BERLIN—German officials are willing to support at least a temporary increase of the euro-zone's rescue fund, in a sign that the country is yielding to international pressure to bolster Europe's defenses against its debt crisis.

Chancellor Angela Merkel has been reluctant, amid opposition in parliament and within her own center-right coalition, to consider a bigger contribution from Germany.

But a cabinet member, and two of Ms. Merkel's allies in parliament said they would consider measures to temporarily boost the firewall.

Norbert Barthle, a lawmaker for Merkel's Christian Democratic Union who is also the party's budget spokesman, said that a temporary increase is an option and could be accomplished by combining the euro-zone's temporary bailout facility, the European Financial Stability Facility, with the planned permanent facility, the European Stability Mechanism.

The move would increase Europe's firepower to €750 billion from a planned €500 billion.

"We could think about boosting both [facilities] for a transition period in order to have a bigger volume at our disposal," Mr. Barthle said. "But we oppose raising the ESM volume permanently."

Michael Meister, deputy parliamentary floor leader and finance expert of Merkel's CDU party, said he would support such a move, depending on the outcome of the debt restructuring in Greece and bond auctions in Italy and Spain.

"The force of the ESM might have to be increased," Mr. Meister said. "I can imagine to use remaining funds from the ESM or to increase the cash contributions into the ESM."

Ms. Merkel, who is meeting with other European leaders in Brussels Thursday and Friday, is under growing pressure to increase Europe's war chest but the issue isn't officially on the agenda of a two-day meeting of European leaders that began today.

"This is currently not the right time for a debate," Vice chancellor and Economics Minister Philipp Roesler told Friday's edition of Handelsblatt newspaper, according to a version of the article released earlier. "But of course we will look very closely at bond markets in the light of the pending exchange of Greek bonds."

Greece and private sector creditors have agreed on a €100 billion debt restructuring deal.

Earlier Thursday, Sueddeutsche Zeitung and Handelsblatt cited unnamed government sources as saying Ms. Merkel now appears willing to back down and support a move that would raise the firewall to €750 billion.

Finance Minister Wolfgang Schäuble's spokesman said the volume will be revisited.

"Euro-zone leaders in December 2011 agreed to examine in March 2012 whether the rescue facility's [ESM's] volume as drawn up is sufficient," spokesman Martin Kotthaus said. "The rest remains to be seen."

A Government official Wednesday said that "taking assessment of the funding needs of the ESM and the EFSF at this point would not be effective."
Lawmakers from the opposition Social Democrats said they expect Merkel to give in to pressure.

"Ms. Merkel will of course agree in the course of March to raise the ESM," lawmaker Joachim Poss said. "Ms. Merkel knows...that she can't allow an international isolation of Germany."

—Andreas Kissler in Berlin contributed to this article.

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