RESEARCH-WORKS

MISCONCEPTION

CHINA CYCLE NOT OVER: BUY

20 May 2004

Markets have reacted irrationally to recent pronouncements from China. This creates a buying opportunity in those assets, from H Shares to commodities, most hit in the sell off. China's cycle is far from over, indeed a soft landing is more likely now that the political decision has been taken to cool the economy. However this is cool, not stop, the economy, even if Beijing so wanted. Structural change is still driving growth at an above-trend rate. Mid-year figures will show modest but sufficient cooling to spark a 3Q rally. Time to accumulate.

What Happened ? Comedy of Errors: No Loan Ban

- "Bright Idea" to Make April Loan Numbers Better
- Political Cycle Now Aligned With Economic Needs
- Political Consensus Achieved: Part III of Cycle
- Beijing Puts Provincial, Banking Officials on Notice

What Happens Next ? No Panic

- Beijing Will Wait for First Half Numbers: Then Review Strategy
- More Administrative Measures:
  Market Mechanisms Inadequate
- Interest Rate Increases Likely by 3Q
- Yuan Revaluation If Inflation Threatens Stability

Where Are We in the Economic Cycle ? Mixed Picture

- Probably Past the Peak
- But Growth Still Stronger for Longer Than Consensus Expects
- Structural Change Driving Economy to Above-Trend Growth
- Soft Landing Still Likeliest Outcome

What Threatens Soft Landing ? External Inflation

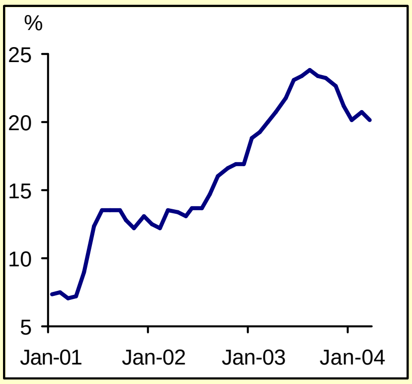
- Global Commodity Prices: Most Likely Grains
- Stocks Low: One More Supply Shock Could Tip Balance
- 5-6% Inflation Manageable: 8% May Change Expectations

Misconceptions Abound: Structural Change Underestimated

- Economy Driven by Consumers, Not Officials, Planners

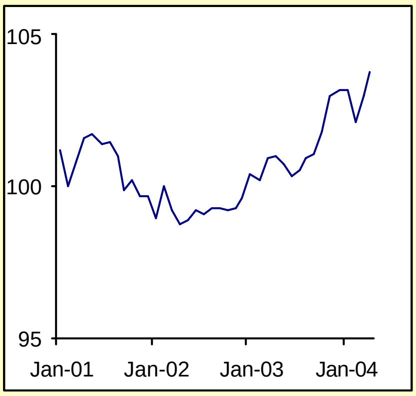
Steady Decline From August Peak

Bank Loans



Greatest Threat to Soft Landing

Consumer Price Index



Recommendations

- *Steel Companies*
- *H Shares*
- *Sold-Off Asian Markets*

Please contact:
Hugh Peyman at hughpeyman@research-works.com or at 86-21-5887 6060 with any questions or comments.

CONTENTS

ACTION: Buy After Overreaction ……………………………………………………………………………3

INVESTMENT PERSPECTIVE: Still Stronger For Longer than the Consensus Believes…....5

Mixed Picture ……………………………………………………………………………………………7

MISCONCEPTIONS ………………………………………………………………………………………10

Appendix 1 (from Overheating ? Unprecedented Growth Spurt 3 Dec, 2003)…………………12

Appendix 2 (Leveraging The Chinese Consumer)………………………………………………16

Action: Buy After Overreaction

Value has returned to Asia in general and China in particular after the recent China sell-off. As hedge funds ungeared their positions, prices overshot what is reasonable to expect from the government's likely future actions. There is value again in the China universe for the first time this year. If anything a soft landing looks more likely now that political consensus has been reached.

Asia Stock Market Performance

%	YTD 2004			Since 13 Apr 04			Hist	Est
	Market Performance	Currency Performance	Total Return (US$)	Market Performance	Currency Performance	Total Return (US$)	PE (X)	PE (X)
H Shares	**(26.6)**	**-**	**(26.6)**	**(25.8)**	**-**	**(25.8)**	**13.5**	**10.6**
Shanghai	**4.0**	**-**	**4.0**	**(9.3)**	**-**	**(9.3)**	**34.7**	**NA**
Thailand	(24.6)	(3.0)	(27.6)	(17.0)	(4.2)	(21.1)	13.3	10.9
India	(16.4)	0.3	(16.2)	(17.4)	(3.8)	(21.2)	14.5	12.6
Indonesia	(2.3)	(7.4)	(9.7)	(12.4)	(5.3)	(17.7)	10.6	11.4
Philippines	2.3	(0.5)	1.8	(0.6)	0.0	(0.6)	19.0	10.9
Hong Kong	(12.0)	-	(12.0)	(15.0)	-	(15.0)	15.9	14.1
Taiwan	(5.7)	0.9	(4.8)	(18.2)	(2.7)	(20.9)	21.1	14.0
Singapore	(2.4)	(1.6)	(3.9)	(9.1)	(3.4)	(12.5)	17.0	13.5
Korea	(8.5)	0.9	(7.6)	(19.1)	(3.6)	(22.7)	19.7	9.1
Malaysia	(1.3)	-	(1.3)	(11.0)	-	(11.0)	15.6	14.7
US	(4.4)	-	(4.4)	(4.0)	-	(4.0)	18.8	15.9
Japan	0.3	(6.6)	(6.3)	(11.7)	(7.2)	(18.9)	64.9	28.7

Source: Bloomberg

The Hong Kong All China Index now sells on 9.9X 2004 and yields 3.3%. With stronger growth than the consensus expects we believe that these estimates underestimate EPS growth for both 2004 and 2005. Hence our advice to accumulate.

Interestingly the 17% average decline in prices was almost double that of the Shanghai A Share market where prices fell only 9.3%. We would take this as a much better estimation of future prospects rather than that set largely by unfamiliar hedge funds that overgeared before deciding to cut and run.

In the eye of the storm we like the steel stocks Angang New Steel and Maanshan Iron&Steel that have both fallen 43% since 13 April. Consensus estimates put them on 5.2X 2004 earnings and 4.1X respectively. They both have compelling yields of 7.7% and 9.8% respectively.

On Hafidzah Hassan's estimates Angang is even cheaper on 3.4X04 and 3.1X05 while Maanshan is on 3.3X04 and 2.7X05. Around the region Hafidzah likes POSCO at 4.6X04, which has fallen 17%, JFE that sells on 10.4X March 05, after a 16% sell-off, and China Steel that sells on 6.4X04 after its price declined 17%. With steel prices likely to rise in the second half all these stocks appear undervalued.

Asian Steel Valuations

		Price	EPS 01	EPS 02	EPS 03	EPS 04f	EPS 05f	EPS 06f	PER x 02	PER x 03	PER x 04f	PER x 05f	PER x 06f	*EPS # Growth %*	*Yield %*
POSCO	(Won '000)	141	10.4	13.3	24.8	30.7	35.7	44.0	10.6	5.7	4.6	3.9	3.2	*21*	*4.3*
JFE*	(¥)	2,310	NA	NA	27.7	165.7	223.1	283.2	NA	83.3	13.9	10.4	8.2	*31 #*	*1.3*
Nippon Steel*	(¥)	217	3.89	(4.17)	(7.70)	4.25	14.92	17.74	NM	NM	51.1	14.5	12.2	*23 ##*	*0.7*
Sumitomo Metals*	(¥)	118	1.61	(28.83)	4.36	5.25	9.51	11.41	NM	27.1	22.5	12.4	10.3	*47 #*	*1.3*
China Steel	(NT$)	28.90	0.82	1.86	3.93	4.52	4.98	6.09	15.5	7.4	6.4	5.8	4.7	*16*	*11.4*
Baosteel	(RMB)	6.26	0.20	0.34	0.56	0.67	0.81	0.99	18.4	11.2	9.3	7.7	6.3	*21*	*7.7*
Angang	(HK$)	2.65	0.12	0.19	0.45	0.77	0.85	0.93	14.1	5.9	3.4	3.1	2.9	*27*	*7.5*
Wuhan	(RMB)	6.33	0.34	0.29	0.25	0.50	1.14	1.60	21.8	25.3	12.7	5.6	4.0	*86*	*2.4*
Maanshan	(HK$)	2.18	0.02	0.05	0.38	0.67	0.82	0.88	48.3	5.7	3.3	2.7	2.5	*32*	*11.5*

EPS growth between FY2004 and FY2006. ## Excludes impact of exceptional provision in FY04. *Source: Research-Works*

* Year ending Mar 31.

Hong Kong All China Index Valuation (19 May 04)

	Price (HK$)	Mkt Cap (US$ bn)	Performance Since (%) Jan 03	Jan 04	Apr 04	EPS (HK$) 03	04E	05E	PE (x) 03	04E	05E	Yield %	Yr End
PetroChina	3.5	78.9	125.8	(21.3)	(12.5)	0.38	0.37	0.32	9.3	9.5	10.8	5.1	Dec
China Mobile	20.7	52.1	11.3	(13.4)	(13.1)	1.70	1.88	2.00	12.1	11.0	10.3	1.7	Dec
China Petroleum & Chemical	2.6	47.8	100.4	(24.5)	(15.3)	0.24	0.29	0.29	11.1	9.0	9.2	3.4	Dec
China Telecom	2.4	23.0	73.4	(25.8)	(12.8)	0.31	0.29	0.30	7.6	8.3	7.8	2.9	Dec
CNOOC	3.1	16.3	52.7	2.0	(8.1)	0.26	0.26	0.28	11.7	11.8	11.0	1.7	Dec
Huaneng Power	6.7	13.9	5.7	(22.8)	(24.3)	0.42	0.47	0.51	15.8	14.1	13.0	3.7	Dec
China Unicom	5.6	9.0	114.4	(0.4)	(19.3)	0.32	0.51	0.57	17.7	11.0	9.8	1.8	Dec
Aluminum Corp of China	4.2	5.9	267.3	(29.7)	(38.5)	0.32	0.51	0.59	12.9	8.1	7.1	2.3	Dec
Sinopec Shanghai Petrochemical	2.2	4.2	84.3	(37.0)	(45.3)	0.18	0.29	0.37	11.8	7.4	5.9	3.7	Dec
Jiangsu Express	3.3	3.8	42.4	(20.6)	(28.8)	0.19	0.22	0.24	17.4	14.7	13.6	4.4	Dec
Beijing Datang	5.7	3.8	125.7	2.7	(20.8)	0.33	0.40	0.45	17.3	14.3	12.8	2.1	Dec
Yanzhou Coal Mining	6.8	3.7	117.7	(14.0)	(28.6)	0.45	0.70	0.73	14.9	9.7	9.2	1.7	Dec
Maanshan Iron & Steel	2.2	3.2	270.7	(16.5)	(43.4)	0.39	0.53	0.49	5.5	4.1	4.4	9.8	Dec
Denway Motors	3.5	3.1	162.8	(16.4)	(27.4)	0.25	0.33	0.38	14.1	10.4	9.0	1.4	Dec
China Shipping Development	3.9	2.9	139.3	(32.2)	(27.8)	0.29	0.38	0.44	13.4	10.4	8.8	3.8	Dec
Zhejiang Expressway	4.8	2.7	59.2	(12.4)	(17.0)	0.22	0.27	0.32	21.8	17.6	15.0	3.1	Dec
COSCO Pacific	9.5	2.6	47.7	(8.7)	(25.6)	0.56	0.70	0.78	16.8	13.6	12.2	3.4	Dec
China Merchants	9.5	2.6	73.4	(7.8)	(18.5)	0.70	0.69	0.78	13.5	13.6	12.1	4.4	Dec
China Southern Airlines	2.7	2.4	26.2	(20.3)	(26.9)	-0.08	0.19	0.27	(31.2)	13.7	9.7	NA	Dec
China Eastern Airlines	1.4	2.2	40.6	2.3	(15.6)	-0.18	0.10	0.15	NM	13.4	8.7	NA	Dec
Legend Group	2.3	2.2	(13.5)	(32.3)	(24.4)	0.14	0.14	0.16	16.5	15.6	13.7	2.2	Mar
NWS Holdings	8.5	2.0	150.0	19.7	(22.0)	1.39	0.90	1.17	6.1	9.5	7.2	4.1	Jun
Sinopec Yizheng Chemical Fibre	1.2	1.9	13.7	(40.8)	(33.3)	0.06	0.08	0.10	18.9	14.3	11.9	1.3	Dec
Sinopec Zhenhai Refining & Chemical	5.8	1.9	198.5	(14.0)	(39.7)	0.41	0.60	0.72	14.3	9.7	8.1	2.4	Dec
BYD	24.2	1.7	54.1	18.3	(9.7)	1.51	1.81	2.12	16.1	13.4	11.4	2.1	Dec
Jiangxi Copper	2.5	1.7	160.3	(40.9)	(44.5)	0.18	0.31	0.32	13.8	8.2	8.0	4.8	Dec
Anhui Conch Cement	8.2	1.7	210.5	(18.5)	(39.2)	0.58	0.70	0.92	13.9	11.6	8.8	1.2	Dec
Shanghai Industrial	13.4	1.6	24.2	(24.8)	(23.9)	1.34	1.27	1.28	10.0	10.5	10.5	3.7	Dec
Angang New Steel -H	2.6	1.5	132.1	(38.1)	(43.2)	0.46	0.50	0.45	5.7	5.2	5.8	7.7	Dec
Sinotrans	2.7	1.5	22.1	(23.6)	(10.8)	0.16	0.17	0.20	16.7	15.3	13.6	2.1	Dec
Weighted Average			**86.3**	**(18.4)**	**(17.0)**				**11.1**	**9.9**	**9.8**	**3.3**	

Investment Perspective: Still Stronger For Longer than the Consensus Believes

Much Ado About Nothing does not quite describe the events of the last few weeks though Comedy of Errors does capture some of them. Far from there being a permanent ban on bank loans as first believed by the credulous (this is not the Khmer Rouge that did abolish money) recent statements are merely the leadership's attempt to align political diktat with economic needs and try to speed up the slowdown before the economy does get out of control.

As we said in *Overheating ? Unprecedented Growth Spurt* December 3, 2003, policy making and implementation in China in the words of a senior official goes through four distinct phases. First the financial technocrats in Beijing identify the problem: this happened in mid-2002 and led to the People's Bank of China warning the banks to be more careful about loans to developers. Then there is a search for consensus in Beijing amongst the government: this was delayed due to the transition to a new administration and then the administration's desire for jobs in the name of social stability.

The third step, which has now been reached, is the hammering out of a consensus that is then enshrined in political pronouncements that are delivered nationwide to the provinces that otherwise prefer to go their own way. This happened with the Standing Committee of the Politburo meeting last month and agreeing that investment has to be slowed.

There now follows the fourth phase that is the implementation of the consensus-formed directive. This generally takes a year or two during which time it is implemented with "local characteristics" i.e. really-favoured projects continue to be supported, even if in scaled-down form, while others are delayed for however long (probably two or even three years) the political heat remains on the provinces.

This is the reality, however much the planners in Beijing wished it were not so. In the absence of a functioning interest rate and banking system economics in China depends on politics when the economic cycle heats up. Politics can be messy: consequences can be unintended.

Comedy of Errors

Rather than a total ban on new loans what happened was that some "bright" officials in the CBRC decided that the April bank lending figures would look much better if there were no new loans in the last three days of the month. For they feared that loan growth would be artificially swollen by loan applications brought forward because of the May Week holiday. The transition from a centrally planned to a market economy is never smooth.

New Players, Old Lessons

The overreation of foreign investors as well as the miscommunication by government officials and actions should hold lessons for all investing in China-related assets. State officials clearly had no idea that their words and actions would have such ramifications in the markets.

The behaviour of some investors indicates that the level of knowledge about China is very limited. It is reminiscent of 1987 and 1989 when US money first entered the emerging markets of Asia in any real size. Familiar with the disciplines of owning biotech stocks (the previous hot sector) investors were content to crash prices 10% or even 20% as long as they were able to exit their positions quickly. The same behaviour has been displayed by the many hedge funds who were apparently relatively new to Asian investment.

What Happened ?

The first quarter economic numbers came as an unpleasant surprise to the leadership. It had hoped that a combination of jawboning, administrative measures and some market mechanisms would show a decisive slowdown in the economy. This was misplaced optimism, as we indicated earlier. "The bad news may be that the economy will probably slow less than they [the government] might hope, for the structural reasons that we outline, giving it worries about overheating for longer than it anticipates."

Furthermore "Predictions that Beijing will be able to bring the rapid growth under control are based on two misconceptions. The first is that the central bank possesses the instruments necessary to do this. It does not. The instruments that are available to central banks in market economies are not fully present in China. Increasing reserve requirements will do little if there is still pent up demand.

Second, there is the assumption that because China is an authoritarian country and the state is still at the heart of the economy that it can achieve its goals: the early 1990s should have proven this to be false when Beijing tried in vain to rein in runaway growth and inflation. Attempts to cool the property sector started in September 2002. 15 months later demand is still strong.

The first point is answered by the old Chinese saying that the mountain is high and the emperor is far away. This captures the reality of the relationship between Beijing and the provinces: there is little that Beijing can do quickly if it wants to bring the provinces to heel. First it will need their cooperation on agreeing to national policy. This always takes time.

The second was summarised by Mao Zedong when Richard Nixon said to Mao it must be nice to have a whole country do what he said. Mao replied that he could not even get his household to do what he wanted. Beijing must feel like that at times today. The provinces will pay lip service to central directives and follow their own distorted versions of policy that serve local interests

Appendix 1 summarises, from our previous report, what we mean by structural change that is creating an unprecendented growth spurt.

Appendix 2 outlines how leveraging the consumer is changing the nature and dynamics of the economy. Although it was written a year ago, the forces and trends are very much in place and explain a great deal of what has happened over the last year.

The high profile arrest of 10 executives from Jiangsu Tieben, whose long-term goal was to nearly quadruple steel capacity to 8 mn tonnes, and the demotion of the local party secretary in Changzhou, is a classic play from the Chinese statecraft manual, best described as killing the chickens to frighten the monkeys (senior government officials)

Where Are We In the Economic Cycle ?

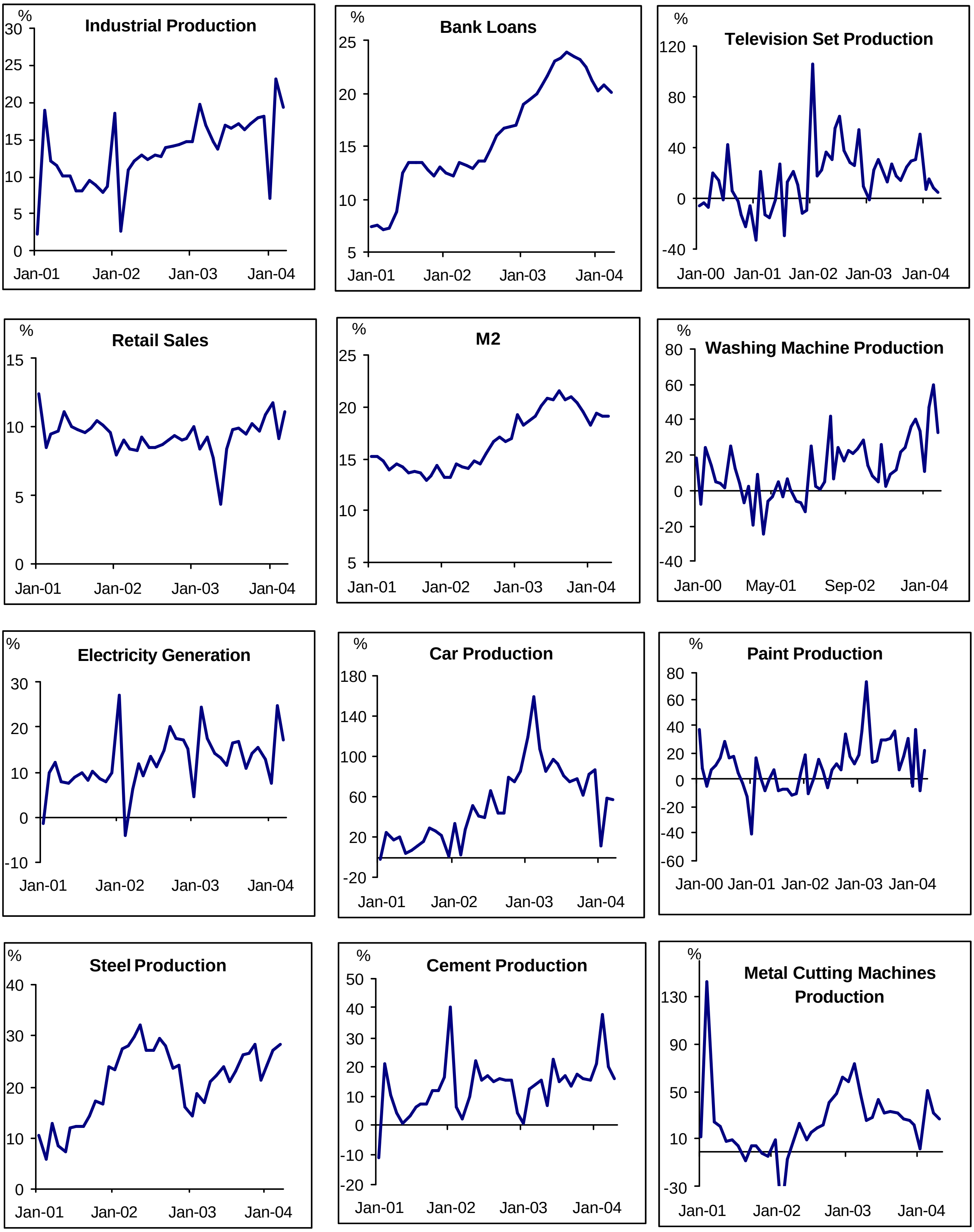
Although structural change is driving the economy faster than its managers or the consensus believed likely there are increasing signs that the cycle has peaked. Reinforced by the inevitable impact of the political decision to focus on overinvestment, the cycle should continue to slow.

This increases the chances of a soft landing (though with the inevitable jarring bumps) and reduces the chances of the economy going out of control, requiring a return to the austerity of the 1990s that would have ended in a hard landing.

Although the levels may still be high there are unmistakable signs that growth has peaked by several measures. On the credit side bank loans and M2 growth have been declining steadily, if not dramatically, since the third quarter of 2004. So have real economy indicators like car and cement production.

Mixed Picture

Still Strong *Declining From Peak Growth*



Note: All data year-on-year

Source: CEIC

The hard landing confidently predicted by some since the second half of 2003 has not come about. The economy has not seized up because of bottlenecks or unsustainable demand. Industrial production is still 19% higher year on year, retail sales growth is over 10%, electricity generation is up 17% and steel production is around 27% higher. Thus a mixed picture emerges but at least one that is neither rapidly overcooling nor overheating: (all these indicators are below their cyclical highs).

What Happens Next ?

We expect that policy makers will wait until the first half fgures are available in early July. This would give them a chance to assess the impact of their recent measures before setting their course for the second half. This fits neatly into the normal planning process that always reviews and refines monetary and fiscal policy at mid-year.

In the meantime there will be more jawboning and directives from Beijing, trying to get the provinces and the state banks to toe the line. Rather than a ban on new loans there will be exhortations to lend more to infrastructure bottlenecks – electricity, roads, rail, ports, energy etc.

We expect interest rates to rise by the third quarter as inflation is likely to rise further. Already savers are getting negative deposit rates of nearly 3% (0.72% versus CPI of 3.8%). Rate increases will do little to slow borrowing but would be an attempt to further monetary reform, probably with greater leeway given to banks to set rates. They would also reward savers and deter some consumption.

If inflation continues to rise in the second half we would expect that it would provide the perfect excuse for China to revalue the yuan. Since most of China's inflation is imported through higher raw material, input and intermediate goods prices, a stronger yuan would cut domestic inflation.

The Real Threat To a Soft Landing

The one thing that could throw China off course from a softish landing would be externally-driven inflation. On current indications China's inflation could well rise to 5-6% before falling back over 12 months as supply is stimulated by higher prices and bottlenecks are removed. That would be manageable. Rising productivity and falling tariffs are still deflationary forces among transportation, clothing and household goods.

However what would put real strain on the economy would be if inflation rose to 8% and were heading for 10%. This would panic policy makers who would fear that rising prices would feed into rising wage demands, as they did in the early 1990s when inflation rose to 28%.

This is not a central scenario but it is worth reflecting how quickly inflationary perceptions change. It was only at the end of March that we wrote *Inflation From the Land of Deflation*. In just six weeks expectations among investors have moved from a deflationary or at most non-inflationary mindset to a sense that inflation is setting in, though few have a sense of its magnitude.

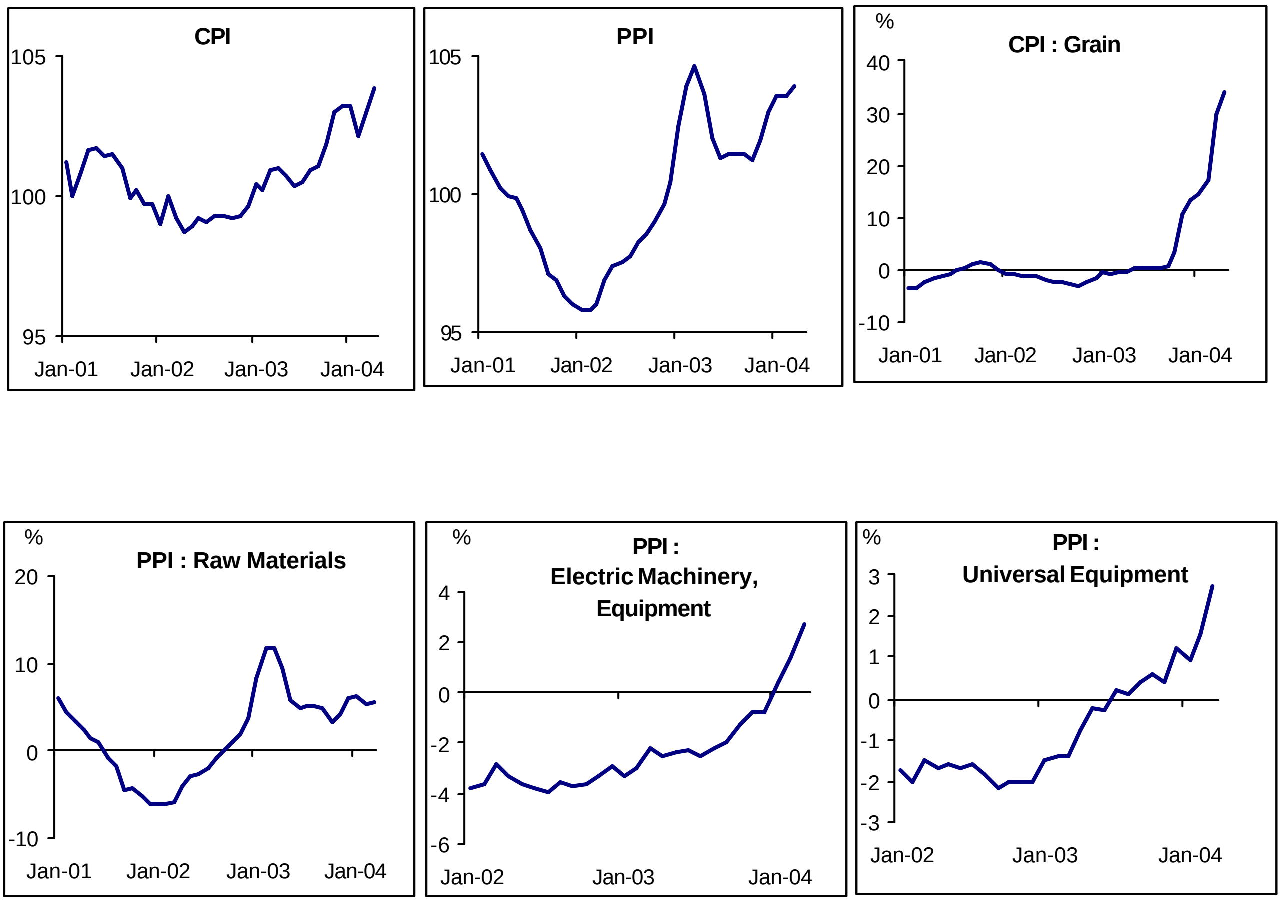
It would take a resurgence in commodity prices to change expectations. It is not metal or even energy prices (unless oil went to $60 a barrel) that most threaten China but grain prices. Poor harvests have raised grain prices, including those of rice. However what is still unknown is the real level of stocks, both in China and worldwide.

Concern is mounting that grain stocks, mainly accumulated during earlier periods of state subsidy, in both China and India, are less than presumed. Inflated numbers from corrupt officials, destruction by vermin and mold from poor storage are all now believed to have raised stated stocks well above real usable levels. The USDA last year cut its estimates of China's grain stocks. These are now down at much less comfortable levels. Other agricultural experts believe that maize (corn) stocks have fallen to 27% of consumption from 63% in 2000 while wheat stocks have fallen even more to 35% from 88% over the same period.

All it would take is a major supply shock elsewhere in the world for global grain prices to rise significantly. This could be caused by drought, floods or just a hangover from earlier weather problems, especially in North and South America. The chance of this happening in the next couple of years is about 30%, but it is a rising possibility. If it did happen, grain could experience a price spike that would raise prices anywhere between 50% and 100%.

This would have a marked impact on inflationary expectations in China. Already grain prices are 33% higher in China than a year ago. Raw material prices are up 5.5% in the PPI.

While there are still some deflationary forces it is notable that producer prices are rising again, up nearly 4%. For instance machinery prices have moved out of deflation after several years. The two series for electrical machinery and universal machinery prices show inflation of 4% and 3% respectively.



Note: All data year-on-year

Source: CEIC

Misconceptions

Many misconceptions are exposed in investor thinking by the overreaction to recent news from China.

- *Implicit Faith in Official Numbers:* something not shared by senior officials who have expressed real anger at the inadequacy of data. As one put it, he has no real idea what is happening either in investment or consumption.

Even footnotes to official figures are ignored, most famously in the new fixed asset investment series that stated that growth in March was not the oft-quoted 43% but 33%. The series itself is believed to be flawed by those familiar with its composition: land is included at current prices instead of at constant prices for instance.

- *Consumer-Led Growth:* for the first time the consumer is responsible for much of the growth. In previous cycles, before housing reform, there was no private housing market. Nor was there consumer financing, nor household deposits of the current magnitude let alone asset-based household balance sheets.

This is a completely different economy, driven by consumers – housing, autos and retail - not by central planners. Growth is no longer just generated by state bankers pumping money into the economy. The reason housing and autos are the source of high growth (and the target of officials) is that after 50 years of scarcity these are the things that consumers most want.

- *Bank Loans:* while smaller banks have seen loans growth over 40%, the Big Four banks, which comprise nearly 60% of all credit, have seen loans growth of 17.2% in March. Overall loans growth is down to 22.4% from its 25.5% August peak. This will doubtless slow further as the government targets institutions outside the Big Four.

- *Overinvestment:* numbers are hard to come by when fixed asset investment numbers are uncertain. From our own detailed work on steel there seems to be less overinvestment than many assume. There continues to be a deficit in flat products, so all new flat output will find domestic demand.

Even the state companies threatened by private sector companies see private sector expansion mainly in smaller plants (0.5-1.5 mn tonnes) rather than in large-scale plants. We sense that to a degree Beijing is fighting the last war with its focus on reckless over investment leading to troublesome overcapacity

- *Private Sector:* compared with earlier cycles the private sector is larger and more capable of making rational decisions than before when it was in its infancy.

- *Misallocation of Resources*: doubtless there are plenty of cases of misallocation of resources, especially where the state is involved, however we suspect that they are fewer than in previous cycles.

Even in the now notorious case of steel maker Jiangsu Tieben it is debatable whether it was a misuse of resources since most of the output would have been a classic case of import substitution: it may well have been illegal acquisition of farm land. It is ironic that some in the markets prefer to take the judgment of state planning officials rather than the private sector as to the proper allocation of resources.

- *In Praise Of Central Planning:* by accepting the view of Beijing that there has been gross misallocation of resources by the private sector, Wall Street commentators are ironically aligning themselves with the state planners and fingering the private sector as the culprit: Stalin would have been delighted.
- *Command Economy:* although administrative measures are making a come back this does not herald a return to the command economy. It is merely recognition that in some areas market mechanisms are still insufficiently developed to slow the economy naturally. We expect further liberalization of financial markets and the economy, including privatization.

Appendix 1 (from Overheating ? Unprecedented Growth Spurt 3 Dec, 2003**)**

New Thinking Required

Is China overheating ? We think that is the wrong question to ask. For investors the key question is how long will China continue to grow at above its trend rate ? We feel that the answer is for longer than the consensus appreciates. Trying to understand the nature, rate and scale of the structural change that is driving the economy through a period of unprecedented growth will preoccupy investors for the next two years at least. In the meantime, expectations that the economy is about to slow appreciably will be repeatedly premature.

Listening to all the debate on whether or not China is overheating leaves us feeling that the consensus is missing the central fact. China is clearly going through an unprecedented period of growth as a whole series of structural changes reinforce each other to deliver growth well above average. Whether this phase lasts in all for three or five years is hard to know but it is clear to most who live in China and see the changes day-to-day that these are not ordinary times, even when compared with the 7-8% growth of the last two decades.

Our belief is that China is about 18 months in to a growth spurt that in all could last about five years. This means that no significant slowdown can be expected before 2006 or even 2007. This may be hard to grasp for those conditioned to regular economic cycles and extrapolating from the past.

It is especially hard to grasp because of its implications. For now that the Law of Large Numbers kicks in, whatever happens in China has a significant if not major impact on the rest of Asia and the rest of the world. Its hundreds of million no longer have an impact on just industrial output and exports but increasingly on consumption, imports, commodities, transport, investment flows, both in and out of China, and on most other global economic, investment and financial equations. This new reality will take some time for the consensus to digest. In the meantime confusion will reign over whether the economy is overheating and whether the recent rapid growth can be sustained.

The best way to understand this phenomenon is to consider the changes that have already happened in the last five years, the structural changes that have been underway for a decade, which may continue for another decade or two, and most importantly the changes that lie ahead over the next five years that are already underway.

The length of the list is impressive, bringing home the scale and extent of the changes as well as the rapid rate of change. So as to keep this to a reasonable length we shall outline the changes more as notes rather than as a lengthy treatise. Each point would deserve a separate section in its own right.

Then we shall condense our earlier report *China Enters A New Era* 27 May on the leveraging of the Chinese Consumer. This will explain in more detail some of the most powerful trends that are observable in housing, autos and consumer credit, three of the areas singled out in the overheating debate. Our conclusion is that although growth may be well above trend, structural change already underway will explain why this will continue for longer than the consensus believes. Much is pent up demand that has built up over 50 years.

The Last Five Years

Since China emerged out of its last slowdown in 1998 it has undergone not just rapid growth, but the start of rapid change. It is rare that economic and social change is so visible over such a short period of time. This is the point that underlines the nature, scale and rate of change that China is undergoing. It is observable and palpable. For these are not cyclical changes but structural changes. As the Consumer Society re-emerges, unleashing over 50 years of pent-up demand, whilst the industrial base increases in scope and efficiency, the drivers of growth have moved into a new gear.

Over the last five years the following have happened or started to happen for the individual:

Incomes: Real incomes have doubled in a decade. There are more better-paid jobs in firms with sustainable futures
Household Balance Sheets: These have been totally transformed by housing reform in 1997/8 that for the first time provided all urban households with a substantial asset – their home
Savings: These have been drawn down once value appears in housing and consumer goods
Credit: Mortgages started barely four years ago, auto loans and credit cards only two years ago
Consumer Society: The last vestiges of Maoist anti-materialism and austerity are falling away just as the production of consumer goods increases in quality and value
Aspirations: These have changed dramatically as the younger generation reared in relative affluence enter their 20s and 30s
Personal Space: Has been changed by the growth of private housing, foreign travel and a more extensive media, creating new needs and wants for better-educated consumers
Services: From restaurants to tourism these are becoming normal parts of life where Serve the People is no longer a poor joke
Confidence: This has reached new highs, reducing consumer reluctance to spend

Economic and political structures are also changing, giving greater confidence about the future:

Leadership: Younger, better-educated technocrats and leaders are taking over not just in Beijing but throughout the country, both in politics and corporations
Accountability: Already this year two ministers have been sacked – one for the handling of SARS (Health), the other corruption (Land)
SOEs: The hard part has been done, over 30 mn industrial workers have been laid off. This is about 65% of the number that will finally be retrenched.
Industrial Reform: Textiles have already been totally transformed into an efficient industry. Banking, often the most visible, is the laggard not the norm.
Infrastructure: Pump priming has built the expressways that are having the same catalytic effect as in the US in the 50s and Thailand in the 60s, setting up future economic growth by linking markets, labour, producers and consumers
Tax Revenues: Long an Achilles heel, these have grown to 19% of GDP from 10% in 1996 due not just to higher economic activity but also to better collection: up 21% this year

As confidence rises for these specific reasons, some of the old worries are starting to fade:

Deflation: Stability seems to be returning to prices. Some commodities and even industrial products are seeing an end to deflation
Rural Economy: The terms of trade that turned very negative in the 1990s (after a very favourable decade in the 1980s) are starting to turn more favourable again
Social Safety Net: This is starting to emerge with the development of pension reform
Social Stability: There is a growing sense that things have improved over the last five years, largely for the reasons cited above

Shift to A Market-Driven Economy

Each year China is moving more and more towards a market-driven economy. This is raising efficiency, activity and confidence:

Competition: Is now the rule (if often ruinous in its initial liberalisation phase). This is driving prices down and quality up, thereby making products and services more attractive and affordable both at home and overseas

Legal Status: Private property was only protected by the constitution in 2000. The private sector is about to be endorsed and given similar status as the state sector

WTO: This is levelling the playing field (with Chinese characteristics) for all competitors, not just foreigners. By 2006/07, when many of the short-term protections are removed, its impact will be more evident

Internal Barriers: Previous provincial self-reliance led to the creation of inter-provincial barriers that limited trade and the movement of goods. These are steadily falling

Consolidation: Provincial self-reliance led to Chinese industry being highly fragmented and therefore inefficient. 10 years ago beer market leader Tsingtao had only 1.6% of the national market, now it is closer to 13% and the top three companies have 30%: soon they will have 40%. This is providing economies of scale while raising overall productivity

Information: The life blood of any market economy is increasingly available, whether it is in housing with the development of estate agents, websites and newspapers or better industry data provided by industry associations and consultants

The Next Five Years

This is a formidable list of structural changes, unprecedented in contemporary Asia. What lies ahead is even more significant. At the macro level these include:

Growth Shift: Towards a more domestically-driven economy as a result of the structural changes already underway, making growth less dependent on exports

Continental Economy: Increasingly China with its large hinterland will resemble the US in the late 19th century: an economy driven by increasing development of its western interior and increasing prosperity of its eastern seaboard

2nd, 3rd Tier Cities: Growth is highest in the smaller cities, away from Beijing, Shanghai, Guangzhou and Shenzhen. They have yet to share in the recent high growth of the major cities. They lag behind by 3-4 years both in terms of growth and financing. Most property is still mainly bought with savings. Here mortgages are a much smaller factor, hence less of a spur to growth.

Demographics: Over 75 mn better-educated consumers in the 25-36 year age group will become the primary consumers over the next five years. Another 37 mn in the 16-25 year cohort are joining them, fully exposed to a consumer society

Credit: Only 20% of autos are bought with loans. This is likely to rise to 60% within five years. There are barely 2 mn credit cards in China, this is on the point of exploding as foreign banks enter the market and local banks tap their client bases with new personal finance products

Urban Redevelopment: Beijing, Guangzhou and numerous other cities are following Shanghai in redeveloping their city centres, creating both construction work and compensation for relocated households to spend on new housing, typically in satellite towns: a veritable engine for growth

Housing: This has only just started with the recent introduction of mortgages. Plans for increasing space to 25 square metres per capita by 2010 will raise space by 25% per person. In some of the most overcrowded major cities it will almost double space required (Beijing aims to raise average space to 8 and then 10 square metres per person from just 6). This increase is in addition to the replacement properties that are part of urban redevelopment

Urbanisation: An extra 190 mn people are expected to live in towns by 2010, raising the urban population by 42%. This is largely the response to the plight of the rural areas, just as happened in Europe and North America over the last 250 years: in China it is just happening so much faster

Infrastructure: Spending will not slow as plans to double expressways by 2010, power projects, water and transport systems continue the build out and renovation of China's infrastructure

Environment: The last few years have seen the writing of legislation, now comes the implementation of laws

Land: Enabling farmers to own the usage rights to their property will be a major change in rural China. It will not only spur investment, lead to more efficient size of land holdings but also provide collateral against which to borrow. Its impact will be as far reaching as urban housing reform, probably the single largest catalyst for domestic growth of the last decade.

Tourism: Both domestic and foreign. The number of Chinese travelling overseas is expected to rise from 20 mn to 50 mn by 2010. Inbound tourism, with improved infrastructure and events like the Olympics, is likely to see similar trends

Devolution: Increasingly decisions, political and financial, are made in the provinces, generating speedier responses and hopefully better decisions

Wealth Effect: The 50-150% increase in property values in some cities has generated a significant wealth effect that will spur consumption and investment

At the corporate level :

Private Sector: Official sanction of the private sector should lead to rapid growth in bank lending to it. Again hopefully leading to better utilisation of credit

Privatisation: Not only will this help resolve the problem of the SOEs, it should lead to better management as the private sector, local and foreign, take over in what could be dubbed the "Sale of the Century"

WTO: Has an increasing impact in opening up China's markets, much will be done by 2006/07 when most protection is removed

FDI: As China reaches critical mass in world terms (third largest auto market by 2005) it will attract increasing amounts of FDI. Hence the euro 6 bn new investment by VW and its partners, $1 bn by Ford and $ 1 bn by DaimlerChrysler is driving investment, regardless of the short-term economic cycle

Global Industries: Following consumer electronics, textiles, after the lifting of quotas in 2004, and ship building, where market share may rise from 11% to 30%, look like the next industries to reach world dominance

Global Brands: From OEM manufacturer to the owner and developer of global brands in the industries where China has become the Workshop of the World is the next step

Overseas Investment: Some will be to acquire foreign brands, production facilities, distribution networks and technology, others will be in raw materials to reduce dependence on foreign trade

Capital Goods: After mastering assembly work, China's manufacturing base is increasingly developing its own capital goods industry

Productivity: Productivity rather than low labour cost are driving investment to China

Import Substitution: All of the above are generating opportunities for companies locally

Appendix 2

LEVERAGING THE CONSUMER

CHINA ENTERS A NEW ERA

27 May 2003

China is entering a new era: China's best decade lies ahead as consumer financing creates the Consumer Society and its aspirations that will prolong growth well beyond consensus expectations. Rather than fret about Sars, asset bubbles or an economic slowdown we would look at the real economy. Major structural changes initiated in the 1990s are coming together to reinforce growth trends that will take a decade to play out fully. Consumer financing has only just started. There is plenty to fund: $120bn of mortgages, 50mn who can afford autos.

Change Has Happened: Or Is Underway

- Results of Economic Liberalisation Flow Through
- Meeting 50 Years of Pent-Up Demand
- Mortgages, Auto Loans, Credit Cards Become Key Drivers
- As China Moves from a Cash to Credit-Driven Economy
- Four Enormous Industries Underpin Higher Growth Potential
- Supported by Developments: Competition, WTO, Market & Legal Mechanisms, Infrastructure, Growing Value

Infancy: In China Only

- 6% Bank Loans to Mortgages v. 20% Globally
- 8% to Consumer Financing: Aim for 20% by 08/10 Even 07
- 1mn Credit Cards Out of 1.3bn Population
- 20% Auto Financing v. 70-80% in OECD
- 2 Cars per 1,000 v. 90 World Average: 15 Indonesia

Live Now, Pay Later: No Return to Maoism

- 300mn Urban Dwellers have Glimpsed the Good Life
- Generational Change: Debt No More a Four-Letter Word
- 37% Under 36 Years: 112mn Urban. Born Consumers
- Nearly Half in 'Self-Seeking' and 'Me' Generations
- Like Hong Kong, Taiwan in 1960s Before Highest Growth
- 50mn Already Have Per Capita Incomes Over $3,000: Key Threshold for Consumer Society Take-Off

Unprecedented Scale: Not Phenomenon

- India in 1990s Has Already Experienced the Same
- Raised Growth Rates Beyond Expectations

36 mn Potential Home Buyers

Affordability *

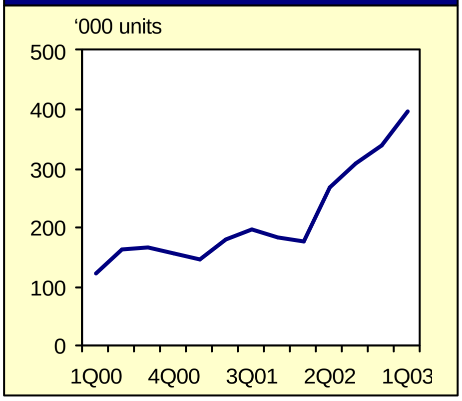
(mn households)	
Luxury	0.3
Mid Market	6.9
Mass Market	29.5
Can Afford	**36.7**
Can't Afford	60.7

Source: Research-Works Est.

* No of Urban Households that can afford new property

Taking Off

Auto Output



Source: *CEIC*

Recommendations

- *Autos, Toll Roads, Oils*
- *Retail, Consumer Goods*
- *Aviation, Travel, Leisure*

Please contact:
Hugh Peyman at hughpeyman@research-works.com or at 86-21-5887 6060 with any questions or comments.

CONTENTS

ACTION: Many Sectors Benefit From the Evolving Consumer Society………..……………..12

INVESTMENT PERSPECTIVE: Long-Term Growth Potential Raised …………..……………..13

HOUSING: $240bn Needed………………………………………………………………......17

AUTOS: Taking Off……………………………………………………………………….....….20

CONSUMER LENDING: People Starting To Live Now, Pay Later……………………………..24

INVESTMENT PERSPECTIVE: Long-Term Growth Potential Raised by Structural Change

The original portfolio investment optimists on China in the early 1990s were a decade too early and the recent pessimists a decade too late. We believe that China's best decade lies just ahead. Many forces are coming together to reinforce each other, building on the economic liberalisation, planning and policy development of the 1990s. These are creating major trends that have major implications. The scale and duration of the changes is so large that they will take a decade for them to play out fully. There remain outstanding questions over China's institutional and political development but these are unlikely to threaten as long as growth is sustained as we expect.

China will enjoy the sort of prolonged exceptional growth that Japan enjoyed in the 1960s and 1970s; of Taiwan and Korea in the 1970s and 1980s; of Hong Kong, Singapore, Thailand and Malaysia in the 1980s and 1990s; some two decades after they started to emerge as Asia's latest high-growth economies. The only difference with China will be the scale and the impact.

During this process we believe that China's growth will be sustained for longer than the consensus believes. There can be cyclical slowdowns, even periodic adjustments, but the overall trend is towards a more normal market-driven economy that feeds on 50 years of pent-up demand and the aspirations of a consumer society that is only in its infancy. Leveraging the consumer through mortgages, auto loans, credit cards and consumer finance will create accelerating sources of growth that investors have yet to appreciate fully. These are all developing at different paces, taking years to work through to maturity, thereby ensuring sustained growth for a decade. This is not the normal timeframe of most investors and hence the trends are missed by many, but it is the only way to appreciate what is happening in China where the scale and nature of the trends is so vast.

We do not say this lightly. Foreigners have been getting China wrong for over 200 years. Indeed, as we said in early 2001, it is only the second time in nearly 30 years that I am bullish on China: the first, simply because there was no alternative after the Great Leap Forward and the Cultural Revolution, was in 1978 when the consensus seriously underestimated the outcome of the Four Modernisations. Our argument is not based on the size of the market, let alone straight-line extrapolation from the last two decades. It is based on trends already underway that are built on major fundamental structural changes that are now in place and others likely to happen.

The likelihood of these panning out I have been testing day by day in the nearly two years that I have been living in Shanghai. There is no substitute for buying and renovating a house in China to find out how the country works (and does not work), how people's aspirations are changing and how the institutions are developing. Living and breathing this change one sees economic history in the making as virtuous cycles are being created and reinforced. And from an investment perspective these are very much the early days as mortgages, auto loans and credit cards start to take their place as key economic drivers, replacing centrally (mis)allocated credit and (mis)directed investment. From such a dysfunctional system, it is easy to see the rapid rate of change.

Leveraging the Chinese consumer is already fundamentally changing the long-term potential of the economy and the pace of growth. The transition from a cash to a credit-driven economy is profound (imagine the US economy without leverage: that was China until a couple of years ago). The major trends are taking China from the end of the centrally-planned economy which only created shortages to the early days of a market-driven Consumer Society and a consumer-sensitive financial system which develop four enormous industries - housing, consumer goods, autos and leisure. The macro trends range from urbanisation in the world's most populous nation to the pace of market development in the last remaining major communist economy. None are small either in size or consequence.

There is a long way to go. Only about 6% of bank loans are to mortgages compared with a global average of 20%. Consumer financing does not amount to more than 8% of all loans, yet banks want to make it their major activity. Some aim for 20% by 2008/10, others by 2005/07. China only has 1mn credit cards while just 20% of autos are financed compared with 70-80% in mature markets. Consumers and hence the economy are entering a new era. In the process savings will be better mobilised, resources allocated more rationally and economic efficiency raised.

These trends and catalysts can be best understood by looking at housing and autos, what is driving them and what is supporting them:

Housing: Housing reform of the late 1990s is the least appreciated catalyst and influence behind long-term economic growth. It has created:

- *Household Balance Sheets Created*. Acquired at 70% to 80% discounts, housing reform transformed previously asset-poor households into being asset owners

- *Relocation Compensation*. This monetised these assets providing down payments for new property: 100,000 households a year in Shanghai alone

- *Wealth Effect*. Both from the acquisitions and the subsequent appreciation in property prices. The precedents of Hong Kong and Singapore are instructive

- *World's Largest Building Site.* Just by increasing average urban living space from 20 sqms to 30 by 2020 China will add 400 mn sqms of new property, upgrading will add even more, an unprecedented phenomenon

- *Global Integration.* A metropolitan global city would normally have 5% of its residents from overseas. This would lift Shanghai's expatriate population to 700,000 high-income earners from 300,000: Beijing and others will follow

- *Economic Impact.* Housing added 1.6% to China's GDP growth in 2001, some 22% of the total. If exports slow, its importance will only increase. Sales are growing over 20% while investment, which is already 13% of total investment, is up 17%. Its investment induction coefficient or multiplier is between 1.5 and 1.7

Autos: The ultimate expression of the consumer society, autos are fast becoming a key part of China's economy (output up 110% in the first four months of 2003). The significance of autos is:

- *Second Largest Purchase.* After housing they are a household's largest purchase

- *The Ultimate Shortage Economy Product.* China had only two cars per 1,000 people in 1997. It still only has four compared with Indonesia's 15, Thailand's 42

- *Creating China's Next Global Industry.* The eventual scale of China's car market, second only probably to the US and Japan by 2010, will make it a major global producer just as it has become in everything from TVs to handphones

Like the related consumer goods and leisure industries, housing and autos are driven by:

- *Consumer Society.* In an unspoken pact between rulers and ruled, the Chinese have been shown a glimpse of the Good Life in the 1990s. More is promised. Live Now, Pay Later is rapidly overturning old habits of thrift and anti-materialism

- *Generational Change.* The willingness to take on debt is most pronounced in the younger generation. 37% of the population is under 36: 112mn are urban. Consumer consultant Jackie Wong divides the population into four groups, each shaped by recent Chinese history. Each year millions enter the two segments that take most readily to consumerism: soon half will be in this cohort.

Socialist Generation

SOCIALIST SOCIETY GENERATION

Age + 47

43.6%*	**423 mn**
urban	130mn
rural	293mn

** Of Adult Population*

- TALENTED FEW BECAME HIGH RANKING OFFICIALS
- SOME ALREADY RETIRED
- LITTLE OPPORTUNITY FOR MOST TO HAVE A GOOD EDUCATION
- MOST WORK FOR SOEs IN LOWER SKILLED JOBS
- WILLING TO SACRIFICE FOR THEIR CHILDREN AND GRANDCHILDREN (THE "LITTLE EMPERORS") WHO RECEIVE MOST DISPOSABLE INCOME

Cultural Revolution Generation

THE "ABANDONED GENERATION"

Age 37-46

19.0%	**185 mn**
urban	57 mn
rural	128 mn

- ACCESS TO PRIMARY / SECONDARY EDUCATION DENIED
- ACCESS GIVEN AT HIGH SCHOOL / UNIVERSITY, BUT FEW QUALIFIED TO ATTEND. MOST TOO OLD TO RETURN TO SCHOOL
- MOST WORK FOR SOE's, IN BLUE COLLAR JOBS

Post Cultural Revolution Generation

SELF-SEEKERS, SELF RELIANT

Age 26-36

25.0%	**243 mn**
urban	75 mn
rural	168 mn

- MORE INDIVIDUALISTIC AS REACTION TO COLLECTIVIST DESTRUCTIVE CULTURAL REVOLUTION
- GOOD EDUCATION. CAN WORK IN PRIVATE PRIVATE SECTOR / FOREIGN JVs
- FIRST EXPOSED TO MTV / CHANNEL V

The Me Generation

PRODUCTS OF THE PAMPERED ONE CHILD POLICY

Age 16-25

12.4%	**120mn**
urban	37mn
rural	83mn

- MORE EXPOSED TO GLOBAL INFLUENCES AND MEDIA
- WELL EDUCATED, ACCESS TO SPECIALISED EDUCATION, INCLUDING OVERSEAS STUDY
- CAN PUT SKILLS LEARNED AT UNIVERSITIES INTO CHOSEN WORK
- ACCESS TO EMPLOYMENT AT FOREIGN FIRMS
- BRIGHT FUTURE IN JOB MARKET: ABLE TO EARN HIGHER INCOMES
- ***THE MOST AFFLUENT AND EDUCATED GENERATION YET***

- *Urbanisation.* By 2010 an estimated 46% of China's population will live in towns. This means 640mn people, some 190mn more than today. The process will not end there. An estimated 400mn will move off the land over the next 25 years. Should China ever reach US levels of productivity in agriculture, it would only need 40-50 mn farmers – implying 1.5bn urban dwellers ?

- *Incomes*. As incomes rise households can afford the previously unaffordable. Over 50mn people live in coastal towns where per capita GDP exceeds $3,000 pa, the level at which auto consumption takes off in most economies

They are supported by **market developments** :

- *Affordability*. Not just income but lower prices are increasing affordability
- *Competition*. Is driving down prices, both of local and foreign manufacturers
- *Economies of Scale*. Driving down unit costs
- *WTO*. Has spurred local manufacturers to greater efficiency, broken monopolies
- *New Models.* Have increased choice that has generated demand
- *Local manufacturers.* Have injected competition, especially at the lower end of the market where demand is most price sensitive
- *Value.* Competition, WTO and new models have all created a sense among consumers that products now have value

market mechanisms in property:

- *Real Estate Agencies:* (private sector) bring buyers and sellers together
- *Loan Brokers:* find funding
- *Mortgages:* provide long-term funding
- *Secondary Market:* provides an exit and valuation
- *Property and Land Auctions:* create transparent markets
- *Market Clearing:* through forced sales

legal developments also aid property:

- *Constitution:* legitimises private property
- *Land Use Rights:* up to 70 years
- *Progress:* foreign lawyers see no major problems within five years. Title registration, foreclosure and new concepts like condominia should be resolved

infrastructure spending aids both housing and autos

- *Road Networks:* stimulate commercial, commuter and leisure traffic. Makes relocation to outskirts more acceptable: raises land values

financial system is being forced to cater to the new consumer demands

- *$120bn Needed:* by new property alone by 2020, assuming 50% average mortgage. Upgrading needs are extra.
- *New Instruments:* mortgage-backed securities and mortgages for existing housing are needed.

HOUSING: $240bn Needed

China aims to raise average personal living space from 20.4sqms in 2000 to 25sqms by 2010 and 30sqms by 2020. By the time this is finished the urban population will be over 400mn, implying 200mn sqms of new property to be built in each decade. At an average of RMB5,000/sqm, that means RMB1trn (US$120bn) of new property will be built each decade. It is an unprecedented phenomenon, as China transforms itself from a shortage economy to one of meeting consumers' needs. Helping fund over $240bn of new property in two decades is what the financial system has to address as well as to help those who will upgrade.

Shanghai: An Instructive Microcosm

Before considering the extent to which consumers are being leveraged it is worth understanding the major physical changes in the urban landscape that are driving the financial process. Shanghai is a good place to illustrate the phenomenon and the scale. In 1990 40% of people in Shanghai had less than 4 square metres (sqms) of living space, average space was just 6.7 sqms. The goal was to move from one room per family to one room per person as a minimum.

A comprehensive development plan built around the concept of One City and Nine Towns has seen 520,000 families moved out of the center of Shanghai between 1995 and 2001, that is nearly 100,000 families, over 300,000 people, a year. A further 500,000 families are due to move between now and 2012. In all an extra 75mn sqms of space will have been built, over 750mn square feet, in over one million new homes. RMB 300bn (US$36.2bn) will have been spent on infrastructure from tunnels and bridges to expressways and water systems.

This all got underway just as housing reform was introduced nationally around 1998. This enabled state employees to buy the property in which they lived, often at steep discounts of 70-80%. Now over 60% of people own their own home and 98.5% of residential property is privately owned. Financial mechanisms, other than the initial loans from companies and deductions from future salary, had to be developed to meet this need and so the mortgage market was born.

Shanghai became a model for the new property market. From effective planning, where a Master Plan replaced the anything goes philosophy of five years ago, to the control over land supply and the introduction of land sales by transparent auctions, Shanghai has led the way. This year its secondary market may equal the primary market: last year it was 17mn sqms compared with the primary market's 19.6mn. In contrast Beijing still has less-developed property laws and the secondary market comprises only 4% of transactions.

This undertaking is so large that the local government made property development one of the six pillars of its long-term economic development plan, something done nowhere else. The relocation alone should sustain housing demand for another 8-10 years. Then there will be the upgrading of people from their existing, often less than satisfactory, housing. Added to that are the generational changes. Traditionally 40% of households had adult children living with them. Now 80-90% of newly-weds aspire to live on their own if they can afford it.

The market is not just restricted to Shanghai buyers who make up only 75% of demand. Being China's metropolitan center Shanghai attracts property investors from outside its boundaries. Some 25% is bought by outsiders, about 18% by Chinese from other provinces, often rich individuals or companies buying for their staff, and another 7% is by people from overseas.

Shanghai is only halfway through the process of relocating people, yet is ahead of most cities. Beijing for instance, with less effective governance and more corruption, as Sars has shown, lags far behind and is rushing to complete all its urban renewal by 2006 so that the air quality is adequate for the 2008 Olympics. Outside the main cities there are the smaller towns where the vast majority of urban China lives, over 85% of it

Additional Sources of Funds

In China salaries are a poor guide to the ability to afford housing, but they are a starting point. Often more important are other non-salary sources of income. Apart from annual bonuses which vary widely, from one month to six months but we have assumed conservatively are only one month, there are a series of sources that are generally unique to this point in China's history.

Second Jobs: As in many low-income and state-dominated economies, lowly-paid public sector workers have second jobs, either part time or outside working hours. These supplement their main income.

Corruption: With salaries low, corruption is systemic. In a group discussion it was asserted that about 80% of people in a position to influence a decision would do so for personal gain: everything from government contracts to purchases of office supplies. This may include up to 20% of the workforce and could easily on average add 30% to income. If this is hard to conceive, think of the size of China's GDP rather than monthly salaries. An understanding of post-Communist Russia will illustrate the point.

Relocation Compensation: With the redevelopment of not just the main cities but most other towns as well, households often acquire sufficient compensation to move out of the old overcrowded centers of town to the outskirts where new properties are developed. In Shanghai, typical compensation would be RMB 3-4,000 psqm, usually some RMB 100,000 or more, enough to make down payment on a RMB 400,000 mass market apartment.

Life Savings: During the shortage economy and iron-rice bowl society that characterized China for over four decades many households saved much of the little income that they earned. There were few goods of any quality worth purchasing. One house buyer related how her mother gave her RMB 30,000 for her home down-payment, much of it saved from years of never taking a bus to work and other similar sacrifices. Hence savings are surprisingly high, even among those on lower incomes.

Family Assistance: In the traditional Chinese family way parents and siblings help the younger generation purchase their first home, as if the communes and state housing had never existed.

Migrant Workers: Although most migrant workers come from the rural areas these are increasingly turning in to small towns. As any visit to most of rural China will attest, migrant incomes are remitted from the coastal factories and building sites to the inland provinces where property investment is often the migrant's first major objective.

Overseas Workers: Unlike internal migrants these tend to have much higher incomes. An estimated 500,000 graduates from China work abroad earning high salaries. Increasingly these incomes are remitted to parents and siblings back in China. This is most noticeable in the main cities like Beijing and Shanghai.

Inherited Wealth: Despite being a communist state, inherited wealth in China should not be overlooked. In Beijing an estimated 5% of households have inherited their homes from pre-1949 days. Many were lost during the Cultural Revolution and only regained since, however they are perfectly good collateral today against which new properties can be bought.

Female participation in the workforce is high. Therefore we calculate that each household has 1.6 incomes. Up to the age of 44 women almost all work or seek work. Over 45 years old, when women tend to look after grandchildren for their own children who are usually both working, female participation drops to about 40%. However the remainder almost always do some part-time work. Even above the retirement age of 60 about 25% of people do part-time work.

Working Female Population		
Age	**Seeking Work (%)**	**Part Time (%)**
20-44 Years	100	0
45-59 Years	40	60
60 + Years	0	25

Source: Research-Works Est.

The final source of extra funding, which is growing to be of increasing importance, is like Singapore's Central Provident Fund. The most directly important part is the housing fund. Introduced in the last decade this amounts to 14% of salary: 7% is contributed by the employer and 7% by the worker who may draw up to RMB 100,000 from the fund if it does not exceed 15 years of salary. The interest rate is usually about 100 basis points below the market rate.

In addition to salary there are pension, health and unemployment contributions made by both worker and employer that round out total income and make property more affordable, if only because these schemes partly take care of future needs and uncertainties.

Provident Benefits		
(% of salary from)	**Individual**	**Company**
Old Age	7.0	22.5
Healthcare	2.0	12.0
Unemployment	1.0	2.0
Housing Fund	**7.0**	**7.0**

Source: Research-Works

AUTOS: Taking Off

Driving Demand

Demand is being driven by five main forces – affordability, infrastructural development, market development, new sources of demand and the nature of the car.

Affordability:

- *Financing:* Only about 20% of cars in China are financed compared with 60-75% in Europe and 80-85% in the US. GM expects this percentage to rise to 30% by 2004/05 and to 50% by 2005/06 (Poland reached 70% within six years). Already 40% of Yuppie purchases in China are financed, so are 25% of car purchases in trend-setting Shenzhen.

So far only banks are allowed to make auto loans but WTO requires foreign companies to be given licenses. [This was done in November]. This will enable market leaders GM and VW to get behind their products even more strongly. The full impact will probably only be felt in 2007: it will take a full year to gain the necessary license and another three years or so to understand the market before manufacturers are confident enough to lend to their full ability. Therefore the impact will only be gradual.

With a 30% deposit, borrowers can get a 3-5 year auto loan, paying 5.04% for the shorter tenure and 5.49% for the longer. Interest rates are currently fixed by the PBoC but when liberalized they can fall further when used as competitive tools: China can only dream of US-style 0% financing but the providers are lining up to bring similar tactics to a previously credit-starved China.

- *Price:* Growing competition has brought prices down and promise to lower them further. Now most of the world's major manufacturers have a presence in China. Rapid increases in capacity will doubtless lead to low capacity utilization initially and the need to gain share through price that will further spur demand.

Growing economies of scale can also help reduce prices. The industry is approaching critical mass not only in terms of scale but also of component makers and other suppliers. So far though it is cheaper for VW to make a Pasat in Emden than in Shanghai. As in other industries though, where China has not only achieved critical mass but gone on to be a major market, efficiency will rise and costs will fall – TVs, white goods and cell phones are all examples of the phenomenon and there is no reason why autos will not do the same.

Foreigners are responsible, in joint-venture, for 90% of China's car production. Steadily though local manufacturers are entering the market, especially at the lower end where customers are most price sensitive. Better products and designs will increase their scale so that their prices can fall to expand the market further.

New Sources of Demand

- *Incomes Take Off:* Generally worldwide demand for cars surges when GDP per capita reaches US$3-4,000. In a country as large and diverse as China this is meaningless given that per capita GDP is just below US$1,000. However there are over 50mn inhabitants of cities and provinces where per capita GDP exceeds US$3,000. Furthermore there are some industry specialists who believe that in China's case the take off point would be more like $2-3,000 because of underreporting of incomes and economic activity as well as other factors. If so some 62mn people in coastal China alone are at or above the take off point for car demand with average GDP per capita of US$ 3,572.

Coastal Cities (2001)		
	GDP Per Capita (US$)	Population (mn)
Shanghai	4,520	16.1
Beijing	3,086	13.8
Tianjin	2,437	10.0
Hangzhou	3,032	6.3
Guangzhou	4,596	5.7
Ningbo	2,928	5.4
Dongguan	4,568	1.5
Shenzhen	5,242	1.2
Wuxi	3,778	1.1
Suzhou	3,674	1.1
Zhuhai	3,544	0.4
Total	**-**	**62.8**
Average	**3,572**	**-**

Source: CEIC, China Urban Statiscal Yearbook

- *Pent-Up Demand:* Not only are people waiting for cars to become more affordable through better financing terms and lower prices. There is a large group of potential buyers who have driving licenses but have yet to buy a car. In Beijing there are one million more licenses than cars.

- *Secondary Market:* This is still underdeveloped. Only one-third of all autos are bought in the secondary market, thereby reducing the resale value. As the market develops so will the purchase of new cars as their second-hand value will hold up better.

- *Company Cars:* This market is already starting to look interesting. Very much the pillar of the new car market in the US and Europe, in China these are early but promising days.

Infrastructural Development

- *Redevelopment:* The redevelopment of city centres has led to the relocation of large numbers of people to new towns on the outskirts and the development of new satellite towns. This dispersal has made private transport highly desirable when affordable.

- *Road Network:* Like the US in the 1950s and the UK in the 1960s China is developing a national road network that has been under construction for the last decade (remember the much-criticised pump priming in 1997-98). This is now starting to impact consumer behaviour.

By 2010 China aims to have expressways connecting 90% of towns with populations over 200,000. This integration of main towns will greatly stimulate traffic and car ownership.

The road network is planned almost to double to reach 2.1-2.3mn kms in 2010 compared with 1.4mn in 2000. Highways are set to more than treble to 36,000 kms by 2010 from 11,605 kms in 1999.

All told, this spending on infrastructure will stimulate commercial, commuter and leisure traffic.

- *Example:* Shanghai has become a model for the rest of China for urban redevelopment. Apart from its urban renewal previously mentioned, Shanghai is implementing its 15-30-60 road network. This aims to provide drivers with access to the highway within 15 minutes, to work within 30 minutes and no more than a 60 minute drive across the city, either from East to West or from North to South. In so doing, Shanghai is building another three tunnels and another bridge [completed in June] across the Huangpu River.

  Not for nothing are all nine members of the Standing Committee of the Politburo trained engineers. Many at the centre of power worked in Shanghai as did Jiang Zemin a tenth engineer.

Market Development

- *New Models:* Gone are the days of the ubiquitous Santana that looked as if it had been designed for the Trabant-loving, car-starved citizens of East Germany. A sudden increase in new models combined with lower prices to boost demand last year. As more manufacturers come to China, not only do they offer more models but they put pressure on the existing leaders to offer better and more stylish products.

- *Value, Quality:* Literally the number of new models doubled or trebled last year, catering for all segments of the market. With this development came the perception among buyers that both value and quality were emerging. Finally consumers were getting products that they felt were worth the money – even though prices are still above world levels.

  GM has one of its most modern plants in the world in Shanghai, producing models that are new by world standards as well as incorporating new technology.

- *WTO:* Tariffs are due to fall to 25% by 2006 from 80-100%. They are already down to 30-40% and ahead of schedule. Duties on parts are to fall to an average of 10% from 40%. Import quotas will be abolished by 2005.

- *Foreign Participation:* Improving the efficiency and expertise of the industry, foreign companies are supposed under WTO to be able to become distributors within three years and to undertake retailing within 3-5 years; as well as to get into after sales service over three years.

Market Size and Growth

Given this long, but not exhaustive list of factors generating car demand today and likely to do so for the rest of the decade, it is hard to believe that China will remain at the bottom of the car ownership league for long. Or even that it will lag behind Indonesia whose per capita ownership is treble that of China but whose per capita GDP is lower: ditto India whose GDP is half.

% of Population with Cars

	1997	2002	GDP per capita*
US	48.2	49.2	35,815
UK	37.3	41.6	23,477
Poland	21.8	28.5	4,556
Taiwan	19.8	21.8	12,266
Malaysia	15.1	20.4	3,676
Korea	16.0	19.5	8,870
Thailand	3.0	4.2	1,874
Philippines	3.5	4.1	927
Indonesia	1.3	1.5	798
India	0.2	0.5	466
China	**0.2**	**0.4**	**904**

* 2001 in US$ *Source: CEIC, World Bank, US & UK Ministry of Transport*

The eventual size of the market is hard to predict but even an interim figure of 50mn (ownership under 4% of the population) would imply new sales of over 4mn a year. The world average is 9%. By the time China approaches that number it will doubtless have increased which is why final estimates range from 130mn to 200mn and above.

CONSUMER LENDING: Banks Starting to Fund 'Live Now, Pay Later' Lifestyles

Consumer lending is a very new business for banks in China. Mortgages only began to be made about three years ago, auto loans in 2001 and credit cards were introduced only in 2002. For even though the regulations were promulgated in the early 1990s nothing was done by any of the banks for about six years even to prepare for this field.

Today consumer loans still only comprise 8-9% of total loans although we expect this to rise to 20% by 2008 or 2010. Individual banks in Shanghai expect to double their consumer portfolios this year and Pudong Development expects to have over 20% of its loans to consumers within three to five years.

Consumer lending has become a major focus of all the Big Four banks just over the last year. The reasons are clear. Consumer loans represent relatively low-risk business with higher quality assets. The banks want to move away from corporate lending to state owned enterprises that have damaged their balance sheets so much. Default by individuals is much lower: so far on mortgages it is under 1%, much like the experience worldwide. One of the medium-sized banks claims defaults on consumer loans are just 0.01%.

The newest area is credit cards, launched mainly only last year. Plastic cards have been a feature of banking in China since 1985 and there are an estimated 450mn of them. However 93% are ATM and debit cards while 6.8% are secured credit cards. Therefore only 0.2%, just under one million, are actual credit cards. The potential is obvious (though so are the problems). In 2001 for instance, 12mn Chinese travelled abroad yet only 1.7% of their spending was done using credit cards.

The reasons for the lack of credit cards are all too clear. There was no traditional debt culture and therefore no expertise in managing credit card portfolios. The institutions did not exist. There was no credit database or central processing and clearing system. When they did begin, application procedures were tedious.

This is all changing rapidly, mainly because of the emergence of a younger generation that embraces the idea of 'Live Now, Pay Later'. Most cardholders are aged between 25 and 35 years old, the Self-Seeking and Self-Reliant Generation, using their cards for shopping, eating out and entertainment. Having grown up in relative affluence and exposed through the media to the consumer society, their number will only grow with time as the Me Generation, the 16-25 year olds, ages and swells the ranks of consumers.