

Economic meltdown

Time for a new story

by Arthur Kroeber

China's economy has, apparently, turned on a dime. As recently as March, it was still growing at well above 10%, about the same rate it had maintained for the previous five years. The major problem for policy makers was how to keep inflation in check and restrain a rising tide of capital inflows. By July, some slowing was in evidence, but the State Council was still confident enough of the economy's ability to generate at least 9% growth that it took a pass on a proposed fiscal stimulus program of Rmb370 bn (US\$54 bn).

But by October, growth in industrial production had collapsed and investment bank economists were in competition to see who could lower their forecasts fastest and deepest. On November 9 the State Council approved a two-year fiscal stimulus package with a headline value of Rmb4 trn, or 14% of GDP. Although at least three-quarters of that money had already been budgeted, the actual new expenditures will likely double the amount of the stimulus package tabled in July. At the end of November, the People's Bank of China (PBC) followed up with a 108 basis point interest rate cut – the biggest rate reduction since 1997, when China was reacting to the Asian financial crisis.

China shaken by the world

How could the seemingly unstoppable Chinese economy be brought to a halt so quickly, and with so little warning? The simplest explanation is that China is the rather plump tail of the global economic dog. The United States went into recession in December 2007; European growth began to wobble in the summer; and the bankruptcy of Lehman Brothers in mid-September precipitated a full-fledged global financial panic that halted international credit flows. That trajectory accords nicely with China's shift from gradual relaxation in the first two quarters to abrupt pratfall in the third.

The simple explanation describes perhaps half of the story. China does not operate in isolation from the global economy, and since its entry into the World Trade Organization in 2001 its dependence on global demand has risen. Between 2001 and 2007 gross export value rose from 22% of GDP to 35%, the current account surplus from 2% of GDP to 11%, and the net export contribution to GDP growth from 5% to 20%. Foreign direct investment is a small part of total investment (around 3%), but plays an important catalytic effect by introducing modern technology and management skills. Moreover, access to other forms of global liquidity probably helped stimulate Chinese growth in ways that are difficult to trace. The freezing up of global credit, and the end of growth in global trade, clearly explain part of China's economic woes.

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In less than nine months China's economic story has been rewritten

The perils of global integration

China's economic crisis is as much home-grown as externally imposed

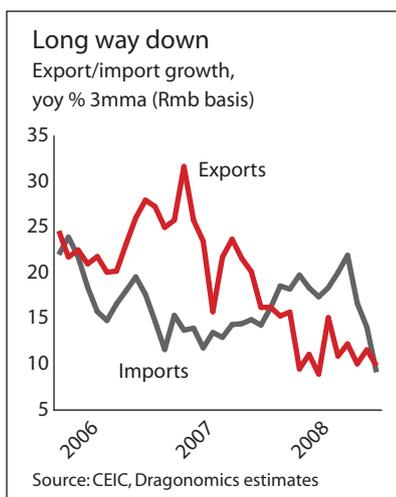
The implosion of China's property market is the key domestic factor in slowing growth

But the simple explanation of China as first beneficiary and then victim of global financial excess does not provide a complete picture. China's economic crisis is at least as much home-grown as it is externally imposed. This survey will attempt to answer three questions:

1. What are the domestic and internal factors contributing to the Chinese economic slowdown?
2. What is the economic prognosis for the next two years?
3. Do we need to re-think the long-term trajectory of Chinese growth?

I. How we got here

China's economic slowdown results from a combination of domestic and external factors. The external factors were a marked deceleration in global trade which cut into China's trade surplus, and the seizing up of international credit. The main domestic factor was a collapse in the domestic property market, which is the ultimate source of demand for China's heavy industries.



Contrary to a widespread view that China's exports held up well until the middle of this year and then suddenly collapsed, export growth peaked at the end of 2006 and then declined steadily through 2007 as demand from the United States softened. This decline accelerated sharply in early 2008, as the United States slid into full-blown recession, leading to a significant decline in the trade surplus in the first half of the year. These trends were masked by the custom of reporting trade flows in US dollars – but it is the local-currency value of trade that matters for Chinese GDP calculations. The renminbi appreciated against the US dollar throughout 2007 and this appreciation accelerated in the first quarter of 2008, meaning that significant declines in export volumes and renminbi values failed to show up when converted into dollars. At the same time, spiraling prices for commodities (notably crude oil and metal ores) sent China's import bill soaring: three-quarters of China's imports are raw materials and capital goods.

As a result, China's trade surplus, when calculated in local currency, fell by about 10% in the first six months of this year, and this was a principal cause of the decline in GDP growth from nearly 12% in 2007 to 10.4% in the first half of 2008. The flip side is that the recent collapse of commodity prices, and the end of the renminbi's appreciation against the dollar, meant that the trade picture improved substantially in the third quarter. For the full year, trade is likely to make a modestly positive contribution to GDP growth.

It's the property market, stupid

But there was also a home-made ingredient in China's slowdown, which was the implosion of the property market – by which we mainly mean housing, which comprises about 80% of the total floor space built in China each year. China's commercial housing market only began in about 2000, when most of the housing formerly owned by state-owned work units had been sold off to its occupants. Over the next several years private property developers sprang up like mushrooms in nearly every Chi-

nese city, eager to make a killing in a new and vibrant market. At first they did this by acquiring land in corrupt back-room deals from city officials, who often expropriated suburban farmers to clear land for new developments. Concerned about the social consequences of creating legions of landless farmers, the central government cracked down on land sales in 2004, requiring all urban development land to be sold at auction.

The result was that land became harder to come by, land prices rose, and so too did the price of housing. By the end of 2007, the average house price in Beijing was an astonishing 15 times the average household income in the city. Most other major cities had ratios of 9-13 and the average for all cities in China was 10. By contrast, the normal price-to-income ratio in most Asian countries is between 5 and 8. The United States, at the peak of its housing bubble, had a ratio of around 5.

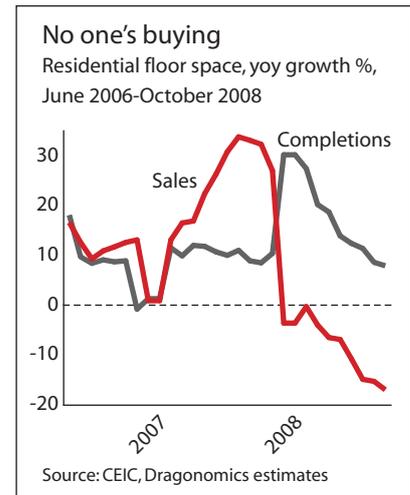
Beijing officialdom got worried about these sky-high house prices in mid-2007; its analysis was that developers were building too much high-end housing and not enough affordable housing. This led to a speculative bubble in high-end properties and a shortage of low-end properties, pushing up prices across the board. Beginning in August 2007 Beijing imposed a series of measures intended to force developers to stop building luxury flats and start building economical ones. Minimum down payments and transaction fees were raised to discourage speculative purchases; banks were ordered to cut credit lines to developers; and use-it-or-lose land rules aimed to prevent developers from hoarding land banks and encourage them to build affordable housing.

Falling dominoes

This attempt to micro-manage the market backfired. Buyers were driven out of the housing market – not just at the high end, as the government intended, but in every price segment. Housing sales volumes collapsed in the first quarter of 2008 and by October were running at a year-on-year pace of minus 17%. Prices followed suit: after peaking in January they started to decline in all major cities and are likely to tumble by 15% or so from their peak values. In some cities (notably Shenzhen) and market segments (notably properties in the Rmb15,000-20,000 per sq m range that were a key locus of speculation) price falls of 30-40% are likely.

The property market fiasco was principally a story of domestic cause and effect, but international factors also played a role. A significant amount of property development and purchases – it is impossible to know exactly how much – was financed by US dollar borrowing. For most of 2006-07, the most obvious trade in the world was to borrow depreciating dollars and invest them in an appreciating renminbi asset, namely property. The drying up of dollar credit lines probably contributed to the rout of buyers in 2008.

With buyers absent, construction ceased; and when construction ceased demand for basic materials – steel, cement, aluminium, copper and so on – disappeared. China's heavy industries, which cater mainly to the domestic construction industry and whose capacity had expanded by three to



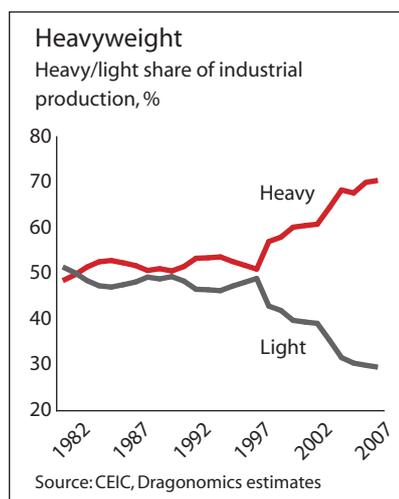
Sky's the limit

House price/income ratios, 2007

Beijing	15.4
Xiamen	13.8
Shenzhen	13.3
Guangzhou	12.5
Dalian	12.0
Shanghai	11.6
Hangzhou	11.0
Wuhan	10.5
Urban China	10.0
Qingdao	9.5
Chengdu	9.4
Ningbo	9.1
Zhengzhou	7.9
Chongqing	6.3

Source: Dragonomics Research

Borrowed dollars financed some of the property bubble



five times between 2001 and 2007, suddenly found they had no orders. By the third quarter most basic materials industries were announcing production cuts of 20-30%. Demand for electric power – of which 75% comes from industry – plummeted.

The message is clear: China's heavy industry sector is plagued by overcapacity, and will need to re-adjust to a significantly weaker demand pattern than was anticipated a year ago. To give just one example: the steel industry, whose production expanded from 100m tons in 2001 to an annualized rate of 570m tons in early 2008, is now facing annualized demand of just over 400m tons.

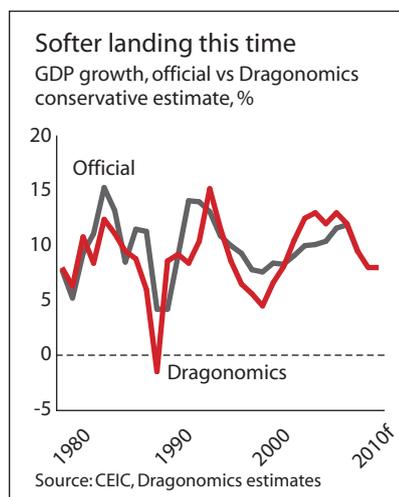
The final bit of bad news, which along with the heavy-industrial meltdown forced the government into growth-supporting action in November, was a visible decline in consumer confidence in September and October. This was not apparent in the official data on retail sales, which are polluted by government and business purchases and therefore an unreliable guide to household spending patterns. Nor was it evident in wage growth, which registered a solid 18% in October. But anecdotal reports from retailers suggest that true household purchases of retail goods were flat or negative in September and October; and purchases of big-ticket durables – notably automobiles – fell into negative territory after several consecutive years of robust double-digit growth. Bank data show that household deposits rose by 21% in October – meaning that households are hoarding their cash, not spending it.

While we cannot be certain of the cause of consumer malaise, it is clear that the collapse of the stock market at the end of 2007, the popping of the property bubble in early 2008, and the accumulation of bad news about China's export industries and the global economy over the course of the subsequent months was hardly a sequence to make Chinese households sanguine about the immediate economic future.

II. What kind of landing?

After several years of high flying, China's economy is coming in for a landing. We expect it will be a soft landing, but a long one.* The economy will slow less abruptly than during the two previous economic slumps in the post-1978 reform era, but the landing will last three or four years. A considerable amount of excess investment and capital misallocation needs to be unwound before China will be ready for another investment boom.

We are more optimistic than the doomsayers for two reasons.** First, China's economy is fundamentally far sounder and more flexible than it was



*We are indebted to the prescient Nicholas Lardy and Morris Goldstein of the Peterson Institute for International Economics, who coined the term “long landing” in a November 2004 paper that was, as the old Panasonic ads said, “just slightly ahead of its time.” (*What Kind of Landing for the Chinese Economy?*, Peterson Institute policy brief, November 2004.)

**See, for instance, CLSA's Eric Fishwick, whose forecast of 5.5% growth in 2009 is now widely cited by investors. (*China's Growth – Ask JACC*, CLSA Asia-Pacific Markets Triple-A weekly economic commentary, 5 November 2008.)

in the past two downturns, in 1989 and 1998. In each of those recessions, as today, a domestic cyclical downturn coincided with a major external shock (a political crisis in 1989, the Asian financial meltdown in 1997-98). But those downturns were exacerbated by structural rigidities left over from the planned economy: administered prices and an inflexible labor market in 1989; and thoroughly dysfunctional state-owned industrial and banking sectors in 1998. Today these rigidities are almost wholly absent: most prices are marketized, the labor market is the world's most flexible, and banks and big companies have plenty of cash to cover their losses.

Market forces have made China's economy enormously more flexible and resilient

How externally driven is China's economy?

One of the long-running arguments among China economists is the extent to which China's economy is "export driven." Generally the argument revolves around the question of whether gross or net exports is the relevant measure.

Proponents of the export-driven view note that gross export value is high – 35% of GDP – and suggest that once the export-linked supply chain is taken into account, exports account for a decisive share of investment and employment. Skeptics point out that, despite high headline export numbers, domestic value-added is extremely low, and net exports – that is to say, the trade surplus – accounted for around 7% of Chinese GDP growth on average in 1980-2004. Even in the last three years of exploding trade surpluses, net trade contributed about 21% of GDP growth, meaning that over nine points of annual GDP growth came from domestic demand.

Our own view is that the key variable in China's economic cycles is domestic investment, which is far more a function of infrastructure and real-estate construction (together accounting for about 60% of fixed investment) than of exports (15% of fixed investment, including the export-linked supply chain). In the long run, however, the export economy's role in growth goes well beyond its direct contribution to investment and employment.

The export economy is best understood as a big technology-transfer machine. As with any developing economy, one major element in China's growth story is technological "catch-up" with the more advanced countries. The catch-up theory states that the further behind you are, the faster you can run, because you can beg, borrow or steal technology developed at great expense of time and money in rich countries. As a nation gets closer to the technological frontier, these easy gains evaporate and more technological improvement has to be self-generated, resulting in slower growth (just ask Japan). Exports contribute to technology transfer

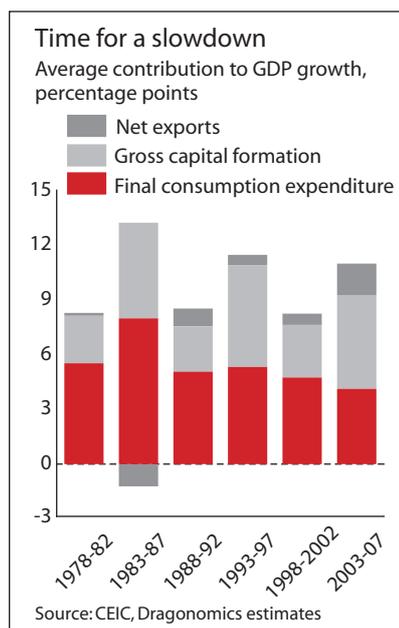
in two ways. In classic East Asian economies such as Japan and South Korea, export requirements were a way to compel domestic firms to stay internationally competitive, even as protectionist trade policies shielded them from competition at home. Companies that failed to meet export targets lost access to state-guided credit. To maintain export competitiveness, these firms had to keep up with global technology standards.

In China, an additional factor is the role of foreign enterprises, which account for nearly 60% of China's export value. Foreign firms bring with them machinery, manufacturing techniques, software and management skills; these technologies are often locally adopted, either formally through joint-venture agreements or informally by local employees using what they learned at foreign companies as the basis for their own start-ups. This technology transfer ensures a high rate of growth in "total factor productivity," which is the main source of sustained long-term economic growth.

So over the long run China's high structural growth rate depends heavily on the existence of a liberal system of global trade and capital flows. It is no coincidence that China's stellar growth period coincided almost exactly with a quarter century (1983-2007) during which global trade on average grew at twice the rate of global GDP. In the short term, China can easily ride out cyclical export dips, both because domestic construction is a more important source of demand and employment, and because as the low-cost producer of many goods, China can pick up global market share during trade recessions.

Worryingly, the World Bank forecasts that 2009 will be the first year since 1982 that global imports shrank. If this is simply a cyclical downturn, even a severe one, China's growth is not imperiled. But if, as is possible, the financial crisis has ushered in a new era of protectionism, capital controls and perennially weaker trade growth, there is a real risk that China's awesome productivity growth will start to slow.

Government policy is now focused on stimulating growth not containing inflation



Second, we believe that government policy is likely to be effective. The pessimists fail to recognize that, until just a few weeks ago, government macroeconomic policy was still relatively tight. Now policy is focused on stimulating growth rather than containing inflation. And since Beijing mainly employs direct tools such as fiscal spending and quantitative guidance of bank lending – rather than the indirect interest-rate mechanism employed by most mature economies – the impact of the stimulus will begin to be felt within three to six months.

... overheating, was it?

It is difficult to remember now, but in November 2007 the government was so concerned about the inflationary risk posed by runaway bank lending that it imposed draconian credit controls that brought lending virtually to a halt for two months. In the first half of 2008, the PBC rigorously enforced credit quotas intended to curb excessive investment and consumer price inflation, which peaked at nearly 9% in February. After a mid-year economic review in July by the State Council, the government started making noises about supporting growth – but the PBC maintained its cautious stance on inflation.

It was only in October, when the extent of the heavy industry slowdown and the decline in consumer confidence became apparent, that the government realized the risk to growth. Not until November, when it finally relaxed its constrictive real estate policies and announced a fiscal stimulus package, did Beijing make a clear-cut public statement abandoning its anti-inflation stance and devoting itself entirely to supporting growth (see “Economic survey” on page 3).

Three key points of the fiscal stimulus are worth highlighting. First, the package focuses mainly on reviving domestic construction activity, which is appropriate since the collapse in construction demand was the principal domestic cause of the slowdown. Second, the focus is not *exclusively* on construction, as was the case with the previous economic stimulus program launched in 1998 in response to the Asian financial crisis. This one also includes rural and urban income support, along with spending on social services and environmental technology that are related to longer-term efficiency and social equity goals. In other words, in crafting economic policy Beijing is trying to achieve a balance between the short-term goal of sustaining economic growth at around 8% and longer-term projects to improve the economy’s allocative efficiency. This is sensible and pragmatic policy-making.

Finally, the success of the stimulus program does not depend on government resources alone. Ten years ago, fiscal resources had to bear virtually the entire burden of rescuing the economy from the combination of a domestic cyclical slowdown and the impact of the Asian financial crisis. Banks were impotent because more than 40% of their loans were non-performing, and it was not until they had undergone two years of balance-sheet restructuring that they were able to contribute substantially to liquidity creation. Industry was also a mess: it was mostly state-

owned, loss-making and burdened with non-productive employees. The aggregate profits of the state industrial sector were less than 1% of GDP in 1997, and more than 30m state-sector workers had to be laid off from 1998 to 2003.

Today the situation is far better. Thanks to a rigged interest rate system and a booming economy, banks have been vastly profitable for the past three years and their non-performing loans are officially around 5% of assets. Banks have considerable ability to expand credit, especially if reserve requirements are dropped from their current level of around 15%. Industrial profits in 2007 amounted to 11% of GDP, of which the state sector contributed nearly half; even with falling profit growth, significant funds can be mobilized from the corporate sector.

Stuck on the tarmac

There is thus enough domestic liquidity that, once it is mobilized by government policy, growth can be stabilized at around 8% by the end of 2009. The question then becomes whether the recovery will be a “short landing” followed by a quick return to robust growth rates of above 9% (and a commensurate re-acceleration of commodity demand) or a “long landing” during which growth stays stuck around the 8% mark for three or four years.

A “long landing” is far more likely, for two reasons. First, to the extent that China's slowdown results from or is aggravated by the collapse in global trade and credit, no quick recovery is in sight. The United States recession will be deep and severe, and further deleveraging is required. The European recession, which will be at least as long-lasting, has only just begun. So the easy growth that China garnered from ebullient external demand in 2002-07 will not return for some time.

Second, to the extent that the slowdown reflects domestic factors, the nature of Chinese cycles dictates a long, slow recovery. Since the reform of the planned economy began in 1978, China has run alternating cycles of investment expansion and contraction, each lasting roughly five years. During the investment expansion eras, GDP growth averages over 11%; during the contractions, growth runs at around 8% as excess capacity is gradually worked out of the system. We have just concluded a six-year run during which growth averaged 11%; a four or five-year period of growth closer to 8% is the predictable (though not inevitable) sequel.

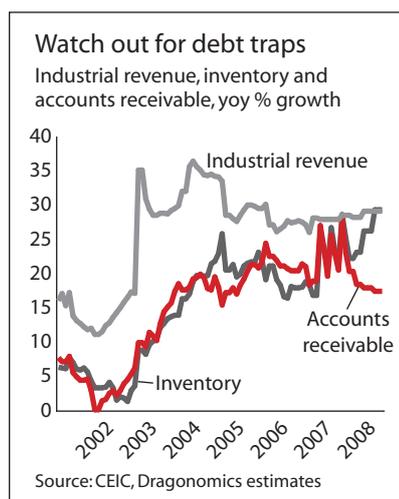
There is nothing occult about these cycles; they represent the normal functioning of a rather old-fashioned industrial economy, in which productive capacity gets built up quickly during periods of easy money, overshoots underlying demand, and then needs to be scaled back when the gap between supply and demand becomes apparent. When excess capacity gets exposed, the unwinding cannot be completed in a matter of a few months or quarters. Investments in plant that seemed rational when the economy was growing at 11% prove to be unprofitable when the economy grows at 8%. Various levels of hidden debt used to finance this

Banks are in a good shape to fund growth for the next few years

The landing may be soft, but it will surely be long

China's economy is functioning like a normal old-fashioned industrial economy

Hidden debt is a potential drag on growth in the next few years



capacity are gradually peeled away. Until the discounting of hidden debt is complete and enough unprofitable capacity is taken offline, a strong investment cycle cannot begin again.

Dark matter

Hidden debt – or, to borrow a term from physics, economic “dark matter” – is a fascinating if perilous phenomenon, as investors in credit default swaps have recently found to their cost. One of the difficulties in analyzing the Chinese economy over the next couple of years will lie in identifying the sources of “dark matter” that will create a persistent drag on growth. By definition this dark matter is hard to tease out from economic data and usually becomes quantifiable only after its malefic consequences have been exposed.

The main source of dark matter is unrecorded borrowing among enterprises, which means that actual debt levels in the corporate sector are higher than revealed by official bank loan data. This borrowing can take the form of direct loans by cash-rich enterprises to firms in need of working or investment capital. Not infrequently, private enterprises with little direct access to bank lending borrow from state enterprises with bank credit lines. Another type of informal lending is the extension of trade credit to one’s customers. Back in the debt-heavy early 1990s, this tangle of corporate IOUs was known as “triangular debt” – with Enterprise A owing money to Enterprise B, which until it received payment did not have the cash to pay off its loan from Bank C.

Anecdotally, private equity investors have long complained that their inability to gain clarity on off-the-books liabilities is a major obstacle to completing deals in China. But quantifying these liabilities on a macroeconomic scale is hard. One way is to examine the aggregate accounts receivable of industrial enterprises, which are published regularly. The latest available figures (through August) show accounts receivable growth declining, while inventory growth spiked up. This suggests that orders are disappearing, but that firms are not yet stiffing their suppliers.

A more suggestive, but opaque, indication of hidden debt levels lies in a data series purporting to show the sources of fixed asset investment funding. This data has always puzzled us, since it suggests that the vast majority of corporate capital expenditure is financed by internally

Black hole

Sources of funds for fixed asset investment, % of total

	Self-raised funds, of which			Loans	Other*
	Internal capital	Other			
2004	51	37	14	20	29
2005	55	40	15	19	26
2006	56	36	19	18	26
2007	57	33	24	17	26
2008 (Jan-Oct)	63	33	30	16	21

*Includes state budget funds, foreign capital and unidentified sources, which in Jan-Oct 2008 accounted for 4%, 3% and 14% respectively. Source: CEIC, Dragonomics estimates

generated funds, whereas micro-level evidence (those whingeing private equity investors) suggests that Chinese firms rely heavily on debt. A closer examination of the data indicates that “internally generated funds” may include plenty of disguised debt.

Since 2004, the share of fixed-asset investment financed by “internally generated funds” rose from 51% to 63%; bank loans this year accounted for just 16%. But within internally generated funds, the share of “self-owned” funds (labeled as “internal capital” in our chart) fell from 37% to 33%. The unidentified residual rose from 14% to 30%. The increase in 2006-07 could reflect capital raised on the stock market. But even in 2008 – a dead year on the stock market – the residual’s share still jumped by six percentage points. Unidentified “other” sources of funding accounted for another 14%. Thus 44% of corporate capital expenditure in 2008 was financed by money whose source is literally unknowable. There is no reason to believe that any of this is internal cash flows, and good reason to suspect that a significant chunk of it is hidden debt.

In 2008 nearly half of corporate capital expenditure came from unknown sources

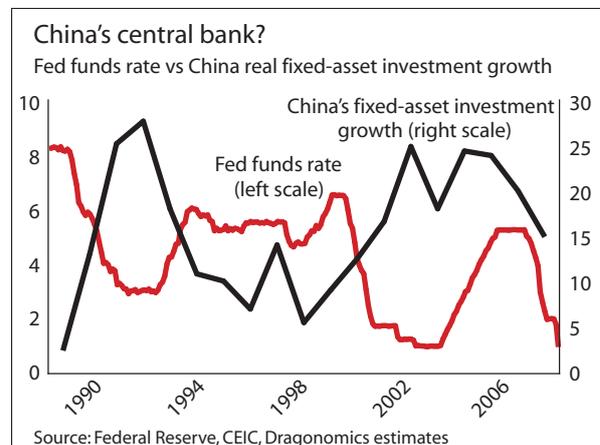
III. The long squeeze

For those who can afford to look beyond the next year or two, the larger question is whether the global crisis and the domestic downturn mean that the long-run outlook for China has changed in any significant way. For the past three decades, China has generated impressive economic growth on the back of large-scale industrialization and urbanization. We believe that China’s industrialization, urbanization and strong economic growth will continue, as they are supported by a robust infrastructure of productivity, demographics, and enabling government policy. But growth will be subject to gradually increasing constraints – some demographic and environmental, others the result of deliberate government policy.

The friendly Fed

China’s investment cycles, we argue, depend mainly on domestic drivers. But they are also coordinated with international liquidity flows. It is clear that China’s last two major investment booms (1992-94 and 2002-06) coincided exactly with massive reductions in the US federal funds rate which pumped up global liquidity. In each case, a substantial inflow of foreign capital helped incite the Chinese boom.

In the early 1990s, this capital came mainly in the form of foreign direct investment, which at its peak in 1994 comprised 17% of total fixed-asset investment. The recent boom began in 2002, after China’s entry into the World Trade Organization in December the previous year. Coincidentally or not, 2002 was also the year in which capital flight reversed, and short-term speculative capital began to flow into the country. Short term capital flows, which had been negative since the mid-1990s,



turned positive in the fourth quarter of 2004 and by mid-2004 were running at an annualized rate of US\$100 bn.

We call the sum of all these constraints the “long squeeze.” The last quarter-century’s growth was very inefficient, created high environmental costs, and depended mainly on the brute accumulation of vast amounts of factor inputs (land, labor and capital). The next quarter century’s growth will of necessity rely much more on efficient allocation of resources, and will be overseen by a government whose central task is no longer the construction of a high-performance economic engine, but the forging of a more effective polity.

Deng Xiaoping is still the draftsman of China’s development blueprint...

Deng’s enduring legacy

Forecasting the future depends on understanding the past. The economic model that China has used for the past three decades exists within the framework established by Deng Xiaoping in 1978. Deng inherited an economy that did a poor job of raising per capita incomes; his pragmatic goal was to make the economy work better, while observing three core principles:

1. The economy must be made progressively more effective at generating wealth.
2. The state must retain a substantial direct ownership role in the economy.
3. The Communist Party must retain absolute control of the political system.

...and today’s Chinese economy bears almost no resemblance to the one he inherited in 1978

After a vast number of incremental reforms, the Chinese economy today bears scarcely any relationship to the sclerotic, closed, inefficient planned economy that Deng inherited. Certainly it is a far better wealth-creating machine – yet principles 2 and 3 have also been scrupulously adhered to. The efficiency cost of the state-ownership and political authoritarianism principles has been, until now, surprisingly low. The success of this unusual combination, which has proved a conundrum for simplistic free-marketeers who believe political and economic liberalization always march in lockstep, derives from the pragmatic focus of Deng and his successors on the *substance* of a market economy – prices and competition – and their refusal to get hung up on the issues of *form* (such as private ownership of assets) that foreigners insisted were central.

Hu Jintao’s main contribution is governance reform

When Hu Jintao took over as China’s president in 2002, he inherited an economy that worked pretty well. With entry into the World Trade Organization the previous year and the subsequent reform and recapitalization of the banking system in 2004-05, the restructuring of the old planned economy was substantially accomplished. But along with this marvelous economic engine, Hu inherited a governance system that was clearly not up to the task of running a dynamic capitalist economy with increasingly diverse interest groups. Hu therefore initiated a program of governance reform, under the twin rubrics of the “scientific concept of development” and the “harmonious society.” It is likely that governance reform will play the same overriding role in the next quarter-century of Chinese history that economic reform played in the last three decades.

As with economic reform, governance reform will focus on substance (more responsive and efficient, and less corrupt, administration) rather than form (democratic elections). And just as goal of economic reform in China was simply to create an economy that worked better while preserving the roles of the Party and state, so the goal of governance reform is to create a governance system that works better, while preserving the roles of the Party and state.

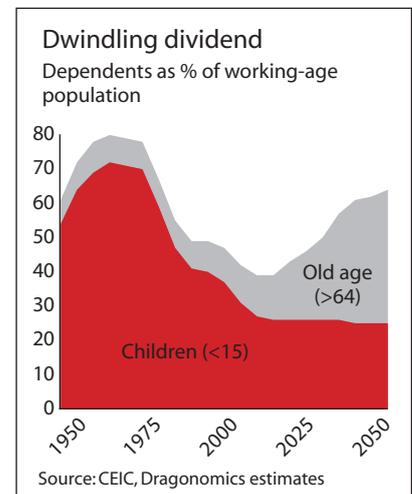
New social contract

The initial fruits of governance reform are already in evidence: higher (though still inadequate) public funding for education, health care and pensions; more secure private property rights through the 2007 Property Law; and better protections for workers under the 2008 Labor Contract Law. The last two major reshuffles of top-level Party and government personnel – the 2002 and 2007 Party congresses – saw an unprecedented influx of fresh faces into the top ruling bodies, notably the Politburo. And the vast majority of the newly-promoted officials were not engineers, as was usually the case in the 1980s and 1990s. Instead, they were educated in history, law, economics and politics, and gained promotion on the basis of demonstrated skills in administration and governance, not just economic management. It is likely that by 2020 China will have essentially the same political system it does today – but with a better-funded and better-run government that delivers greatly improved standards of education, health and environmental protection.

The economic implication of this shift from a focus on growth to a focus on governance is that capital and operational costs for businesses will rise. For years, Chinese firms prospered partly because of their entrepreneurial dynamism and increased productivity – but also because of state-provided benefits such as cheap land, infrastructure and capital, and very lax environmental, worker safety and social security regulations. The consequence of governance reform (as well as of specific economic policies such as the current energy-efficiency drive) is that capital and regulatory compliance will gradually become more costly.

But the “long squeeze” is not simply a matter of government policy. Two other factors will play a key role: the demographic dependency ratio and labor productivity. Much of China's stellar economic growth since the early 1980s can be attributed to the “demographic dividend,” or the declining ratio of non-working-age to working-age people. In 1975, 100 Chinese of working age (15-64) had to support 80 non-working children or old people; today they support fewer than 40. As in Japan, South Korea and Taiwan previously, this sharp fall in the dependency ratio was a key source of economic growth.* In 2015 or so, the dependency ratio will start to rise – almost entirely because of a rapid increase in the number of old people, who will impose a dramatically escalating health care cost

Expenditure on education, health care and pensions – though still inadequate – is growing



*For a comprehensive analysis of the impact of demographic factors on east Asian growth, see David E. Bloom and Jeffrey G. Williamson, “Demographic Transitions and Economic Miracles in Emerging Asia,” *World Bank Economic Review*, Vol. 12, No. 3 (1998).

As China ages, growth will fall to around 5-6% a year

on the economy. By 2040, there will be 60 people of non-working age for every hundred workers.

Upgrading the workforce

There is almost no doubt that once this “demographic tax” sets in, China's structural rate of GDP growth will fall, from around 8-9% today to around 5-6% in the 2020s. But the aging population is not a death sentence: its impact can be mitigated by improved education and longer working lives. Many people of “working age” in China today do not in fact work, because their low level of education and limited job skills makes them hard to employ past the age of 50. The government has invested tremendously in education over the past decade, increasing enrollments in junior and senior high school and pushing up the number of college graduates from 1m a year in 2000 to nearly 6m. The average working life will gradually extend over the next two decades, because workers will be better educated and will have spent all of their careers in a marketized environment where they are constantly forced to upgrade their skills.

A related factor is labor productivity. Productivity gains in Chinese manufacturing have been little short of spectacular – 20% a year on average over the past decade or so. It is largely these enormous produc-

Further reading

Over the past several years the *China Economic Quarterly* and Dragonomics Research have published a series of articles documenting the long-term trends discussed in this article. In almost all cases, the key findings of these reports remain valid despite the current economic storms. Subscribers may access these articles in the electronic archives at www.dragonomics.net and www.gavekal.com, or by sending an email request to research@dragonomics.net.

The sources of saving

Louis Kuijs, “Where does all the money come from?” *CEQ* Q3 2005, pp. 40-44

Productivity trends

Pieter Bottelier, “The flywheel economy,” *CEQ* Q4 2007, pp. 45-52

The role of housing in investment

Arthur Kroeber and Rosealea Yao, “A room of one's own,” *CEQ* Q4 2007, pp. 53-58

Increasing returns to education

Arthur Kroeber and Tom Miller, “Building human capital: education in China,” *CEQ* Q4 2005, pp. 19-32

Energy efficiency

Deborah Seligsohn, “Doing more than you think,” *CEQ* September 2008, pp. 21-27

Consumption trends

Arthur Kroeber, Paul French and Matthew Crabbe, “China retail: a nation of shoppers?” *Dragonomics China Insight* note, 27 November 2006

Arthur Kroeber, Paul French and Matthew Crabbe, “A billion customers, or six Malaysias?” *CEQ* Q4 2006, pp. 44-48

Arthur Kroeber, “Consuming China: pretty fictions, hard facts,” *Dragonomics China Insight* note, 14 December 2006

Arthur Kroeber, “Consumption: a Chinese puzzle,” *Dragonomics China Insight* note, 13 February 2007

Demographic dividend

Judith Banister and Calla Wiemer, “Long boom, slow bust,” *CEQ* Q3 2005, pp. 20-22

Political reform

Cheng Li, “The big shake-up,” *CEQ* Q1 2007, pp. 19-28

Governance reform

Arthur Kroeber, “Seismic shift: economics gives way to politics,” *GaveKal Dragonomics China Insight* note, 13 February 2008

The rising cost of capital

Arthur Kroeber, “The long squeeze,” *GaveKal Dragonomics China Insight* note, 22 February 2008

tivity gains that enabled China to enjoy virtually zero inflation between 1998 and 2006, despite rapid economic growth and big increases in both materials costs and nominal wages. It is inconceivable that gains of this magnitude can be sustained forever. Before the economic slowdown in the third quarter of this year, there was already evidence of such diminishing returns in the form of higher unit labor costs, which correlated well with a slow but steady increase in the goods components of the consumer price index.

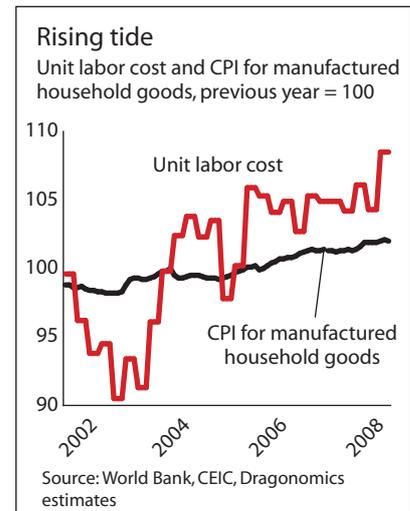
It is almost certain that, over the next year or so, this pressure will temporarily abate as export industries lay off workers and the level of construction growth slows. Given the unusually high flexibility of the Chinese labor market, we expect more of the labor-market adjustment to come in the form of reduced wages than in net job losses. But once the economy stabilizes, the gradually shrinking pool of young workers predicted by demographic projections means that wage pressure will inevitably return. When the next investment-led boom comes around in five years or so, it will be difficult to sustain growth much above 9% without also accepting significantly higher consumer price inflation, probably in the 5-6% range. In that environment, efficiency will need to play a far greater role in generating growth than it has in the past.

IV. The new story

We may summarize the outlook for China as follows. Through the spring of next year, most of the economic data will look gloomy as China absorbs the full impact of the global financial crisis. By the middle of 2009, however, the impact of stimulative fiscal and monetary policies will have kicked in, and GDP growth should stabilize at around the 8% mark.

Over the course of the next twelve months, understanding base effects will be crucial to interpreting monthly and quarterly data. Because China reports most economic figures on a year-on-year basis, data reported between now and next spring will look especially bad because it will come off extremely robust year-earlier figures. But rather than reflecting a deteriorating trend, this data will most likely mark the trough of the economic cycle. (There is some risk that the government will simply make up numbers to disguise the horrid truth, as it did in 1998-99 when physical indicators and expenditure numbers suggested GDP growth of around 5% but official data persistently reported growth rates two or three points higher. Data accuracy has generally improved since then, but the true test will be whether accuracy holds up in a recession.)

The present problems are severe, but the resilience of the Chinese economy is considerable, and the sources of liquidity for stimulus are relatively abundant. Maintaining 8% growth is achievable, but accelerating growth much above that level will be extremely difficult for at least two or three years because of the need to strip out "dark matter" debt from the corporate sector, and soak up the excess capacity in heavy industry. (The excess capacity problem is larger in materials industries than in



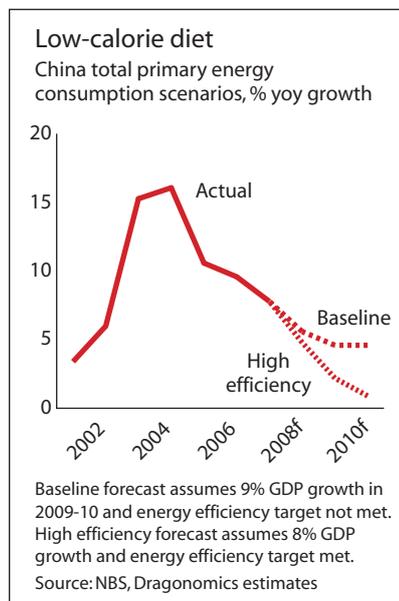
By mid-2009, China's growth should stabilize around 8%

The government has abundant liquidity available to stimulate the economy

Wage growth and inflation will slow...for a while

consumer goods manufacturing, which has important consequences for the inflation outlook.) Small-scale, low-efficiency, high operating-cost firms in basic industries like steel, metals smelting and cement will be driven out of business because of an inability to adjust to weaker demand environment. Capacity will be consolidated in bigger players with higher efficiency in capital deployment and resource use.

The immediate impact of lower aggregate demand and the consolidation of excess capacity will be disinflationary. The labor market will adjust to these new conditions partly through job losses but more through a sharp reduction in wage growth. For a year or two (2009-10) we will see a return to the conditions prevailing in the early part of this decade: wages growing more slowly than productivity, hence declining unit labor costs and little inflationary pressure. But a return to outright deflation is unlikely. For the past few years manufacturers have been under intense pressure from rising wage and material costs. As these cost pressures abate, firms will try to use these savings to bolster profits, rather than reduce prices for consumers.



A second key consequence of industrial consolidation is that the resource intensity of China's growth will be far lower in the next five years than it was in the last five. From 2002 onward, China's energy and resource demand exploded, because of a double acceleration: GDP growth rose from 8% to 12%, and huge investments in new heavy industrial capacity meant that more oil and iron were required for each dollar of GDP growth. Now the reverse is occurring: GDP growth is decelerating from 12% back down to 8%, resource-intensive production will need to be consolidated in the most efficient players, and very little new plant needs to be built for a few years. As a result of this combination of slower growth and efficiency improvements, resource demand growth could easily slide into the low single digits in the next two years. Skeptics may take these numbers as evidence that the government is lying about GDP growth, but as our chart shows, substantially lower resource consumption growth is perfectly consistent with strong GDP growth and plausible improvements in efficiency.

Slower but healthier growth

At some point in 2010 or 2011, when the economy is on a more stable footing and the "dark matter" and labor-market adjustments have progressed, the logic of the "long squeeze" will take over. Less favorable demographics, government policy and the law of diminishing returns mean that real wage costs will rise inexorably. Ongoing governance reform will create higher capital and regulatory costs.

These constraints on growth will take hold gradually, and can be offset to some extent by smart policies. Extending educational opportunities will enable higher productivity to counteract the reduced availability of labor. Increased efficiency in the use of physical resources and capital can mitigate the inevitable rise in the cost of both. And a shift in government spending priorities to favor the provision of public goods such as

Greater education will be a key long-term need

education, health care, social security and pensions may ultimately boost the role of consumer spending, which will need to play a greater role in driving economic growth as the demand for new investment in infrastructure and industrial plant declines.

There is nothing preordained about this course. And it may well be that the global economic environment, which has been extraordinarily accommodating since the early 1980s, will be far less so over the next two decades. But the conditions for China to ride out the present storms and emerge with a healthier and stronger economy are in place. Government policies in general are headed in the right direction, and Beijing seems committed to balancing the short-term need for stimulus with the long-term need for firmer regulation and efficiency. A lot can still go wrong, but compared to the world's other large economies China looks in pretty good shape.

With government policies headed in the right direction, China is in good shape to survive the next few years