

A PREDICTABLE RECESSION,
AND WHAT TO DO ABOUT IT
(General lecture, AUC, 22 April 2009)

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- The global recession is here.
- Was it predictable?
- What were its causes, and how did they manifest themselves?
- Is there a fix for this recession?
- Can we learn any lessons to soften the next recession?
(There will certainly be another one.)

- These events were inevitable.
- But the system will pull through (capitalism is alive, but not kicking very much... except own goals):
 - ① the US will recover first, within a year (the Obama feelgood factor will help, but it is *not* the reason);
 - ② Europe will take longer and will be worse off in the meantime.
- Why?

- The crisis was predictable:
 - ① Imperial inaugural of 21 June 2007, then
 - ② BoE talk on 15 August 2007, before the subprime crisis hit the US.

“Recession will happen if the US doesn’t reduce interest rates, and it will be transmitted to the rest of the world.”

- These predictions come from Abadir, Caggiano, Talmain (2005).
- New technology: micro-founded GE model of the economy (Abadir and Talmain, 2002) leads to results requiring new and unconventional econometric techniques in Abadir et al. (2005) and subsequent work.
- Policymakers must be able to read what the data say, if they are to act in a timely *and* proportionate way.

- Our model predicts that changes in economic policy take time to work through the system...
- ... but not in a gradual way as was previously thought: instead, there's a long sequence of small signs of a slowdown, then a seemingly abrupt decline.
- Existing models cannot cope with these patterns:
 - When only the small signs have appeared, no-one using existing models would be able to guess the substantial turning point that is about to occur.
 - That's because these models misinterpret the inertia and project it into the future, hence missing the 'sudden' turns.

- Implications of the model for policymakers?
- If a policy intervention is needed to counter the signs of a slowdown, the stimulus that is applied to the economy:
 - ① should be timed to start *well* before the abrupt decline;
 - ② will take a long time to have an impact (and will eventually wear off);
 - ③ should be sufficiently aggressive to achieve the objective, taking into account the increments that will keep occurring afterwards due to inertia; and
 - ④ revert to a neutral stance well before the objective is achieved, letting the economy ease onto its intended path.
- Consequently, a gradualist macroeconomic policy will *not* yield the desired results: too little and too late.
- Ok, so this is about the 'math', but where did the crisis come from, on the ground, and how would it show up in the calculations?

Macro

- The trigger was a macro slowdown, through the following sequence:
 - 1 profit warning and restructuring announcements
 - 2 income reduction, espec. at lower-income end
 - 3 housing crisis, espec. at lower-income end
 - 4 consumer spending dip, incl. mortgage defaults, as a result of 2&3 (double whammy: income and wealth effects)
 - 5 cut in investments (leading to shrinking productive capacity... important for longer term) and layoffs
 - 6 and the vicious circle went on...

Financial sector

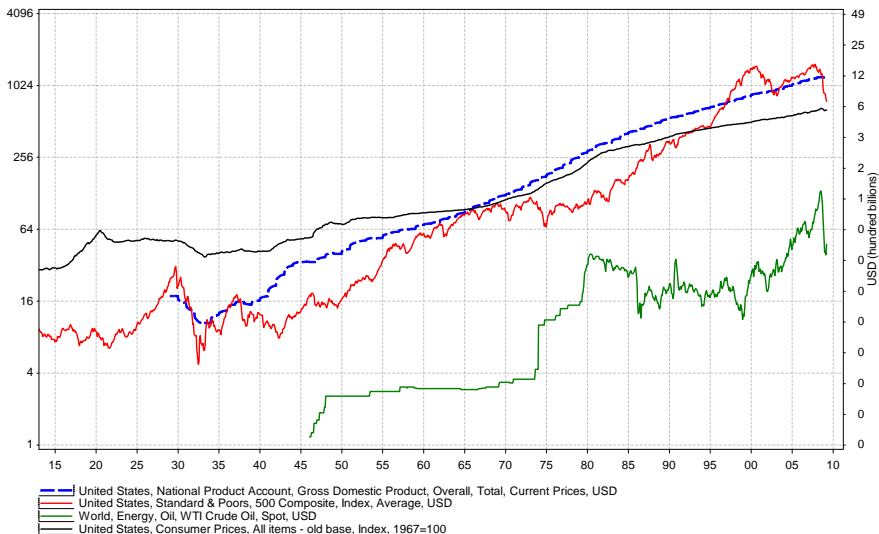
- The incentive systems in the financial sector (bonuses etc.) will have to be reformed.
- Currently, they are still based on returns only, and not on any measure of risk.
- Bonuses are paid within a year.
Later the riskiness of the deal (e.g. loan) is revealed over time, but it's too late to adjust the bonus.
(The trader/manager may have even moved on elsewhere.)
- The result is a “moral hazard” problem, encouraging risk-taking.
- In a frail economy, defaults increase in a snowball effect...
- ... and the banks take a hit (they need better *dynamic* measures of risk).

Feedback from financial sector to the rest

- Knee-jerk reaction: banks wake up to 'risks' and cut lending.
- The banks holding back lending is effectively a contraction of the money supply (via the money-supply multiplier).
- This is equivalent to a more restrictive monetary policy, even if interest rates were kept constant by Central Banks (CBs).
- It needs to be neutralized by governments and CBs, with:
 - 1 additional liquidity,
 - 2 loan guarantee schemes for banks (unusual) and depositors (mostly in existence already).

- What if initial macro trigger wasn't there?
- ① The financial system would have continued to 'work' (a better description would be 'limp along').
- ② The financial markets would display excess volatility and overreaction to events.
- ③ The real economy would have to cope with higher uncertainty: investment spending would be more volatile and/or less forthcoming...
- ④ ... with negative effects on the productive capacity of the economy.

Future trends (& let's put things in a historical perspective), in logs



- How long and how deep will the recession be?
- The answer is endogenous for the medium-term, depending on how governments and CBs react.
- But because of the inertia effect, the trend in the meantime for the coming year (or so) can be determined, hence the statements in the intro.
- Afterwards?...

Problems with current policy, 1: macro reaction

- Resuscitation of a patient is harder than having stopped the bleeding in the first place!
- US apart, CBs were way too late and timid in their reaction: it is going to be harder now for them to be effective.
- The **ECB** is the worst culprit on this, and is yet to react properly.
- It even raised interest rates 9 months ago (July 08), as if oblivious to what was going on in the economy!
- The Eurozone will be hit hard in the near future.
- The **US** economy will start recovering within a year.
- This will be good news for the rest of the world; through international trade, expectation adjustments, etc.

Problems with current policy, 1: macro reaction, ctd.

- Apart from the Eurozone where interest-rate reductions can still play some role, monetary policy will need to consider less conventional tools:
 - quantitative easing (will be a problem for ECB)
 - credit guarantees
 - direct involvement in lending (incl. by taking large shareholdings in banks and affecting their lending policies)... not something that TARP allows.
- Fiscal policy (hence government) will have a bigger role to play, now that monetary policy will be less effective.

Problems with current policy, 2: banking regulation

- 1 The “moral hazard” issue is still here: the capping of boards’ compensation is not enough.
 - 2 Incorrect risk *measurement* (hence incorrect risk management and monitoring) still prevails.
- One solution for the moral hazard (exists already, but rarely):
 - The bonus from a deal goes to a deposit that can be withdrawn after n years but...
not before and only if the deal is revealed not to be a writeoff.
 - Problem in its implementation: competition for talent between the banks (which is why regulation is required).

Problems with current policy, 2: banking regulation, ctd.

- One solution for the risk measurement issue:
 - Make them take a proper financial econometrics course (preferably at Imperial)! 😊
- Jokes apart, the development of the relevant theory has progressed a lot (from variance to VaR, EVT, ...; from i.i.d. to heterogeneous and dynamic; incl. economic variables) and is still underway.
- Regulators and firms should be at the forefront of these techniques and use them in their monitoring.
- Shareholders should be informed of the latest benchmark measures and how their company is performing on these.
- Academic R&D should be encouraged, not cut, in this time of crisis! Cutbacks have already occurred for universities in North America.

Problems with current policy, 3: prospect of inflation

- Because of the shrinking productive capacity (see earlier) coupled with generous government spending and expansive monetary policy, there will be a risk of demand-pull inflation this time (unlike cost-push of 70's).
- Must reduce deficits later (but not through tax increases: beware of Ricardian equivalence).
- Best not to commit to many new recurrent expenses, preferable to spend on (possibly one-off) investments in productivity-enhancing measures; e.g.:
 - infrastructure (one of Obama's electoral promises), incl. IT,
 - energy-efficient technologies, incl. ones based on renewables,
 - training and education,
 - encouraging R&D.