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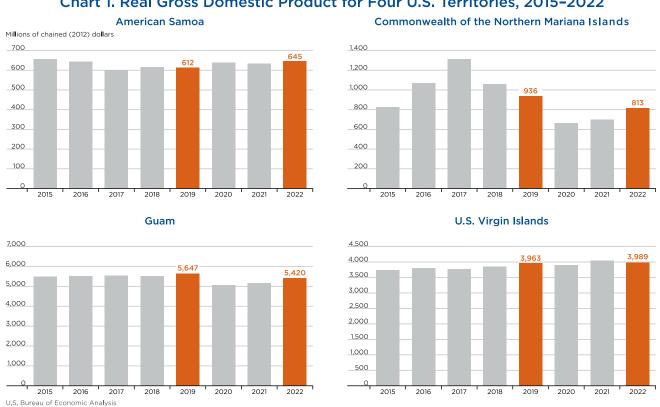
Territorial Economic Accounts for American Samoa, the CNMI, Guam, and the USVI

Estimates of GDP for 2022 and Estimates of GDP by Industry and Compensation by Industry for 2021¹

By Sabrina Montes, Garrett Fanning, and Aya Hamano | January 24, 2025

In 2022, real gross domestic product (GDP) in the U.S. Virgin Islands (USVI) and American Samoa exceeded pre-pandemic 2019 levels. Real GDP in Guam and the Commonwealth of the Northern Mariana Islands (CNMI) did not reach 2019 levels; however, both economies showed growth compared with 2020 and 2021 (chart 1).

Chart 1. Real Gross Domestic Product for Four U.S. Territories. 2015–2022

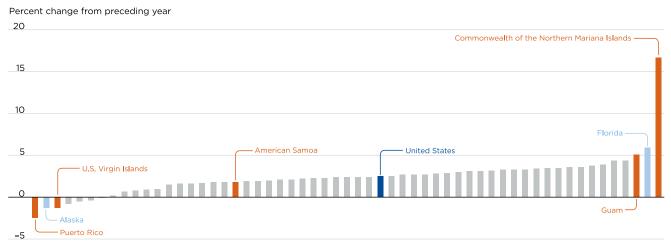


Across all of these unique economies, continuing response and recovery from the COVID–19 pandemic played a role in GDP in 2022. Government transfers to households to assist with pandemic-related financial hardship continued but decreased in 2022. These funds continued to support consumer spending in 2022 but less so than in 2021. Across all four territories, federal funds for territorial government operations were available to support pandemic response and recovery as well. American Samoa instituted new restrictions on business and government operations in response to the first incidence of COVID–19 community spread in the territory. Meanwhile, the CNMI and Guam saw the return of visitor arrivals as countries from which they draw tourists began to loosen travel restrictions.

As chart 2 shows, real GDP growth across the territories varied widely in 2022. The CNMI's real GDP growth rate was the highest among all territories and states, while Puerto Rico was the lowest.

- In American Samoa, real GDP increased 1.8 percent in 2022 (table 1). The increase in real GDP reflected increases in terrigorial government spending and exports. Personal consumption expenditures (PCE), private fixed investment, private inventory investment, and federal government spending subtracted from growth. Imports, a subtraction item in the calculation of GDP, decreased.
- In the CNMI, real GDP increased 16.7 percent in 2022. The increase in real GDP reflected increases in exports, federal and territorial government spending, and private fixed investment. These increases were partly offset by a decrease in PCE. These increases were partly offset by a decrease in territorial government spending. Imports increased.
- In Guam, real GDP increased 5.1 percent in 2022. The increase in real GDP reflected increases in exports, private fixed investment, federal government spending, and PCE. Imports increased.
- In the USVI, real GDP decreased 1.3 percent in 2022. The decrease in real GDP reflected declines in exports, private fixed investment, federal and territorial government spending, and PCE that were partly offset by an increase in inventory investment. Imports decreased.

Chart 2. Real Gross Domestic Product for U.S. States, the District of Columbia, and U.S. Territories, 2022



Note. Gross domestic product estimates for the United States include the 50 states and the District of Columbia. U.S. Bureau of Economic Analysis

Table 1. Contributions to the Percent Change in Real GDP in American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the U.S. Virgin Islands, 2022

U.S. territory	Percent change in real GDP from preceding year	Percentage points						
		Personal consumption expenditures	Private fixed investment	Change in private inventories	Government consumption expenditures and gross investment		Net exports of goods and services	
	year				Federal	Territorial	Exports	Imports
American Samoa	1.8	-6.19	-3.95	-3.67	-0.07	2.88	1.34	11.46
Commonwealth of the Northern Mariana Islands	16.7	-2.60	0.45		1.30	2.38	19.69	-4.54
Guam	5.1	0.75	3.82		1.90	-0.95	4.79	-5.22
U.S. Virgin Islands	-1.3	-0.69	-2.12	13.20	-0.75	-0.77	-19.90	9.72

GDP Gross domestic product

Notes. The table shows the percent change of total real GDP and the contributions (in percentage points) of each major component to that change. For example, for Guam, personal consumption expenditures accounted for 0.75 percentage points of the 5.1 percent increase in real GDP in 2022. Imports are a subtraction item; thus, an increase in imports results in a negative contribution to GDP. Private inventory investment is not estimated for Guam or the Commonwealth of the Northern Mariana Islands due to source data limitations.

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GDP Statistics for American Samoa, the CNMI, Guam, and the USVI Paused

The annual publication of the U.S. Bureau of Economic Analysis' (BEA's) GDP statistics for American Samoa, the CNMI, Guam, and the USVI is made possible through funding by the Office of Insular Affairs (OIA) of the U.S. Department of the Interior. OIA has paused funding of this work to conduct an exploratory assessment of territorial source data with the goal of informing how to strategically invest in and support these four territories' economic statistics into the future. Without funding, BEA is pausing the production of GDP statistics for these four territories. When funding and improved data sources become available, BEA plans to resume production of these statistics.

Archived GDP statistics for American Samoa, the CNMI, Guam, and the USVI will continue to be available on the BEA website.

Components of Territorial GDP

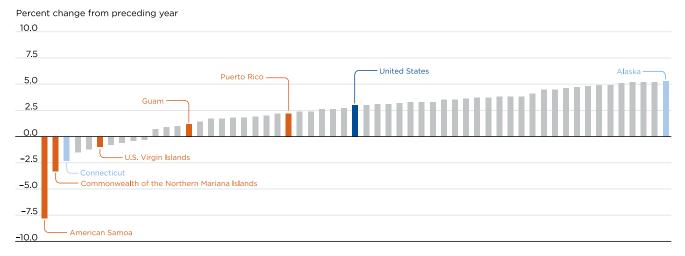
Personal consumption expenditures

Real PCE decreased in American Samoa, the CNMI, and the USVI. In all three of these territories, increases in consumer prices outpaced the increase in current-dollar PCE. In addition, economic impact payments to households through the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 and the American Rescue Plan Act were largely distributed prior to the beginning of 2022; these payments had contributed to increases in PCE in 2021.

In contrast, Guam's real PCE increased in 2022. Price inflation and a reduction in federal economic impact payments also affected Guam households. However, other factors supported continued growth in spending, including substantial growth in compensation. In addition, direct cash assistance was administered by the territorial government. Bank call report data reported by the Federal Financial Institutions Examination Council also suggest that Guam households drew down on their savings during the year.³

For 2022, PCE growth rates in each of the U.S. territories were less than the average for U.S. states. American Samoa and the CNMI had the lowest PCE growth rates among all territories and states (chart 3).

Chart 3. Real Personal Consumption Expenditures for U.S. States, the District of Columbia, and U.S. Territories, 2022

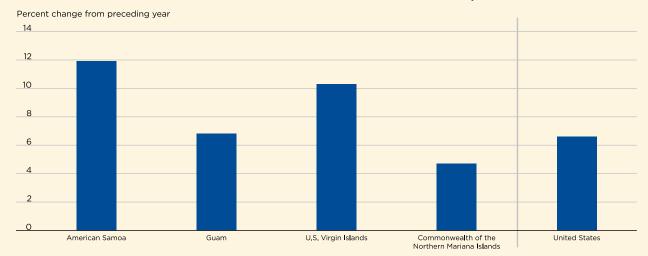


Note. Personal consumption expenditures estimates for the United States include the 50 states and the District of Columbia. U.S. Bureau of Economic Analysis

Prices in the U.S. Territories

The PCE price index reflects changes in the prices of goods and services purchased by consumers. Like the rest of the nation, the economies of American Samoa, the CNMI, Guam, and the USVI saw increases in price indexes for PCE in 2022 (chart I).

Chart I. Price Indexes for Personal Consumption Expenditures for Selected U.S. Territories and the United States, 2022



Note, U.S. price indexes for personal consumption expenditures include the 50 states and the District of Columbia. U.S. Bureau of Economic Analysis

A key data gap for the U.S. territories is the lack of price information specific to each territory. As described in the *Summary of Methodologies: Gross Domestic Product for American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the U.S. Virgin Islands,* for most of the detailed components of GDP, inflation-adjusted estimates are calculated by deflating each component using an appropriate price index. Because of the limited availability of price indexes that are specific to the territories, U.S. price indexes are used for deflation in many cases. The territorial governments each produce their own consumer price indexes that BEA uses within the estimates of PCE. However, there are no producer price indexes for any territory, nor are there price indexes that cover trade in goods and services between each of the territories and the rest of the world, including the United States.

Private fixed investment

In 2022, real private fixed investment (PFI) increased 14.7 percent in Guam and 3.8 percent in the CNMI, while decreasing 18.6 percent in the USVI and 38.4 percent in American Samoa.

The increase in real PFI in Guam reflected growth in equipment and structures. Private-sector construction projects included a 60-megawatt solar farm, resort renovations, and retail outlets.

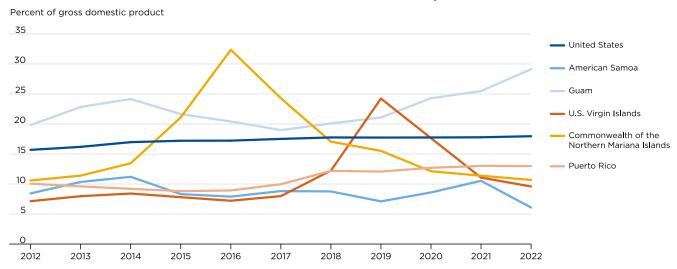
The increase in real PFI in the CNMI primarily reflected an increase in business spending on equipment.

The decrease in real PFI in the USVI reflected declines in spending on equipment and structures. Investment spending continued to decline after being elevated in prior years to support capital improvement projects including the restart of the oil refinery on St. Croix.

The decrease in real PFI in American Samoa reflected declines in residential and nonresidential structures and purchases of equipment.

Chart 4 shows the annual volatility in market-value PFI in the USVI and the CNMI. This volatility reflects a boom-bust cycle in industries that have played a dominant role in these economies over the last decade: oil refining in the USVI and casino gambling in the CNMI.

Chart 4. Ratio of Private Fixed Investment to Gross Domestic Product for U.S. Territories and the United States, 2012–2022



Note. Private fixed investment (PFI) and gross domestic product estimates for the United States include the 50 states and the District of Columbia. For the United States and Puerto Rico, PFI includes intellectual property products.

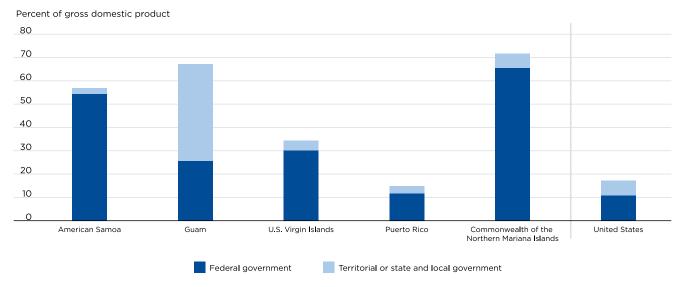
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Government consumption expenditures and gross investment

In 2022, the ratio of government consumption expenditures and gross investment—or "government spending"—to GDP was higher in American Samoa, the CNMI, Guam, and the USVI than in the United States (chart 5). For American Samoa, the CNMI, and the USVI, territorial government spending accounted for most of government spending. In contrast, in Guam, federal government spending accounted for a larger share due to a substantial U.S. military presence, including Andersen Air Force Base, Naval Base Guam, and Marine Corps Base Camp Blaz.

Note that the federal government spending component of GDP does not reflect transfer payments to households or to other levels of government. These payments are instead reflected when they are spent by the sector that received them. For example, pandemic-related federal grants to the territorial governments (e.g., Coronavirus State and Local Fiscal Recovery Fund payments and Education Stabilization Fund payments) are reflected in the estimates of territorial government spending at the time they are spent. These grants supported territorial government spending in 2020 and 2021 and continued to do so during 2022.

Chart 5. Ratio of Government Spending to Gross Domestic Product for U.S. Territories and the United States, 2022



Note, Estimates of government spending and gross domestic product for the United States include the 50 states and the District of Columbia. U.S. Bureau of Economic Analysis

In 2022, real government spending increased 5.0 percent in American Samoa, 4.7 percent in the CNMI, and 1.4 percent in Guam. In contrast, real government spending decreased 4.4 percent in the USVI.

The increase in American Samoa reflected growth in territorial government spending supported by federal grant revenues.

The increase in the CNMI reflected increases in both territorial and federal government spending. Territorial government spending increased 3.3 percent, supported by federal grant revenues. Federal government spending increased 22.8 percent, reflecting construction spending associated with the U.S. Air Force's Tinian Divert Airfield project.

The increase in Guam reflected growth in federal government spending that was partly offset by a decrease in territorial government spending. U.S. Department of Defense construction was a notable source of growth, as progress continued on multiple U.S. military projects, including housing and dining facilities for the Marine Corps base.

The decrease in the USVI reflected declines in territorial and federal government spending. Territorial government spending decreased 2.6 percent, reflecting a decline in construction activity. Federal government spending continued to decline in 2022 after being elevated in prior years to support reconstruction activities following the 2017 hurricanes.

Exports

Exports measures the portion of total production of goods and services in a territory that is provided to the rest of the world, including other countries, the 50 states and the District of Columbia, and other U.S. territories.

In 2022, exports increased 324.9 percent in the CNMI, 150.4 percent in Guam, and 3.0 percent in American Samoa, while they decreased 18.9 percent in the USVI. Growth in services—primarily tourism—drove the growth in exports for the CNMI and Guam. For these two territories, services accounted for the majority of exports in recent years (chart 6). For American Samoa and the USVI, goods are significant and were a key factor in the growth rates of total exports in 2022.

The increases in the CNMI and Guam reflected substantial growth in exports of services from historically low 2021 levels, as visitors from South Korea and Japan returned to these islands following the loosening of pandemic-related travel restrictions in those countries. In the CNMI, visitor arrivals increased 656.4 percent in 2022, according to statistics published by the CNMI government. Similarly, data from the Guam Visitors Bureau arrival summary reports show that visitor arrivals increased over 300 percent.

The 2022 increase in American Samoa reflected an increase in goods—primarily exports of canned tuna and related products—and an increase in services. Data from the U.S. Census Bureau's U.S. Trade with Puerto Rico and U.S. Possessions reports show that the quantities of prepared or preserved fish shipped from American Samoa to the 50 states and the District of Columbia were 3.3 percent higher in 2022 than in 2021. The growth in exports of services primarily reflected growth in visitor spending.

The 2022 decrease in the USVI reflected a decrease in exports of goods that was partly offset by an increase in exports of services. The decline in exports of goods primarily reflected decreases in exports of crude oil and petroleum products. The increase in exports of services primarily reflected growth in spending by visitors. Total visitor arrivals increased 69.7 percent in 2022, according to information published by the USVI government.

Percent of gross domestic product 100 90 80 70 60 50 40 30 20 10 0 2020 2021 2022 2020 2021 2022 2020 2021 2020 2021 2022 2020 2021 2022 American Guam U.S. Virgin Islands Commonwealth of the **United States** Samoa Northern Mariana Islands Exports of goods Exports of services

Chart 6. Ratio of Exports of Goods and Services to Gross Domestic Product for Selected U.S. Territories and the United States, 2020–2022

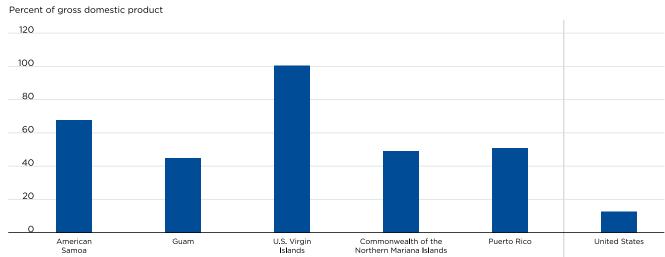
Note. Estimates of exports and gross domestic product for the United States include the 50 states and the District of Columbia. U.S. Bureau of Economic Analysis

Imports

Imports measures the portion of total expenditures in a territory that is accounted for by goods and services provided by the rest of the world, including other countries, the 50 states and the District of Columbia, and other U.S. territories.

The U.S. territories are relatively reliant on imports of goods for domestic use; although some have large manufacturing sectors, production is specialized and primarily for export. In 2022, the imports-of-goods-to-GDP ratio ranged from 44.9 percent for Guam to 100.5 percent for the USVI, compared with 12.5 percent for the United States excluding the territories (chart 7).

Chart 7. Ratio of Imports of Goods to Gross Domestic Product for U.S. Territories and the United States, 2022



Note. Estimates of imports and gross domestic product for the United States include the 50 states and the District of Columbia. U.S. Bureau of Economic Analysis

2021 GDP by Industry and Compensation by Industry

Estimates of GDP by industry and compensation by industry for 2021 were released at the same time for each territory as the 2022 GDP estimates described above.

The following is a summary of the estimates of GDP by industry, by territory:

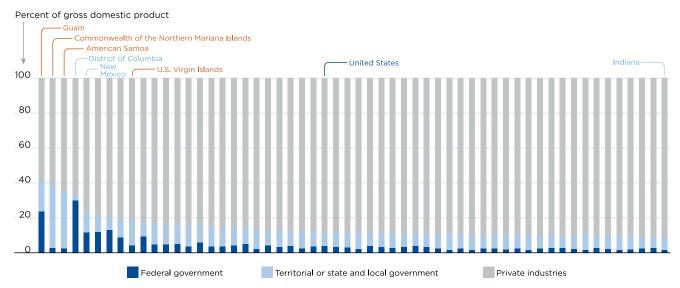
- In American Samoa, real GDP decreased 0.8 percent in 2021. The private sector, which decreased 5.2 percent, was the primary source of the decline in real GDP in 2021. This primarily reflected a decline in manufacturing. The decline in manufacturing reflected decreased tuna cannery output. The government sector increased 8.1 percent, reflecting growth in compensation of territorial government employees.
- In the CNMI, real GDP increased 5.1 percent in 2021. The government sector was the primary contributor to the increase. The government sector increased 13.2 percent, primarily reflecting growth in compensation of territorial government employees. The private sector increased 0.6 percent, reflecting an increase in "other private industries," such as professional services and construction. The increase was partly offset by a decline in accommodations, food services, and amusement. The number of visitor arrivals to the CNMI decreased 85.7 percent from 2020 to 2021.
- In Guam, real GDP increased 2.1 percent in 2021. The private sector increased 4.4 percent, primarily reflecting growth in other private industries, such as health care and social assistance and financial services. Construction also increased, reflecting retail outlet and multiunit residential development projects. The government sector decreased 1.1 percent, partly offsetting the growth in the private sector. Both federal and territorial government decreased.
- In the USVI, real GDP increased 3.7 percent in 2021. The private sector was the source of growth in real GDP in 2021. The increase in the private sector reflected growth in services-producing industries that was partly offset by a decline in goods-producing industries. Services-producing industries increased 10.9 percent. The largest source of growth within services-producing industries was accommodation and food services, reflecting an increase in visitor spending. Goods-producing industries decreased 13.8 percent, reflecting a decline in construction activity. The government sector decreased 5.4 percent, primarily reflecting operating losses of government utilities and a decrease in territorial government employment.

The impact of the COVID–19 pandemic remained substantial in the 2021 estimates. However, each territory's economy is unique, leading to variation in the resulting trends in GDP by industry. For example, visitor arrivals by air to the USVI nearly doubled compared with 2020, as stateside demand for travel began to rebound. In contrast, visitor arrivals continued to decrease for the CNMI and Guam, as strict COVID-related requirements remained in place for travel to and from east Asian countries. These structural differences between the Caribbean and Pacific territories' tourism markets resulted in contrasting trends in the output of industries serving tourists, such as accommodations and food services.

Note that there are differences in the industry detail published across the four territories due to differences in the availability and quality of industry-specific data for each location. Although this limits comparisons of industries across territories and with other regions in the United States, it is possible to draw general conclusions about the relative importance of the government sector versus the private sector to the territorial economies. For example, the estimates show that compared with the United States, the government sector accounts for a relatively large share of the economic activity in American Samoa, the CNMI, Guam, and the USVI (chart 8).

In 2021, the government sector share of GDP ranged from 19 percent for the USVI to 40 percent for Guam, compared with 12 percent for the United States excluding the territories.

Chart 8. Value Added by Industry as a Percentage of Gross Domestic Product for U.S. States, the District of Columbia, and Selected U.S. Territories, 2021



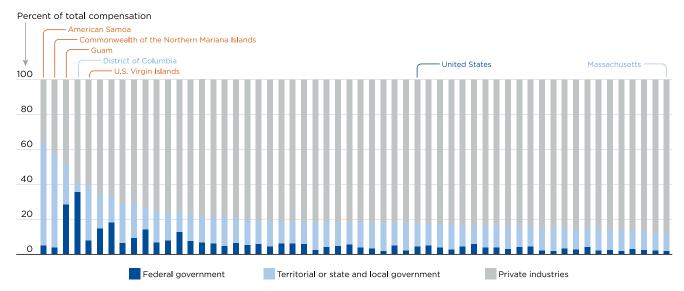
Note. Estimates of value added by industry for the United States include the 50 states and the District of Columbia. The U.S. Bureau of Economic Analysis does not publish value added by industry estimates for Puerto Rico.

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Similarly, the importance of the government sector as an employer in American Samoa, the CNMI, Guam, and the USVI is reflected in the compensation by industry estimates. In 2021, the government sector accounted for 40 percent of total compensation in the USVI, 52 percent in Guam, 57 percent in the CNMI, and 64 percent in American Samoa (chart 9). In comparison, for the United States excluding the territories, the government sector accounted for 18 percent of total compensation.

- In American Samoa, total compensation increased from \$345 million in 2020 to \$364 million in 2021. The \$19 million increase reflected growth in territorial government compensation.
- In the CNMI, total compensation increased from \$578 million in 2020 to \$604 million in 2021. The \$26 million increase was mostly accounted for by an increase in territorial government compensation.
- In Guam, total compensation increased from \$3,527 million in 2020 to \$3,615 million in 2021. The \$88 million increase reflected increases in both private-sector and government compensation. The largest contributor to the increase was construction.
- In the USVI, total compensation decreased from \$2,546 million in 2020 to \$2,306 million in 2021. The \$240 million decrease reflected a decrease in private-sector compensation. The largest contributor to the decrease was goods-producing industries.

Chart 9. Compensation of Employees by Industry as a Percentage of Total Compensation for U.S. States, the District of Columbia, and Selected U.S. Territories, 2021



Note. Estimates of compensation of employees by industry for the United States include the 50 states and the District of Columbia. The U.S. Bureau of Economic Analysis does not publish compensation by industry estimates for Puerto Rico.
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Conclusion

Continuing response to the COVID-19 pandemic played a role in GDP in 2022. Federal funds related to the pandemic continued to influence the economies of American Samoa, the CNMI, Guam, and the USVI. These funds contributed to increases in current-dollar territorial government spending in all four territories.

Price inflation was an important factor across the territories. Although territorial government spending increased in current-dollar terms, real spending decreased in two of the four territories. Similarly, current-dollar personal consumption expenditures increased in all four territories. However, due to price inflation, the only territory that experienced household spending growth in real terms was Guam.

There were signs of recovery from the pandemic within the territories. For example:

- Real growth rates in two of the four territories exceeded pre-pandemic levels.
- Real private fixed investment increased in two of the four territories.
- Exports of services contributed positively to the territorial economies, as tourism began or continued to recover.



Technical Notes

These estimates are produced for each territory primarily using data from the territorial governments.

GDP for American Samoa, the CNMI, Guam, and the USVI is estimated using the expenditures approach, that is, as the sum of goods and services sold to final users. This methodology is similar to that used to estimate national GDP; in contrast, GDP for each of the 50 states and the District of Columbia is produced using an income-based approach. Each territory is estimated separately as a stand-alone entity with the methodology tailored to the economic data available for that territory. See *Summary of Methodologies: Gross Domestic Product for American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the U.S. Virgin Islands* on the BEA website for detailed methodological information.

Acknowledgments

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U.S. federal agencies

- Office of Insular Affairs, U.S. Department of the Interior
- Census Bureau, U.S. Department of Commerce
- Bureau of Labor Statistics, U.S. Department of Labor
- Energy Information Administration, U.S. Department of Energy
- Federal Emergency Management Agency, U.S. Department of Homeland Security

American Samoa

- American Samoa Office of the Governor
- American Samoa Department of Commerce
- American Samoa Department of Treasury
- American Samoa Tax Office, Department of Treasury
- American Samoa Customs, Department of Treasury
- American Samoa Budget Office
- American Samoa Telecommunications Authority
- American Samoa Power Authority
- LBJ Tropical Medical Center
- American Samoa Community College
- Office of Petroleum Management

Commonwealth of the Northern Mariana Islands (CNMI)

- CNMI Office of the Governor
- CNMI Department of Commerce
- CNMI Commonwealth Ports Authority
- Marianas Visitors Authority
- CNMI Department of Finance
- Northern Marianas College
- CNMI Public School System
- Commonwealth Utilities Corporation
- Commonwealth Healthcare Corporation

Guam

- Guam Office of the Governor
- Guam Bureau of Statistics and Plans
- Guam Department of Administration
- Guam Department of Revenue and Taxation
- Guam Bureau of Budget and Management Research
- Guam Economic Development Authority
- Guam Office of Public Accountability
- Guam Visitors Bureau
- Guam Department of Labor
- Guam Port Authority

U.S. Virgin Islands (USVI)

- USVI Office of the Governor
- USVI Bureau of Economic Research
- USVI Bureau of Internal Revenue
- USVI Office of Management and Budget
- USVI Department of Finance
- USVI Bureau of Labor Statistics, Department of Labor
- USVI Department of Labor

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 funded the production of the territorial economic accounts for American Samoa, the Commonwealth of the Northern
 Mariana Islands (CNMI), Guam, and the U.S. Virgin Islands (USVI). For complete data tables for 2022 and other years,
 see the U.S. Bureau of Economic Analysis (BEA) website. BEA's Puerto Rico GDP estimates are produced under a
 different funding source and are included in selected charts for comparison. BEA's Puerto Rico GDP estimates are
 available on the BEA website.
- 2. American Samoa recorded its first COVID-19 case in September 2021—a traveler who arrived from Hawaii. However, in spring 2022, news reports indicated community spread was occurring.
- 3. In the bank call report data reported by the Federal Financial Institutions Examination Council, see deposit products intended primarily for individuals for personal, household, or family use reported in "Schedule RC-E Part 1 Deposits in Domestic Offices" for the Bank of Guam.



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