How Much Revenge Spending Can We Hope For?

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- The prospect of income and consumption growth in 2020 is quite dim, meaning that any "revenge spending" after the outbreak will be underwhelming.
- COVID-19 could lead to an additional job loss of 24 million in China, or an unemployment rate near 10%. Household income growth will halve at best.
- Higher household debt will constrain the prospect of a consumption boom.
- Sales vouchers are a micro story, not a macro one yet.

As China gradually recovers from the COVID-19 outbreak, the market is expecting "revenge spending" by Chinese households, like the one following the SARS outbreak in 2003. Local governments are also trying to stimulate consumer spending by giving out vouchers. However, we think annual consumption growth will still slow down significantly from last year's 8.6% to about 4%.

This is because the job market has yet to heal from the severe impact from the coronavirus, and Chinese households are facing the slowest income growth in recent decades. Also, households are loaded with much higher debt than before and the pressure to service these debts will constrain their ability to spend. Last, the scale of sales vouchers is still too limited to have a meaningful macro impact and the government is only funding a fraction of them.

Over 20 million jobs will be lost

Major economies are all facing huge unemployment pressure and China is no exception. Official urban unemployment rate increased from 5.2% to 6.2% in the first two months, meaning a loss of 5.5 million jobs. But this is just the beginning. We estimate that the total loss of jobs could be 24 million, higher than that in the global financial crisis. The service sector will cut workforce by 15 million and the manufacturing sector will lose 9 million jobs.

China's urban workforce is about 530 million according to the fourth national economic census in 2018. Among them, 330 million people in the service sector are facing tremendous stress as the services are getting hit the hardest by the outbreak. The Caixin/Markit service PMI fell to a record low of 26.5 in February and only recovered to 43 – the second lowest of all time, in March.

Accommodation and catering services are the biggest victims. They are about to lose 20% of annual revenue and cut 8 million jobs. Leasing and commercial services, household services, transportation, and retail are the other major losers and they will shed another 7 million jobs, making the total job loss in the service sector 15 million (See the methodology at the end of the note).

The manufacturing sector employs 120 million workers, and we expect it to cut 9 million jobs this year. The reduction of manufacturing jobs is a consistent trend over the past few years as the Chinese economy pursues industrial upgrade and shifts away from manufacturing towards services. Total employment in the manufacturing sector fell by 14 million from 2013 to 2018, meaning that 3 million jobs are gone every year regardless.

The outbreak will strengthen this trend. We estimate that the manufacturing sector will shed 6 million additional jobs as a result of the outbreak. This is partly because the outbreak will cause the sector to lose 7% revenue, meaning that 2 million jobs may be sacrificed to offset the loss. Further, firms will use the outbreak as an opportunity to reduce positions for less skilled labor, which we estimate at about 4 million.

Construction, which employs over 68 million people, is also suffering now as both infrastructure spending and property investment are falling. But they should pick up later as the government will ease policies gradually. We expect housing sales volume to bottom out after declining by nearly 40% yoy in Q1, and for the full year it may fall by 12%. Growth of infrastructure investment could accelerate a bit more, as more government bonds will be issued to finance infrastructure projects. On a net basis, we estimate that the construction sector could save all the jobs, but it is unlikely to absorb more labor as it did in 2009 when China had a construction boom after launching the big stimulus.

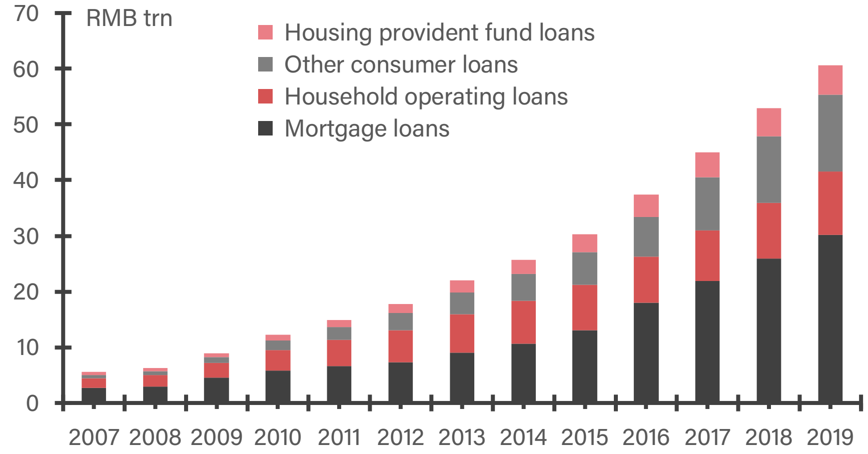
On the positive side, some industries are still likely to expand this year and the government will also adjust policies to stabilize the job market, although they are far from enough to offset the losses. The IT sector is probably the biggest beneficiary from the outbreak and may add 2.2 million jobs. In the public sector, Beijing has urged state-owned enterprises and local governments to increase recruitment for two consecutive years. Hubei province, the epicenter of the outbreak, has already announced the expansion of post-graduate education and public servant programs. As such, education and utility sectors are likely to add more jobs. Public health and administration sectors may receive more support after the outbreak and expand employment as well. Combined, these sectors could hire another 1.5 million people.

Taken together, unemployment may cause household wage income to decline by nearly RMB 1trn, or 2.5% of household disposable income in 2019. The overall impact on household income is likely greater, because people may also lose business or property income. Chinese urban residents had 9% disposable income growth in 2019, and they would be lucky to see half of that growth this year. Annual consumption growth would also halve from last year's 8.6% to about 4%.

Chinese households set aside more money to service debt

Another factor that subdues consumption is Chinese households' mounting debt burden. Consumers need to set aside RMB 7-8 trillion to service their debt every year and this pressure will constrain their ability to spend more after the outbreak.

China's household debt reached RMB 60trn

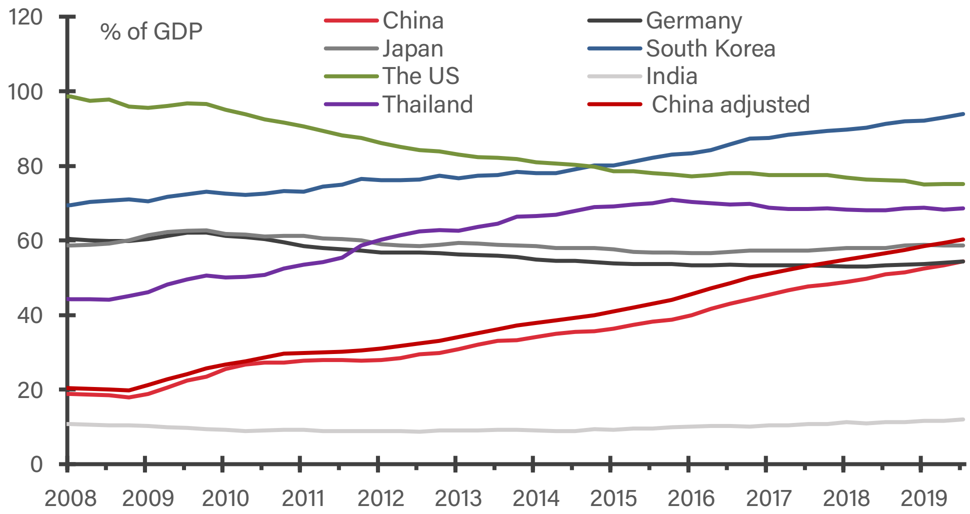


(Source: CEIC, Wind)

Total household debt in China reached over RMB 60trn (60% of GDP) by the end of 2019 thanks to the housing boom as well as the rising appetite for personal credit. The level is on par with global average and is higher than that in several advanced economies.

Over half of the debt is related to housing. Commercial mortgage loans totaled RMB 30trn and the loans from the housing provident fund were RMB 5trn. Operating loans, borrowed by individuals to run small businesses, totaled RMB 11.3trn. The remaining RMB 13trn is consumer debt and over half of it is credit card debt. In fact, total credit card debt in China reached RMB 7.6trn ($1.08trn) at the end of 2019, surpassing the U.S. which saw an all-time high of $930bn in credit card debt. The actual number is even higher because this has not considered the consumer credit given by e-commerce platforms, which could be at least another RMB 2trn.

China's household leverage is rising to global average



(Source: CEIC, BIS)

The debt servicing cost is quite high. Annual mortgage payment was over RMB 2trn in 2019. Interest payment for the operating loans was over RMB 650bn. Together, they account for 6% of household disposable income, a ratio that has doubled over the past ten years. Of the RMB 7.6trn credit card debt, RMB 5trn needs to be paid when the bills are due every month and over RMB 2trn is spread over a period of 24 months as borrowers don't have enough cash flow. The default rate of credit card debt could rise this year as a result of job loss, and the social credit system means that people who failed to make payments may never be allowed to borrow again from banks, a risk for consumption growth in the future.

The sales voucher is a micro story, not a macro one yet

Local governments have rolled out sales vouchers to promote consumption. Since March 13, at least 30 cities have announced the distribution of sales vouchers. Consumers are offered vouchers with small face value (RMB 10-50) and can spend them almost anywhere in the city. For example, Hangzhou municipal government announced that the distribution of RMB 100mn voucher boosted consumption by RMB 1.2bn. Most vouchers probably went to consumer staples. In 2009 when Hangzhou did the same, more than 70% of the money was spent in the supermarket. However, since the values of the vouchers are quite small, they may just push up consumption temporarily in a few jurisdictions.

The governments are planning bigger programs. Starting in mid-April, they will raise the value of the vouchers and direct consumption towards targeted areas such as automobile, tourism and entertainment. But it seems most vouchers are paid by the retailers themselves. So far, most of them are no different than promotions offered in the name of the government. We probed into seven cities and one province that have distributed vouchers totaling RMB 3.7 bn and found that only 30% is funded by the government (see table below). The most powerful policies so far are still direct subsidies from local governments for certain sectors, such as automobile, and it is unclear whether this would benefit the overall consumption.

(Table continues on next page)

Consumption coupons* by city and funding source

Announcement Date	Province	City	Government (RMB mn)	Private (RMB mn)
2020/4/1	Henan	Zhengzhou	80	320
2020/3/31	Guangdong	Foshan	100	600
2020/3/29	Zhejiang	Jiaxing	56**	144**
2020/3/28	Zhejiang	Hangzhou	500	1,180
2020/3/25	Zhejiang	Shaoxing	180	0
2020/3/23	Anhui	Hefei	36**	94**
2020/3/18	Hunan	-	100	0
2020/3/13	Jiangsu	Nanjing	50	268
Total			1,102	2,606

(Source: Media reports, Plenum.
* Include only those with total value larger than RMB 100mn and at least partially funded by government money. Unrealized promises are not counted, such as Zhejiang's promise to issue RMB 1.1 billion coupon to promote local tourism.
**Public sources did not disclose the amount funded by the government, therefore we assumed the same ratio (28:72) as observed in other data.)

Appendix 1: How we calculated job loss

We estimated job loss via two steps.

First, we estimate the potential annual revenue loss by industry as a result of the outbreak. Based on the industrial profit reported by the National Bureau of Statistics and high frequency numbers such as passenger traffic and property sales, we develop our projections for the rest of the year. We also benchmark our estimates with those from industry associations and relevant companies. For example, the China Passenger Car Association estimated that annual auto sales could fall by 8% this year, and several property developers are expecting 10-15% sales decline. China Tourism Academy estimated that the industry's revenue may shrink by 20%, which will affect accommodation and catering services.

Second, we translate the revenue loss into job loss via elasticity ratios. These ratios were developed by dividing employment growth by nominal GDP growth by industry in 2009 when the impact of global financial crisis was revealed. Starting from there we made several important adjustments to reflect the recent trend. For example, we assume the elasticity ratio for manufacturing to be 1, meaning that firms will fully pass their revenue loss to workers as they pursue industrial upgrade which reduces their reliance on labor. We also assume the elasticity ratios for accommodation, catering, and retail to be 1, as these sectors are hit much harder this time. They also do not require highly skilled labor, meaning that they are more likely to lay off workers in difficult times.

Appendix 2: Change of Revenue and Employment by Industry

	Rev. Loss	Elasticity	Job Loss	Formal (mn)	Informal (mn)	Sum (mn)
Manufacturing	-7%	1.00	-7%	-7.6	-1.8	-9.3
Accommodation and Catering	-20%	1.00	-20%	-1.4	-6.7	-8.1
Leasing and Commercial Services	-16%	0.55	-9%	-2	-0.4	-2.4
Transport, Storage and Post	-5%	1.20	-6%	-0.9	-1.1	-1.9
Resident and Other Services	-20%	0.29	-6%	-0.3	-1.1	-1.4
Wholesale and Retail Trade	-1%	1.00	-1%	-0.4	-0.9	-1.3
Real Estate	-12%	0.37	-4%	-0.6	-0.1	-0.7
Culture, Sport and Entertainment	-18%	0.18	-3%	-0.1	-0.1	-0.2
Electricity, Gas, and Water Production and Supply	4%	0.10	0%	0.0	0.0	0.0
Mining	1%	0.0	0%	0.0	0.0	0.0
Construction	0%	1.00	0%	0.0	0.0	0.0
Scientific Research	0%	0.33	0%	0.0	0.0	0.0
Water Conservancy, Environment and Utility Management	11%	0.25	3%	0.1	0.0	0.1
Education	12%	0.06	1%	0.2	0.0	0.2
Health Care, Social Security and Welfare	14%	0.28	4%	0.5	0.1	0.6
Financial Intermediation	9%	0.40	4%	0.7	0.0	0.7
Public Administration and Social Organization	13%	0.21	3%	0.7	0.0	0.7
Information Transmission, Software and Information Technology	20%	1.00	20%	2.0	0.1	2.2
Total Job Loss (Mn)				-9.0	-11.9	-20.9
Total Urban Employment				382	148	530
% Lost				2.4%	8.1%	3.9%

(Source: CEIC, the fourth national economic census by NBS, media reports, Plenum. Informal jobs are assumed to be 50% more vulnerable than formal jobs.)

Appendix 3: Change of employment and wage by industry

	Formal Job Loss (mn)	Informal Job Loss (mn)	Formal Wage (RMB)	Informal Wage (RMB)	Total Wage Loss (RMB bn)
Manufacturing	-7.6	-1.8	72,088	49,275	-632
Accommodation and Catering	-1.4	-6.7	48,260	39,632	-334
Leasing and Commercial Services	-2	-0.4	85,147	53,382	-190
Transport, Storage and Post	-0.9	-1.1	88,508	50,547	-129
Resident and Other Services	-0.3	-1.1	55,343	41,058	-61
Wholesale and Retail Trade	-0.4	-0.9	80,551	45,177	-70
Real Estate	-0.6	-0.1	75,281	51,393	-48
Culture, Sport and Entertainment	-0.1	-0.1	98,621	44,592	-16
Electricity, Gas, and Water Production and Supply	0.0	0.0	100,162	44,239	0
Mining	0.0	0.0	81,429	44,096	0
Construction	0.0	0.0	60,501	50,879	0
Scientific Research	0.0	0.0	123,343	61,876	0
Water Conservancy, Environment and Utility Management	0.1	0.0	56,670	42,409	6
Education	0.2	0.0	92,383	46,228	16
Health Care, Social Security and Welfare	0.5	0.1	98,118	52,343	49
Financial Intermediation	0.7	0.0	129,837	62,943	86
Public Administration and Social Organization	0.7	0.0	87,932	26,744	62
Information Transmission, Software and Information Technology	2.0	0.1	147,678	76,326	309
Total Wage Change	-9.0	-11.9			-952
Total Wage Income					24,061
% Lost					3.9%

(Source: CEIC, the fourth national economic census by NBS, Plenum)