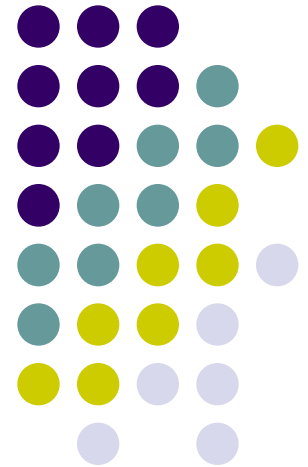


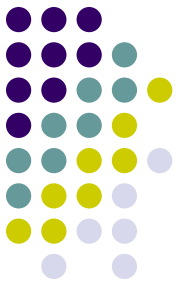
The Housing Finance Sector in Indonesia

Marja Hoek-Smit
Wharton School
University of Pennsylvania



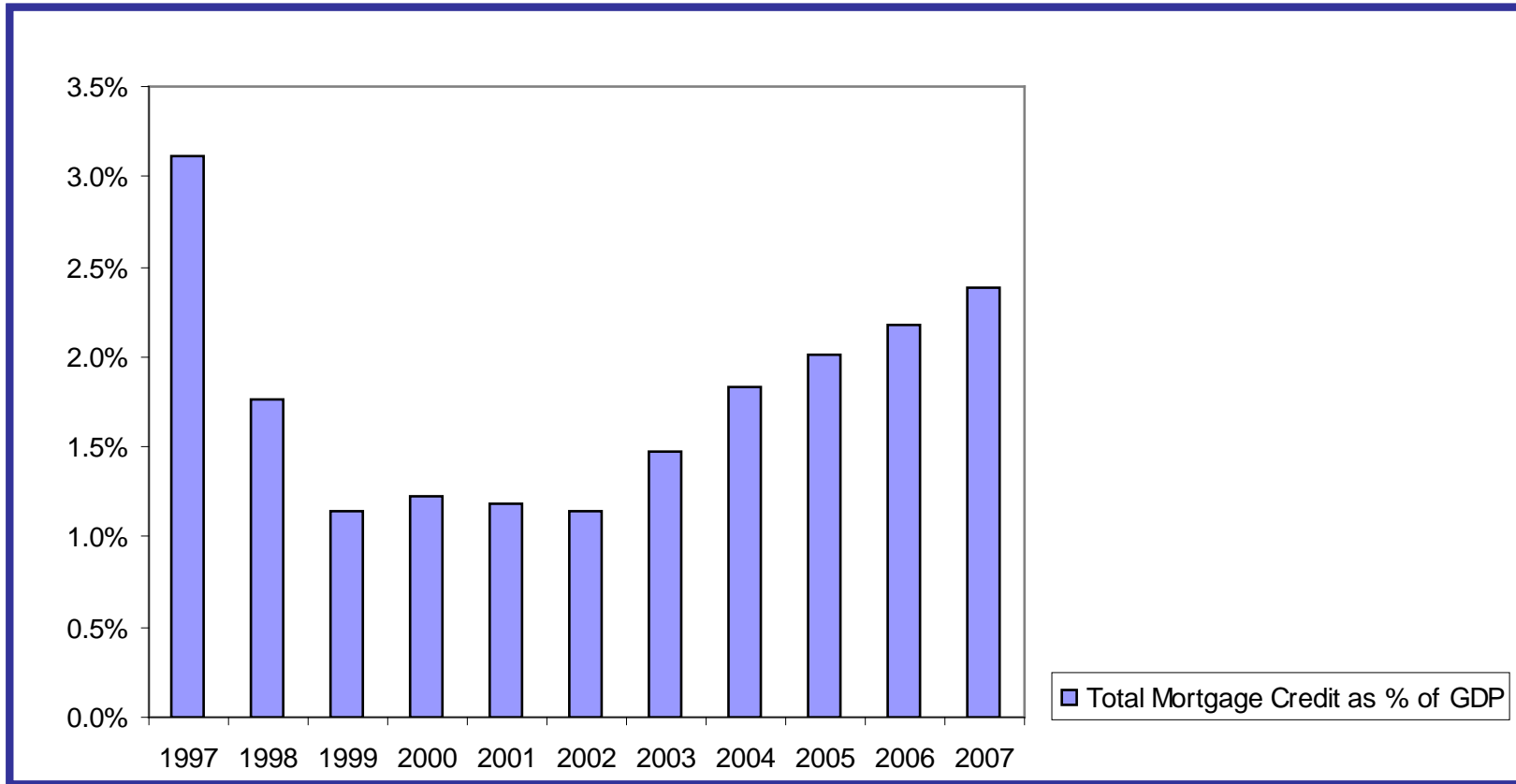
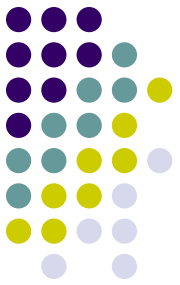
Indonesia Jakarta November 9 2008

Indonesia's Mortgage Market is Maturing and Expanding



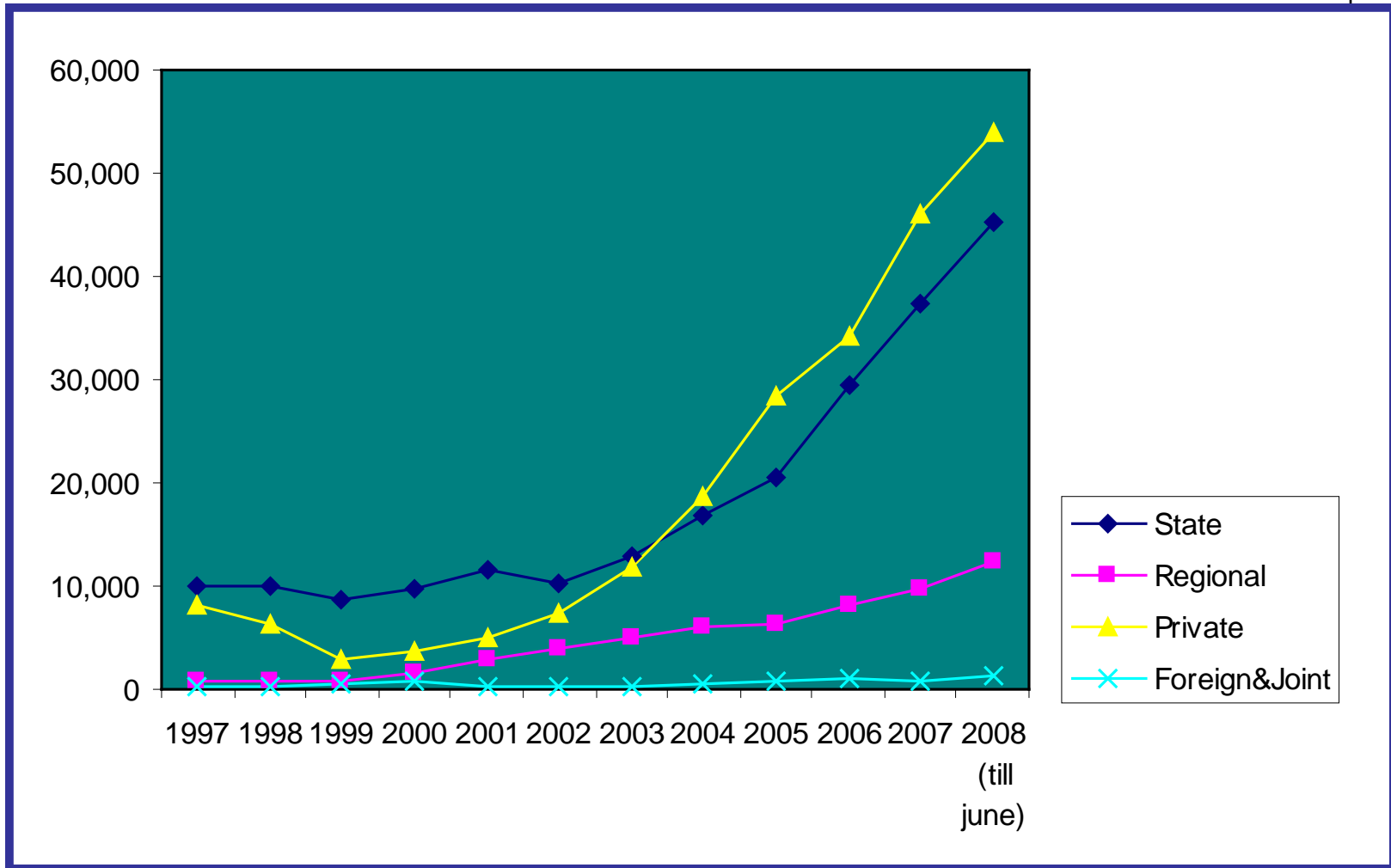
- **State lenders** dominated the sector until 1998
 - Major implicit subsidies in the system
- But **private sector** has recently overtaken state sector
 - Competition on rates, products, services, cross-selling
- **Mortgages are growing as % of total bank credit**
 - Mortgage portfolio growth of 30% to 40% from 2002-06 (total bank credit at 20% in 2004/05)
 - Reaching >10% of total bank credit
- Mortgage loans outstanding are still **only 2.4% of GDP**
 - Hong Kong 44%, China 10%, Thailand 15%

Total Mortgage Credit as % of GDP

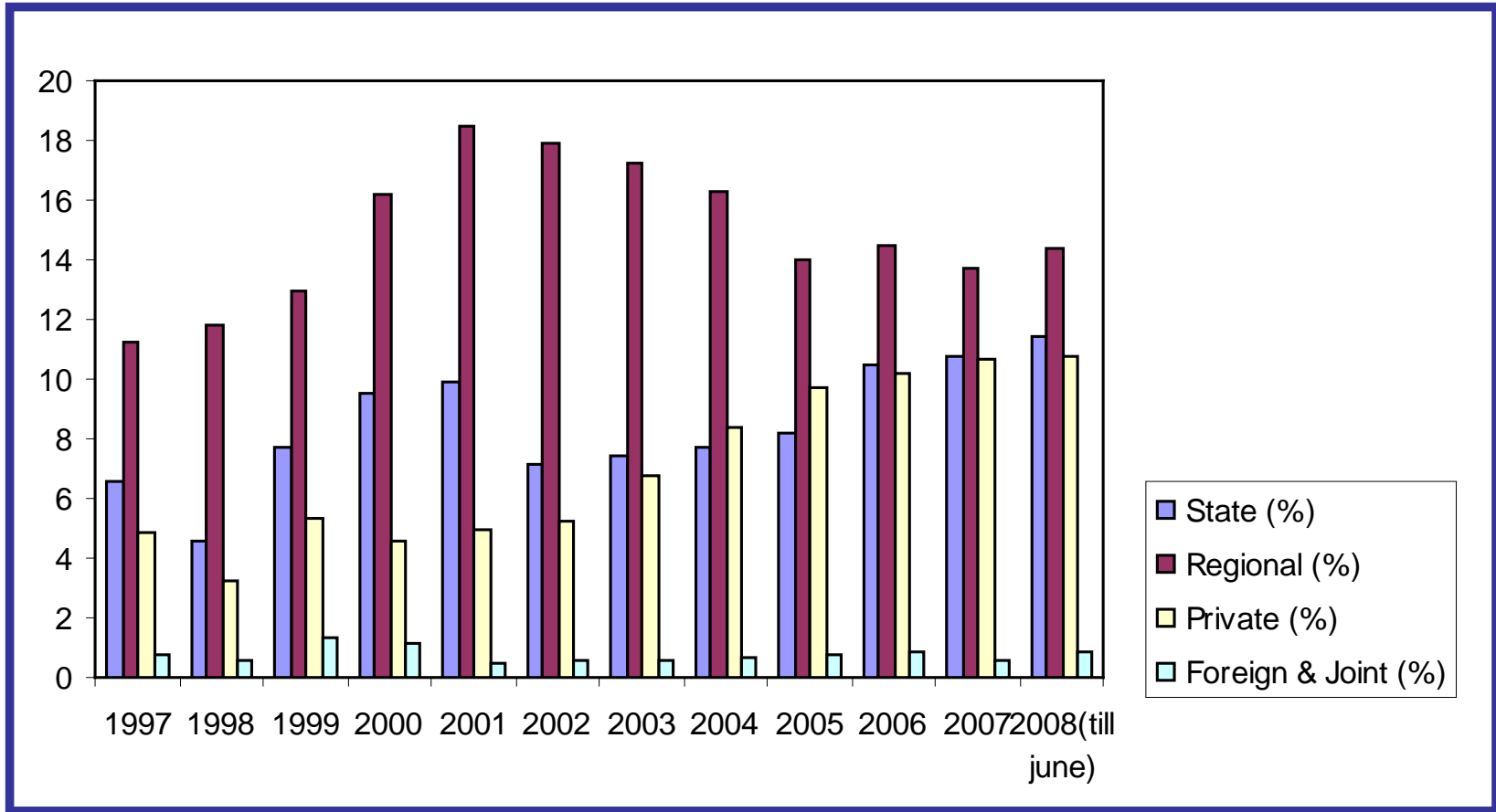
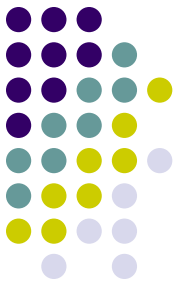


Source: Calculated by author from Bank of Indonesia data . 2008

Growth of Total Outstanding Mortgage Credit by Bank Type (in billion of Rp)

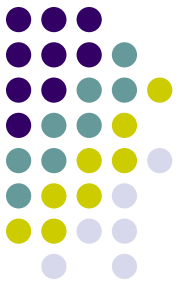


Mortgage Credit is a Small but Growing Percentage of Total Outstanding Bank Credit



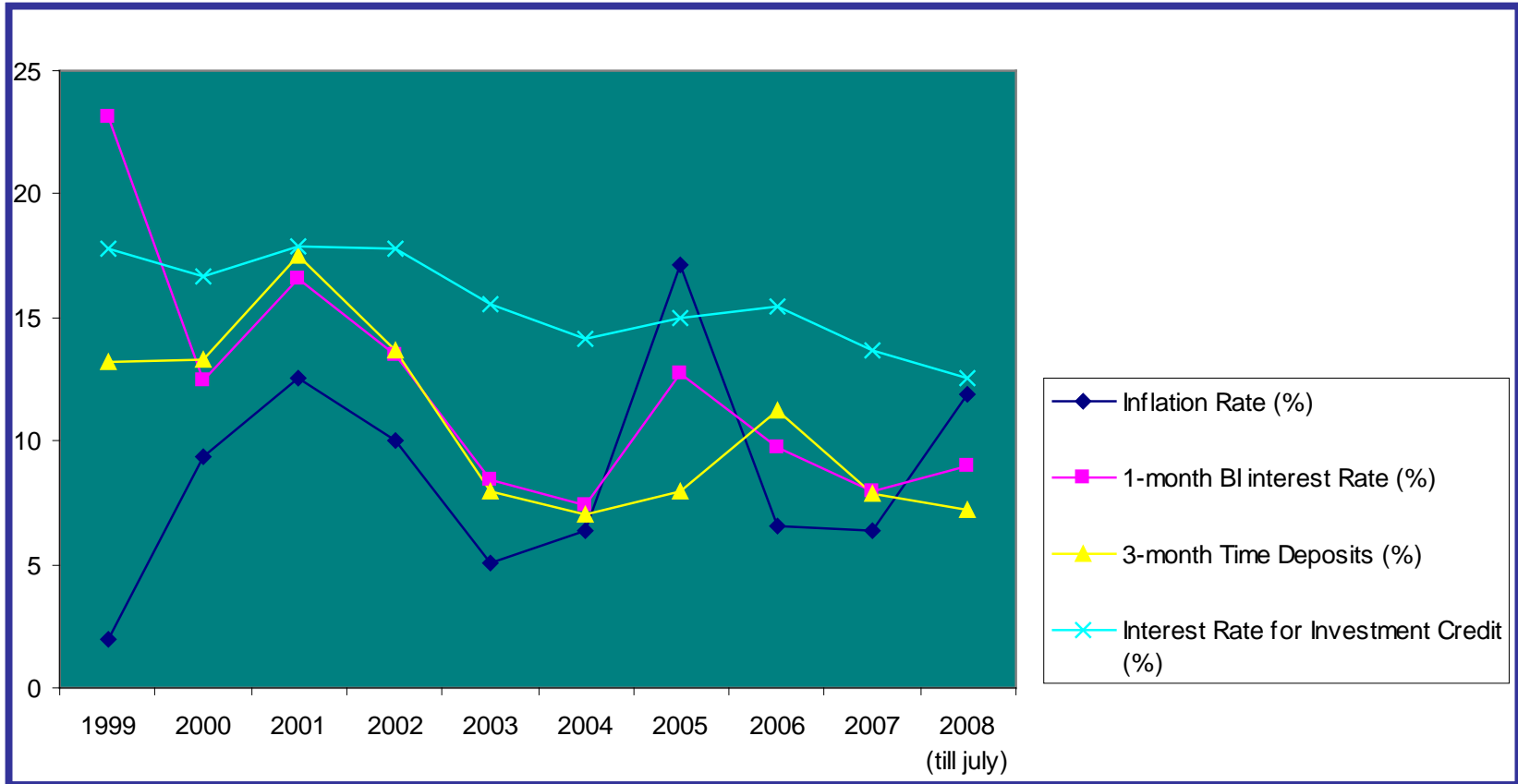
Source: Calculated by author from Bank of Indonesia data. 2008

Drivers of Growth



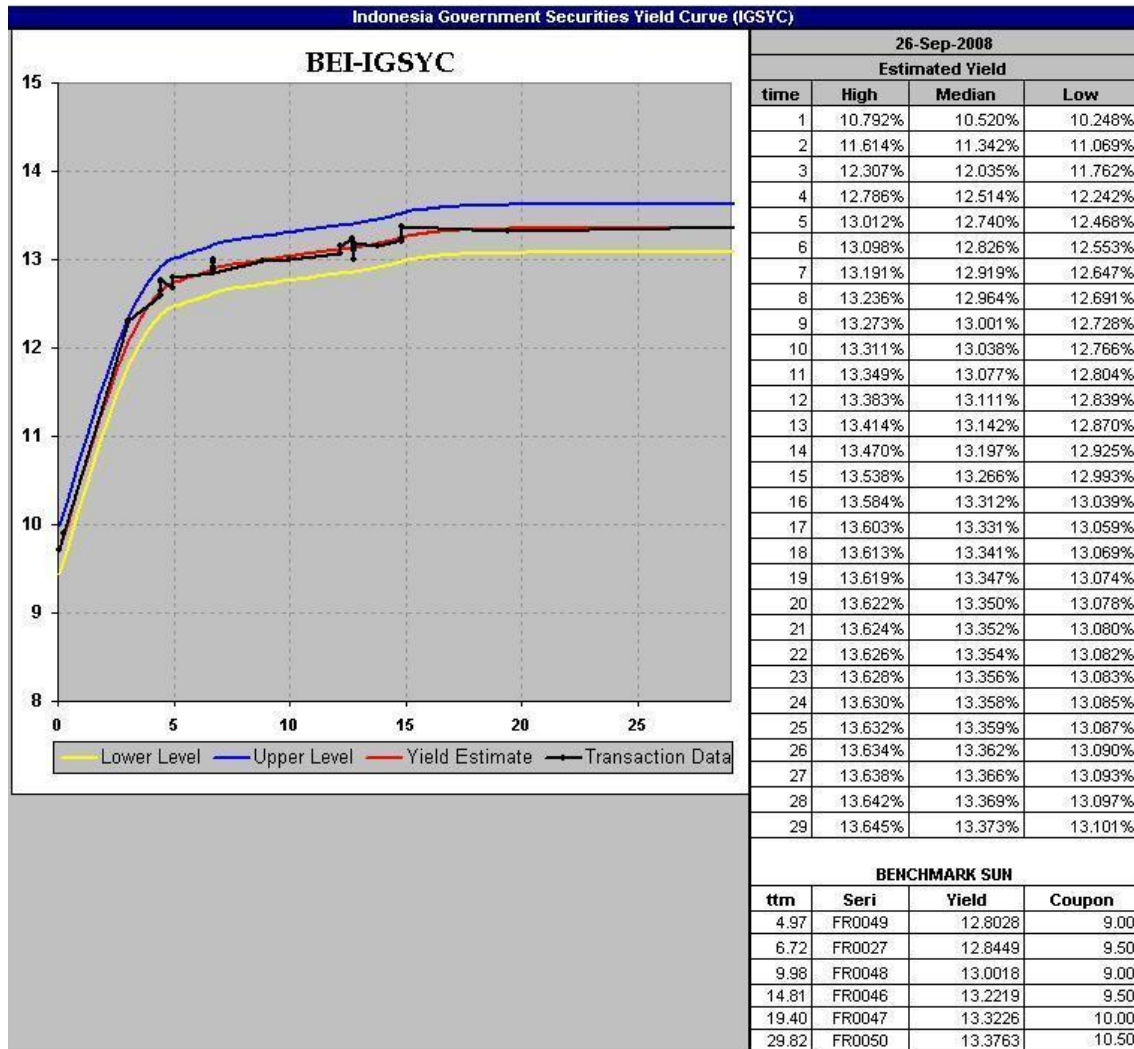
- **Positive macro economic climate**
 - GDP growth at +/-6%
 - But inflation is increasing, around 12% + volatile
- GDP growth allows for **credit expansion**
 - Improved regulation, safety net lowers risk
- **While interest rates have come down they are still high**
 - one month SBI 8.0%, down from 17% in 2001
 - +/- 12.5% mortgage rate, down from > 20% in 2001
- Development of **capital markets**; yield curve out 18 yrs
- **Improved legal environment**
 - property registration >85%, foreclosure process shortened
- **Stable house price environment**
 - fairly elastic housing supply through **informal sector**
- **Growing housing demand**
 - population 234,693,997 and real income growth (10%) in 2007

Inflation increasing and interest rates may follow

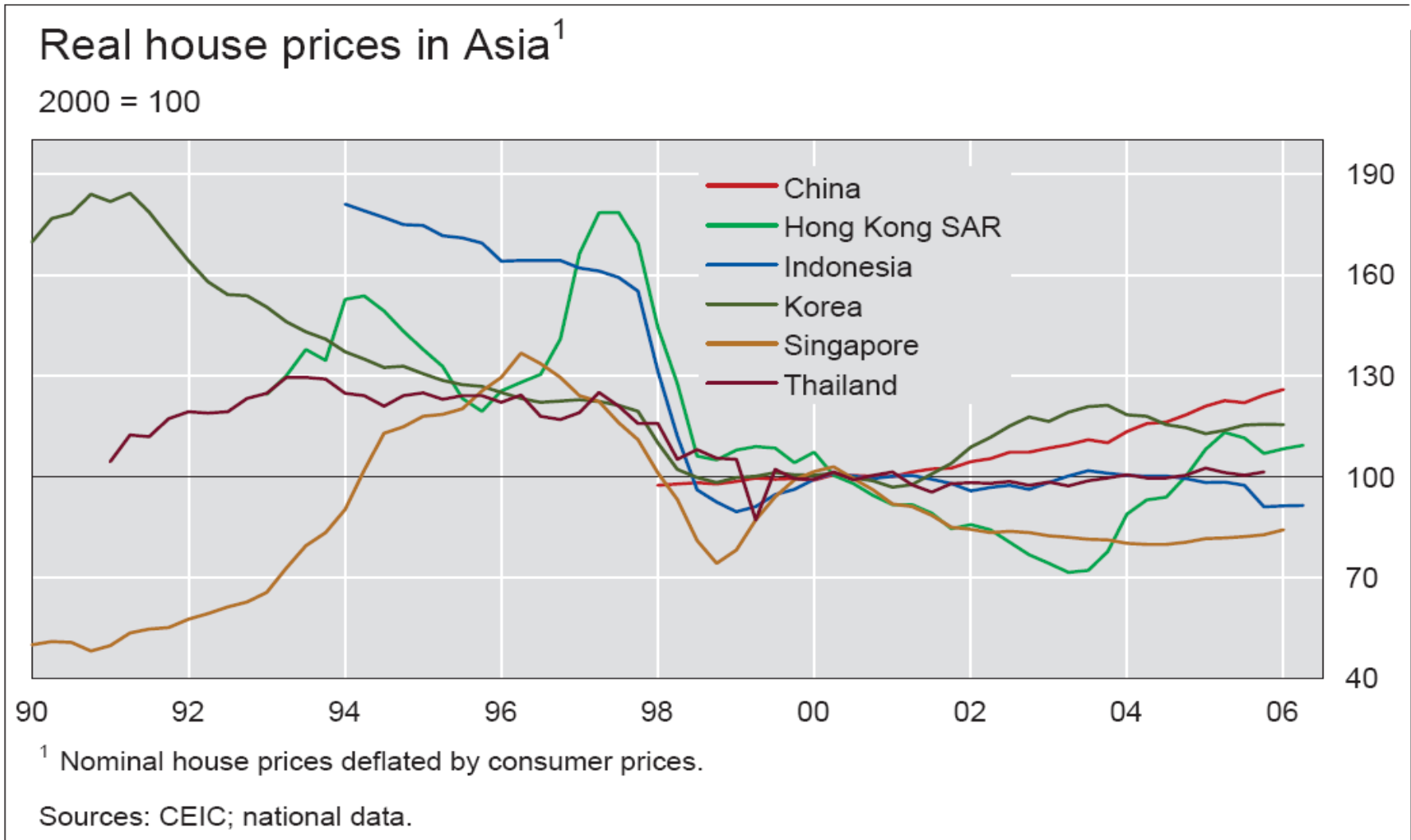


Source: Calculated by author from Bank Indonesia data. 2008

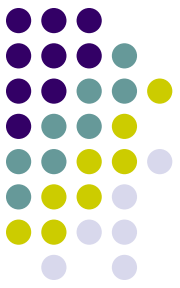
29 Year Yield Curve on Basket of Govt. Bonds: Benchmark for Long-term Mortgage Pricing /15 yr risk free =13.26%



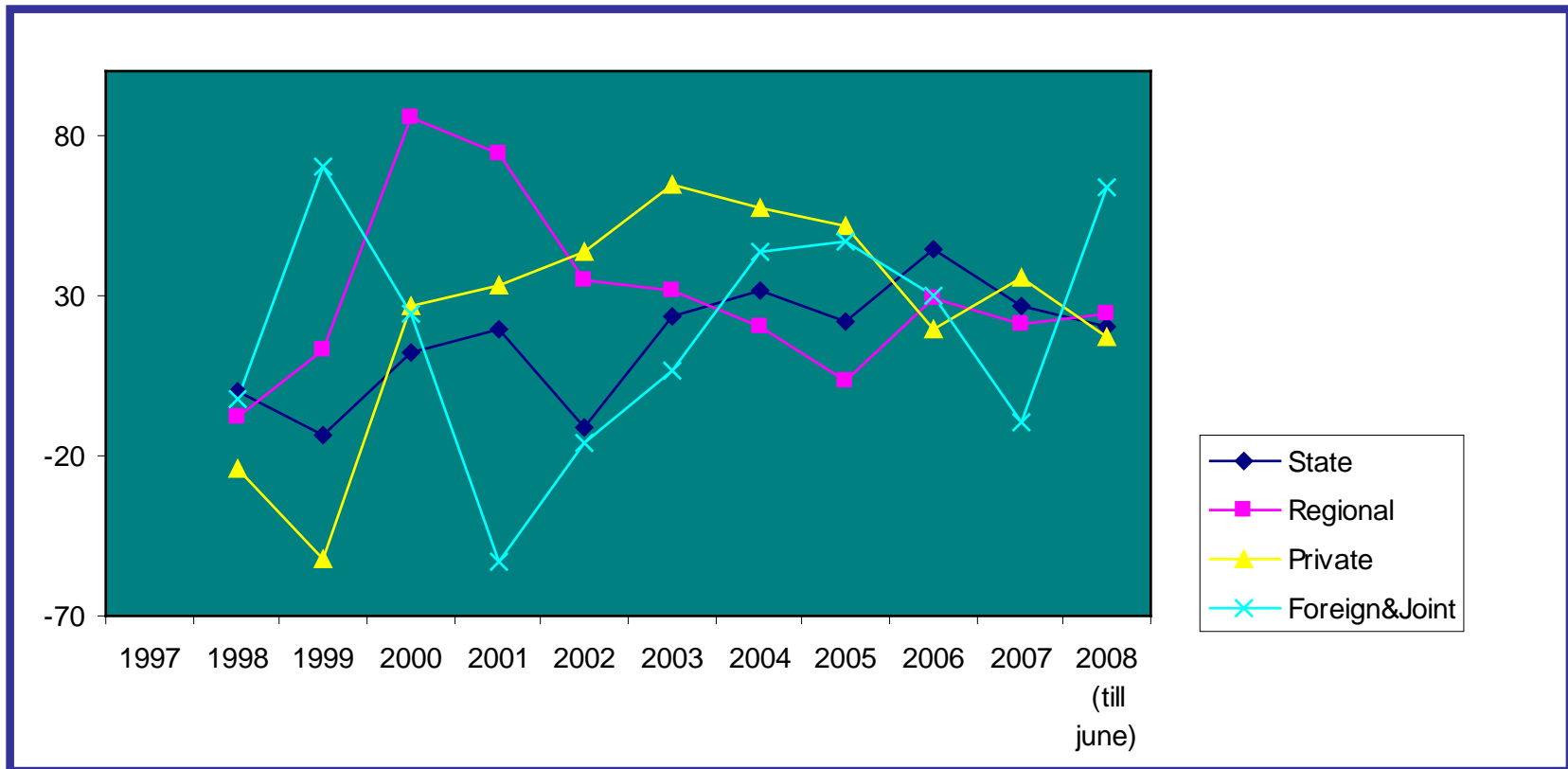
Indonesia's Formal Real House Prices Have Remained Stable since the Crisis



But Growth of Mortgage Lending Flattened after 2005 Inflation Spike and current inflation may have same effect



Annual % Growth of Total Outstanding Mortgage Credit by Bank Type



Specific Risks in Indonesian Mortgage Sector: **Interest rate risk**



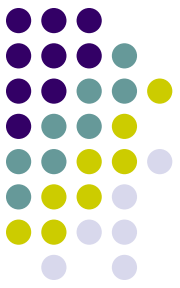
- Short-term – long-term mismatch; **not** necessarily a problem for banks using **Adjustable Rate Mortgages**
- Volatility /spikes in rates **are a problem:**
 - **transferring interest rate risk to borrower** causes increased **credit risk**, as in 2005
 - decreases supply and demand for mortgages
- **Fixed Rate Mortgages** decrease credit risk but require long-term funding (or sale to investors) to limit lender interest rate risk (consumers appear willing to pay for that)

Specific Risks in Indonesian Mortgage Sector: **Interest rate risk**



- SMF established to provide **longer term funding** but...
 - Has only recently obtained approval to do long-term lending (15 yr)
 - Lacks access to competitively priced funds (no guarantees; tax issues)
 - Lacks special standing as regular debt issuer
- SMF introduced **standardization** of documentation, underwriting, servicing to facilitate long-term refinancing of loans, future securitization (and mortgage insurance). Enforced?

Specific Risks in Indonesian Mortgage Sector: **Credit risk**



Issues:

- Fear of non-payment linked to **ARM** instrument makes lenders conservative in underwriting
- No systems for underwriting/servicing creditworthy **informally employed** (74% of working people)
- Perceived **collateral weakness** limits lending to new housing and existing housing in good neighborhoods
- **Foreclosure** procedures improved but still inefficient

=> **Limits expansion of mortgage sector**

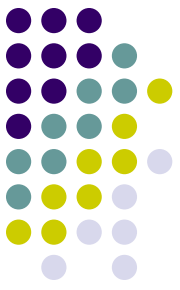
Specific Risks in Indonesian Mortgage Sector: **Credit risk 2**



Possible solutions/questions for discussion?

- **First: improve credit information**
 - Will private sector come together to create credit bureau?
 - Has BI regulated sharing of credit info for **all** credit providers?
 - Consumer education/ information systems widely used?
- **Second: improve housing market/collateral information / use of appraised value in LTV calc**
- Consider establishment of **mortgage insurance**
 - Are lenders interested in MI; will they expand lending to underserved if available?
 - Will cost be partly recovered in lower risk premium/ elimination of requirement for life-insurance?
 - Which institution to initiate MI; SMF? private sector interest?

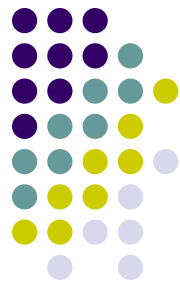
Transaction Costs are High in the Mortgage Sector



- Net interest margins are high 7-8% because of risks and **transaction costs incurred by banks**
- Direct **upfront cost to borrowers** are high –
 - Rp 2.5 to Rp.3 million in 2005; 2 to 3 times the median income level!
- **Taxation on transfer** of property is high
- Bringing transaction costs down is high priority to make lending more affordable and market more efficient
- Who deals with these different cost components? SMF, MOF, BI, MOH, BPN? Coordination?

Real Estate and Transaction Costs Are High Relative to Other Countries:

Average total transaction costs are 12,5% in Indonesia and 2.2% in Singapore, excluding VAT



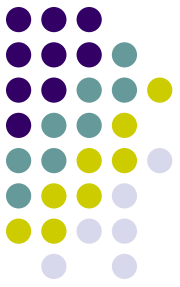
Real estate taxes and transaction costs in Asia					
As a percentage of property value					
	Property tax ¹	Stamp duty and legal costs	Deeds and transfer tax	Sales tax or business tax	Other
China	0.96	0.13	3	5	0.05–0.35 ²
Hong Kong SAR	0.7	1.25–5.75			
Indonesia	0.1–0.2	1–2	1	10	
Korea	1	0.23–0.83	4		0.6 ³
Singapore	0.2	1–3			
Thailand	0.6	0.50 ⁴	2	3	1.05 ⁵

¹ In Hong Kong SAR, Singapore and Thailand, the property tax is calculated based on the annual value (rents), which is assumed to be 5% of the property value. ² City maintenance and construction tax. ³ Including 0.2% rural development tax and 0.4% education tax. ⁴ The stamp duty is waived if the special business tax (3%) is paid. ⁵ Including 1% withholding tax and 0.05% income tax.

Sources: World Bank; Jones Lang LaSalle (2006a); author's calculations.

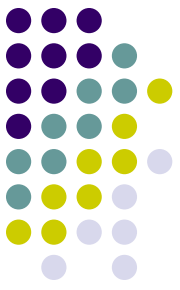
Table 2

Expanding Demand through Subsidy Programs



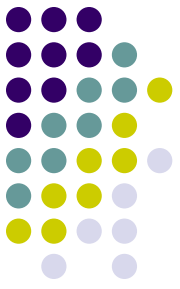
- Current Demand Subsidies address two frontiers in the housing market:
 - **Expand mortgage market** for new housing (upfront subsidy and buy-down) for loan amounts <Rp 36 million
 - **Expand micro-lending** for home-improvement and upgrading

Subsidy Programs: Mortgage Linked



- Banks, other than BTN, do not participate in mortgage subsidy scheme? Why?
 - **Gap** between current market (Rp 75 to 100 million loan) and ceiling of subsidy program (Rp36 million) too large?
 - **Buy-down not feasible** in ARM environment; subsidy program fixes buy-down IR schedule=>interest rate risk!
 - How does BTN handle **interest rate risk**?
 - **Upfront subsidy misused?** not liked by BTN because borrowers can refinance at competing banks
 - But other banks/Finance Companies prefer upfront subs
 - Need for **Mortgage Insurance** to make scheme attractive?

Subsidy Program: Micro lending linked



Has micro loan program taken off through Fin Cos?

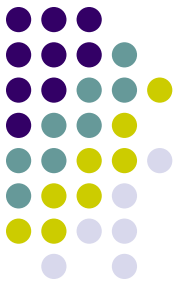
- But at what interest rates? Does subsidy increase new entries in the market, rate competition?
- Can FinCos handle medium term loans with current funding source? Or are loans very short-term? limits use for housing?
- Who regulates, supervises FinCos? Provides TA on Mortgage Lending? SMF?

Do BRI and other micro-lenders participate?

- Do they require insurance / guarantee?
- Access to liquidity funding?
- Individual or portfolio guarantees?

As with all subsidies, the devil is in the details!

Other Important Issues



- Supply side constraints in housing production
 - Developer finance
 - Lack of infrastructure /serviced land
 - Cumbersome permitting procedures
- Rental market constraints
 - Regulation and taxation issues?
 - Underwriting difficulties for rental investor finance?
 - Lack of Public-Private partnership models in production of rental housing,
- Lease to buy programs and role of government