

# Is Poland at Risk of a Boom-and-Bust Cycle in the Run-Up to Euro Adoption?

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- This paper takes as a given that Poland will adopt the euro (perhaps in 2011) and asks how it should manage the transition.
- It focuses on the boom-bust problem that has afflicted other catch-up economies around the time of euro adoption.
  - It analyzes how and why those cycles occurred.
  - It explores the consequences
  - It asks what might have ensured superior outcomes.

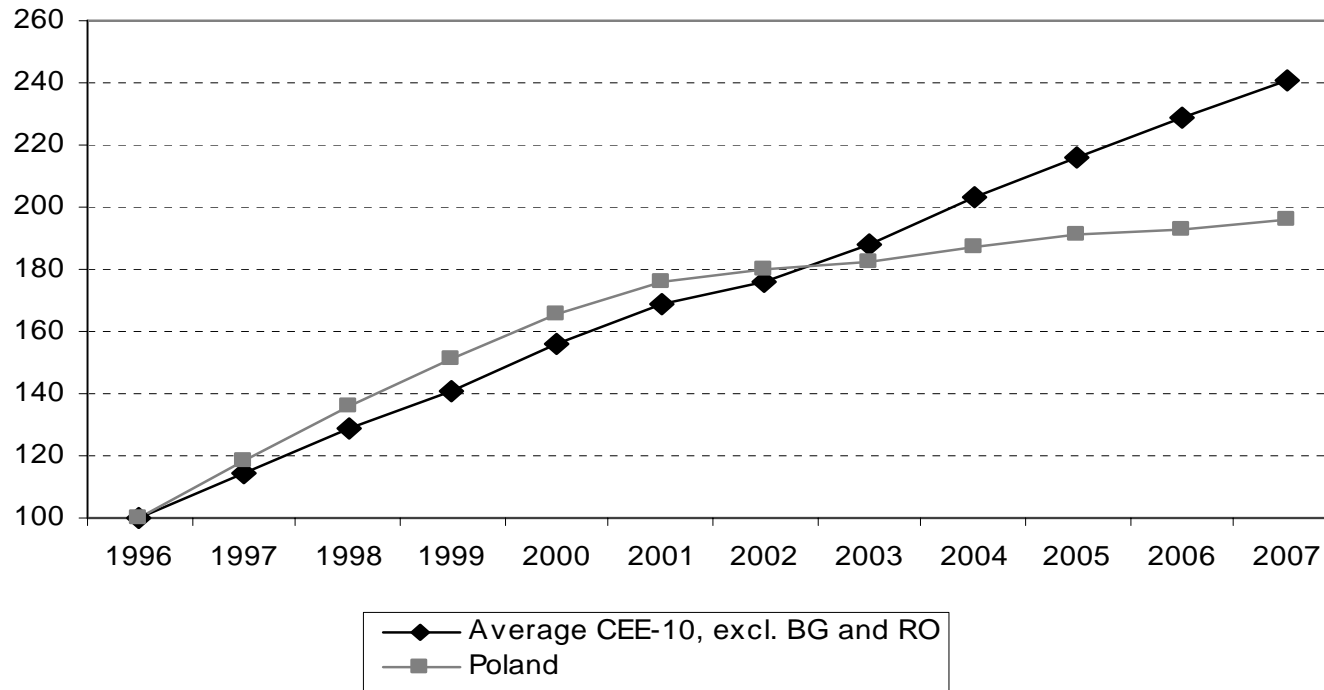
# This is not the first paper to consider the problem

- But it looks both at member states that have and have not suffered from the problem (not just at the boom-bust cases).\*
- And it considers what is unique about Poland
  - Growth of credit has been relatively subdued
  - Increase in housing prices has been relatively limited
  - Residential mortgage debt remains relatively low
    - The next slides illustrate these points.

\* Portugal being everyone's popular case in point.

# Here are housing prices in Poland and CEE-10

(notice the divergence after 2002)

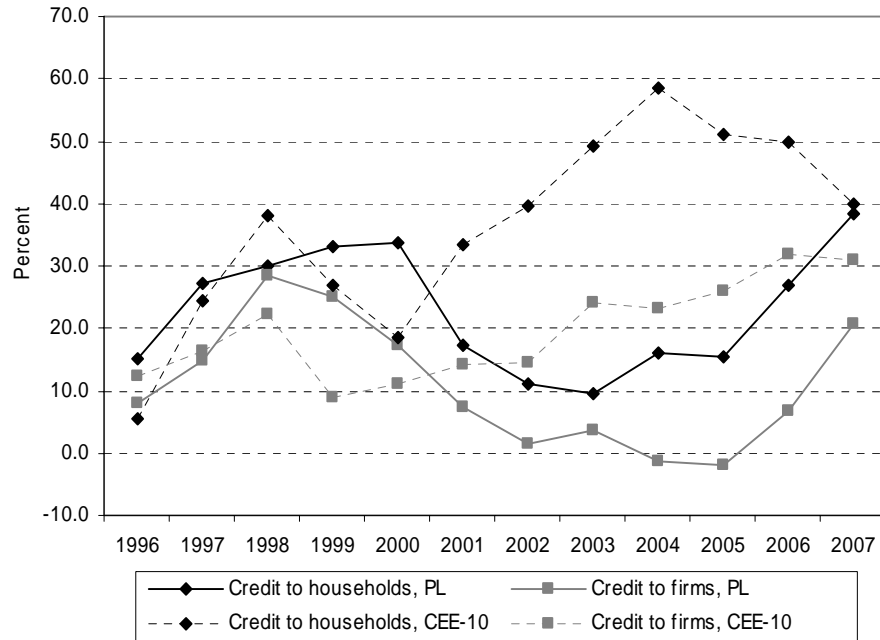


Definition: The index of housing prices is constructed as a weighted average of index of actual rentals for housing prices, index of imputed rentals for housing prices, index of maintenance and repair of dwellings prices, index of water and miscellaneous domestic services prices, and index of electricity, gas and other fuels prices.

Source: Euromonitor International (2008).

# Here is credit growth in Poland & the CEE-10

## Growth of Credit to the Private Sector by Debtor (1996–2007)



Definition: Loans to households include loans to households and non profit institutions serving households (NPISH); loans to firms include loans to non financial firms and non monetary financial firms; loans to general government.

Source: OeNB (2007).

- At 33% of GDP, private credit levels are far below those in other catch-up economies adopting the euro (45-75%)
- Growth rates of credit to firms (the rectangles) have been consistently below for Poland what they have been for the CEE-10.
- Similarly, growth credit to households (the diamonds) have been consistently below for Poland what they have been for the CEE-10.
  - Note, however, that the gap is not always what it once was (especially in the case of households).

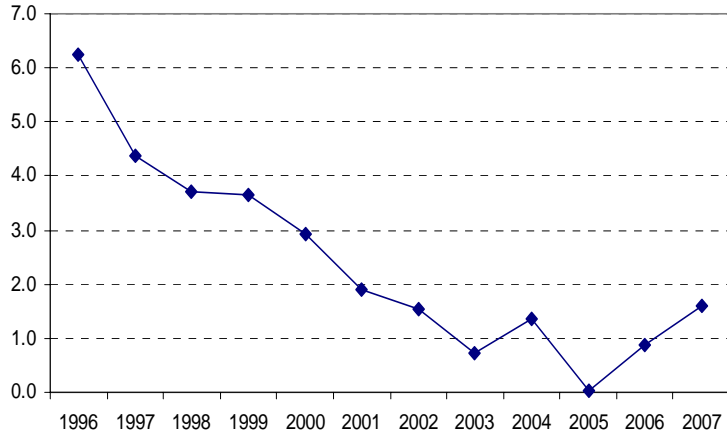
# The question is what these differences imply for the future

- Answer is not clear.
  - On the one hand, there could be something different about Poland that inoculates it from credit cycles and limits the boom-bust problem.
  - On the other hand, the very fact that credit growth has lagged (and housing prices haven't risen as elsewhere) means that there is scope for their (even more) rapid increase in the run-up to euro adoption.

# What is this boom-bust scenario?

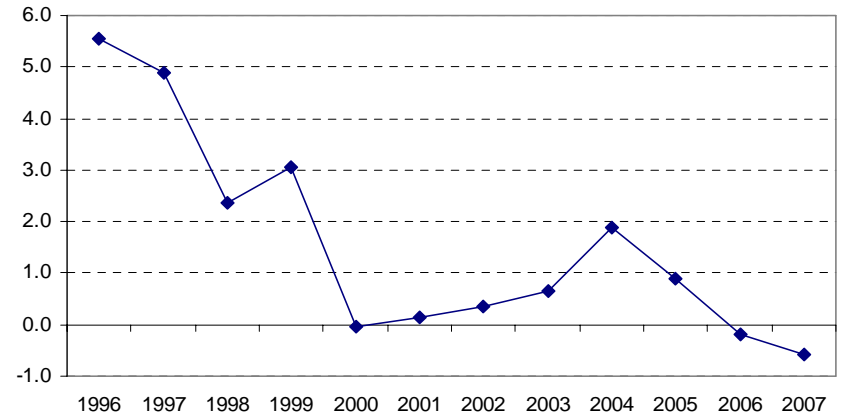
- Nominal interest rates come down as monetary policy credibility is enhanced by euro adoption.
- Inflation, by comparison, is relatively inertial.
- Hence there is a decline in real as well as nominal interest rates.
- We can see this in the next graph for four earlier euro adopters.

**GREECE**  
**REAL INTEREST RATES (1996-2007)**



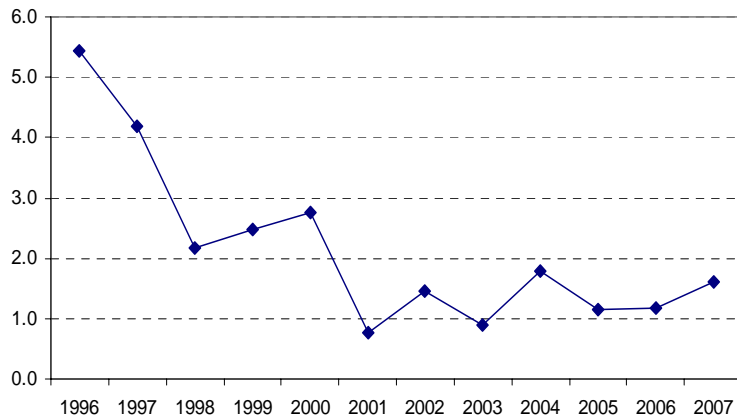
10-year Government Bond yield adjusted by inflation.  
 Source: IFS

**IRELAND**  
**REAL INTEREST RATES (1996-2007)**



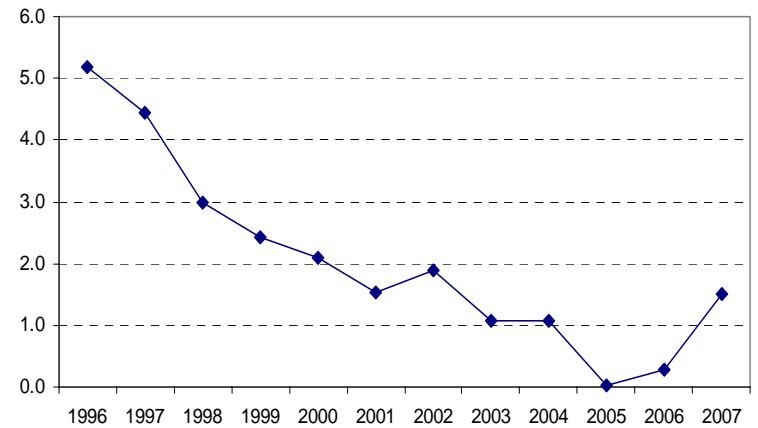
10-year Government Bond yield adjusted by inflation.  
 Source: IFS

**PORTUGAL**  
**REAL INTEREST RATES (1996-2007)**



10-year Government Bond yield adjusted by inflation.  
 Source: IFS

**SPAIN**  
**REAL INTEREST RATES (1996-2007)**



10-year Government Bond yield adjusted by inflation.  
 Source: IFS



# With real economic consequences

- Lower real rates stimulate consumption and investment.
- The resulting economic boom fuels wage demands.
- The current account gap widens, competitiveness deteriorates.
- As this momentum and exuberance build up, there can be overshooting.
- Eventually, the deterioration in competitiveness results in a sharp slowdown, a loss of consumer and investor confidence, and the need for a grinding deflation.
- “All that is left are the memories and the hangover.”

# This is the canonical case, but there are exceptions

- Slovenia did not experience this kind of boom-bust cycle.
  - Maybe because interest rates had already declined to euro-area levels well before it adopted the single currency in 2003.
- Malta and Cyprus similarly do not show severe dislocations due to this cycle.
  - Maybe because they too had relatively high incomes, well-developed financial systems and credible central banks, and again did not experience sharp declines in interest rates around the time of euro adoption.

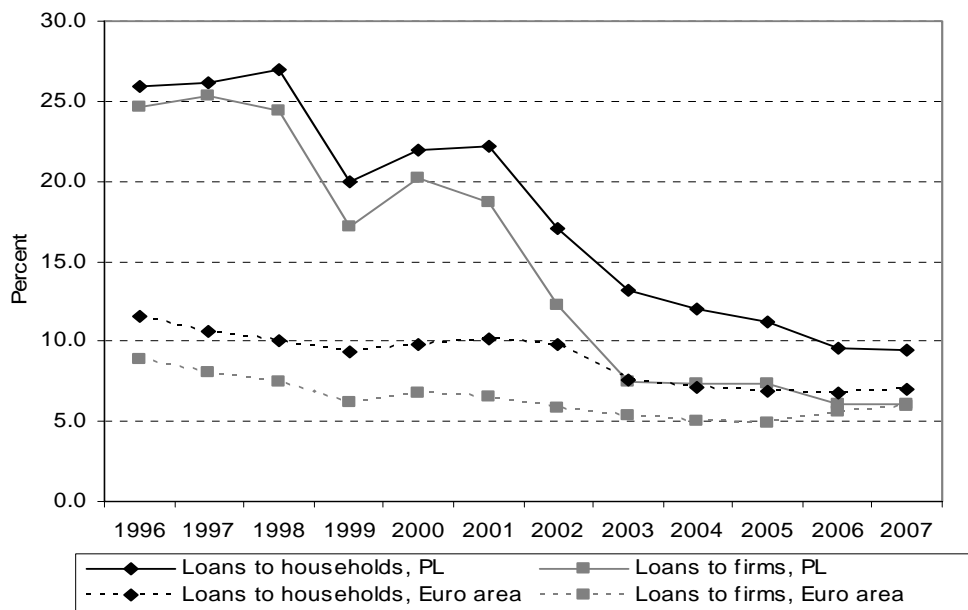
# Bringing us to our question: Is Poland at risk of this kind of cycle?

- And, if so, what form might it take?
- How big exactly might it be?

# Bringing us to our question: Is Poland at risk of this kind of cycle?

- The first step in formulating an answer is to ask what has happened to interest rates so far.
  - Here rates in euroland are the natural benchmark.

## Nominal interest rate on loans to the private sector: Poland and Euroland



- We see here that loans to firms have already come down to euro area levels.
- But not so loans to households.
- So Poland would seem to be an intermediate case.
  - (It would be useful to get more information from those present on exactly what explains this difference...)

# If there is a credit boom, how big exactly might it be?

- To answer this, we estimate a simple model of private credit/GDP levels.
  - We use annual data for 50 middle-income countries since 1996.
- This private credit/GDP ratio is taken as a function of:
  - Nominal interest rates
  - Real GDP per capita
  - The CPI inflation rate
  - An index of financial openness
    - These are the central variables used in previous studies of credit growth.
- The model fits the data well and is robust to a variety of extensions.
- Although precise coefficient estimates depend on choice of estimator, as we explain in the text.
- In particular, for 2006 Poland remains a significant outlier (see slide following).

**Table 5. In-sample Actual and Predicted Values of Private Credit to GDP for Poland, 2006 (in percent)**

	<b>actual pcgdp (a)</b>	<b>predicted value of pcgdp (b)</b>	<b>absolute deviation (a-b)</b>
1a	33.29	41.22	-7.93
1b	33.29	59.71	-26.42
1c	33.29	41.85	-8.56
2a	33.29	43.27	-9.99
2b	33.29	60.58	-27.29
2c	33.29	43.61	-10.32

Source: See text.

# Our most reliable estimates show the private credit/GDP ratio to be 10 percentage points “too low”

- Assume 5 per cent growth of nominal GDP.
- Assume that this 10 per cent of GDP shortfall is eliminated in two years.
- This then suggests nominal credit growth of a bit more than 10 per cent per annum.
- This is fast, but not as fast as what we have seen in other CEE-10 countries in recent years. It actually is somewhat slower than what Poland experienced in 2006-7.



# We can also think about the statistical future in two other ways

- First, we can mechanically extrapolate the 2006-7 growth rate of credit.
  - This brings us to ratio to GDP of 58 per cent in 2010 (up from 33 per cent in 2006). (first column, next slide)

**Table 6. Linear Extrapolation of Credit/GDP Ratio and Forecast Based on Estimated Relationship and Linear Extrapolation of Independent Variables (in percent)**

<b>extrapolated pcgdp 2010 (a)</b>	<b>predicted value of pcgdp (b)</b>	<b>absolute deviation (a-b)</b>
58.28	48.47	9.80
58.28	83.37	-25.09
58.28	49.88	8.40
58.28	52.21	6.07
58.28	85.20	-26.92
58.28	52.40	5.87

**Source: See text.**

- Second, we can assume that the independent variables continue to grow as in recent years, extrapolate, and use our estimated coefficients.
  - This yields a predicted ratio to GDP for 2010 between 48 and 85%, depending on the point estimates you prefer. (second column next slide)
  - Our preferred model (column c) yields a ratio of 52 per cent in 2010. Again, this suggests an annual average rate of nominal credit growth of around 9-10 per cent.
    - Substantial but not highly alarming by the standards of other catch-up economies adopting the euro.
    - Maybe now too high in light of recent events?

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- So there is a range of forecasts. Most of them point to substantial but not breakneck credit growth.
- Not for the first time, econometrics fail to answer the question definitively.
- So we look at it also from an institutional point of view. Specifically, we consider the institutional determinants of three aspects of the response:
  - Will wage discipline be maintained?
  - Will the authorities resist the pressure to increase public spending?
  - Will regulators restrain excessive financial enthusiasm?

# Will wage discipline be maintained?

- Poland appears to have relatively competitive and flexible labor markets.
- Union density is low by EU standards.
- Employment protection legislation is modest.
- Wages in different sectors move independently.
- There appears to be a low correlation between public and private sector wages, reflecting differential demand conditions.
  - All this is discussed further in the text. The analysis there suggests that Poland is in a relatively good position compared to, inter alia, Portugal, to restrain wage growth in the boom and adjust in the event of a bust. (Emphasis on the qualifier “relative...”)

# Will government spending be restrained?

- Poland receives reasonably positive ratings according to the standard measures of the design of fiscal institutions and procedures to limit common pool problems.
  - Parliament cannot change the government's deficit target.
  - The government can call for a new election if parliament fails to adopt a budget
  - The finance minister has the power to block expenditures when the deficit widens unexpectedly.
  - So far so good. But:
    - The finance minister, to act, requires the consent and support of his cabinet colleagues.
    - Polish finance ministers have repeatedly resigned or been dismissed for failing to get their cabinet colleagues to agree on spending limits.

# Will regulators rein in the banks?

- Regulatory record is not too bad.
  - Polish banks are well capitalized.
  - FSA has required fairly prompt recognition of bad loans.
  - It has promulgated a set of best practices for mortgage-related lending.
  - So far so good. But:
    - One reads of complaints about uneven application of regulations.
    - And clamping down on bank lending may just drive intermediation into the nonbank sector, where oversight is less extensive.



# Conclusions

- That Poland is an outlier in terms of credit growth increases the danger of a boom if one believes in mean reversion.
- On the other hand, that interest rates have already come down part way to euro-area levels suggests that there is less scope for a further fall as euro adoption approaches.

# Conclusions

- The broader literature also points to two sets of factors, the first which makes the danger of an unsustainable boom more immediate.
  - Continuing weaknesses in the supervisory framework
  - Weakness of the finance minister in the budget making process.
- The second set makes the danger of a boom more remote.
  - Relatively effective prudential supervision to date.
  - Existence of relatively competitive labor markets.

- Bottom line: no one has a crystal ball.
- The best counsel under these circumstances is vigilance.