Economic Integration: Relationship between trade and financial integrations in ASEAN+3

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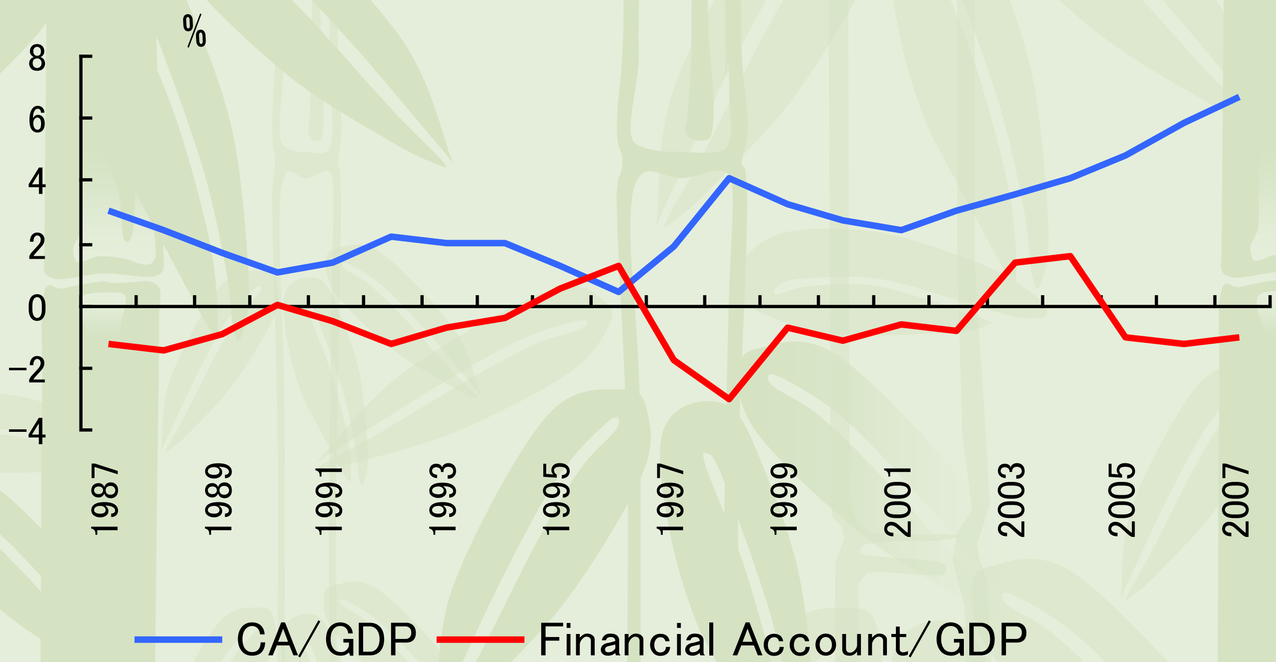
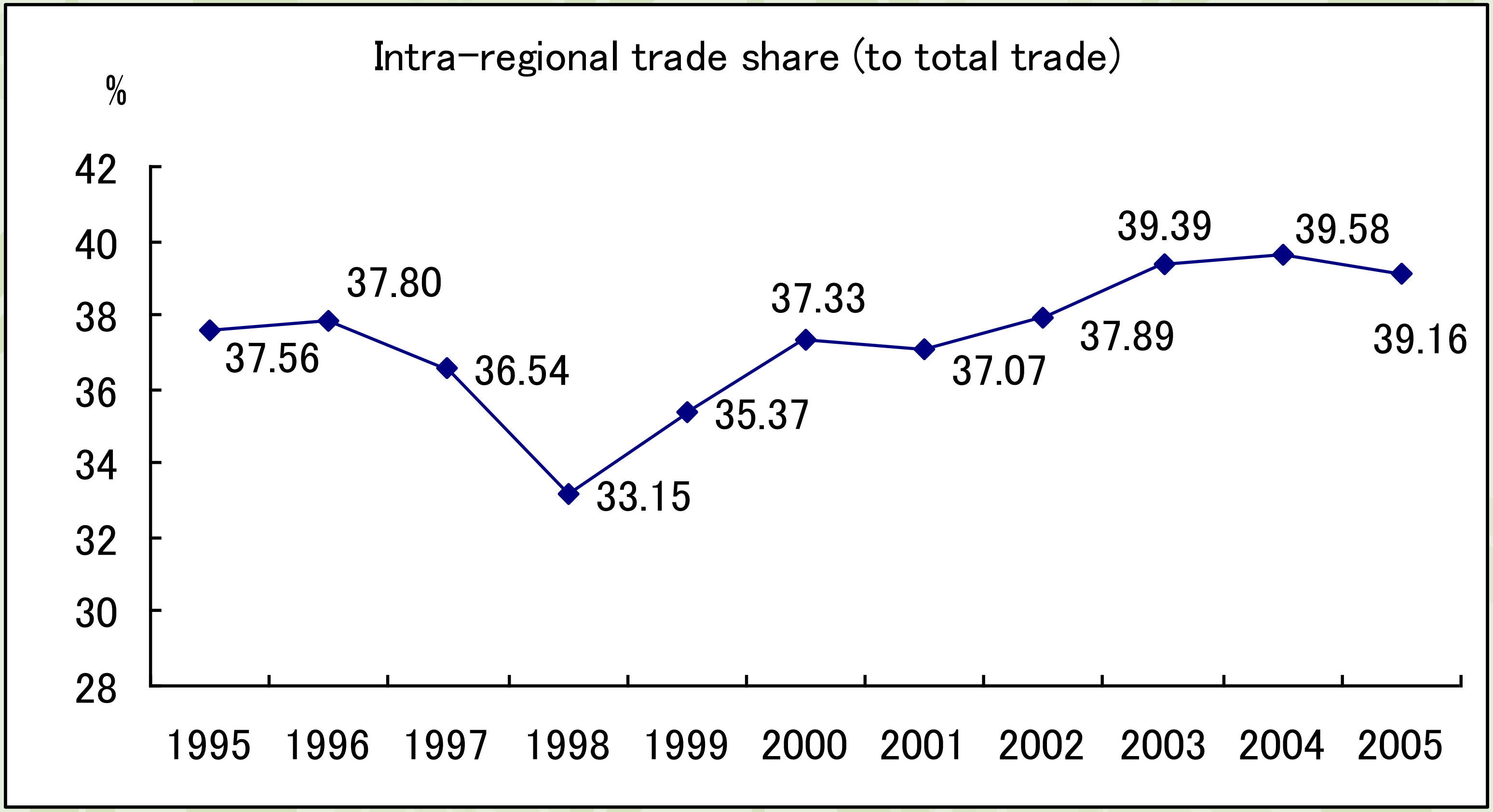
Analyzing BOP

Ratio of CA and Financial Account to GDP since 1987



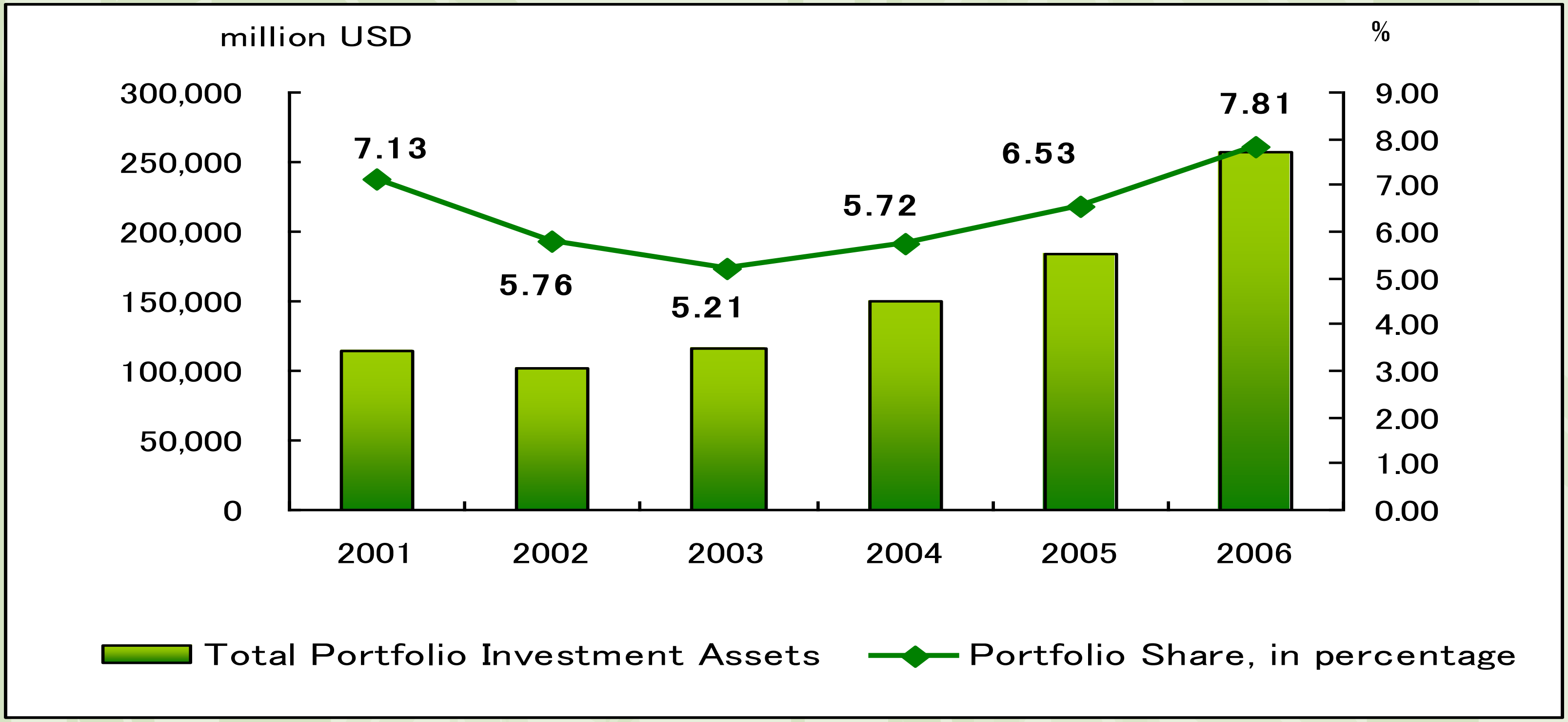
Trade Integration



Source: ARIC,ADB

Financial Integration

- Cross-border Credits
- Portfolio Investment



Source: CPIS,IMF

Objectives

- To find relationship between trade integration and financial integration, the effect of and on each other in regional level.
- To analyze other determinants for trade and financial integrations

Intra-regional Trade and Portfolio Investment

	2001	2002	2003	2004	2005
Trade/bil.USD	1,208	1,335	1,633	2,035	2,321
Ln(trade)	14.0	14.1	14.3	14.5	14.6
Portfolio/bil.USD	85.6	81.2	116.5	147.6	187.9
Ln(Portfolio)	11.4	11.3	11.7	11.9	12.1

- Correlation of Trade/Portfolio =0.986
- Correlation of Ln(Trade)/Ln(Portfolio) =0.981

Methodology

- Gravity Model Approach

$$\ln(Trade_{ijt})=\beta_0+\beta_1\ln(GDP_{it})+\beta_2\ln(GDP_{jt})+\beta_3\ln(GDP_{it}/Pop_{it})+$$
$$\beta_4(GDP_{jt}/Pop_{jt})+\beta_5\ln Dist_{ijt}+\beta_6 Border_{ijt}+$$
$$\beta_7\ln(Portf_{ijt})+\beta_8\ln(FX_{it})+\beta_9\ln(FX)_{jt}+$$
$$\beta_{10}\ln(REER_{it})+\beta_{11}\ln(REER)_{jt}+\delta Year_t+\varepsilon_{ijt} \qquad (1)$$

$$\ln(Portf_{ijt})=\beta_0+\beta_1\ln(GDP_{it})+\beta_2\ln(GDP_{jt})+\beta_3\ln(GDP_{it}/Pop_{it})+$$
$$\beta_4(GDP_{jt}/Pop_{jt})+\beta_5\ln Dist_{ijt}+\beta_6\ln(Trade_{ijt})+$$
$$\beta_7\ln(Return)_{it}+\beta_8\ln(Return)_{jt}+\beta_9\ln(Diff(Return)_{ij})_t+\beta_{10}\ln$$
$$(FX_{it})+\beta_{11}\ln(FX)_{jt}+\beta_{12}\ln(REER_{it})+\beta_{13}\ln(REER)_{jt}+\delta Year_t+\varepsilon_{ijt}$$
$$(2)$$

Data

- Variables

  - Portf : Bilateral Portfolio Investment
  - Trade : Bilateral Trade
  - GDP : Country's GDP
  - Pop : Country's Population
  - Dist : Distance between $country_i$ and $country_j$
  - Border : Binary variable unified if i and j share border
  - Return : Financial markets indices and interest rates
  - Year

Coefficient signs (Result)

	Equation(1)	Equation(2)
ltrade		+***
lportf	+***	
lrgdp1	+*	-
lrgdp2	+***	-***
lrgdppc1	-**	-
lrgdppc2	-***	+***
ldist	-	-
border	+	n.a.
reer1	-	+
reer2	+	+

	Equation(1)	Equation(2)
index1		-
short1		+***
long1		-**
index2		+
short2		-**
long2		+***
dshort		-
dlong		+*
fx1	-**	+***
fx2	-***	+***

Findings

- Bilateral trade and bilateral portfolio investment flows have positive effects on each other.
- Distance variables are insignificant in both equations.
- Exchange rates appreciation supports bilateral trade flows while bilateral portfolio investment flows will be promoted by depreciation of local currencies.
- Intra-regional portfolio investors concern on short-term interest rates movement rather than long-term ones.

THANK YOU