Despite some BIS-economists: Deleveraging does matter

Outstanding credit to the private sector in the euro area has been shrinking for a long time. It is shrinking fast in several peripheral countries and the European Central Bank (ECB) seems unable or unwilling to do anything about it. Given that the economy of the euro area is barely crawling out of recession and that inflation is predicted to be significantly below the central bank's target rate for the next two years at least, this seems troublesome. Two economists of the Bank for International Settlements (BIS) help out

with a study called "Credit and Growth After Financial Crises": The authors claim: „We find that declining bank credit to the private sector will not necessarily constrain the economic recovery after output has bottomed out following a financial crisis." So if there should be a problem, it is not because of a credit crunch or anything like that, we learn. To obtain their result, BIS-economists El?d Takáts and Christian Upper examine data from 39 financial crises, which were preceded by credit booms. "In these crises the change in bank credit, either in real terms or relative to GDP, consistently did not correlate with growth during the first two years of the recovery", they write.

Thus, against the consensus, deleveraging need not hold back the upswing, is their contention. By extension, this means that even if all sectors of the economy are deleveraging, government may also reduce the deficit or pay down debt, without necessarily causing trouble.

The trouble is, the BIS-economists use an entirely inadequate method for coming to their conclusion, and they even seem to do so knowingly. At the very least, they knowingly ignore those who cast doubt on their methodology and spare their readers the trouble of being confronted with such doubts.

What do they do? They relate changes in the stock of credit to changes in GDP and find that after the economy has bottomed out, there is no correlation. This is not really surprising, because the derivative of the change in credit, i.e. the change in (net) new credit is the more relevant metric as Michael Biggs, Thomas Mayer and Andreas Pick write in a Working Paper of the Dutch central bank called "Credit and Economic Recovery".

They explain: "To the extent that spending is credit financed, GDP will be a function of new borrowing or the flow of credit, not the stock of credit." A consequence of this is that CHANGE in GDP should be related to CHANGE in (net) new credit, not to (net) new credit itself (which is equal to change in the stock of credit).

Let me give a schematic example to explain.

Let consumers' current income be 100 in all periods. They spend their current income and any (net) new credit, which they take out, on consumption, which we will assume to be equal to GDP.

In periods zero and one, the stock of outstanding credit is unchanged, i.e. net new credit is 0. Consumption and GDP will be 100.

In period two, consumers increase the stock of credit by 5. This equals a net flow of new credit of 5. They have available 105 for consumption and GDP will be 105, or 5% more than in period one.

Let the stock of credit remain unchanged again in period three. This means, the flow of new credit is 0. Consumers have available only their current income of 100 for consumption in this period. GDP will be 100, or 5% less than in period two.

In period four let the stock of credit decline by 5. This means net new credit of minus 5. Consumers have available their current income of 100 minus the 5 they use for paying down their debt. Consumption and GDP will be 95, again 5% less than in the previous period.

In period five, let the stock of credit decline by another 5. This means, net new credit is minus 5 again. Consumption and GDP will again be 95 or unchanged from period four.

In period six let the stock of credit be unchanged and thus net new credit be 0. Consumption and GDP will be 100, or 5% more than in the previous period.

El?d Takáts and Christian Upper would find that an unchanged stock of credit (= zero net new credit) goes together with unchanged GDP in period one, a GDP decline of 5% in period three and a GDP increase of 5% in period six. No significant correlation can be detected in such a series.

However, the change in the stock of credit, or net new credit, is obviously not the relevant explanatory variable here, since the change in the amount of money that consumers have available for consumption, and thus change in consumption (and GDP) depends on the CHANGE of net new credit. If you relate that to the change in GDP in our stylized example, you get a perfect correlation. Zero change in net new credit in periods one and five goes together with unchanged GDP. An increase of net new credit in periods two and six by 5% goes together with an increase in GDP of 5%. A decline in net new credit by 5% in periods three and four goes together with a decrease in GDP of 5%. A perfect correlation,

Only at the beginning of the downturn, change in credit and change in net new credit are strongly correlated. However, this is the phase until the bottoming out of GDP, which the two BIS-researchers exclude from their sample.

Even if you use the right explanatory variable, you will find that GDP can recover before credit recovers. It is good enough that the decline in net new credit become smaller, so create a positive impulse on money available for spending. However, the policy implications are very different. If you use the correct explanatory variable, you will not conclude that deleveraging is irrelevant. Even if GDP can somewhat recover without the stock of credit recovering, it will recover much more strongly if credit does recover.

It is concerning that the two BIS economists are aware of the paper by Biggs et al., which challenges their methodology. They have this paper and a related, less formal paper by Thomas Mayer in their list of references. However, in the text of their paper and in their footnotes, they never refer to Biggs et al. and Mayer. They chose not to justify what they are doing against contrarian arguments and evidence and not to bother their readers with it.