Commonwealth of Kentucky

Quarterly Economic & Revenue Report

First Quarter Fiscal Year 2023

TEAM KENTUCKY®

Governor's Office for Economic Analysis - Office of State Budget Director

Office of State Budget Director
284 Capitol Annex, 702 Capitol Avenue
Frankfort, Kentucky 40601

Andy Beshear
Governor

(502) 564-7300
Internet: osbd.ky.gov

John T. Hicks
State Budget Director

Governor's Office for Policy and Management
Governor's Office for Economic Analysis
Governor's Office for Policy Research

October 31, 2022

The Honorable Andy Beshear
Governor
Commonwealth of Kentucky
State Capitol Building
Frankfort, Kentucky 40601

Mr. Jay Hartz, Director
Legislative Research Commission
Room 300, State Capitol
Frankfort, Kentucky 40601

Ms. Laurie Dudgeon, Director
Administrative Office of the Courts
1001 Vandalay Drive
Frankfort, Kentucky 40601

Dear Honorable Governor Beshear, Mr. Hartz and Ms. Dudgeon:

In accordance with KRS 48.400(2), the Office of State Budget Director (OSBD) is directed to continuously monitor the financial situation of the Commonwealth. In furtherance of this directive, OSBD submits this *Quarterly Economic and Revenue Report* for the first quarter of fiscal year 2023 (FY23) to the three branches of government.

This report includes the actual revenue receipts for the first quarter and an unofficial forecast for the final three quarters of FY23 (the forecast horizon). The report also provides updates on the national and Kentucky economic landscapes.

When combined with the first quarter of actual receipts, the interim forecast predicts General Fund revenue of $15,116.5 million, or 2.8 percent growth in FY23, a revenue surplus of $1,357.5 million over the enacted projection of $13,759.0 million. The individual income tax, sales tax, and major business taxes make up $1,235.0 million, or 91.0 percent, of the revenues in excess of the enacted estimates.

The preliminary Road Fund outlook for FY23 calls for revenues of $1,699.7 million, $21.3 million less than the FY23 enacted estimate of $1,721.0 million.

This office will continue to closely monitor Kentucky's economic and revenue conditions and will provide updates at the appropriate times.

Sincerely,

John T. Hicks

John T. Hicks
State Budget Director

TABLE OF CONTENTS

Executive Summary

In accordance with KRS 48.400(2), the Office of State Budget Director (OSBD) is directed to continuously monitor the financial situation of the Commonwealth. In fulfillment of this statutory requirement, OSBD submits this *Quarterly Economic and Revenue Report* for the first quarter of fiscal year 2023 (FY23). This interim outlook includes the actual revenue receipts and economic landscape for the first quarter, a comprehensive revenue outlook for upcoming three fiscal quarters which make up the remainder of FY23, as well as an US and Kentucky economic outlook for the same period. All estimates in this outlook extend from the second quarter through the fourth quarter of FY23 (the forecasting horizon).

The Interim Outlook represents unofficial estimates prepared pursuant to KRS 48.400(2). Forecasted revenues presented in Table 1 are projected using the September 2022 “control scenario” economic forecast from both IHS Markit and the Kentucky MAK model as the primary inputs. IHS Markit has placed a 50 percent probability on their "control scenario" as being the most likely economic outcome, relative to the pessimistic (35 percent) and optimistic (15 percent) scenarios. It is noteworthy that the downside risk, as represented by the 35 percent weight on the pessimistic scenario, exceeds the upside risk of 15 percent.

In addition, the revenue estimates incorporate various tax law changes enacted during recent sessions of the General Assembly. The greatest share of the tax law fiscal impact arises from legislation passed in 2022. However, some of the previous tax-related pieces of legislation from prior sessions had lagged effective dates and other provisions that pushed the fiscal impact beyond the biennium in which they were enacted. Since these bills have delayed fiscal impacts, they are not built into the existing revenue base and must, therefore, be included in the fiscal impacts affecting the estimates rendered for the forecasting horizon.

Since the previous edition of the quarterly report, growth in the General Fund has remained quite strong. General Fund revenues grew 3.8 percent in the first quarter, marking the ninth consecutive and 21st time in the last 22 quarters in which collections have increased. Excluding the $225 million in one-time money from a prior-year legal settlement from first quarter of FY22, then the revenue growth in the first quarter of FY23 is 11.1 percent, which is more representative of this year’s revenue trend.

Projected General Fund Growth for the final three quarters of FY23

The current official estimate for FY23 is $13,759.0 million. Due to the $945.4 million revenue surplus in FY22, the enacted estimate is 6.4 percent less than actual FY22 General Fund collections. Table 1 displays the interim forecast for the remainder of FY23 in comparison to the enacted estimates. When combined with the first quarter of actual receipts, the interim forecast predicts General Fund revenue of $15,116.5 million, or 2.8 percent growth in FY23, and a projected $1,357.5 million General Fund revenue surplus. The individual income tax, sales tax, and major business taxes make up 91.0 percent of the revenues in excess of the enacted estimates.

Projected Road Fund Growth for the final three quarters of FY23

Road Fund revenues fell slightly in the first quarter of FY23, the second consecutive quarterly decline after four straight positive quarters. Collections in the first quarter fell 0.3 percent, or $1.2 million, after growing 2.0 percent in FY22. Total Road Fund collections are expected to increase 2.0 percent over the final three quarters of FY23, ending the year at 1.5 percent.

If the projected 1.5 percent forecast for the Road Fund is achieved, then revenues would fall short of the official revenue estimate by $21.3 million, or 1.3 percent. Motor fuels would be $71.6 million below estimate while motor vehicle usage collections would exceed the estimate by $45.9 million. Taken together, the remaining accounts net out to $4.4 million more than the enacted level.

Summary of Projected Major Economic Factors

The US economy is poised for modest growth according to the September economic outlook from IHS Markit. Inflation will remain the focus over the next three fiscal quarters. Having reached a high that has not been seen since the early 1980s, inflation is expected to markedly exceed the Fed's two percent long-run goal throughout the forecasting horizon. While the US consumer has displayed a degree of resilience, inflation and interest-rate hikes will remain strong headwinds to real consumption growth in the short-term. US employment growth is anticipated to remain in positive territory, and many measures of economic activity are expected to grow, albeit at a slower pace than last year. Non-farm employment is expected to increase 2.2 percent in the final three quarters of FY23, a gain of approximately 3.3 million jobs.

Kentucky's employment is expected to outpace the US in the manufacturing, finance, business services, and government employment sectors during the forecasting horizon. On the other hand, the state's employment growth is anticipated to underperform in the sectors of mining, information services, and leisure and hospitality, compared to the national workforce. Kentuckians' personal income is poised to grow 3.6 percent over the three forecasted quarters. Wages and salaries, the largest component of personal income, is poised to grow by a robust 5.7 percent in the final three quarters of FY23, compared to the same periods in FY22.

Summary of Second Quarter Tax Receipts

General Fund revenues grew 3.8 percent in the first quarter, marking the ninth consecutive and 21st time in the last 22 quarters in which collections have increased. Receipts were artificially higher in the first quarter of FY22 due to a one-time settlement payment in the "other" account. The absence of the $225 million settlement amount from the first quarter FY22 receipts would have resulted in a growth rate of 11.1 percent for the first quarter of FY23. Revenues in the just completed quarter totaled $3,556.6 million compared to $3,424.9 million in the first quarter of FY22, for an increase of $131.7 million. Collections from the major revenue categories grew across the major accounts. Sales and use and individual income taxes each increased by more than $100 million while the business taxes rose by $46.6 million. The decline in the "other" account was attributable to a one-time legal settlement in the first quarter of FY22. The remaining accounts were within $10 million of FY22 levels.

Road Fund receipts declined 0.3 percent in the first quarter of the fiscal year compared to what was collected in the same time period last year. The differences among the major accounts were generally small, ranging from $4.8 million less in motor vehicle operators' collections to an increase of $3.6 million in motor vehicle usage tax receipts. Total receipts in the quarter were $422.6 million, which was $1.2 million less than what was collected last year. Motor vehicle usage tax receipts were 2.2 percent above last year's collections while the motor fuels tax fell by 0.7 percent. The remaining accounts collectively decreased 6.0 percent.

Summary of the Economy for the First Quarter of FY23

The September "control" scenario forecasts that real GDP rose by an estimated 1.5 percent in the first quarter of FY23 compared to the first quarter of FY22. In terms of actual data, the first official look at first quarter real GDP, "the advanced estimate", will be published on October 27, 2022. Using the same IHS Markit estimates, real investment increased 3.1 percent in the first quarter of FY23 while real government expenditures fell by 2.0 percent. Total outlays declined by 11.7 percent in the first quarter. Government expenditures and outlays can move in different directions because government expenditures do not contain any transfer payments. The CPI for all goods rose by 8.2 percent in the first quarter of FY23.

Regarding projected quarterly US personal income, the estimate for first quarter growth was 4.9 percent, as US wages and salaries income grew 9.7 percent. US non-farm employment rose by 4.0 percent in the first quarter of FY23. Kentucky non-farm employment rose by 3.2 percent, or 60,000 seasonally-adjusted jobs, in the first quarter of FY23. Kentucky leisure and hospitality services employment was the fastest growing supersector in both percentage and absolute terms. Kentucky leisure and hospitality services employment grew by 8.8 percent, or 16,100 seasonally-adjusted jobs, in the first quarter of FY23. Kentucky personal income grew by 3.0 percent in the first quarter of FY23 compared to the first quarter of FY22. Kentucky wages and salaries rose by 8.4 percent during the quarter.

REVENUE & ECONOMIC OUTLOOK

GENERAL FUND

The Interim Outlook represents unofficial estimates prepared pursuant to KRS 48.400(2). Forecasted revenues presented in Table 1 are projected using the September 2022 "control scenario" economic forecast from both IHS Markit and the Kentucky MAK model as the primary inputs. IHS Markit has placed a 50 percent probability on their "control scenario" as being the most likely economic outcome, relative to the pessimistic (35 percent) and optimistic (15 percent) scenarios. In addition, the revenue estimates incorporate various tax law changes enacted during recent sessions of the General Assembly. All estimates in this outlook extend through the fourth quarter of FY23 (the forecasting horizon).

Table 1
General Fund Interim Forecast
$ millions

	FY23						FY23	
	Q1		Q2, Q3, & Q4		Full Year		Official CFG	
	Actual	% Chg	Estimate	% Chg	Estimate	% Chg	Estimate	$ Diff
Individual Income	1,368.9	8.4	4,399.8	-8.1	5,768.7	-4.6	5,342.3	426.4
Sales & Use	1,397.1	12.8	4,210.6	10.1	5,607.7	10.8	5,283.2	324.5
Corp. Inc. & LLET	337.2	16.0	1,056.6	17.9	1,393.8	17.5	909.8	484.1
Property	68.0	7.8	690.7	4.5	758.7	4.8	674.9	83.8
Lottery	75.0	7.9	262.0	16.2	337.0	14.2	335.0	2.0
Cigarettes	81.1	-3.4	231.4	-3.8	312.5	-3.7	318.6	-6.1
Coal Severance	22.1	72.2	72.8	25.9	94.9	34.3	76.6	18.3
Other	207.1	-48.7	636.1	8.3	843.2	-15.0	818.7	24.5
General Fund	**3,556.6**	**3.8**	**11,559.9**	**2.5**	**15,116.5**	**2.8**	**13,759.0**	**1,357.5**

In comparison to the enacted numbers, the FY23 interim estimate predicts that General Fund revenues will exceed the enacted estimate by $1,357.5 million. When combining the first quarter of actual receipts with the next three fiscal quarters, the interim forecast predicts FY23 General Fund revenue of $15,116.5 million, or growth of 2.8 percent. Excluding the $225 million one-time settlement received in FY22, the forecasted revenue growth for FY23 is 4.4 percent. The current official estimate for FY23 is $13,759.0 million. Due to the large revenue surplus in FY22, the enacted estimate is 6.4 percent less than actual FY22 General Fund collections. Table 1 displays the interim forecast for the remainder of FY23 in comparison to the enacted estimates.

General Fund receipts finished FY22 up 14.6 percent over FY21 levels, the highest annual rate of growth in 31 years. The second highest growth rate during that 31-year span occurred in FY21, where General Fund receipts grew 10.9 percent.

Collections for FY22 were $14,702.5 million. Final FY22 General Fund revenues exceeded the enacted estimate by $945.4 million, an amount surpassed only by the revenue surplus of $1,123.4 million in FY21. The three largest accounts, individual income, sales and use, and the business taxes combined to create all the revenue surplus gains in FY22, exceeding the enacted estimate by $951.1 million.

Due to legislative tax policy changes, individual income receipts are projected to fall 8.1 percent during the three-quarter forecast horizon after growing 8.4 percent during the first quarter of FY23. The decline for the remainder of the year is solely attributable to the recent legislative actions which will diminish receipts in the remainder of FY23 by $342.5 million. Of the combined legislative actions, the largest impact, $291.5 million, comes from House Bill 8 passed in 2022 which reduced the individual income tax rate from 5.0 percent to 4.5 percent, effective January 1, 2023. Without the rate reduction, withholding would have grown, declaration payments would have fallen slightly, and net returns would have been near FY22 levels. Even with the legislative actions, the individual income tax is expected to exceed the enacted estimate by $426.4 million in FY23.

Sales and use tax receipts are expected to rise 10.1 percent over the forecasting horizon. When combined with the 12.8 percent growth from the first quarter of FY23, annual growth in the sales tax is expected to be 10.8 percent. Growth at that level would constitute a third consecutive year in which the sales tax has grown over 10 percent. House Bill 8 added approximately 35 new categories of services to the list of taxable services in Kentucky, effective January 1, 2023. The fiscal impact of the base broadening is $43.9 million for activity occurring between January and June of 2023. Like the individual income tax, the sales tax is expected to exceed the enacted estimate by $324.5 million in FY23. Business taxes (corporation income tax plus the limited liability entity tax) grew 34.4 percent in FY22 following a 38.1 percent surge in FY21. Collections of $1,186.6 million in FY22 shattered the record set in FY21 for combined business taxes that previously dated back to the final implementation of corporate tax changes in FY06. The corporation income tax and the LLET are now reported and estimated in combination due to the interrelationship of the tax credit that flows between the two revenue sources. Corporate and business taxes are expected to increase 17.9 percent during the forecasting horizon following first quarter growth of 16.0 percent. In the previous two fiscal years, business taxes have exceeded the official estimates by $335.3 million in FY21 and $216.1 million in FY22. In this forecast, the major business taxes will exceed the enacted estimate by $484.1 million in FY23.

Total property tax receipts had a breakout year in FY21, posting annual growth of 9.2 percent. Growth moderated in FY22 to 3.0 percent. Despite Executive Order 2022-196, which froze the 2022 assessments on motor vehicles at 2021 levels, the property tax on motor vehicles grew by 7.8 percent in FY22. The FY22 growth in the motor vehicle property tax was primarily attributable to new vehicle purchases. Growth in combined property taxes is expected to be 4.5 percent over the forecasting horizon. When added to first quarter growth of 7.8 percent, the FY23 annual rate of increase is projected to be 4.8 percent. Compared to the enacted estimate of $674.9 million, the interim projections project $758.7 million, or a revenue surplus of $83.8 million over the enacted estimate.

Lottery revenues deposited into the General Fund for FY22 were $295.0 million, 2.0 percent higher than the $289.1 million deposited in FY21. In FY21, an additional $58 million in lottery dividends was received but for the first time diverted to a separate account as required by the budget bill. In FY22, an additional $52.3 million in lottery dividends was also diverted to the separate account. Together, over $110.3 million of the lottery dividend has been deposited into a trust and agency account rather than deposited into the General Fund. The projection for FY23 is $342.3 million, of which $337 million will be deposited into the General Fund and the remaining $5.3 million will go to the trust and agency account as required by 2022 RS HB 1.

Cigarette tax receipts continue to be collected at the rate of $1.10 per pack, effective July 1, 2018. Cigarette taxes were the only major account to decline in FY22, falling 7.3 percent. Other tobacco products, including vaping products, grew by 7.8 percent to partially offset the decline in cigarette taxes. For FY23, cigarette tax collections in the first quarter fell 3.4 percent. The forecasting horizon anticipates further declines of 3.8 percent, so the FY23 total rate of decline is expected to be 3.7 percent.

Coal severance tax receipts dipped by 4.7 percent in FY21 following an annual decline of 36.7 percent in FY20. Since FY21, however, coal severance revenues have seen a reversal of fortunes with growth of 26.0 percent in FY22. Growth in the first quarter of FY23 surged with a 72.2 percent increase. The forecast calls for strong growth over the forecasting horizon with receipts rising 25.9 percent. Coal severance taxes in Kentucky are benefiting from the rise in energy prices worldwide, including the global prices of coal, natural gas, and oil.

The “other” category contains dozens of smaller accounts, which make up the remainder of the General Fund. The insurance premiums tax, the inheritance tax, the telecommunications tax, the distilled spirits wholesale tax and the beer wholesale tax are the five largest accounts in the "other" category. The “other” accounts totaled $991.5 million in FY22 and were $22.4 million short of the official estimate of $1,013.9 million for the year. Revenues in this category were amplified in the first quarter of FY22 by a $225 million one-time legal settlement with Flutter Entertainment, the parent company of PokerStars. Since that deposit into the General Fund was nonrecurring, the actual collections in the first quarter of FY23 fell 48.7 percent. Growth is expected to resume during the forecasting horizon with collections of $636.1 million, or 8.3 percent growth. Looking at FY23 in total it is projected to fall 15.0 percent when adding the first quarter to the final three quarters. If the settlement is removed from FY22 collections, then the first quarter FY23 growth in the other account would have been 15.7 percent.

ROAD FUND

Road Fund revenues fell slightly in the first quarter of FY23, the second consecutive quarterly decline after four straight positive quarters. Declines in motor fuels, motor vehicle operators and income on investments outweighed moderate gains in the other accounts. Collections in the first quarter fell 0.3 percent, or $1.2 million, after growing 2.0 percent in FY22. Motor vehicle usage, motor vehicle license, weight distance and "other" revenues combined to increase $7.8 million but these gains were offset by declines in motor fuels, motor vehicle operators and income on investments in the first quarter of FY23. Going forward, total Road Fund collections are expected to increase 2.0 percent over the final three quarters of FY23, ending the year at 1.5 percent. Motor fuels taxes, which declined 0.7 percent in the first quarter, are forecasted to continue to weaken, decreasing 1.9 percent over the last nine months of the year.[1]

The motor vehicle usage taxes rose 2.2 percent in the first quarter and is expected to gain strength in the final three quarters, growing 3.6 percent to end the year at 3.3 percent. Motor vehicle license receipts rose 11.9 percent in the first quarter. The forecast for the remainder of the year is for revenues to increase 0.7 percent. First quarter motor vehicle operator's collections were affected by a timing issue in receipts collections, resulting in a drop of 65.4 percent. It is expected that the issue will be resolved, inflating the growth of receipts in this account to 42.1 percent over the final three quarters.

Weight distance tax collections rose 2.8 percent in the first quarter. Receipts will soften slightly over the final nine months of the year, increasing only 0.9 percent.

Income on investments will continue to remain weak. Revenue from this source was -$2.8 million in the first quarter and the forecast calls for an additional loss of $3.2 million for the rest of the year. Income on investments is being hampered by the uncertainty in the bond markets, the primary investment vehicle for state tax receipts. Finally, the "other" category had growth of 13.5 percent in the first quarter and is forecast to increase 4.9 percent in the final three quarters of the year.

[1]1103 KAR 43:040E was filed on June 2, 2021, to freeze the average wholesale price at $2.177 due to prevailing high fuel prices at the time of the filing. The freeze began on July 1. It is typical in Quarterly Reports to use existing laws and regulations when estimating tax receipts without relying on future actions which may or may not occur. Therefore, all four quarters of FY23 are assumed to have the current excise tax rates of $0.26 per gallon for gasoline and $0.23 per gallon for special fuels.

Table 2
Road Fund Interim Forecast
$ millions

	FY23						FY23	
	Q1		Q2, Q3, & Q4		Full Year		Official CFG	
	Actual	% Chg	Estimate	% Chg	Estimate	% Chg	Estimate	$ Diff
Motor Fuels	200.1	-0.7	562.1	-1.9	762.2	-1.6	833.8	-71.6
Motor Vehicle Usage	167.6	2.2	482.0	3.6	649.6	3.3	603.7	45.9
Motor Vehicle License	22.1	11.9	104.6	0.7	126.7	2.5	119.4	7.4
Motor Vehicle Operators	2.5	-65.4	30.1	42.1	32.6	14.4	27.1	5.5
Weight Distance	22.4	2.8	66.0	0.9	88.4	1.4	94.6	-6.2
Income on Investments	-2.8	NA	-3.2	-71.2	-6.0	-45.6	0.1	-6.1
Other	10.7	13.5	35.5	4.9	46.2	6.8	42.4	3.8
Road Fund	**422.6**	**-0.3**	**1,277.1**	**2.0**	**1,699.7**	**1.5**	**1,721.0**	**-21.3**

Based on the above forecast, revenues would fall short of the official revenue estimate by $21.3 million, or 1.3 percent. Motor fuels would be $71.6 million below estimate while motor vehicle usage collections would exceed the estimate by $45.9 million. Taken together, the remaining accounts net out to $4.4 million more than the enacted level.

NATIONAL OUTLOOK

The forecast of the national outlook used in this quarterly report is the IHS Markit control scenario for September 2022.

The US economy is poised for a modest expansion according to the September economic outlook from IHS Markit. Recent economic indicators estimated by IHS Markit clarify that the US economy is not currently in a recession, nor is a recession forecasted over the three-quarter outlook. Employment growth is anticipated to remain in positive territory, and many measures of economic activity are expected to grow, albeit at a slower pace than last year.

Inflation will remain the focus over the next three fiscal quarters, having reached a high that has not been seen since the early 1980s. Inflation is expected to markedly exceed the Fed's two percent long-run goal throughout the forecasting horizon. The inflationary growth is a result of strong consumer demand and restrained supply in the goods, services, and labor markets. The continued war in Ukraine further exacerbates the already surging inflation. In a response to contain inflationary pressures of the economy, the Federal Reserve is expected to further tighten monetary policy through balance sheet reductions and additional increases in the federal funds rate.

Table 3
US Economic Outlook
Interim Forecast

	Q2-Q4			Full Year	
	FY23	**FY22**	**% chg**	**FY23**	**% chg**
Real GDP	19,855.5	19,744.6	0.6	19,832.0	0.8
Real Consumption	14,098.7	13,877.0	1.6	14,070.7	1.7
Real Investment	3,681.4	3,889.3	-5.3	3,691.7	-3.3
Real Govt. Expenditures	3,349.8	3,337.4	0.4	3,340.6	-0.2
Real Exports	2,546.3	2,403.6	5.9	2,541.4	7.2
Real Imports	3,924.2	3,860.1	1.7	3,914.7	3.2
CPI all goods (% chg)	5.8	7.8	NA	6.4	NA
CPI Food (% chg)	9.3	7.9	NA	9.7	NA
CPI Energy (% chg)	4.4	31.5	NA	9.7	NA
CPI Core (% chg)	5.2	5.8	NA	5.5	NA
Industrial Production Index (% chg)	1.4	4.6	NA	2.1	NA
Unemployment Rate (%)	3.7	3.9	NA	3.6	NA
Housing Starts ($ millions, NSA)	1.4	1.7	-17.0	1.4	-14.5

Signs of softening inflation appear in the forecast horizon. CPI on all goods is anticipated to reflect a 5.8 percentage change average over the final three quarters of FY23. Subdued energy prices are projected to be the largest driver pushing headline CPI down. The easing of inflationary pressures will begin when energy price levels further recede, food prices correct, and supply disruptions gradually abate. Less accommodative monetary and fiscal policy will also generate a degree of downward pressure on inflationary pressures moving forward.

Growth in real GDP is expected to slightly increase by 0.6 percent in the second, third and fourth quarters of FY23. A combination of factors influences the relatively tepid real GDP growth rate. Slower growth in consumer spending and significantly weakened investment continues to negatively impact real GDP.

While the US consumer has displayed a degree of resilience, inflation and interest-rate hikes will remain strong headwinds to real consumption growth in the short-term. Growth in real consumption is projected to rise 1.6 percent, spanning the final three quarters of FY23. Consumer sentiment is showing signs of improvement, following historically low levels reported by the University of Michigan in June. The consumer sentiment index, a reflection of consumer attitudes on the state of the economy, is expected to rebound further over the economic outlook relative to its trough earlier in the summer.

Real investment growth is expected to decline sharply over the three-quarter forecast horizon, falling 5.3 percent. Real investment spending is expected to lose an estimated $208 billion, compared to the same three fiscal quarters one year prior. Rapidly increasing borrowing costs have lowered the internal rate of return on investments and slower growth in economic output has dampened business expectations regarding the need for enhanced production in the near-term.

Among the five components of real GDP, real exports are poised to grow the quickest in percentage terms, increasing 5.9 percent compared to the same periods one year prior. The Russian invasion of Ukraine and the strength of the US dollar continue to create challenges for US exporters. Exports to Europe continue to decrease as the exchange rate disparity makes imports from the US more expensive. Real exports remain below the pre-pandemic level, whereas real imports are now higher than they were in late 2019, reflecting the flip side of the strength of the dollar. Strong domestic demand for goods and services will continue to underpin real imports. Real imports are expected grow in the final three quarters of FY23, increasing 1.7 percent.

US housing starts are expected to plummet 17.0 percent during the final three quarters of FY23. The jump in mortgage rates since late 2021 has largely contributed to the slowing in existing home sales. Higher mortgage rates and increased underwriting scrutiny have dampened home affordability.

One key element that has kept the economy afloat has been the rapid pace of job gains. The pace of job growth has remained strong, and various indicators point to continued momentum over the outlook periods. Non-farm employment is expected to increase 2.2 percent in the final three quarters of FY23, a gain of approximately 3.3 million seasonally-adjusted jobs. The rate of unemployment is expected to contract over the final quarters of FY23, reaching 3.7 percent. Labor markets will remain tight over the three-quarter outlook.

Shifting focus towards the sectoral analysis, the service-producing sectors continue to trend up in the US labor outlook. Growth in the service-providing sectors is expected to increase 2.7 percent in the final three quarters of FY23. Leisure and hospitality employment continues to expand, with 6.5 percent projected growth in the second, third and fourth quarters of FY23. The goods-producing sectors are expected to gain 80,000 net annualized jobs in the second, third and fourth quarters of FY23, a growth of 0.4 percent. Mining employment is forecasted to surge 7.1 percent, representing an increase of approximately 43,000 annualized jobs. The forecasted growth in mining employment accounts for 54 percent of the expected job gains in the goods-producing sectors.

US personal income is expected to increase 5.3 percent in the final three quarters of FY23. The wages and salaries component is anticipated to continue its positive trajectory, bolstering personal income growth with a 6.7 percent increase in the second, third and fourth quarters of FY23. The demand for labor is expected to continue to outpace the supply of labor, resulting in the continued trend of upward pressure on wages and salaries growth. The projected uptick in personal income is also attributed to an increase in dividends, interest, and rents, and supplements to wages and salaries.

Table 4
US Labor and Income Outlook
Interim Forecast

	Q2-Q4			Full Year	
	FY23	FY22	% chg	FY23	% chg
Non-farm Employment (millions, SA)	153.5	150.2	2.2	153.3	2.6
Goods-producing	20.9	20.8	0.4	21.0	1.3
Construction	7.6	7.6	-0.2	7.6	0.8
Mining	0.6	0.6	7.1	0.6	8.1
Manufacturing	12.7	12.6	0.4	12.7	1.2
Service-providing	110.1	107.2	2.7	109.9	3.2
Trade, Transportation & Utilities	28.9	28.4	1.9	28.9	2.3
Information	3.0	2.9	3.0	3.0	3.7
Finance	9.0	8.9	0.8	9.0	1.2
Business Services	22.5	22.0	2.2	22.5	3.0
Educational Services	24.7	24.1	2.5	24.6	2.7
Leisure and Hospitality Services	16.3	15.3	6.5	16.2	7.2
Other Services	5.7	5.6	1.5	5.7	2.0
Government	22.5	22.2	1.5	22.4	1.3
Personal Income ($ billions, AR)	22,424.8	21,292.5	5.3	22,279.8	5.2
Wages and Salaries ($ billions, AR)	11,807.0	11,070.4	6.7	11,730.8	7.4
Transfer Receipts	4,029.8	3,918.0	2.9	3,998.1	0.6
Dividends, Interest, and Rents	4,005.0	3,773.0	6.1	3,970.7	5.9
Supplements to Wages and Salaries	2,461.5	2,338.4	5.3	2,446.7	5.4
Proprietors' Income	1,921.2	1,887.1	1.8	1,922.8	2.2
Social Insurance	1,799.7	1,694.4	6.2	1,789.2	6.9
Residence Adjustment	0.0	0.0	NA	0.0	NA

KENTUCKY OUTLOOK

The forecast for Kentucky personal income by type and the employment outlook by sector was prepared using the Kentucky MAK model and the September 2022 control forecast from IHS Markit.

Kentuckians' personal income is poised to grow 3.6 percent over the three forecasted quarters. Growth at the projected levels would represent a $8.3 billion increase in Kentuckian's personal income, compared to the same three quarters one year prior. The increase in personal income primarily reflects an increase in employee compensation, as well as dividends, interest, and rents.

Wages and salaries, the largest component of personal income, is poised to grow by a robust 5.7 percent in the final three quarters of FY23 compared to the same periods in FY22. US wages and salaries growth is projected to be 6.7 percent, slightly ahead of the pace set in Kentucky. Despite a tightening labor market, wages and salary growth remains strong over the forecast horizon.

Traditionally there has been a high correlation between the wages and salaries component of personal income in Kentucky and the withholding component of the individual income tax, as well as the sales and use tax. At the national level, the substantial gains to wages and salaries over the last two years have had a positive impact on consumer sentiment as measured by the University of Michigan's Consumer Sentiment Index. Record high inflation has lowered the purchasing power of the wage gains, resulting in downward pressure on consumer sentiment. In fact, the Consumer Sentiment Index, created in 1952, hit an all-time low of 50 in the month of June 2022 (1966Q1=100). Consumer sentiment has rebounded from the bottom in recent months, but the level remains near all-time lows.

Total nonfarm payroll employment is anticipated to grow by 1.9 percent over the next three fiscal quarters, adding approximately 36,500 annualized jobs to the Commonwealth's economy. Eight of the eleven supersectors are forecasted to experience varying degrees of employment gains over the nine-month forecast. In percentage and absolute terms, the service-providing sector is expected to experience the most pronounced job growth, which will account for an increase of 27,100 jobs, or a 2.1 percent increase over the outlook period. The notable job gains in the service-providing sector will account for roughly 74 percent of the total non-farm employment gain over the outlook periods.

Leisure and hospitality employment is anticipated to grow the quickest among all supersectors. Over the final three quarters of FY23, the leisure and hospitality employment sector is on track to add roughly 10,100 annualized jobs, accounting for an increase of 5.2 percent compared to the same three quarters in FY22. Employment in business services is forecasted to increase by approximately 5,900 annualized jobs, an increase of 2.6 percent.

Growth in the goods-producing sector is expected to be 1.1 percent over the second, third, and fourth quarters of FY23 which reflects a total gain of roughly 3,500 annualized jobs, compared to the same periods one year prior. Manufacturing employment is forecasted to be a continued bright spot of total non-farm employment, increasing by an estimated 3,700 annualized jobs, a percentage change of 1.5 percent over the forecasting horizon. Manufacturing employment is significant to the Commonwealth's labor force, as it represents approximately 12.4 percent of Kentucky's workforce over the next three fiscal quarters, compared with a national average of 8.3 percent for the same period.

Kentucky's employment is expected to outpace the US in the construction, manufacturing, finance, business services, and government employment sectors during the forecasting horizon. On the other hand, the state's employment expansion is anticipated to underperform in the sectors of trade, transportation, and utilities, information, education services, leisure and hospitality services, and other services compared to the national workforce averages.

Government employment, which includes federal, state, and local government jobs, is forecasted to continue its positive trajectory over the final three quarters of FY23. The government sector is expected to increase by approximately 6,000 annualized jobs, a 2.0 percent increase, compared to the same fiscal quarters in FY22.

The OSBD will continue to monitor the economic conditions closely, but the current economic forecasts assume that public health impacts will have minimal effect on the overall state of the Commonwealth. Kentucky's economy is on solid ground. The increase in jobs subsequently increases wages and salaries, underpinning future personal income growth.

Table 5
KY Labor and Income Outlook
Interim Forecast

	Q2-Q4			Full Year	
	FY23	FY22	% chg	FY23	% chg
Non-farm Employment (thousands, SA)	1,968.6	1,932.0	1.9	1,966.5	2.2
Goods-producing	331.2	327.6	1.1	331.8	1.1
Construction	78.8	79.0	-0.2	79.1	0.1
Mining	7.6	7.6	-0.7	7.6	0.4
Manufacturing	244.8	241.0	1.5	245.1	1.5
Service-providing	1,332.2	1,305.1	2.1	1,330.5	2.5
Trade, Transportation & Utilities	426.1	421.9	1.0	426.0	1.6
Information	21.2	21.3	-0.2	21.2	0.0
Finance	96.6	95.8	0.9	96.6	0.8
Business Services	229.7	223.8	2.6	229.4	3.0
Educational Services	289.9	284.3	2.0	289.9	2.3
Leisure and Hospitality Services	205.1	195.0	5.2	203.7	6.0
Other Services	63.5	63.0	0.7	63.5	0.8
Government	305.2	299.3	2.0	304.2	2.0
Personal Income ($ billions, AR)	237.1	228.8	3.6	235.9	0.8
Wages and Salaries ($ billions, AR)	118.4	112.1	5.7	117.8	1.1
Transfer Receipts	62.4	62.2	0.3	62.0	0.1
Dividends, Interest, and Rents	35.8	33.9	5.7	35.5	1.5
Supplements to Wages and Salaries	28.8	27.3	5.4	28.6	1.3
Proprietors' Income	15.3	15.7	-2.5	15.3	-0.9
Social Insurance	20.2	19.0	5.9	20.0	1.2
Residence Adjustment	-3.4	-3.2	NA	-3.3	NA

REVENUE RECEIPTS

GENERAL FUND
First Quarter FY23

General Fund revenue collections grew 3.8 percent in the first quarter of FY23, and by 11.1 percent excluding a large one-time settlement from last year. That marks the ninth consecutive and 21st time in the last 22 quarters in which collections have increased. At first glance, the rate of growth doesn't look all that impressive when compared to prior quarters, but the 3.8 percent increase is on top of a 20.0 percent increase in the first quarter of last year. Revenues in the just completed quarter totaled $3,556.6 million compared to $3,424.9 million in the first quarter of FY22, for an increase of $131.7 million.

Table 6
Summary General Fund Receipts
$ millions

	FY23 Q1	FY22 Q1	Diff $	Diff %
Individual Income	1,368.9	1,262.3	106.6	8.4
Sales & Use	1,397.1	1,238.6	158.5	12.8
Corp. Inc. & LLET	337.2	290.6	46.6	16.0
Property	68.0	63.1	4.9	7.8
Lottery	75.0	69.5	5.5	7.9
Cigarettes	81.1	84.0	-2.9	-3.4
Coal Severance	22.1	12.9	9.3	72.2
Other	207.1	404.0	-196.9	-48.7
Total	**3,556.6**	**3,424.9**	**131.7**	**3.8**

Collections from the major revenue categories are shown in summary form in Table 6 which reveals broad-based growth across the major accounts with declines in only two accounts: cigarettes and "other". However, the "other" account was boosted last year by a one-time $225 million legal settlement. The sales and use and individual income taxes each increased by more than $100 million while the business taxes rose by $46.6 million. The largest decliner was the "other" account which was $196.9 million less than last year's total as a result of the one-time settlement. The remaining accounts were within $10 million of FY22 levels. Detailed information on these major accounts is available in the Appendix.

The official General Fund revenue estimate for FY23 calls for collections to decline 6.4 percent compared to FY22 actual receipts. At the time the estimates were done, growth was predicted in FY23, but the amount needed to hit the enacted estimate fell sharply due to the $945.4 million revenue surplus in FY22. Given the year-to-date revenue situation, General Fund receipts can fall 9.5 percent for the remainder of the fiscal year and still meet the official estimate.

Individual income tax receipts grew 8.4 percent in the first quarter of the year. Receipts were $1,368.9 million which was an increase of $106.6 million over FY22 collections. While all three major components of the tax were higher than last year, withholding accounted for $90.1 million of the increase.

Sales and use tax collections were strong as well, increasing $158.5 million over FY22 levels. Collections for the quarter were $1,397.1 million, an increase of 12.8 percent. All three months in the first quarter posted double-digit rates of growth.

The combined corporation income and LLET taxes rose 16.0 percent, or $46.6 million in the just completed quarter. Receipts totaled $337.2 million compared to the $290.6 million received a year earlier. Estimated corporation income tax payments accounted for $42.3 million of the increase.

Property taxes rose 7.8 percent in the quarter with collections of $68.0 million. This compares to $63.1 million received in the first quarter of the prior fiscal year. The first quarter is typically the lowest quarter of collections each fiscal year, contributing less than 10 percent of the annual total for the property tax accounts.

Lottery receipts increased 7.9 percent, or $5.5 million, in the first quarter of FY23. Revenues were $75.0 million compared to $69.5 million collected in the first quarter of FY22.

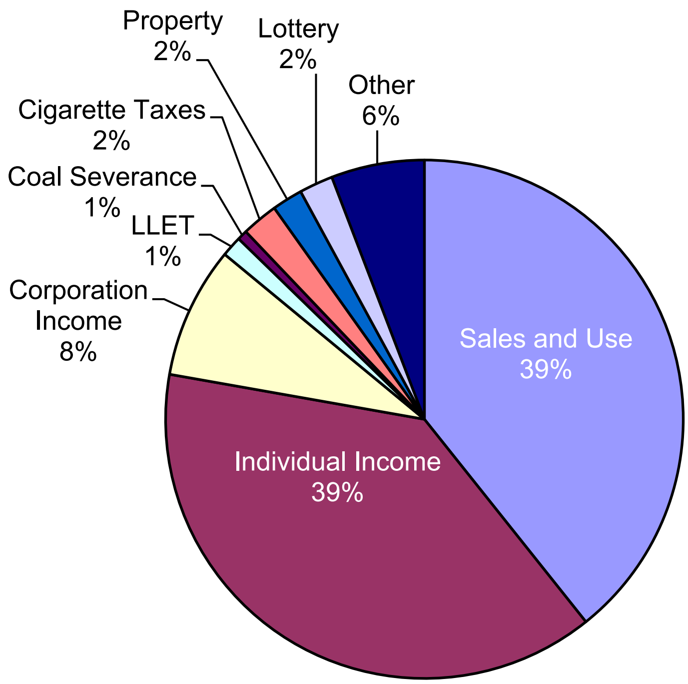
Cigarette taxes fell 3.4 percent in the first quarter with receipts of $81.1 million. This compares to $84.0 million collected in the first quarter of FY22. Cigarette consumption has been trending downward for several years and that trend is reflected in this revenue stream. Excluding FY19, when there was an increase in the tax rate on cigarettes, collections have declined in ten of the past 12 years.

Coal severance tax collections grew 72.2 percent to $22.1 million in the first quarter. That is the largest quarterly receipts total since the fourth quarter of FY19.

The "other" category represents the remaining accounts in the General Fund, and collections in this account decreased 48.7 percent with receipts of $207.1 million,

Figure 1 details the composition of first quarter General Fund receipts by tax type. Seventy-eight percent of General Fund revenues were collected in the areas of the individual income and sales and use taxes. The next largest source of revenue was the combined corporation income and LLET taxes made up nine percent while the "other" account contributed six percent. Cigarette taxes accounted for two percent. Lottery receipts and property accounted for two percent each. Finally, the coal severance tax accounted for one percent.

Figure 1
Composition of First Quarter FY23
General Fund Revenues



ROAD FUND
First Quarter FY23

Road Fund receipts declined 0.3 percent in the first quarter of the fiscal year compared to what was collected in the same time period last year. The differences among the major accounts were generally small, ranging from $4.8 million less in motor vehicle operators' collections to an increase of $3.6 million in motor vehicle usage tax receipts. Total receipts in the quarter were $422.6 million, which was $1.2 million less than what was collected last year. Motor vehicle usage tax receipts were 2.2 percent above last year's collections while the motor fuels tax fell by 0.7 percent. The remaining accounts collectively decreased 6.0 percent.

The official Road Fund revenue estimate calls for a 2.7 percent increase in revenues for the year. Based on year-to-date tax collections, revenues can increase 3.7 percent for the remainder of FY23 and meet the estimate. Summary data are contained in Table 7 and detailed data are shown in the Appendix.

Table 7
Summary Road Fund Receipts
$ millions

	FY23 Q1	FY22 Q1	Diff $	Diff %
Motor Fuels	200.1	201.5	-1.3	-0.7
Motor Vehicle Usage	167.6	164.0	3.6	2.2
Motor Vehicle License	22.1	19.7	2.3	11.9
Motor Vehicle Operators	2.5	7.4	-4.8	-65.4
Weight Distance	22.4	21.8	0.6	2.8
Income on Investments	-2.8	0.1	-2.9	NA
Other	10.7	9.4	1.3	13.5
Total	**422.6**	**423.8**	**-1.2**	**-0.3**

Motor fuels tax receipts fell 0.7 percent during the quarter after growing 3.5 percent in FY22. Higher gas prices had an adverse impact on quantity demanded, resulting in a reduction in collections in this account. Receipts were $200.1 million as compared to $201.5 million collected during the first quarter of last year.

Motor vehicle usage tax revenue rebounded from a poor fourth quarter of FY22 where receipts fell 6.7 percent to an increase of 2.2 percent in the just completed quarter. Revenues were $167.6 million compared to $164.0 million in the first quarter of FY22.

Motor vehicle license tax receipts rose11.9 percent, or $2.3 million in the first quarter of FY23. Receipts in the first quarter were $22.1 million compared to $19.7 million during the same period last year.

Motor vehicle operators' tax receipts were $2.5 million in the first quarter of FY23, a 65.4 percent decrease compared to collections a year ago. An undetermined portion of the shortfall is the result of timing issues brought about by changes in the accounting system.

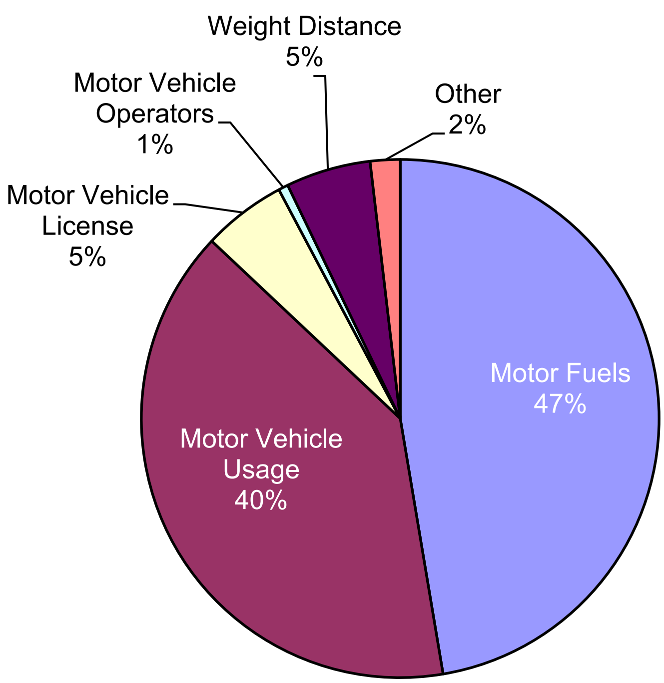
Weight distance tax receipts were $22.4 million in the quarter, a 2.8 percent increase compared to receipts collected during the first quarter of FY22.

Income on investments was -$2.8 million in the quarter hampered by the uncertainty in the bond markets, the primary investment vehicle for state tax receipts.

The remainder of the accounts in the Road Fund are grouped in the "other" category and consist primarily of fines, fees, and miscellaneous receipts. These funds combined to total $10.7 million, a 13.5 percent increase from FY22 levels.

Figure 2 shows the composition of Road Fund revenues by tax type in the quarter. The motor fuels tax and the motor vehicle usage tax are by far the largest components of the Road Fund. Together, they combined for 87 percent of Road Fund revenues in the first quarter. The next largest sources of revenue were the motor vehicle license and weight distance taxes at five percent. The "other" category accounted for two percent while motor vehicle operators was one percent.

Figure 2
Composition of First Quarter FY23
Road Fund Revenues



THE ECONOMY
FIRST QUARTER FY23

NATIONAL ECONOMY

Real Gross Domestic Product (real GDP) rose by 1.5 percent in the first quarter of FY23 compared to the first quarter of FY22. See Table 8. NB: First quarter FY23 national data is a forecast by IHS Markit and is not official. The first official look at first quarter real GDP, "the advanced estimate", will be published on October 27, 2022. Real GDP growth has been weak lately. The last five adjacent-quarter growth rates are: 0.6, 1.7, -0.4, -0.1, and 0.3 percent, respectively. The generally accepted rule for declaring a recession is two consecutive quarters of decreasing real GDP. However, the National Bureau of Economic Research (NBER), the entity responsible for identifying official turning points in the economy, will examine many facets of the economy before declaring those previous two quarters a recession. NBER examines "the depth of the contraction, its duration, and whether economic activity declined broadly across the economy (the diffusion of the downturn)." For these reasons, it is not uncommon for recessions to be identified many quarters after a recession has begun.

Table 8
History of US Economic Variables

	FY22								FY23	
	Q1	% chg	Q2	% chg	Q3	% chg	Q4	% chg	Q1	% chg
Real GDP ($ billions, AR)	19,478.9	4.9	19,806.3	5.5	19,727.9	3.5	19,699.5	1.7	19,761.5	1.5
Real Consumption	13,732.4	7.1	13,818.4	6.9	13,881.1	4.5	13,931.5	1.9	13,986.8	1.9
Real Investment	3,609.7	7.1	3,903.0	9.6	3,951.1	11.6	3,813.8	8.8	3,722.6	3.1
Real Government Expenditures	3,381.6	0.6	3,359.0	0.1	3,334.3	-1.7	3,319.0	-1.6	3,313.0	-2.0
Real Exports	2,273.0	4.9	2,390.6	4.9	2,361.3	4.4	2,458.9	6.7	2,526.6	11.2
Real Imports	3,589.6	12.6	3,740.8	9.6	3,906.0	12.0	3,933.5	10.8	3,886.1	8.3
CPI - All Goods (% chg)	5.3	NA	6.7	NA	8.0	NA	8.6	NA	8.2	NA
CPI - Food (% chg)	3.9	NA	5.9	NA	7.9	NA	10.0	NA	10.8	NA
CPI - Energy (% chg)	24.6	NA	30.7	NA	28.4	NA	35.4	NA	25.5	NA
Core CPI (% chg)	4.1	NA	5.0	NA	6.3	NA	6.0	NA	6.1	NA
Industrial Prod. Index (% chg)	4.9	NA	4.5	NA	4.9	NA	4.6	NA	4.2	NA
Working Population (millions, NSA)	261.6	0.4	262.0	0.4	263.3	0.9	263.7	0.9	264.2	1.0
Civilian Labor Force	162.0	0.7	161.9	0.9	163.6	2.3	164.2	2.0	164.9	1.8
Employed	153.6	4.9	155.5	3.6	156.9	5.0	158.4	4.4	158.9	3.5
Unemployed	8.4	-41.4	6.4	-38.8	6.7	-35.5	5.8	-37.9	6.0	-28.5
Not in Labor Force	99.6	-0.1	100.1	-0.4	99.7	-1.3	99.5	-0.7	99.3	-0.4
Labor Force Participation Rate (%)	61.7	NA	61.8	NA	62.3	NA	62.3	NA	62.3	NA
Unemployment Rate (%)	5.1	NA	4.2	NA	3.8	NA	3.6	NA	3.6	NA
Housing Starts (millions, AR)	1.6	8.3	1.7	6.7	1.7	8.8	1.7	4.0	1.5	-6.6

Real consumption rose by 1.9 percent in the first quarter of FY23 compared to the first quarter of FY22. Real consumption has been weak for the last five quarters. The last five adjacent-quarter growth rates are: 0.5, 0.6, 0.5, 0.4, and 0.4 percent, respectively. Real consumption surpassed its 2020 pre-recession peak in the third quarter of FY21. It is now $737.8 billion, or 5.6 percent, above its pre-recession peak. Real consumption made up 70.8 percent of real GDP in the first quarter of FY23.

Real investment increased 3.1 percent in the first quarter of FY23 compared to the first quarter of FY22. Real investment has declined for the last two consecutive quarters by significant amounts on an adjusted-quarter basis. While it has been erratic over the last eight quarters. The last eight adjacent-quarter growth rates are: 5.7, -0.6, -1.0, 3.0, 8.1, 1.2, -3.5, and -2.4 percent, respectively. Real investment surpassed its 2020 pre-recession peak in the second quarter of FY21. Despite the two recent sharp declines, real investment is still above its pre-recession peak by $186.7 billion, or 5.3 percent. Real investment made up 18.8 percent of real GDP in the first quarter of FY23.

Real government expenditures fell by 2.0 percent in the first quarter of FY23 compared to the first quarter of FY22. Real government expenditures have fallen in five of the last six quarters on an adjacent-quarter basis. Real government expenditures used to be a countercyclical component of real GDP. This was true up until the 2001 recession. Since then, real government expenditures have been acyclical or procyclical, but mostly just monotonically increasing regardless of position in the business cycle. Real government expenditures made up 16.8 percent of real GDP in the first quarter of FY23.

Real government expenditures fail to capture all of the expenditures that the federal government makes in a given period. Outlays capture every expenditure made by the federal government including transfers to individual persons and to state governments. Total outlays declined by 11.7 percent in the first quarter of FY23 compared to the first quarter of FY22. See Table 9. Three major categories were the cause of this decline in the first quarter. The three categories are Federal Transfer Payments to Resident Persons, Grants-in-Aid to State & Local Governments, and Subsidies. All three categories declined by significant amounts in the first quarter of FY23. Federal Transfer Payments to Resident Persons declined by 9.4 percent in the first quarter. Grants-in-Aid to State & Local Governments declined by 16.1 percent in the first quarter. Subsidies was the biggest loser, dropping 73.5 percent in the first quarter of FY23 compared to the first quarter of FY22. These three outlays combined declined by $870.7 billion compared to the first quarter of FY22. The declines in these three outlays were substantial enough to completely offset the large increases in Interest on the Debt and Social Security. Interest on the Debt increased by 20.4 percent, or $104.3 billion, in the first quarter of FY23 compared to the first quarter of FY22. Meanwhile, Social Security outlays increased by 8.5 percent, or $95.2 billion, during the first quarter of FY23 compared to the first quarter of FY22. Total outlays decreased by a net $769.0 billion in the first quarter of FY23 compared to the first quarter of FY22.

Table 9
US Federal Outlays
$ billions, AR

	First Quarter			
	FY23	FY22	$ Chg	% Chg
Federal Outlays excl. Gross Investment	5,791.3	6,560.4	-769.0	-11.7
National Defense	728.9	710.3	18.6	2.6
Non-Defense Consumption	480.4	485.8	-5.4	-1.1
Federal Transfer Payments to Resident Persons	2,843.1	3,136.3	-293.3	-9.4
Medicare	870.6	826.5	44.1	5.3
Social Security	1,212.4	1,117.2	95.2	8.5
Social Insurance to Rest of the World	28.0	28.4	-0.4	-1.3
Grants-in-Aid to State & Local Govts	887.1	1,057.1	-170.0	-16.1
Medicaid	563.1	530.8	32.3	6.1
Non-Medicaid Grants to State & Local Govts	324.0	526.3	-202.3	-38.4
Aid to Foreign Govts	61.0	74.9	-13.9	-18.6
Interest on the Debt	615.9	511.6	104.3	20.4
Subsidies	147.0	554.5	-407.5	-73.5

Real exports rose by 11.2 percent in the first quarter of FY23 compared to the first quarter of FY22. See Table 8. Net exports had been experiencing some weakness even before the 2020 recession. The previous peak for real exports occurred in the fourth quarter of FY18. The 2020 recession had a significant effect on real exports, as other countries were also experiencing economic hardships and decreased their consumption of all goods including US exports. On an adjacent-quarter basis, real exports declined 4.4 percent in the third quarter of FY20 and declined by 20.4 percent in the fourth quarter of FY20. Real exports rebounded somewhat in the next two quarters, growing 11.5 and 5.2 percent, respectively. This was insufficient to bring real exports back to its previous peak. Over the next seven quarters, real exports have been erratic with some modest net growth. Adjacent-quarter growth in the last seven quarters was: -0.7, 1.8, -1.4, 5.2, -1.2, 4.1, and 2.8 percent, respectively. Seventeen quarters later, real exports are still $56.2 billion below the previous pre-recession peak. Real exports made up 12.8 percent of real GDP in the first quarter of FY23.

Real imports rose by 8.3 percent in the first quarter of FY23 compared to the first quarter of FY22. While exports rose over the last year, they actually declined in the first quarter compared to the fourth quarter of FY22. Real imports had increased for eight consecutive quarters until the first quarter. The last nine adjacent-quarter growth rates were: 17.3, 7.0, 2.2, 1.7, 1.2, 4.2, 4.4, 0.7, and -1.2 percent, respectively. Real imports surpassed its previous pre-recession peak in the third quarter of FY21. Real imports are now 11.5 percent, or $399.5 billion, above their previous peak. Real imports, a deduction from real GDP, made up 19.7 percent of real GDP in the first quarter of FY23.

The CPI for all goods rose by 8.2 percent in the first quarter of FY23 compared to the first quarter of FY22. See Table 8. The growth rate in the CPI for all goods is also known as the national inflation rate. Inflation peaked in the fourth quarter of FY22 at 8.6 percent. The CPI for food rose 10.8 percent in the first quarter of FY23 compared to the first quarter of FY22. See Table 8. This is the highest growth rate for food inflation since 1979. The CPI for energy rose 25.5 percent in the first quarter of FY23. Energy inflation peaked in the fourth quarter of FY22 with 35.4 percent. The core CPI (excludes food and energy) rose by 6.1 percent in the first quarter of FY23. Core inflation peaked in the third quarter of FY22 at 6.3 percent.

The civilian labor force increased 1.8 percent in the first quarter of FY23 compared to the first quarter of FY22. More importantly, the civilian labor force increased compared to last quarter as well, gaining 0.4 percent, or 712,000 persons compared to the fourth quarter of FY22. Similarly, the Employed rose 3.5 percent in the first quarter of FY23 compared to the first quarter of FY22. Likewise, Employed rose compared to the fourth quarter of FY22 by 0.3 percent, or 502,000 persons. The Unemployed decreased by 28.5 percent in the first quarter of FY23 compared to the first quarter of FY22. However, the Unemployed rose in the first quarter by 3.6 percent compared to the fourth quarter of FY22. The labor force participation rate remained unchanged at 62.3 percent for the first quarter of FY23.
* See the Glossary for definitions of these terms.

US personal income grew 4.9 percent in the first quarter of FY23 compared to the first quarter of FY22. See Table 10. Historically, personal income was heavily influenced by the movements in wages and salaries income. However, during the last two and a half years, large changes in transfer receipts income have greatly influenced the movements of personal income overwhelming the movements of the much larger wages and salaries income. Now in the first quarter of FY23, it appears that the large shocks in transfer receipts income have finally diminished, and wages and salaries are once again the primary driver of US personal income. Adjacent-quarter growth in personal income for the last five quarters are: 0.7, 0.9, 1.2, 1.7, and 1.1 percent, respectively.

US wages and salaries income grew 9.7 percent in the first quarter of FY23 compared to the first quarter of FY22. This growth represents solid growth over the last four quarters and not just during the first quarter. Adjacent-quarter growth for the last five quarters is: 3.0, 3.3, 2.4, 1.9, and 1.8 percent, respectively. US wages and salaries income was the largest mover in personal income for the first quarter of FY23. Social insurance income (a deduction from personal income) rose by 9.1 percent in the first quarter of FY23. Social insurance, like wages and salaries has had continued modest growth for many quarters. The last five quarters of adjacent-quarter growth for social insurance are: 2.5, 2.8, 2.6, 1.7, and 1.7 percent, respectively. Transfer receipts income declined by 5.7 percent in the first quarter of FY23. Transfer receipts income has now decreased in seven of the last nine quarters on an adjacent-quarter basis. The last nine adjacent-quarter growth rates for transfer receipts income are: -22.4, -14.6, 60.4, -27.6, -4.4, -4.7, -1.2, 0.5, and -0.3 percent, respectively. US wages and salaries made up 52.7 percent of US personal income in the first quarter of FY23, while transfer receipts income made up 17.9 percent of US personal income in the same quarter.

US non-farm employment rose by 4.0 percent in the first quarter of FY23. While non-farm employment has risen in every quarter for the last nine quarters, that growth has softened in the last two quarters. The last nine adjacent-quarter growth rates are: 5.0, 1.4, 0.9, 1.0, 1.2, 1.2, 1.2, 0.8, and 0.8 percent, respectively. US non-farm employment was hit especially hard by the 2020 recession. Non-farm employment declined by 18.1 million jobs, or 11.9 percent, in a single quarter. Non-farm employment has finally surpassed its pre-recession peak in the first quarter of FY23, 10 quarters later. All 11 supersectors improved in the first quarter of FY23.

US mining employment grew the fastest in percentage terms, growing 11.3 percent in the first quarter of FY23 over the first quarter of FY22. Mining employment rose by 65,000 jobs during that time. US mining employment is the smallest supersector and made up 0.4 percent of total non-farm employment in the first quarter of FY23.

US leisure and hospitality services employment grew the fastest in absolute terms, gaining 1.3 million jobs, or 9.3 percent, in the first quarter of FY23 compared to the first quarter of FY22. Leisure and hospitality services employment was hurt significantly by the shutdowns and restrictions during the Covid-19 period. The industry still has not fully recovered. The previous peak for US leisure and hospitality services employment occurred in the second quarter of FY20 with 16.7 million jobs. US leisure and hospitality services employment lost 6.5 million jobs, or 39.0 percent, in a single quarter – the fourth quarter of FY20. US leisure and hospitality services employment still has not returned to its pre-recession level. US leisure and hospitality services employment has grown a net 54.7 percent, or 5.6 million jobs since the trough. The sector has regained 85.6 percent of its recession losses so far. US leisure and hospitality services employment is the fifth largest supersector and made up 10.3 percent of total non-farm employment in the first quarter of FY23.

Table 10
History of US Labor and Income Data

	FY22								FY23	
	Q1	% chg	Q2	% chg	Q3	% chg	Q4	% chg	Q1	% chg
Non-farm Employment (millions, SA)	146.9	4.6	148.6	4.3	150.4	4.6	151.6	4.4	152.7	4.0
Goods-producing	20.4	2.6	20.6	2.8	20.8	3.5	21.0	4.1	21.2	4.0
Mining	0.6	1.5	0.6	5.2	0.6	9.5	0.6	10.8	0.6	11.3
Construction	7.4	2.6	7.5	2.4	7.6	3.2	7.6	3.6	7.7	3.9
Manufacturing	12.4	2.7	12.5	2.9	12.6	3.3	12.8	4.1	12.8	3.7
Service-providing	104.4	5.7	105.9	5.2	107.4	5.5	108.3	5.2	109.3	4.7
Trade, Transportation & Utilities	27.8	4.5	28.1	3.8	28.5	4.0	28.7	4.0	28.8	3.7
Information	2.9	7.9	2.9	7.1	2.9	6.1	3.0	6.4	3.0	6.0
Finance	8.8	1.5	8.8	1.5	8.9	1.8	8.9	2.3	9.0	2.2
Business Services	21.3	6.5	21.7	5.8	22.0	5.2	22.2	5.7	22.4	5.3
Educational Services	23.7	2.9	23.9	2.4	24.1	2.6	24.3	2.8	24.5	3.5
Leisure and Hospitality Services	14.4	14.9	14.9	14.3	15.4	16.5	15.6	12.7	15.8	9.3
Other Services	5.5	4.2	5.6	4.7	5.6	5.6	5.7	5.1	5.7	3.8
Government	22.1	1.4	22.1	1.8	22.2	1.6	22.2	1.0	22.2	0.7
Personal Income ($ billions, AR)	20,823.8	5.3	21,010.0	7.5	21,257.2	-2.8	21,610.3	4.5	21,845.1	4.9
Wages and Salaries	10,487.2	11.4	10,828.3	10.7	11,084.7	12.2	11,298.3	11.0	11,502.3	9.7
Transfer Receipts	4,137.5	-5.3	3,942.2	5.7	3,896.8	-34.9	3,914.9	-9.6	3,903.0	-5.7
Dividends, Interest, and Rents	3,674.1	3.0	3,732.7	3.1	3,756.2	3.9	3,830.2	5.0	3,867.7	5.3
Supplements to Wages and Salaries	2,269.3	6.6	2,304.4	5.7	2,340.2	5.9	2,370.7	6.0	2,402.3	5.9
Proprietors' Income	1,867.0	6.0	1,858.5	7.4	1,878.2	9.6	1,924.7	4.1	1,927.4	3.2
Social Insurance	1,611.3	10.5	1,656.1	10.3	1,698.9	10.8	1,728.4	9.9	1,757.6	9.1
Residential Adjustment	0.0	NA	0.0	NA	0.0	NA	0.0	NA	0.0	NA

KENTUCKY ECONOMY

Kentucky personal income grew by 3.0 percent in the first quarter of FY23 compared to the first quarter of FY22. See Table 11. This is the fifth consecutive quarter of growth for Kentucky personal income on an adjacent-quarter basis. The last 11 adjacent-quarter growth rates for Kentucky personal income are: 1.0, 13.0, -7.5, 0.1, 14.6, -8.2, 1.9, 0.7, 1.0, 0.6, and 0.7 percent, respectively. These large increases and decreases are almost entirely due to large changes in Kentucky transfer receipts income. Kentucky personal income in the quarter before the 2020 recession was $198.9 billion. Kentucky personal income has risen by $33.3 billion, or 16.7 percent on net since then, and is currently $232.2 billion.

Kentucky wages and salaries rose by 8.4 percent in the first quarter of FY23 compared to the first quarter of FY22. Kentucky wages and salaries followed a classic pattern during the 2020 recession. It fell during the recession and has grown in the following expansion period. Kentucky wages and salaries income has risen in the last nine consecutive quarters. The last 10 adjacent-quarter growth rates are: -7.5, 6.6, 2.9, 1.2, 2.0, 3.1, 2.6, 2.5, 1.3, and 1.7 percent, respectively. While Kentucky wages and salaries lost 7.5 percent, or $7.4 billion in value, it rebounded quickly. Kentucky wages and salaries had surpassed its pre-recession peak by the second quarter of FY21. Kentucky wages and salaries made up 49.9 percent of total Kentucky personal income in the first quarter of FY23.

Kentucky transfer receipts income declined by 4.7 percent in the first quarter of FY23 compared to the first quarter of FY22. Kentucky transfer receipts income has declined for the last four consecutive quarters on an adjacent-quarter basis. While transfer receipts income has declined recently, it is still greatly above its pre-recession peak. Kentucky transfer receipts income was $48.0 billion in the second quarter of FY20, just before the recession officially started. Following the three stimulus bills, Kentucky transfer receipts income climbed to $86.3 billion by the third quarter of FY21. Kentucky transfer receipts income has receded over the last six quarters, but remains $13.0 billion, or 27.1 percent, above its pre-recession level. The last 11 adjacent-quarter growth rates are: 2.9, 70.7, -28.5, -7.0, 54.0, -26.9, 1.4, -1.5, -1.5, -0.9, and -0.9 percent, respectively. Kentucky transfer receipts income made up 26.3 percent of total Kentucky personal income in the first quarter of FY23. This is up considerably from the 24.1 percent share of Kentucky personal income from just before the 2020 recession.

Kentucky proprietors' income declined by 2.8 percent in the first quarter of FY23 compared to the first quarter of FY22. Proprietors' income was only modestly harmed by the 2020 recession (relative to other income components). Kentucky proprietors' income declined by a net 4.4 percent, or $587.3 million during the 2020 recession. Proprietors' income rose quickly after the recession ended and made all the recession losses in just one quarter. Kentucky proprietors' income is now $2.0 billion above its pre-recession level. Kentucky proprietors' income is the smallest personal income component and made up 6.7 percent of total Kentucky personal income in the first quarter of FY23.

Kentucky non-farm employment rose by 3.2 percent in the first quarter of FY23 over the first quarter of FY22. See Table 11. Kentucky non-farm employment surpassed its pre-recession peak in the first quarter of FY23. Employment in Kentucky was hit hard by the shutdowns and employment restrictions during calendar 2020. Kentucky non-farm employment lost 241,200 jobs, or 12.3 percent, in a single quarter during the recession. It took nine quarters to make up those losses. Kentucky non-farm employment is now 11,000 seasonally-adjusted jobs above its pre-recession peak. All 11 supersectors improved in the first quarter of FY23.

Kentucky leisure and hospitality services employment was the fastest growing supersector in both percentage and absolute terms in the first quarter of FY23. Kentucky leisure and hospitality services employment grew by 8.8 percent, or 16,100 seasonally-adjusted jobs, in the first quarter of FY23 compared to the same quarter the previous year. Kentucky leisure and hospitality services employment was already experiencing some softness before 2020 recession officially began. The pre-recession peak for Kentucky leisure and hospitality services employment occurred in the fourth quarter of FY19. Kentucky leisure and hospitality services employment lost 74,200 seasonally-adjusted jobs, or 36.4 percent, in fourth quarter of FY20. Nine quarters later, Kentucky leisure and hospitality services employment still has not reached its pre-recession peak. During that time, Kentucky leisure and hospitality services employment has made considerable improvements, regaining 69,900 net jobs. That is 94.3 percent of total recession losses. Leisure and hospitality services employment is the sixth largest supersector in Kentucky and made up 10.2 percent of total non-farm employment in the first quarter of FY23.

Table 11
History of KY Labor and Income Data

	FY22								FY23	
	Q1	% chg	Q2	% chg	Q3	% chg	Q4	% chg	Q1	% chg
Non-farm Employment (thousands, SA)	1,900.3	3.8	1,915.5	3.4	1,935.6	2.8	1,945.0	3.0	1,960.3	3.2
Goods-producing	329.7	2.9	327.8	0.8	325.8	-1.1	329.3	0.3	333.7	1.2
Mining	7.5	5.6	7.5	5.6	7.7	0.9	7.7	0.7	7.8	3.6
Construction	78.9	3.0	78.4	0.2	79.0	0.0	79.4	0.8	79.7	1.0
Manufacturing	243.2	2.8	241.9	0.8	239.1	-1.5	242.2	0.2	246.2	1.2
Service-providing	1,275.2	5.0	1,289.4	4.5	1,310.6	4.0	1,315.4	3.8	1,325.3	3.9
Trade, Transportation & Utilities	411.3	3.2	417.2	3.0	424.3	3.7	424.1	3.7	425.7	3.5
Information	21.0	4.5	21.1	4.3	21.5	5.4	21.2	2.0	21.2	0.7
Finance	95.9	3.6	95.4	1.9	95.7	0.2	96.4	0.6	96.7	0.8
Business Services	219.5	6.3	219.7	3.5	225.8	3.9	225.8	3.0	228.7	4.2
Educational Services	281.0	2.8	282.4	2.1	283.9	1.1	286.6	1.7	289.8	3.1
Leisure and Hospitality Services	183.4	12.8	190.6	15.2	196.8	12.6	197.7	11.0	199.5	8.8
Other Services	63.0	3.5	63.0	3.0	62.5	0.9	63.6	2.3	63.7	1.1
Government	295.5	0.0	298.3	1.5	299.2	2.3	300.3	2.6	301.3	2.0
Personal Income ($ billions, AR)	225.3	7.3	227.0	8.0	229.1	-4.8	230.5	4.3	232.2	3.0
Wages and Salaries	107.0	9.6	109.7	9.2	112.5	10.6	113.9	9.8	115.9	8.4
Transfer Receipts	63.9	6.2	63.0	12.4	62.0	-28.1	61.5	-2.5	60.9	-4.7
Dividends, Interest, and Rents	33.2	2.4	33.6	2.5	33.7	3.1	34.3	4.2	34.6	4.5
Supplements to Wages and Salaries	26.6	5.7	26.9	4.7	27.3	4.7	27.7	5.8	28.1	5.4
Proprietors' Income	16.0	13.5	15.5	2.4	15.9	10.1	15.6	-1.5	15.5	-2.8
Social Insurance	18.2	8.9	18.6	8.8	19.1	9.2	19.4	9.2	19.7	8.2
Residential Adjustment	-3.1	NA	-3.1	NA	-3.2	NA	-3.2	NA	-3.3	NA

APPENDIX

General Fund and Road Fund Revenue Receipts

FIRST QUARTER FY23

Kentucky State Government – General Fund

	First Quarter FY 2023	First Quarter FY 2022	% Change
TOTAL GENERAL FUND	**$3,556,591,021**	**$3,424,906,837**	**3.8%**
Tax Receipts	$3,446,661,406	$3,109,272,410	10.9%
Sales and Gross Receipts	**$1,612,316,916**	**$1,449,219,936**	**11.3%**
Beer Consumption	1,774,172	1,768,766	0.3%
Beer Wholesale	20,195,637	19,429,315	3.9%
Cigarette	81,147,640	84,007,814	-3.4%
Distilled Spirits Case Sales	71,179	58,186	22.3%
Distilled Spirits Consumption	4,758,749	4,918,394	-3.2%
Distilled Spirits Wholesale	17,883,244	17,458,187	2.4%
Insurance Premium	46,217,123	37,056,696	24.7%
Pari-Mutuel	7,091,085	9,335,370	-24.0%
Race Track Admission	63,820	44,073	44.8%
Sales and Use	1,397,123,023	1,238,582,601	12.8%
Wine Consumption	763,780	925,425	-17.5%
Wine Wholesale	4,737,198	4,909,160	-3.5%
Telecommunications Tax	18,881,035	19,127,949	-1.3%
Other Tobacco Products	11,607,466	11,595,643	0.1%
Floor Stock Tax	1,765	2,357	-25.1%
Car Rental & Ride Sharing	0	0	---
Natural Resources	**$37,733,485**	**$20,986,833**	**79.8%**
Coal Severance	22,131,217	12,853,296	72.2%
Oil Production	2,569,311	1,569,191	63.7%
Minerals Severance	7,711,713	5,780,964	33.4%
Natural Gas Severance	5,321,244	783,382	579.3%
Individual Income Tax	**$1,368,907,575**	**$1,262,295,330**	**8.4%**
Withholding	1,219,907,786	1,129,763,447	8.0%
Declarations	143,142,887	128,426,926	11.5%
Net Returns	6,873,171	4,908,445	40.0%
Fiduciary	(1,016,269)	(803,488)	---
Major Business Taxes	**$337,178,767**	**$290,605,551**	**16.0%**
Corporation Income	291,490,216	248,021,159	17.5%
LLET	45,688,551	42,584,393	7.3%
Property	**$67,979,659**	**$63,064,812**	**7.8%**
General - Real	(273,966)	(145,827)	---
General - Tangible	9,054,246	10,484,891	-13.6%
Tangible - Motor Vehicle	45,324,649	38,737,716	17.0%
Omitted & Delinquent	159,289	4,435,887	-96.4%
Public Service	11,668,561	7,969,540	46.4%
Other	2,046,879	1,582,605	29.3%
Inheritance Tax	**$23,435,444**	**$17,764,639**	**31.9%**
Miscellaneous	**($890,441)**	**$5,335,308**	**---**
License and Privilege	$402,118	$455,688	-11.8%
Bank Franchise	($4,480)	$285,050	---
Legal Process	2,381,908	2,445,897	-2.6%
T. V. A. In Lieu Payments	(3,691,145)	2,143,950	---
Other	21,158	4,723	348.0%
Nontax Receipts	$109,590,853	$310,701,177	-64.7%
Departmental Fees	3,668,708	3,144,335	16.7%
PSC Assessment Fee	10,153,525	13,442,610	-24.5%
Fines & Forfeitures	4,853,630	4,786,573	1.4%
Income on Investments	13,008,508	(133,023)	---
Lottery	75,000,000	69,500,000	7.9%
Miscellaneous	2,906,482	219,960,681	-98.7%
Redeposit of State Funds	**$338,762**	**$4,933,250**	**-93.1%**

Kentucky State Government – Road Fund

	First Quarter FY 2023	First Quarter FY 2022	% Change
TOTAL STATE ROAD FUND	$422,642,759	$423,836,188	-0.3%
Tax Receipts-	$417,066,629	$416,408,151	0.2%
Sales and Gross Receipts	$367,780,456	$365,480,238	0.6%
Motor Fuels Taxes	200,142,382	201,458,094	-0.7%
Motor Vehicle Usage	167,638,074	164,022,144	2.2%
License and Privilege	$49,286,173	$50,927,913	-3.2%
Motor Vehicles	22,069,753	19,729,226	11.9%
Motor Vehicle Operators	2,544,287	7,354,849	-65.4%
Weight Distance	22,383,722	21,763,848	2.8%
Truck Decal Fees	67,720	37,200	82.0%
Other Special Fees	2,220,690	2,042,790	8.7%
Nontax Receipts	$5,472,653	$7,279,109	-24.8%
Departmental Fees	7,104,409	6,166,623	15.2%
In Lieu of Traffic Fines	116,685	61,545	89.6%
Income on Investments	(2,798,577)	112,152	---
Miscellaneous	1,050,136	938,789	11.9%
Redeposit of State Funds	$103,478	$148,928	-30.5%

Glossary

Adjacent-quarter	A growth rate computed as the current quarter relative to the previous quarter.
AR	Annual Rate is the quantity of a series that would occur for the entire year, if the current period's growth were to continue for the entire year.
Civilian Labor Force	A subset of the working population who are currently employed or are actively looking for employment.
Employed	In the context of working population and civilian labor force data, Employed is a subset of the civilian labor force who are employed regardless of industry or profession. This is therefore different than non-farm employment, which explicitly does not include those persons employed in the agricultural sector.
Growth rate	Unless otherwise stipulated, a growth rate is computed as the current quarter relative to the same quarter of the previous year.
Labor Force Participation Rate	The Civilian Labor Force divided by the Working Population.
Not in Labor Force	A subset of the working population who have decided not to be employed nor seek employment.
SA	Seasonally-Adjusted
SAAR	Seasonally-Adjusted Annual Rate
Unemployed	In the context of working population and civilian labor force data, Unemployed is a subset of the civilian labor force who are not currently employed but are actively seeking employment.
Working population	The group of persons who are 16 years or older, non-institutionalized, not in prison, not in an old-age home, and not engaged in active military duty. It is meant to capture those persons who are capable of working and could work if suitable employment were found. Working population figures are listed in millions.

Tables Notes

Table 3

Not Seasonally Adjusted. Real series are annual rate, billions of chained 2000 dollars. Components do not sum to GDP because they are annualized independently.
Source: IHS Markit - Economics & Country Risk, September 8, 2022 data release.

Table 4

Employment data are Seasonally Adjusted.
Source: IHS Markit - Economics & Country Risk, September 8, 2022 data release.

Table 8

Not Seasonally Adjusted. Real series are annual rate, billions of chained 2000 dollars. Components do not sum to GDP because they are annualized independently. Data for FY23 Q1 are September 2022 estimates.
Source: IHS Markit - Economics & Country Risk, September 8, 2022 data release.

[1] Working population is the group of persons who are 16 years or older, non-institutionalized, not in prison, not in an old-age home and not engaged in active military duty. It is meant to capture those persons who are capable of working and could work if suitable employment were found. Working population figures are listed in millions.
[2] Civilian Labor Force is a subset of the working population who are currently employed or are actively looking for employment.
[3] Employed is a subset of the civilian labor force who are employed regardless of industry or profession. This is therefore different than non-farm employment, which explicitly does not include those persons employed in the agricultural sector.
[4] Unemployed is a subset of the civilian labor force who are not currently employed but are actively seeking employment.
[5] Not in Labor Force is a subset of the working population who have decided not to be employed nor seek employment.
[6] Labor Force Participation Rate is computed as the Civilian Labor Force divided by the Working Population.

Table 9

Not Seasonally Adjusted.
Source: IHS Global Insight, Inc. and the Kentucky Governor's Office for Economic Analysis MAK model, September 2022

Table 10

Seasonally Adjusted. Data for FY23 Q1 are September 2022 estimates
Source: IHS Markit – Economics & Country Risk, September 8, 2022 data release.