PARIS—The cascade of rating downgrades that hit France and eight other euro-zone nations last week casts fresh doubts over the monetary union’s ability to bail itself out of financial crisis and rescue its most vulnerable member, Greece.

Standard & Poor’s Ratings Services on Friday said it had stripped triple-A ratings from France and Austria and downgraded seven others, including Spain, Italy and Portugal. It retained the triple-A rating on Europe’s No. 1 economy, Germany.

The downgrade to France, the bloc’s second-largest economy, will make it harder—and potentially more expensive—for the euro zone’s bailout fund to help troubled states, because the fund’s own triple-A rating depends on those of its constituents.

The downgrades also speak to how deeply the concerns over countries on the euro zone’s periphery have penetrated its core.

Worst-case fears weren’t borne out: France avoided the two-notch downgrade S&P had warned of last month.

"It’s not the cut in the rating that is historic. It’s the depth of the euro crisis that is historic," said Dominique Barbet, an economist at BNP Paribas.

German Chancellor Angela Merkel on Saturday told reporters the downgrades underscore that euro-zone nations must accelerate efforts to implement a closer fiscal union and to set up a permanent bailout facility, the European Stability Mechanism. The ESM, scheduled to start on July 1, should start “as soon as possible” because this is important for investors’ confidence, she said, adding that the downgrades weren’t a full surprise and dismissing concerns that they would harm the euro’s temporary bailout facility, the European Financial Stability Facility, by making it more difficult for the fund to borrow.

"This won’t torpedo the work of the EFSF," she said.

Friday’s downgrade highlights limitations in the euro-zone’s strategy to ride out of the protracted sovereign-debt crisis, and casts doubt over whether France can continue to assist others while coping with domestic woes. The downgrade will rekindle debate about the role of the European Central Bank, which has so far maintained that bailing out euro-zone countries wasn’t part of its mandate.
Since Greece ran into financial troubles in spring 2010, followed by Ireland and Portugal, euro-zone countries have been relying on core members of the monetary union to take on more debt and help struggling neighbors.

But the bailout bills dangerously piled up on top of other debt. France, Germany and other euro-zone nations had contracted in late 2008 and 2009 when their economies slipped into recession. Making matters worse, the sovereign-debt crisis began infecting larger countries such as Spain and Italy, leaving the euro zone with a shrinking number of paymasters.

S&P, which in December placed 15 of the 17 euro-zone countries on watch for possible downgrades, said Friday it had decided to lower the debt ratings of nine of them because it felt the currency bloc has so far failed to take adequate action.

"In our view, the policy initiatives that have been taken by European policy makers in recent weeks may be insufficient to fully address ongoing systemic stresses in the euro zone," the ratings firm said.

S&P cut the debt ratings of France and Austria by one notch, to double-A-plus from triple-A.

The downgrade of France, the world's fifth-largest economy, marks S&P's second high-profile downgrade of a top-tier triple-A nation in less than six months, after it stripped the U.S. of the ranking and sparked a wave of controversy in August.

Malta, Slovakia and Slovenia were also downgraded by one notch. S&P lowered the ratings of Italy, Spain, Portugal and Cyprus by two notches.

"The government I preside [over] knows what it has to do improve Spain's reputation, to grow and to create employment," said Spanish Prime Minister Mariano Rajoy at a political rally on Saturday after S&P downgraded his country two notches to single-A from double-A-minus.

The credit-ratings firm kept Spain's rating on negative outlook, warning of further possible downgrades if the country doesn't take decisive steps to slash its budget deficit and overhaul its rigid labor laws.

"There will be reforms, and the first will be a labor reform," said Spain's new prime minister. Mr. Rajoy took the reins of power last month after his party won a landslide victory over the incumbent Socialists in November.

S&P cast a dark outlook for the currency bloc, assigning France and 13 other euro-zone nations a negative outlook, indicating at least a one-in-three chance of a further downgrade in the next two years. S&P said it feared Europeans may grow tired of austerity and change.

"We believe that there is a risk that reform fatigue could be mounting, especially in those countries that have experienced deep recessions and where growth prospects remain bleak," it said.

Over the weekend, the French government said S&P's downgrade decision wasn't "a catastrophe." France continues to hold triple-A ratings from Fitch Ratings and Moody's Investors Service.

As word of the downgrades emerged on Friday, France's CAC-40 index was nearly flat and Germany's DAX fell 0.6%. The Dow Jones Industrial Average fell 48.96 points to 12422.06, after being down as many as 159 points at its intraday low.

The euro fell more sharply, hitting an intraday low of $1.2623, its weakest level since late August 2010. The euro has dropped more than 10% against the dollar since Oct. 27. That pronounced weakness in the currency is something of a new development in the crisis, observers said.

Although S&P left Germany's triple-A rating unscathed, the ratings firm's assessment offers stark evidence of the extent to which many industrialized countries have been relying on debt during both periods of economic expansion and contraction, as they pursued the increasingly elusive goal of buoyant growth and full employment.
France, for example, hasn't recorded a balanced budget since 1974.

The U.S. ratings firm expressed concern over the euro zone's decision in recent weeks to focus on reinforcing fiscal discipline within the bloc, without elaborating growth strategies.

"We believe that a reform process based on a pillar of fiscal austerity alone risks becoming self-defeating, as domestic demand falls in line with consumers' rising concerns about job security and disposable incomes, eroding national tax revenues," it said.

Euro-zone leaders are set to meet later this month to consider ways to boost growth and create jobs, notably by launching infrastructure and renewable-energy projects.

—William Horobin, Matt Phillips and Jonathan House contributed to this article.

Write to David Gauthier-Villars at David.Gauthier-Villars@wsj.com and Charles Forelle at charles.forelle@wsj.com