The Asian Consumer: A new series



Equity Research

China Consumer Close-up

The who, what and why of China's true consumer class

Few investing challenges have proven more elusive than understanding the Chinese consumer. Efforts to translate the promise of an emerging middle class into steady corporate earnings have been uneven. In the first of a new series on the Asian consumer, we seek to strip the problem back to the basics: Who are the consumers with spending power, what drives their consumption and how will that shift over time? The result is a new approach that yields surprising results.

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PM Summary: A holistic view of the Asian consumer

"Who are the Asian consumers?" – cohorts instead of averages

With this report, we launch a new series focused on the Asian Consumer. Over the next 10-15 years, we estimate almost half a billion people will move into Asia's true "consuming class", able to spend beyond their essential needs. We have little doubt that the rise of the Asian consumer will be one of the most important growth stories of the 21st century. While there is already an abundance of literature about the Asian consumer market, **our starting point differs in that we begin by forming a holistic view of the consumer, rather than starting with a particular consumer-related industry**.

We begin the series with a deep dive on China, where we move away from the traditional aggregate per-capita analysis and instead seek to **understand the true cohorts of the consumer population**. Like much of the rest of emerging Asia, China is marked by disparity within its 1.35 billion people – meaning the traditional analysis of GDP per capita vs. consumption penetration per capita can miss significant dynamics beneath the surface.

We divide Chinese consumers into six cohorts, a set-up that allows us to better appreciate the differences between the "**Urban Middle**" and the growing "**Urban Mass**". We find that only 146 million of China's 1.35 billion people can be considered "middle class" and we show that government-related cohorts account for close to half of the middle class, helping to explain why the impact of austerity and anti-graft measures has been much stronger than expected in consumption in the past two years.

"What do they want?"

– tracking 7 key
consumption desires

We then set out to re-think how consumption behavior evolves as consumer incomes grow. Starting from the Chinese phrase that describes life's essential needs - "衣(yī) 食(shí) 住 (zhù) 行(xíng)" - we make a fresh assessment of China's consumer by focusing on seven key areas of consumption desire:

- 1) 衣 Looking more beautiful (yī)
- 2) 食 Eating better (shí)
- 3) 住 Better home (zhù)
- 4) 行 Mobility/connectivity (xíng)
- **5)** 娱 **Having more fun** (yú)
- 6) 康 Well-being (kāng)
- 7) 奢 Luxury (shē)

"What can they afford?" – Hours Worked affordability analysis

We overlay on these desires a simple "hours worked" affordability test that often explains why growth for a particular segment or product stalls despite still low per capita penetration. The results help illuminate what is enabling smartphone brand Xiaomi to gain so much market share so quickly, and why athletic shoe maker Li Ning is struggling against both local competitors and global brands.

"What's different about their behavior?" – we highlight what's "Uniquely Asia"

Last, we highlight how "Uniquely Asia" factors add layers of complexity to an already dynamic story, such as the pervasive influence of the government, cultural undercurrents that drive consumption priorities (a lopsided family structure with 4 grandparents and 2 parents for one child means concentrated spending on the next generation, for example), distribution implications from urban densities (but yet often combined with lack of middle class critical mass), and more.

In summary, tracking behavior and desires instead of industries allows us to see the big picture, analyzing cohorts allows us to understand the size of the market, affordability allows us to analyze what can sell and what doesn't, and what's "Uniquely Asia" allows us to understand how history will rhyme if not exactly repeat itself in the Asia development context.

China Consumer in Numbers

NARROW MIDDLE CLASS

146 MILLION / **1.35** BILLION

Only the top 11% of China's population by income is middle class. The number that pays income taxes is even smaller at 24 million. (Pages 5 and 7)

HUGE GOVERNMENT SECTOR

Almost half of the middle class is effectively on government payrolls.

This helps explain why changes in government policies, such as the recent crackdown on giving gifts to government workers, can have a wide impact on spending. (Page 5)

URBAN MASS COHORT RISING

31% WORKING POPULATION



The past 10 years allowed "some to get rich first", in Deng Xiaoping's words. We expect the next 10 years to see the Urban Mass cohort take the primary stage as they start to have discretionary income. (Page 8)

FUN = GROWTH

9.2% of SPENDING ON "FUN"

Only 9.2% of China's PCE goes to spending we classify under the "having more fun" heading, vs. 16% in Japan and 17% in the US. (Page 13). In the Urban Middle cohort, travel and dining are likely to see increased spending.

POWERFUL FORMULA FOR E-COMMERCE

BILLION



The combination of comprehensive mobile internet access, low car ownership, underdevelopment of physical retail and the availability of cheap unbranded products online, as well as cheap shipping costs, offers a recipe for explosive growth of e-commerce. The number of packages delivered is up 10X since 2006 to 10 billion and is already close to that of the US. (Page 35)

SILENT MAJORITY OF LOW-COST COMPETITORS

A legion of unbranded and niche brand competitors present challenges to international brands trying to reach the Chinese consumer. The best-selling jeans on online marketplace Taobao, under the brand USIGSX, retail for US\$6/pair. (Page 21)

SMALL NUMBERS ADD UP

Our Macau Gaming team estimates

15,000 to 20,000



Chinese VIP customers lost on average US\$1mn each in Macau in 2013, accounting for 80% of Macau's total gross gaming revenue. (Page 51)

AFFORDABILITY DRIVES MASS ADOPTION

Xiaomi shipped 15mn smartphones in 2014, 2.5X the higher-priced iPhone, according to Canalys. Xiaomi rose from a niche player to the No.1 smartphone vendor in China in just one year. (Page 34)

WHERE HIGH-END SPENDING GOES

40% OF HIGH-END SWISS WATCH SALES

We estimate Chinese account for 40% of high-end Swiss watch sales. In contrast, De Beers' analysis indicates that China's diamond retail sales contributed to only 10% of the world's total in 2013. (Page 51)

EDUCATION DEMAND

The top 154 universities in China had an admission rate of 9% on average in 2012. (Page 49)



BRAKES ON AUTO MARKET GROWTH

\$12,000 FEE PER CAR

A car registration in Shanghai costs \$12,000, reflecting the government's interest in restraining demand because of environmental and congestion concerns. Chinese owned 83mn passenger cars in 2013 and annual sales saw a 23% CAGR over 2008-2013. (Page

TRAVEL GROWTH

3% HAVE PASSPORTS

Despite the visibly growing presence of Chinese tourists abroad, only 3% of Chinese hold passports and only 1.7mn visited the US last year. (Page 41)

NEW HOUSING

90_{million}



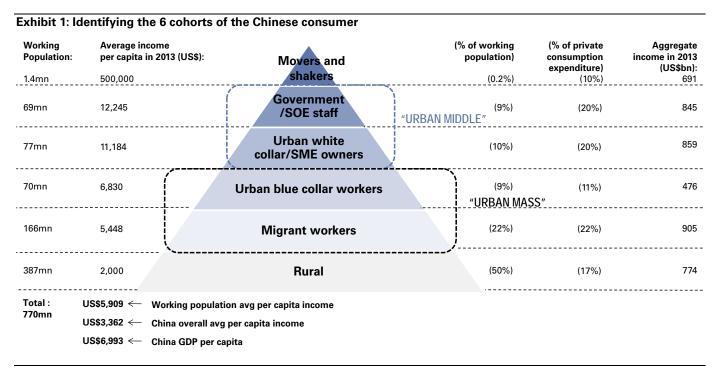
Out of the current 220mn to 230mn urban housing units in China, our property team estimates that roughly 90mn, or 40%, were built after 1998. (Page 24)

The many faces of China's consumer – identifying six key cohorts

In this report, we revisit and fine-tune the analysis we first presented in our February 8, 2012, report, *China: Retail: Many faces of the Chinese consumer.* We break down the population into key cohorts to better understand the patterns and influences on spending for each group. This is an approach that applies across Emerging Asia, where the uneven participation of different groups in the region's economic development makes it critical to segment the population to understand the true consuming class.

We identify six key cohorts within the Chinese working population (Exhibit 1) and we concentrate on the middle four, with a working population of 382mn, which we divide between the Urban Middle and the Urban Mass. We see the Urban Middle comprising 146 mn people, or 19% of the working population, with an average wage now surpassing US\$11,000. Within this cohort, the importance of government cannot be underestimated – we estimate people on government payrolls or on the payroll of state-owned companies account for close to half of China's middle class. This estimate is based on a detailed analysis of SOE employment figures, and also takes into account civil servants, military, and workers in government-controlled enterprises, ranging from schools to hospitals to brokerage firms (see next page for a more detailed discussion). While this number may look surprisingly high at first glance, it should become more reasonable when one considers that prior to the early 1980s, the government controlled virtually the entire economy. The private sector has grown tremendously over the past three decades, but the state sector clearly remains hugely important in China today.

The Urban Mass comprises 236 mn, or 31% of the working population. Migrant workers now account for 70% of the Urban Mass, we estimate. China's urbanization will continue to be driven by this large and important cohort, which remains understudied. With average hourly earnings huddled around US\$3, the Urban Mass is currently spending mostly on essentials but represents the most important discretionary consumption growth story in the next decade.



Source: China NBS, CNPolitics, Goldman Sachs Global Investment Research.

The 6 Cohorts of Chinese Consumer

Population

Income per capita per annum

MOVERS AND SHAKERS •

1.4mn

- We take the top 3% of 23mn private sector business owners, 50,000 "superstar" workers, and 1% from the public sector. As such, it is roughly a 50/50 split between the private and public sector.
- This is in line with the estimate of 1.1 mn Chinese millionaires (with assets > Rmb10 mn) in 2013, according to Hurun's 2013 Chinese Millionaire Report.

US\$500,000

- Our starting point is that in the US the average annual income for the top 1% of income tax payers was US\$1,013,100 in 2010, according to the US Congressional Budget Office.
- Given the top 1% equivalent in China, whether it is a business owner or a media celebrity, tends to earn lower income compared to their US counterparts, we think US\$500,000 is a reasonable estimate.

GOVERNMENT 69mn /SOE STAFF

- This includes 7mn civil servants and 3mn military personnel. The remainder comprises white-collar staff in SOEs and in public enterprises such as schools.
- Many SOEs have turned into shareholding companies with new investors in recent years; as they remain statecontrolled, their employees are included.

US\$12,245

- Managerial staff on government payroll tend to have lower pay than private sector equivalents but receive significant fringe benefits, such as subsidies in housing and health care.
- In addition, senior-ranking staff within this cohort historically have had significant expense account allowance for travel, entertainment, etc.

URBAN WHITE 77mn

BUSINESS OWNERS

COLLAR/SMALL• We derive 55mn urban white collar workers by taking a bottom-up analysis of the number of registered workers in each profession, assigning a percentage of white collar jobs to each profession. We then add the remaining 97% of all 23 mn private business owners, or 22mn people.

US\$11,184

In Chinese statistics, "private business" refers to small registered enterprises with 10 workers on average. We believe the bulk of these 23mn private business owners earn income similar to those in white collar jobs.

URBAN **BLUE COLLAR** •

70_{mn}

Similarly, based on our bottom-up estimate of the blue collar jobs within urban registered employment, after subtracting 166mn migrant workers from the pool (below).

US\$6,830

- This is equivalent to Rmb3,500/month, approx. half of white-collar income.
- Also equivalent to hourly wages of US\$3.0, based on 250 working days per annum and 9-hour working days.

MIGRANT **WORKERS**

166mn

- Migrant workers totaled 166mn in 2013, according to the National Bureau of Statistics of China.
- This cohort, the size of the US working population, migrates from rural to urban areas looking for better-paying jobs, driving China's urbanization process.

US\$5,448

- This is equivalent to Rmb2,800/month, lower than their blue collar peers given job nature and fewer benefits.
- Most migrant workers are earning close to or below Rmb3,000/month, but the average is lifted by workers in "hardship jobs" such as in construction, where pay is now approaching Rmb10,000/month.

RURAL WORKERS

387mn

The remaining 387mn of China's working population resides in rural areas but is still considered to be economically active. The total size will likely continue to shrink as more workers migrate to urban areas.

US\$2,000

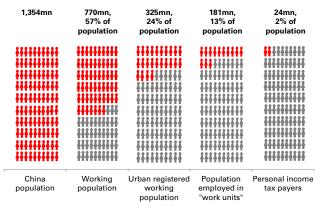
They earn a significantly lower income compared to the migrant workers, reflecting the fact that fewer full-time jobs with good pay are available in rural areas, but they typically also have lower living expenses such as for food and housing.

"Uniquely Asia": Large population but small middle class.

"The Narrow Middle": China income tax data as a case study

China's personal income tax code was last modified in 2011, when the income tax threshold was raised to Rmb3,500/month from Rmb2,000. The government disclosed at that time that the number of income tax payers dropped to 24mn from c.84mn as a result of the change in tax code. Even after adding back the deductibles (housing fund, pension insurance, unemployment insurance and medical insurance, totaling around 20% of the headline salary), this statement at that time implied that the number of people making over US\$8,470 per annum in taxable income was just 24mn in 2011, 2% of the total population. While such a small income tax base points to the incompleteness of China's income tax reporting and collection, it still illustrates the small middle class in China at present. For China, the "middle class" is a misnomer as it represents only the top 11% of the population, who are on average making just US\$11-12,000 per annum.

Exhibit 2: China case study: from 1.3bn people to 24mn personal income taxpayers

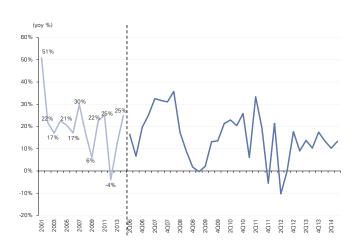


Note:

- 1) China's urban registered working population is categorized in three forms of employment: 1. working population employed in "work units" (referring to all SOEs, public enterprises and all private/foreign-owned incorporated entities); 2. "private enterprises" (smaller private companies); 3. "self-employed".
- 2) Personal income taxpayers as of 2011; other data as of 2013

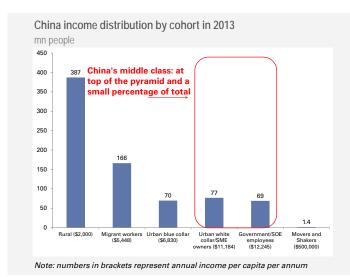
Source: China National Bureau of Statistics (NBS), MOF, Goldman Sachs Global Investment Research

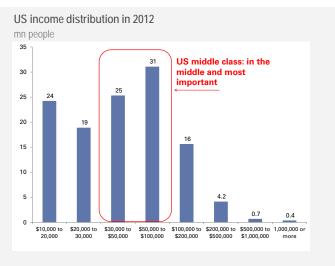
Exhibit 3: China's income tax receipts yoy growth



Source: MOF.

Exhibit 4: China vs. US income distribution: China's middle class is the top 11% of the population





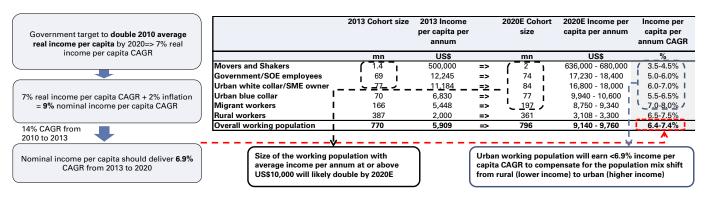
Source: China NBS, US IRS, Goldman Sachs Global Investment Research.

Understanding the government's growth objectives for income

The Chinese government has set out a target to double real income per capita from 2010 to 2020. The current leadership team, coming into power in late 2012, reaffirmed the commitment to achieving this target. We estimate the implicit average nominal income growth is close to 9%, using 2% as the average inflation rate. And given 14% CAGR already achieved in average nominal income from 2010 to 2013, we estimate the required nominal growth from 2013 to 2020 is 7%. Note this is not a like-for-like target, but is meant to incorporate the positive "mix" impact driven by urbanization and labor mobility.

To achieve these targets, we have laid out a case of estimates for income growth and cohort size in Exhibit 5. While forecasting to such granularity is fraught with imprecision, we think the key message is that, if this set of government targets is achieved, by 2020 the Urban Mass will be earning \$9,000-10,000 on average and reach the size of 274 million. This further implies that by then over 100mn people would earn income comparable to that earned by Urban Middle at present. In other words, the number of people earning at or above US\$10,000, with the means to spend beyond essentials, will double by the end of the decade if these objectives are achieved. Whether these growth objectives are still realistic – given China's broad-based slowdown in the past year and evidence of increasing slack in the labor market – will be a topic we will explore in a future installment. Directionally, however, we believe the fact that tens of millions Chinese consumers will enter the middle class remains the most important consumption story for the remainder of this decade.

Exhibit 5: Beijing's target to double real income per capita over 2010-2020 implies that the working population earning at or above US\$10,000 per annum could double by the end of the decade



Source: Xinhuanet, China NBS, Goldman Sachs Global Investment Research.

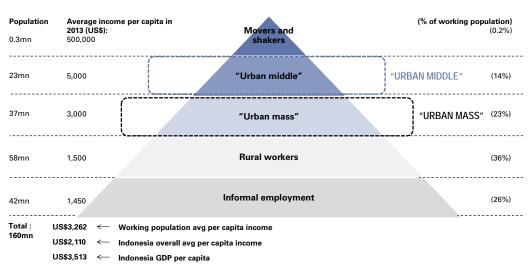
China's cohort in a regional context (a preview of India and Indonesia)

The current limited scale of the middle class in China is the rule rather than the exception in much of emerging Asia. As a comparison and a (very brief) introduction to our upcoming studies, we show our cohort analysis applied to India and Indonesia. We estimate India, for example, has only 27mn people in the middle class working population, making US\$7,200-8,000 per year. This represents just 6% of its total working population. Ninety-four percent of India's working population is still living with minimal discretionary spending, we estimate. For Indonesia, the Urban Middle is larger, accounting for 14% of the working population. But the absolute income is low at US\$5,000 on average, comparable to the lower end of the income for China's Urban Mass.

Exhibit 6: India's 6 cohorts Average income per capita in Working (% of working population) Movers and shakers Population: 0.11mn **2013 (US\$)**: 500,000 Govt/SOE 18mn 7,200 employees "URBAN MIDDLE Urban white collar/SME 8,000 (2%) owners 3,858 (8%) Urban blue collar workers "URBAN MASS" 90mn 2,315 (20%)Migrant workers 295mn 1,543 (66%) Rural Total: US\$2,362 Working population avg per capita income 446mn India overall avg per capita income US\$1,555 India GDP per capita

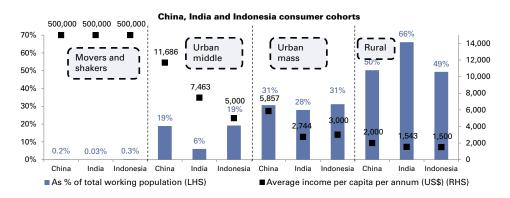
Source: CEIC, Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 7: Indonesia's cohorts



Source: CEIC, Euromonitor, Goldman Sachs Global Investment Research

Exhibit 8: China, India and Indonesia consumer cohorts in comparison

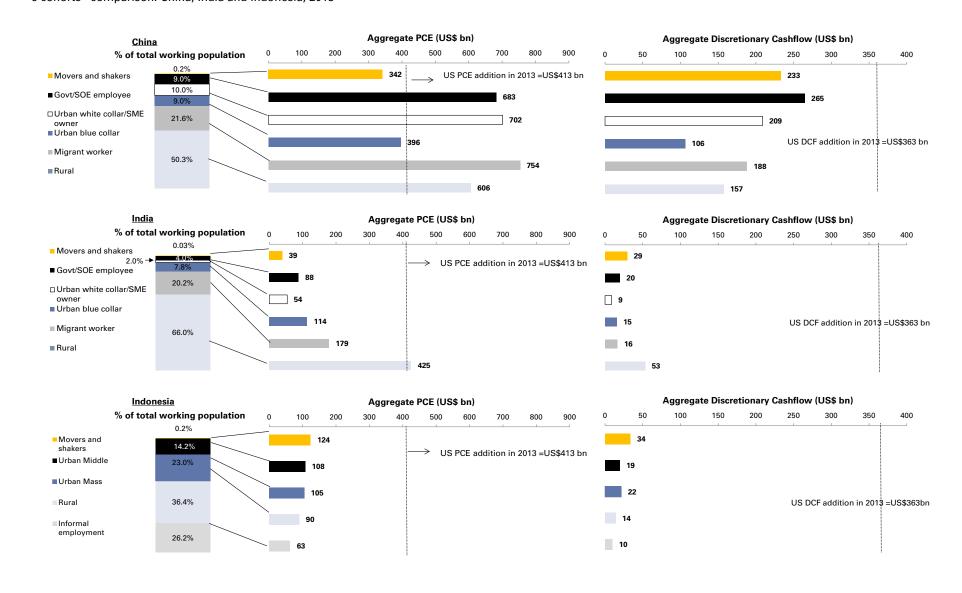


Note: Indonesia's total working population size base in the chart has excluded informal employment for comparison.

Source: CEIC, Euromonitor, CNPolitics, Goldman Sachs Global Investment Research.

January 13, 2015

Exhibit 9: China's Urban Middle and Urban Mass are still the most important drivers of consumption in Asia for the rest of the decade "6 cohorts" comparison: China, India and Indonesia, 2013



Source: Euromonitor, Goldman Sachs Global Investment Research.

What they are buying and what they will buy next: Tracking 7 consumption desires

We believe the old Chinese description of life's essential needs, "衣食住行", which means "clothes, food, shelter and mobility/connectivity", is quite apt, but we add two less essential but still important needs: to have fun, and to preserve and promote one's wellbeing. Lastly, we also include a consumption desire that is part of modern society: the pursuit of a luxury lifestyle.

China today over-indexes its spending on the most basic of the 7 desires, such as food and clothing, and under-indexes in areas such as fun and well-being relative to more developed countries such as Korea, Japan and the US (Exhibit 11). We see the greatest growth opportunities in these under-indexed areas as the size and income levels of the Urban Middle and Urban Mass expand. Our aim in the following pages is to provide high-level analysis of the market opportunity in each of these seven spending desires, and to deal with specific topics in more depth in future installments of this series.

Two factors wield an important influence on the spending patterns across these desires: affordability, and "Uniquely Asia" characteristics, such as concentrated spending on the next generation. We apply an affordability test based on the number of hours the average worker in each of the cohorts would need to work to pay for a product in comparison with workers in other countries. This helps spot the pockets of the market where there is the best chance to reach a product fit that can attract wide scale.

Looking more beautiful Eating Luxury better Income Income spent saved Well-being Better (Health/ home Education) More mobility/ Having connectivity more fun

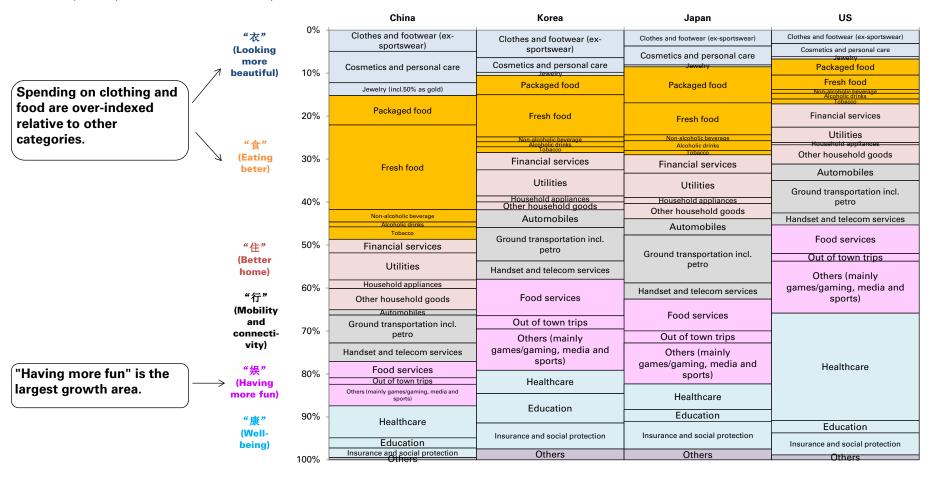
Exhibit 10: Identifying seven key consumption desires

Source: Goldman Sachs Global Investment Research.

January 13, 2015

Exhibit 11: Breaking down China's Personal Consumption Expenditure along "7 Consumer Desires": what is under-indexed and what is over-indexed

Note: "Luxury" consumption is contained in the first 6 consumption desires



Source: Euromonitor, CEIC, Goldman Sachs Global Investment Research.

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Exhibit 12: We calculate per capita Private Consumption Expenditure (PCE) on seven consumption desires

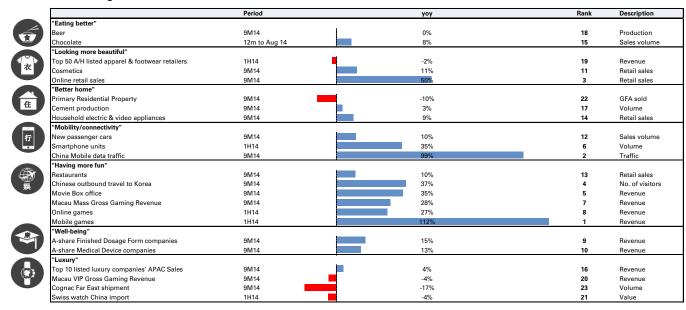
Per capita PCE and Per capita PCE as % of aggregate PCE per capita, 2013

PCE per capita by category, US\$, 2013	China	Korea	Japan	US
"Looking more beautiful"	339	1,134	1,539	2,014
Clothes and footwear (ex-sportswear)	110	691	669	937
Color cosmetics and skincare	18	115	175	78
Jewelry	67	75	77	189
Others (mainly personal care)	145	253	618	810
Citiers (mainly personal care)	143	200	010	010
"Eating better"	743	1,941	3,694	3,129
Food	590	1,546	2,858	2,118
Packaged food	152	488	1,514	1,118
Fresh food	438	1,058	1,344	1,000
Non-alcoholic beverage	64	120	248	272
Alcoholic drinks	25	128	404	401
Tobacco	65	147	184	338
"Better home"	646	3,089	7,497	9,779
Housing	282	1,657	4,810	5,582
Utility	140	655	1,029	1,071
Household appliances	45	149	245	1,071
Financial services	70	431	771	1,621
	110	199		
Other household goods and services	110	199	643	1,348
"Mobility/connectivity"	268	1,744	3,399	4,271
Automobiles	28	445	683	1,142
Ground transportation/services, incl. petro	145	838	2,012	2,265
Telecom equipment	21	72	18	43
Telecom services	74	386	662	789
Postal services	1	4	24	32
"Having more fun"	230	2,284	3,559	6,151
Food services	85	916	1,331	2,001
Out-of-town trips	33	333	507	525
Hotel	9	113	146	327
Package holidays	11	5	291	34
Air transportation	14	215	71	164
Cruise	n/a	n/a	n/a	38
Media	19	327	644	849
Sports	28	194	284	657
Other recreational goods and services	26 66	515	793	2,119
	42			450
Gaming and online games	42	n/a	n/a	450
"Well-being"	267	1,973	2,733	9,883
Healthcare	166	586	1,071	7,480
Education	53	736	498	872
Insurance and social protection	49	651	1,165	1,531
Others	12	275	455	349
Total	2,506	12,439	22,876	35,576
Total	2,500	12,439	22,0/0	30,070

As % of aggregate PCE per capita, 2013	China	Korea	Japan	US
"Looking more beautiful"	13.5%	9.1%	6.7%	5.7%
Clothes and footwear (ex-sportswear)	4.4%	5.6%	2.9%	2.6%
Color cosmetics and skincare	0.7%	0.9%	0.8%	0.2%
Jewelry	2.7%	0.6%	0.3%	0.5%
Others (mainly personal care)	5.8%	2.0%	2.7%	2.3%
"Eating better"	29.7%	15.6%	16.1%	8.8%
Food	23.5%	12.4%	12.5%	6.0%
Packaged food	6.0%	3.9%	6.6%	3.1%
Fresh food	17.5%	8.5%	5.9%	2.8%
Non-alcoholic beverage	2.6%	1.0%	1.1%	0.8%
Alcoholic drinks	1.0%	1.0%	1.8%	1.1%
Tobacco	2.6%	1.2%	0.8%	0.9%
'Better home"	25.8%	24.8%	32.8%	27.5%
Housing	11.2%	13.3%	21.0%	15.7%
Utilities	5.6%	5.3%	4.5%	3.0%
Household appliances	1.8%	1.2%	1.1%	0.4%
Financial services	2.8%	3.5%	3.4%	4.6%
Other household goods and services	4.4%	1.6%	2.8%	3.8%
Other mousehold goods and services	4.470	1.070	2.070	3.070
'Mobility/connectivity"	10.7%	14.0%	14.9%	12.0%
Automobiles	1.1%	3.6%	3.0%	3.2%
Ground transportation/services, incl. petro	5.8%	6.7%	8.8%	6.4%
Telecom equipment incl. handsets	0.8%	0.6%	0.1%	0.1%
Telecom services	3.0%	3.1%	2.9%	2.2%
Postal services	0.0%	0.0%	0.1%	0.1%
"Having more fun"	9.2%	18.4%	15.6%	17.3%
Food services	3.4%	7.4%	5.8%	5.6%
Out-of-town trips	1.3%	2.7%	2.2%	1.5%
Hotel	0.3%	0.9%	0.6%	0.9%
Package holidays	0.4%	0.0%	1.3%	0.1%
Air transportation	0.5%	1.7%	0.3%	0.1%
Cruise	n/a	n/a	n/a	0.5%
Media	0.7%	2.6%	2.8%	2.4%
	1.1%	1.6%	2.8% 1.2%	1.8%
Sports Other recreational goods and services		4.1%	3.5%	
	2.6%			6.0%
Gaming and online games	1.7%	n/a	n/a	1.3%
'Well-being"	10.7%	15.9%	11.9%	27.8%
Healthcare	6.6%	4.7%	4.7%	21.0%
Education	2.1%	5.9%	2.2%	2.5%
Insurance and social protection	2.0%	5.2%	5.1%	4.3%
Others	0.5%	2.2%	2.0%	1.0%
Total	100.0%	100.0%	100.0%	100.0%

Source: Euromonitor, CEIC, Goldman Sachs Global Investment Research.

Exhibit 13: Tracking 7 consumer desires in China in 2014



Source: CEIC, China NBS, Wind, Nielsen, iResearch, Gartner, Bureau National Interprofessionnel du Cognac, Federation of the Swiss Watch Industry.

Exhibit 14: What can the Chinese consumer afford? "Hours worked" affordability analysis helps to identify pricing sweet spots

Our "hours worked" aff	ordability te	st			
		US	"Urban middle" (China)	"Urban mass" (China)	Comments
Average hourly earning (US\$)	Delete (LICA)	24.0	5.2	2.6	
Product "Looking more beautiful"	Price (US\$)		No. of working hours no	eeded	
- Apparel / Footwear					(1) The ability of unbranded products
Gap jeans (US)	45	1.9	8.7	17.3	online to truly meet affordability in
USIGSX jeans (best-selling jeans on Taobao)	6	n/a	1.2	2.4	China is a main reason for the rapid
- Accessories			***************************************		growth of ecommerce.
Coach Signature Stripe Tote (US)	105	4.4	.20.2.	40.3	
Coach Signature Stripe Tote (China)	216	n/a	41.6	→ 83.0	(2) In beauty, global marquee brands
- Beauty / Skincare		promise.			need to create entry-level products to
SK-II Facial Treatment Mask 10 pieces (US)	135	5.6	26.0	51.9	meet affordability. Korean brands are
SK-II Facial Treatment Mask 10 pieces (China)	176	n/a	33.8	67.5	leading in this segment.
It's skin Prestige Masque D'escargot 10 pieces (Tmall discounted price) "Eating better"	41	n/a	7.8	15.6	
- Beer					
Bud Light beer 473 ml (US)	2.4	0.1	0.5	0.9	
Tsingtao beer 500ml (China)	0.8	n/a	0.2	→ 0.3	
- Spirit			***************************************	e some	(1) In many F&B categories, pricing
Whiskey - Jack Daniel's North American Whiskey 500 ml (bestseller in US)	13.6	0.6	2,6	5.2	remains low and affordability is no
Baijiu - Luzhou Laojiao Yipinfang 500 ml (best-seller on Taobao, discounted price)	3.9	n/a	0.8	1.5	longer an issue for Urban Middle.
	5.0	/u	3.0		1 -
- Milk (per 1000ml)	0.4	100 N	4.0	0.0	(2) Urban Mass is driving volume
Organic Valley 1% Lowfat Milk (US)	6.1	0.3	1.2	2.3	growth as affordability improves - focus
Mengniu pure milk (China)	1.6	n/a	0.3	0.6	on nutrition and pleasure.
Yili pure milk (China)	1.9	n/a	0.4	0.7	
- Ham (per 1000g)		permission.			
Smithfield Country ham (US)	44.2	1.8	8.5	17.0	
Shuanghui ham (China)	7.3	n/a	1.4	2.8	
"Better home" Residential housing per sqm					(1) Housing affordability is lacking
US	1120.3	46.7	215,7	430,4	compared to US but more comparable
China	876.1	n/a	168.7	336.6	to some Asian countries.
Utility (residential)		January, Commission of the Com	- Contract	***************************************	(2) As utility prices in China and US are
Electricity (US / MWh)	118.0	4.9	.22.7.	45.3	comparable but affordability is not,
Electricity (China / MWh)	82.0	n/a	15.8	31.5.	ample growth opportunity still exists as
Natural gas (US / mmBtu) Natural gas (China / mmBtu)	11.5 17.6	0.5 n/a	3.4	6.8	income rises in China.
"Mobility / Connectivity"	17.0	11/4	**********	**,	
Handset					
iPhone 6 16G (US)	649.0	27.0	125.0	249.3	Domestic handset makers such as
iPhone 6 16G (China)	866.9	36.1	166.9	333.0	Xiaomi are able to bring products to the
Samsung Galaxy S3 3G (best-selling Samsung phone on JD.com)	213.0	n/a	47.0	81.8	Chinese consumer at price points that
Xiaomi Redmi 1S (China) Huawei Honor 3 (top-selling handset on JD.com)	130.0 131.0	n/a n/a	25.0 25.2	49.9	deliver affordability comparable to the
Lenovo A8 (top-selling handset on JD.com)	130.8	n/a	25.2	50.3	US; but data affordability is not yet
Monthly data plan	100.0		40.4	1,00,0	there, especially to the Urban Mass.
AT&T 1GB 4G LTE data plan with unlimited voice	60.0	2.5	11.6	23.0	
China mobile 1GB LTE data plan with 300 min voice	21.0	0.9	4.0	8.1	
"Having more fun"			Section 2		
Food services					
Fast food	4.6		0.9	1.0	
Big Mac (US) Big Mac (China)	4.6 2.7	0.2 n/a	0.5	1.8	
Sit-down casual dining	2.7	II/d	0.5		
Red Lobster (US)	20.3	0.8	3.9	7.8	
Saizeriya (China)	4.0	n/a	0.8	1.5	
Tsui Wah (China)	13.1	n/a	2.5	5.0	(1) Fun is key growth area, but having
Out-of-town trips			****	******	the right affordability is still critical.
- Round trip transportation cost		permission.			
Boston - Washington (Plane)	162.0	6.8	31.2	62.2	(2) Online games become a huge part of
Beijing - Shanghai (Plane)	203.4	n/a	39.2	78.2	how Urban Mass spend on fun due to
Beijing - Shanghai (Train - regular)	58.2	n/a	11.2	22.4	lowest entry ticket price.
- Hotel daily cost	100.0	(50 \ -	00.4	40.4	(3) For Urban Middle, travel and dining
Mid/upscale hotel (US)	120.0	5.0	23.1	46.1	(3) For Urban Middle, travel and dining out will be a key focus for discretionary
Tier 1/2 City 5 star hotel (China) Shanghai Home Inns Hotel near Lujiazui (China)	131.1 46.6	n/a n/a	25.3	50.4 17.9	spending going forward.
Hostel (China)	15.0	n/a n/a	2.9	50.4 17.9 5.8	Spending going forward.
Movie ticket	13.0	11/a	12.37	\ \	
Movie ticket (US)	8.4	0.4	1.6	3.2	
Movie ticket (China)	5.7	n/a	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	2.2	
Online games	,	, u	- Samuel K	//	
Tencent Massively Multiplayer Online Games per hour	0.6	n/a	0.1	0.2	
Tencent Cool Run game on IOS (most popular mobile game) per time	Free for entry	n/a	0.0	0.0	
, , , , , , , , , , , , , , , , , , ,				"France"	

Source: Taobao, Tmall, JD.com, Euromonitor, Amazon, EIA, IEA, company websites, Havers, Goldman Sachs Global Investment Research.

China Consumer - Top 10 takeaways from this report

- 1) Why has it been so tricky to make money in China consumer?
 - The middle class is smaller than meets the eye it is in fact the top 11% of the population and the top 19% of the working population.
 - Close to half of the middle class is effectively on government payroll.
 - An unsettled competitive landscape: "the silent majority" of unbranded and small niche-brand competitors.
 - Difficulty in accessing 1 billion customers in a market that that speaks 100+ dialects and lacks density and mobility, allowing rapid share gain by ecommerce.
 - China domestic prices for global brands are now some of the highest in the world due to 25% Rmb appreciation, 17% VAT and other taxes. This pricing architecture is increasingly unsustainable.
- 2) But it is not all bad news. The consumer who is truly consuming discretionary products today is still just the tip of the iceberg. Examples: 15,000-20,000 customers account for 80% of Macau's gaming revenue; 3% of Chinese citizens have a passport.
- The past 10 years was a decade that allowed "some to get rich first", in Deng Xiaoping's words. The next 10 years will see **the Urban Mass cohort take the primary stage** as they start to have discretionary income.
- 4) Sweet spot: Go discretionary in staples and go mass (entry level) in discretionary.
- 5) Fun = Growth. In services, "having more fun" may be the biggest growth area in the coming decade.
- 6) Low per capita consumption \neq growth automatically. Only when pricing can reach affordability equivalent to the DM, then the market will be huge. Xiaomi is a good example.
- Pay attention to what's "Uniquely Asia": US\$10,000 car licenses; 10% admission rates for top 100 universities...and developed Asia's love for spirits and beauty products.
- 8) There are social implications when the hundreds of millions start to consume at the same time. As a result, car ownership simply cannot reach DM levels without having severe environmental and social consequences.
- 9) Even in luxury, price point matters. Growth is focused on entry level price point and what is still "underconsumed", such as diamonds.
- Consuming for the next generation: strong Asian family values combined with the single child policy means parents tend to save the best for the children: this starts with premium infant formula, diapers, and then moves to test prep, then to wedding jewelry and finally to down payments for house purchases. For items such as these, we have to take into account affordability of not just one, but as many as 6 adults.



Seven consumption desires in focus

1. Eating better



"Chocolate is like cigarettes: you have lifetime consumers of the same brand. In China you had consumers with no taste profile....You need to write off the older generation. But the people born in the '80s and '90s – that's your consumer market. Their palate is much broader and you now have 350 to 400 million Chinese with the disposable income to buy chocolate once in a while."

- Lawrence Allen, author of Chocolate Fortunes; interview with The Guardian, Nov 2014

While **Yi** (clothing) comes before **Shi** (food) in the original Chinese phrase, we will discuss "Eating better" before "Looking more beautiful", reflecting that discretionary spending tends to start with food, as a much larger share of the wallet goes into food than clothing.

From filling the stomach to quality, pleasure and nutrition

Higher incomes, coupled with food safety incidents that have dominated headlines in China in recent years, means that, for the middle-class Chinese consumer, eating better is now more important than ever. Whereas volume growth was the primary driver of growth in the previous decade, that component has now become less important for many categories, often running at mid-single digits. Within that, mass market cohorts contribute to the bulk of the growth, as for many categories affordability is no longer a major issue with the Urban Middle (Exhibit 15). In this area we see premiumization as a key growth and investment theme, supplemented by some category volume growth opportunities.

Exhibit 15: Using our "hours worked" affordability test on F&B: For the Urban Middle, affordability is no longer an issue for the majority of mass F&B categories

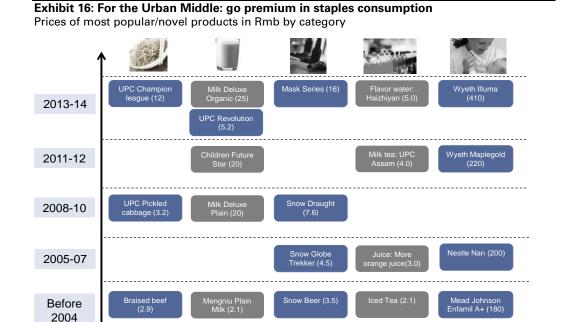
Our "hours worked" affor	dability tes	t		
		US	"Urban middle" (China)	"Urban mass" (China)
Average hourly earning (US\$)		24.0	5.2	2.6
Product	Price (US\$)	ľ	No. of working hours	needed
- Beer		A Comment	_	
Bud Light beer 473 ml (US)	2.4	0.10 . 1	0.46	0.92
Tsingtao beer 500ml (China)	0.8	n/a	0.16	0.31
- Spirit			"Marriage"	
- Spirit Whiskey - Jack Daniel's North American Whiskey 500 ml (best-seller in US)	13.6	0.57	2.62	5.22
, , ,		***************************************	4.00	1.51
Baijiu - Luzhou Laojiao Yipinfang 500 ml (best-seller on Taobao, discounted price)	3.9	n/a	0.75	1.51
- Soft drinks				
Coca Cola 500 ml (US)	1.5	0.06	0.29	0.58
Coca Cola 500 ml (China)	0.5	n/a	0.09	0.19
- Milk (per 1000ml)				
Organic Valley 1% Lowfat Milk (US)	6.1	0.25	1.17	2.34
Mengniu pure milk (China)	1.6	n/a	0.32	0.63
Yili pure milk (China)	1.9	n/a	0.37	0.74
Mengniu Milk Deluxe (China)	3.4	n/a	0.66	1.32
Yili Milk Satine (China)	3.5	n/a	0.67	1.34

- Ham (per 1000g)		per en		
Smithfield Country ham (US)	44.2	1.84	8.51	16.98
Shuanghui ham (China)	7.3	n/a	1.41	2.81
			"Marine"	

Source: IRI, Tmall, Taobao, Amazon, Walmart.com, Goldman Sachs Global Investment Research.

"Uniquely Asia": The largest Asian food companies tend to be instant noodle companies: Tingyi (China), Uni-President (Taiwan), Nongshim (Korea), Nissin (Japan) and Indofood (Indonesia).

"Uniquely Asia":
Premium milk is a big
business in China.
Mengniu's Milk Deluxe
brand, started in 2005, is
now a US\$1.1bn annual
sales business.



RMB/500ml

Beer

RMB/500ml

Beverages

RMB/900g

IMF formula

Source: Goldman Sachs Global Investment Research.

RMB/100g

Noodles

*Pricing info is

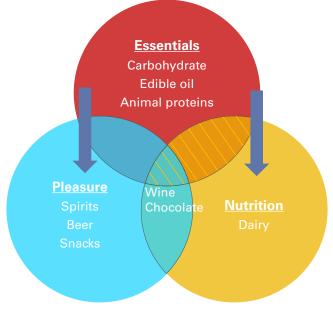
Urban Mass drives volumes as affordability improves – focus on nutrition and pleasure

RMB/litre

Dairy

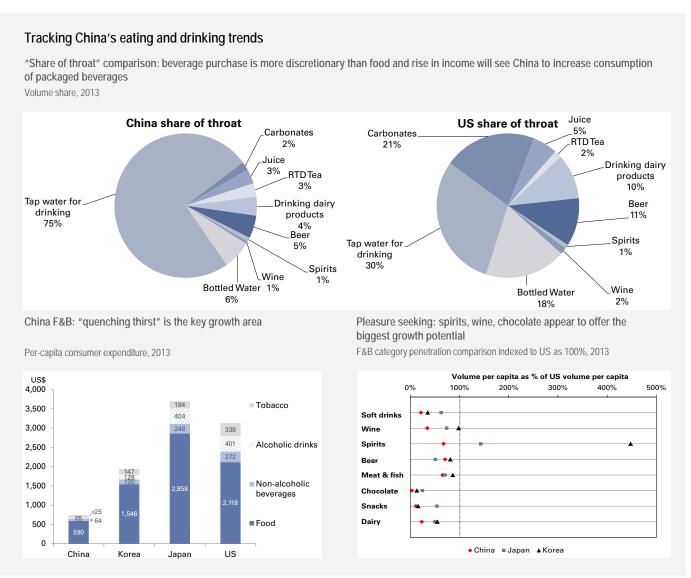
Consumption of staple products by the Urban Mass cohort still has a strong discretionary element, as shown in Exhibit 15. As the income of the Urban Mass cohort continues to grow, it will continue to drive aggregate volume growth. We note that the opportunities are most outsized for categories that offer the most nutrition and/or pleasure – these categories include chocolate snacks, milk, spirits and wine.

Exhibit 17: For Urban Mass, shifting from essentials to nutrition and pleasure



Source: Goldman Sachs Global Investment Research.

Exhibit 18: Beverage offers better growth than food; within beverage, spirits lead



Source: Euromonitor, Urban Water Supply Statistics Yearbook 2012; China City Statistics Yearbook 2012, Food Surveys Research Group, Goldman Sachs Global Investment Research.

For beverage, current reliance on on-premise consumption makes demand more cyclical

At the same time, staples' top line has not been truly defensive due to high reliance on onpremise consumption, which is by nature more cyclical. Carbonated soft drinks saw 12m rolling growth slow to 0.4% by August 2014, from 5% in January, and beer saw growth running at -6.5% in August from 3-3.5% in 2Q. For soft drinks, for example, China's split is now about 50/50 between on-premise and at-home vs. 30/70 in the US. The slowdown in the restaurant business in the past year has therefore had a direct impact on the soft drinks market – although this is likely still a more cyclical issue. Indeed, another key part of eating better is eating out. As we believe eating out represents a key part of consumer expenditure on leisure, we discuss it in the "Having more fun" section.

Exhibit 19: Growth trend of key categories: Tobacco, liquor leading

Volume yoy growth and retail sales yoy growth for selected key categories

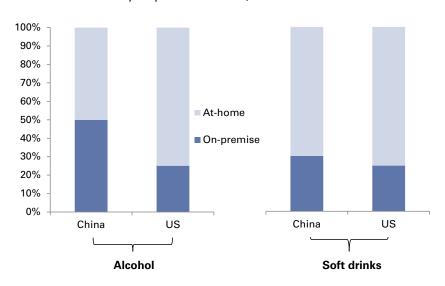
	Carbonated soft drinks	Juice	Liquid milk	Infant milk formula	Chocolate	Crispy Snack Food	Beer	Tobacco & Liquor
2012	1.1%	9.8%	12.3%	-4.0%	10.6%	10.5%	12.6%	16.5%
2013	2.4%	0.0%	2.8%	-9.3%	9.4%	0.8%	-9.3%	11.1%
2011-13 CAGR	1.7%	4.8%	7.4%	-6.7%	10.0%	5.5%	1.1%	13.8%
Jan-14	5.0%	3.2%	4.5%	-9.4%	17.2%	5.0%	n.a.	n.a.
Feb-14	4.6%	2.8%	4.7%	-9.8%	11.8%	3.5%	n.a.	n.a.
Mar-14	2.8%	0.2%	2.9%	-10.5%	10.1%	1.6%	-3.7%	6.3%
Apr-14	2.8%	-0.2%	2.3%	-11.4%	9.1%	1.2%	3.0%	10.4%
May-14	2.6%	-0.9%	1.9%	-12.1%	8.5%	0.5%	3.5%	12.3%
Jun-14	2.0%	-1.7%	1.4%	-12.7%	7.4%	0.1%	3.3%	11.9%
Jul-14	1.4%	-2.4%	0.8%	-13.2%	7.2%	0.4%	-1.2%	6.3%
Aug-14	0.4%	-2.7%	0.1%	-12.4%	7.8%	1.1%	-6.5%	11.3%

Note: Carbonated soft drinks, juice, liquid milk, infant milk formula, chocolate growth rate data represent moving 12m average retail sales volume yoy growth; beer data represents monthly production volume yoy; Tobacco and liquor data represent above designated size enterprise retail sales value yoy.

Source: Nielson, CEIC, Wind.

"Uniquely Asia": China's current heavy exposure to on-premise consumption of beverages makes the demand fluctuation more cyclical

Exhibit 20: China's beverage consumption is currently skewed to on-premise Volume breakdown by on-premise/at-home, 2013



Source: Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 21: "Eating better": Key stocks with China exposure (CY13 regional revenue exposure in brackets)

	Local leaders (rank by mkt cap)	Mkt cap (USD bn)	Regional Champions (rank by mkt cap)	Mkt cap (USD bn)	Global leaders (rank by mkt cap)	Mkt cap (USD bn)
	"Eating better"					
"食" Shi	"Eating better" Kweichow Moutai Want Want Jiangsu Yanghe Yili Wuliangye Tingyi Foshan Haitian Flavouring Sun Art Tsingtao WH Group Mengniu CRE Luzhou Laojiao Yonghui Uni-President China Bright Dairy Yantai Changyu Huishan Dairy	37.2 17.0 15.0 14.7 14.4 12.5 9.8 9.5 9.0 8.4 8.0 5.2 4.9 4.8 4.0 3.6 3.5 2.5	Asahi (China: 0.9%) Kirin Yakult Fonterra (Greater China: 19%) Meiji holdings Nissin foods (Greater China: 7.2%) Orion (Greater China: 45%) Calbee (China: 1.3%) Glico (China: 6.7%) Vitasoy (Greater China: 75%)	14.5 11.5 9.2 7.3 6.9 5.6 5.4 4.6 2.4 1.5	Walmart Nestle (GS estimate for China: 5%) Coca-Cola (APAC: 13%) Anheuser-Busch InBev (APAC: 8%) PepsiCo British American Tobacco (APAC: 28%) Altria Group Ambev SABMiller (APAC: 15%) Diageo (GS estimate for China: 1%) Abbot Laboratories (Greater China: 5%) Mondelez (APAC: 14%) Danone (GS estimate for China: 6%) Heineken (APAC: 11%) Kraft Foods Pernod Ricard (GS estimate for China: 14%) Kellogg's (Asia: 7%) Hershev's	276.1 229.7 184.6 173.7 140.3 96.9 96.2 90.3 79.2 69.7 67.6 60.9 40.3 39.0 36.4 28.2 22.8

Source: Bloomberg, Goldman Sachs Global Investment Research.

2. Looking more beautiful

"衣yo thin" "全xi thin" "Xing" "Xing" "Xing" "Xing" "Xing" "A lot of my clothes and shoes were bought for me by my family on Taobao and Tmall. The prices are good."

- Jack Ma, interview with Sina Finance in May 2013, at Taobao's 10-year anniversary

"Fine jewelry is the most desired object or experience for urban women in China; and yet the Chinese market remains underpenetrated. Diamond ownership has risen to 20 per cent in the top urban cities (up from 10 per cent in 2003) but this remains well below the US ownership rate of around 70 per cent."

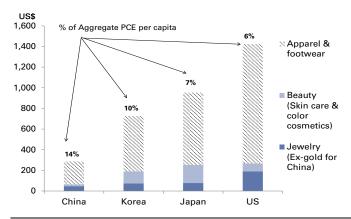
- Stephen Lussier, EVP of Marketing of De Beers, at the Hong Kong launch of *The Diamond Insight* Report 2014, Sep 2014

 $\bar{\kappa}$ (Yi) literally conveys the essential need for clothing, hence its appearance before \hat{g} (Shi) in the phrase $\bar{\kappa}$ (Yi) \hat{g} (Shi) 住 (Zhu) 行 (Xing). In the modern context, the connotation of $\bar{\kappa}$ can represent all consumer activities focused on improving one's appearance – e.g. clothes, shoes, accessories, and beauty / personal care products. In this arena, China's overall per-capita spending is US\$339, compared with US\$1,100 - US\$2,000 in Korea, Japan and the US.

We see two big trends in Chinese consumers' spending in this area. First, significant differences in affordability as well as social/job needs result in vastly different price points between those consumed by the Urban Middle vs. the Urban Mass. These cohorts may eat the same chocolate bar or drink the same beer, for example, but in looking more beautiful, the product preferences differ drastically. Second, we now see greater spending on beauty and, for the Urban Middle cohort, some of the highest growth potential in gemset products.

Exhibit 22: Looking more beautiful: China's spending on clothing is over-indexed relative to other categories although absolute base is still low

Jewelry, beauty (skin care & color cosmetics), apparel & footwear retail sales per capita, 2013



Source: Euromonitor.

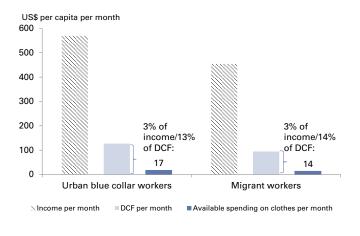
Exhibit 23: China growth trends in spending: aggregate spending still double digits but rapid channel shift
Apparel and footwear, cosmetics, jewelry retail sales, A-share dept store sales, online retail sales yoy

	Apparel and footwear	Cosmetics	Jewelry		A-share Dept store sales	Online retail sales
2008	24.8%	22.2%	38.5%		21.5%	n.a.
2009	22.4%	24.1%	26.8%		22.8%	105.2%
2010	27.1%	20.2%	56.0%		33.8%	75.3%
2011	35.4%	24.0%	45.7%		19.1%	70.2%
2012	22.9%	21.5%	20.3%		10.7%	51.3%
2013	16.7%	21.3%	33.9%		7.6%	59.4%
08-13 CAGR	24.8%	22.2%	36.0%		18.4%	71.3%
Jan/Feb 14	8.8%	9.4%	9.3%	$\Gamma_{\!\scriptscriptstyle\perp}$		
Mar-14	9.2%	9.2%	-6.1%	1014	0.0%	44.4%
Apr-14	11.4%	6.6%	-30.0%	h		
May-14	11.4%	12.9%	-12.1%	├2 014		
Jun-14	11.7%	12.9%	-0.2%	L	-5.4%	47.1%
Jul-14	12.5%	12.9%	-11.7%	h		
Aug-14	11.7%	12.6%	7.3%	− 3Q14		
Sep-14	11.1%	12.0%	11.4%	Ц	-1.6%	49.8%

Source: CEIC, iResearch, Wind, Bloomberg.

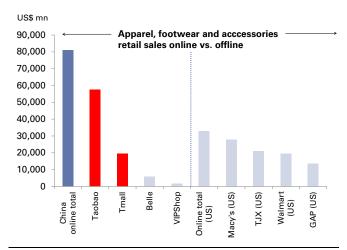
Exhibit 24: Our discretionary cashflow (DCF) analysis suggests Urban Mass can only afford Rmb100-200 per month on clothing purchases

Available spending on clothes per month based on US experience (3% of income per month), 2013



Source: CEIC, Goldman Sachs Global Investment Research.

Exhibit 25: For apparel and footwear, E-commerce now dwarfs the largest brick & mortar players in China 2013 sales



Source: Bloomberg, company data, iResearch, Goldman Sachs Global Investment Research.

"Uniquely Asia":
Unbranded products are
available and popular
online. Such a low price
is possible due to
China's status as the
world's largest
manufacturer.

"How to look like a million dollars" - a reality check

We continue our simple "hours worked" affordability analysis here. A pair of Gap jeans (at the lowest on-sale price of US\$45 on gap.com) would cost 1.9 hours of average hourly earnings of US\$24. A pair of Giordano jeans will cost 4.4 hours in average Urban Middle earnings, so it is still not truly affordable for the Urban Middle, let alone the Urban Mass cohort. However, when we go online, we find products that truly address affordability: the best-selling jeans on Taobao, under the brand USIGSX, retail for US\$6/pair, equivalent to 2.4 hours of average hourly earnings of US\$2.6 for the Urban Mass. A similar case can be made in ladies shoes: a pair of Nine West shoes cost 3.3 hours of average hourly earnings in the US; on Taobao, the best-selling high-heeled shoe, which is unbranded, costs just US\$5, representing 2.1 hours of average hourly earnings for the Urban Mass.

Such a low price is possible thanks to China's status as the world's largest manufacturer. This allows consumers to purchase products, where brand is not important, at much closer to ex-factory cost. The typical mark-up from ex-factory cost to retail sticker price may be 5X-6X, and for final sale price after discount, usually around 3X. So a pair of shoes that retails at US\$30 may indeed cost less than US\$10 ex-factory – hence the often surprisingly low prices from hundreds of thousands of vendors on Taobao. So simply assessing the topline growth opportunity becomes vastly insufficient when it comes to categories such as apparel and footwear, where online disruption is significant. In short, to tap into the growth in spending by the Urban Mass on apparel and footwear, the best investment ideas may be online, not offline.

Exhibit 26: Our "hours worked" affordability test: established brands losing to online competitors in affordability

Our "hours worked" affo	rdability te	est		
		US	"Urban middle" (China)	"Urban mass" (China)
Average hourly earning (US\$)		24.0	5.2	2.6
Product	Price (US\$)	No	o. of working hour	s needed
- Apparel / Footwear				
Gap jeans (US)	45	1.9	8.7	17.3
Gap jeans (China)	63	n/a	12.2	24.3
Muji jeans (China)	60	n/a	11.6	23.0
Uniqlo jeans (China)	47	n/a	9.1	18.2
Giordano jeans (China)	23	n/a	4.4	8.7
USIGSX jeans (best-selling jeans on Taobao)	6	n/a	1.2	2.4
The North Face women's down jacket (US)	180	7.5	34.7	69.1
Bosideng women's ultra-light down jacket (Tmall discounted price)	65	n/a K	12.6	25.1
Uniqlo women's ultra-light down jacket (China)	82	n/a	15.8	31.5
HOYANP women's ultra-light down jacket (best-seller on Tmall)	26	n/a	5.0	→ 10.0
,		49794	"training"	***************************************
Nine West women's high-heel Rascal Platform Pump (US)	79	3.3.	15.2	30.3
Unbranded high-heel shoes (best-selling women shoes on Taobao)	5	n/a	₹ 1.0 :←	2.1
- Accessories		,,,,,,,,		
Coach Signature Stripe Tote (US)	105	4.4	20.2	40.3
Coach Signature Stripe Tote (China)	216	n/a	41.6	83.0
- Beauty / Skincare		41114		
Clinique moisturizing lotion+ 125 ml (US)	26	1.1	5.0	10.0
Clinique moisturizing lotion+ 125 ml (China online discounted price)	32	n/a	6.1 :←	12.1
L'Oreal Hydrating Refreshing Creamy Foam 125 ml (US)	11	0.5	2 1	4.2
L'Oreal Hydrating Refreshing Creamy Foam 125 ml (China)	16	n/a	31	62
L Oreal Hydrating Netreshing Creamy Foam 125 mi (China)	10	11/a	3.1	0.2
SK-II Facial Treatment Mask 10 pieces (US)	135	5.6.	26.0	51.9
SK-II Facial Treatment Mask 10 pieces (China)	176	n/a	33.8	67.5
It's skin Prestige Masque D'escargot 10 pieces (Tmall discounted price)	41	n/a	7.8	. 15.6.
Estée Lauder Pure Color Envy Sculpting Lipstick 3.2g (US)	32	1.3	6.2	12.3
IOPE lipstick 3.2g (China online discounted price)	30	n/a	5.8	11.5
Total Emposion only	00	II/ G	•, 0.0,	********

Source: Tmall.com, Taobao.com, Company website, Euromonitor, Goldman Sachs Global Investment Research.

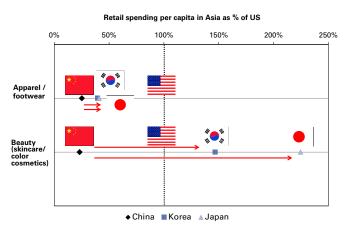
"Uniquely Asia": North Asian consumers tend to spend more on beauty products than on clothing.

All that glitters – a decade of fast growth ahead for beauty products and diamonds

We can see from Exhibit 27 that Asian consumers tend to spend proportionately more on beauty products relative to clothing. This combined with an accessible price point and the fact that there is an unbranded substitute should give the beauty/skincare category one of the best growth rates in this field. However, the channel shift is a factor here given high import taxes in China, which range up to 80%. As a result of affordability and taxes, we have seen foreign brands that focus on entry-level products – most notably Korean brands – making great market share gains in the past year, as evidenced by the fact that Korea has become a net exporter of beauty products this year.

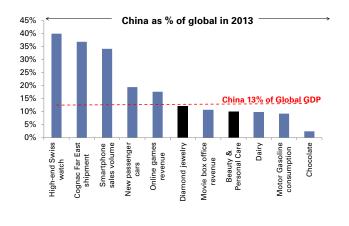
When it comes to looking more beautiful, diamond jewelry represents the ultimate big ticket – for this reason, we expect it is also the category with some of the most outsized growth opportunities in the coming decade. Using two months' salary as a benchmark, the affordability level for white collar cohorts is now around US\$2,000, just enough for a 0.5 carat diamond. Reflecting its high price point and relatively low perceived "utility", diamonds look to be vastly under-indexed compared with other discretionary purchases (Exhibit 28). Considering this is also the product with the most limited supply, we believe a close monitoring of the demand/supply picture is warranted.

Exhibit 27: Looking more beautiful: Beauty appears to offer the most growth potential if Chinese consumers were to behave more like Korea and Japan consumers Retail spending per capita on apparel / footwear and beauty products as a % of US, 2013



Source: Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 28: Beauty and diamond products look to be under-indexed in China relative to other discretionary purchases



Source: De Beers, Company data, Goldman Sachs Global Investment Research.

Exhibit 29: Urban Middle income is just approaching the level where demand can start to take off

Our affordability test								
		us	Urban Middle (China)	Urban Mass (China)				
Average annual earning (US\$)		45,246	11,686	5,857				
Product	Price (US\$)	Number of months to afford						
Diamong ring								
The Tiffany Setting Engagement ring (white, 0.5 carat)	3,870	1.0	4.0	7.9				
Chow Tai Fook (white, 0.5 carat)	2,141	0.6	2.2	4.4				

Source: Company website, Goldman Sachs Global Investment Research.

Exhibit 30: "Looking more beautiful": Key stocks with China exposure (CY13 regional revenue exposure in brackets)

	Local leaders (rank by mkt cap)	Mkt cap (USD bn)	Regional Champions (rank by mkt cap)	Mkt cap (USD bn)	Global leaders (rank by mkt cap)	Mkt cap (USD bn)
:"	"Looking more beautiful"					
	Alibaba	249.0	Fast Retailing	38.8	P&G (Asia: 18%)	243.2
i	Chow Tai Fook	14.0	Kao (China: 1.5%)	19.9	Amazon	139.9
	Hengan	12.5	Unicharm (China: 15.5%)	15.0	Unilever (GS estimate for China: 3%)	114.8
	Vipshop	12.2	Amorepacific (Greater China: 11%)	12.1	L'Oreal (GS estimate for China: 10%)	89.6
	Belle	9.6	LG H&H (Greater China: 3.4%)	8.7	Inditex	85.4
	Shanghai Jahwa	3.9	Shiseido (Greater China: 14.6%)	5.7	H&M (Greater China: 4%)	68.0
	Lao Feng Xiang	2.3	Ryohin Keikaku (Greater China: 13%)	3.5	Colgate-Palmolive (Asia: 14%)	62.5
	Luk Fook	2.2	Wacoal	1.4	Reckitt Benckiser (GS estimate for China: 2%)	56.7
	Jumei	2.1			Henkel (GS estimate for China: 4%)	43.0
	Sa Sa	2.0			Kimberly Clark (Asia, Latam & other: 38%)	42.8
	Golden Eagle	2.0			Estee Lauder (APAC: 21%)	28.3
	Chow Sang Sang	1.8			Beiersdorf (GS estimate for China: 8%)	19.8
	Intime	1.6			Michael Kors (Asia: 1%)	15.0
					Tiffany (GS estimate for China: 12%)	13.4
					Burberry (Asia ex-Japan: 13%)	10.9
					Coach	10.1
					Hugo Boss (Asia: 14%)	8.3

Source: Bloomberg, Goldman Sachs Global Investment Research.

3. Better Home

"衣yi食hi" "食hi" "Chu" "Xing" "Xing" "Kang" "She"

"Uniquely Asia": 40% of urban housing units were built in past 15 years.

"Vanke will focus primarily on the blue collar segment in the coming 10 years... We know construction workers now earn Rmb10, 000 per month...and despite wages higher than typical college graduates, it is difficult to find people... Construction workers at Vanke are now over 44 years of age; no young people are willing to enter the business... We must focus on blue collar homes, and focus on solving housing needs for these 100 million migrant workers – their housing needs and that of their next generation."

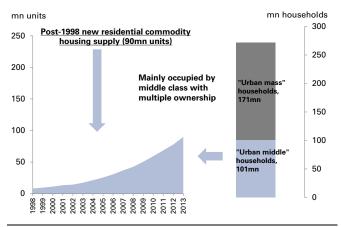
- Mr. Yu Liang, Chairman of Vanke, at Guangzhou-Shenzhen Vanke regional media conference, October 2014

Urban Mass – the forgotten group in the past two decades

Out of the current 220-230mn urban housing units in China, roughly 90mn, or 40% were built after 1998. The better quality of construction and the higher prices of these units mean that most of them were taken by the Urban Middle – which we estimate at a working population of 146mn. In other words, most of the Urban Mass has significant upgrade needs.

The issue of affordability: Mass market cohorts earn around US\$6,000 per year on average. Some "undesirable" jobs, such as construction workers, can reach Rmb10,000/month, or US\$20,000 a year. Considering the average selling price of Rmb600,000 (US\$100,000) for mass market apartments, a household with two working members can pay off such a home on average in 8 years. Our "hours worked" affordability test suggests 4 weeks of pay to buy one square meter, consistent with Japan, and better than Hong Kong.

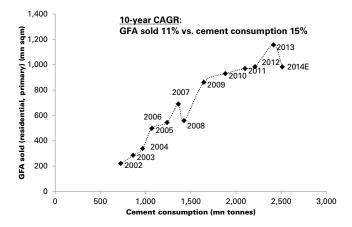
Exhibit 31: The 40% of urban housing added after 1998 (roughly 90mn) has largely gone to the Urban Middle cohort, with huge upgrade demand from the Urban Mass



Source: CEIC, Goldman Sachs Global Investment Research.

Exhibit 32: China primary home sales and cement consumption grew at 11% and 15% in the decade to 2013, before taking a pause in 2014

GFA sold vs. cement consumption



Source: CEIC, Goldman Sachs Global Investment Research.

Exhibit 33: Our "hours worked" affordability on housing: affordability a stretch but not at a level that suggests an imminent collapse

Our "hours worked" affordability test							
(1)	Price per sqm (US\$)	Average income per capita per week for a household with 2 members working (US\$)	No. of weeks worked to purchase 1 sqm				
China (Urban Mass)	876	234	4				
Japan	5,800	1,208	5				
Hong Kong	12,284	1,813	7				

Source: Fang.com, CEIC, Goldman Sachs Global Investment Research.

Urban Middle – Upgrade, or at least improve

Despite having a better and newer home than the mass cohort, the white collar cohort would still like to upgrade. But in tier 1 cities, the cost of upgrading for an average white collar working couple family has become prohibitive. The cost of upgrading – even enlarging the home size by 30 sqm – will cost easily Rmb1 mn (US\$160,000) in Beijing/Shanghai. Not impossible, but if this is the minimum spend for upgrade, it is far from practicable to most. We are seeing the average housing space stagnating in tier 1 cities, reflecting this challenge.

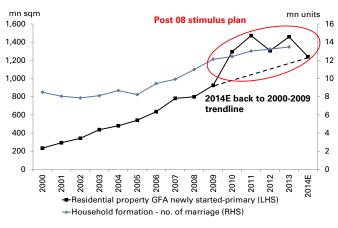
Exhibit 34: Tier 1 cities' average living space no longer growing, a sign of increasing issue with affordability Average living space in China, sqm per capita



Source: CEIC, Goldman Sachs Global Investment Research.

Exhibit 35: Post 2008-09 stimulus, China's housing starts grew faster than household formation, before reverting to trend in 2014

Residential property GFA newly started (primary) and no. of marriages



Source: CEIC, Goldman Sachs Global Investment Research.

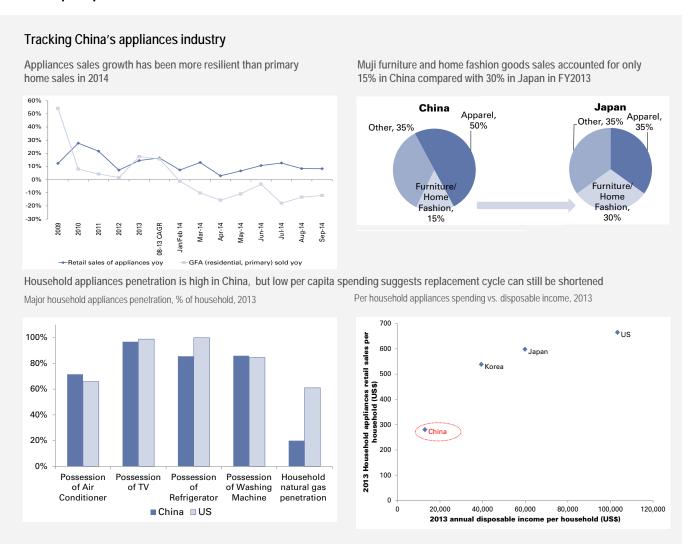
But the desire for a better home is still there. To compensate for the increasing difficulty of upgrading, the Urban Middle appears to be spending more on household improvement. YTD, overall appliance sales have seen healthy growth, compared to the yoy decline in primary property sales. Clearly, for the Urban Mass, the relatively low entry ticket for appliances means the sector can also capture the rising income.

"Uniquely Asia": Despite smaller size, Chinese households have higher demand for air conditioners than US households.

"Home improvement" in China: appliances penetration rate high, but faster replacement cycle can still unlock growth

It is often noted that the penetration rate for appliances is already quite high in China – which is factually correct (Exhibit 36). However, what is less noted is that the overall replacement cycle is also much longer, as evidenced by the lower annual per capita spending (Exhibit 36). Overall, even if appliances do not generate outsized growth relative to China's aggregate spending, their ability to capture the overall growth still cannot be ignored. To invest in consumers' desire for a better home, appliance companies, with the leaders commanding 30%+ market share, may be better proxies than a typical property developer.

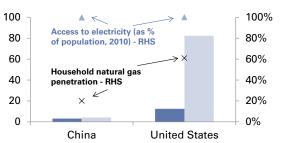
Exhibit 36: Demand for home appliances, like for housing, is driven by income growth, but appliances is at a much more accessible price point



Source: CEIC, China NBS, Company data, Euromonitor.

At the same time, one amenity severely underpenetrated in China is natural gas (Exhibit 37). Affordability is not hugely prohibitive compared to electricity but current home installation rates are very low (Exhibit 37). This suggests further buildout of infrastructure can unlock demand growth.

Exhibit 37: China's per capita electricity consumption and dry natural gas consumption lag far behind those of the US



- Electricity consumption per capita (Thousand Kilowatthours) LHS
- Dry natural gas consumption per capita (Thousand Cubic Feet) LHS

Note: Dry natural gas consumption per capita as of 2013, electricity consumption per capita as of 2011, US natural gas penetration as of 2009, China Natural gas data as of 2013.

Source: Sina News, worldbank, EIA.

Exhibit 38: Our "hours worked" affordability test: Electricity tariff close to US levels despite huge income gap, translating into low affordability

Our "hours worked" affordability test								
		US	Urban Middle (China)	Urban Mass (China)				
Average hourly earning (US\$)		24.0	5.2	2.6				
Product	Price (US\$)	No. of working hours needed						
Utility (residential)		January, Commission of the Com						
Electricity (US / MWh)	118.0	4.9	22.7.	45.3				
Electricity (China / MWh)	82.0	n.a.	15.8	31.5				
			"Anna and a second					
Natural gas (US / mmBtu)	11.5	0.5	2,2	4.4				
Natural gas (China / mmBtu)	17.6	n:a.	3.4	6.8				

Source: CEIC. EIA.

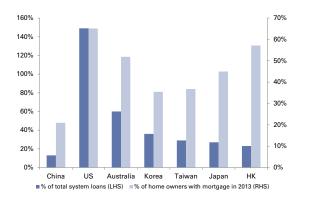
"Uniquely Asia": 12% of China's housing stock has a mortgage, compared with 39% in the US.

Personal finance: "Under-leveraged and under-invested"

Not surprisingly, given the low overall ownership of modern housing units, that housing mortgage penetration is also low (Exhibit 40). While one factor is the cultural tendency not to be heavily in debt – as more developed Asian markets like Hong Kong, Singapore and Taiwan also have significantly lower mortgage penetration levels compared with the West – it is clear that the mortgage market is vastly under-indexed relative to the local government debt market (Exhibit 40). Mortgage growth has been consistently faster than China's overall loan growth market, and our China Banking team expects this trend to continue.

Exhibit 39: China mortgages accounted for 13% of total system loans, with only 21% of homeowners having mortgages in 2013

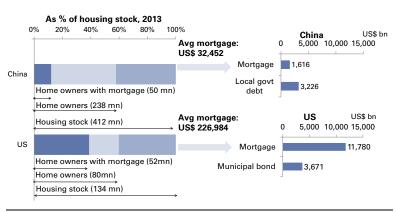
Note: US mortgage data include MBS and mortgage loans offered by banks



Source: CEIC, Wind, Euromonitor, Goldman Sachs Global Investment Research.

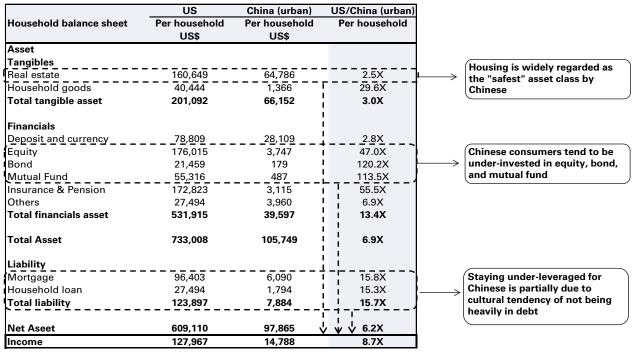
Exhibit 40: China has a similar local government debt level to US but only 14% of the US mortgage amount

Note: US mortgage data include MBS and mortgage loans offered by banks



Source: Euromonitor, Wind, PBOC, CEIC, Goldman Sachs Global Investment Research.

Exhibit 41: China Household balance sheet in 2013: Under-leveraged and Under-invested



Note: China Financials Asset data are 2010 data except for deposit and total financials asset data.

Source: China NBS, Goldman Sachs Global Investment Research.

Exhibit 42: "Better home": Key stocks with China exposure (CY13 regional revenue exposure in brackets)

	Local leaders (rank by mkt cap)	Mkt cap (USD bn)	Regional Champions (rank by mkt cap)	Mkt cap (USD bn)	Global leaders (rank by mkt cap)	Mkt cap (USD bn)
	IID-44					
	"Better home"	280.2	Hitachi	25.5	CE (ADAC: 100/)	047.0
"住"	ICBC			35.5	GE (APAC: 18%)	247.0
Zhu	China Construction Bank	212.8	Panasonic	28.6	3M (APAC: 29%)	102.8
	Agricultural Bank of China	199.9	Sony (Greater China: 7%)	23.4	Siemens (Asia: 11%)	95.9
	Bank of China	187.0	LG Corp (Greater China: 8%)	9.6	Rio Tinto (Greater China: 38%)	82.1
	China Shenhua Energy	69.4	Nitori	6.2	Glencore (Asia: 29%)	56.5
	Sun Hung Kai Properties	42.8	Ryohin Keikaku (Greater China: 13%)	3.5	Emerson Electric (Asia: 23%)	41.9
	JD.com	34.0			Phillips (Greater China: 13%)	26.1
	China Overseas Land & Investment	26.6				
	China Vanke	26.6				
	Poly Real Estate	20.5				
	Midea	20.2				
	Gree	19.7				
	Anhui Conch	19.5				
	CR Land	17.3				
	Lenovo	14.4				
	Suning	11.1				
	Country Garden	8.9				
	Longfor	8.4				
	Haier	6.7				
	Soufun	3.4				
	Gome	2.6				
	Ozner	0.8				

Source: Bloomberg, Goldman Sachs Global Investment Research.

4. Mobility and connectivity

"Uniquely Asia":
Government and
business account for
20%-40% of China's
passenger car market.
Unlike the US, many
Chinese companies
maintain their own fleet
and drivers.

"读万卷书,不如行万里路."

"Through the wonders of modern technology, our world is more connected than ever before. Ideas can cross oceans with the click of a button...As the Chinese saying goes: 'It is better to travel ten thousand miles than to read ten thousand books.'"

- Michelle Obama, speech at Stanford Center at Peking University, March 2014

Of all the Chinese characters in our behavioral study, 行(Xing) is the hardest to translate simply into English, as its connotations encompass walking, moving about, and travelling. We will discuss travel, or taking out-of-town trips, in the next section, "Having Fun". Here, we start with the question of what exactly drives people to travel within their locale. Pre digital era, there were perhaps three main reasons:

- 1) Going to one's school, work, etc.
- 2) Visiting friends and families.
- 3) Shopping or going out to have fun (i.e. restaurants, movies etc.).

With the internet, the second and third reasons have changed perhaps more than any other consumer behavior we have discussed so far. Connectivity, enabled by technology, is clearly an integral part of the discussion here, and we will discuss connectivity together with mobility.

Cars and 4G smart phones - a sign of true middle class?

Let's start with cars. This is one consumer product that, if China's consumption does approach anything near global metrics, could have grave consequences for the environment and global energy demand, not to mention domestic traffic conditions. China's annual sales of passenger cars were about 16mn in 2013, roughly similar to the US annual sales of 15.5mn light passenger vehicles last year. China's current passenger auto stock is estimated at around 83 mn cars (IHS Global Insight) – up from less than 8 mn in 2000. A significant portion of both the annual sales volume and the total stock would originate from non-consumer purchase, i.e., from government entities and businesses. Yipeng Yang, our China auto analyst, estimates the portion could be as little as 20% and as much as 40%. Taking one third as non-consumer purchase, we would arrive at a personal car ownership level of around 55mn. Interestingly, this is roughly similar to China Mobile's 80 million 4G subscribers – perhaps this gives us a not unreasonable account of China's true middle class? As expected, both would represent a fraction of the overall 189mn broadband and 282mn overall 3G/4G subscribers (ex TDSCDMA).

On a per capita basis, China's car market is equivalent to annual purchases of 12 cars per 1,000 people, compared with 49 units in the US and 81 units in Korea. But if we take the Urban Middle and also eliminate one third of the volume as non-personal use, we get to a level of annual purchase of 40 cars per 1,000, more comparable to DM. Clearly, other considerations aside, the growth potential of the auto market looks likely to be driven by more people entering the Urban Middle with the rising income.

Exhibit 43: Growth patterns in Mobility and Connectivity

Growth patterns in Mobility and Connectivity

Growth trends for cars, phones, data usage and online shopping

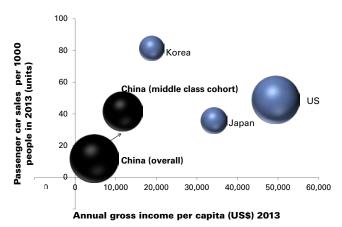
yoy growth	Passenger car sales volume	Smartphone units	Smartphone subscribers	Smartphone data usage*	Online retail sales
	7.10/	10.50/	0.1.00/		
2008	7.1%	-13.5%	34.6%	n.a.	n.a.
2009	52.9%	43.9%	32.3%	n.a.	105.2%
2010	33.3%	39.7%	34.2%	n.a.	75.3%
2011	5.4%	178.9%	73.3%	n.a.	70.2%
2012	6.9%	129.0%	97.5%	107.4%	51.3%
2013	15.7%	86.3%	87.0%	100.5%	59.4%
08-13 CAGR	21.6%	88.7%	62.6%	n.a.	71.3%
1014	10.1%	67.1%	65.6%	84.6%	44.4%
2Q14	12.3%	68.5%	53.9%	97.3%	47.1%
3Q14	8.1%	51.3%	44.0%	109.9%	49.8%

*Note: Smartphone subscribers yearly growth are GS estimates, 1014-3014 yoy data are using China Mobile, China Unicom, China Telecom 3G+4G subscribers growth; Smartphone data usage for 1014 to 3014 are using China Mobile data usage yoy as proxy Postal express package volume delivered vastly stronger momentum than railway/highway/air passenger traffic

yoy growth	Railway passenger traffic	Highway passenger traffic	Air passenger traffic	Postal express package volume
2008	7.3%	30.8%	3.6%	25.8%
2009	4.4%	3.6%	20.0%	23.2%
2010	10.2%	9.8%	16.0%	25.8%
2011	11.1%	7.6%	9.5%	56.8%
2012	1.7%	8.2%	9.2%	54.9%
2013	11.2%	5.3%	11.0%	61.6%
08-13 CAGR	7.7%	6.9%	13.0%	43.5%
Jan-14	1.6%	8.8%	19.1%	29.1%
Feb-14	13.8%	-4.3%	11.5%	94.2%
Mar-14	4.6%	-0.3%	5.1%	52.9%
Apr-14	13.4%	-0.1%	10.3%	59.1%
May-14	17.3%	4.1%	9.8%	50.5%
Jun-14	7.8%	2.1%	6.8%	56.5%
Jul-14	12.3%	4.5%	9.6%	48.7%
Aug-14	15.9%	3.3%	7.3%	51.5%
Sep-14	9.3%	3.7%	8.8%	47.1%

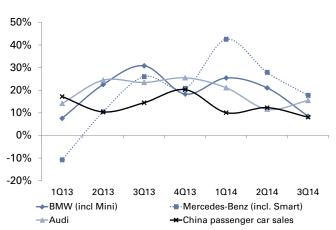
Source: CEIC, IHS Global Insight, iResearch, Company Data, Gartner, Goldman Sachs Global Investment Research.

Exhibit 44: Annual automobile sales to Urban Middle cohort are approaching US and Japan



Note: Bubble size represents passenger car sales in 2013

Exhibit 45: Luxury car brands' China sales yoy vs China passenger car sales yoy



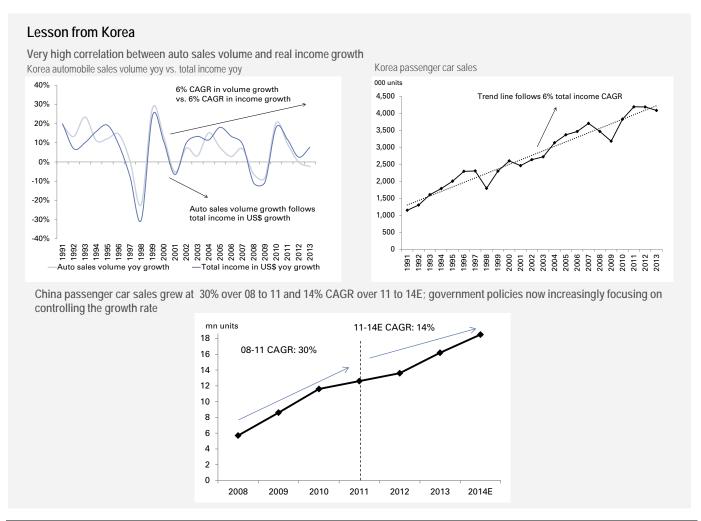
Source: CEIC, IHS Global Insight.

Source: CEIC.

What Korea's experience shows us, and why China's growth will likely be different due to its sheer scale

Korea's development suggests car volume growth has had a high correlation with aggregate real income growth (Exhibit 46). If unchecked, China's auto demand looks set to continue to enjoy a healthy growth rate. Yipeng Yang, our China auto analyst, believes that because of environmental, resources and urban traffic concerns, the government will continue to pursue a policy that restricts the growth of the auto market. We have seen fuel consumption per car on average decline steadily in the past few years (Exhibit 48), and combined with better fuel efficiency and lower industrial use of oil (residential use of gas is only 10% of total), China's overall oil and energy consumption has grown at just 6% over 2009-2012, well below car market growth (Exhibit 48).

Exhibit 46: If allowed, China's passenger car demand could continue to grow at double digits, judging by the development of the auto industry in Korea



Source: Korea Automobile Manufacturers Association, CEIC, IHS Global Insight, Euromonitor, Goldman Sachs Global Investment Research.

"Uniquely Asia": A car registration license costs US\$12,000 in Shanghai.

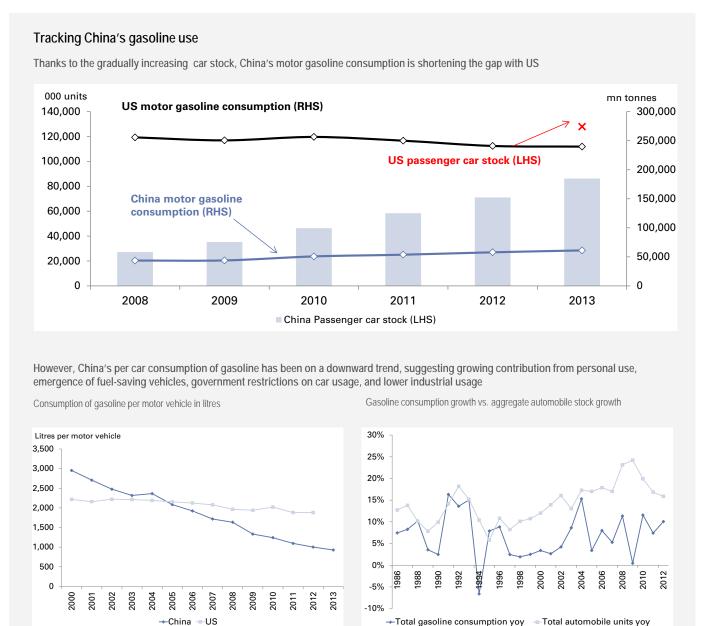
Exhibit 47: China's passenger car license plates can cost over US\$10,000 as government tries to rein in demand

	Date	Price (US\$)
China passenger car license plat	te cost	
Shanghai	Oct 2014	12,033
Hangzhou	Oct 2014	7,770
Guangzhou	Oct 2014	1,860
US vehicle registration and/or t	itle fee	
Massachusettes	Latest	105
New Jersey	Latest	60
California*	Latest	69

Note: US vehicle fees vary by purchase date of vehicles. California requires \$46 registration fee and \$12 Highway Patrol fee.

Source: Sina News, DMV.org, New Jersey State website.

Exhibit 48: Growth of China's gasoline consumption has trailed that of auto industry



Source: IHS Global Insight, CEIC, Euromonitor, Goldman Sachs Global Investment Research.

"Uniquely Asia": Many car owners do not drive cars to work every day, as evidenced by China's relatively low and declining trend of gasoline consumption per motor vehicle.

Exhibit 49: Our "hours worked" affordability test: China consumers' gasoline affordability vastly lagged behind that of US

Our "hours worked" affordability test								
			Urban Middle	Urban Mass				
	000	US	(China)	(China)				
Average hourly earning (US\$)		24.0	5.2	2.6				
Product	Price (US\$)	S\$) No. of working hours needed						
Gasoline (US / per gallon)	2.6	0.1	0.5	1.0				
Gasoline (China / per gallon)	4.3	n.a.	0.8	1.7				

Source: EIA, Metalnews, Sina News, Euromonitor, Goldman Sachs Global Investment Research.

Smartphones and e-commerce: Chinese consumers leap-frogging

"Uniquely Asia": Enough handset affordability thanks to low-priced smartphones but data affordability not there yet.

Handset affordability is there, but not data affordability yet

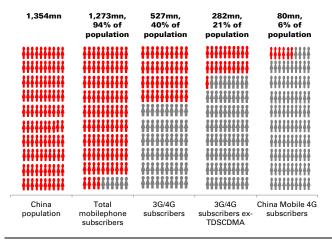
It has taken just a decade for hundreds of millions of Chinese to go from having virtually no internet access in 2000 to having seamless mobile internet access. There are now 282 mn smartphone subscribers ex-TDSCDMA (Exhibit 51) – a bigger mass than US mobile users – capturing the higher income spectrum within China. Adding in the TDSCDMA accounts, the total base jumps to 527 mn, although our China Telecoms team thinks these tend to be much less active users of 3G services.

Exhibit 50: Penetration analysis of Connectivity: China vs. US, Japan and Korea

Smartphone subscriber over total mobile subscriber

	2013 fixed broadband account penetration	2013 smartphone penetration	2013 smartphone penetration	2013 telephone line penetration
Unit	% of household	% of total population	% of total mobile subscribers	% of total household
China	43%	39%	43%	61%
Korea	92%	94%	74%	148%
Japan	68%	63%	73%	122%
us	77%	75%	71%	110%

Exhibit 51: Despite 1.3bn mobile users, true heavy users of smartphones are under 100mn

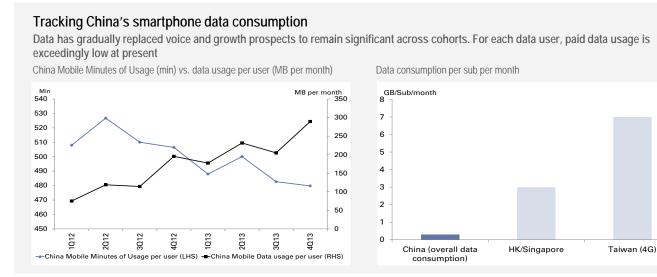


Source: Worldbank, Goldman Sachs Global Investment Research.

Source: Company data, Tencent News.

The high level of penetration is partly due to the affordability of local smartphones. Using our "hours worked" affordability test, we can see that an iPhone equates to 27 hours of US average hourly earnings – a level of affordability that local handset makers are now able to reach in China.

Exhibit 52: From hardware to data: High smartphone ownership but low data consumption at present suggests significant growth prospects for data usage across cohorts



Source: Company data, Goldman Sachs Global Investment Research.

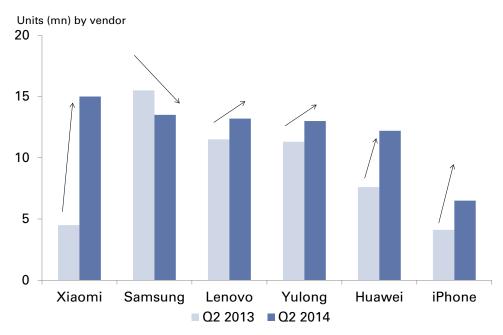
Exhibit 53: Our "hours worked" affordability test on phones and data: local phones win on affordability, data plan is not yet truly affordable, even to Urban Middle

Our "hours worked" afford	dability tes	t		
		US	Urban Middle (China)	Urban Mass (China)
Average hourly earning (US\$)		24.0	5.2	2.6
Product	Price (US\$)	No	o. of working hours	needed
Handset iPhone 6 16G (US) iPhone 6 16G (China) Samsung Galaxy S3 3G (best-selling Samsung phone on JD.com) Xiaomi Redmi 1S (China) Coolpad Dashen F2 (8675) (top-selling handset on JD.com)	649.0 866.9 213.0 130.0 196.6	27.0 36.1 n/a n/a n/a	125.0 166.9 41.0 25.0	249.3 333.0 81.8 49.9 75.5
Huawei Honor 3 (top-selling handset on JD.com) Lenovo A8 (top-selling handset on JD.com)	131.0 130.8	n/a n/a	25.2 25.2	50.3 50.3
Monthly data plan AT&T 1GB 4G LTE data plan with unlimited voice China mobile 1GB LTE data plan with 300 min voice	60.0 21.0	2.5 0.9	11.6	23.0 8.1

Source: JD.com, company data.

But data affordability is clearly not there yet, and that explains the low data usage at present. However, we believe rising incomes and China's socioeconomic backdrop (with the majority of the population not working in front of a network PC) provide powerful tailwinds for the growth ahead.

Exhibit 54: On the back of design, product quality and affordability, Xiaomi rose from a niche player to China's No.1 smartphone vendor in a year China smartphone shipment to vendors in million units



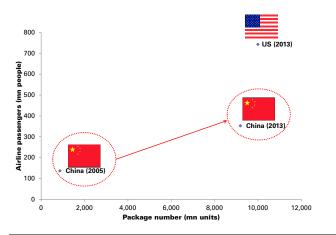
Note: Yulong owns the smartphone brand Coolpad.

Source: Canalys, Goldman Sachs Global Investment Research.

Powerful formula for e-commerce to take off

The combination of comprehensive mobile internet access, low car ownership, underdevelopment of physical retail and the availability of cheap unbranded products online, as well as cheap shipping costs, offers a recipe for explosive growth of ecommerce, as we have witnessed in the past few years. Today, aggregate packages delivered is already close to that of the US, having risen 10X since 2005. And yet the overall retail sales market is just 85% of the US. The fact that aggregate volume of packages delivered still grew at 54% in 1H14 suggests potential for further strong growth of the segment going forward, in our view. It is worth noting that the active customers served by the leading China retailers and e-tailers are still minuscule compared to those of the US leaders (Exhibit 56).

Exhibit 55: As e-commerce boomed, China's package delivery industry has become much more highly developed relative to the air travel market



Source: State Post Bureau of the People's Republic of China, Goldman Sachs Global Investment Research.

Exhibit 56: Despite the robust growth in last few years, China's e-commerce companies still serve only a small percentage of the potential customer base Active customers (daily, mn people)



Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 57: "Mobility/Connectivity": Key stocks with China exposure (CY13 regional revenue exposure in brackets)

	Local leaders (rank by mkt cap)	Mkt cap (USD bn)	Regional Champions (rank by mkt cap)	Mkt cap (USD bn)	Global leaders (rank by mkt cap)	Mkt cap (USD bn)
了"	"Mobility/Connectivity"					
	PetroChina	333.2	Toyota (Greater China net income: 9%)	210.5	Apple (Greater China: 15%)	623.1
ng	Alibaba	249.0	Samsung Eletronics (Greater China: 18%)	174.3	Exxon Mobil	382.3
	China Mobile	236.9	TSMC	113.0	Microsoft	381.9
	Tencent	137.1	Honda (Greater China net income: 18%)	52.6	Google	350.3
	Sinopec	127.4	Nissan (Greater China net income: 24%)	38.4	Facebook	215.9
	Baidu	77.1	Hyundai Motor	32.9	Chevron	204.3
	CNOOC	61.3	KIA	18.7	Royal Dutch Shell	202.8
	China Telecom	47.4	Suzuki Motor (Greater China net income: 6%)	16.5	Oracle (APAC: 16%)	191.4
	SAIC Motor	41.9	Mazda (Greater China net income: 8%)	13.8	Visa	160.3
	China Unicom	32.4			Amazon	139.9
	Daqin Railway	26.8			Schlumberger	107.3
	Great Wall Motors	20.3			United Parcel Service	100.2
	CSR	16.3			Volkswagen AG (Asia: 18%)	98.6
	China CNR	16.2			Mastercard	96.3
	BYD	13.8			American Express	93.7
	Dongfeng	12.2			Daimler (Greater China: 9%)	84.5
	Qihoo 360	7.5			SAP (APXJ: 11%)	82.4
	Autohome	4.1			Hewlett-Packard	72.6
	58.com	3.7			Bayerische Motoren Werke (Greater China:20%)	65.4
	Weibo	2.9			EMC (APAC: 14%)	59.5
					Ford	56.8
					GM	55.2
					Dow Chemical	52.1
					FedEx	48.1
					Ericsson (Asia: 19%)	39.3
					Audi (APAC: 31%)	33.2

Source: Bloomberg, Goldman Sachs Global Investment Research.

5. Having More Fun

"China has been an incredible growth market, not just for Disney, but for global media companies because of the substantial investment in infrastructure that traditionally delivers or distributes our products."

 Mr. Robert Iger, CEO of Disney, at Fortune Global Forum town hall, Jun 2013

The big picture: Fun = Growth

While influence from traditional values is still pervasive, the reality is that China's young generation's tolerance for "eat bitter" is on the decline. Simply put, the changing demographics combined with rising income means having more fun may be the single most important growth area for the Chinese consumer in the coming decade. It is one that has the lowest relative indexing rank – just 9% of private consumption expenditure vs. 16-18% in US, Japan and Korea, representing the biggest gap among all categories.

We see five major groups of recreational activities in consumers' choices for spending on "having more fun":

- 1) Going out to eat.
- 2) Consumer media: subscribing to cable, watching movies, buying books and magazines, etc.
- 3) Taking trips out of town.
- 4) Games and gaming: spending on gambling and video games.
- 5) Sports.

Using the US as a reference, dining out would account for approximately 33% of total recreational expenditure, followed by media spending (14%) and taking trips out of town (9%). Games and gaming amount to 7%, but indexed to youth demographics computer games would account for a significantly higher share of young consumers' recreational spending.

Fun is more accessible to Urban Mass compared to a car or an apartment purchase, but affordability is still critical

Unlike purchasing a car or a good apartment, "fun" is possible to purchase with just a small level of discretionary income. However, this is also an area where the importance of entry ticket price, or the cost per serving, takes on primary importance. This is perhaps due to the fact that people need to participate in some form of recreational experiences regularly. Consequently, each product/experience offering has to be at the price point that is affordable to the targeted core consumer group on a regular basis. Using our "hours worked" affordability test (Exhibit 61), we can see that most experiences offered by global companies still do not fully pass the affordability test for the Urban Mass cohort, meaning these consumers will either find cheaper alternatives or use such offerings at much lower frequency compared to normal.

Exhibit 58: In China, expenditure on "Having more fun" may see the biggest growth in wallet share

Tracking China's expenditure on "Having more fun" vs. US

"Having more fun" may see the biggest increase in consumption allocation in China over the next decade

PCE per capita by category, US\$, 2013	China	Korea	Japan	US
"Looking more beautiful"	339	1.134	1.539	2.014
"Eating better"	743	1,941	3,694	3,129
"Better home"	646	3,089	7,497	9,779
"Mobility/connectivity"	268	1,744	3,399	4,271
"Having more fun"	230	2,284	3,559	6,151
"Well-being"	267	1,973	2,733	9,883
Others	12	275	455	349
Total	2,506	12,439	22,876	35,576

As % of aggregate PCE per capita, 2013	China	Korea	Japan	US
"Looking more beautiful"	13.5%	9.1%	6.7%	5.7%
"Eating better"	29.7%	15.6%	16.1%	8.8%
"Better home"	25.8%	24.8%	32.8%	27.5%
"Mobility/connectivity"	10.7%	14.0%	14.9%	12.0%
"Having more fun"	9.2%	18.4%	15.6%	17.3%
"Well-being"	10.7%	15.9%	11.9%	27.8%
Others	0.5%	2.2%	2.0%	1.0%
Total	100.0%	100.0%	100.0%	100.0%

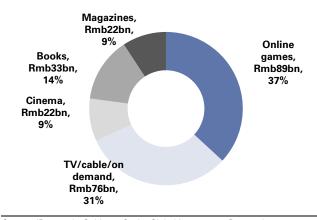
US consumers spend 17% of PCE on "Having more fun": a look at where the money goes $\,$

	US	US	US	US
Choices of having fun	Per capita spending on recreational items (US\$)	% of total recreational expenditure	% of PCE per capita	% of average income per capita
(1) Food services (fast food, restaurants)	2,001	32.5%	5.6%	4.4%
(2) Out-of-town trips	525	8.5%	1.5%	1.2%
- Hotel	327	5.3%	0.9%	0.7%
- Package holidays	34	0.6%	0.1%	0.1%
- Air transportation	164	2.7%	0.5%	0.4%
- Cruise	38	0.6%	0.1%	0.1%
(3) Media	849	13.8%	2.4%	1.9%
(4) Games and gaming	450	7.3%	1.3%	1.0%
(5) Sports	657	10.7%	1.8%	1.5%
(6) Others	1,669	27.1%	4.7%	3.7%
Total	6.151	100.0%	17.3%	13.6%

Source: Euromonitor, CEIC, Goldman Sachs Global Investment Research.

Exhibit 59: In China, online games represent the biggest component of media spending

China media sales by value, 2013



Source: iResearch, Goldman Sachs Global Investment Research.

Exhibit 60: "Having more fun" in China: growth trends in recent years: fastest growth has been in movies, gaming and online games

% yoy growth

	Restaurant retail sales	Travel accommodation retail sales	Movie Box office revenue	Book market revenue	Cable TV market revenue	Macau Gross Gaming Revenue	Online games revenue
2008	n.a.	-1.7%	30.5%	n.a.	n.a.	n.a.	n.a.
2009	n.a.	-4.3%	43.0%	n.a.	n.a.	9.7%	n.a.
2010	18.0%	28.2%	63.9%	n.a.	n.a.	57.8%	n.a.
2011	16.9%	12.9%	28.9%	n.a.	n.a.	42.2%	n.a.
2012	13.6%	8.5%	30.2%	-1.0%	n.a.	13.5%	n.a.
2013	9.0%	7.0%	27.5%	-1.4%	14.2%	18.6%	32.9%
08-13 CAGR	n.a.	10.0%	38.1%	n.a.	n.a.	27.1%	n.a.
Jan-14	n.a.	n.a.				7.0%	
Feb-14	n.a.	n.a.				40.3%	1Q: 28.3%
Mar-14	10.2%	n.a.				13.1%	
Apr-14	10.7%	n.a.	\downarrow	. ↓	\downarrow	10.6%	
May-14	11.0%	n.a.	35% (ytd)	0.0% (ytd)	11.0% (ytd)	9.3%	20: 25.6%
Jun-14	9.8%	n.a.	Λ.	Λ.	Λ.	-3.7%	
Jul-14	9.4%	n.a.				-3.6%	
Aug-14	8.4%	n.a.				-6.1%	30: 20.3%
Sep-14	8.7%	n.a.				-11.7%	

Source: Euromonitor, iResearch, DSEC, DICJ, Macao Daily, Bloomberg, CEIC, Goldman Sachs Investment Research.

January 13, 2015

Exhibit 61: Our "hours worked" affordability test on "Having more fun": Highest level of affordability in online games and cable TV

Our "hours worked"	affordability test	t			
		US	Urban Middle (China)	Urban Mass (China)	Comments
Average hourly earning (US\$)		24.0	5.2	2.6	
Product	Price (US\$)	N	o. of working hours	needed	
Food services		41114			A meal in a US quick service
Fast food	4.0		- 00	4.0	restaurant costs 0.2 hours of
Big Mac (US)	4.6	0.2	0.9	1.8	pay to 0.8 hours of pay. With
Big Mac (China)	2.7	n/a	0.5	1.0	average hourly earnings of
			"trace"	"Married"	US\$5 for Urban Middle and
Fast casual dining					US\$3 for Urban Mass,
Chipotle (US)	9.0	0.4	1.7	3.5	businesses that can offer
Café De Coral (China)	6.6	n/a	1.3	2.5	meals at price points below
			********	********	US\$5 will continue to do
Sit-down casual dining		and the second			well.
Red Lobster (US)	20.3	0.8	3.9	7.8 1.5	
Saizeriya (China)	4.0	n/a	0.8		
Tsui Wah (China)	13.1	n/a	2.5	5.0	
			"Marine"	Section 1	
Out-of-town trips					
Entrance ticket to Disneyland (1-day for adult)					
Anaheim (close to LA)	96.0	4.0	18.5	36.9	
Hong Kong	57.7	n/a	11.1	22.2	
- Round trip transportation cost		,,,,,,,,	Ţ		
Boston - Washington (Plane)	162.0	6.8	31,2	62.2	For Urban Middle, taking ou
Beijing - Shanghai (Plane)	203.4	n/a	39.2	78.2	of-town trips will still be a
Beijing - Shanghai (Train - regular)	58.2	n/a	11.2	22.4	key focus for discretionary
Beijing - Shanghai (Train - high speed)	181.3	n/a	34.9	69.7	spending with income
			×		increase.
- Hotel daily cost		J	- 11		
Mid/upscale hotel (US)	120.0	5.0	23.1	46.1	
Tier 1/2 City 5 star hotel (China)	131.1	n/a	25.3	50.4	
Shanghai Home Inns Hotel near Lujiazui (China)	46.6	n/a	9.0	17.9	
Hostel (China)	15.0	n/a	2.9	5.8	
			· · · · · · · · · · · · · · · · · · ·	"Manager"	
Movie ticket			\ \		
Movie ticket (US)	8.4	0.4	1.6	3.2	Online games have the
Movie ticket (China)	5.7	n/a	1.1	2.2	lowest entry ticket price
Cable TV per month				1	among all "fun" activities.
US	30.0	1.3	5.8	11.5	Low income and easy access
China	4.1	n/a	0.8	1.6	enable online games to
			The second of	M. January	capture high wallet share
Online games				W ,	among China's young
Tencent Massively Multiplayer Online Games per hour	0.6	n/a	0.1	0.2	consumers.
Tencent Cool Run game on IOS (most popular mobile game) per time	Free for entry	n/a	0.0	0.0	

"Uniquely Asia": "High on time, but low on income" results in proportionately more spending on online

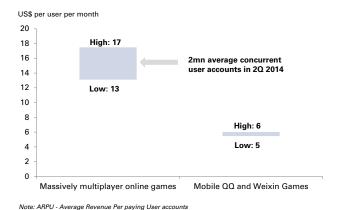
games.

For consumers on limited budgets, online games become a huge part of how Urban Mass spends on fun

Low income and an abundance of free time (given the low participation in organized labor – page 7), combined with high broadband access and smartphone ownership, are a powerful driver of PC and mobile game consumption. Online games have the lowest entry ticket price among all "fun" activities (Exhibit 61), giving the Urban Mass an outlet for their free time. Tencent's massively multiplayer online game has 2mn concurrent users who spend US\$13-17 per month.

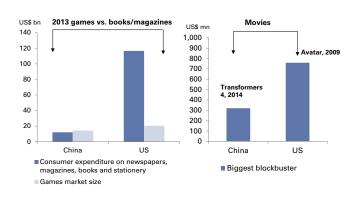
Exhibit 62: Online games cost only US\$5 to US\$17 per month for an average user, providing a low entry price for Urban Mass

Tencent monthly ARPU implied from 2Q14 and combined ACU in 2Q14, US\$



Source: iResearch, Goldman Sachs Global Investment Research.

Exhibit 63: "Games vs. Reading vs. Movies": as overall education improves in China, we see room for consumption of printed media to grow. Movies are also a source of opportunity



Source: Euromonitor, iResearch, Newzoo, Goldman Sachs Global Investment Research.

Other media product consumption – Significant difference in affordability drives behavior

In the consumption of regular media products, cinema currently ranks lowest in affordability and is seeing one of the highest growth rates – even higher than gaming. In fact, China is vastly under-indexed to the US on overall movie and book consumption, compared with video games.

In restaurants and leisure travel, true private consumption expenditure still looks extremely low

"Uniquely Asia": True private consumption in restaurant and accommodation is low due to large government /business consumption.

Exhibit 64 shows Euromonitor's estimates of per capita PCE at restaurants and hotels compared to its estimates of per capita retail sales on restaurants and travel accommodation. For comparison, we also outline its per capita estimates for PCE/retail sales on clothing, footwear and household appliances. Per capita PCE being such a low percentage of total retail sales per capita indicates the degree of non-personal consumption in these areas.

Exhibit 64: The huge gap between PCE and retail sales per capita for restaurant and hotel spending suggests heavy involvement by government / business entities

China PCE per capita vs. retail sales per capita from Euromonitor in 2013

US\$/per annun/per capita	China - PCE per capita from Euromonitor	China - retail sales per capita from Euromonitor		
Clothes and footwear	212	224		
Household appliances	61	66		
Food services Hotel	85 9	382 73.		

% of annual gross income per capita	China - PCE per capita from Euromonitor	China - retail sales per capita from Euromonitor
Clothes and footwear	4.5%	4.8%
Household appliances	1.3%	1.4%
Food services	1.8% <	→ 8.2%
Hotel	0.2% ←	→ 1.6%

Large consumption from business/government consumption

Source: Euromonitor.

Exhibit 65: China premium hotel room market looks saturated, resulting in lower occupancy rate Cohort penetration of premium hotels

China hotels	# of rooms 2013
5 star	261,100
4 star	462,800
Total 4 to 5 star	723,900
Population with US\$21,444 per annum from China NBS household survey (mn)	38
Implied population with salary above US\$21,444 per annum (mn)	19
	# hotels per 1000 people in
	top 10% of income
	distribution
Penetration	38.6

US hotels	# of rooms Mar 2014
Luxury (US\$270 per room per night)	98,854
Upper upscale / (LICC120 to 150)	593,124
Upscale (> US\$120 to 150)	593,124
Total upscale to luxury	1,285,101
Working population with median annual salary of US\$43,836 (mn)	144
Implied working population with salary above US\$43,836 per annum (mn)	72
	# hotels per 1000 working population
Penetration	17.8

China's number of hotel room from upper mid-end to luxury per person with income above US\$21,444 doubled that of US per person with income above US\$43,836



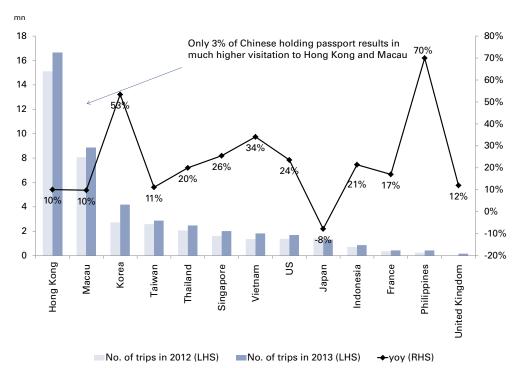
Source: China NBS, CEIC, Inntie, Goldman Sachs Global Investment Research.

We noted earlier the affordability issue with restaurants (Exhibit 61). This would also be quite consistent with the hotel industry: for all starred hotels, the average occupancy rate is running at 46-53%, considered low by global standards. Hong Kong, although perhaps an extreme example, has been running at 80-90% for the overall industry in the past few years. China's low occupancy rate reflects not just overcapacity (Exhibit 65) but also a lack of affordability with consumers (Exhibit 61).

Discretionary spend by the Urban Middle likely to focus on travel and dining out going forward

Last year, there were 353mn air passengers in China – equivalent to 177mn round trips. Based on our Urban Middle cohort size, this equates to 1 trip per annum. This is roughly comparable to the US at 743mn air passengers or 1.2 round trips per capita. However, the reality is that most Chinese have yet to go abroad. Despite the visibly growing presence of Chinese tourists abroad, only 3% of Chinese hold passports and only 1.7mn visited the US last year. Affordability is again an issue (Exhibit 61), but with average weekly income now running over US\$200 for the Urban Middle, a trip to Macau is becoming affordable to wider groups; depending on duration and mode of transportation, it can be as low as US\$50 (a bus day-tour from Guangdong) to around US\$400 for flights and hotel from inland cities. US per capita spending on out of town trips was US\$525 last year, equal to roughly 3 days of pay.

Exhibit 66: Key gateway cities will continue to see growth in visitation from the Urban Middle, while "movers and shakers" are still important in farther away locations
No. of trips by Chinese citizens in 2012 and 2013, mn and yoy change from 2012 to 2013



Note: Data exclude outbound trips by same-day visitors and transit passengers.

Source: Euromonitor, CEIC.

"Uniquely Asia": Average ticket price below US\$5 per meal.

China (Urban)

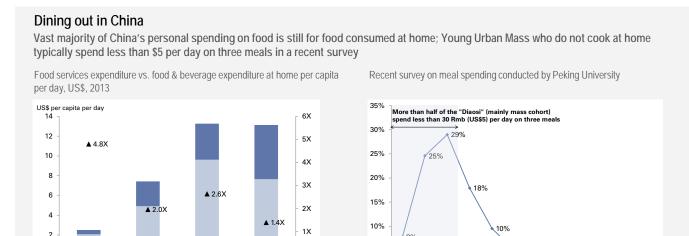
Food services (fast food, restaurants)-LHS

▲ Food & beverage at home/Catering-RHS

Dining out – focus on meals below US\$5, or one hour of pay

Our affordability index shows that a meal in the US should cost 0.2 hours of pay (fast food) to 0.8 hours of pay (sit-down casual). With average hourly earnings of US\$5.2 for Urban Middle and US\$2.6 for Urban Mass, it seems clear that businesses that can offer meals at price points below US\$5 will continue to do well. It is a reality of the market's cheap labor costs that even in Hong Kong a sit-down meal at a local cafe will cost just US\$4, which is one major reason why McDonalds is cheap in Hong Kong. We believe the implication for China is clear – premium restaurants may find it difficult to scale the business and fend off competition.

Exhibit 67: Food at home still accounts for majority of overall food spending; as the "dining in" to "dining out" begins, entry level price points (below US\$5) is the focus



0X

USA

5%

<10 10-19 20-29 30-39 40-49 50-59 60-69 70-79 80-89 90-99 >100 Per day

Source: Euromonitor, Peking University, Goldman Sachs Global Investment Research.

Japan

Food & beverage at home-LHS

Exhibit 68: How Urban Middle and Urban Mass spend on "having more fun": some typical experiences

China					
Choices of having fun	Urban Middle	Urban Mass			
Discretionary cashflow per capita (US\$)	3,247	1,249			
(1) Food services (fast food, restaurants)	- Chained food services - US\$15 per meal	Roadside foodstandsLess than US\$2 per meal			
(2) Out-of-town trips	- Long-distance domestic travel/overseas trips (7 days)	- Nearby short journey (2-3 days)			
- Hotel	- 3/4-star hotel - US\$50 per night in Tier 1 cities	Gradually upgrade to budget hotels from hostelsUS\$10 per night			
- Air/land transportation	- Air travel- US\$200 round trip ticket from Shanghai to Beijing	Travel by train/busU\$\$20 from Shanghai to Hangzhou			
- Tourism	- Online trip booking via Ctrip	- Online trip booking via Qunar			
(3) Media	Movies in theatreUS\$10 per ticket	- Online video (Youku, Tencent, iQiyi) - Free access to most content			
(4) Games and gaming	- Macau Gaming- Lost US\$1000 per year per player	- Online games - Less than US\$2 per hour			
(5) Sports	- Play basketball wearing Anta basketball shoes (US\$40)	- Running wearing Taobao unbranded running/casual shoes (US\$14)			
(6) Others	- Karaoke - US\$5 for 3 hours	- YY, GroupBuy - Less than US\$5 per activity			

Illustration - how do the two groups spend during a typical weekend?

	Urban Middle	Urban Mass
Options	Dining out (well-reputed restaurants) + movie	GroupBuy + Online free video
Per capita cost	US\$40	US\$5
Illustration -	how do the two groups spend during sumn	mer time (3 months)?
Options	5-day trip from Shanghai to Beijing (Round-trip air ticket + 4-star hotel) via <i>Ctrip</i>	<i>Tencent</i> PC/mobile gaming/ <i>YY</i>
Per capita cost	US\$500	US\$40

Source: Ctrip.com, Goldman Sachs Global Investment Research.

Sports

According to a 2007 study, only 100mn people "actively participated" in sports activities (more than three times a week). This is roughly the size of the current Urban Middle. The state council expects this number to increase 5X to 500mn by 2025 (a 10% CAGR). Despite this support, however, we think affordability will continue to be a key determinant of individual athletic goods brands' success.

On affordability: The average US worker would have to work 6 hours to afford a pair of Nike running shoes. As shown in Exhibit 69, the equivalent in China would be Anta, not Li Ning. But to the Urban Mass, the true affordability comes from unbranded shoes sold online and offline. Within the c.600mn pairs of sports shoes sold in 2013, we estimate the top four brands (Nike, Adidas, Li Ning and Anta) accounted for only c.150mn pairs based on their China revenues and ASP. So there is significant opportunity as demand for real performance shoes continues to increase – and our affordability test suggests that these shoes need to be priced at around 5-5.5x hourly earnings, meaning a price point of US\$20-30.

Exhibit 69: Our "hours worked" affordability test on sports shoes

Our "hours worked" affordability test						
		US	Urban Middle	Urban Mass		
			(China)	(China)		
Average hourly earning (US\$)		24.0	5.2	2.6		
Product	Price (US\$)	No. of working hours needed				
Sportswear		January, and				
Nike Air Zoom Pegasus 31 iD (from Amazon)	135.0	5.6	26.0	51.9		
Li Ning Arc 4.0 running shoes (Tmall)	45.0	1:9	8.7	17.3		
Anta 2014 autumn/winter new model (Tmall)	38.5	n/a	7.4	14.8		
Anta most popular running shoes on Tmall	28.9	n/a	5.6	.11.1		
Taobao unbranded running/casual shoes (most popular item)	14.2	n/a	2.7	5.5		

Source: Company data, Tmall.com, Taobao.com

Exhibit 70: "Having more fun": Key stocks with China exposure (CY13 regional revenue exposure in brackets)

Le	ocal leaders (rank by mkt cap)	Mkt cap (USD bn)	Regional Champions (rank by mkt cap)	Mkt cap (USD bn)	Global leaders (rank by mkt cap)	Mkt cap (USD bn)
l"i	Having more fun"					
	encent	137.1	Canon	41.3	Disney	156.6
	aidu	77.1	Sands China	38.7	United Technologies Corp (APAC: 14%)	103.1
Yu 🔓	ir China	15.6	Galaxy	22.8	Boeing (Greater China: 12%)	92.0
N	letease	13.0	Wharf	22.6	McDonalds (APMEA: 23%)	89.8
C	hina Eastern	9.6	Naver	22.1	Nike (Greater China: 10%)	80.6
C	athay Pacific	8.3	Wynn Macau	14.2	Twenty-First Century Fox (Asia: 7%)	78.9
С	hina Southern	7.7	JAL	11.1	Honeywell International	77.0
С	hina Intl Travel Services	7.3	SIA	10.1	Time Warner (APAC: 6%)	69.8
В	esTV New Media	6.7	Genting SG	9.6	Lockheed Martin	59.8
C	trip	5.8	ANA	8.8	Starbucks (Asia: 6%)	59.8
Н	luayi Brothers	5.3	Lotte Shopping (Greater China: 5.8%)	7.2	Yahoo (APAC: 17%)	46.5
S	hangri-La Asia	4.9	Kangwon Land	5.8	Las Vegas Sands (Greater China: 65%)	43.9
С	hina South Publishing & Media	4.8	Hysan	4.9	Airbus (Asia: 33%)	39.0
Le	eshi	4.8	Aeon mall	4.0	Yum (Greater China: 53%)	31.0
W	Vasu Media	4.6	Lifestyle	3.5	Wynn (Greater China: 72%)	14.6
Ji	iangsu Phoenix	4.5	Hotel Shilla	3.4	Adidas (Greater China: 11%)	13.6
Α	inta Sports	4.3	Paradise	1.9	Samsonite (Greater China: 14%)	4.3
Y	Υ	3.8	GKL	1.8	Tumi	1.6
Y	ouku Tudou	3.7	Saizeriya (Greater China: 6%)	0.7		
D	angdang	0.8				

Source: Bloomberg, Goldman Sachs Global Investment Research.

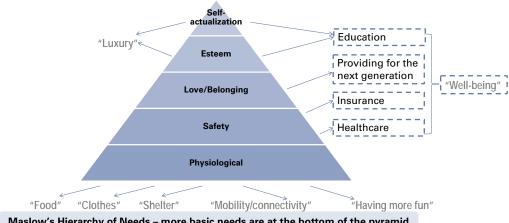
6. Well-being

Xing Kang "30% of college graduates in China cannot find a job at graduation."

- Yu Ming Hong, co-Founder of New Oriental, "Finding Hope in Despair" published by China Citic Press, 2014

In some ways, our last two consumer behaviors, "Well-being" and "Luxury", correspond roughly with the upper sections of Maslow's Hierarchy of Needs, elements that include "safety", "love/belonging", "esteem", and "self-actualization" (Exhibit 71). Under "Wellbeing", we include spending on education and healthcare, as well as spending on insurance and the motivation to provide for the next generation.

Exhibit 71: Maslow's Hierarchy of Needs



Maslow's Hierarchy of Needs - more basic needs are at the bottom of the pyramid

Note: Abraham Maslow was an American psychologist who created Maslow's Hierarchy of Needs, which is a theory of psychological health.

Source: Goldman Sachs Global Investment Research.

Healthcare – more policy driven than others but a consistently fast growth sector

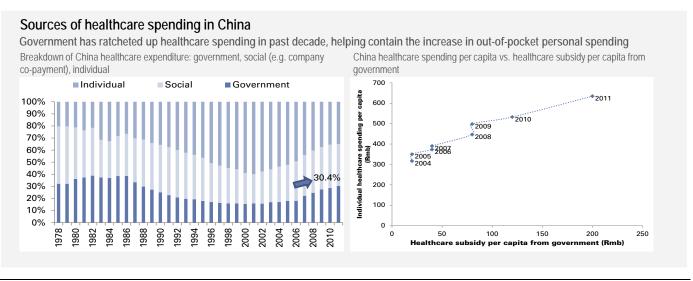
More so than any other area of consumer spending, government policies drive health care spending. In the US, 21-22% of personal expenditures go towards health care vs. 4-5% for Japan and Korea and 6-7% for China. In China, government spending accounts for 30% of total health care expenditure at present, up from 20% in 2000. Personal out-of-pocket expenditure currently accounts for 30% of total, with 97%+ of the population under some type of government-funded coverage. Overall, the per capita out-of-pocket expenditure is around US\$150 at present.

Exhibit 72: Growth trends: healthy growth across all segments as the Urban Middle is increasingly focused on "Wellbeina"

being									
		A-share healthcare compa	nies' median topline grow	/th		Hospital visits a	and spending		
	Finished Dosage	Traditional Chinese	Medical Device	Distribution	Annual outpatients (No.	Annual inpatients (No.	Average spending per	Average spending per	
	Form	Medicine			of visits)	of visits)	outpatient visit	inpatient visit	
2008	16.9%	17.9%	19.3%	21.5%	8.8%	13.9%	n.a.	n.a.	
2009	10.9%	14.7%	23.3%	19.8%	7.9%	14.8%	8.1%	10.2%	
2010	13.9%	14.2%	18.1%	17.8%	6.1%	12.2%	8.2%	12.9%	
2011	12.5%	18.3%	17.5%	19.0%	10.7%	12.9%	8.0%	10.5%	
2012	18.2%	17.4%	15.4%	15.5%	12.4%	18.3%	6.8%	11.7%	
2013	14.5%	22.6%	25.8%	17.4%	n.a.	n.a.	n.a.	n.a.	
08-13 CAGR	14.0%	17.4%	20.0%	17.9%	n.a.	n.a.	n.a.	n.a.	
1014	15.9%	9.3%	19.2%	13.3%	n.a.	n.a.	n.a.	n.a.	
2014	13.3%	9.7%	7.5%	13.7%	n.a.	n.a.	n.a.	n.a.	
3Q14	15.9%	10.8%	11.3%	13.4%	n.a.	n.a.	n.a.	n.a.	

Source: Wind, Frost & Sullivan.

Exhibit 73: Government has stepped up healthcare spending in recent years, but absolute coverage remains low



Source: Wind, National Health and Family Planning Commission (NHFPC), Euromonitor.

"Uniquely Asia": Health care available to different cohorts differs significantly in China. Migrant workers often encounter significant differences in coverage due to Hukou system.

Despite close to universal coverage, the quality of coverage available is drastically different across cohorts

More so than any other consumption goods, health care is drastically different across the different cohorts in China. We illustrate the key differences in Exhibit 74. In short, while the "movers and shakers" approach health care just as their counterparts would in DM, the government officials in China, depending on rank, would have significant allowances in health care. There are many top-grade military and government hospitals where the main objective is to provide quality care to senior government and military officials, both active and retired. On the other end of the spectrum, the working class cohorts tend to go with the most basic care provided by coverage, and generally spend small amounts out of pocket. The migrant workers usually will find health coverage one of the biggest challenges of living in urban areas away from home, as most of them do not have local Hukou and the policy would require them to pre-pay and claim later with the coverage administrators in their home town – this can severely restrict the spending and treatment this cohort now is receiving.

Exhibit 74: While China is close to universal healthcare coverage, the quality of care available to different cohorts is drastically different

	Movers and shakers	Govt/SOE employees	Urban white collar/SME owners	Urban blue collar	Migrant Workers	Rural
Coverage	Private: Have premium private insurance; but prepared to pay out of pocket	Goxt: Senior-ranked officials typically have very high or no ceiling for health care spending Depending on rank, can access special government only hospital; Other ranked officials will have special subsidies on health coverage		Mostly rely on basic state coverage and additional free coverage from employers	Mostly rely on basic state coverage but Hukou system means this group often needs to prepay and claim later from their original place of adobe	Mostly rely on basic state coverage
Consumption behavior	Prefer top-end hospitals and imported drugs	Tend to frequent hospitals catering to government officials	Tend to prefer top hospitals and willing to top up for additional drugs/treatment	Tend to go to basic hospitals	Tend to go to basic hospitals and get basic treatments	Due to lack of mobility and access, usually cannot even get full treatment that is possible under the coverage
			Also willing to purchase medical devices	Not willing to pay out of pocket for premium drugs/treatments	Because of the need to prepay, tend to be more budget conscious than blue collar workers	coverage

Source: Goldman Sachs Global Investment Research.

Urban Middle the key focus for profit pool

Wei Du, our China Healthcare analyst, believes it is the white collar cohort that offers the biggest growth potential in the coming decade for the health care companies' profit pool. This is due to their willingness to spend on patented drugs and consumer-grade medical devices for home use. The mass cohort on the other hand is expected to focus their spending increase on generic drugs and going to basic hospitals, which makes monetizing the growth more difficult.

Exhibit 75: China's elderly population is bigger than US and Japan combined

Demographics aged 65+, China vs. Japan vs. US

Source: Euromonitor.

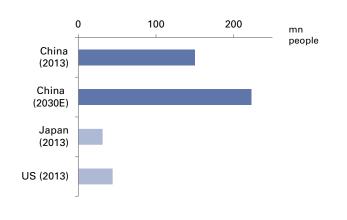
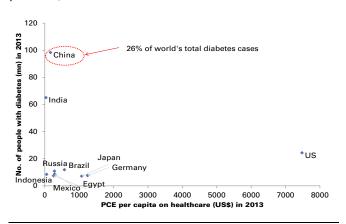


Exhibit 76: China accounts for 26% of world's diabetes cases but many cases are untreated at present

Top 10 countries for number of people with diabetes (20-79 years old)

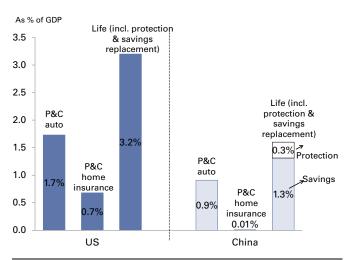


Source: Euromonitor, International Diabetes Federation.

Insurance – fast growth, although life protection products are affordable mainly to the Urban Middle

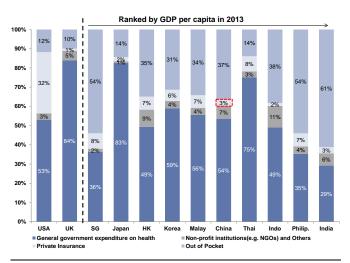
China's aging urban population, combined with rising income, limited investment alternatives and a desire to save and provide a safety net for the next generation remain strong growth drivers for China's insurance market. Mancy Sun, our Asia Insurance analyst, sees growth opportunities differing for Urban Middle (c.28% of total life insurance market) vs. Urban Mass (c.32%). For Urban Middle, the growth will focus on protection-related products, and tier 1 cities are seeing fast growth for private insurance as a funding source for medical expenses. P&C home insurance is also at the very nascent stage (Exhibit 77). For Urban Mass (c.32%) and rural (c.40% of total market), savings-replacement products remain the main feature, however, as private healthcare plan affordability is not yet there for the Urban Mass (Exhibit 79).

Exhibit 77: China's life insurance market is under-indexed compared with P&C auto and is mostly saving-oriented As % of GDP, 2013



Source: China NBS, company data, Goldman Sachs Global Investment Research.

Exhibit 78: In tier 1 cities, we see growth opportunities for private insurance to fund medical expenses Sources of funding for medical expenses, 2010



Source: HK Food and Health Bureau, WHO.

Exhibit 79: Our "hours worked" affordability test on insurance plans

Rmb300,000 benefit for 27-year-old female non-smoker – Price comparison for similar benefits between China Life New Kang Ning (China) and ING Easy Defender (Hong Kong)

Our "hours worked" affordability test											
			(Tage)	HK	Urban Middle	Urban Mass					
			Carrie .		(China)	(China)					
Average hourly earning (US\$)				9.2	5.2	2.6					
(Female, Age 27, Non-smoker) (US\$)	Annual	Policy Term	Special	ľ	No. of working hour	s needed					
	premium		Bonus								
ING Easy Defender Critical Illness - Hong Kong	1,050	To age 100	Υ	114	202	403					
China Life New Kang Ning Critical Illness (2012) - China	1,287	Whole life	N	n.a.	248	494					

Notes: ING Easy Defender's special diseases benefit term: 20% of the sum insured (subject to a maximum of US\$30,000/HK\$240,000) plus a proportionate Special Bonus (if any) and minus any amount due to the Company.

Source: Company data, Goldman Sachs Global Investment Research.

"Uniquely Asia": Intensive focus on education in light of Confucian culture and fierce competition.

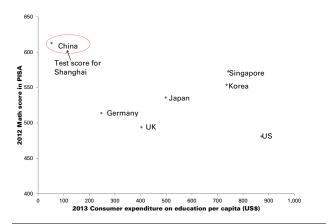
Education – a mismatch between "brains" and "brawn"?

The combination of the Confucian tradition of emphasizing education and a focus on improving the future of the single child in single child households means that education is a big expenditure for the Urban Middle, but most of this goes to individual tutors at present. It is not rare to hear from middle-class households in Tier 1 cities like Beijing and Shanghai that education expenditure (mainly in the form of hiring private tutors) is simply the biggest discretionary expenditure in the household. This is typically not captured in national statistics. Demand for afterschool tutoring is on a mass market scale, with 58% of K-12 students participating, according to IDC and the National Bureau of Statistics. Fei Fang, our China Education analyst, estimates aggregate spending is growing at 10% yoy. Among listed companies, the growth rate has been running well ahead of that as these leaders gain market share. New Oriental has established brand leadership in English studies, while Xueda is known for its 1-to-1 session quality.

Yet all this spending on education seems to not have produced exactly what the market is looking for. In China, competition is fierce to get into college (Exhibit 81) and even fiercer to get a high-paying white collar job after college. As Vanke chairman's aptly put it (see the quote at the beginning of our "Better home" section), it is difficult in today's China to find construction workers at US\$20,000 annual salary, and yet there is fierce competition for a

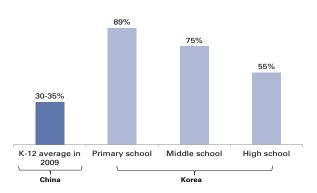
white collar job at US\$8,000 salary. In China, the annual graduating class represents 18% of the pool of approximately 38mn high-paying positions in the urban job market (with average income of US\$21,400), based on NBS household survey statistics. In the US, annual college graduates represent 8% of <u>all</u> jobs (average pay of US\$45,300). This disparity has resulted in growth in spending in the private vocational training sector to gain an extra edge.

Exhibit 80: On a "bang for the buck" basis, China's spending on education yields impressive results
Per capita spending on education vs. test score



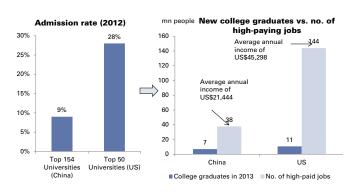
Source: Euromonitor, PISA.

Exhibit 82: We expect the Urban Middle will increasingly act like their counterparts in Korea and Japan Penetration of tutoring service, 2010



Source: iResearch.

Exhibit 81: It's difficult to get admitted into colleges in China but it's even more difficult to find a high-paying job after graduation



Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 83: Growth patterns: major education companies' calendarized sales performances

yoy growth	New Oriental Education &	TAL Education	Tarena International	Nord Anglia Education
	Technology	Group		
2008	47.9%	n.a.	n.a.	n.a.
2009	36.3%	n.a.	n.a.	n.a.
2010	40.1%	62.1%	n.a.	n.a.
2011	37.8%	60.4%	n.a.	n.a.
2012	30.4%	30.9%	120.7%	20.6%
2013	21.6%	37.3%	63.4%	28.5%
08-13 CAGR	33.1%	n.a.	n.a.	n.a.
1014	16.4%	45.9%	60.7%	52.9%
2014	20.0%	45.0%	53.4%	55.0%
3Q14	1.4%	33.1%	41.3%	15.0%

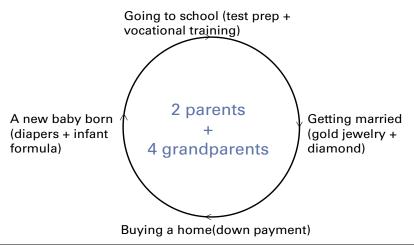
Source: Euromonitor, China Education and Research Network, US National Center for Education Statistics.

"Uniquely Asia":
Chinese parents,
together with virtually
all grandparents, save to
spend on the youngest
generation in the family.
When it comes to
spending on the
children, the
affordability calculation
becomes drastically
different from other
categories.

Saving for next generation

One strong cultural aspect of the Chinese household is the closeness of the family bond – not just between parents and children, but between grandparents and grandchildren. The one-child policy of course has a lot to do with it – it is now the reality of most urban extended families that there is only one young child for six adults. As a result, when it comes to spending on the next generation for key "milestone" expenditures such as those listed in Exhibit 84, the affordability calculation needs to be recalibrated. It is not surprising therefore that we are seeing the premium segment of infant formula, diapers, etc. experiencing dramatic growth in recent years, with no signs of abating.

Exhibit 84: Chinese parents and grandparents save to spend on the children



Source: Goldman Sachs Global Investment Research.

Exhibit 85: "Well-being": Key stocks with China exposure (CY13 regional revenue exposure in brackets)

	Local leaders (rank by mkt cap)	Mkt cap (USD bn)	Regional Champions (rank by mkt cap)	Mkt cap (USD bn)	Global leaders (rank by mkt cap)	Mkt cap (USD bn)
	"Well-being"					
'康"	China Life	143.4	AIA Group (Greater China: 27%)	67.0	Johnson & Johnson (APAC & Africa: 19%)	290.5
(ang	Ping An Insurance	98.1	Prudential	57.2	Novartis	250.4
tung	China Pacific Insurance	47.6	Kao (China: 1.5%)	19.9	Roche (AXJ: 11%)	235.6
	New China Life	22.2	Unicharm (China: 15.5%)	15.0	Pfizer	196.3
	PICC Group	21.0	Pigeon (Greater China: 28.9%)	2.4	Merck & Co (APXJ: 9%)	165.5
	Yunnan Baiyao	10.9			Amgen	120.2
	Sinopharm	9.8			Sanofi	115.9
	Jiangsu Hengrui Medicine	9.4			Novo Nordisk (Greater China: 9%)	112.8
	Fosun Pharma	8.1			Bayer (APAC: 21%)	108.1
	Shanghai Pharma	7.0			AbbVie	103.0
	Tianjin Tasly	6.9			GlaxoSmithKline	101.4
	Sihuan Pharma	6.8			Bristol-Myers Squibb	97.2
	CSPC Pharma	5.1			AstraZeneca (Greater China: 7%)	88.2
	Sino Biopharm	4.4			Eli Lilly & Co	77.2
	CMS .	3.8			Allianz SE	72.8
	New Oriental	3.3			Actavis	68.0
	TAL Education	2.2			El du Pont de Nemours (Greater China: 10%)	65.0
	Tarena	0.6			Metlife (Asia: 19%)	59.2
					AXA SA	53.5
					Merck KGaA	40.4

Source: Bloomberg, Goldman Sachs Global Investment Research.

7. Luxury

"衣yi 食hi "Zhu" "在" "Xing" "Xing" "Xing" "Kang"

She

"Uniquely Asia: China's consumption of high-end luxury is often courtesy of "other people's money".

"With the current anti-corruption drive, officials can no longer receive blatantly expensive products, so we're seeing a trend towards less-expensive giving."

- Rupert Hoogewerf, founder of the Hurun Report, interview with Reuters, Jan 2013

Is China's love affair with luxury over?

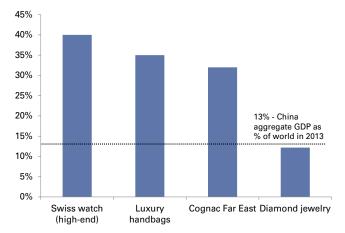
The subject of luxury consumption affects virtually all the previous categories – hence we have left this discussion to the end. More than any other category, the Chinese consumer has become the most important cohort globally for luxury, accounting for approximately 30% of the total market in 2013 (Exhibit 86).

"Other people's money" resulted in over-indexing and over-consumption of many products

While per capita consumption may still look reasonable for some categories, this is a category where the overwhelming majority of the consumer base has been, and will likely remain, within the first three cohorts – an addressable market of 147 mn people. Not surprisingly, there is also heavy participation from the state/public sector, accounting for one-third to two-thirds of total consumption, by our estimates, depending on the product. In short, we think China's own anti-graft and austerity measures have caused a reset in the demand for some luxury products.

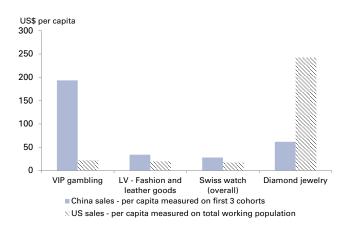
Beneath the surface, the impact of the movers and shakers group is also worth considering. According to Simon Cheung, our Macau Gaming analyst, 15,000 to 20,000 Chinese VIP customers lost on average US\$1 mn each in 2013 in Macau, accounting for 80% of total Macau GGR. This type of concentration is not limited to gaming. Tenfu, China's leading tea brand franchise, boasts about 10,000 customers who each spent Rmb10,000 (US\$1,500) on tea products in 2013, accounting for 70%+ of its total sales. Take another product – the liquor Moutai, which has a selling price of US\$150 per bottle, and produced 15,700 tons in 2013 (around 31 mn bottles). In comparison, Dom Perignon, one of the most well-known luxury champagnes, has a similar selling price of US\$150, and produces about 17 million bottles each year for the global market.

Exhibit 86: China's contribution to global luxury demand by product: Are diamonds the last untapped mine? China sales as % of global, Aug 13-Aug 14



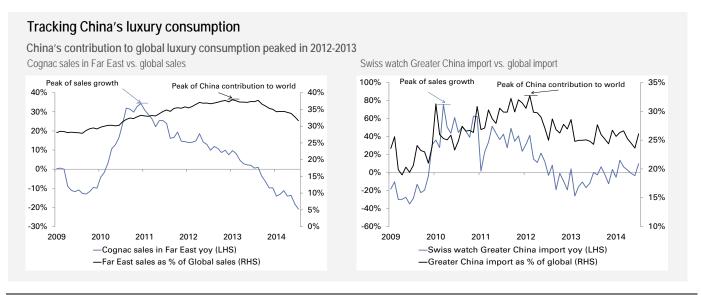
Source: Company data, BNIC, De Beers, Goldman Sachs Global Investment Research.

Exhibit 87: Measured by top 10% of population, China's luxury spending penetration surpassed the US in 2013



Source: Company data, BNIC, De Beers, Goldman Sachs Global Investment Research.

Exhibit 88: China's contribution to global luxury consumption peaked in 2012-2013



Source: Bureau National Interprofessionnel du Cognac, Federation of the Swiss watch industry.

Exhibit 89: Key luxury companies' sales growth (cFX)

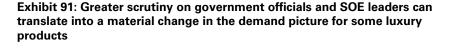
Company	Fiscal year end	1Q12	2012	3Q12	4012	1013	2013	3Q13	4013	1014	2014	3Q14
LVMH (F&L)	Dec	12.0%	7.9%	4.4%	4.5%	3.0%	7.1%	2.2%	7.6%	9.0%	0.0%	0.0%
Hermes	Dec	17.6%	13.4%	15.7%	18.6%	12.8%	15.9%	12.8%	11.0%	14.7%	8.9%	11.1%
Gucci (Brand)	Dec	11.6%	10.0%	7.0%	8.2%	4.0%	4.1%	0.6%	0.2%	0.3%	-2.4%	-1.9%
Prada (group)	Jan	41.3%	19.3%	24.4%	13.7%	15.9%	13.4%	12.3%	10.7%	3.8%	4.0%	
Prada (brand)	Jan	46.4%	22.5%	29.2%	15.8%	19.1%	16.1%	16.2%	13.6%	4.8%	5.2%	
Bottega Veneta	Dec	33.0%	37.4%	20.6%	32.7%	8.8%	17.2%	15.8%	13.4%	14.6%	20.2%	10.4%
Ferragamo	Dec	19.1%	16.7%	8.0%	10.8%	9.5%	13.4%	10.4%	8.9%	7.5%	7.7%	2.8%
Burberry	Mar	14.8%	11.0%	5.0%	8.5%	9.9%	10.0%	8.5%	12.3%	11.8%	17.0%	13.0%
Hugo Boss	Dec	10.0%	14.0%	0.0%	18.2%	-1.8%	9.5%	5.4%	10.0%	5.5%	7.7%	9.0%
Tod's	Dec	7.1%	8.1%	-0.6%	6.1%	-5.5%	9.7%	0.0%	4.5%	2.2%	-3.3%	1.0%
Swatch	Dec	12.8%	12.8%	9.2%	9.2%	7.7%	7.7%	10.4%	10.4%	8.5%	8.5%	
Richemont	Mar	26.0%	12.9%	9.9%	5.2%	9.2%	9.3%	9.2%	8.7%	15.6%	4.0%	4.0%
Tiffany	Jan	4.0%	-1.0%	1.0%	0.0%	8.0%	5.0%	7.0%	6.0%	11.0%	3.0%	7.0%
Diageo	Jun							3.1%	-0.9%	-1.3%	0.8%	-1.5%
Pernod-Ricard	Jun					6.0%	5.0%	-1.0%	2.0%	-7.3%	-8.6%	-1.2%
Median		13.8%	12.9%	7.5%	8.9%	8.0%	9.5%	7.8%	8.8%	8.0%	4.0%	3.4%

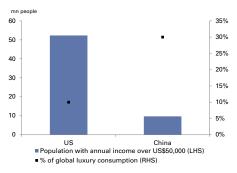
Source: Company data.

From luxury to accessible: Real demand still to increase – but at entry price point, and potentially lower profitability

We believe there is no denying that the real luxury consumer class will continue to grow in China. However, by spending money from their own pockets, the behavior of this cohort will be much more similar to their counterparts in the DM. By and large we expect the key beneficiaries to be both soft and hard luxury at accessible price points. This group would include watches that cost 1-2 months typical white collar salary (Tissot, Longines), handbags that retail at US\$500-2,000 (as opposed to US\$3,000+) and diamond jewelry that costs below US\$2,000. Diamonds in particular look to be one of the most under-indexed luxury products in comparison, and could be poised for significant growth in the years ahead (Exhibit 87).

Exhibit 90: China's population with income over US\$50,000 is just 1/5 that of US but triple the share of luxury consumption



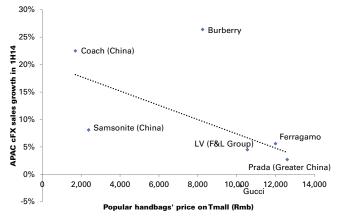




Source: Euromonitor, US IRS.

Source: Company data, Hurun, Financial Times, Xinhuanet, Goldman Sachs Global Investment Research.

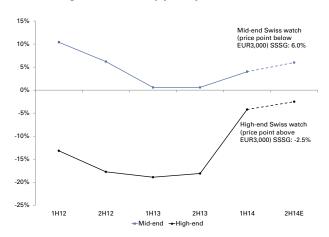
Exhibit 92: Entry-level luxury is still doing well in China Popular handbag prices on Tmall in China as of Oct 28, 2014



Note: Burberry's 2Q14 APAC cFX growth is using 1Q14 cFX growth as proxy.

Source: Tmall.com, Company data, Goldman Sachs Global Investment Research.

Exhibit 93: Entry-level Swiss watches also still doing well– Hengdeli's SSSG by price point



Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 94: "Luxury": Key stocks with China exposure (CY13 regional revenue exposure in brackets)

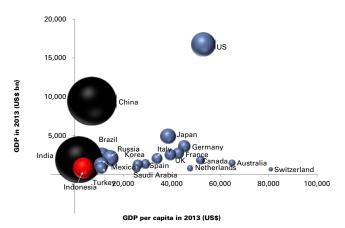
	Local leaders (rank by mkt cap)	Mkt cap (USD bn)	Regional Champions (rank by mkt cap)	Mkt cap (USD bn)	Global leaders (rank by mkt cap)	Mkt cap (USD bn)
	"Luxury"					
'奢"	Sands China	38.7	Genting Singapore	9.6	LVMH (Asia ex Japan: 30%)	76.9
	Galaxy	22.8	Crown Resorts (Greater China net income: 43%)	7.3	Diageo (GS estimate for China: 1%)	69.7
She	Kweichow Moutai	37.2	Genting Malaysia	6.3	Richemont (Greater China: 24%)	49.5
	Wynn Macau	14.2	Tatts Group	4.1	Hermes (APAC: 33%)	36.5
	Hengdeli	0.9	Tabcorp	2.6	Pernod Ricard (GS estimate for China: 14%)	28.2
			Echo Entertainment	2.5	Swatch (Greater China: 38%)	23.7
			Sky City Entertainment	1.7	Kering (APXJ: 25%)	23.2
					Prada (Asia ex Japan: 36%)	14.6
					Tiffany (APXJ: 23%)	13.4
					Ferragamo (Asia ex Japan: 37%)	4.0
					Remy Cointreau (APAC: 29%)	3.1

Source: Bloomberg, Goldman Sachs Global Investment Research.

Appendix: The Asian Consumers and our assumptions behind China's six key population cohorts

Exhibit 95: China, India and Indonesia relative to world's top 20 economies

Top 20 economies in the world in terms of GDP in 2013

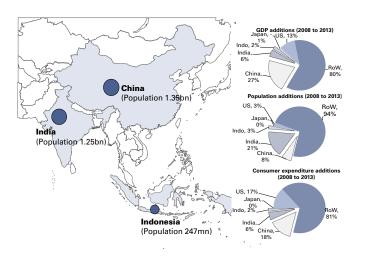


Note: Bubble size represents total population in 2013.

Source: Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 96: China, India and Indonesia contributed 35% of global GDP growth in 2008-2013

Incremental population, GDP, consumer expenditure (currency neutral) from 08-13



Source: Euromonitor.

Exhibit 97: Leaving China, India and Indonesia aside, Thailand, Malaysia, Philippines, Vietnam have an aggregate population similar to the US

Key Asian countries' contribution to global growth in past five years

	2	013 aggregate		08-13 aggregate change (currency neutral)			08-13 aggregate change as % of world 08-13 aggregate change				
	GDP	PCE	Population	GDP	PCE	Population	GDP	PCE	Population		
	US\$ bn	US\$ bn	mn	US\$ bn	US\$ bn	mn	%	%	%		
China	9,469	3,393	1,354	4,369	1,585	33	27.4%	17.6%	7.7%	China	
Japan	4,898	2,913	127	-237	-7	-1	-1.5%	-0.1%	-0.2%	Japan	
India	1,938	1,111	1,246	977	555	90	6.1%	6.2%	21.2%	India	
Australia	1,498	837	23	306	177	2	1.9%	2.0%	0.4%	Australia	Although smaller
Korea	1,305	625	50	296	123	1	1.9%	1.4%	0.3%	Korea	a standalone bas
Indonesia	868	486	247	395	198	12	2.5%	2.2%	2.9%	Indonesia	these four ASEA
Taiwan	489	291	23	65	43	0	0.4%	0.5%	0.1%	Taiwan	
Thailand	387	233	68	92	61	2	0.6%	0.7%	0.5%	Thailand	"Tigers" boast a
Malaysia	313	168	30	69	50	2	0.4%	0.6%	0.5%	Malaysia	population size
Singapore	298	114	5	81	32	1	0.5%	0.4%	0.1%	Singapore	similar to the US
Philippines	277	202	98	92	64	8	0.6%	0.7%	1.9%	Philippines	_ can also contribu
Hong Kong	274	189	7	54	62	0	0.3%	0.7%	0.1%	Hong Kong	meaningfully to
New Zealand	174	103	4	23	16	0	0.1%	0.2%	0.0%	New Zealand	aggregate demar
Vietnam	171	107	91	94	55	5	0.6%	0.6%	1.1%	Vietnam	
World	75,058	42,290	7,126	15,974	8,984	423	100%	100%	100%	World	

Source: Euromonitor, Goldman Sachs Global Investment Research.

January 13, 2015

Exhibit 98: In China, 11% of the total population accounts for 53% of income and 61% of discretionary cashflow Discretionary cashflow analysis for six cohorts in China, 2013

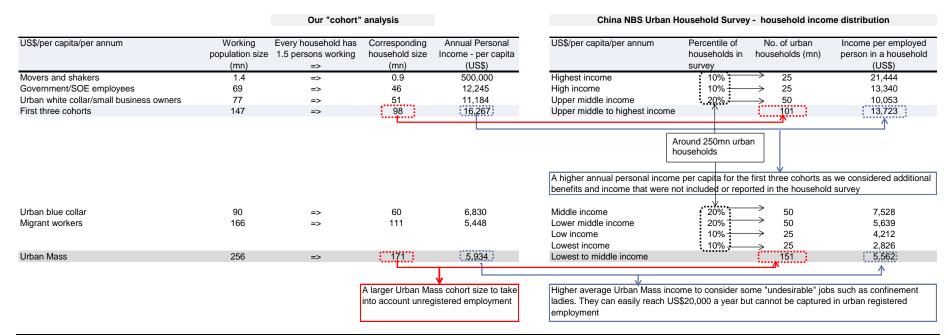
Working population

US\$/per capita/per annum	Movers and Shakers	Government/SOE staff	Urban white collar/small business owners	Urban blue collar	Migrant workers	Rural workers	Overall working population	Non- working population	Total population
Working population size (mn)	1.4	69	77	70	166	387	770	+ 547	= 1,354
Annual Personal Income - per capita	500,000	12,245	11,184	6,830	5,448	2,000	5,909		
Disposable Personal Income - per capita	450,000	11,878	10,960	6,830	5,448	2,000	5,764		
"Cash Income" - per capita	450,000	11,878	10,960	6,830	5,448	2,000	5,764		
Borrowing - per capita	-	59	55	20	16	6	19		
Total cash flow per capita	450,000	11,937	11,015	6,851	5,465	2,006	5,783		
Essentials consumption - (US\$/per capita/per annum)									
(1) Food	22,500	2,376	2,192	1,434	1,117	410	1,049		
(2) Housing (rent/mortgage payments)	22,500	1,782	2,192	1,503	1,308	280	978		
(3) Transportation	9,000	594	658	444	354	200	352		
(4) Utility	6,750	475	438	273	218	90	215		
(5) Medical spending	9,000	594	603	273	245	140	278		
(6) Education spending	9,000	238	329	239	163	40	147		
Total cash spending on essentials	78,750	6,058	6,412	4,167	3,405	1,160	3,019		
Discretionary cash flow - (US\$/per capita/per annum)	371,250	5,880	4,603	2,684	2,060	846	2,765		
Savings adjustment - (US\$/per capita/per annum)	202,500	2,043	1,885	1,161	926	440	1,260		
Adj. discretionary cash flow - (US\$/per capita/per annum)	168,750	3,837	2,718	1,523	1,133	406	1,504		
PCE per capita - (US\$/per capita/per annum)	247,500	9,894	9,130	5,690	4,539	1,566	4,523		
% Total									
Working population	0.2%	9%	10%	9%	22%	50%		→	
Income	15%		19%	10%	20%	17%			
Disposable income	14%		19%	11%	20%	17%			
Total PCE	10%		20%	11%	22%	17%		440/ 64 4	
(1) Food	4%		21%	12%	23%	20%		11% of total	
(2) Housing	4%		22%	14%	29%	14%		account for	
(3) Transportation	5%		19%	11%	22%	29%		income and	61% of
4) Utility	6%		20%	11%	22%	21%		discretionar	y cashflow
5) Medical spending	6%		22%	9%	19%	25%			
6) Education spending	11%		22%	15%	24%	14%			
Total Essentials cash flow	5%		21%	12%	24%	19%			
Discretionary cashflow	24%		17%	9%	16%	15%		→	
Adj. discretionary cash flow	20%	23%	18%	9%	16%	14%	100%		

Source: China NBS, CEIC, Euromonitor, Goldman Sachs Global Investment Research.

January 13, 2015

Exhibit 99: Our income assumptions for Urban Middle and Urban Mass reconciled with China NBS urban household survey for income distribution



Source: Goldman Sachs Global Investment Research, China NBS.

Disclosure Appendix

Reg AC

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