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ASIA-EUROPE: THE THIRD LINK

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Non technical summary

This paper provides an overview of the relative

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1. Introduction

The prevailing view of the world economy is strikingly polarised. Analyses of macroeconomic linkages and transmission channels routinely represent the world with the US at the centre and other regions, among which Asia and Europe, at the periphery. Asia and Europe are obviously regarded as important players, but mainly in

2. A map of the world

In recent times, Europe, North America and East Asia have gone through (much discussed) parallel regional integration processes. In Europe, the process has involved a series of continuous institutional investments into the deepening of the European Union and its successive enlargement to new member countries³. Major recent steps have included the creation of an integrated market for goods and to a lesser extent for services; the introduction of a common currency for a subset of countries within the EU; and enlargement to twelve new members, including ten former communist countries. Institutional integration has been shallower in North America, where the North American Free Trade Agreement (NAFTA) was a one the

a. Weights

As regards their weight in the world economy, East Asia, Europe and North America exhibit both similarities and differences (Table 1). On the one hand, the three regions are very similar as regards their weight in world production and trade. Each accounts for about one fourth of world GDP at PPP exchange rates and for between one fifth and one fourth of world trade (excluding trade within the region). On the other hand, differences in population size are considerable,

size
Table

Turning to financial markets, Europe and North America are still much bigger players than East Asia. Each accounts for one third of the global

Turning to external trade, East Asia clearly stands out as more open to (extra regional) trade than the other two regions (Table 2). The trade to GDP ratio (excluding internal trade) has increased almost twice as much as those of Europe and North America over the last decade to reach one third of GDP. The figure echoes the recent observation made by IMF (2008b) that ‘if anything, Asian economies are more reliant on trade developments outside the region than ever before’.

Noticeably, East Asia is the only surplus region. North America’s trade imbalance is particularly striking as almost 70 percent of its external trade is made of imports (Table 2). In terms of trade composition, the three regions share the same reliance on the provision of primary goods by the rest of the world and East Asia remains highly dependent on final consumers in other countries for buying its final goods (something we will investigate more closely when discussing the transmission of shocks).

Table 2: Trade ‘openness, 1996 and 2006’

	East Asia		Europe		North America	
External trade (exports plus imports as a percentage of GDP)						
1996	18		15		13	
2006	32		20		16	
<i>of which (% of 2006 external trade):</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>	<i>Exports</i>	<i>Imports</i>
<i>Composed of (% of exports or imports)</i>						
Primary goods	2	32	4	25	10	13
Intermediate goods	40	46	47	35	51	37
Final goods	58	22	49	40	39	50
<i>Trade balance</i>		3		2		6

Source: IMF, *Direction of Trade Statistics*, April 2008; Comtrade (UN); authors’ calculations.

c. Finance

Thanks to the data assembled by Philip R.

Europe is by far the part of the world where regional financial integration is the most advanced. Since the mid 1990s, intra European cross border portfolio holdings have increased dramatically as

world

for only one third of intraregional holdings. North America is however far less integrated as regards the interbank market as cross border deposits account only for about 10% of total intraregional holdings against respectively 30% and 40% in East Asia and Europe.

Also, the low degree of regional financial integration in Asia can be regarded as consistent with the asset supply constraints models of Caballero, Farhi and Gourinchas (2007) and of Mendoza, Quadrini and Rios Rull (2008). In these models, a key comparative advantage of the US is its ability to supply high quality financial assets that the rest of the world is not able to produce. Although this characterisation of the US may command more irony than support in the wake of the financial crisis, the contrast between the rapid pace of trade integration and the slow pace of financial integration within East Asia can be read as an illustration of the intuition behind the asset supply constraint models. By the same token, the high and rapidly rising degree of financial integration within Europe is an indication that the

position equivalent to almost one third of its GDP while North America exhibits a significant negative NFA position equivalent to a fifth of its GDP in 2004.

The composition of both assets and liabilities differs strongly across regions. East Asia stands out for the high share of FX reserves on the assets side and the overwhelming share of equity on the liability side, whereas the US is characterised by the

overwhelming share of equity on the liability side

Table 4: Bilateral trade integration (% of GDP), 1996 and 2006

Trading partner	East Asia	Europe	North America
Region			
	1996		
East Asia	X	5.1	6.9
Europe	3.8	X	3.7
North America	5.5	3.9	X
	2006		
East Asia	X	8.1	9.4
Europe	5.2	X	4.6
North America	6.6	4.6	X

Source: IMF, *Direction of Trade Statistics*, April 2008; authors' calculations.

Note: Sum of imports and exports

Table 5: Bilateral financial integration (% of GDP), 1996 and 2004

Financial Partner	East Asia	Europe	North America
Region			
1996			
East Asia	X	22.2	29.0
Europe	21.0	X	51.1
North America	23.1	63.7	X
2004			
East Asia	X	42.9	57.5
Europe	26.5	X	89.0
North America	30.0	102.1	X

Source: Authors' calculations based on Lane and Shambaugh (2007) data

Note: Figures represent the sum of bilateral assets and liabilities as a percentage of the region's GDP. For example, the sum of North American assets and liabilities vis à vis Europe represented, in 2004, 92.4% of Europe's GDP and 93.6% of North America's GDP

Table 6 decomposes bilateral holdings by asset classes. Figures are tentative as they are not corrected for inconsistencies in reporting but they nevertheless provide important orders of magnitude. Most noticeable are the significantly higher share of reserves in East Asia's North American assets (at the expense of equity), the predominant share of equity (largely FDI) in Europe's and North America's Asian assets, and also the asymmetry between Europe's

Table 6: Breakdown of bilateral asset holdings by asset classes, 2004

	East Asia 2004	Europe 2004	North America 2004
East Asia Total assets (% of GDP)	X	25	41
Share of:			
Equity		19%	14%
Debt		22%	30%

a. Trade linkages

A

Second, Europe's exposure to demand shocks originating in North America is more than twice as low as for East Asia and North America's exposure to shocks originating in either of the other two regions is about four times lower. As far as trade channels are concerned, demand shocks affecting Europe or East Asia are basically unimportant for the North American economy. If one can speak of decoupling, it is paradoxically there.

b. Financial linkages

In view of the close financial integration between Europe and North America, the potential for the transmission of financial shocks is high. What about Asia? Aggregate numbers suggest that there is a somewhat lower, but still high, potential for such transmission also, but this ignores the fact that the distribution of East Asia's North American financial assets is very different from the one of Europe. The predominance of government bonds in Asian assets explains why the fallout from the subprime crisis has been almost unnoticeable in East Asia despite the size of the region's portfolio. In effect, by October 2008 losses incurred by European banks exceeded those reported by US banks, while Asian banks reported only minor losses. This is at

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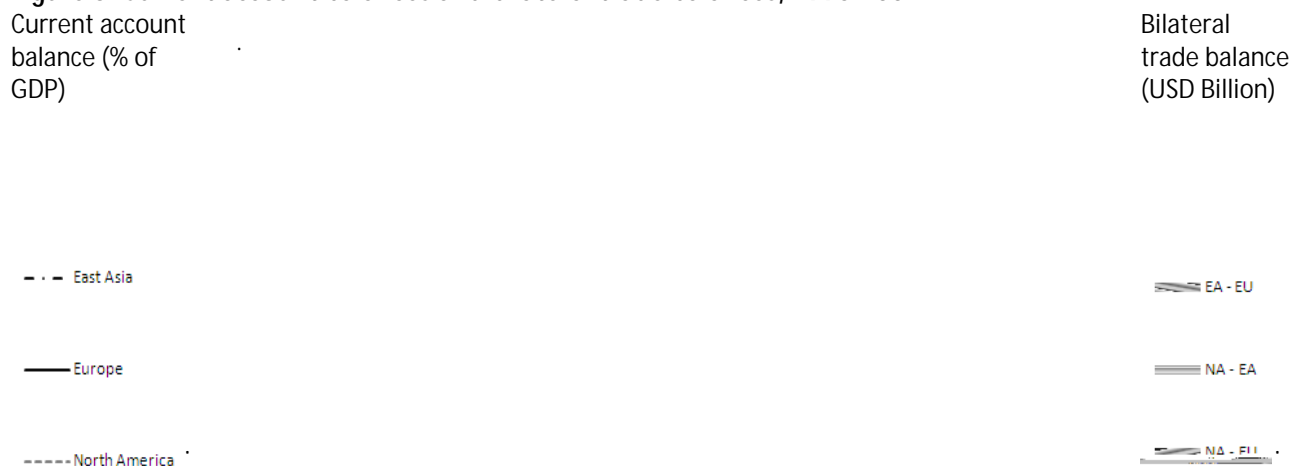
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and Vietnam recorded surpluses in 2006. The region's two largest economies, Japan and China, have both recorded sizable surpluses in recent years.

Europe's intermediate situation can be further highlighted by the observation of bilateral trade deficits: its surplus vis à vis North America roughly matches its deficit with East Asia. However, in spite of the hope that it would not need to be part of the solution of a problem it was not part of, Europe has by no means remained a bystander in the global adjustment so far, as illustrated by the evolution of the exchange rate of the euro vis à vis the dollar.

Figure 5: Current account balances and bilateral trade balances, 1996-2007



Source: IMF, *World Economic Outlook database*, April 2008; authors' calculations.

b. Exchange rates

To assess the degree to which exchange rates have been responsive to current accounts, we have computed bilateral effective exchange rates between regions (Appendix 3). Figure 6 gives their evolution since 1996. The graph highlights the particular situation of Europe, whose bilateral exchange rates with both East Asia and North America exhibit much more variability than between East Asia and North America. Europe depreciated until the end of 2001 and then experienced a continuous appreciation. On the contrary, from the aftermath of the Asian crisis of 1997-98 until mid 2007, East Asia's bilateral exchange rate with North America has remained remarkably stable. It is only over the last year that a faster and more pronounced

Table 7: Monthly volatility of bilateral exchange rates

A

The model of Blanchard, Giavazzi, and Sa (2005) helps clarify the reason for the inconsistency, as it encompasses both views¹⁹. It can be summarised in two long term relations between the exchange rate (E)²⁰ and the external debt (F) of the United States (in the original model), represented by current account balance (EC) and a portfolio balance (EP) schedules (Figure 7). Both slope downward: in the steady state a higher debt implies a more devalued exchange rate, resulting in a larger trade surplus, which allows for servicing of the debt. Higher debt also implies that non residents hold more dollar assets, which they are inclined to do if a lower dollar makes those assets cheaper.²¹

Suppose now that E represents the exchange rate of North

The issue for the Europeans is therefore one of time preference. The renminbi peg on the dollar has the advantage of avoiding too sharp a depreciation of the dollar in the short run, but it also contributes to the build up of US external debt, and thus to an eventually lower dollar in the long run. This is one of the reasons why the Europeans have long been hesitant and have refrained from expressing strong views about the Chinese exchange rate policy.

d. Valuation effects

An important consequence of the rise in

for example Higgins et al., 2006). However, they do not provide a decomposition of the wealth transfer by partner country.

In what follows, we use the breakdown of assets and liabilities by partner region and information on the aggregate currency composition of assets and liabilities to evaluate the geographical distribution of the wealth effects of currency movements (see Appendix 5 for methodology and sources). This is a highly tentative exercise that is affected by considerable uncertainty for three reasons. First, the geographical breakdown of the three regions' assets and liabilities is imprecise, as already indicated. Second, the currency composition of assets and liabilities is known only partially and in this case only vis à vis all partners, not on a bilateral basis. Decomposing valuation effects thus requires making sometimes heroic assumptions. Third, it should be noted that estimates of wealth transfers through valuation effects assume that exchange rate changes were unanticipated and did not affect the market valuation of the assets and liabilities in their currency of denomination. In other words, they are intrinsically naive²². For all these reasons, estimates need to be made with considerable caution. For this tentative estimate, we rely as much as possible on no nonsense assumptions and then compute the direct effects of an unexpected variation in the value of the exchange rate.

We start by evaluating the effects of a North American depreciation (Table 8 a). To do that, we depart from the standard one country approach that measures the wealth transfer effect by the variation of the Net Foreign Asset position (NFA) as a proportion of GDP. The problem with this measure is that it fails to account for the

Table 8: Variation in NFA/aggregate 3 regions GDP ratios following exchange rates variation

a) 10% North American depreciation

	East Asia	Europe	North America	Total
East Asia	0.0%	0.2%	0.7%	0.5%
Europe	0.2%	0.0%	1.0%	1.1%
North America	0.7%	1.0%	0.0%	1.6%

b) 10% European appreciation

	East Asia	Europe	North America	Total
East Asia	0.0%	0.4%	0.2%	0.3%
Europe	0.4%	0.0%	1.0%	1.4%
North America	0.2%	1.0%	0.0%	1.1%

c) Cumulative wealth effects since dollar peak in 2001*

	East Asia	Europe	North America	Total
East Asia	0.0%	1.5%	1.2%	0.3%
Europe	1.5%	0.0%	4.1%	5.6%
North America	1.2%	4.1%	0.0%	5.3%

Source: Author's calculations based on assets and liabilities for 2004

Note: [*] The cumulative movements of bilateral NEER between the three regions over the period 2001M6-2008M7 are based on trends. Trends for this period of time are as follows: East Asian currencies have appreciated by 1.7% per year vis à vis North American currencies; European currencies have appreciated by 6.1% per year vis à vis North American currencies and by 4.7% per year vis à vis East Asian currencies.

These are effects significant enough to warrant being taken into account in the evaluation of the effects of the strengthening of European currencies. Surprisingly, however, they are usually not mentioned in the frequent EU-US controversies about exchange rates.

East Asia to ab

integration on a global scale and should not be taken as implying that growth in the region can decouple from the rest of the world.

Second, integration within the three regions we have focused on – East Asia, Europe and North America is very uneven. Trade and financial integration is by far more advanced in Europe and it continues to deepen, whereas there is no visible momentum in North America. In East Asia, there is a strong contrast between, on the one hand, fast strengthening trade integration and, on the other hand, the stagnation of financial integration at a low level. These observations need to be qualified because they rely on simple statistics rather than a normative model that takes into account the size of countries and the distance between them. Nevertheless the contrast between Europe, where trade and financial integration have been progressing in tandem, and East Asia, where they have not, is robust. There are two possible explanations for it. One, consistent with the asset supply constraint hypothesis, is that East Asian assets are intrinsically less attractive, including for the East Asians themselves. The other one is that regulatory obstacles have prevented financial integration within the region and that initiatives taken to remove them and promote the emergence of a regional financial market have been insufficient or misguided. It would be important to sort out which hypothesis accounts for the largest part of the observed asymmetry.

Third, there is a clear contrast between trade and finance as regards the relative importance of the three bilateral linkages between East Asia, Europe and North America. For trade, the historically major transatlantic link has become the least important one – East Asia is now for both North America and Europe a more important partner than the other western partner and, for East Asia, Europe and North America are of broadly similar significance. So in this respect, the polarised view of the world economy does not correspond to reality. For finance, however, the transatlantic link remains by far the most important one and the ‘third link’

Fifth, since gross stocks of external assets and liabilities have grown dramatically, the asset valuation effects of exchange rate changes matter for all three regions. An admittedly rough calculation indicates that from 2001 until mid 2008 corresponding wealth transfers, mainly from Europe to North America, have amounted to about 4% of world GDP –

References

- Ahearne, Alan, William R. Cline, Kyung Tae Lee, Yung Chul Park, Jean Pisani Ferry, and John Williamson (2007), "Global Imbalances: Time for Action", *Bruegel Policy Brief* 2007/02 (March).
- Asian Development Bank (2007), "Trade and Structural Change in East and Southeast Asia: Implications for Growth and Industrialization," *Asian Development Outlook 2007: Growth amid Change*.
- Belaisch, Agnès and Alessandro Zanello (2006), "Deepening Financial Ties", *Finance and Development*, Volume 43, Number 2, World Bank.
- Blanchard, Olivier, Francesco Giavazzi, and Filippa Sa. 2005. The US Current Account and the Dollar. *Brookings Papers on Economic Activity* 2005, no. 1: 1–66.
- Buldorini, Lucas, Stelios Makrydakis and Christian Thimann (2002), "The Effective Exchange Rates of the Euro", *Occasional Paper Series N.2*, February, European Central Bank.
- Caballero, Riccardo, Emmanuel Farhi and Pierre Olivier Gourinchas (2008), "An Equilibrium Model of "Global Imbalances" (Go) (uri)/TT21Tf40.03821.nc(Euro",.)Tj/TT11Tfzsn

International Monetary Fund (2008c), "Financial Turbulence: Testing Resilience and Dampening Growth", Chapter 2, *Regional Economic Outlook Europe*, April.

International Monetary Fund (2005), Regional economic outlook, Asia and Pacific, September, chapter 5,

International Monetary Fund (2002), "Trade and Financial Integration", *World Economic Outlook*, September.

Ito, Takatoshi (2008), "Influence of the Renminbi on Exchange Rate Policies of Other Asian Currencies", in Morris Goldstein and Nicholas Lardy (eds), *Debating China's Exchange Rate Policy*, Peterson Institute for International Economics.

Lane, Philip R. (2006), "The Real Effects of European Monetary Union", *Journal of Economic Perspectives*, Volume 20, Number 4, Fall, Pages 47–66.

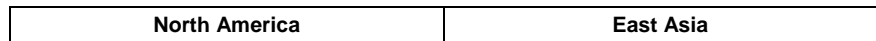
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Appendix 1: Measuring Indirect Export Exposure

The nature of regional trade integration differs greatly between regions with East Asia, on the one hand, and Europe and North America on

Appendix 2: Export dependency of individual countries

Europe



Appendix 3: Bilateral effective exchange rates

Appendix 4: Financial linkages

The bilateral data assembled by Lane and Shambaugh (2007) are used to estimate the strength of financial linkages between East Asia, Europe and North America. This appendix summarises the information available in Appendix A in Lane and Shambaugh (2007).

<i>Asset class</i>	<i>Sources</i>	<i>Assumptions</i>
Portfolio Equity Portfolio Debt	IMF's Coordinated Portfolio Investment Survey (CPIS)	<ul style="list-style-type: none"> • Missing points are estimated using a gravity based model of bilateral equity/debt holdings • Holdings listed in offshore financial centres are eliminated
Direct Investment	UN's United Nations Conference on Trade And Development (UNCTAD)	<ul style="list-style-type: none"> • FDI valued at historical cost • Liabilities of the reporters used to estimate assets of the non reporters
Bank Loans	Bank of International Settlements (BIS)	<ul style="list-style-type: none"> • Liabilities of the reporters used to estimate assets of the non reporters
Reserves	IMF's Currency Composition of Official Foreign Exchange Reserves (COFER) Data from Central Banks Data from Literature	<ul style="list-style-type: none"> • For World total • For country holdings • For country holdings

Appendix 5: Currency composition of bilateral holdings of financial assets and liabilities

To estimate

assets in