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The Political Investment Cycle Within China: The Next Transition and its Investment Implications

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The Next Transition and Its Investment Implications

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This article explores the importance and risks of internal infrastructure investments in China whether made directly by, or promoted by, the government or by foreigners. Two factors in our analysis are worth noting.

First, China's internal investment as a share of gross domestic product (GDP) is now fast approaching 50 percent, up from slightly under 30 percent in 1982 (Ahuja and Nabar 2012). This level of investment is high by most standards, including comparisons to other countries with similar development strategies

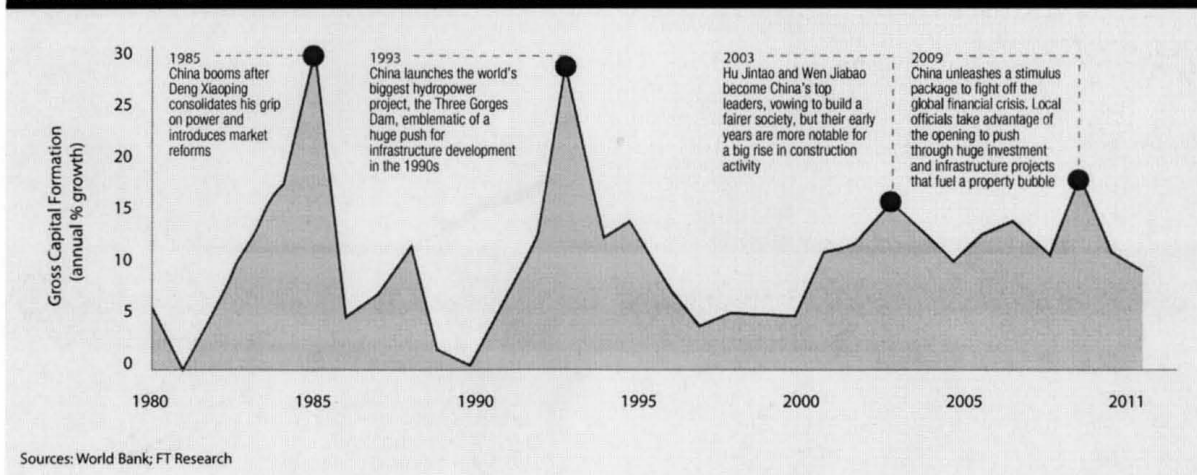
or income levels. This investment historically has been concentrated in the manufacturing sector, encouraged by various cost advantages, including a low cost of capital, labor, utilities, pollution control, energy, land, tax incentives, and an undervalued currency.

Second, China changes its top political leaders every decade and shuffles other high-ranking officials and local leaders every five years. These changes coincide with the National Communist Party congresses. The last party congress took place in late 2012 leading to the change of political leadership in

China—Hu Jintao being replaced as president by Xi Jinping.

Interestingly, since Mao Zedong's death in 1976, Chinese leadership transitions have, like clockwork, been accompanied by a big jump in government spending (see figure 1). For example, in the second half of 2012 provincial and municipal governments unveiled spending plans totaling more than Rmb10 trillion (\$1.6 trillion). The National Development and Reform Commission, a powerful central planning agency, also approved about Rmb 1 trillion worth of urban rail, road, and

FIGURE 1: CHINA'S POST-PARTY CONGRESS INVESTMENT BOOM



waterway projects. These large expenditures are not isolated or rare historical events. The economic influence of this political cycle has been visible in investment spikes at the time of virtually every congress including 1977, 1982, 1987, 1992, 2002, and 2007.

Recent studies on the nature of investment in China have shown that financial variables such as interest rates, the exchange rate, and the depth of the domestic capital market are important determinants of corporate investment (Ahuja and Nabar 2012; Geng and N'Diaye 2012). Very few studies have looked at the influence of political factors on overall investment volume. This article will attempt to fill this gap in the literature.

Why should the well-worn path of the political investment cycle in China interest outside investors? The answer is that China has the highest risk of an economic correction because of low investment productivity in recent years (Standard & Poors 2012). When the economy corrects, there should be a greater negative impact on real GDP growth given the high investment-GDP ratio. Therefore, the longer the period and the greater the size of the investment overhang to start with, the larger the economic correction.

Three groups of countries should be most affected by a slowdown in investment in China. The first group includes China's geographic neighbors. These countries are strongly integrated in the Chinese supply chain. Goods made in a chain of production from various countries contribute inputs that are assembled in China and exported. Taiwan, Korea, Thailand, Malaysia, and the Philippines fall into this first group. For these countries, the impact is likely to be most profound. Recent International Monetary Fund (IMF) estimates have shown that for Taiwan—which is likely to be most impacted—if investment in China were to fall by 1 percentage point, growth in Taiwan would fall by 0.9 percent.

The second group of countries impacted would be commodity exporting nations that are heavily dependent on

demand from China. When demand in China drops, commodity prices and commodity exports from those countries drop. So, for example, for a commodity producing country such as Chile, a 1-percentage-point decline in investment in China translates into a 0.4-percent drop in growth. For African commodities exporters, such as Zambia, there would be a slightly smaller impact.

The third group of countries produces high-quality investment goods (i.e., finished products such as machinery used for production) because China currently relies so heavily on investment. A sharp drop in this type of investment likely would have a significant impact on exporters of these finished goods. Even for large economies such as Japan or Germany, for example, a 1-percentage-point decline in investment in China likely would lower economic growth by about 0.1 percent in Germany and Japan. This fractional impact is not trivial given the size of these economies.

In short, Chinese investment has profound implications for commodity exporters and goods producers. A very sharp slowdown in investment in China would have a significant impact on growth in a wide array of countries.

China's Economy

The Chinese economy has accelerated in recent months and a number of factors suggest this pick-up in activity will persist throughout 2013. Real GDP growth in the fourth quarter of 2012 jumped to 8 percent year over year, ending seven consecutive quarters of decelerating expansions. The upturn reflected a sizeable rebound in net exports, a firming of fixed investments, and sustained gains in domestic consumption. In 2013 momentum in economic growth should modestly increase.

Domestically, private consumption likely will keep growing at a solid pace as real disposable income outpaces real GDP growth. In turn, rising credit and pent-up demand stemming from prior policy tightening should continue to support improving real estate activity.

Externally, a higher pace of growth among most of China's main Asian trading partners should offset the dampening effect on Chinese exports resulting from protracted weakness across advanced economies. In all, the Chinese economy should expand 8.2 percent in 2013, a 0.4-percentage-point gain over 2012.

A stronger Chinese upturn will reinforce improving growth dynamics across Asia and other emerging markets. Ultimately, this will result in stronger global trade, which will have positive spill-over effects even in the United States and Canada.

China relies mostly on its neighbors to drive exports. Chinese exports have increased in recent months, on the back of improving Asian demand for Chinese products, as well as on stronger sales to North America and Africa. In 2013, export momentum should improve as China's main trading partners in Asia and other emerging markets experience a further acceleration in domestic economic activity. Nevertheless, the persistency of only a modest expansion in the United States and a protracted Eurozone recession will limit the upside for growth of Chinese external sales.

Stock Markets in China

China's stock market performance has shown little relevance to its economic performance over the past two decades. From 1992, when the stock market was first established in Shenzhen, until 2012, China has grown at an annual rate of around 10 percent, but its stock market performance has been very volatile. The behavior of the Chinese stock market has been affected little by the country's long-term growth potential and more by its regulatory policies and a lack of forceful enforcement of security laws and regulations, as well as short-term macroeconomic policies. Consequently, the Chinese stock market has become a haven for speculators rather than a place for long-term investment.

Though China's recent performance doesn't stack up to that of previous

years, macroeconomic performance remains robust relative to emerging market peers as well as major advanced economies such as the United States, the European Union, and Japan. The contrast between China's GDP growth and its stock market returns raises questions about why China's market doesn't reflect its underlying economic fundamentals as the second-largest economy in the world.

We believe that growth of around 7–8 percent a year is sustainable for China. It is also what the government set for itself as a goal in its 2012 Five-Year Plan. That said, to achieve that pace of growth over the medium term China will have to change its growth model. Over the past few years, growth in China has relied very much on high and rising rates of internal investment. So, proprietary Chinese government investment has been very strong, capacity has been built, and infrastructure has been added, but this rapid pace cannot continue. Instead, over the next few years, there needs to be a smooth handover from investment to domestic consumption as the main source of growth in China. It is this domestic consumption and the desire of exporters to penetrate that market that creates interesting investment opportunities.

Methodology and Empirical Results

In this section we analyze the relationship between investment and political factors and its implication for investors. In particular, we conduct an empirical analysis to explain the dynamics of investment in China and the impact of leadership change on the level of investment. Following the empirical literature, we use firm-level data to capture the effects of a number of factors on investment. These factors include stickiness in investment, adjustment costs (captured by the capital output ratio squared), capital market development, cost of capital, exchange rates, country risk, countries' level of development,

TABLE 1: BREAKDOWN OF CHINESE LISTED FIRMS BY INDUSTRY

Standard Industrial Classification	Number of Firms	Share of Sample
Agriculture, Forestry and Fishing	40	2.10
Mining	44	2.31
Manufacturing	1,111	58.23
Utilities	69	3.62
Construction	38	1.99
Transportation	73	3.83
Information Technology	151	7.91
Wholesale and Retail Trade	101	5.29
Finance and Insurance	34	1.78
Real Estate	118	6.18
Social Services	52	2.73
Communication and Cultural Industry	17	0.89
Comprehensive	60	3.14
Total	1,908	100

Source: Worldscope and WIND Databases

TABLE 2: BREAKDOWN OF CHINESE LISTED FIRMS BY OWNERSHIP

Ownership Type	Number of Firms	Share of Sample
Government Agency	137	7.18
State-Owned Assets Supervision and Administration Commission	762	39.94
State-Owned Enterprises	81	4.25
Private	826	43.29
Collective	19	1.00
Foreign	58	3.04
University	9	0.47
Other	16	0.84
Total	1,908	100

Source: Worldscope and WIND Databases

profit opportunities, uncertainty, and the availability of external financing.

In particular, we regress corporate capital expenditures (in relation to sales) on:

- past capital expenditures,
- the capital output ratio squared,
- stock market capitalization in relation to GDP,
- real interest rates (the change in the real effective exchange rate),
- real GDP growth (the current account balance in relation to GDP),
- foreign debt to GDP ratio,
- the relative price of capital to output,
- the volatility of output,
- and a dummy variable representing leadership change.

The firm-level data used in this paper are from Worldscope Database and Wind Database. It is the same data set used in Geng and N'Diaye (2012). The database reports on listed financial and nonfinancial corporations' annual financial statements during 1990–2009. The total number of firms included in the sample is 1,908 and the total number of observations is 7,422. Manufacturing firms dominate the sample and account for about 58 percent of the reporting firms. Private firms account for the largest share of ownership (43 percent). Tables 1 and 2 show a breakdown of the data.¹

Table 3 shows the results of the firm-level data regressions. The results indicate that investment is positively related to capital market development,

TABLE 3: DETERMINANTS OF CORPORATE INVESTMENT IN CHINA

Explanatory Variables	Estimate (t-value)
Capex Ratio (lagged one year)	-0.137* (2.14)
Investment Adjustment Cost squared	-0.011* (2.30)
Stock Market Capitalization/GDP	0.428** (5.58)
Real Interest Rate (lagged one year)	-0.082** (4.12)
Appreciation of Yuan	-0.077* (2.36)
Real GDP Growth	0.134* (2.48)
Current Account Balance/GDP (lagged one year)	0.066 (1.76)
Relative Price of Capital to GDP	0.622** (6.40)
Volatility of GDP growth (lagged one year)	-0.298* (2.38)
Leadership Change Dummy	1.454** (7.44)
Observations	7,422
Number of Firms	1,908
AR(1)	0.054
AR(2)	0.165
* Significant at the 5-percent level	
** Significant at the 1-percent level	

output growth, and the relative price of capital, and negatively related to adjustment costs, real interest rates, changes in the real effective exchange rate, and uncertainty. While most of these results are consistent with what has been shown in the literature—e.g., capital market development increases financing opportunities and instruments (Beck and Levine 2001; Leahy et al. 2001)—the sign of the relative price of capital is less obvious.

Indeed, as shown in Caselli (2007), the price of capital relative to that of output is higher the less advanced the economy. With investment rates being higher in general in China, the result in table 1 could simply be capturing the positive relationship that exists between the level of development and that of investment.

Overall, the results are consistent with our expectations. Investment falls with rising real interest rates, rising uncertainty, and the level of economic development in China. Investment rises with growth opportunities, with financial development, and with a depreciating currency. This may reflect the dominance of manufacturing firms in the sample.

An analysis of the estimation results provides us with some policy implications about the Chinese economy. First, real interest rates have a negative

impact on investment. At the aggregate level, a 100-basis-point increase in real interest rates reduces corporate investment in China by about 0.8 percent of GDP. Based on these estimates, raising real interest rates to the level of the marginal product of capital net of depreciation probably would lower investment by about 2 percent of GDP.

Second, exchange-rate appreciation also lowers investment. A 10-percent appreciation would reduce total investment by around 0.7 percent of GDP. The large concentration of manufacturing companies in the firm-level sample means that the estimated impact of exchange-rate appreciation from the firm-level data is large.

Third, indicators of capital market development suggest that as China's financial system develops, it tends to promote higher investment, largely by easing the financing constraints faced by firms.

Now let's consider one of the main focuses of this paper. Does the change in political leadership in China lead to higher investment? A dummy variable is included in the regression equation to measure this effect. The variable takes the value of 1 in the years when a leadership change took place and zero otherwise. The coefficient for the leadership dummy variable is positive and statisti-

cally significant. In fact, the variable is highly significant at the 1-percent level. This shows that leadership changes do lead to investment boom in China.

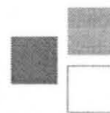
Investment Implications of the Political Cycle

Empirical results show the close connection between the economy and government transitions in China, perhaps an even closer connection than in western countries. The flurry of government spending-plan announcements in the second half of 2012 preceding the change in the political leadership highlights the deeper political forces still at work in China's economy, no matter how much it has opened and developed in the past three decades.

With the economic growth rate in China dipping toward 7.5 percent from a high of about 12 percent a couple years ago, the incentive for government officials to promote growth is strong. The investment projects announced in the second half of 2012 were described as stimulus initiatives to prop up the slowing economy. But the stimulus label misses the point. The wider political context rather than immediate economic trouble is the most important factor behind the investment announcements.

A careful analysis of the historical trend in investment spending in China shows that a deceleration in investment before party congresses is as common as the post-congress investment booms. When new cadres take local political posts following the party congress, they plan out their term intent on major achievements. These almost always are big infrastructure or industrial projects. These take time to complete, so the sooner they begin, the greater the chance that they can be completed during the term.

This spending binge saddles the economy with rising price levels, which forces the central government to tighten policy for several years to calm the economy. Tightening stops in the year of the congress. With inflation largely under control, the groundwork has been laid for more monetary easing and fiscal spending




during the year of the political congress. It is due to the end of the intervention that investment starts going up again.

Do we expect this close relationship between leadership change and investment boom to continue in the future? It depends on how long China can sustain such a high rate of investment (currently at 50 percent of GDP) against the backdrop of weak demand from the rest of the world, in particular from the United States and the Eurozone. Persistent high rates of investment run the risk of creating overcapacity, exerting deflationary pressure, increasing nonperforming loans in the banking system, and ultimately deteriorating the general government's fiscal position (Geng and N'Diaye 2012). Such a buildup of excess capacity also has consequences for the rest of the world, as excess capacity in the manufacturing sector in China further dampens tradable prices in global markets, potentially creating trade tensions.

The Chinese government realizes these risks and envisages in its 12th Five-Year Development Plan a set of reforms to rebalance economic growth away from exports and investment toward private consumption. Key to such a structural change is the plan to reform the financial system, which includes liberalizing interest rates, developing capital markets, reforming the exchange-rate system, and raising the costs of various inputs to production—capital, labor, energy, land, water—and reducing the high level of corporate savings and investment.

With the possible realization among Chinese leaders that they have to rein in investment growth or risk a major

crisis, the economic impact of the political cycle may become much weaker in the future than in the past. This will happen if the Chinese policy-makers realize the limits of the capital-intensive, infrastructure-focused growth model. 

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Endnote

- 1 The model is estimated using the dynamic panel data estimator developed by Arellano and Bond (1991) with an unbalanced panel of 1,908 firms in China during 1990–2009. To handle simultaneity, lagged values of the contemporaneous regressors were used as instruments and a special correction for correlation was applied. All variables that enter with a lag on the right-hand side of the equation are considered exogenous.

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