Implications of the Global Financial Crisis for EMU-Integration and Real Convergence in the EU

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University of Hagen

Conference
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Tokyo, Japan
Why focusing on the aspect of real convergence?

Real Convergence
- is an indicator (a precondition)
  for sustainability/stability/legitimacy of an economic/monetary union
  (expectations triggered by the EU itself)
- “sustainable convergence” describes an original goal laid down in the
  European Treaties since 1957
DEFINITIONS

A) **EMU-Integration**

attempt to build [and enlarge] a monetary union

[In EU (in last decade/s): focus on enlargement]

B) **Real Convergence**

(1) catching-up in GDP per capita
(2) minimize the variance of GDP per capita in a union

C) **NMS**

New Member states of EU (since 2004ff)

(which have not yet joined the monetary union)
EU-integration and real convergence

Undisputed that EU-integration fosters real convergence

→ Mechanisms
  - international Trade
  - FDI
  - transfer payments
  - political stability
  - enforced (quicker and deeper) reforms

[„endogenous convergence“ vs. „EU-Halo-effect“]
EMU-integration and real convergence

Disputed whether EMU-integration fosters real convergence
(though contended in the preamble of the Treaty of Maastricht)

→ Pro-arguments:
- the hope for more, or for prolongation of the positive effects, i.e.
- the hope for more international trade between the EMU-countries
- the hope for more capital inflows
  (particularly FDI)
- the hope for more transfer payments
  (due to club-solidarity)
- the hope for more political stability
  (particularly via the handing over of monetary policy decision power
to the European Central Bank)
EMU-integration and real convergence (2)

→ Counter-effects:
  - the loss of seigniorage
  - the danger of internal and external imbalances
  - the necessity of austere fiscal policy
    (in order to fulfil the Maastricht convergence criteria as a precondition for Euro area entry)

furthermore, run-up to EMU-integration is feared to lead (for quite a while) to
  - business cycle desynchronization
  - an anticipatory recession

→ would be bad for not only the NMS, but also the incumbent EMU countries
  „Euro is no panacea – will not compensate for structural weaknesses“ (A-T-T)
Empirical experiences in the EU

so far, quite positive:

- strong positive real-convergence effect of EU-integration (particularly for the current NMS)  
  figure 3

- positive real-convergence effect of EMU-integration (for older “emerging” members)  
  figure 4

- however mixed experiences:  
  e.g., Ireland vs. Portugal  
  (significance of institutional and structural differences)
However: **Non-continuance of strong convergence**

- positive effects only for a while: “EU-HALO-effect” + reform fatigue
  (IMF-study 2009: EU-Halo-effect already disappeared in mid-2007)

- 2007-2008:
  slowdown of real convergence, partly even divergence starting
  (“What goes up, must come down.”) ("sudden stop")
  (“The higher you climb, the farther you fall.”) figure 5

- 2009ff:
  further slowdown????
  or only-very-slow convergence (example: East Germany)
Fears of a further slowdown

fears of (further) slowdown or even divergence are strengthened by the existence of **PITFALLS:**

(which are prevalent even without the crisis)

namely:

1. excessive external imbalances:
2. *(endogenously-enforced)* austere fiscal policy
3. business cycle asymmetries
4. anticipatory recession
(1) excessive external imbalances

→ Capital inflows

Non-FDI capital flows:
- sensitive to interest rate differentials and risk premia
- can lead to overheating, large current account deficits & high inflation
  (Baltic countries)
- in countries with floating rate: pressure on the exchange rate
  (Hungary, ...) [in particular, problem with “bands”]
- expose countries to sudden reversals of capital flows
- may delay needed reform adjustments

→ Credit booms and overheating

Various dangers associated (in particular, financial and banking crises):
  - Darvas/Szapary (2009, European Commission)
early warnings, e.g.:
  - Schadler et al. (2005, IMF), Wagner (2005, IMF)
(2) *(Endogenously-enforced)* austere fiscal policy

…. (need/attemp to fulfil the Maastricht convergence criteria) 
[“cannot be changed anymore – discussion is over” (Tuma)]

- argumentation: …. 
  +
  model analysis: …

→ Wagner (2002a, Bundesbank; 2002b, JEI)
(3) Business cycle asymmetries

... the phenomenon of persistent inflation differentials within the EA may be related to an equally persistent pattern of desynchronized cyclical fluctuations in Europe ("rotating slumps" (Blanchard))

[Mechanism:
differences in inflation rates translate into real interest rate differentials]

- argumentation: ....
  +
  model analysis: ...
  → Landmann (2009)
(4) Anticipatory recession

If

(1) expectations of real divergence as the likely outcome over the next years, and

(2) the expectation that core countries will react and try to stop the divergence process
   (to stabilize and save the economic and monetary union)

→ an EU-wide increase in interest rates may immediately arise

- argumentation: …
  +
  model analysis: …

→ Wagner (1995; 2002a, Bundesbank)
(5) (Fear of) Contagion

… crisis can spread to “neighbouring” countries (see *Asian Crisis*) ….

- argumentation
  + model analysis …
  → Berger and Wagner (2005, IMF Staff Papers)
Possibility of real divergence

.... possible violation of the real-convergence-expectation

- argumentation
  +
  
model analysis
→ Wagner (2002a, Bundesbank; 2002b, JEI)

Elements of the model: A 2-country growth model with public goods (extension of Barro 1990)

......
...... (skipped)
Intermediate summary

- not unlikely that there will be a slowdown of real convergence and even a temporary real divergence in the EMU (particularly between the NMS and the incumbents)

→ unfavourable/dangerous for stability of E(M)U-integration

[guess: Without IMF- and EU-help, some NMS – and perhaps the NMS as a whole – would have run into a disaster]

→ a very heterogeneous economic (monetary) union is “endogenously unstable”, however politically stabilizable (so far)
(Further) Unfavourable conditions

Likelihood of this scenario increases due to unfavourable frame conditions in the EU/NMS

(1) globalization [tax competition]
   + institutional backwardness [need of govt. expenditures]  

\[ \rightarrow \] Wagner (2007, IMF-SUERF study) 

(2) ageing [increase in structural deficit ratio] 

\[ \rightarrow \] Wagner (2006, EEE; 2007, IMF-SUERF study) 

(3) global financial crisis (and policy responses) 

Model analysis: see above …… (skipped) (paper)
Global Financial Crisis and Europe’s Policy Response to Bad Debt:

Implications for EMU-Integration/ Real Convergence

- **Increase in money supply**
  
  → danger of hyper-inflation?
  
  → **NO**: globalization (Wagner, 2001, IMF)
  
  → however:

  some EU, esp. NMS, countries will violate Maastricht inflation criterion (in a later stage: step 2)

- **Increase in Debt and Guarantees**
  
  → all EU-members will violate Maastricht deficit criterion
  
  → NMS will have to delay / give up hopes of early euro adoption

[= step 1] (explanation in the following)
## Forecasts of budget deficits, % of GDP, 2009-2011

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<th>UK</th>
<th>LV</th>
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<td>-13.1</td>
<td>-9.1</td>
</tr>
</tbody>
</table>

Source: European Commission (2009)

- violation of Maastricht-criteria
- sanctions for EA-members: SGP
- sanctions for NMS: delay of Euro adoption
- recess of EMU-integration
Are Government deficits sustainable?

- NO
  - if deficit levels are maintained indefinitely, and
  - if nominal growth rate remains low

→ **stability condition**:

  primary surplus  >  interest - nominal growth

- condition is not satisfied today to guarantee stability → →
Have to be / will be reduced?!

Implications from the above Model Analysis:

\[\text{(skipped) (see paper)}\]
Europe’s Response to the Bad Debt Problem

I) **Macro**economic perspective of the Bad Debt Problem

“bad debt” results when debt-financed fiscal policy is ineffective, in particular, when multiple attempts lead to unsustainable debt levels

→ post-Crisis scenarios discussed:

V, U, W, L and LL – development

| Bad debt
Stability condition for debt/GDP-ratio

The debt/GDP-ratio is stable when

- the public sector borrowing requirement (P(G-T)) as a fraction of outstanding debt (D) is equal to the excess of real growth (g) over the real interest (r):

  \[ \frac{P(G-T)}{D} = g - r \]

rewritten as:

  \[ \frac{T-G}{Y} = (r - g) \frac{D}{PY} \]

This condition is (will be) violated in all (most) EU-countries in 2009 (2010/11).
The Euro and EMU: Negative Spin (Scenario)

- low real interest rates tend to lull governments into complacency – as in the 1970s

- real interest rates could rise again, possibly sharply in the next 3-5 years (in particular, if quantitative easing is abandoned before government deficits are tamed)

- exploding debt with anemic growth could lead to massive speculation against government paper from high debt EMU countries

- high foreign debt, if in foreign currency (esp. in NMS) → danger of a self-enforcing depreciation process → debt spiral [strengthened by procyclical effects of IMF- and EMU-conditionalities]
Europe’s Response to the Macroeconomic Bad Debt Problem

SGP (Stability and Growth Pact)

binding ?? / credible ?? („Paper Tiger“?)

- relevant: institutional requirements
  ➔ Heterogeneously implemented:
  - Germany: “debt brake/cap” (commitment by law to reduce deficits to zero in 2016)
  - France et al.: no such brake/cap or commitment
  ➔ transitory (short-term) problem in Germany;
  ➔ however, longer-term problems in France
  (and in other countries without such a commitment)
II) Microeconomic Perspective of the Bad Debt Problem

DEFINITION: “Bad Debt”
here results when a debt becomes worthless as the surrounding facts and circumstances indicate there is no longer any chance the amount owed will be paid.

→ application to the current crisis:
- rescue measures in 2007-9 were to reduce the default risk of major banks.
- in particular, guarantees have allowed banks to refinance maturing bonds.
- however:
  part of private and/or government loans (or guarantees) to companies, esp. banks, may become “bad” in the above sense and raise the debt/GDP ratio, so violating (in the end) the stability condition for debt/GDP ratio.
Europe’s Response to the Microeconomic Bad Debt Problem

Introduced measures have consisted of:

(i) capital injections to strengthen banks’ capital base
(ii) explicit guarantees on liabilities to help banks retain access to wholesale funding
(iii) purchases or guarantees of impaired legacy assets to help reduce banks’ exposure to large losses

The overall amount of resources committed to the various packages varied greatly across countries:
- **higher** in countries with relative large banking system dominated by large institutions (e.g. UK)
- **lower** in countries where banks are more focused on traditional credit activities and so far have been less affected by the crisis (e.g. Italy, as well as Japan)
Europe’s Response to the Microeconomic Bad Debt Problem (2)

Main findings of recent studies such as Panetta et al (2009):

- Government interventions have been effective in reducing banks’ default risk, at least over a short time horizon (fall in CDS premia); and there seem to be positive spillover effects across countries.

- Overall, the rescue packages seem to have contributed to avoiding “worst case scenarios”, primarily by reducing the default risk of major banks.

- In particular, the issuance of government-guaranteed bonds has provided banks with an important source of funding and has allowed banks to refinance maturing debt.
Europe’s Response to the Microeconomic Bad Debt Problem (3)

However, there have been some undesired side effects or even distortions:

- Significant tiering of spreads on guaranteed bonds paid by banks from different countries
- In some cases, banks with a better rating have paid much larger spreads than banks with a lower rating → distorting incentives
- Rescue programmes may have de facto subsidised large and complex financial institutions which were at the root of the ongoing crisis
- A large portion of guaranteed banks have been bought particularly by banks → no stimulation lending to the real economy (just lending to other banks)
Europe’s Response to the Microeconomic Bad Debt Problem (4)

Assessment/Proposals of Improvement (in Literature)

(1) take into account country-specific factors (?)

(2) create the conditions for a (credible, quick-to-implement) exit strategy in order to avoid false expectations triggering instability/ or a new bubble);

→ example for (2): ECB-announcement of November 2009

- some of the most recent initiatives include comprehensive schemes for dealing with illiquid or “bad” assets

- however: inefficiencies of some regional solutions

→ example: Germany’s Bad Bank Solution
Germany’s Bad Bank Solution

Law of 10th of July 2009

Characteristics

- Voluntary participation of systemically relevant banks
- Offloading of problematic financial assets to a special purpose vehicle (SPV) at reduced book value
- Funding through government-guaranteed debt securities issued by the SPV
- Balance sheet relief for transferring enterprise
- Repayment of the difference between the reduced book value and the fundamental value over a period of up to 20 years
- Transferring enterprises shielded from further risks
- Old owners continue to participate in all opportunities and, to a large extent, in all risks, government has only a subordinated liability, new investors shielded from risks
Germany’s Bad Bank Solution (2)

**Problem** with Germany’s Bad Bank Solution:

→ has so far been **inefficient**!

Why?

- mainly because of voluntary participation
- by now (almost) no use by the private “problem” banks with toxic assets
→ postponement of problem solution!
Other Solutions in other European countries

...........

Differences to GB/US/Japan

...........
Conclusions

1) EMU-integration and real convergence

.........

2) (Europe’s Response to the) Bad Debt Problem

.........
General Conclusions

- possible, however unlikely, that Europe will follow Japan’s way of the 1990s (L-, LL-scenario)
- possible as well that Japan will experience another “lost decade”
- always good to try to learn from (the innovations and the mistakes of) others
- perhaps Japan (Asia) could strengthen its risk management by entering a Europe-type way of economic integration process (→ paper)

- overall, Europe could learn from Japan wrt its crisis management, [‘lost decade’ was partly caused by wrong monetary policy crisis management:IMF] whereas Japan (Asia) could learn from Europe wrt its risk management [benefits and managing of economic integration]
Thank you for your attention !!
Figure 1 Trade Openness, 1997-2008

Value of exports and imports of goods and services in % of GDP
Figure 2 FDI Inflows, % of GDP 2004 (mio USD), 1999-2008

Source: IMF IFS
Figure 3 Real Convergence of GDP p.c., 1999-2006

\[ y = -0.043x + 0.4447 \]

\[ R^2 = 0.6462 \]

Source: Eurostat
Figure 3a GDP p.c. in PPT, % of EA12

Source: Eurostat
Figure 4 GDP p.c. in PPT, % of EA12

Source: Eurostat
Figure 5 Real Growth in GDP p.c., %yty, 1999-2010

*: since 2004 preliminary figures, f: forecast

Source: Eurostat
Figure 6 Selected Transition Indicators, 1989-2009

Source: EBRD
Figure 7 Old Age Dependency Ratio (%), 2000-2050

Source: UN, 2004
Figure 8 M1 Growth Rate, % month to previous year month

Source: Eurostat
Figure 9 Increase in Gross Public Debt, % of GDP 2007-2010f

Source: European Commission (2009)
Figure 10 Total Public Intervention in the Public Sector, since October 2008, % of GDP

Source: European Commission (2009)
## Figure 11 Maastricht Criteria

<table>
<thead>
<tr>
<th></th>
<th>HCPI inflation rates (annual averages)</th>
<th>Long-term government interest rates (bond yields)</th>
<th>General government deficit (% of GDP)</th>
<th>General government debt (% of GDP)</th>
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* criteria violated by non-Eurozone member  ° criteria violated by Eurozone member


Note: reference values for HCPI inflation rates and long-term government interest rates are own calculations

* countries currently (Oct 2009) in excessive deficit procedure, source: European Commission

° countries possibly facing excessive deficit procedure in near future (as of Oct 2009), source: European Commission

1) Jan-Sept 2009  2) EC forecast

back
Figure 12 Structure of Net Foreign Debt, 2008

<table>
<thead>
<tr>
<th></th>
<th>net foreign debt 1) % of GDP</th>
<th>foreign-currency denominated credit % of total</th>
<th>market share of foreign banks 2) %</th>
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</table>

1) held by banks
2) balance sheet total in % of balance sheet total of all banks in reported economy

Source: Sachverständigenrat Gutachten 2009