



Macroeconomic Interdependence Between PRC, Japan and Korea

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“Plus 3” important

Table 4: Selected Indicators—PRC, Japan, and Republic of Korea¹ (2013)

	Population ² (million)	Nominal GDP (\$ billion)	Exports (\$ billion)	Imports (\$ billion)	Foreign Reserves less gold (\$ billion)
PRC	1,351 (19.2%)	8,939 (12.4%)	1,430 (11.9%)	1,273 (10.4%)	3,840 (32.9%)
Japan	128 (1.8%)	5,007 (6.9%)	474 (4.0%)	546 (4.4%)	1,237 (10.6%)
Korea, Rep. of	50 (0.7%)	1,198 (1.7%)	369 (3.1%)	341 (2.8%)	342 (2.9%)
Combined	1,529 (21.7%)	15,144 (21.2%)	2,273 (18.9%)	2,160 (17.6%)	5,419 (46.4%)

Deepening trade links...



Table 5: Trade Links—PRC, Japan, and Republic of Korea
(% of GDP)

	1990	2000	2010	2012
Exports of PRC to:				
Japan	2.7	4.0	2.3	2.1
Korea, Rep. of	0.1	1.0	1.2	1.0
World	19.4	27.0	28.7	25.9
Exports of Japan to:				
PRC	0.2	0.8	3.0	2.7
Korea, Rep. of	0.6	0.7	1.2	1.1
World	9.6	10.5	14.3	14.0
Exports of Rep. of Korea to:				
PRC	0.0	3.9	12.6	13.3
Japan	4.5	3.8	2.8	3.5
World	23.7	32.5	46.5	49.7

...With higher value added



Table 6: Trade Links: Value Added (% of GDP)

	1995	2000	2005	2009
PRC				
Japan	2.9	2.9	2.5	1.4
Korea, Rep. of	0.5	0.6	0.7	0.5
Total	16.3	18.1	21.9	16.6
Japan				
PRC	0.4	0.7	1.3	1.4
Korea, Rep. of	0.5	0.5	0.6	0.5
Total	8.0	9.3	11.7	10.2
Korea, Rep. of				
PRC	1.4	2.6	3.1	4.2
Japan	3.9	3.6	2.3	2.0
Total	20.8	24.8	23.3	28.1



FDI flows rising...



Table 7: Financial Links: Foreign Direct Investments—PRC, Japan, and Republic of Korea¹ (\$ million)

	2001		2005		2012	
PRC inflows from:						
Japan	2,916	(7.2%)	6,530	(9.0%)	7,352	(6.1%)
Korea, Rep. of	1,490	(3.7%)	5,168	(7.1%)	3,038	(2.5%)
World	40,715		72,406		121,073	
Japan inflows from:						
PRC	5	(0.0%)	12	(0.4%)	71	(4.1%)
Korea, Rep. of	49	(0.2%)	29	(1.0%)	558	(32.2%)
World	28,982		2,778		1,732	
Rep. of Korea inflows from:						
PRC	58	(0.7%)	2	(0.0%)	246	(2.2%)
Japan	996	(11.5%)	1,469	(24.2%)	4,123	(37.1%)
World	8,643		6,066		11,117	

...With Japan being a big investor



Table 8: Japan's Outward FDI and Bank Claims¹ (\$ million)

	1996		2000		2005		2012	
FDI Flows								
PRC	2,324	(9.9%)	937	(3.0%)	6,589	(14.4%)	13,485	(11.0%)
Korea, Rep. of	403	(1.7%)	1,082	(3.4%)	1,784	(3.9%)	4,007	(3.3%)
Total	23,426		31,557		45,781		122,551	
FDI Stocks								
PRC	8,097	(3.1%)	8,699	(3.1%)	24,553	(6.4%)	92,967	(9.0%)
Korea, Rep. of	3,464	(1.3%)	4,192	(1.5%)	8,217	(2.1%)	25,526	(2.5%)
Total	258,609		278,445		386,585		1,037,698	
Bank Claims (outstanding)								
PRC	17,800	(4.3%)	11,314	(1.0%)	18,698	(1.1%)	62,377	(1.9%)
Korea, Rep. of	25,722	(6.2%)	11,000	(0.9%)	16,308	(1.0%)	50,075	(1.6%)
Total	411,743		1,165,110		1,652,897		3,223,447	

Portfolio flows small yet rising fast

Table 9: Financial Links: Portfolio Flows—PRC, Japan, and Republic of Korea¹ (\$ million)

	2001		2005		2012	
PRC inflows from:						
Japan	1,669	(8.2%)	4,074	(3.5%)	10,423	(1.6%)
Korea, Rep. of	157	(0.8%)	101	(0.1%)	6,651	(1.0%)
World	20,417		116,213		644,169	
Japan inflows from:						
PRC	–		–		–	
Korea, Rep. of	176	(0.03%)	1,463	(0.1%)	5,440	(0.4%)
World	540,800		1,295,878		1,430,816	
Rep. of Korea inflows from:						
PRC	–	–	–	–	–	
Japan	5,835	(7.5%)	7,456	(3.0%)	24,228	(5.1%)
World	77,340		250,776		471,965	

More people traveling

Table 10: Tourist Arrivals—PRC, Japan, and Republic of Korea¹ (In thousand)

	1995		2005		2010		2013	
PRC from								
Japan	1,305	(2.8%)	3,390	(2.8%)	3,722	(2.8%)	2,878	(2.2%)
Korea, Rep. of	529	(1.1%)	3,545	(2.9%)	4,085	(3.1%)	3,969	(3.1%)
World	46,113		120,259		133,762		129,078	
Japan from								
PRC	221	(6.7%)	653	(9.8%)	1,413	(16.4%)	1,314	(12.7%)
Korea, Rep. of	874	(26.4%)	1,747	(26.2%)	2,440	(28.3%)	2,456	(23.7%)
World	3,315		6,675		8,610		10,364	
Rep. of Korea from								
PRC	178	(5.2%)	710	(12.4%)	1,875	(21.3%)	4,327	(35.5%)
Japan	1,667	(48.8%)	2,440	(42.6%)	3,023	(34.4%)	2,748	(22.6%)
World	3,416		5,730		8,798		12,176	

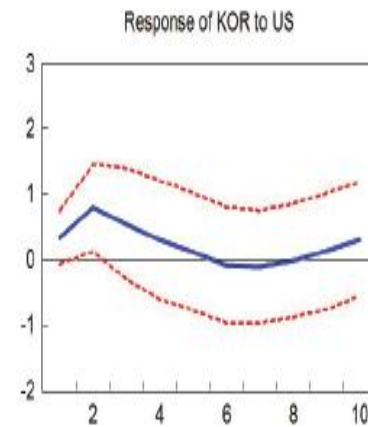
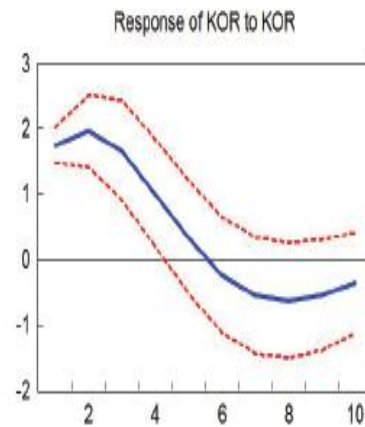
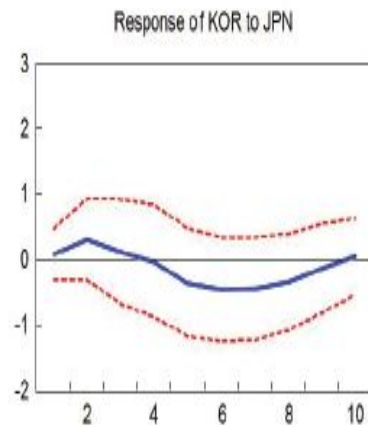
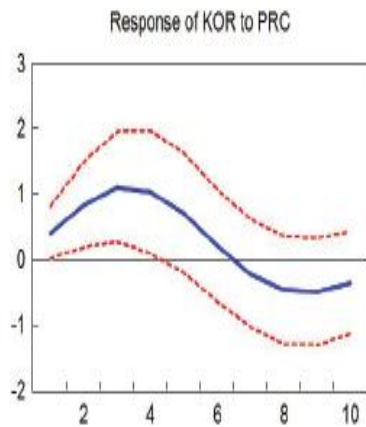
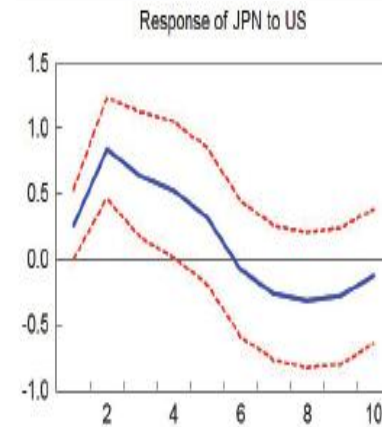
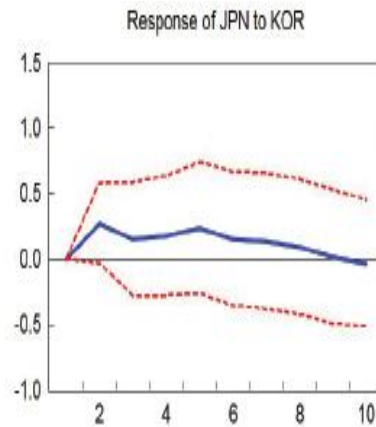
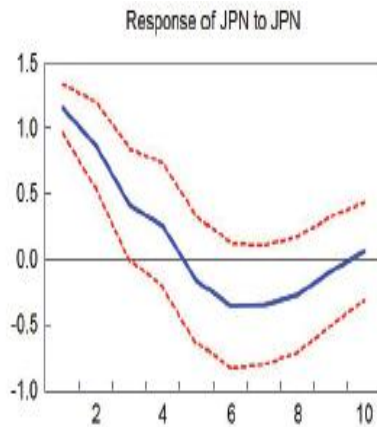
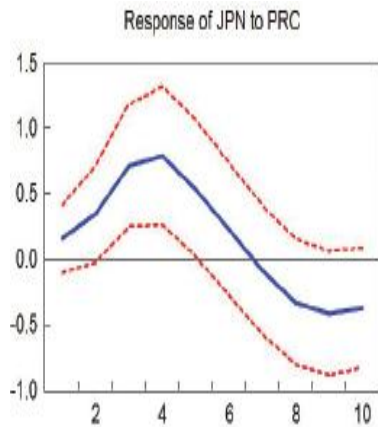
GDP growth more correlated



Table 11: Correlation Coefficients: GDP Growth Rates

	1993Q1–2013Q4	1993Q1–2003Q1	2003Q2–2013Q4
PRC–Japan	0.32 [0.11,0.5]	0.18 [–0.13,0.47]	0.41 [0.13,0.64]
PRC–Korea, Rep. of	0.34 [0.13,0.51]	0.26 [–0.05,0.52]	0.67* [0.46,0.81]
Japan–Korea, Rep. of	0.52 [0.34,0.66]	0.54 [0.28,0.73]	0.79 [0.64,0.88]
PRC–US	0.08 [–0.13,0.29]	–0.09 [–0.38,0.23]	0.27 [–0.04,0.53]
Japan–US	0.56 [0.39,0.69]	0.02 [–0.29,0.33]	0.83* [0.7,0.9]
Korea, Rep. of–US	0.36 [0.16,0.53]	0.03 [–0.28,0.34]	0.62* [0.39,0.77]

PRC affecting JPN & KOR more...



...And explaining more of variation

Table 12: VAR Analysis: Share of Growth Variance Due to Each Economy (%)

Quarterly Average	PRC	Japan	Rep. of Korea	US
PRC				
Q1–Q5	93.2	1.3	0.4	5.1
Q6–Q10	92.3	2.0	0.8	4.9
Japan				
Q1–Q5	14.8	60.2	2.1	22.9
Q6–Q10	27.9	41.3	3.6	27.2
Rep. of Korea				
Q1–Q5	15.1	0.9	77.1	6.9
Q6–Q10	23.0	3.9	66.3	6.8
US				
Q1–Q5	2.7	0.9	0.2	96.2
Q6–Q10	6.3	4.4	0.5	88.8

Summary



- Close economic links
 - Proximity, production networks and supply chains
- High degree of macroeconomic interdependence and business cycle co-movement
- Effect of PRC on JPN & KOR significant



Thank You!

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