Sectoral balances and financial crises

Alberto Bagnai
Department of Economics – Gabriele d’Annunzio University (Pescara, Italy)
CREAM – University of Rouen (France)
asimmetrie (Rome, Italy)

Stylized facts in the Eurozone

1. Public debt rises in «virtuous» countries and decreases in most «distressed» countries
2. Private debt does the opposite
3. The rise in private debt is correlated to a rise in external debt
4. 1+2+3 = financial crises follow from the accumulation of private debt, financed by foreign creditors
5. Is that a general phenomenon?
6. Can we predict financial crises?

The simple arithmetic of sectoral balances

\[ Y = C + G + I + X - M \]

Take everything to the left-hand side:
\[ Y - C - G - I - X + M = 0 \]

Add and subtract net direct taxes T and rearrange:
\[ Y - T - C - I + T - G + M - X = 0 \]

Substitute the definition of private saving \( S = Y - T - C \):
\[ S - I + T - G + M - X = 0 \]

The interpretation of sectoral balances

1. A positive balance means that a sector has a net saving (is accumulating wealth/reimbursing debts)
2. A negative balance means that a sector has a net indebtedness (is accumulating debt/decumulating wealth)
3. The balances must add to zero: we cannot be all in surplus nor in deficit at the same time
4. If you get money from someone (financial deficit), someone is giving money to you (financial surplus).
What we know about financial crises:

1. They mostly depend on private debt accumulation, financed by external creditors.
2. This gives rise to a typical pattern before the crisis.
3. $S - I$ decreases (decreasing accumulation of net saving by the domestic private sector).
4. $M - X$ increases (the external sector uses its increasing surplus to finance our private sector).
5. $T - G$ is stable or increasing (public debt is not an issue).

Some examples:

What happens when the crisis arrives?

1. The foreign creditors stop financing the economy: sudden stop.
2. They want to be reimbursed: current account reversal.
3. The public sector intervenes to sustain the private sector deleveraging: government deficit.
4. $S - I$ increases (increasing accumulation of net saving by the domestic private sector).
5. $M - X$ changes sign (from external indebtedness to external debt reimbursement).
6. $T - G$ decreases (private debt is transformed into public debt, which becomes an issue).
Some examples

Ireland sectoral balances reversal (%GDP)

France sectoral balances within the euro (%GDP)

What’s next?