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The unbalanced dragon: China's uneven provincial and regional FDI performance

by

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Among developing countries, China attracts most foreign direct investment (FDI). Where is this investment located *within* China, what explains its distribution and what are policy implications?

We used UNCTAD's FDI Performance Index to answer the first question.¹ Although developed for *countries*, it can be applied to *sub-national* units. It uses provincial GDP to ascertain whether a given territorial unit has received FDI inflows as expected from its economic size. Standardizing the data accordingly reveals three clusters of provinces for 2007-2010 (table 1, figure 1 below):

- The first cluster encompasses virtually all coastal provinces: they have an index value above 1, i.e. perform better than their economic size would lead one to expect. They account for 9 of the top 11 performers of Mainland China's 31 provinces, municipalities and autonomous regions ("provinces").
- The provinces in the middle cluster underperform (index value of 1-0.5). They include 5 central provinces, but also 3 western and 2 coastal provinces.

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¹ UNCTAD, *World Investment Report 2002* (Geneva: UNCTAD, 2002), p. 23. The Index has several limitations (ibid.), but it can serve as an initial benchmark that reflects the extent of success regarding a province's FDI performance.

- The provinces in the bottom cluster underperform significantly (index value below 0.5), comprising primarily the country's western provinces (8 out of the 10 provinces in this cluster).

Clearly, the further away a location is from the coast, the less FDI it attracts: the Coastal Region over-performs, the Central and especially the Western Region under-perform. These three clusters roughly correspond to China's administrative regions (Coastal, Central and Western Regions), respectively.²

The Coastal Region has always been the best performer. Importantly, however, its share in China's total FDI inflows declined from 89% in 1987-1990 to about 75% in 2007-2010; that of the Central Region rose from below 4% to about 17%, and that of the Western Region fluctuated mainly below 10%. Still, the share of the Coastal Region in total FDI inflows remains higher than its share in China's GDP (84% vs. 56%); for the Central Region (10% vs. 25%) and the Western Region (6% vs. 18%), the reverse is true. However, while the Coastal Region as a whole has always performed better than its GDP predicts, its index value has declined from an average of 1.6 in 1987 to 1.3 in 2010; the Central Region improved its index value, but remained under 1; the Western Region remained under 0.5 for most of the period 1987-2010 (figure 2 below). This shows a moderate shift of FDI flows away from the coast to the interior.

Why this pattern and what to do about it?

First, while China's overall *regulatory framework* is the same for all provinces, the Coastal Region benefitted from early economic liberalization and the establishment of Special Economic Zones; this created an enabling environment for export-oriented and market-seeking FDI. Liberalization began only later for other parts of China. While the Central and Western provinces have advantages that apply only to them, more could be done, e.g. granting longer tax incentives (and compensating tax losses centrally). Also, the degree of ease of doing business in provincial capital cities shows a pattern (table 2 below) similar to our index ranking, pointing to a potential to-do for policy makers. Moreover, officials need to understand better what role enterprises play in economic development and how a law-based market system works.

Second, the Coastal Region has the best *economic determinants*: high economic growth and mature markets, developed supplier industries, modern infrastructure, cheap skilled labor, and a favorable business culture; it also benefits from closeness to Hong Kong and strong links with overseas Chinese. Massive efforts are being made to improve the interior's physical infrastructure, strengthen its science and technology capacities and upgrade its educational and skills offerings. These need to continue: they lay the foundations for attracting more investment. Supporting enterprise development and industrial clustering would also be important, as would be higher wages to create a demand-pull.

Finally, all provinces in China have undertaken active *investment promotion*, but the coastal provinces could build on more favorable regulatory and economic conditions. Elsewhere, such promotion needs to be strengthened, by upgrading the capacity of investment promotion agencies (IPAs) to attract and service investors. The appointment of FDI Ombudspersons would help to

² See <http://www.chinamap.com/html/baodaoshuoming2.aspx>.

identify areas for improvements and help mediate conflicts. Since coastal production costs are rising rapidly, the interior provinces could attract labor-intensive production from there, production that otherwise might move abroad. Twinning arrangements between coastal and interior IPAs could facilitate such internal relocation.

China's Government has recognized that the country's uneven development is a challenge that must be met. Key is to increase investment by domestic and foreign firms in the Central and Western Regions. Since, in the end, all investment is local, production conditions there need to be made more attractive. All three sets of investment determinants therefore require further strengthening. At the same time, efforts should not only concentrate on attracting investment, but ensuring that the attracted investment makes a significant contribution to the economic, social and environmental development of the recipient provinces.

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Table 1. China's provinces Inward FDI Performance Index, four-year average, 1987 - 2010^{a)}

1987-1990			1991-1994			1995-1998			1999-2002			2003-2006			2007-2010		
Province	Index	Rank															
Hainan	5.3	1	Hainan	5.3	1	Hainan	3.4	1	Guangdong	2.5	1	Jiangsu	1.9	1	Tianjin	2.7	1
Guangdong	4.9	2	Fujian	3.8	2	Tianjin	3.0	2	Fujian	2.2	2	Tianjin	1.9	2	Liaoning	2.3	2
Beijing	4.0	3	Guangdong	3.4	3	Guangdong	2.8	3	Tianjin	2.2	3	Shanghai	1.9	3	Jiangsu	1.8	3
Shanghai	2.7	4	Shanghai	1.9	4	Fujian	2.5	4	Hainan	2.0	4	Hainan	1.7	4	Hainan	1.8	4
Fujian	2.6	5	Beijing	1.5	5	Shanghai	2.1	5	Jiangsu	1.9	5	Jiangxi	1.4	5	Shanghai	1.6	5
Shaanxi	1.6	6	Tianjin	1.4	6	Beijing	1.6	6	Shanghai	1.7	6	Liaoning	1.4	6	Chongqing	1.3	6
Tianjin	1.4	7	Jiangsu	1.2	7	Jiangsu	1.5	7	Zhejiang	1.4	7	Zhejiang	1.4	7	Jiangxi	1.3	7
Liaoning	0.8	8	Liaoning	0.9	8	Liaoning	0.9	8	Liaoning	1.1	8	Fujian	1.3	8	Beijing	1.2	8
Guangxi	0.8	9	Shandong	0.8	9	Guangxi	0.7	9	Shandong	0.9	9	Guangdong	1.3	9	Guangdong	1.2	9
Jiangsu	0.5	10	Guangxi	0.8	10	Shandong	0.7	10	Zhejiang	0.7	10	Shandong	1.2	10	Zhejiang	1.1	10
Shandong	0.4	11	Zhejiang	0.5	11	Zhejiang	0.5	11	Hubei	0.6	11	Beijing	1.2	11	Fujian	1.1	11
Chongqing	0.3	12	Chongqing	0.5	12	Shaanxi	0.5	12	Guangxi	0.5	12	Qinghai	0.8	12	Anhui	0.9	12
Zhejiang	0.3	13	Hubei	0.4	13	Hebei	0.5	13	Jiangxi	0.5	13	Hubei	0.8	13	Hubei	0.8	13
Xinjiang	0.3	14	Shaanxi	0.3	14	Jilin	0.5	14	Hunan	0.5	14	Hunan	0.7	14	Inner Mongolia	0.7	14
Qinghai	0.3	15	Jilin	0.3	15	Chongqing	0.5	15	Qinghai	0.4	15	Inner Mongolia	0.5	15	Shandong	0.7	15
Heilongjiang	0.2	16	Jiangxi	0.3	16	Hunan	0.4	16	Shaanxi	0.4	16	Heilongjiang	0.5	16	Heilongjiang	0.7	16
Henan	0.2	17	Hebei	0.3	17	Hubei	0.4	17	Jilin	0.4	17	Hebei	0.4	17	Hubei	0.7	17
Hubei	0.2	18	Tibet	0.3	18	Jiangxi	0.4	18	Hebei	0.4	18	Shaanxi	0.4	18	Qinghai	0.6	18
Hebei	0.2	19	Hunan	0.3	19	Heilongjiang	0.4	19	Shanxi	0.3	19	Chongqing	0.4	19	Henan	0.6	19
Sichuan	0.2	20	Sichuan	0.2	20	Anhui	0.3	20	Chongqing	0.3	20	Jilin	0.3	20	Sichuan	0.5	20
Guizhou	0.1	21	Henan	0.2	21	Henan	0.3	21	Sichuan	0.3	21	Anhui	0.3	21	Hebei	0.5	21
Tibet	0.1	22	Heilongjiang	0.2	22	Shanxi	0.2	22	Anhui	0.2	22	Henan	0.3	22	Shaanxi	0.4	22
Jiangxi	0.1	23	Anhui	0.2	23	Yunnan	0.2	23	Heilongjiang	0.2	23	Sichuan	0.3	23	Jilin	0.4	23
Yunnan	0.1	24	Ningxia	0.2	24	Ningxia	0.2	24	Ningxia	0.2	24	Ningxia	0.3	24	Shanxi	0.4	24
Jilin	0.1	25	Gansu	0.2	25	Sichuan	0.2	25	Henan	0.2	25	Guangxi	0.3	25	Yunnan	0.3	25
Ningxia	0.1	26	Yunnan	0.1	26	Gansu	0.1	26	Inner Mongolia	0.2	26	Shanxi	0.2	26	Guangxi	0.3	26
Shanxi	0.1	27	Guizhou	0.1	27	Inner Mongolia	0.1	27	Yunnan	0.1	27	Tibet	0.1	27	Tibet	0.2	27
Anhui	0.1	28	Inner Mongolia	0.1	28	Guizhou	0.1	28	Gansu	0.1	28	Yunnan	0.1	28	Ningxia	0.1	28
Hunan	0.1	29	Shanxi	0.1	29	Tibet	0.1	29	Guizhou	0.1	29	Guizhou	0.1	29	Guizhou	0.1	29
Gansu	0.1	30	Xinjiang	0.1	30	Xinjiang	0.1	30	Xinjiang	0.0	30	Xinjiang	0.0	30	Xinjiang	0.1	30
Inner Mongolia	0.0	31	Qinghai	0.0	31	Qinghai	0.1	31	Tibet	0.0	31	Gansu	0.0	31	Gansu	0.1	31

Source: The authors, based on China Data Center <http://chinadataonline.org/>.

Color code

Coastal provinces according to official classification.
Central provinces according to official classification.
Western provinces according to official classification.

a) The Index is calculated according to the following formula: $Index = (FDI_{province} / FDI_{China}) / (GDP_{province} / GDP_{China})$. The horizontal dotted lines indicate the clusters. No official data on utilized FDI at the provincial level are available, although MOFCOM's, China Foreign Investment Report 2011 (Beijing: Economics and Management Press, 2011) contains such data for a few years. For this reason, the provincial FDI data reported by the China Data Center at the University of Michigan have been used. A comparison of the data available from the MOFCOM Report with the data available from the China Data Center for the respective years suggests a similar pattern.

b) 2007-2009 figures only.

Table 2. China's provincial capitals, World Bank's Doing Business Index ranking, 2008

Provincial capital	Starting a business	Registering property	Enforcing contracts	TOTAL	Overall ranking ^{a)}	Inward FDI Performance Index ranking 2007-2010
Guangzhou, Guangdong	3	2	1	6	1	9
Nanjing, Jiangsu	2	5	2	9	2	3
Shanghai	5	1	4	10	3	5
Hangzhou, Zhejiang	1	7	3	11	4	10
Ji'nan, Shandong	4	4	5	13	5	15
Tianjin	8	6	5	19	6	1
Fuzhou, Fujian	7	3	12	22	7	11
Beijing	6	12	9	27	8	8
Shenyang, Liaoning	9	14	10	33	9	2
Chongqing	17	9	8	34	10	6
Xi'an, Shaanxi	25	10	5	40	11	22
Changchun, Jilin	10	8	25	43	12	23
Haikou, Hainan	13	23	11	47	13	4
Hohhot, Inner Mongolia	11	18	19	48	14	14
Urumqi, Xinjiang	14	13	22	49	15	30
Shijiazhuang, Hubei	16	21	14	51	16	17
Harbin, Heilongjiang	18	14	20	52	17	16
Chengdu, Sichuan	19	11	23	53	18	20
Yinchuan, Ningxia	26	16	13	55	20	28
Zhengzhou, Henan	12	27	16	55	19	19
Nanchang, Jiangxi	21	20	15	56	21	7
Wuhan, Hubei	15	25	17	57	22	21
Taiyuan, Shanxi	20	26	18	64	23	24
Hefei, Anhui	27	17	26	70	24	12
Xining, Qinghai	23	19	28	70	25	18
Changsha, Hunan	22	24	27	73	26	13
Kunming, Yunnan	23	22	29	74	27	25
Nanning, Guangxi	28	30	20	78	28	26
Guiyang, Guizhou	30	28	24	82	29	29
Lanzhou, Gansu	29	29	30	88	30	31
Lhasa, Tibet	31	31	31	93	31	27

Source: The authors, World Bank, "Doing business in China 2008", at <http://www.doingbusiness.org/Rankings/china/>, and China Data Center.

a) Calculated by adding the ranking scores of the individual indicators.

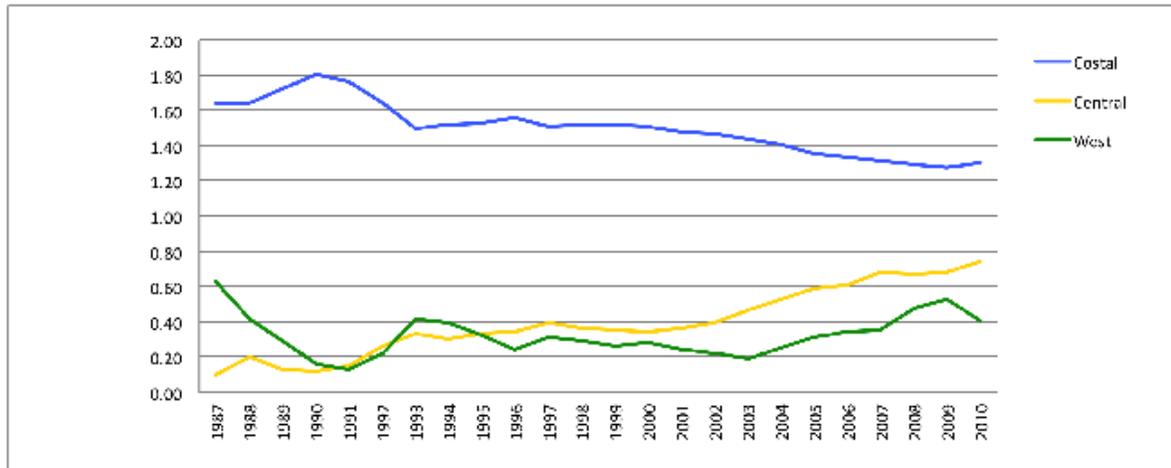
Color code

Coastal provinces accordingly to official classification.

Central provinces accordingly to official classification.

Western provinces accordingly to official classification.

Figure 2. China's regions Inward FDI Performance Index, 1987 - 2010 ^{a)}



Source: The authors, based on China Data Center <http://chinadataonline.org/>.

a) Calculated by adding the FDI inflows for the region divided by the GDP of that region.