



CROATIAN NATIONAL BANK

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Comments on  
Eduardo Borensztein, Marcos Chamon, Olivier Jeanne, Paolo  
Mauro and Jeromin Zettelmeyer  
Sovereign Debt Structure for Crisis Prevention

Maroje Lang\*  
11th Dubrovnik's Conference

\*Disclaimer: All remarks are author's and do not represent those of the CNB

# Main points of the paper

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- could the sovereign debt be used for crisis prevention
  1. Discusses how the structure of existing sovereign debt could propagate/prevent a possible crisis
  2. Explores whether existing debt instruments could be used for crisis prevention
- NEW PROPOSALS
  3. Explicit seniority in privately held sovereign debt
  4. Indexation to real variables to ameliorate the effects of crisis
- survey of investors about use of new instruments

# Few points

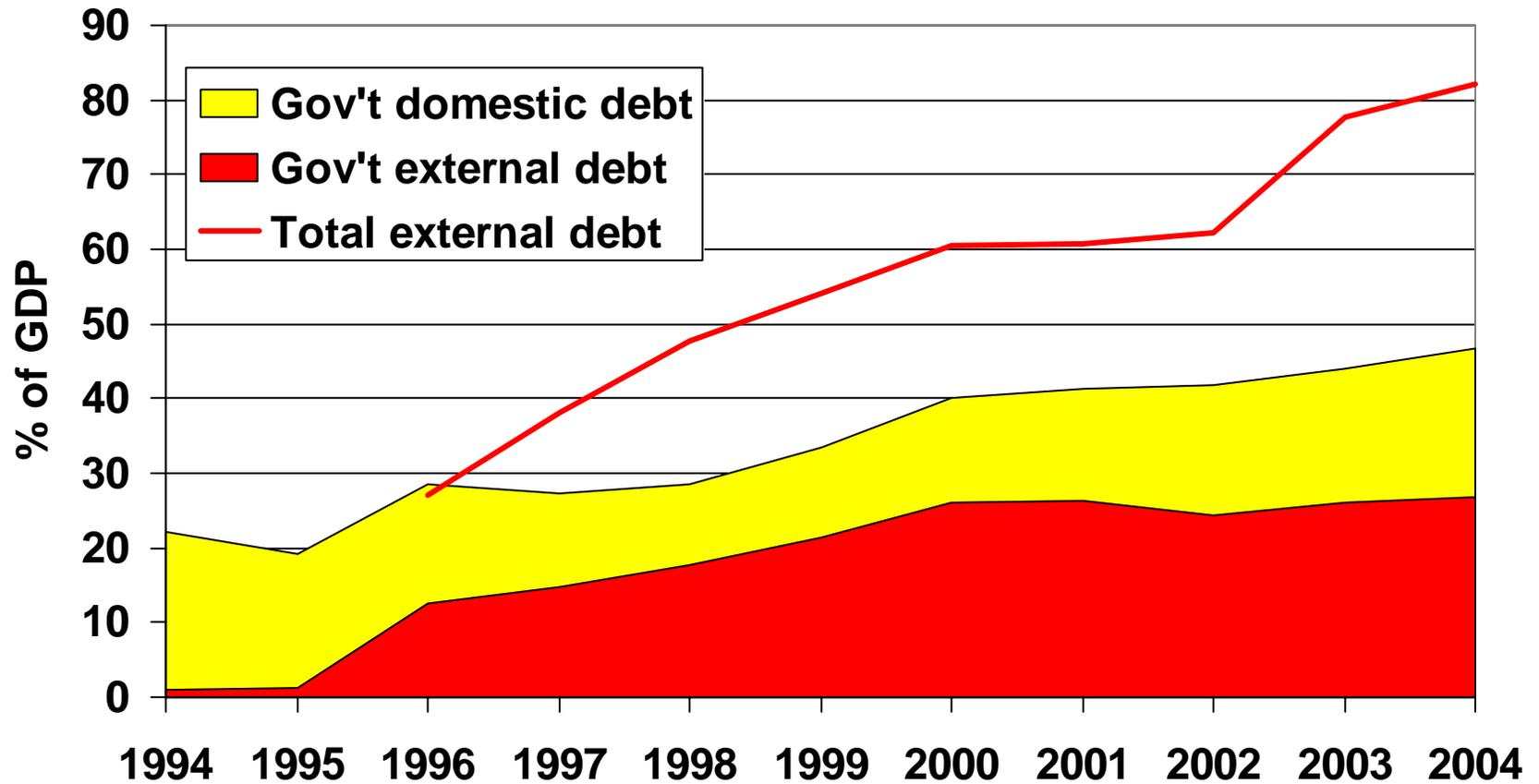
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- "Paper not strictly academic"
- Aims to initiate discussion

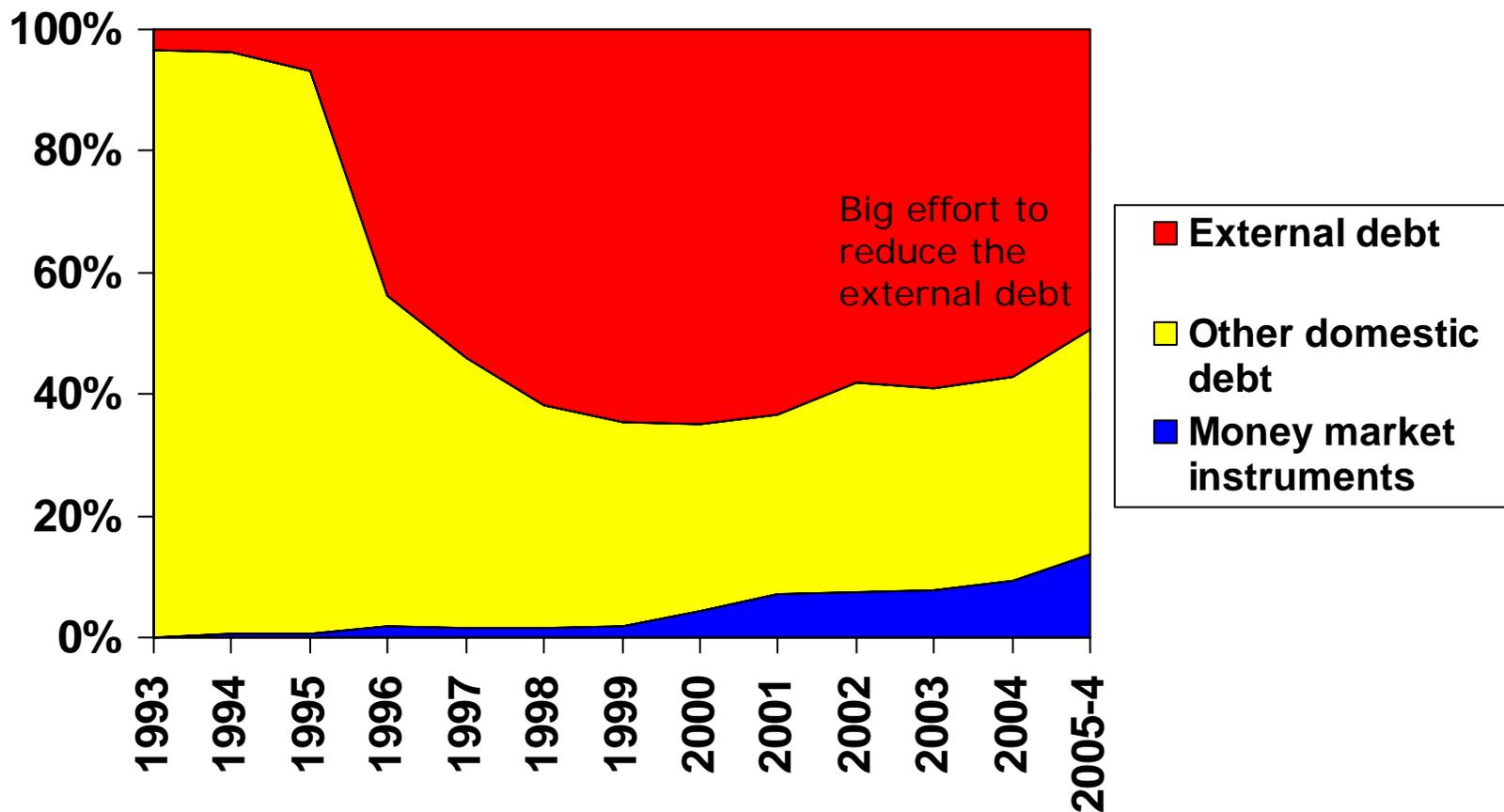
=> How does it apply to Croatia?

- current debt structure
- attractiveness of indexation (CPI vs. real indexation)
- debt seniority not discussed

# Croatian Sovereign and Foreign Debt



# Structure of Croatian Government Debt - domestic vs external



# Currency structure of Croatian government debt (as of April 2004) - estimate

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- mostly in foreign currency (or indexed to fx) ~ 80%
  - almost entire external debt (~ 50% of total debt)
  - most domestically issued bonds (indexed to fx ~ 22% of total debt)
  - domestic banks credits - (fx 6%, indexed ~ 3% of total debt)
- some domestic currency ~ 20%
  - two bonds (5 year maturity ~ 4% of total)
  - domestic banks credits (2% of total debt; 2/3 under 1 year)
  - money market instruments (short term - 14% of total debt)

# Structure of Croatian government debt

## – some conclusions

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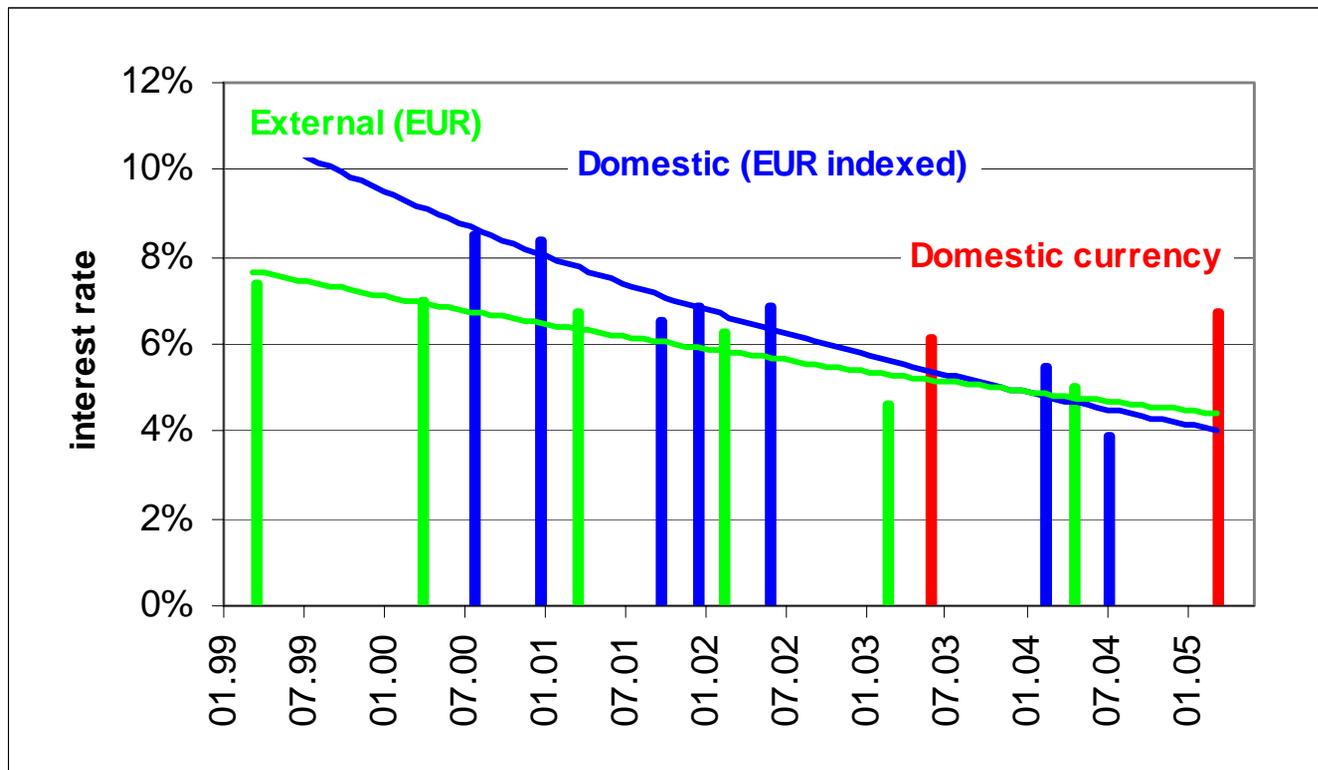
- large currency exposure (eurisation of Croatian economy)
  - domestic debt small
    - only 40% of which in domestic currency
    - mostly short term 80%
  - current effort of switching from external to internal debt only partially prevents crisis
    - + less dependence on foreign capital (?)
    - + repayment in kuna
    - but debt burden grows with depreciation (indexation to Fx)
    - domestic currency debt mostly short term
- ⇒ how to encourage long term debt in domestic currency

# Indexation to CPI ?

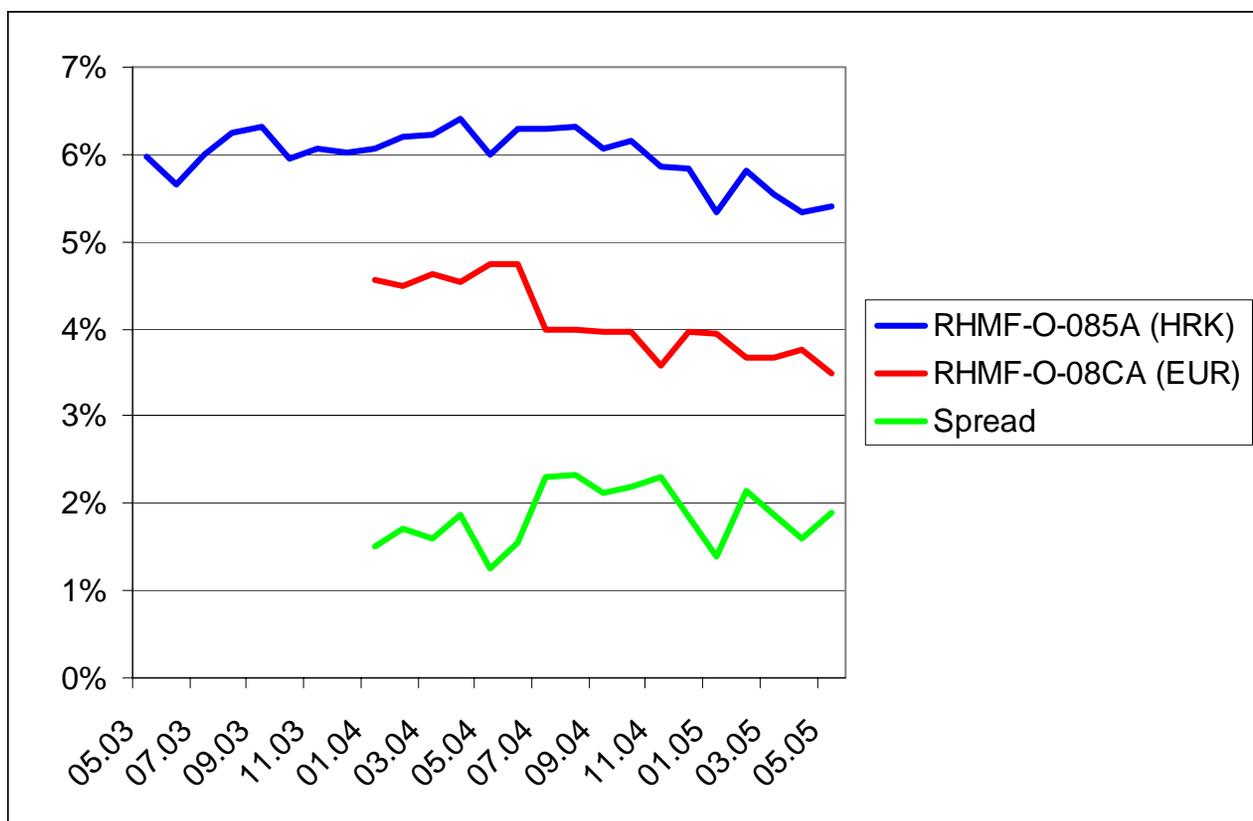
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- way to promote long term debt in domestic currency
  - domestic pension funds (long term liabilities in domestic currency) -
    - currently have large currency exposure (many assets in Fx)
- good examples exists
- “minor” problems:
  - encouraging price indexation - superior to present indexation to Fx
  - nominal convergence ?
- good idea to encourage borrowing in domestic currency  
... and reduce price premium

# Price of Croatian government bonds (at issuance date)



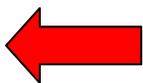
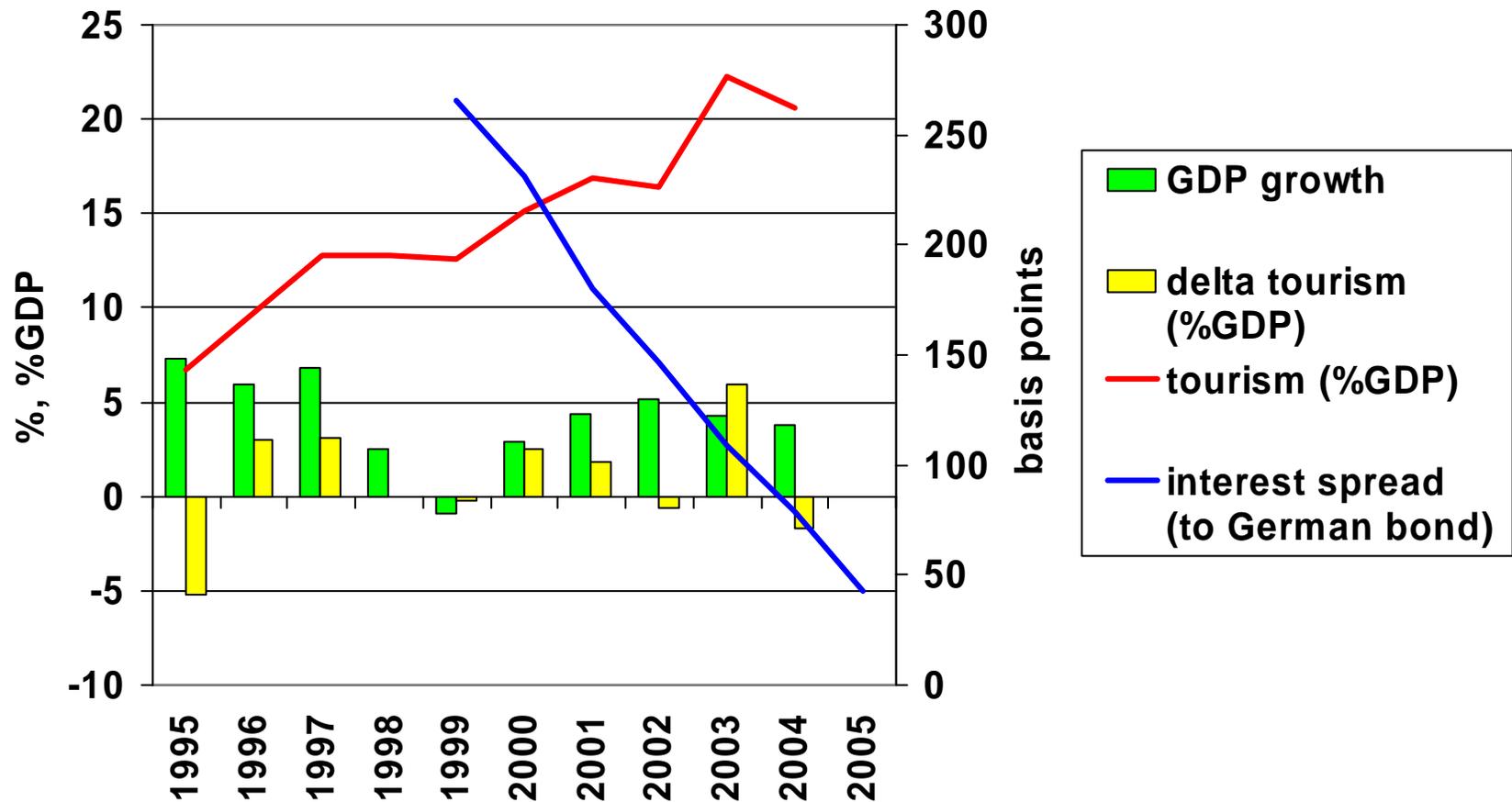
# Premium for borrowing in domestic currency: Yield to maturity on domestic market



# Real indexation ?

- insurance against "bad times" and procyclicality (due to debt eurisation)
- interest in investing in emerging markets (gain from real convergence)
- which variable best for Croatia ?
  - GDP 
  - tourism exports - major Croatian export (inflow of Fx)
- bigger problems than with CPI indexation
  - incentive to misreport/bias data – even in advanced countries (creative accounting)
    - ... but current circumstances also create perverse incentives ? ("cosmetics")
  - short history – difficult to estimate potential growth (4,2%?, postwar period?)
    - (what is the cost of making a mistake ?)
  - willingness to pay insurance premium and risk aversion ? – political cycle?
  - more international experience / explicit demand

# Tourism exports and GDP vs. interest spread



# Conclusion

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- structure of Croatian government debt could improved
- growing interest in long term debt in domestic currency
- CPI indexation could support borrowing in domestic currency and make it cheaper
- ... but insurance premium? – size & acceptance
- Real indexation – to GDP despite strong tourism sector
- ... interesting but less than CPI indexation
  - more experience needed /investors demand