BBVA Research

China's outward FDI: What explains geographical destination? Some thoughts for Europe

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Roadmap to presentation

- 1. Why China's rapid growth in Outward FDI (OFDI) makes sense?
- 2. Some stylized facts
- 3. How to explain geographical choice?
 - Comparison with other Asian countries who conducted large OFDI before
 - Also comparison with India today being the only country of similar population size
- 4. What is it for Europe?

1. Why to invest abroad?

- 1. Big economies tend to invest abroad
 - China is already second largest economy...
 - But large economies have always been wealthy
- 2. China's citizens might not be wealthy but country sitting on huge liquid assets
- 3. Outward FDI generally to export know-how but could it be a way to import it?
 - India is trying also, before Taiwan did
- 4. Outward FDI may be a substitute of imports for some goods
 - Seems to be the case for some commodities in China, specially energy

1. Where does China stand?: Growing fast

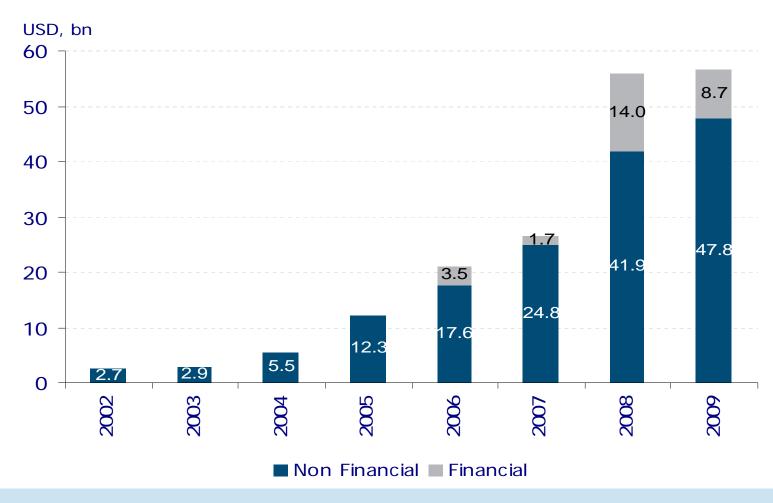


Although moderating in 2009, 2010 should again be impressive



Still concentrated on non financial sector

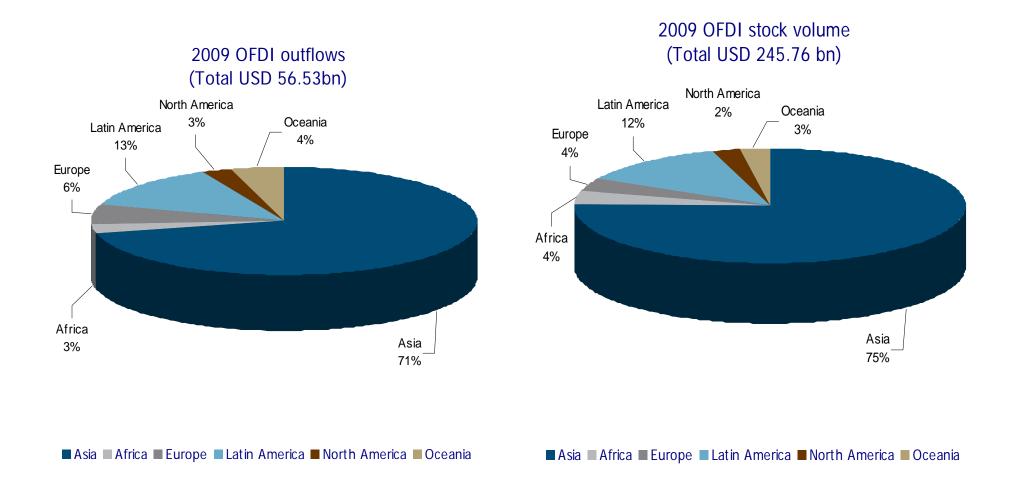
Non-financial and financial OFDI flows



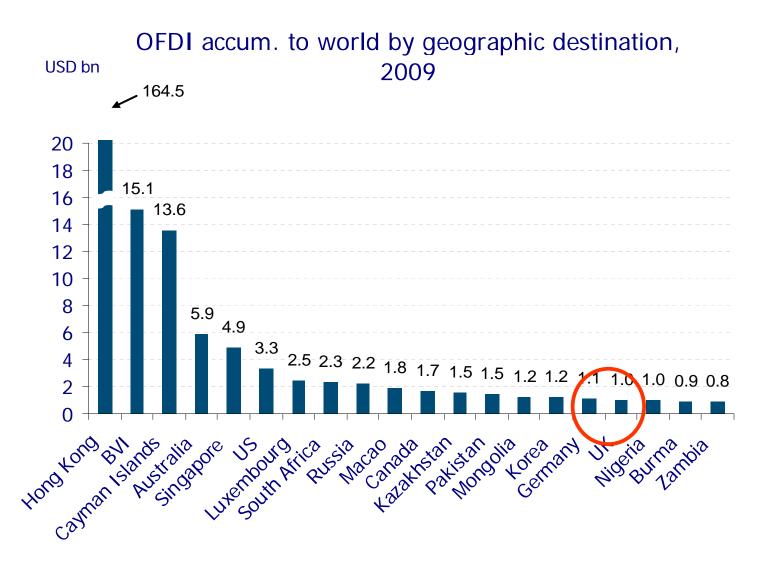
Sector wise mining is become more important and banking less so

Outward flows	2006	(in % of total)	2009	(in % of total)
Leasing & Commercial Service	21,717	39	20,474	36
Mining	5,824	10	13,343	24
Banking and Insurance	14,048	25	8,734	15
Wholesale & Retail Trade	6,514	12	6,136	11
Manufacturing	1,766	3	2,241	4
Transport, Storage & Postal Service	2,656	5	2,068	4
Real Estate	339	1	938	2
Scientific Research, Poly Service & Software	167	0	776	1
Electricity, Gas & Water Production & Supply	1,313	2	468	1
Construction	733	1	360	1
Agricultural	172	0	343	1
Information Transmission, Computer Service	299	1	278	0
Residential & Other Service	165	0	268	0
Accommodation & Catering Trade	30	0	75	0
Culture, Sport & Recreation	22	0	20	0
Water Conservancy, Enviro & Public Utility Mgt	141	0	4	0
Education	2	0	2	0
Health Care, Social Security & Welfare	0	0	2	0

Most FDI goes to Asia. Latin America as destination very resilient

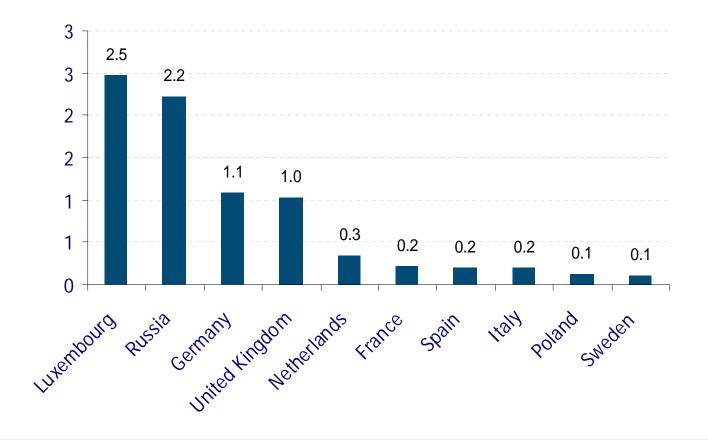


Europe is hardly present compared to its size



France lagging behind also Spain and Italy

OFDI accum. to Europe by geographic destination, 2009



Geographical destination: Is China very different from key Asian investors?

- Fung and Garcia-Herrero (Asia Development Review 2009) analyze empirically the determinants of OFDI's geographical destination for
 - Japan
 - South Korea
 - Taiwan
 - China
 - 1. Some historical fact on Japanese, Korean and Taiwanese OFDI
 - 2. Our empirical model
 - 3. Results
 - 4. Implications for China

Japanese OFDI: stylized facts

- Phases in Japanese OFDI
 - In the 1950s and 60s, mainly resource extraction; intensified during oil shock of the
 70s
 - 1960s and 70s, higher labor costs led to labor-intensive manufacturing firms moving abroad
 - In 1981, US market –specially autos due to protectionist actions in the US and elsewhere
 - Hypothesis: FDI jumping over trade barriers
 - From 1985 on, Yen shock
 - Hypothesis: high yen drove FDI abroad
- Japanese firms are famous to pay attention to quality and demand higher quality of labor (job rotation, just-in-time, etc)
 - So we also include host human capital in set of possible determinants

Korean OFDI: stylized facts

- Phases in Korean FDI:
 - From 1968 to 1993, number one motive is to develop natural resources
 - Thereafter, securing local or third markets and utilizing low labor costs
 - Hypothesis: Market-seeking

Taiwanese OFDI: stylized facts

- Taiwan's OFDI is heavily concentrated in China so conclusions on geographical destination hard to generalize
- Phases in Taiwanese OFDI
 - Before 1978, outflows were severely restricted
 - In the 1980s, easing of the restrictions, with help from Ex-Im Bank
 - The NT dollars rose in the 1980s; large foreign reserves led to inflation; higher labor costs all led to the erosion of competitiveness of Taiwanese firms, which had to go abroad
 - In the 1990s onwards, high-tech companies needed to upgrade and to acquire technology

Our model

- Several hypotheses for Chinese OFDI:
 - resource extraction
 - access to markets
 - technology acquisition
- Other potential determinants of OFDI include:
 - openness of the host economies
 - distance
 - sharing borders
 - human capital
 - home market macro variables growth rate of GDP
 - GDP level
 - current account balance
 - money supply

Determinants of Chinese OFDI (1991-2007)

- Market Size, positive and significant Preference for larger and/or richer countries
- Human capital negative and significant –Search for knowledge
- Distance, negative and significant *Preference for closer countries*
- FOOD is positive and significant Preference for targets with abundant natural resources, sp. food

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Determinants of Japanese OFDI (1983-2007)

- Market size positive and significant
- FOOD is significant and positive
- Ores and metals significant and positive
- Openness significant and positive Opposite of hypothesis of tariff-jumping
- No Technology acquisition
- No evidence of importance of Yen valuation for whole sample

Determinants of Korean OFDI (1980-2007)

- Market access significant and positive
- FOOD is positive and significant
- Distance is negative and significant

Determinants of Taiwanese OFDI (1968-2007)

- Market access significant and positive
- Investment in technology in host country significant and positive

Overall results and conclusions

- Overall, for the full model:
 - Market access is important for all four economies
 - FOOD is important for Japan and Korea
 - Metals and ores important for Japan as well
 - Abundant technology is important for Taiwan
- After all, China's geographical strategy for OFDI does not seem so strange when comparing with its Asian predecessors
 - Europe should be in the rather because of market access considerations
 - If China were to follow Taiwan and search technology, Europe would become a more interesting destination

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China and India's comparison for geographical destination of OFDI

- Fung and Garcia Herrero (forthcoming in China Economic Policy Review 2010)
 analyze empirically the determinants of China's and India's OFDI
- Both countries similar in terms of stellar growth recently and population but very different in their sectoral concentration
- China plays a key role in global manufacturing while India could soon be in a similar situation for services

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Objective of empirical paper

- 1. Examine empirically what determines the destination of China's and India's outward FDI
 - Starting with the standard gravity model and then including other variables which proxy other motives
- 2. Explore the potential differences in investment behavior between India and China
 - Specially important given that most FDI from China involves the public sector while most FDI from India comes from private firms

Model variables

In addition to the gravity model, other outward FDI motives to be explored:

- 1. Institutional quality
- 2. Exchange rate issues
- 3. Search for natural resources
- 4. Controlling the supply chain
- 5. Home market conditions
- 6. Search for technology
- 7. Search for human capital

Some stylized facts

- China's most important destination economy is Hong Kong
 - But is this real?
 - Not to a large extent because of roundtripping so we exclude it. Other off-shore centers also dropped

East Asia
South Asia
South-East Asia

FDI flows within subregions
\$10 billion

\$5 billion

\$2 billion

\$2 billion

\$3 billion

\$3 billion

\$3 billion

Figure II.10. Pattern of intraregional FDI flows in South, East and South-East Asia, 2002-

Source: UNCTAD.

The width of arrows reflects the annual average of FDI flows during 2002-2004 (based on FDI inflow data from host economies). FDI flows below \$400 million are not shown, except for those between India and South-East Asia. The size of circles reflects the inward FDI stock in 2004.

Findings

- Both China and India have investment motives beyond the standard gravity model
- However, their investment motives are clearly different
 - China targets countries with worse institutions and low education
 - India instead prefers countries with better rule of law
 - China tends to go to economies with are larger but poorer
 - Both India and China seem to be investing in economies to seek fuels
 - There is also some evidence that they are investing to acquire technology
 - Exchange rates do not play a major role in affecting Indian or Chinese investment

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Some tentative conclusions for Europe

- China does not seem to be very interested in Europe given the small amount of OFDI into European countries
- The motifs behind Chinese's OFDI found in Fung and Garcia-Herrero (2009 and 2010) tend to explain why such OFDI remains low
- However, there could also be <u>protectionis</u>t reasons from the European side (not included in our analysis)
- There are reasons to believe that this will change that China may become more insterested:
 - The <u>experience of some other Asian countries</u> with large OFDI shows that they graduated from a resource-seeking motif to others more related to market size and technology
 - India's motifs behind geographical destination today are already more akin to Europe's comparative advantage than those of China
 - According to the literature the <u>appreciation of the RMB</u> against the euro should not be the key determinant