WASHINGTON—The U.S. economy expanded faster than initially thought in the third quarter as stronger inventory and export gains caused the government to revise its growth reading higher.

The nation's gross domestic product—the broadest measure of goods and services produced in the U.S.—advanced at an annual rate of 2.7% from July through September, the Commerce Department said Thursday. The revised figure is up from the previously reported 2.0% gain.

Economists surveyed by Dow Jones Newswires expected growth to be revised to a 2.8% rate.

The uptick in economic activity came as corporate profits grew. Compared with a year earlier, profits from current production were up 8.7%. The figure measures business income generated from production during the quarter and excludes items, such as capital gains, that revalue existing assets.

By another measure, corporate profits after taxes and unadjusted for inventories and capital consumption advanced 18.6% from a year earlier and were up 5.2% from the prior quarter. The after-tax numbers more closely reflect what companies would report in quarterly accounting.

While economic growth from July through September was the second-best quarterly reading of the current recovery, the gains resulted in a modest jobs boost. The unemployment rate, at 7.9% in October, remains above historic norms.

Economists also warn that superstorm Sandy, which struck in late October, and worries over the fiscal cliff—the package of tax increases and spending cuts slated to hit in January unless lawmakers strike a deal—are likely to hold back GDP gains in the fourth quarter.

An increase in private inventories helped drive the upward revision to third-quarter GDP, the Commerce Department said. The new data show private inventories contributed 0.77 of a percentage point to growth. Initially, the government estimated inventories were a 0.1 percentage point drag.

Those gains, however, could be an impediment in the fourth quarter. With stockpiles on hand, businesses won't need the same level of production to meet demand.

New data show that real final sales—GDP less changes in private inventories—increased 1.9% in the third quarter, compared with a rise of 1.7% in the prior period. GDP overall grew at an unrevised 1.3% rate in the second quarter.

The revision to third-quarter GDP also reflects higher exports than the first reading. The latest data show exports grew 1.1% in the quarter, compared with an initially reported 1.6% contraction.

The upward revisions helped offset downward adjustments to consumer spending and business investment. Nonresidential fixed investment—business spending on items such as buildings and equipment—fell 2.2% during the quarter, the worst reading since the final three months of 2009.

Thursday's report showed inflation remained mild during the quarter. The price index for personal consumer expenditures rose at a 1.6% annualized rate during the quarter, below the Federal
Reserve’s 2% target. Stripping out volatile food and energy, the price index for personal consumer expenditures advanced at a 1.1% rate from the prior quarter.

Separately, the number of new unemployment claims dropped week, but an average of claims in the last four weeks remained elevated because of superstorm Sandy.

Jobless claims decreased by 23,000 to a seasonally adjusted 393,000 in the week ended Nov. 24, the Labor Department said Thursday. Economists surveyed by Dow Jones Newswires expected 395,000 claims.

The four-week moving average, which smooths out shifts in weekly data, rose 7,500 from the previous week to 405,250, the highest level since October 2011.

A Labor Department analyst said there was no noticeable impact from Sandy last week, which hit much of the Northeast in late October and had caused claims to spike in recent weeks as businesses were forced to close temporarily or permanently.

The analyst said it was difficult to read too much into the figures because the non-seasonally-adjusted data are particularly volatile toward the end of the year. There was no indication that any states last week were reporting claims above what is normally expected around this time, he said.

For the week ended Nov. 17, new jobless claims dropped by 35,000 to 416,000, according to upwardly revised figures. For that week, new claims in New York fell by more than 30,000, but claims in New Jersey remained elevated.

The job market had been gradually improving before Sandy hit. In October, the unemployment rate was below 8% for the second consecutive month, the Labor Department said earlier this month. The November employment report, which will reflect Sandy’s impact, is due out Dec. 7.

Thursday’s data showed the number of continuing unemployment-benefit claims—those drawn by workers for more than a week—fell by 70,000 to 3,287,000 in the week ended Nov. 17. Continuing claims are reported with a one-week lag.

The number of workers requesting unemployment insurance was equivalent to 2.6% of employed workers paying into the system in the week ended Nov. 17, the same as the prior week.