Globalization and the Sustainability of Large Current Account Imbalances: Size Matters
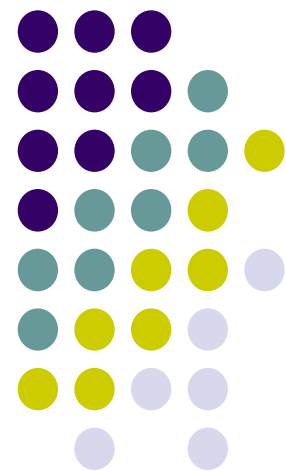
Joshua Aizenman and Yi Sun

UCSC and the NBER; UCSC

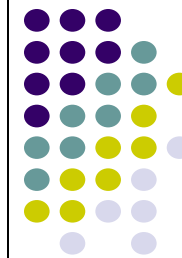*ASSA session on "The Capital Flows Behind Global Imbalances"*

Organized by Kristin Forbes (MIT)
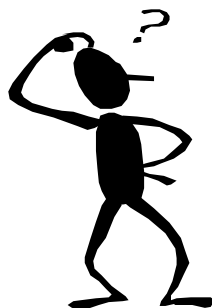
Discussant: Jeff Frankel (Harvard)

SF, January 4, 2009

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"Globalization and the Sustainability of Large Current Account Imbalances: Size Matters" (with Y. Su)
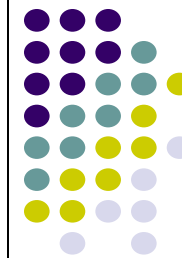
The purpose

- To evaluate the sustainability of large current account imbalances in the era when the Chinese GDP growth rate and current account/GDP surplus exceed 10%.
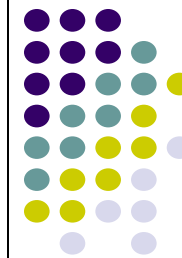
Conjecture - size matters

- A small country embarking on export led growth can sustain it without imposing negative ripple effects, as long as it remains small.

- The long run success of the Chinese growth strategy put in motion forces that would curtail the sustainability of its large current account surplus path.

- It would be conditional on the sustainability of growing current account deficit/GDP of countries that grow at a much slower rate.

- Explore reasons to doubt the sustainability.
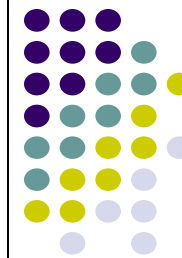
Methodology

- We study a simulation that relies on the adding-up property of global current account balances.

- We investigate the size distribution and the durability of current account deficits during 1966-2005.

Main results

- Excluding the US, size does matter: the length of current account deficit spells is negatively related to the relative size of the country's GDP.

- Short of the emergence of a new "demander of last resort," the Chinese growth path will be challenged by its own success, and by the limited sustainability of the growing curr. Act. deficits/GDP of courtiers that grow at a much slower rate.
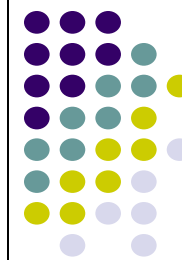
Implication of the global budget constraint: zero adding up
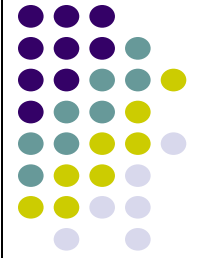
$$\sum_i Cu.Ac_i = 0$$

$$\sum_i s_i \frac{Cu.Ac_i}{GDP_i} = 0; \quad s_i = GDP_i / \sum_j GDP_j$$

Assumptions, base simulation

- China will keep GDP growth rate of 10%, while maintaining a current account surplus of 10% for the next twenty years.

- The GDP of all the other countries [AOC] will grow at their average growth rate during 1990-2005, at about 3%
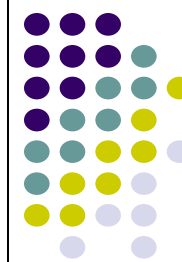
- Notation:

AOC and Chinese GDP at time zero

$$GDP_{AOC,0}; \qquad GDP_{C,0}$$

- Current account/GDP ratio of AOC and China at time t $\qquad cu_{AOC,t}; \qquad cu_{C,t}$
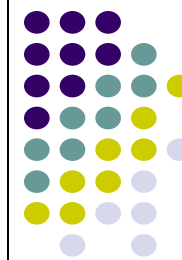
# Chinese & AOC GDP's growth rates of 10% and 3%, China will maintain current account surplus of 10%

$$0.1 GDP_{C,0} \exp(0.1t) + cu_{AOC,t} GDP_{AOC,0} \exp(0.03t) = 0$$

$$cu_{AOC,t} = -0.1 \exp(0.07t) \frac{GDP_{C,0}}{GDP_{AOC,0}}$$

The political economy of surplus/deficits

- Prolonged current account surpluses or small deficits may reflect a social contract that opposes significant net imports, or supports net export positions.

- Faruqee and Jaewoo (2006): high persistency in the patterns of current accounts -- countries tend to run imbalances of the *same* sign (either positive or negative) as in the past.
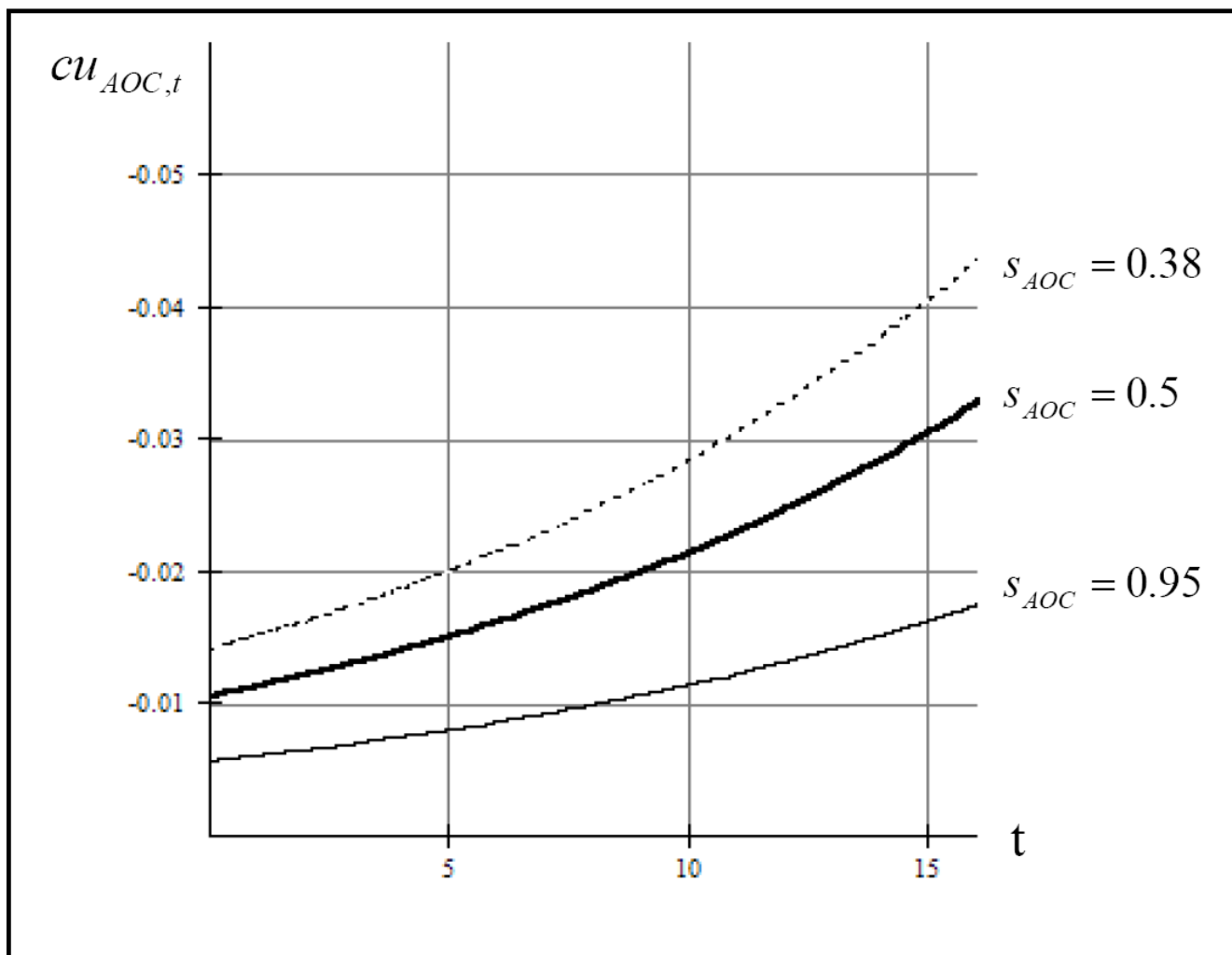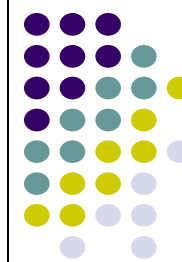
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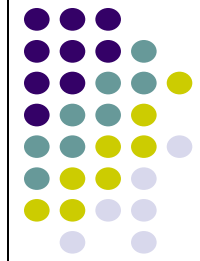
Future adjustments

- In these circumstances, the adjustment to the future Chinese current account surplus would be carried by countries that, on average, are willing to run deficits, whose combined global GDP share is about 0.5.

Which countries would oblige and adjust to accommodate China?
Projected current account/GDP of AOCs.

Average annual current account deficit/ WGDP (avgCAs) & the cumulative current account/WGDP during each spell of deficits, Cum.CAs (= avgCAs*length of the deficit spell). 1966-2005 (429 episodes).

Cum.CAs (all)

△—△—△ Cum.CAs (all)   ● ● ● U.S.

92-05, -0.95% WGDP

82-90, -0.64% WGDP
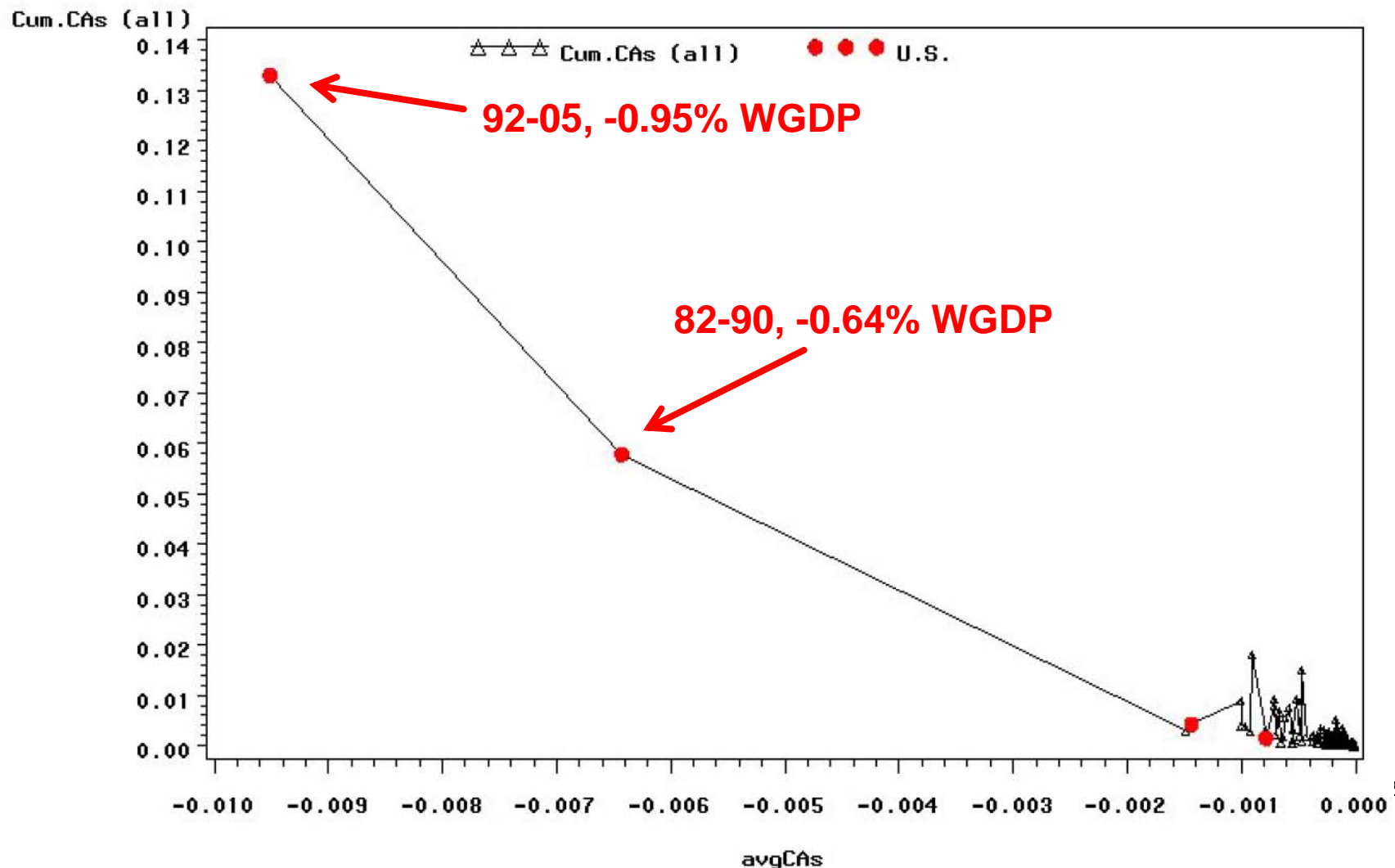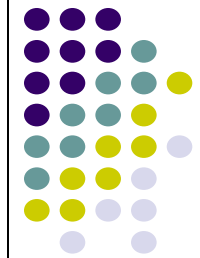
avgCAs

AvgCA and the sum of Cum.CAs.D. 1966-2005 (429 episodes).

Explaining the duration of current account deficits on a country's relative size.
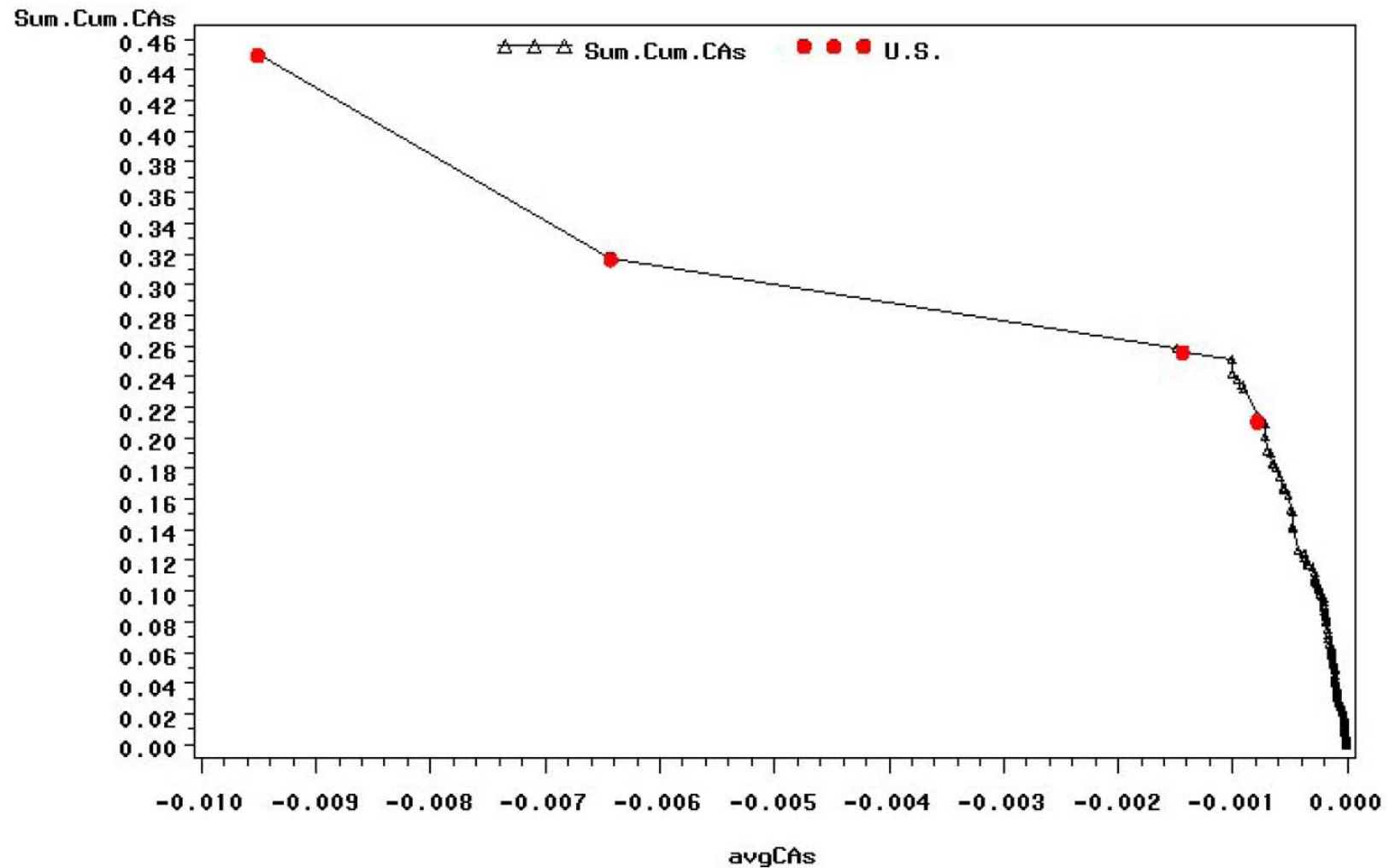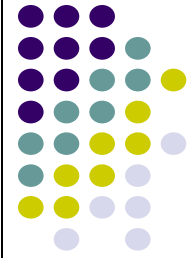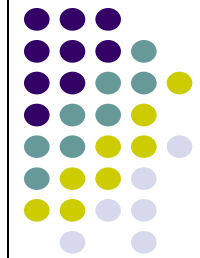
"Avg.GDPs," average country's GDP/World GDP (WGDP) during the current account deficit episode.

dependent variable : Length of current account deficit spell

Parameter	(1)	(2)	(3)	(4)	(5)	(6)
Intercept	2.64***	2.69***	2.35***	2.42***	2.79***	2.80***
	(0.08)	(0.08)	(0.13)	(0.14)	(0.10)	(0.10)
avgGDPs	−3.0*	−16.***	−2.01	−13.***	0.08	−10.5*
	(1.74)	(4.31)	(1.78)	(4.63)	(2.13)	(5.49)
ini.EWN			−0.5***	−0.44**		
			(0.20)	(0.20)		
avgGDPg			2.11	2.12		
			(2.97)	(3.01)		
avgGDPpc					−0.3***	0.27**
					(0.12)	(0.12)
With US data	yes	no	yes	no	yes	no
No.of Censored	202	201	140	139	200	199
No.of obs	429	425	329	325	425	421
log likelihood	−547	−538	−433	−425	−540	−532

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A robust negative association between country size and the duration of deficits for all countries excluding the US.
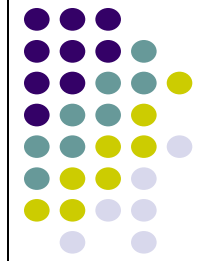
- It holds, controlling for the countries' net external asset position/GDP in the starting year of a current account episode [Ini.EWN], & the average growth rate of a country's real GDP (Avg.GDPg).

- The association does not hold once that we include the US.

- A higher net external asset position/GDP is associated with shorter spells of current account deficits, possibly reflecting self insurance and a more conservative management of demand policies.

Faster growth is associated with larger current account/GDP.
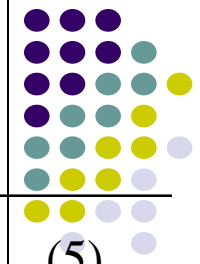
| Dependent Var: CA ratio	(1)	(2)	(3)	(4)	(5)
Intercept	-0.04*** (0.002)	-0.05*** (0.002)	-0.04*** (0.003)	-0.04*** (0.002)	-0.05*** (0.002)
GDP growth rate	0.097** (0.039)	0.109*** (0.038)	0.094** (0.041)	0.074** (0.035)	0.083*** (0.027)
GDP per capita		0.030*** (0.002)	0.024*** (0.002)	0.030*** (0.002)	0.032*** (0.002)
Data start from	1990	1990	1990	1990	1970
has population small countries	yes	yes	yes	no	no
has GDP size small countries	yes	yes	no	yes	no
# of obs	2300	2286	1732	2023	4064
R square	0.0026	0.0951	0.092	0.106	0.0847
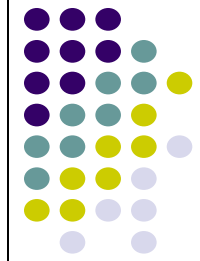
Concluding remarks I

- The growing current account surplus run by high growing countries will require overtime larger current account/GDP deficits run by slower growing countries.

- Such deficits tend to be unattainable for most.

- Short of the emergence of a new "demander of last resort" replacing the US, the Chinese growth path will be challenged by the limited appetite for prolonged current account deficits of most countries.

Concluding remarks II

- With the exception of the US, larger countries run shorter spells of current account deficits.

- Even after the collapse of the B.Woods system, the U.S. enjoyed global economic hegemony, enabling it to run large and long spells of current account deficits.

- Yet, the gains from economic hegemony will be eroded if the leading country overplays its privileged position.

- This explained the collapse of the B.Woods system, and may explain the future unwinding of the recent patterns of global imbalances.

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Future adjustments
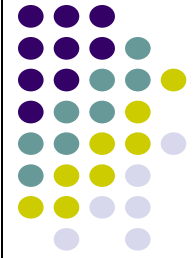
- A gradual shift of China from export led growth, towards a balanced growth of internal demand, may be consistent with the continuation of Chinese employment and GDP growth [Feenstra and Hong (2007)].

- The unwinding of US curr. account deficit, the growing pressure from Europe and the US regarding the Renminbi appreciation, and the greater tacit protection from the EU and the US may provide a further impetus for Asian countries to switch towards domestic demand policies.
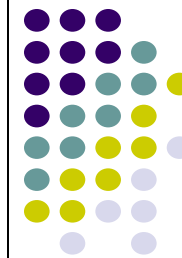
Should we care about current accounts? **Yes.**
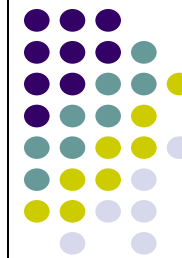## "Current account patters and national real estate markets" (with Y. Jinjarak)
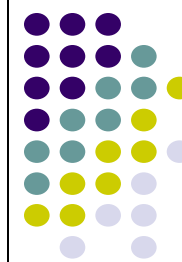
- We study the association between the current account and real estate valuation across countries [43 countries, of which 25 are OECD], during 1990 - 2005.

- We find robust and strong positive association between current account deficits and the appreciation of the real estate prices/(GDP deflator), controlling for other conventional variables.

The US as the "demander of last resort" and its implications on China's current account (with Y. Jinjarak)

- In a panel regressions explaining the current account of 69 countries during 1981-2006. We identify an asymmetric effect of the US as the "demander of last resort:" a 1% increase in the lagged US imports/GDP is associated with 0.3% increase of current account surpluses of countries running surpluses, but with insignificant changes of current account deficits of countries running deficits.

Thank You!