 and 2023 liability in 2021, and receive a repayment of the additional liability through a tax deduction in tax years 2024 and 2025.

- **Delay PIT Middle Class Tax Cuts:** The Executive proposes to delay the phase-in of the middle-class PIT cut, which began in 2018 and is currently scheduled to be fully phased-in by 2025. Rather than the planned tax cut scheduled for 2021, the existing 2020 rates would remain in effect for an additional year, delaying the phase-in of the tax cuts by one year.

Table 18

Proposed 2021 PIT Rates - Married Filing Jointly			
New York Taxable Income:	Current Law	Proposal	Change
Not over \$17,150	4.00%	4.00%	-
\$17,151 to \$23,600	4.50%	4.50%	-
\$23,601 to \$27,900	5.25%	5.25%	-
\$27,901 to \$43,000	5.90%	5.90%	-
\$43,001 to \$161,550	5.97%	6.09%	0.12%
\$161,551 to \$323,200	6.33%	6.41%	0.08%
\$323,201 to \$2,155,350	6.85%	6.85%	-
\$2,155,351 to \$5 million	8.82%	8.82%	-
\$5 million to \$10 million	8.82%	9.32%	0.50%
\$10 million to \$25 million	8.82%	9.82%	1.00%
\$25 million to \$50 million	8.82%	10.32%	1.50%
\$50 million to \$100 million	8.82%	10.57%	1.75%
Over \$100 million	8.82%	10.82%	2.00%

- **Pass-Through Entity Tax:** The Executive proposes to establish an optional pass-through entity tax on the New York sourced income of partnerships and S corporations that are solely comprised of individual partners or shareholders. The electing entities would pay a 6.85 percent tax rate at the entity level and the members and shareholders would

receive a refundable PIT tax credit equal to 92 percent of their share of taxes paid by the entity. This tax structure would allow these partners, members, and shareholders to deduct a portion of their state and local taxes (SALT) on federal returns, with little impact on state tax receipts.

- **Extend the Farm Workforce Retention Credit:** The Executive proposes to extend the \$600 per employee Farm Workforce Retention Credit for three years, through tax year 2024.
- **Reform and Simplify Various Business Tax Provisions:** The Executive proposes to eliminate a \$15 per trip tax on foreign bus and taxicab corporations that make trips into the State of New York. The Executive would also eliminate the state S corporation election requirement, and would require all federal S corporations to be treated as such for New York tax purposes.
- **Increase Wage and Withholding Filing Penalty:** The Executive proposes to increase the penalty imposed on employers for failure to provide complete and accurate wage reporting and withholding reports, to modify the penalty calculation from \$50 per employee to \$100 per employee, and to increase the maximum penalty from \$10,000 to \$50,000 per employer.
- **Tax Preparer Regulation and Enforcement:** The Executive proposes to modify various tax preparer oversight provisions, including proposals to: allow for charges against tax preparation businesses with preparers that fail to register; eliminate the penalty cure period to induce more voluntary registration compliance; increase the penalties for the failure to register; establish clear authority regarding the issuance, revocation, suspension and cancelation of registration certificates; and require registration certificates to be prominently displayed.

School Tax Relief Proposals

- **Close the Enhanced STAR Exemption Program to New Applicants:** Under the Executive proposal, effective in 2021, owners currently in the Basic STAR Exemption Program who are newly-qualified for the Enhanced STAR Program would only be able to register for the Enhanced STAR Credit Program. Seniors currently receiving the Enhanced STAR exemption would not be impacted, and would be allowed to remain in the exemption program. In addition, owners currently receiving the Basic STAR exemption who choose to not apply for the Enhanced STAR credit would be allowed to remain in the Basic STAR Exemption Program.

- **STAR Benefits for Mobile Home Owners:** The Executive proposes to transfer all STAR exemptions for owners of mobile homes to the STAR Credit Program, effective in 2022.
- **STAR Program Administration:** The Executive proposes various changes to the administration of the STAR Program, including proposals to:
 - require that property owners who want to switch from the STAR exemption to the STAR credit must do so by May 1, instead of June 15 under current law;
 - authorize the DTF to provide reports of deceased persons to local assessors directly, instead of only providing such information to the county property tax director; and
 - modify the STAR exemption appeals process to have any appeals determined by the Commissioner of Tax and Finance, or his or her designee, rather than by the State Board of Real Property Tax Services.

Property Tax Proposals

- **Modernize and Merge Real Property Tax Forms and Processes:** The Executive proposes to combine the property transfer form and the real estate transfer tax form into a consolidated real property transfer form and to create an online system for e-filing and paying the associated taxes and fees.
- **Make Technical and Conforming Changes to Real Property Tax Law:** The Executive proposes to make various technical changes in order to facilitate the administration, including proposals to:
 - establish that a majority of the duly appointed members of the State Board of Real Property Tax Services constitutes a quorum for the transaction of business. The board consists of five members; two of which are currently vacant;
 - repeal an obsolete section of law related to local reassessment that expired in 1981;
 - remove a reference to the State Board of Real Property Tax Services that was erroneously left in law when the board and the Office of Real Property Tax Services (ORPTS) were merged into the DTF 2010;

- allow the cancelation of hearings on various tentative ORPTS determinations when no complaints have been filed; and
 - clarify the local option exemption requirements relating to population restrictions and filing requirements.
- **Promote the Development of Renewable Energy Projects:** The Executive proposes to extend the existing real property tax exemption for renewable energy projects from 2025 until 2030, and to establish a statewide, standardized approach for real property tax assessment for such projects.

Consumption and Use Tax Proposals

- **Modify Taxation of the Vacation Rental Industry:** The Executive proposes to impose existing sales taxes on vacation rentals; make vacation rentals in New York City subject to the same use fee paid on hotel stays; and require vacation rental marketplace providers that facilitate vacation rental transactions, collect sales tax on the vacation rentals that they facilitate.
- **Extend the Alternative Fuels Exemption:** The Executive proposes to extend the existing full exemptions of E-85, compressed natural gas and hydrogen, and the partial exemption of B-20 from motor fuel, petroleum business and State and local sales taxes, for five additional years, until September 1, 2026.
- **Extend Dodd-Frank Protection Act Related Sales Tax Exemptions:** The Executive proposes to extend, for three years, the sales tax exemption provided to financial institutions that are required under federal law to create subsidiaries and then transfer the property or services to those subsidiaries without the transfer being considered a taxable sale.
- **Simplify Certain Tax Filing and Reporting Requirements:** The Executive proposes to reduce the tax filing frequency for certain low volume alcoholic beverage tax (ABT) and highway use tax (HUT) taxpayers to allow them to remit taxes on a quarterly or annual basis.
- **Enhance Cigarette Vendor Enforcement:** The Executive proposes to prohibit a retail dealer with revoked or suspended cigarette licenses from possessing any taxed cigarettes and tobacco products during the period of revocation or suspension. In

addition, any retail dealer that fails to obtain a cigarette license would be prohibited from possessing any taxed cigarettes or tobacco products.

- **Sales Tax Remote Vendor Registration:** The Executive proposes to make technical changes to clarify that the vendors with no physical presence in New York must only register and collect sales taxes if they have \$500,000 in sales over the previous four quarters.
- **Local Sales Tax Authorizations:** The Executive proposes to make permanent all current law local sales tax rate authorizations and provide the 57 counties outside of New York City, and the five cities that currently have additional tax rates, with permanent authority to impose a one percent additional rate of sales tax, or their currently authorized additional rate, whichever is higher. These localities would be required to pass a local law every two years authorizing this additional sales tax rate.
- **Sales Tax Refunds Interest Payments:** The Executive proposal would increase the amount of time that the DTF has to review large sales tax refund claims of over \$100,000, without accruing interest, from three to six months.

Business Tax Proposals

- **TED Part TT - Pandemic Recovery and Restart Program:** The Executive proposal would establish new and expanded tax credits to support certain businesses that have been disproportionately impacted by the COVID-19 pandemic, including:
 - a small business return-to-work tax credit (\$50 million), which would provide a refundable tax credit to certain small businesses of under 100 employees that experienced year-to-year revenue or job losses of 40 percent or more. The credit would provide \$5,000 for each net full-time equivalent position added, up to a maximum of \$50,000 per business;
 - a restaurant return-to-work tax credit (\$50 million), which would provide a refundable and advanceable tax credit to small, independently owned restaurants that are located within New York City that were subject to a ban on indoor dining for over six months; or outside of New York City in areas that were designated as a red or orange zone for at least 30 days. The credit would provide \$5,000 for each net full-time equivalent position added, up to a maximum of \$50,000 per business, and would be limited to businesses that experienced a year-to-year revenue or job loss of 40 percent or more; and

- a New York City musical and theatrical production tax credit (\$25 million), which would provide qualified musical and theatrical production companies that produce musical or theater productions in New York City and spend at least \$1 million in qualified production expenditures, with a refundable tax credit equal to 25 percent of the sum of its production expenditures incurred by December 31, 2021. The credit would be capped at \$500,000 per production company.
- **Modify the Musical and Theatrical Production Credit:** The Executive proposes to extend the musical and theatrical production credit for regions outside of New York City, for an additional four years, through January 1, 2026, and increase the annual credit cap from \$4 million to \$8 million.
- **Employer Child Care Credits:** The Executive proposes to modify and expand the Excelsior Jobs Program and Employer-Provided Child Care Credit to incentivize employers to establish new on-site child care opportunities and to provide expanded child care services to their employees. Specifically, the Executive proposal would:
 - expand the Excelsior Investment Tax Credit to provide an enhanced five percent tax credit for qualifying investment in child care services;
 - establish a new six percent Excelsior Child Care Services Tax Credit to support ongoing net child care expenditures provided by the participant business; and
 - expand the employer-provided child care credit from 100 percent to 200 percent of the federal credit, and increase the annual limit from \$150,000 to \$500,000 per entity.
- **Extend and Increase the Low-Income Housing Credits:** The Executive proposes to extend the low-income housing tax credit for five years and to increase the aggregate amount of the credit that the Commissioner of Housing and Community Renewal is authorized to gradually increase available credits by \$70 million over the next five years.
- **Film Tax Credit:** The Executive proposes to extend the Empire State Film Production Credit and Film Post-Production Credit for one year, through tax year 2026; remove the exemption for pilots from the minimum project budget requirements; and modify the Post-Production Credit to expand the jurisdictions that are eligible to receive a

supplemental tax credit for labor costs to include: Columbia, Dutchess, Greene, Orange, Putnam, Rensselaer, Saratoga, Sullivan, Ulster, Warren, and Washington counties.

- **Extend the Economic Transformation and Facility Redevelopment Program Tax Credit:** The Executive proposes to extend the Economic Transformation and Facility Redevelopment Program tax credits for an additional five years, from December 31, 2021 to December 31, 2026.
- **Extend the Hire-A-Vet Credit for Two Years:** The Executive proposal would extend the Hire-a-Vet Credit for an additional two years, to taxable years beginning before January 1, 2024, for employment commenced before January 1, 2023.
- **TED Part AA – Extend Brownfield Credits:** The Executive proposes to extend, for two years, the allowable period for the tangible property credit component of the brownfield tax credit. This proposal would apply to credits that already expired on December 31, 2020, or that are scheduled to expire on December 31, 2021.

Gaming Proposals

- **Authorize Mobile Sports Wagering and Establish a Casino Tax Rate Petition Process:** The Executive proposes to legalize mobile sports wagering within New York State, which would be overseen by the New York State Gaming Commission. The Gaming Commission would be authorized to select a platform provider or multiple providers, through a competitive bidding process, and all revenues that are received by the State would be deposited in the State Lottery Fund. The Executive also proposes to establish a process for casinos to petition for a lower tax rate.
- **Eliminate the State Racing Admissions Tax:** The Executive proposes to eliminate the four percent State racing admissions tax and instead apply the four percent sales tax to such transactions. Local racing admission taxes would remain unchanged.
- **Authorize a Request for Information for Gaming Facility Licenses:** The Executive proposes to authorize the New York State Gaming Commission to issue a Request for Information (RFI) for the purpose of soliciting interest regarding the three unawarded gaming facility licenses.
- **Eliminate Quick Draw Restrictions:** The Executive proposes to eliminate restrictions limiting sales of Quick Draw tickets to premises larger than 2,500 square feet only, and the restriction requiring that a person must be 21 years of age to play Quick Draw on

premises where alcoholic beverages are served. The proposal would also remove from law an obsolete reference to emergency rulemaking power.

- **Remove Restriction on Lottery Draw Game Offerings:** The Executive proposes eliminating a current law restriction that limits the number of daily offerings of Pick 10, Take 5, Lotto and future lottery games tickets to a single daily offering. Removing this restriction would provide the New York State Gaming Commission the discretion to determine the appropriate number of draws per day.
- **Transfer the Gaming Inspector General to the State Inspector General:** The Executive proposes to consolidate the function of the Gaming Inspector General under the Authority of the Office of the State Inspection General.
- **Extend Pari-Mutuel Tax Rate and Simulcast Provisions:** The Executive proposes to extend the current pari-mutuel tax rate structure and other racing-related provisions for one year.
- **Temporarily Suspend Certain Racing Support Payments:** The Executive proposes to temporarily suspend racing support obligations from the Rivers Casino to the Saratoga Racino and Raceway while any COVID-19 related restrictions are in effect for either facility. These payment obligations would resume once each facility operates without any COVID-19 related restrictions for six full and consecutive calendar months.
- **PPGG Part KK - Reduce VLT Aid to Municipalities:** The Executive proposes to eliminate video lottery terminal aid (VLT) for the 15 municipalities outside the City of Yonkers that currently receive a combined \$9.3 million in VLT distributions. The proposal would also reduce VLT aid for the City of Yonkers by five percent, from \$19.6 million to \$18.6 million.

Other Tax Proposals

- **Enhance Real Estate Transfer Tax (RETT) Compliance:** The Executive proposes to add responsible billing language to current law; prohibit sellers from passing on the basic RETT to buyers; and exempt certain entities that are members of LLCs from having to disclose all of their members/shareholders on a RETT return form in the sale of a building with four residential units or less.
- **Simplify the Collection of the Taxicab Tax and Congestion Surcharge:** The Executive proposes to transfer the responsibility for the collection, reporting and remittance of

the taxicab tax and congestion surcharge from individual agents, medallion owners and HAIL vehicle owners to the technology service providers that arrange for their trips.

- **Tax Tribunal Appeals:** The Executive proposes to provide the DTF with the right to appeal adverse Tax Appeals Tribunal decisions. Under current law, only taxpayers may seek additional judicial review of an adverse determination.
- **Delay Implementation of the Secure Choice Program:** The Executive proposes to extend the statutory deadline for implementing the Secure Choice Program, from April 12, 2020 to December 31, 2021.

Cannabis Proposals

- **Adult-Use Cannabis Oversight:** The Executive proposes to establish a regulated adult-use cannabis program and to create a new Office of Cannabis Management (OCM) within the Division of Alcohol Beverage Control, governed by a five-member Cannabis Control Board overseeing the adult-use, medical and cannabinoid hemp industries. The powers of this new office include but are not limited to: the establishment of cultivation and processing standards; the licensure of all business entities in the production and distribution chain; the inspection and enforcement of program standards and the development and issuance of program regulations.
- **Social Equity Programs:** The Executive proposal would establish a social and economic equity program to encourage members of communities who have been disproportionately impacted by the policies of cannabis prohibition to participate in the new industry through the implementation of a social and economic equity plan – providing technical assistance, training, loans and mentoring for qualified social and economic equity applicants.
- **Criminal Justice Proposals:** The Executive would modify, and in some cases reduce, existing penalties related to cannabis under the Penal Law, amend the Vehicle and Traffic Law to increase penalties for driving under the influence of drugs and other substances, as well as make conforming changes to the Public Health Law.
- **Medical Cannabis Program:** The Executive proposal would transfer administration of the existing medical marijuana program from the DOH to OCM.

- **Cannabinoid Hemp Program:** The Executive proposes to transfer the regulatory framework for the licensing, cultivation, processing, extracting and distribution of cannabinoid hemp (CBD) from the DOH to the OCM.
- **Local Option:** The Executive proposal would provide all counties and cities with a population of 100,000 or more with the opportunity to opt-out of certain provisions of the law upon the passage of a local law, ordinance or resolution by a majority vote of their governing body. Counties, cities, towns and villages would be able to dictate the hours of operation and location of licensed adult-use cannabis retail dispensaries within their jurisdiction through local zoning authority.
- **Cannabis Tax:** The Executive proposal would establish a three tier tax structure, including:
 - a tax on the sale from a wholesaler to a retail dispensary, which is based on the total milligrams of tetrahydrocannabinol (THC) in the product. The tax rate would be based on the type of product, as follows: edibles would be taxed at a rate of \$0.04 per milligram of THC, concentrates would be taxed at \$0.01 per of milligram of THC, and cannabis flower would be taxed at rate of \$0.007 per milligram of THC;
 - a tax on the sale by the retail dispensary to the consumer at a rate of 10.25 percent of the sale price; and
 - the applicable state and local sales tax rate in the jurisdiction in which the sale occurs.
- **New York State Cannabis Revenue Fund:** The Executive proposal would deposit revenues from State cannabis taxes into the New York State Cannabis Revenue Fund accordingly:
 - In the first instance, a portion of the revenue collected would be directed to the Cannabis Social Equity Fund, as follows: \$10 million in SFY 2022-23; \$20 million in SFY 2023-24; \$30 million in SFY 2024-25; \$40 million in SFY 2025-26; and \$50 million annually thereafter. This funding would be administered by the Urban Development Corporation and allocated by the Department of State.
 - The remaining balance of the Cannabis Revenue Fund would be expended for the following purposes: administration of the regulated cannabis program, data gathering, monitoring and reporting; the Governor’s Traffic Safety Committee; initiatives and programs of the social and economic equity plan of OCM;

substance abuse, harm reduction and mental health treatment and prevention; public health education and intervention; research on cannabis uses and applications; program evaluation and improvements; and any other identified purpose recommended by the director of OCM and approved by the Division of Budget.

Table 19

TAX AND OTHER REVENUE ACTIONS				
(\$ in Millions)				
	General Fund		All Funds	
	FY 2022	FY 2023	FY 2022	FY 2023
Covid-19 Response	1,896	1,717	1,896	1,717
Enact Temporary PIT High Income Surcharge	1,537	1,404	1,537	1,404
Delay the PIT Middle Class Tax Cut by One Year	394	403	394	403
Enact the Pandemic Recovery and Restart Program	(35)	(90)	(35)	(90)
Expand Employer Child Care Credits	-	-	-	-
Tax Cuts and Credits	(1)	(9)	(3)	(12)
Extend and Enhance Low-Income-Housing Credits	-	(8)	-	(8)
Extend and Modify the Film Tax Credit for One Year	-	-	-	-
Extend the Brownfield Tangible Property Redevelopment Credit	-	-	-	-
Extend the Farm Workforce Retention Credit	-	-	-	-
Extend the Alternative Fuels Exemption	(1)	(1)	(3)	(4)
Extend Certain Sales Tax Exemptions Related to the Dodd-Frank Act	-	-	-	-
Extend the Economic Transformation and Facility Redevelopment Credit	-	-	-	-
Extend the Hire-a-Vet Credit	-	-	-	-
Tax Reform and Simplification	9	23	9	24
Reform and Simplify Various Business Tax Provisions	-	6	-	6
Update the Tax Law to Include the Vacation Rental Industry	9	17	10	18
Simplify Certain Tax Filing and Reporting Requirements	-	-	(1)	-
Make Technical Changes to Cigarette Licensing Provisions	-	-	-	-
Make Technical Correction to Sales Tax Remote Vendor Registration	-	-	-	-
Amend the Collection and Reporting of Taxicab Tax and Congestion Surcharge	-	-	-	-
Reform the State Racing Admissions Tax	-	-	-	-
Make Permanent Local Sales Tax Rate Authorizations	-	-	-	-
Modernize and Merge Real Property Tax Forms and Processes	-	-	-	-
Make Technical and Conforming Changes to Real Property Tax Law	-	-	-	-
Tax Enforcement and Compliance	17	17	17	17
Enact a Pass-Through Entity Tax	-	-	-	-
Increase Wage and Withholding Filing Penalties	2	2	2	2
Update Tax Preparer Regulation and Enforcement	15	15	15	15
Enhance Real Estate Transfer Tax Compliance	-	-	-	-
Increase the Interest Free Period on Certain Sales Tax Refunds	-	-	-	-

Table 19 Continued

TAX AND OTHER REVENUE ACTIONS				
(\$ in Millions)				
	General Fund		All Funds	
	FY 2022	FY 2023	FY 2022	FY 2023
Other Actions	-	13	20	118
Enact the Cannabis Regulation and Taxation Act	-	13	20	118
Allow DTF the Right to Appeal DTA Tribunal Decisions	-	-	-	-
Extend Implementation Deadline for the Secure Choice Program	-	-	-	-
Promote the Development of Renewable Energy Projects	-	-	-	-
STAR Actions	(1)	(3)	(36)	(80)
Preserve Enhanced STAR Exemption Beneficiaries	(1)	(2)	(36)	(72)
Improve Mobile Home STAR Exemption Administration	-	(1)	-	(8)
Make Various STAR Program Reforms	-	-	-	-
Gaming Initiatives	-	-	71	396
Authorize Mobile Sports Wagering and Casino Slot Tax Rate Petitions	-	-	49	357
Eliminate Quick Draw Restrictions	-	-	15	30
Extend Pari-Mutuel Tax Rates and Simulcast Provisions for One Year	-	-	-	-
Decouple the Gaming Commission and the Gaming Inspector General	-	-	-	-
Remove Restrictions on Lottery Draw Game Offerings	-	-	7	9
Authorize a Request for Information for Gaming Facility Licenses	-	-	-	-
Temporarily Suspend Certain Racing Support Payments	-	-	-	-
Other Fee Actions	1	1	8	15
Expand Hunting and Crossbow Licensing	-	-	2	2
Allow Non-CPA Owners of Public Accounting Firms	-	-	2	-
Impose a DMV Convenience Fee	-	-	4	13
Increase Penalties for Mental Hygiene Law Violations and Establish Application Fees for OMH Operating Certificates	1	1	1	1
Grand Total Revenue Actions	1,921	1,759	1,981	2,195

TAX ANALYSIS

Personal Income Tax

Table 20

Personal Income Tax Collections Forecasts by State Fiscal Year (\$ in Millions)						
	2020-21			2021-22		
	WAM Estimate	Percent Growth	Diff. Exec	WAM Forecast	Percent Growth	Diff. Exec.
Personal Income Tax	\$54,308	1.2%	\$1,266	\$60,348	11.1%	\$2,838
Gross Receipts	64,373	(0.9%)	1,249	71,240	10.7%	3,201
Withholding	43,217	0.2%	1,336	47,133	9.1%	2,516
Estimated Payments	16,383	(3.8%)	34	18,181	11.0%	239
Vouchers	10,864	(1.2%)	35	12,239	12.7%	(666)
IT 370s	5,519	(8.5%)	(2)	5,942	7.7%	905
Final Payments	3,507	1.5%	24	4,361	24.3%	379
Delinquencies	1,266	(8.8%)	(145)	1,566	23.7%	68
Total Refunds	10,065	(11.1%)	(17)	10,892	8.2%	363
Prior Year Refunds	6,081	2.6%	(41)	6,517	7.2%	293
Current Refunds	1,750	(22.0%)	-	1,750	0.0%	-
Advance Credit Payments	602	(60.0%)	-	787	30.7%	-
Previous Refunds	483	(9.0%)	20	565	16.8%	71
State/City Offsets	1,149	2.9%	-	1,274	10.9%	-
Collections	54,308	1.2%	1,266	60,348	11.1%	2,838
Transfers to STAR	(2,030)	(7.1%)	-	(587)	(71.1%)	-
Transfers to DRRF/RBTF	(27,154)	1.2%	(633)	(30,174)	11.1%	(1,419)
General Fund PIT Collections	\$25,124	1.9%	\$633	\$29,587	17.8%	\$1,419

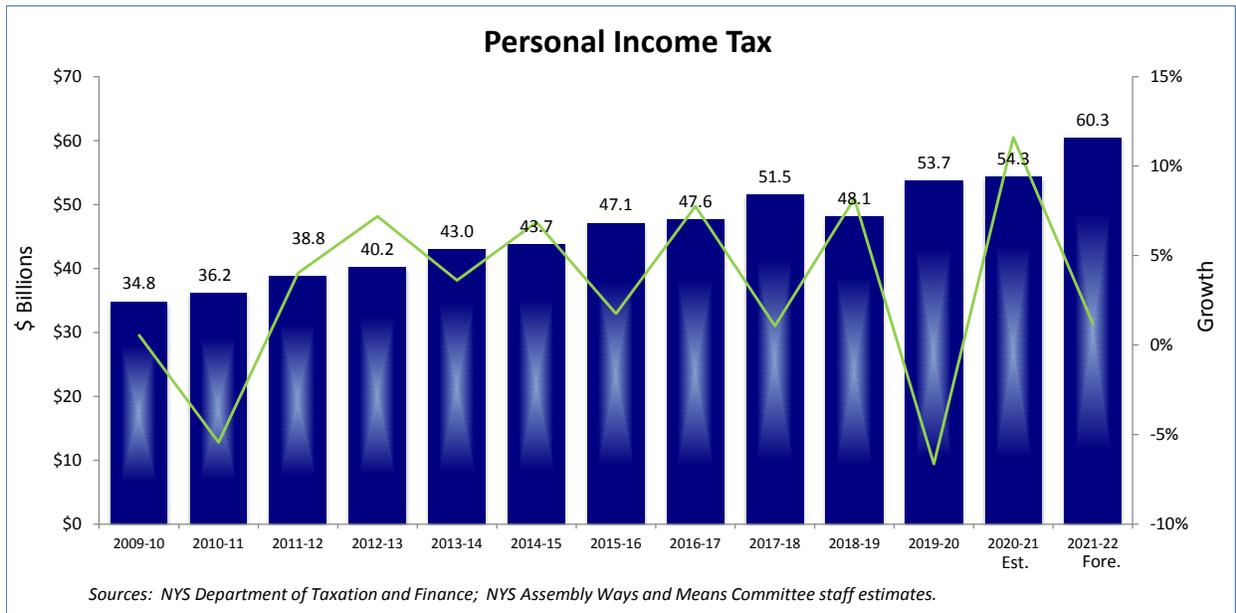


Figure 55

Article 22 of the Tax Law imposes a tax on the income of individuals, estates and trusts residing or located in New York State. Personal Income Tax (PIT) receipts contribute approximately 70 percent of all tax collections deposited into the General Fund. PIT receipts are received through employee withholdings, estimated tax payments, payments accompanying annual tax returns, late payments, and audits and assessments. Withholding is the single largest component, comprising over 65 percent of gross PIT receipts.

New York’s definition of income closely follows federal rules, which include wages, salaries, capital gains, unemployment compensation, as well as interest and dividend income. For residents, these components equal the federal adjusted gross income (AGI). AGI is calculated starting with the federal AGI as a base and then modifying it with certain subtractions or additions as permitted or required under State law. Additions include tax-exempt bonds issued outside of New York. Social security benefits, pension, and annuity income are generally excluded. A taxpayer’s AGI is then reduced by subtracting the New York standard deduction, which varies according to the taxpayer’s filing status, or New York itemized deductions.

Taxpayers may itemize their deductions on their New York State returns if the aggregate of such deductions, minus state and local income taxes and certain other modifications, exceed the New York standard deduction. However, the availability of itemized deductions is limited for certain high income taxpayers. The high income deduction limitation begins at different levels depending upon the taxpayer’s taxable income. A 25 percent reduction begins to phase in for income exceeding \$100,000 of AGI for single filers, above \$200,000 for married filers, and

\$250,000 for head of household filers. A 50 percent limitation on itemized deductions begins to phase in for all filers at \$475,000.

For New York taxpayers whose AGI exceeds \$1 million, itemized deductions are fully excluded, and only 50 percent of charitable contributions may be deducted for the purposes of calculating tax liability. For taxpayers with AGI over \$10 million, the charitable contributions deduction is limited to 25 percent.

Either the State standard deduction or itemized deductions, in addition to exemptions claimed on New York taxes, are subtracted from NYAGI to arrive at New York taxable income. Taxable income is then multiplied by the appropriate tax rate. A taxpayer’s tax rate is partially determined by their filing status. The tax rate is then determined by the level of taxable income.

Net Collections

Year-to-Date (YTD) Through January 2021

Through January 2021, net personal income tax collections have increased by 0.1 percent, or \$37.9 million, with gross collections decreasing by 1.3 percent, or \$738 million, year-to-date.

Table 21

Net Collections (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$46,251	0.1%	\$54,308	1.2%	\$53,042	\$1,266
2021-22			\$60,348	11.1%	\$57,510	\$2,838

State Fiscal Year 2020-21

Net personal income tax collections in SFY 2020-21 are estimated to total \$54.308 billion, which represents an increase of \$648 million, or 1.2 percent, from the prior fiscal year. Gross collections are expected to decrease by 0.9 percent and the Committee anticipates an 11.1 percent decrease in refunds.

The Committee's net PIT collections estimate is \$2.866 billion above the Executive's estimate.

State Fiscal Year 2021-22

Net personal income tax collections in SFY 2020-21 are forecast to total \$60.348 billion, an increase of \$6.041 billion, or 11.1 percent, over SFY 2020-21 estimates. Gross collections are forecast to increase by \$6.868 billion, an increase of 10.7 percent, with an increase in total refunds of \$827 million, or 8.2 percent. The Committee's net collection forecast is \$2.838 billion above the Executive's forecast.

To maintain comparability with the Executive forecast, the Committee adjusts its PIT forecast up by \$1.912 billion, related to PIT budget proposals, including a high income surcharge (\$1.537 billion) and a one-year delay in the middle class tax cut (\$394 million). Without these adjustments, net PIT collections are forecast to increase by 8.5 percent, or \$4.596 billion above SFY 2020-21.

Withholding

Employers are required to withhold an amount from employees' paychecks, which is used at the end of the year to help settle taxpayer liability. Withholding has a slight lag from the period in which it is withheld to the time the State receives the payment from the employer, but is closely correlated to wages and salaries received during any given quarter. In addition, individuals receiving unemployment insurance payments can elect to have taxes withheld.

YTD through January

Through January, withholding collections are down \$20 million, or 0.1 percent, compared to the prior year.

Table 22

Withholding (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$33,862	(0.1%)	\$43,217	0.2%	\$41,881	\$1,336
2021-22			\$47,133	9.1%	\$44,617	\$2,516

State Fiscal Year 2020-21

The Committee estimates withholding collections will total \$43.217 billion, an increase of \$99 million, or 0.2 percent, from the prior fiscal year. The Committee estimate is \$1.336 billion above the Executive's estimate.

State Fiscal Year 2021-22

Withholding collections are projected to increase by 9.1 percent, or \$3.916 billion, in SFY 2021-22, for a total of \$47.133 billion. This forecast is \$2.516 billion above the Executive's forecast, and is premised on a strong rebound in wage growth.

Quarterly Estimated Payments

Individuals make estimated payments if the tax they will owe for the year is significantly more than the amount of tax being withheld from their wages. Individuals who have large amounts of non-wage income (self-employment income, interest, dividends, or capital gains) generally make these quarterly payments. Estimated tax payments are usually due on the 15th of April, June, September and January. In 2020, in response to the COVID-19 pandemic, the April payment date was delayed until July.

YTD through January

Through January, estimated payments, excluding extensions, have decreased by 4.0 percent, or \$132 million compared to the prior fiscal year. Through the same period, prior-year estimated payments have decreased by 8.5 percent compared to SFY 2019-20.

Table 23

Quarterly Estimated Payments (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$10,667	(1.2%)	\$10,864	(1.2%)	\$10,829	\$35
2021-22			\$12,239	12.7%	\$12,905	(\$666)

Table 24

Prior Year Estimated Payments (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$5,491	(8.5%)	5,519	(8.5%)	\$5,520	(\$2)
2021-22			\$5,942	7.7%	\$5,037	\$905

State Fiscal Year 2020-21

The Committee estimates that estimated payments will total is \$16.383 billion, a decrease of 3.8 percent, or \$643 million, from SFY 2019-20. The Committee's estimate is \$1.634 billion above the Executive's estimate.

There have been some changes in taxpayer behavior related to the Federal Tax Cuts and Jobs Act of 2017, which implemented a \$10,000 annual limit on the federal deductibility of state and local taxes. This change has led many taxpayers to shift capital gains realization and other income payments from the normal quarterly payments to their April settlement payments. In response to the COVID-19 pandemic, the Governor administratively delayed the April 15th estimated payment date until July 15th. As a result, April estimated payments were \$6.6 billion, or 96.9 percent, below the SFY 2019-20 level. Likewise, the July estimated payments were \$6.2 billion above the prior year level.

State Fiscal Year 2021-22

Estimated payment collections are projected to increase 11.0 percent, or \$1.798 billion, in SFY 2021-22, for a total of \$18.181 billion. This forecast is \$239 million above the Executive's forecast.

Realized capital gains are expected to decrease 6.9 percent in tax year 2020, followed by a projected increase of 23.7 percent in tax year 2021.

Refunds

YTD through January

Prior year refunds are issued by the State between April 1st and September 31st. These refunds are associated with the most recently completed calendar year liability. Previous year refunds are refunds issued for liability years prior to the year most recently completed. This component, like delinquencies, cannot be specifically connected to a particular liability year.

Year-to-date, prior year refunds have increased by 2.6 percent, while previous year refunds have decreased by 10.5 percent. Total refunds, including State/City offsets, have decreased 8.8 percent year-to-date, relative to the same period of last fiscal year.

Table 25

Prior Year Refunds - 2020 Tax Year (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$6,011	2.6%	\$6,081	2.6%	\$6,121	(\$41)
2021-22			\$6,517	7.2%	\$6,224	\$293

Table 26

Previous Year Refunds - Before the 2020 Tax Year (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$391	(10.5%)	\$483	(9.0%)	\$463	\$20
2021-22			\$565	16.8%	\$494	\$71

State Fiscal Year 2020-21

The Committee anticipates that SFY 2020-21 will conclude with \$6.081 billion in prior year refunds and \$483 million in previous year refund distributions. The Committee's estimate for prior year refunds is \$41 million below the Executive's estimate, and reflects a 2.6 percent increase from SFY 2019-20.

The closeout for previous year refunds represents a 9 percent reduction relative to the last fiscal year. The Committee's estimate is \$20 million above the Executive's estimate.

Total refunds are projected at \$10.065 billion, a decrease of 11.1 percent, or \$1.260 billion, from SFY 2019-20.

State Fiscal Year 2021-22

The Committee projects a prior year refund total of \$6.517 billion, an increase of 7.2 percent, or \$436 million, over the SFY 2020-21 estimates.

Previous refunds are forecast to total \$565 million, representing an increase of 16.8 percent, or \$81 million, over SFY 2020-21.

Advanced credit payments are expected to total \$787 million, an increase of \$185 million, or 30.7 percent, over SFY 2020-21.

Total refunds are projected at \$10.892 billion, an increase of 8.2 percent, or \$827 million, from SFY 2020-21.

Fund Distribution

Table 27

Personal Income Tax Fund Distribution (\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	\$25,124	\$2,030	\$27,154	-	\$54,308
2021-22	\$29,587	\$587	\$30,174	-	\$60,348

The Committee estimates General Fund personal income tax receipts of \$25.124 billion in SFY 2020-21. In SFY 2021-22, General Fund collections are forecast to total \$29.587 billion.

A statutory amount of 50 percent of net personal income tax collections is allocated to the Revenue Bond Tax Fund (RBTF). The estimated contribution to this fund in SFY 2018-19 budget increased this amount from 25 percent to 50 percent.

The STAR fund consists of revenue that is used to reimburse school districts for STAR school property exemptions, as well as New York City for their STAR personal income tax rate reduction. The Executive estimates that the STAR program will cost \$2.030 billion in SFY 2020-21 and \$587 million in SFY 2021-22 adjusted gross income (AGI).

User Taxes and Fees

Table 28

User Tax Collections Forecasts by State Fiscal Year (\$ in Millions)						
	SFY 2020-21	Growth	Diff. Exec.	SFY 2021-22	Growth	Diff. Exec.
User Taxes and Fees	\$16,036	(11.0%)	\$35	\$17,277	7.7%	\$192
Sales and Use Tax	14,051	(11.8%)	21	15,194	8.1%	157
Motor Fuel Tax	423	(17.4%)	(3)	506	19.7%	5
Cigarette Tax	1,026	(0.9%)	7	990	(3.5%)	8
Vapor Tax	32	218.6%	5	25	(20.2%)	9
Highway Use Tax	132	(7.3%)	1	144	9.5%	6
Alcoholic Beverage Tax	272	4.9%	(1)	276	1.7%	5
Opioid Tax	30	57.9%	0	35	16.7%	1
Medical Marihuana Excise Tax	9	50.0%	1	10	11.1%	2
Auto Rental Tax*	63	(40.7%)	6	77	22.6%	(1)

*MCTD supplemental surcharge revenues are excluded, as these are now directly provided to the MTA.

Sales and Use Tax

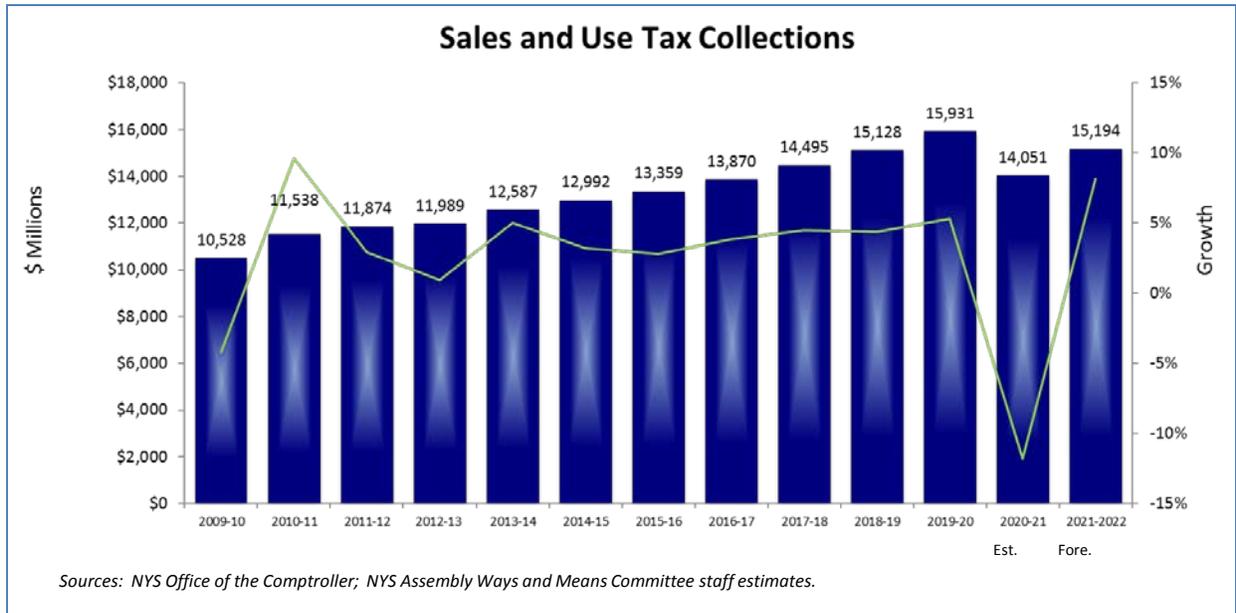


Figure 56

The sales and compensating use tax, imposed by Article 28 of the Tax Law, is a four percent broad-based consumption tax levied on the sale of tangible personal property, excluding items such as food, medicine, products used in manufacturing, and items purchased for resale. A limited number of services such as cleaning, parking, and interior design are also subject to this tax. Non-profit and charitable organizations are exempt from paying sales tax on purchases. Sales taxes are generally paid to, and collected by, the vendor at the time of purchase. Vendors remit sales tax collections annually, quarterly or monthly depending upon their level of taxable sales. Vendors are required to remit their sales tax liability electronically to the State if they are able.

Sales tax collections are deposited into the General Fund, the Local Government Assistance Tax Fund, the Mass Transportation Operating Assistance Fund (MTOAF), and the Sales Tax Revenue Bond Fund (STBF). In 1981, the MTOAF was created to help finance the State's public transportation system. A portion of the MTOAF revenue is derived from a separate sales tax rate of three-eighths of one percent that is imposed in the Metropolitan Commuter Transportation District (MCTD). The MCTD encompasses all of the counties served by the Metropolitan Transportation Authority: counties in the city of New York – Manhattan, Bronx, Queens, Kings, and Richmond – and the counties of Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, and Westchester.

Receipts from one percentage point of the four percent State sales tax are dedicated to the Local Government Assistance Corporation (LGAC), which was created in 1990 to eliminate annual spring borrowing for State expenses. Once the LGAC debt service obligations are paid, excess revenues are transferred back to the General Fund.

Table 29

Sales Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$11,778	(12.9%)	\$14,051	(11.8%)	\$14,030	\$21
2021-22			\$15,194	8.1%	\$15,037	\$157

The Sales Tax Revenue Bond Fund (STBF) became effective April 1, 2013. One-quarter of the State's sales tax collections are directed to this fund. Once LGAC bonds are deceased or retired, collections from two percent of the State's four percent sales tax rate will be dedicated to the STBF. As with the LGAC, all receipts in excess of the STBF debt service requirements will be transferred to the General Fund.

Table 30

Quarterly Sales Tax Growth								
	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4
Western NY	1.4%	2.5%	6.2%	5.3%	7.4%	(16.7%)	3.7%	0.9%
Finger Lakes	1.6%	4.3%	4.2%	6.0%	7.0%	(15.7%)	3.6%	(0.4%)
Southern Tier	1.5%	15.6%	12.7%	13.9%	18.5%	(20.5%)	(0.1%)	1.5%
Central NY	2.8%	(1.6%)	3.7%	4.5%	5.7%	(15.9%)	3.9%	5.4%
Mohawk Valley	(1.2%)	(8.1%)	(7.1%)	(5.7%)	(2.2%)	(14.0%)	5.6%	6.1%
North Country	0.8%	(0.6%)	5.4%	7.3%	8.4%	(9.2%)	4.6%	4.3%
Capital Region	1.0%	4.5%	7.1%	4.4%	5.0%	(18.7%)	(0.4%)	4.8%
Mid-Hudson	3.1%	2.5%	10.0%	13.4%	14.3%	(17.4%)	3.6%	4.2%
NYC	5.0%	3.6%	6.3%	5.0%	1.3%	(34.9%)	(21.9%)	(18.5%)
Long Island	2.0%	2.7%	6.1%	3.3%	5.3%	(24.0%)	0.8%	8.1%

Note: Growth rates shown represent the growth of the quarter over the same quarter in the previous year.
Sources: NYS Department of Taxation and Finance; NYS Assembly Ways and Means Committee staff.

Regional sales tax collections for the first quarter of 2019 through the fourth quarter of 2020 are shown above. New York City accounts for the largest portion of collections each quarter, with approximately half of total collections coming from the City due to its large population and popularity as a tourism destination. As a result of this dependence on tourism, the City has seen a disproportionately large impact from the COVID-19 pandemic, as shutdown orders and travel restrictions have severely impacted its economy. The significant growth in the Mid-Hudson region reflects a one percent increase in the Westchester County sales tax rate that took effect on August 1, 2019.

The limitations on business activity related to the COVID-19 pandemic resulted in a dramatic decrease in statewide sales tax collections in quarter two of calendar year 2020. Sales tax receipts have rebounded in quarters three and four of 2020, following the gradual reopening of the economy. However, as New York City continues to struggle with limitations on business activity and depressed tourist activity, its sales tax collections have continued to lag the rest of the State.

Sales tax collections have benefitted from language included in the SFY 2019-20 budget to tax additional internet sales. This change has resulted in approximately \$150 million in additional State sales tax collections each quarter, with a commensurate amount for local governments.

YTD through January

Statewide collections through January have decreased by 12.9 percent over SFY 2020-21, for a year-to-date total of \$11.778 billion.

State Fiscal Year 2020-21

The Committee estimates sales tax receipts will total \$14.051 billion in SFY 2020-21, a decrease of 11.8 percent, or \$1.8 billion, from SFY 2019-20. Sales tax collections are projected to decrease by 5.2 percent in the remaining two months of the fiscal year. This decrease reflects the slow recovery from the economic distress caused by the COVID-19 pandemic, and these projections are subject to downside risk due to the possible resurgence of the virus. Prior to the pandemic, sales tax collections had shown dramatic growth, driven by continued consumer spending growth as well as the expansion of the sales tax base to include most internet marketplace sales

The Committee's estimate is \$21 million above the Executive's estimate.

State Fiscal Year 2021-22

The Committee forecasts that sales tax receipts will total \$15.194 billion, an increase of 8.1 percent, over SFY 2020-21 estimates. This growth is driven by continuing growth of 5.7 percent in total consumption in 2021. The Committee's forecast is \$157 million above the Executive's forecast.

Fund Distribution

Table 31

Sales Tax Fund Distribution					
(\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	\$6,588	\$874	\$6,588	-	\$14,051
2021-22	\$7,123	\$949	\$7,123	-	\$15,194

Medical Marihuana Excise Tax

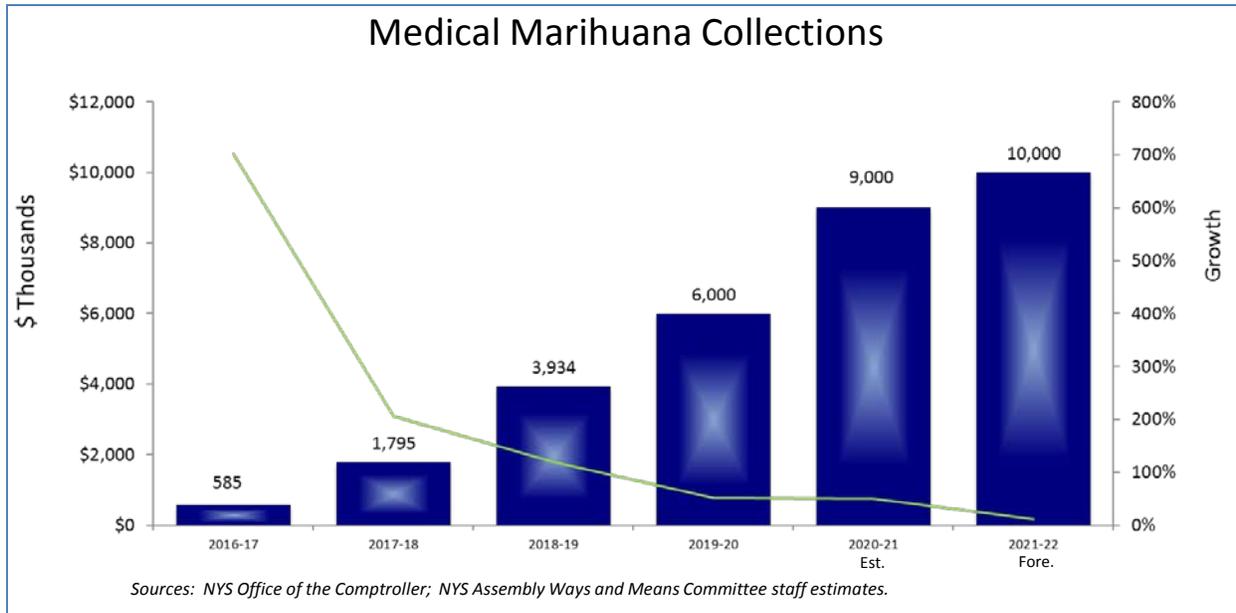


Figure 57

Pursuant to Article 20-B of the Tax Law, the State imposes an excise tax on medical marihuana which is prescribed for the treatment of a variety of conditions. Patients were first able to purchase medical marihuana in the State in January of 2016. In mid-June of 2018, the Department of Health expanded the Medical Marihuana Program to include opioid use as a qualifying condition. Upon the sale of the product from a New York State licensed dispensary to a patient or designated caregiver, a seven percent excise tax is levied and remitted by the dispensary. There are currently ten registered organizations authorized to manufacture and dispense medical marihuana. As of February 17, 2021, there are 3,142 registered practitioners and 138,738 certified patients in the New York State Medical Marihuana Program.

Of the revenues received from the State medical marihuana excise tax, 45 percent is dedicated to the Medical Marihuana Trust Fund and the remaining 55 percent is allocated in the following manner:

- 22.5 percent is remitted to the counties in which a medical marihuana manufacturer is based, in proportion to the gross sales in each county;

- 22.5 percent is remitted to the counties in which the medical marihuana was dispensed, in proportion to the gross sales in each county;
- Five percent is remitted to the Office of Alcoholism and Substance Abuse Services for the purposes of drug abuse prevention, counseling, and treatment services; and
- Five percent is remitted to the Division of Criminal Justice Services to provide discretionary grants to State and local law enforcement agencies.

YTD through January

Through January, Medical Marihuana Excise Tax collections have totaled \$7.2 million, a 49.6 percent increase from the same period of SFY 2019-20. This increase is largely due to the recent expansion of the medical conditions that are eligible for Medical Marihuana prescriptions, including post-traumatic stress disorder (PTSD), substance use disorder, and as an alternative to opioid treatment.

State Fiscal Year 2020-21

The Committee estimates that revenues from the Medical Marihuana Excise Tax will total \$9 million in SFY 2020-21, a 50 percent increase from SFY 2019-20. The Committee's estimate is \$1 million above the Executive's forecast.

State Fiscal Year 2020-21

For SFY 2021-22, the Committee forecasts collections of \$10 million, an 11.1 percent increase from SFY 2020-21 estimates. The Committee's forecast is \$2 million above the Executive's forecast.

Opioid Excise Tax

The SFY 2019-20 Budget enacted an Opioid Excise Tax that would be imposed on the first sale of an opioid unit by a registrant. A first sale is any transfer of title to an opioid unit for consideration where actual or constructive possession of such opioid unit is transferred by a registrant holding title to such opioid unit to a purchaser or its designee in New York State, for the first time. A qualifying sale does not include the dispensing of an opioid unit pursuant to a prescription to an ultimate consumer, or the transfer of title to an opioid unit from a manufacturer in the State to a purchaser outside of the State when such opioid unit will be used or consumed outside New York. It is presumed that every sale by a registrant in this State is the first sale unless it is established otherwise, and the burden of proving that a sale does not qualify as a first sale is on the registrant.

The Tax Law establishes two tax rates:

- A \$.0025 on each morphine milligram equivalent with a wholesale acquisition cost of less than \$0.50 per unit;
- A \$.015 on each morphine milligram equivalent with a wholesale acquisition cost of \$0.50 or more per unit.

State Fiscal Year 2020-21

The Committee estimates that statewide collections for SFY 2020-21 will total \$30 million, which is equal to the Executive projections.

State Fiscal Year 2021-22

The Committee forecasts that statewide collections for SFY 2021-22 will total \$35 million, which is \$1 million above the Executive's forecast of \$34 million.

Auto Rental Tax

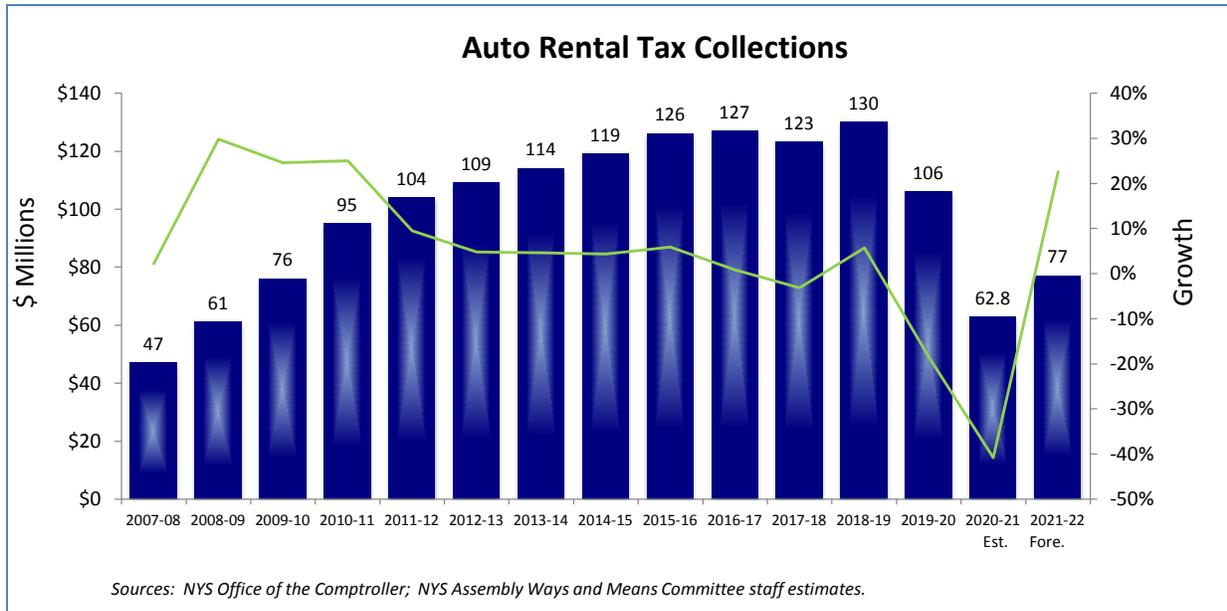


Figure 58

The auto rental tax, imposed by Article 28-A of the Tax Law, applies to the rental of any passenger car with a gross vehicle weight of 9,000 pounds or less that can seat a maximum of nine passengers. The statewide auto rental tax is imposed at a rate of six percent.

On June 1st, 2019, the supplemental surcharge tax of five percent imposed on auto rental sales made within the metropolitan commuter transportation district (MCTD) was increased to six percent and expanded to apply to auto rentals made in the rest of the State. However, revenue previously received from the MCTD supplemental surcharge will now be remitted directly to the Metropolitan Transportation Authority (MTA). Revenue from the new upstate supplemental surcharge will be used to fund upstate transportation systems. The taxes do not apply to leases of one year or more. Expanding the supplemental surcharge to upstate is expected to raise State revenue by \$11 million in FY 2020-21, and \$17 million in SFY 2021-22.

Table 32

Auto Rental Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$51	(39.5%)	\$63	(40.7%)	\$57	\$6
2021-22			\$77	22.6%	\$78	(\$1)

YTD through January

Year-to-date, auto rental tax collections are \$51 million, representing a decrease of 39.5 percent compared to the same period in SFY 2019-20.

State Fiscal Year 2020-21

The Committee estimates auto rental tax collections will total \$63 million in SFY 2020-21, representing a decrease of 41.3 percent over SFY 2019-20. The Committee's estimate is \$6.0 million above the Executive's estimate.

State Fiscal Year 2021-22

The Committee forecasts auto rental tax collections will total \$77 million in SFY 2021-22. This is an increase of 22.6 percent, or \$14 million, over SFY 2020-21 estimates. The Committee's forecast is \$1.0 million below the Executive's forecast.

Fund Distribution**Table 33**

Auto Rental Tax Fund Distribution (\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	-	\$11.0	-	\$51.8	\$63
2021-22	-	\$17.0	-	\$60.0	\$77

Motor Fuel Tax

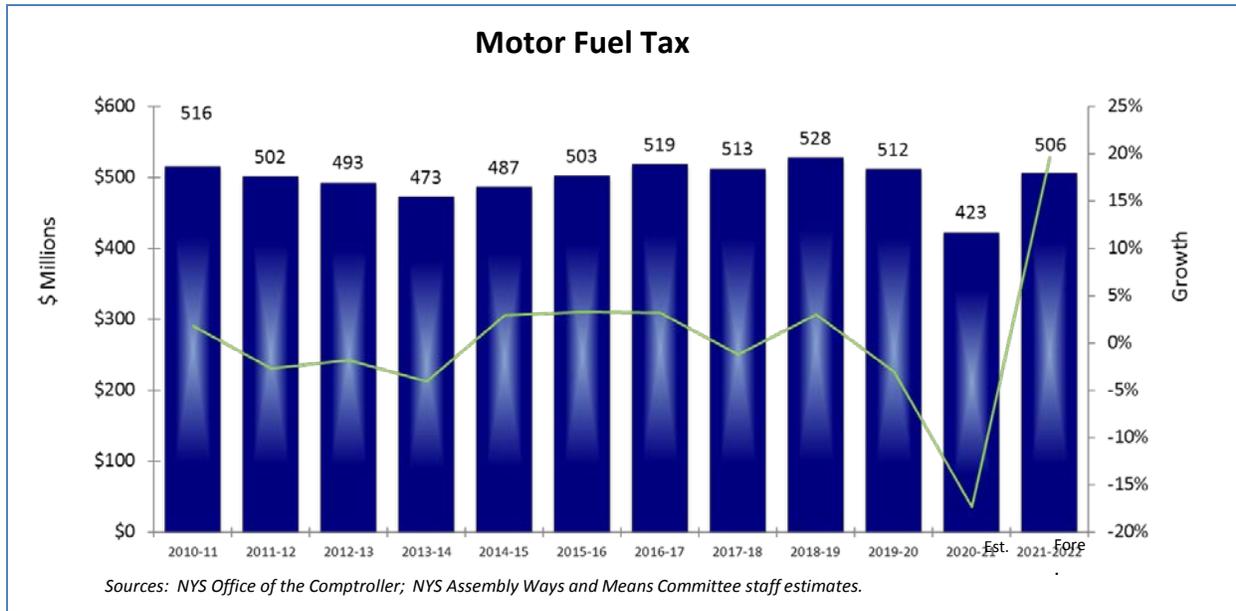


Figure 59

Article 12-A of the Tax Law imposes an eight-cents-per-gallon tax on motor and diesel fuel upon importation into New York or production within the State. The motor fuel tax has three components: a regular tax of four cents per gallon, an additional tax of three cents per gallon, and a supplemental tax of one cent per gallon. Motor fuel receipts are split between the Dedicated Highway and Bridge Trust Fund (81.5 percent) and the Dedicated Mass Transportation Trust Fund (18.5 percent). Diesel receipts are split between the Dedicated Highway and Bridge Trust fund (63 percent) and the Dedicated Mass Transportation Trust Fund (37 percent).

Table 34

Motor Fuel Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$359	(18.0%)	\$423	(17.4%)	\$426	(\$3)
2021-22			\$506	19.7%	\$501	\$5

YTD through January

Through January, motor fuel tax collections have decreased by 28.8 percent compared to last year, totaling \$359 million.

State Fiscal Year 2020-21

The Committee estimates that motor fuel tax collections will total \$422.7 million in SFY 2020-21, or a decrease of 17.4 percent, from SFY 2019-20. Gasoline tax collections are expected to decrease by 3.1 percent in SFY 2020-21, while diesel tax collections are expected to decrease 10.2 percent. The Executive estimates \$426 million in collections, and the Committee's estimates are \$3 million below the Executive's estimate.

State Fiscal Year 2021-22

Gasoline consumption is forecast to increase by 22.4 percent in SFY 2021-22 and diesel consumption is forecast to increase 7.4 percent. These forecasts are the basis for the Committee's revenue forecast of \$505.8 million in motor fuel tax receipts in SFY 2021-22, which is an increase of 19.7 percent from the previous year. The Committee's forecast is \$5 million above the Executive forecast of \$501 million.

Fund Distribution

Table 35

Motor Fuel Tax Fund Distribution					
(\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	-	\$90	-	\$332	\$423
2021-22	-	\$107	-	\$399	\$506

Highway Use Tax

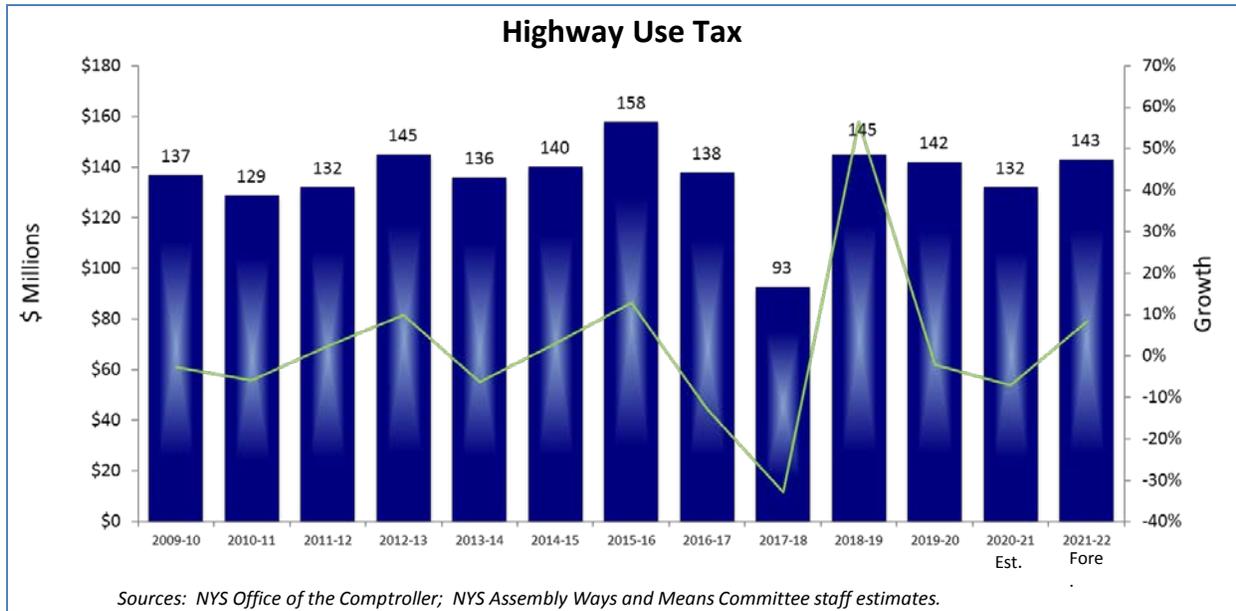


Figure 60

Articles 21 and 21-A of the Tax Law impose a Highway Use Tax (HUT) on truck mileage and fuel use, respectively, for the privilege of operating a commercial vehicle on public highways. Additionally, there is a permit fee collected from taxpayers required to pay the tax.

The truck mileage tax is levied on commercial vehicles having a loaded gross weight of more than 18,000 pounds, or an unloaded weight over 8,000 pounds for trucks and 4,000 pounds for tractors. The tax is calculated by multiplying the number of miles operated on New York State public highways, excluding miles on New York Thruways, by the appropriate graduated rate. Rates are determined according to the gross, laden or un-laden weight.

Highway use permits are mandatory for owners of vehicles subject to the HUT. Beginning December 1, 2013, vehicles subject to the HUT are required to display a decal indicating ownership of a highway use permit. The fee, due every three years, for the registration and decal combined is \$1.50. This change was made after a 2015 New York Supreme Court case ruled the previous \$19 combined fee unconstitutional.

The fuel use tax applies to commercial vehicles that purchase fuel outside New York State, but consume the fuel while traveling on New York highways. The International Fuel Tax

Agreement (IFTA) is used to simplify fuel use reporting for motor carriers. A carrier will report and pay in its home jurisdiction all fuel taxes owed to IFTA members; IFTA then distributes the payments to its members' jurisdictions. The aggregate fuel use tax rate is the sum of the motor fuel tax rate and the sales tax rate. The sales tax rate has two components: the state sales tax rate, four percent, and the lowest county sales tax rate at the time, currently three percent. The sales tax rates are applied to the capped price of \$2 per gallon. All HUT receipts are dedicated to the Dedicated Highway and Bridge Trust Fund.

Table 36

Highway Use Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$115	(6.3%)	\$132	(7.3%)	\$131	\$1
2021-22			\$144	9.5%	\$138	\$6

YTD through January

Through January, collections have totaled \$115 million, a decrease of 6.3 percent from the last fiscal year.

State Fiscal Year 2020-21

Collections are estimated to total \$132 million, a decrease of 7.3 percent compared to the previous fiscal year. The collections this year reflect a decrease in truck mileage tax collections. The Committee's estimates are \$1 million above the Executive's estimates of \$131 million.

State Fiscal Year 2021-22

Highway use tax collections are expected to increase by 9.5 percent, to \$144 million, in SFY 2021-22. This is \$6 million higher than the Executive's forecast of \$138 million.

Fund Distribution

Table 37

Highway Use Tax Fund Distribution (\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	-	\$0	-	\$132	\$132
2021-22	-	\$1	-	\$143	\$144

Cigarette and Tobacco Taxes

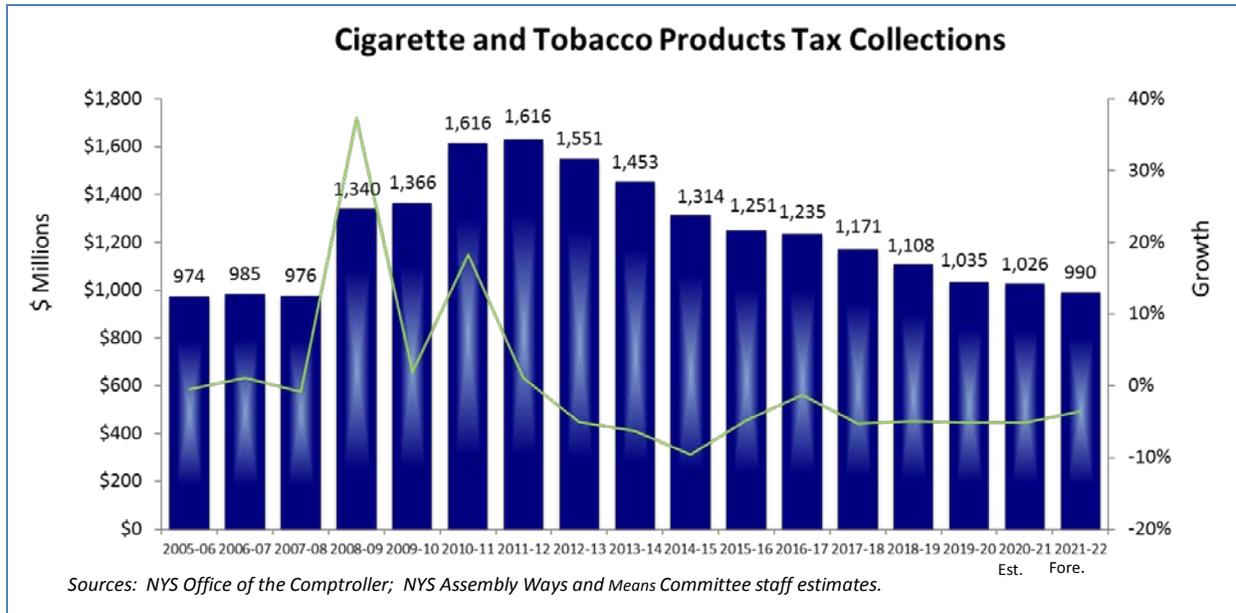


Figure 61

The State cigarette excise tax has been imposed by Article 20 of the Tax Law since 1939. This rate is currently \$4.35 for a package of 20 cigarettes. The Commissioner of Taxation and Finance is authorized to make provisions for the sale of tax stamps and currently licenses agents to sell stamps for the payment of tax on cigarettes. The agent retains some of the revenues from the sale as commission according to guidelines established by the Tax Commissioner. The Commissioner is also authorized to prescribe a schedule of commissions, not exceeding five percent, to agents for buying and affixing stamps. The schedule shall be uniform with respect to the different types of stamps used, and may be on a graduated scale with respect to the number of stamps purchased. The City of New York applies an additional excise tax of \$1.50 per package of 20 cigarettes.

The State also imposes a tax on tobacco products at a rate of 75 percent of the wholesale price of cigars and tobacco products other than little cigars and snuff. Little cigars are taxed at the same rate as cigarettes, \$4.35 for a package of 20. One package of snuff which weighs an ounce or less is taxed at \$2 per container, for packages weighing more than one ounce a proportional amount is levied on the snuff in excess of one ounce.

Table 38

Cigarette and Tobacco Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$891	(0.8%)	\$1,026	(0.9%)	\$1,019	\$7
2021-22			\$990	(3.5%)	\$982	\$8

YTD through January

Through January, cigarette and tobacco products tax collections totaled \$891 million, or a decrease of 0.8 percent from the same period in SFY 2019-20.

State Fiscal Year 2020-21

The Committee estimates SFY 2020-21 collections for cigarette and tobacco taxes will total \$1.026 billion, a decline of 0.9 percent. This estimate is based on year-to-date collections and historical collection patterns. The Committee's estimate is \$7 million above the Executive's SFY 2020-21 projections.

State Fiscal Year 2021-22

The Committee's cigarette and tobacco tax collections forecast for SFY 2021-22 is \$990 million, a decline of 4 percent from SFY 2020-21. The Committee's forecast is \$8 million above the Executive's estimates of \$982 million.

Fund Distribution

Approximately 70 percent of cigarette and tobacco taxes are distributed to the Health Care Reform Act (HCRA) revenue pool which offsets State Medicaid spending.

Table 39

Cigarette and Tobacco Taxes Fund Distribution					
(\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	\$316	\$710	-	-	\$1,026
2021-22	\$314	\$675	-	-	\$990

Vapor Excise Tax

Pursuant to Article 28-C, effective December 1, 2019, a twenty percent excise tax will apply to retail sales of vapor products in New York. Vapor product means noncombustible liquids and gels (with or without nicotine) that are manufactured into a finished product for use in an electronic cigarette, cigar, cigarillo, or pipe, vaping or hookah pen, or similar device. Vapor products do not include any product approved by the United States Food and Drug Administration as a drug or medical device or manufactured and dispensed as medical marijuana.⁵² The tax is imposed on the purchaser and collected by the vapor products dealer. Vapor products dealer means a person issued a Certificate of Registration by the Commissioner of Taxation and Finance.

State Fiscal Year 2020-21

The Committee estimates that collections through SFY 2020-21 will total \$32 million, \$5 million above the Executive's projections.

State Fiscal Year 2021-22

The Committee forecasts that collections for SFY 2021-22 will total \$25 million, a 21.9 percent decrease from SFY 2020-21. This estimate is \$9 million above the Executive's forecast. This decrease is partially the result of the recent prohibitions of flavored vapor products.

⁵² Public Health Law, Article 33, Title 5-A

Alcoholic Beverage Control License Fees

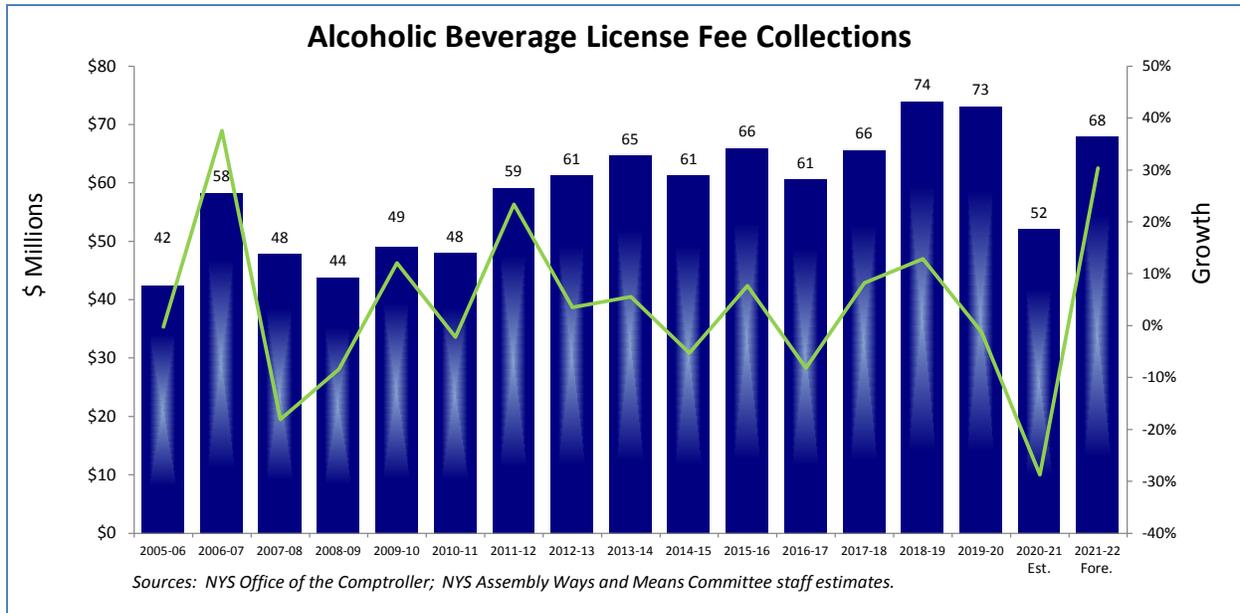


Figure 62

The New York State Alcoholic Beverage Control Law imposes permit fees on licenses for alcohol manufacturers like distillers, brewers, wineries, as well as wholesalers and retailers. License fees vary according to three major factors: (1) the type of license which is issued; (2) the population of the locality where the establishment is located (for retail licenses only); and (3) the class of beverage for which the license is issued, namely liquor, beer, and wine. The State Liquor Authority oversees nearly 70,000 licenses and permits Statewide each year. The most expensive licenses are for distillers.

On September 7, 2016 a new law took effect allowing holders of on premise consumption licenses to serve alcoholic beverages starting at 10 a.m. on Sundays. Prior to the law, alcoholic beverages could not be served for on-premises consumption until noon on Sundays.

Table 40

Alcoholic Beverage Control License Fees (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$40	(36.6%)	\$52	(29.7%)	\$52	\$0
2021-22			\$68	30.5%	\$66	\$2

YTD through January

Year-to-date, Alcoholic Beverage Control License Fees collections are \$39.8 million, a 36.6 percent decrease over the same period in SFY 2019-20.

State Fiscal Year 2020-21

The Committee estimates revenues from Alcoholic Beverage Control License Fees will total \$52 million in SFY 2020-21, a 28.8 percent decrease from the previous year. The Committee's estimate is equal to the Executive's projections. This decrease is related to a reduction in licensing activity due to COVID-19.

State Fiscal Year 2021-22

The Committee forecasts collections of \$67.8 million, an increase of 30.5 percent from SFY 2020-21 collections, as the economy rebounds from the pandemic. The Committee's forecast is 1.8 million above the Executive's forecast.

Alcoholic Beverage Tax

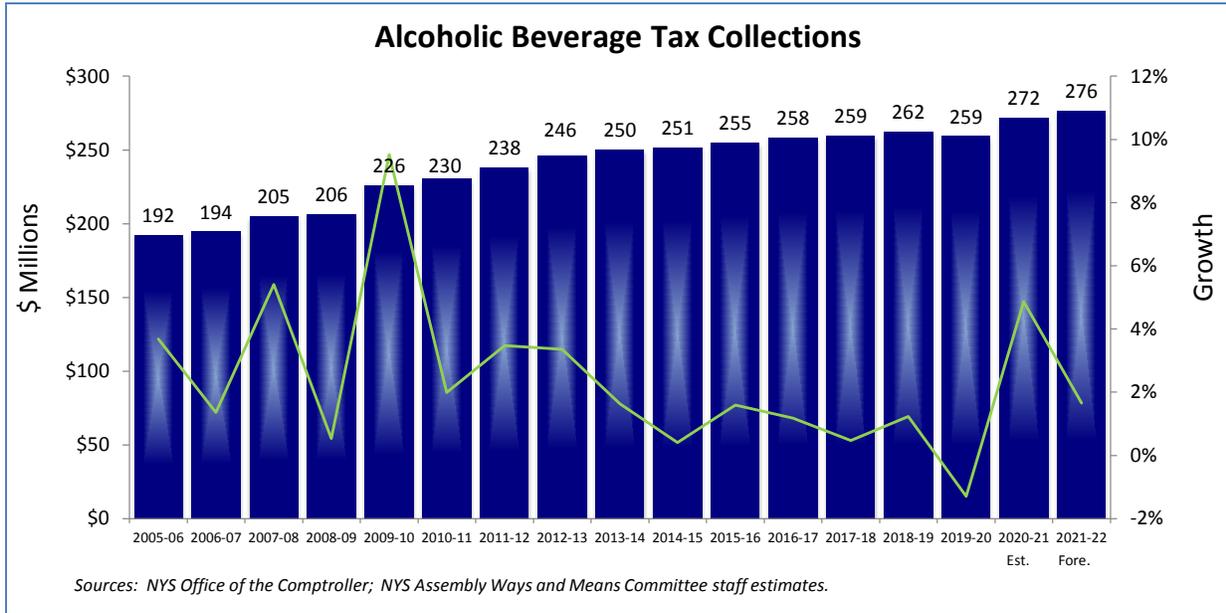


Figure 63

Article 18 of the New York State Tax Law levies a tax on alcoholic beverages at different rates based on the content of alcohol by volume and the type of beverage. The tax is imposed on the distributor or non-commercial importer of alcoholic beverages below illustrates the current State rates, as well as the alcoholic beverage taxes imposed by New York City (see Table 41).

Table 41

New York State and New York City Alcoholic Beverage Tax Rates (dollars per unit of measure)		
	New York State	New York City
Beer and other similar fermented malt beverages	\$0.14 per gallon	\$0.12 per gallon
Cider	0.0379 per gallon	None
Natural and artificially carbonated sparkling wine	0.30 per gallon	None
Still wine, including wine coolers	0.30 per gallon	None
Liquor containing more than 24 percent alcohol by volume	1.70 per liter	0.264 per liter
Liquor containing more than 2 percent but not more than 24 percent alcohol by volume	0.67 per liter	None
Liquor containing 2 percent or less alcohol by volume	None	None

Table 42

Alcoholic Beverage Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$238	1.8%	\$272	4.9%	\$273	(\$1)
2021-22			\$276	1.7%	\$271	\$5

YTD through January

Year-to-date, Alcoholic Beverage Tax receipts are currently \$238 million, a 1.8 percent increase over the same period in SFY 2019-20.

State Fiscal Year 2020-21

The Committee estimates Alcoholic Beverage Tax receipts will total \$272 million in SFY 2020-21 for growth of 4.9 percent. The Committee’s estimate is \$1 million below the Executive’s projection.

State Fiscal Year 2021-22

The Committee forecasts Alcoholic Beverage tax collections in SFY 2021-22 of \$276 million, or 1.7 percent over SFY 2020-21 collections. The Committee’s forecast is \$5 million above the Executive’s forecast.

Business Taxes

Table 43

Business Taxes						
Forecasts by State Fiscal Year						
(\$ in Millions)						
	SFY		Diff.	SFY		Diff.
	2020-21	Growth	Exec.	2021-22	Growth	Exec.
Business Taxes	\$8,349	(7.2%)	\$171	\$8,803	5.4%	\$365
Corporate Franchise	4,522	(6.3%)	219	4,897	8.3%	443
Utility Tax	614	(12.8%)	9	629	2.4%	21
Insurance Tax	2,109	(8.6%)	(34)	2,143	1.6%	(67)
Bank Tax	160	100.0%	-	107	(33.1%)	-
Petroleum Business Tax	944	(18.7%)	(23)	1,027	8.7%	(32)

Corporate Franchise Tax

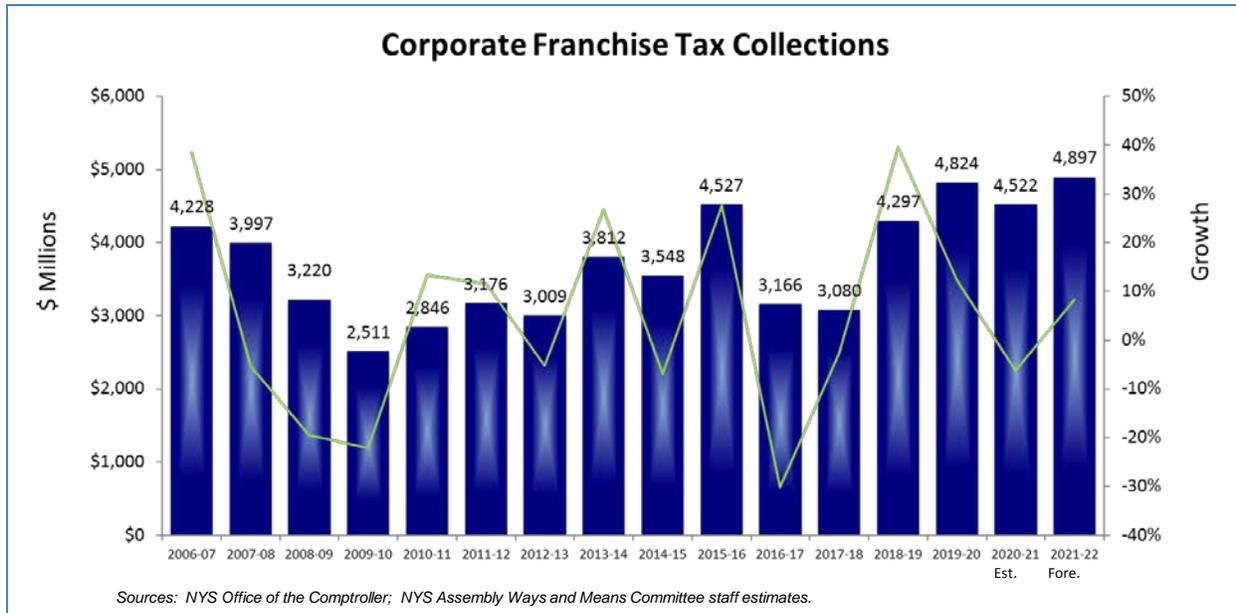


Figure 64

Taxes are imposed on every domestic or foreign corporation, under Article 9-A of the Tax Law, "for the privilege of exercising its corporate franchise, or of doing business, or of employing capital, or of owning or leasing property in a corporate or organized capacity, or of maintaining an office in this State".

Table 44

Corporate Franchise Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$3,601	(2.4%)	\$4,522	(6.3%)	\$4,303	\$219
2021-22			\$4,897	8.3%	\$4,454	\$443

YTD through January

All Funds cumulative collections through January were \$3.601 billion, a decrease of 2.4 percent, or \$88 million, from prior year collections.

Audit collections through January totaled \$403 million, an increase of \$69 million or 20.6 percent compared to the previous fiscal year. Growth without audits is 4.7 percent below that of the prior fiscal year.

State Fiscal Year 2020-21

The Committee estimates SFY 2020-21 corporate franchise tax collections to total \$4.522 billion, a decrease of 6.3 percent, or \$302 million, from the previous fiscal year. To reach this level, remaining collections are expected to decrease by 18.9 percent below collections received over the same period in SFY 2019-20. The Committee's estimate is \$219 million above the Executive's projection.

State Fiscal Year 2021-22

The Committee forecasts corporate tax receipts to increase by 8.3 percent, or \$375 million, for a total of \$4.897 billion in SFY 2021-22. This estimate is \$443 million above the Executive's forecast of \$4.454 billion.

Fund Distribution

All corporate franchise tax receipts are deposited into the General Fund except for the Metropolitan Commuter Transportation District (MCTD) surcharge, which is deposited into the Mass Transportation Operating Assistance Fund (MTOAF) Special Revenue Fund. In SFY 2020-21, the Committee expects General Fund receipts to total \$3.575 billion.

In SFY 2021-22, the Committee's forecasts an increase of 8.0 percent in the General Fund with collections of \$3.861 billion.

Table 45

Corporate Franchise Tax Fund Distribution					
(\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	\$3,575	\$947	-	-	\$4,522
2021-22	\$3,861	\$1,036	-	-	\$4,897

Bank Tax

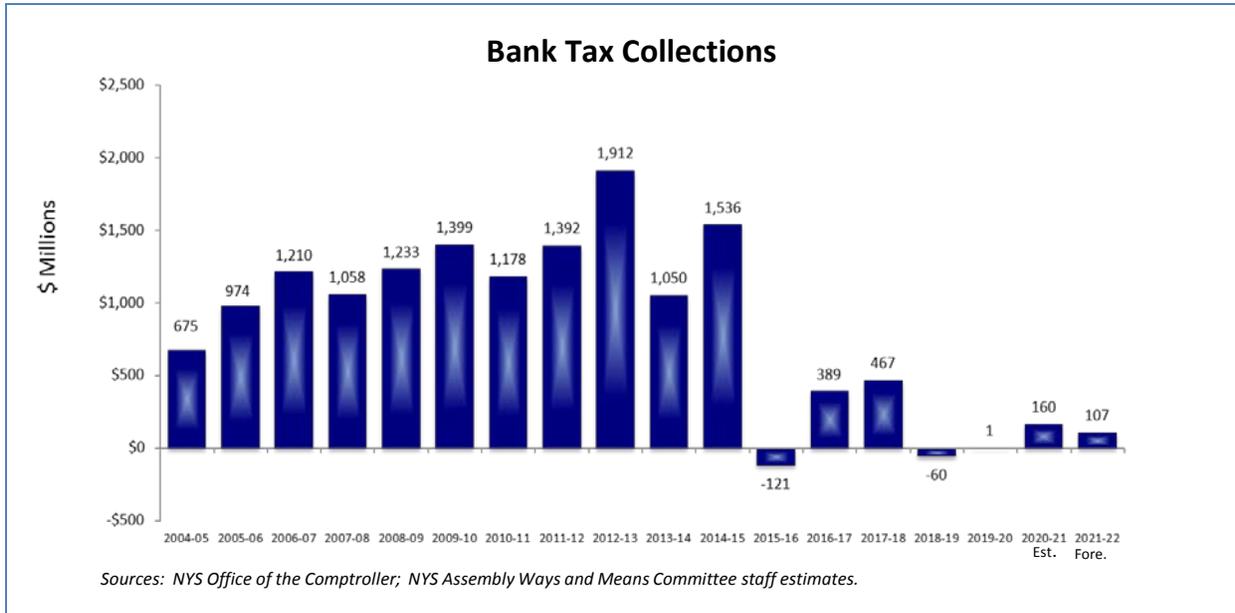


Figure 65

As of January 1, 2015 the Bank Tax has been merged with the Corporate Tax pursuant to the 2014 corporate tax reform. Current collections from this tax arise from audits and other related activity in tax years prior to corporate tax reform.

Table 46

Bank Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$156	(613.2%)	\$160	100.0%	\$160	\$0
2021-22			\$107	(33.1%)	\$107	\$0

YTD through January

Through January, bank tax collections totaled \$156 million, an increase of \$186 million over the prior fiscal year.

State Fiscal Year 2020-21

The Committee expects bank tax collections to total \$160 million this fiscal year, an increase of \$160 million from the prior year. This estimate is the same as the Executive's estimate.

State Fiscal Year 2021-22

The Committee expects bank collections to total \$107 million in SFY 2021-22. This is the same as the Executive's forecast.

Fund Distribution

All bank tax receipts are deposited into the General Fund except for the Metropolitan Commuter Transportation District (MCTD) surcharge, which is deposited into the Metropolitan Transportation Operating Assistance Fund (MTOAF).

In SFY 2020-21, the Committee expects General Fund receipts of \$225 million. In SFY 2020-21 the Committee expects no General Fund receipts.

Table 47

	Bank Tax Fund Distribution				
	(\$ in Millions)				
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	\$140	\$20	-	-	\$160
2021-22	\$85	\$22	-	-	\$107

Insurance Tax

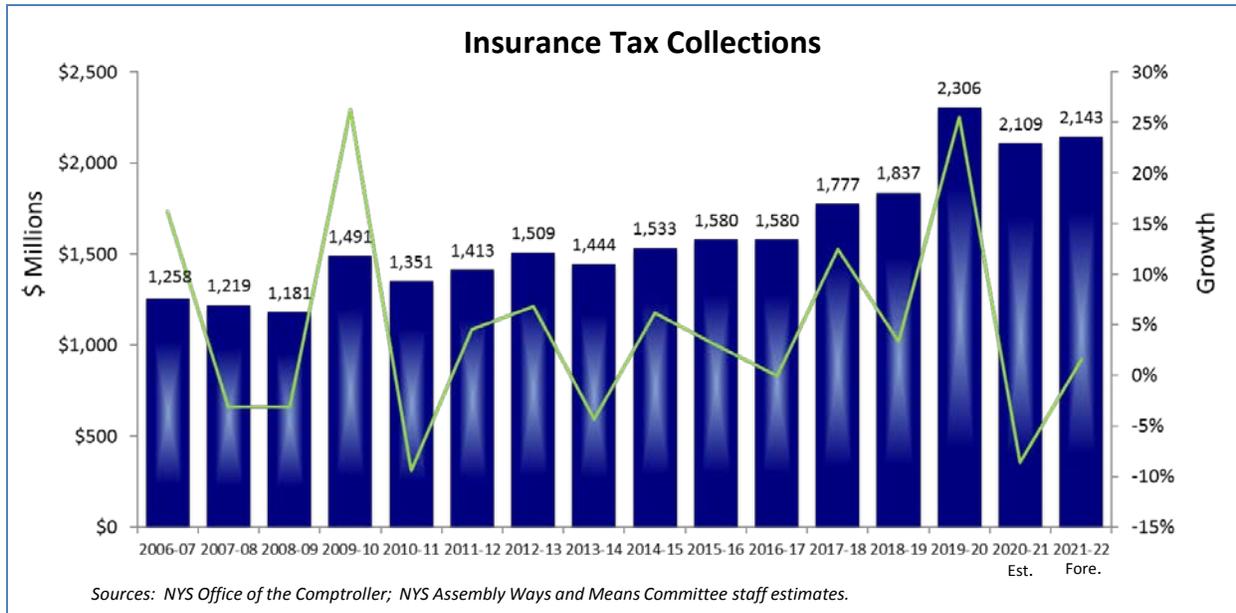


Figure 66

Taxes on insurance companies in New York State are administered by two separate agencies, the Department of Taxation and Finance and the Department of Financial Services. Pursuant to Article 33 of the Tax Law, the Department of Taxation and Finance administers income and or premiums taxes on insurance companies. The Department of Financial Services administers taxes on insurance companies’ premiums pursuant to Articles 11 and 21 of the Insurance Law.

Table 48

Insurance Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$1,331	(12.9%)	\$2,109	(8.6%)	\$2,143	(\$34)
2021-22			\$2,143	1.6%	\$2,210	(\$67)

YTD through January

Year-to-date insurance tax collections are \$1.331 billion, a decrease of \$191 million, or 12.5 percent, from the prior fiscal year.

State Fiscal Year 2020-21

The Committee expects collections to total \$2.109 billion in SFY 2020-21, a decrease of \$197 million, or 8.6 percent, over the prior fiscal year. Collections are expected to remain flat over the remainder of the fiscal year. The Committee's estimate is \$34 million below the Executive's estimate of \$2.143 billion.

State Fiscal Year 2021-22

The Committee forecasts insurance collections to total \$2.143 billion in SFY 2021-22, an increase of \$34 million, or 1.6 percent, above the current fiscal year. The Executive forecasts collections to be \$2.210 billion in SFY 2021-22, an increase of 3.1 percent, or \$67 million. This estimate is \$67 million above the Committee's forecast.

Fund Distribution

All insurance tax receipts are deposited into the General Fund except for the Metropolitan Commuter Transportation District (MCTD) surcharge, which is deposited into the Metropolitan Transportation Operating Assistance Fund (MTOAF).

In SFY 2020-21, the Committee projects General Fund receipts to reach \$1.888 billion. In SFY 2021-22 the Committee projects the General Fund to increase \$25 million to \$1.913 billion.

Table 49

Insurance Tax Fund Distribution					
(\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	\$1,888	\$220	-	-	\$2,109
2021-22	\$1,913	\$230	-	-	\$2,143

Corporate Utility Tax

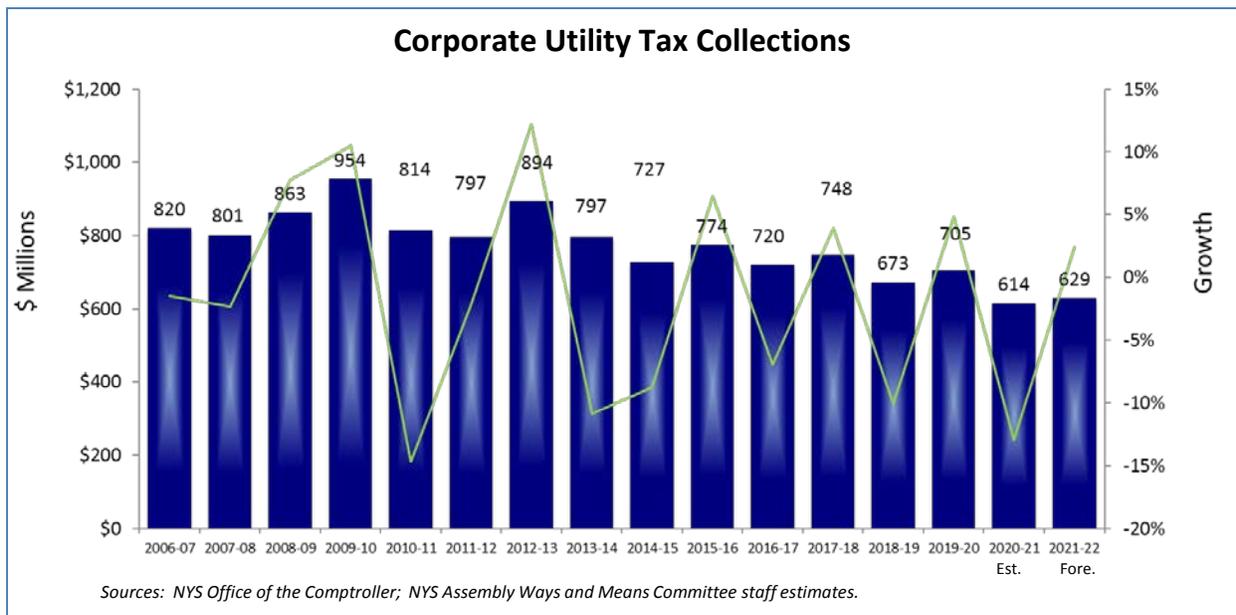


Figure 67

All transportation and transmission companies exercising their corporate franchise, doing business, employing capital, owning or leasing property in the State in a corporate or organized capacity, or maintaining an office in New York are subject to a franchise tax under Article 9 of the Tax Law.

Transportation and transmission companies pay a tax of the greater of:

1. \$75;
2. 1.5 mills per dollar of net value of issued capital stock; or,
3. if dividends are paid on the par value of any stock during any calendar year amount to six percent or more, 0.375 mills per dollar for each 1 percent of dividends paid, computed at par value of the stock.

The excise tax on the sale of telecommunication services is imposed at the rate of 2.5 percent of gross receipts from:

1. intrastate telecommunication services;
2. interstate and international telecommunication services (other than interstate and international private telecommunication services) that originate or terminate in New York State and that are charged to a service address in New York State; and,
3. interstate and international private telecommunication services.

Table 50

Corporate Utility Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$364	(12.0%)	\$614	(12.8%)	\$605	\$9
2021-22			\$629	2.4%	\$608	\$21

YTD through January

Through January, cumulative utility tax collections are \$364 million, a decline of \$30 million, or 12 percent, from the prior fiscal year.

State Fiscal Year 2021-22

The Committee expects collections for SFY 2020-21 to be \$614 million, a decrease of 12.8 percent, or \$91 million, from the previous fiscal year. To reach this estimate, collections over the remainder of the year will need to decline 14 percent. The Committee's estimate is \$9 million above the Executive's estimate of \$605 million.

State Fiscal Year 2021-22

The Committee expects utility tax collections to increase by \$15 million or 2.4 percent to a level of \$629 million in SFY 2021-22. The Executive is expecting an increase of 0.5 percent to \$608 million in collections next fiscal year. The Committee's estimate is \$21 million higher than the Executive's forecast.

Fund Distribution

Eighty percent of the tax receipts from sections 183 and 184 of the Tax Law are deposited into the Mass Transportation Operating Assistance Fund (MTOAF) and the remainder is deposited into the Dedicated Highway Bridge and Trust Fund (DHBTf).

The Metropolitan Commuter Transportation District (MCTD) surcharge of 17 percent on a company’s liability attributable to the MCTD is deposited into the MTOAF.

For SFY 2020-21, the Committee expect General Funds to total \$467 million and Special Revenue Funds to be \$136 million. Capital Projects Funds are estimated to total \$15 million.

For SFY 2021-22, the Committee expect General Funds to decrease to \$465 million and Special Revenue Funds to increase to \$151 million. Capital Projects Funds are forecast to be \$14 million.

Table 51

Corporate Utility Tax Fund Distribution					
(\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	\$467	\$136	-	\$11	\$614
2021-22	\$465	\$150	-	\$14	\$629

Petroleum Business Tax

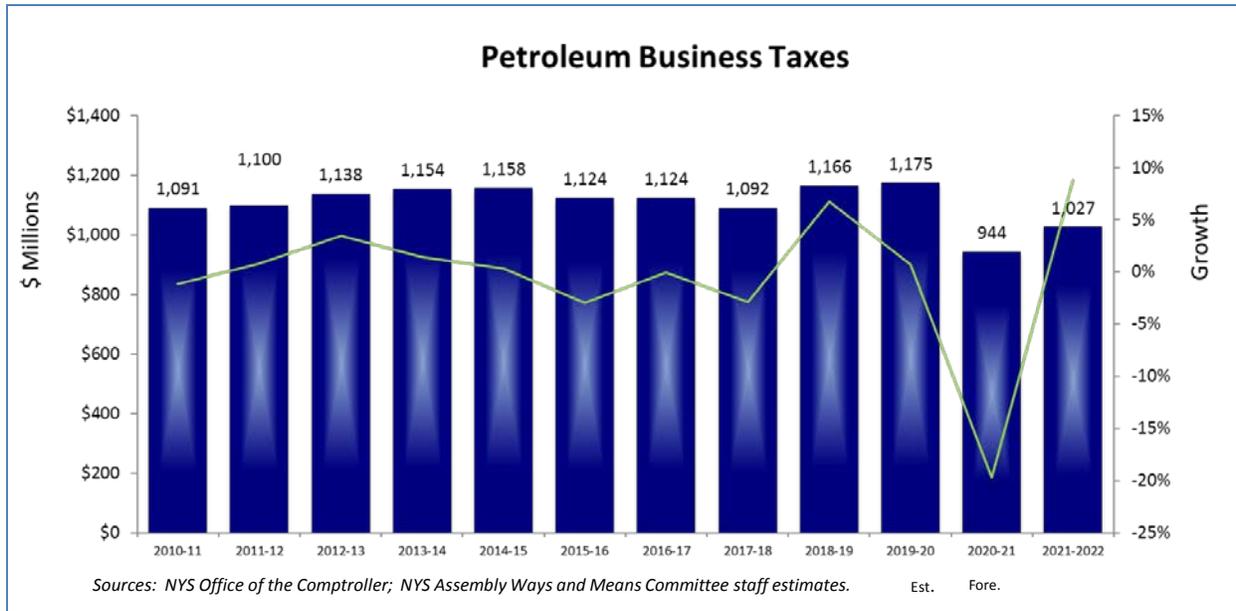


Figure 68

Article 13-A of the Tax Law imposes the Petroleum Business Tax on every petroleum business for the privilege of engaging in business, employing capital, owning or leasing property, or maintaining an office in the State. Gasoline is subject to tax at the time it is imported, while diesel is taxable upon the first sale. The Petroleum Business Tax also applies to the fuel that motor carriers purchase outside of New York State, but consume within the State.

Petroleum Business Tax rates are subject to annual adjustments on the first of January each year to reflect the change in the Producer Price Index (PPI) for refined petroleum products for the twelve months ending August 31 of the immediately preceding year. The petroleum PPI is published by the U.S. Bureau of Labor Statistics. The rates of tax are rounded to the nearest tenth of one cent and limited to a five percent annual change.

The Petroleum Business Tax consists of a base tax, a supplemental tax, and a tax on carriers. All revenues from the base tax are dedicated as follows: 19.7 percent to the Mass Transportation Operating Assistance Fund; and 80.3 percent to a dedicated funds pool. The supplemental tax and the tax on carriers are deposited entirely into that dedicated funds pool. The dedicated funds pool is split between the Dedicated Mass Transportation Trust Fund, (37 percent), and the Dedicated Highway and Bridge Trust Fund (63 percent).

Table 52

Petroleum Business Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$797	(19.9%)	\$944	(18.7%)	\$967	(\$23)
2021-22			\$1,027	8.7%	\$1,059	(\$32)

YTD through January

Through January, petroleum business tax (PBT) collections have decreased by 19.9 percent over last fiscal year, for a total of \$797 million year-to-date.

State Fiscal Year 2020-21

The Committee expects collections for SFY 2020-21 to total \$944 million, a decrease of 18.7 percent, or \$206 million, from the previous fiscal year. The Committee expects collections for the remainder of the year to decrease by 11.1 percent compared to SFY 2019-20. The decrease is attributed to the effects of the COVID-19 pandemic on travel, as well as, a rate decrease of two percent that took effect in January 2020 and a computed rate decrease of five percent to take effect in January 2021. The Committee's estimate is \$23 million below the Executive's estimate of \$967 million.

State Fiscal Year 2021-22

The Committee forecasts PBT collections to increase by 8.7 percent, to a level of \$1.027 billion, in SFY 2021-22. The Executive is forecasting \$1.059 billion in collections for the next fiscal year. The Committee's estimate is \$32 million below the Executive's projection.

Fund Distribution

Table 53

Petroleum Business Tax Fund Distribution					
(\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	-	\$417	-	\$527	\$944
2021-22	-	\$452	-	\$575	\$1,027

Other Taxes

Table 54

Other Taxes Forecasts by State Fiscal Year (\$ in Millions)						
	SFY 2020-21	Growth	Diff. Exec.	SFY 2021-22	Growth	Diff. Exec.
Other	\$2,352	6.3%	\$227	\$2,159	(8.2%)	\$86
Estate and Gift Tax	1,398	30.7%	185	1,110	(20.6%)	52
Real Estate Transfer Tax	941	(16.3%)	43	1,027	9.1%	34
Pari Mutuel	10	(30.7%)	(1)	14	44.3%	0
Other	0	(100.0%)	0	2	100.0%	0

Estate Tax

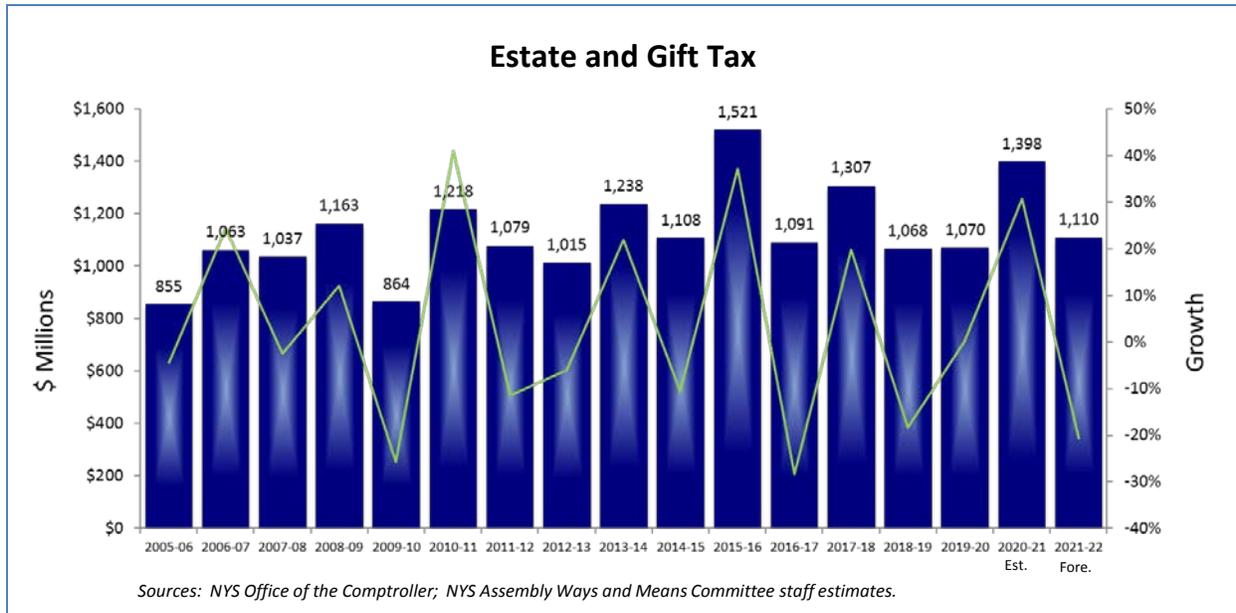


Figure 69

Article 26 of the Tax Law imposes a tax on the transfer of deceased individual’s property known as the estate tax for residents of the State. The estate tax is applied to an estate whose value exceeds an exemption level of \$5.85 million for single filers and \$11.7 million for couples. The tax applies to non-charitable transfers made by people who own real estate or tangible personal property located in New York, as well as intangible property upon death. Nonresidents are subject to the tax if the transfer real estate or tangible personal property is located within the State. Estate taxes must be filed within nine months of the decedent’s death.

Table 55

Estate and Gift Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$1,250	37.8%	\$1,398	30.7%	\$1,213	\$185
2021-22			\$1,110	(20.6%)	\$1,058	\$52

YTD through January

Year-to-date, Estate and Gift tax collections are \$1.250 billion, a 37.8 percent increase from the same period in SFY 2019-20.

State Fiscal Year 2020-21

The Committee estimates Estate and Gift tax collections will total \$1.398 billion in SFY 2020-21. This reflects a 30.7 percent increase from SFY 2019-20. The Committee's estimate is \$185 million above the Executive's estimate.

State Fiscal Year 2021-22

The Committee projects Estate and Gift tax collections to decrease by 21.4 percent, or \$320 million, in SFY 2021-22, for a total of \$1.110 billion. The Committee's forecast is \$52.3 million above the Executive's forecast.

Fund Distribution**Table 56**

Estate and Gift Tax Fund Distribution (\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	1,398	-	-	-	1,398
2021-22	1,110	-	-	-	1,110

Real Estate Transfer Tax (RETT)

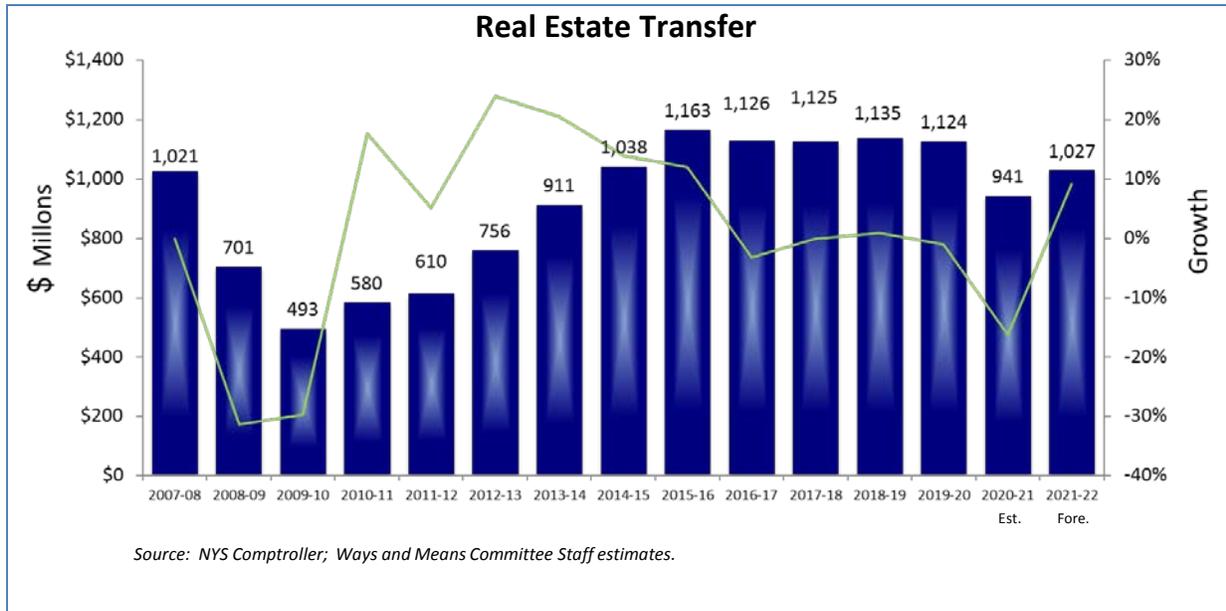


Figure 70

The real property transfer tax is administered pursuant to Article 31 of the New York State Tax Law, and it is levied on real property transfers where the value of the interest conveyed exceeds \$500. The tax is paid by the grantor, the party selling the property, and is imposed on the conveyance of real property, either by deed or economic interest, at a rate of \$2 for each \$500 of sales price. An additional tax of one percent is applied to residential transfers when the value of the property is over \$1 million; this additional tax is commonly called the mansion tax. This additional tax is paid by the grantee, the party purchasing the property.

Real estate transfer tax (RETT) receipts rely on the climate of the housing market in New York State, and especially in New York City. Historically, New York City accounts for over 50 percent of total RETT receipts, while Long Island accounts for around 15 percent of receipts.

The SFY 2019-20 budget established two additional RETT provisions on transfers occurring in New York City, which will support the MTA, including an expansion of the existing transfer tax, which implemented a progressive rate structure ranging from 1.25 percent on transfers valued at \$2 million to 3.9 percent on sales valued over \$25 million; and an additional 0.25 percent RETT on residential transactions valued over \$3 million and commercial transactions valued over \$2 million. Since these taxes are remitted to the Central Business

District Tolling Capital Lockbox, they are not reflected in the Committee’s projections of State receipts.

Table 57

Real Estate Transfer Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$769	(19.2%)	\$941	(16.3%)	\$898	\$43
2021-22			\$1,027	9.1%	\$993	\$34

YTD through January

Through January, RETT collections are \$769 million, which represents a 19.2 percent decrease from the same period in SFY 2019-20.

State Fiscal Year 2020-21

The Committee estimates that RETT receipts will total \$941 million in SFY 2020-21, for a decline of 16.3 percent from SFY 2019-20.

The Executive estimates a total of \$898 million in collections, which is \$43.1 million below the Committee’s estimate.

State Fiscal Year 2021-22

The Committee anticipates RETT receipts will total \$1,027 billion in SFY 2021-22 for a year-over-year increase of 9.1 percent. The Committee’s forecast is \$34 million above the Executive’s forecast.

Fund Distribution

Table 58

Real Estate Transfer Tax Fund Distribution					
(\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	-	-	\$822	\$119	\$941
2021-22	-	-	\$908	\$119	\$1,027

A statutory amount of \$119 million is deposited into the Environmental Protection Fund from RETT collections, and the remaining is deposited into the Clean Water/Clean Air Fund (CW/CA) for Debt Service. When the CW/CA obligation is paid, the excess revenue is transferred to the General Fund.

Pari-Mutuel

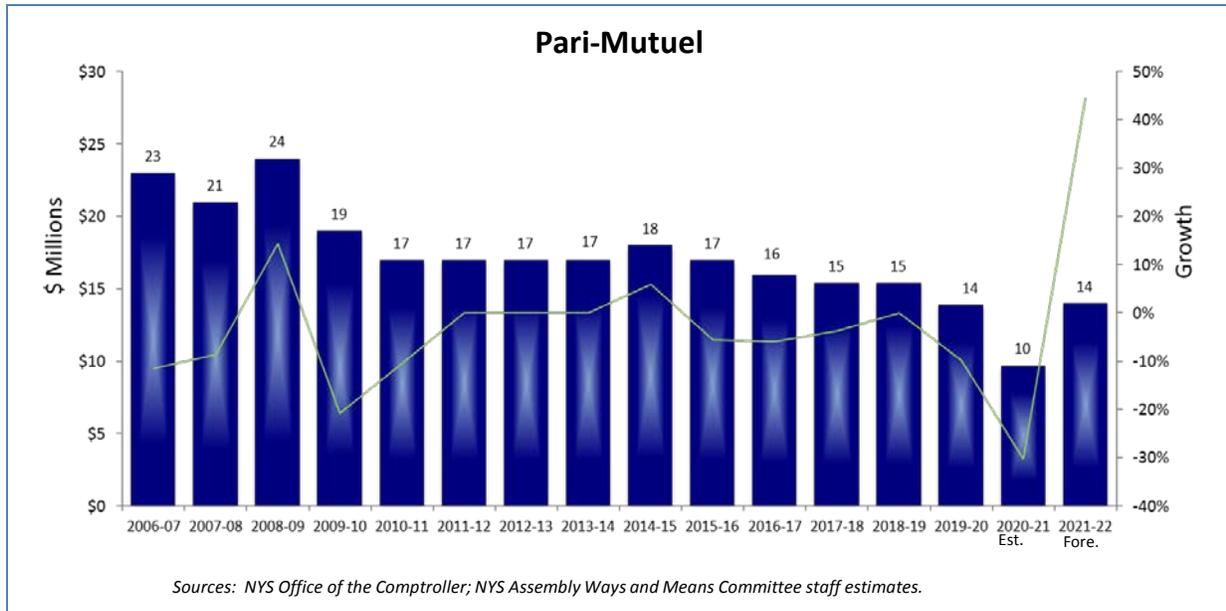


Figure 71

Under the Racing, Pari-Mutuel Wagering and Breeding Law, a tax is imposed on horseracing pari-mutuel bets placed at racetracks, simulcast theaters and Off-Track Betting (OTB) facilities. Pari-mutuel betting, also known as pool betting, is a unique form of betting. Instead of placing wagers against a bookmaker, you place wagers against other bettors who have placed wagers on the same event.

Horse racing businesses that are authorized to conduct pari-mutuel betting must deposit net betting revenue into a pari-mutuel pool. These pools are taxed at rates between 14 and 20 percent for regular on-track bets, 16 percent and 22 percent for multiple on-track bets, 20 percent and 30 percent for exotic on-track bets, 20 percent and 36 percent for super exotic on-track bets, while the breaks are taxed at 55 percent. The breaks are the odd cents or dollars in a payoff, over a scaled rounded value. For example, for a payoff of \$1.67, the break would be two cents, but for a payoff of \$270 the break would be \$20.

In addition to the pool taxes, businesses must pay a tax on the amount that is retained by the business. These rates vary based on the type of bet the revenue originates from. The rates are as follows: 1 percent for revenue from regular bets, 1.5 percent for multiple bets, 6.75 percent for exotic bets, and 7.75 percent for super exotic bets. The above rates will be

increased by 0.25 percent on all on-track bets for racing corporations that did not expend at least 0.5 percent of its on-track bets during the following calendar year for enhancements, repairs, structures and equipment used in its operations.

These businesses will receive a credit, against the tax imposed, in an amount equal to 0.4 percent of total daily pools resulting from the simulcasting of events under the condition that 60 percent of the credit be used for increasing purses for overnight races conducted by such organizations.

The horse racing business must also pay the Gaming Commission a regulatory fee of 0.6 percent of the total daily on-track pari-mutuel pools.

Table 59

Pari-Mutuel Tax (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$9	(32.6%)	\$10	(30.7%)	\$11	(\$1)
2021-22			\$14	44.3%	\$14	\$0

YTD through January

Year-to-date, pari-mutuel tax receipts are currently \$8.7 million, a 32.6 percent decrease over the same period in SFY 2019-20.

State Fiscal Year 2020-21

The Committee estimates pari-mutuel receipts will total \$9.7 million in SFY 2020-21, a decrease of 30.1 percent compared to SFY 2019-20. The Committee’s estimate is \$1.3 million below the Executive’s projections. This decrease is related to the effect of COVID-19 related restrictions on racing activities.

State Fiscal Year 2021-22

The Committee's forecast for SFY 2021-22 is \$14 million, an increase of 44.2 percent compared to SFY 2020-21. The Committee's forecast is the same as the Executive's forecast.

Fund Distribution

Table 60

Pari-Mutuel Fund Distribution (\$ in Millions)					
	General Fund	Special Revenue	Debt Service	Capital Projects	All Funds
2020-21	\$10	-	-	-	\$10
2021-22	\$14	-	-	-	\$14

Gaming

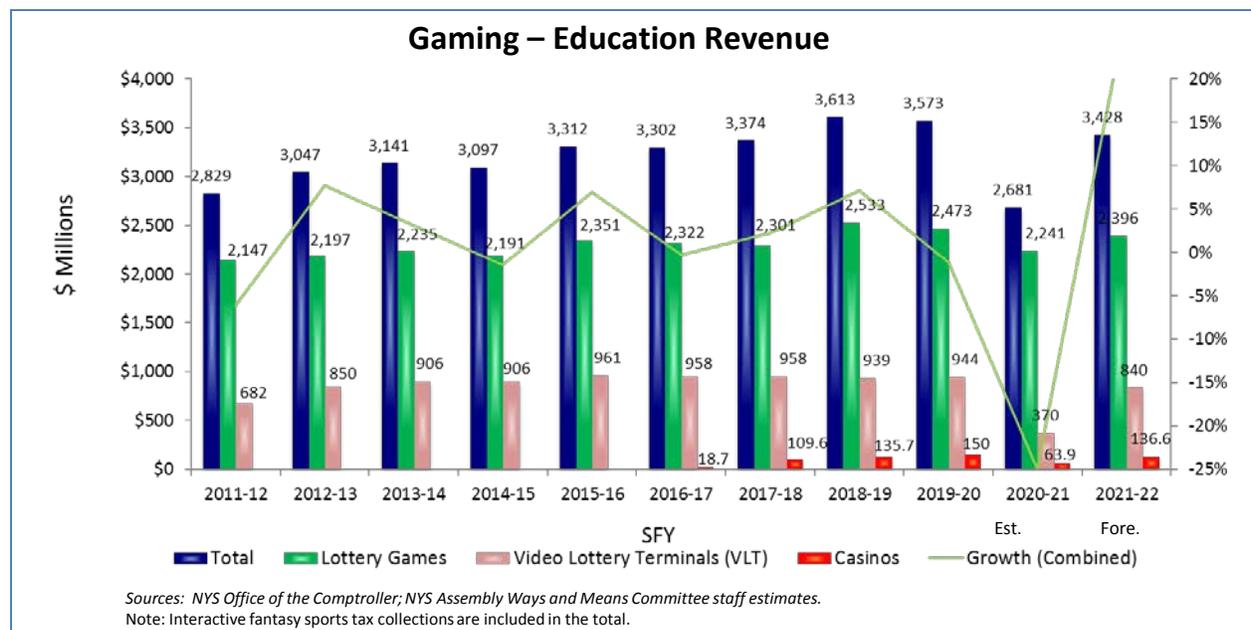


Figure 72

The New York State Lottery was established by a Constitutional Amendment in 1966 for the express purpose of raising revenues for education. The New York State Gaming Commission operates a number of lottery games like jackpot games, and instant scratch-off games. A predetermined percentage of sales from each game is dedicated to fund education. Depending on the type of the lottery game, between 10 to 45 percent of sales are dedicated to education funding. Daily games contribute an average of 33 percent, jackpot games contribute an average of 35 percent, and instant scratch-off games contribute an average of 15 percent.

Video lottery terminal (VLT) facilities began operating in New York State in 2004, and ten video lottery terminals (VLTs) facilities exist today. These facilities contributed \$958 million in revenue to education in SFY 2019-20. On average, VLTs contributed 45 percent of their Net Machine Income to education in SFY 2019-20.⁵³

The law permitting the licensing, regulation and taxation of non-tribal casinos was enacted in 2013. There are currently four commercial gaming facilities in operation: Tioga Downs, Del Lago Resort, Rivers Casino and Resort, and Resorts World.

⁵³ <https://www.gaming.ny.gov/pdf/finance/web%20site%20report%20-%20Statewide%20Totals.pdf>

All commercial casinos must pay a tax of ten percent on the gross table game revenue, but the tax rate varies for revenue from electronic table games (ETGs) and slot machines based on the region in which the casino is located. The tax rates on these receipts are as follows: 39 percent at Resorts World; 45 percent at Rivers; and 37 percent at Del Lago and Tioga. This tax is distributed in the following manner: 80 percent to education and property tax relief, ten percent split equally between the host municipality and the host county, and ten percent split among non-host counties within the region on a per capita basis. Facilities must also pay an annual license fee of \$500 for each slot machine and table game that the Gaming Commission approves for use at the facility.

Legislation to permit, regulate and tax interactive fantasy sports was enacted in 2016. The tax is a 15 percent rate on gross revenue, as well as an additional 0.5 percent tax that is not to exceed \$50,000 dollars annually.

As part of the Executive Budget, there is a proposal to authorize mobile sports betting throughout the State. This proposal is estimated to increase gaming revenue by \$49 million in SFY 2021-22, and \$357 million in SFY 2022-23.

Table 61

Gaming (\$ in Millions)						
	Year To Date	YTD Growth	Closeout/ Forecast	Growth	Executive	Difference
2020-21	\$1,998	(26.8%)	\$2,681	(25.0%)	\$2,684	(\$3)
2021-22			\$3,428	27.8%	\$3,396	\$32

YTD through January

Year-to-date, gaming revenue totaled \$1.998 billion, a 26.8 percent decrease over the same period in SFY 2019-20.

State Fiscal Year 2020-21

The Committee estimates total gaming receipts of \$2.681 billion, a decrease of 25.0 percent, or \$892 million from SFY 2019-20. The Committee's estimate is \$2.9 million lower than the Executive's estimate. This decrease can be attributed to the COVID-19 pandemic.

The Committee estimates lottery games receipts will total \$2.241 billion for a decline of 9.4 percent over SFY 2019-2020.

The Committee estimates that VLT receipts will total \$370 million, a decrease of 60.8 percent over SFY 2019-20. The Committee estimates that casino receipts will total \$63.9 million, a decrease of 57.4 percent over SFY 2019-20. This decrease in VLT and casino revenue is related to these facilities being closed for several months, due to the COVID-19 pandemic.

The Committee estimates that interactive fantasy sports tax receipts will total \$6.0 million, the same level as SFY 2019-20.

State Fiscal Year 2021-22

The Committee projects that combined gaming revenue will total \$3.428 billion in SFY 2021-22. This represents an increase of 27.8 percent, or \$747 million, from SFY 2020-21. This estimate is \$31.6 million above the Executive's forecast.

The Committee forecasts that lottery game revenue receipts will total \$2.396 billion, an increase of 6.9 percent over SFY 2020-21.

VLT receipts are expected to total \$840 million, an increase of 127.1 percent over SFY 2020-21.

Casino receipts are forecast to total \$136.6 million, an increase of 113.8 percent over SFY 2020-21.

Fantasy sports betting receipts are forecast to total \$6 million, the same as the previous fiscal year.

To maintain consistency with the Executive's forecast, the Committee includes \$49 million in mobile sports betting receipts.

Miscellaneous Receipts

Miscellaneous Receipts – All Funds

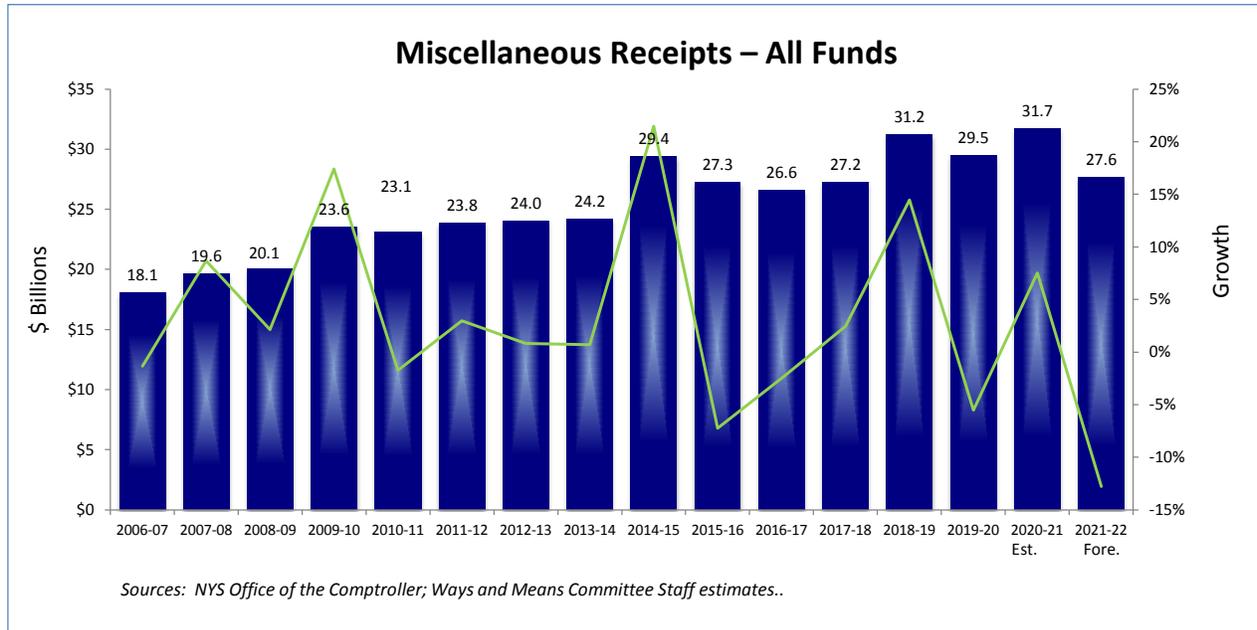


Figure 73

All Funds Miscellaneous Receipts consist of funds received from Health Care Reform Act (HCRA) financing sources, State University of New York (SUNY) tuition and patient income, lottery receipts for education, assessments on regulated industries, motor vehicles fees and a variety of fees and licenses.

On an All Funds basis, Miscellaneous Receipts are estimated to total \$31.677 billion in SFY 2020-21 and \$27.636 billion in SFY 2021-22.

Miscellaneous Receipts – General Fund

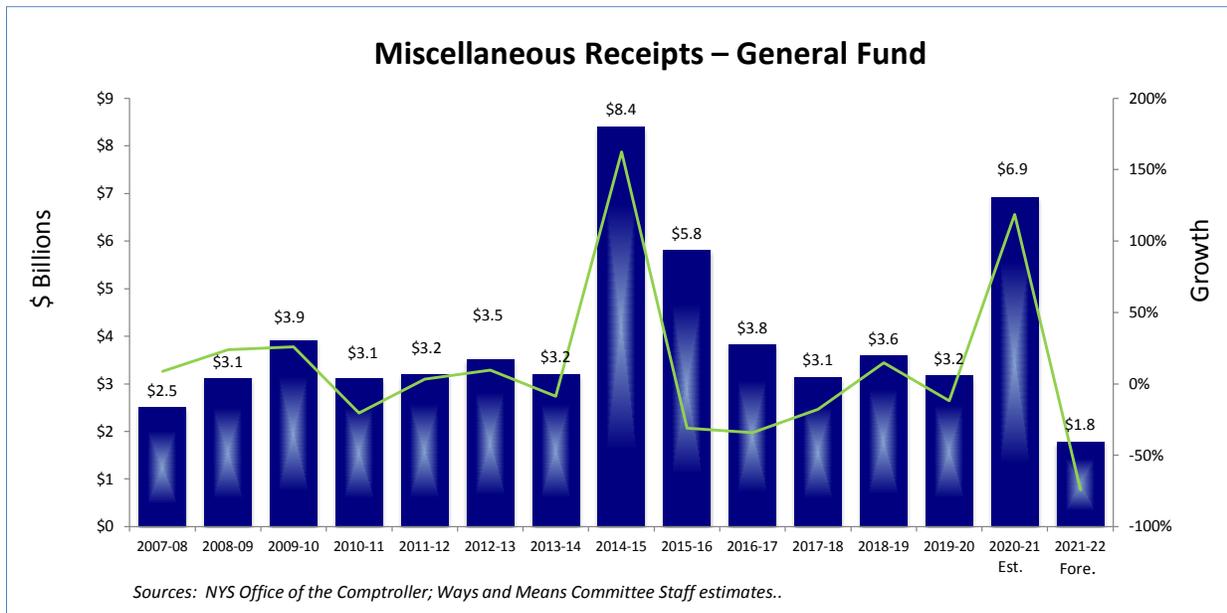


Figure 74

General Fund collections are more volatile as a result of one-time deposits and settlements, which peaked in SFY 2014-15 and have trended lower thereafter.

SFYs 2020-21 & 2021-22

General Fund Miscellaneous Receipts are estimated to total \$6.905 billion in SFY 2020-21 and \$1.771 billion in SFY 2021-22. The substantial increase in SFY 2020-21 receipts are related to extraordinary bond proceeds, authorized in response to the COVID-19 pandemic.

Key Components

General Fund Miscellaneous Receipts contain revenues from a multitude of sources. They include:

- licenses and fees;
- abandoned property;
- reimbursements;
- investment income;
- alcoholic beverage control license fees; and
- motor vehicle fees.

Other transactions include but are not limited to: temporary utility assessment, extraordinary settlements, the medical provider assessment, settlement proceeds from state regulatory agencies and District Attorney’s offices, Bottle Bill proceeds, bond issuance charges, the State of New York Mortgage Authority supplemental wireless surcharge, New York Power Authority, civil recoveries, short term interest on bank accounts, Housing Finance Agency receipts, and released State Insurance Fund Reserves.

Table 62

Miscellaneous Receipts - General Fund					
(\$ in Millions)					
	2019-20 Actual	2020-21 Estimated	2021-22 Projected	Change	Percent Change
Licenses, Fees	697	378	479	101	26.7%
Abandoned Property	450	450	450	0	-
Reimbursements	214	124	70	(54)	(43.5%)
Investment Income	174	79	43	(36)	(45.6%)
ABC License	73	52	68	16	30.8%
Motor Vehicles Fees	342	323	248	(75)	(23.2%)
Extraordinary Settlements	787	600	0	(600)	(100.0%)
Other Transactions	422	4,899	413	(4,486)	(91.6%)
Total	\$3,159	\$6,905	\$1,771	(\$5,134)	(74.4%)

Sources: Executive Budget; NYS Assembly Ways and Means Committee staff.

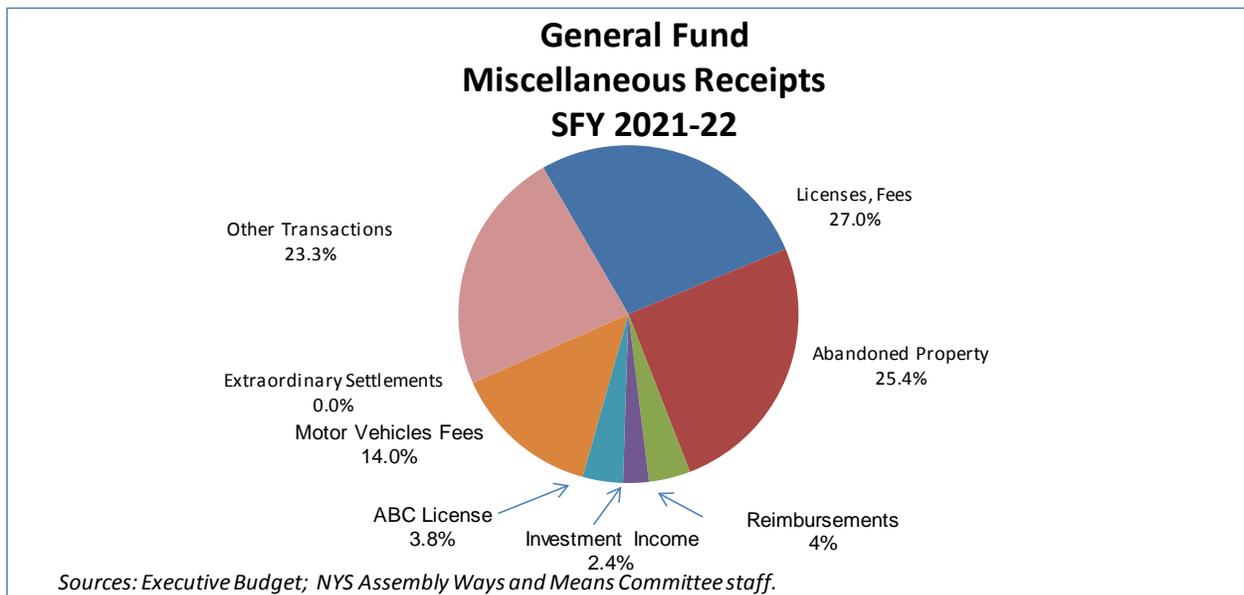


Figure 75

Miscellaneous Receipts – Special Revenue Funds

SFY 2020-21

The Committee estimates Special Revenue funds to total \$15.943 billion in SFY 2020-21, whereas Capital Projects are expected to total \$8.480 billion and Debt Service is anticipated to receive \$374 million in receipts.

SFY 2021-22

The Committee estimates Special Revenue funds to total \$15.571 billion in SFY 2021-22, with Capital Projects expected to total \$9.91 billion and Debt Service anticipated to receive \$384 million in receipts.

Key Components

State Funds Miscellaneous Receipts consist of Special Revenue Funds, Capital Projects, and Debt Services. Special Revenue receipts are comprised of the following:

Health Care Reform Act (HCRA)

Receipts include surcharges, assessments on hospitals and assessments on certain insurance providers, a portion of cigarette tax revenues, and other dedicated proceeds.

HCRA receipts are used to finance New York's Medicaid program, Family Health Plus, workforce recruitment and retention, the Elderly Pharmaceutical Insurance Coverage, Child Health Plus, Graduate Medical Education, AIDS programs, and other public health initiatives.

Medicaid

State Medicaid costs are financed by the General Fund and other various Special Revenue funds. The key contributions are partially-reimbursable assessments to nursing home, hospital, and home care revenues.

State University Income

Receipts into the State University Income Fund are from the operation of SUNY from tuition, patient revenue, and user fees. Tuition is sourced from the sixty-four SUNY campuses while patient revenues come from SUNY's teaching hospitals at Brooklyn, Stony Brook, Syracuse, as well as the Long Island Veterans' Home. SUNY user fees, interest earning, and fringe benefits account for the remaining collections.

Lottery

Sale of lottery tickets and Video Lottery Terminals (VLTs) are used to support public education and Lottery administrative operating costs.

Motor Vehicle Fees

Motor vehicle fees are derived from a list of fees imposed by the Vehicle Traffic Law. License fees, registration revenue, inspection fees, emission stickers, repair shop certificates, as well as insurance civil penalties all contribute. Motor Vehicle Fee revenues are dedicated to various trust funds which cover infrastructure funding and administrative costs.

Capital Projects

Capital Projects spending is funded from two sources: authority bond proceeds which support spending financed through Public Authority Bonds; and Miscellaneous Receipts which finance state pay-as-you-go spending to support the State Capital Plan.

Debt Service

Miscellaneous Receipts in the Debt Service Fund are comprised of Mental Hygiene service providers that receive payments from Medicare and insurance companies; dormitory room rental fees and associated fees from SUNY students; and from patient care revenues of hospitals and certain veterans' homes from payments of Medicaid, Medicare, insurance, and individuals.

Industry Assessments and All Other

Receipts comprising Industry Assessments and All Other are from reimbursements of regulated industries to fund the administrative costs of the state agencies. Receipts may consist of fees, licenses, and assessments. The Department of Financial Services, the Department of Public Service, and the Workers' Compensation Board are all fully funded by assessments of their respective regulated industry. The following agencies account for the largest collections in this category: Health; Environmental Conservation; Tribal State Compact; State Police; Higher Education Service Corporation; Education; City University of New York (CUNY); Children and Family Services; Homeland Security and Emergency Services.