HSBC Global Research

18 January 2022

China Inside Out

Why capital returns are set to rise

Free to View
Economics - China

- Cooling property investment frees up trillions of RMB in new capital, which is being allocated to more productive sectors
- Medium and high-tech manufacturing has a capital return more than double that of the property sector
- This capital reallocation will not only lift total capital returns but can also lower the debt intensity of GDP

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Transition. China Evergrande's debt woes underscore a major transition in China: the decades long construction boom is coming an end, freeing up trillions of RMB of new capital. And investment has already started rotating to the manufacturing sector, especially medium and high-tech industries. Beijing is selectively loosening restrictions on property lending, but the purpose is to provide a floor to the property downturn rather than propping up the property market again. We expect this transition to gain momentum in the coming years for the following reasons: (1) capacity utilisation rates and profitability in the manufacturing sector have rebounded strongly to historic highs; (2) the new supply of 10m university graduates per year – more than the US, Japan, Germen and Korea combined – will provide human capital support for the expansion of the medium and high-tech manufacturing business; (3) improving national innovation capability will lead the industrial upgrading; and (4) Beijing's technology push means more policy support for the expansion of medium and high-tech manufacturing sectors.

Rotation. This rotation in investment is set to lift overall capital returns as medium and high-tech manufacturing has much higher levels of capital returns than the property sector (5%). The gap is even bigger when the capital return is measured as the incremental output generated by per unit of investment, with higher-end manufacturing more than double that of property investment. Apart from boosting capital returns, we also estimate that diverting capital away from real estate towards medium and high-tech manufacturing will likely provide an annual 0.2ppt boost to GDP in the coming years. In addition, the more efficient use of capital is the ultimate solution to the dilemma between sustaining high GDP growth and deleveraging.

Credit easing. We expect Beijing to implement more policies to foster this reallocation of capital towards medium and high-tech manufacturing and other more productive sectors in the coming years. In fact, a key message from the annual Central Economic Work Conference in December is that this year the authorities will step up targeted credit easing, such as increasing relending facilities and window guidance, to prompt more lending to manufacturing and green investment projects. Over time, fiscal support can also help to incentivise more investment in these areas through tax cuts for R&D spending, manufacturing upgrading and green investment. Continued opening and reform through deeper integration of global trade and strengthening IPR protections will also help lead to increased technology diffusion and spur innovation and investment.

This is an abridged version of a report by the same title published on 18-Jan-22. Please contact your HSBC representative or email AskResearch@hsbc.com for more information.

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Why we are bullish on capital returns

- The end of the construction boom in property and traditional infrastructure will free up trillions of RMB of capital …
- … which will be channelled towards new growth drivers: manufacturing upgrading and green investment
- More capital moving to these areas of higher capital returns will not only boost output, but also reduce the macro-leverage ratio

The great transition is underway

The heyday of massive spending on highways, railroads and airports is now behind us

The recent property sector saga has highlighted the risks of overleveraging in the sector. Accordingly, Beijing has been tightening the financing levers for the sector, leading to a drop-off in property investment towards the end of 2021. Meanwhile, infrastructure investment, once a key countercyclical policy tool is no longer going to be the driving force for investment it once was as much of the construction for traditional infrastructure has now been built. Of course, new infrastructure development still provides opportunity for investment and will keep growth at a moderate level, but the heyday of massive spending on highways, railroads and airports is now behind us.

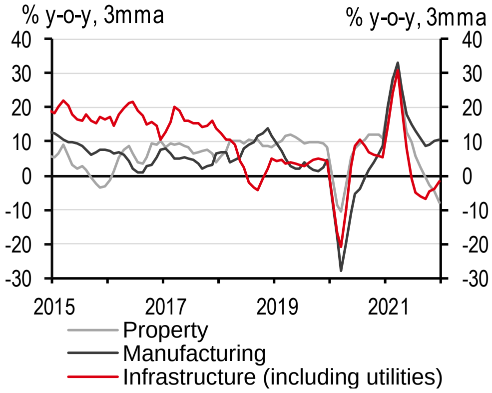
With the construction boom set to slow, this should free up trillions of RMB in capital to be allocated to other sectors. But the question is where will this capital go? Beijing has identified new growth drivers that are already gaining more support, namely manufacturing upgrading and green investment. This will play out in both the near term to act as a buffer again current headwinds as well as in the longer term to drive sustained growth, as was highlighted in the 14th Five-year Plan.

There are signs that this transition is already underway. Manufacturing investment towards the end of 2021 had picked up to over double-digit growth on account of robust exports, strong profits and high capacity utilisation rates. Most pronounced was the acceleration in higher-end manufacturing, which was a driving force for manufacturing investment's recovery (see chart 2).

The amount of outstanding green lending rose to over RMB15trn in 2021

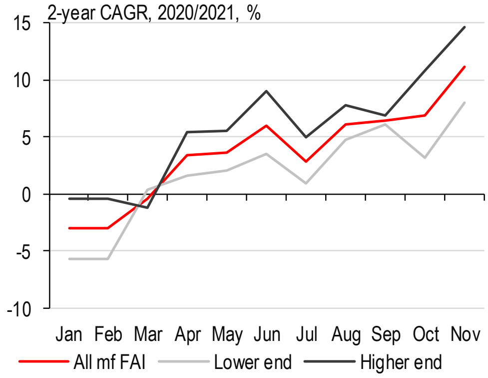
Meanwhile, Beijing's goals of reaching peak carbon emissions by 2030 and carbon neutrality by 2060 has made "green" a key focus. The International Energy Agency (IEA) estimates there needs to be RMB200trn of spending by 2060 to reach these goals, translating to at least RMB5trn a year or 5% of GDP for green investment. We are already seeing a boom in green lending. The amount of outstanding green lending rose to over RMB15trn in 2021, which is at least a RMB3trn increase from 2020 levels. With strong demand for green projects like electrical grid upgrading, increasing the energy efficiency of industrial sectors and renewable energy, as well as policy focus such as the likely issuance of sovereign green bonds, we expect green investment to continue to grow in the coming years.

Chart 1. Investment drivers are seeing a rotation



Source: CEIC, HSBC

Chart 2. High-end manufacturing investment is lifting manufacturing investment



Source: CEIC, HSBC

All this means that capital support will be more targeted to support this capital reallocation. Beijing will be cautious to avoid flooding the market with liquidity. Support will come through re-lending facilities for SMEs, manufacturers and green projects as well as possible lowering of these preferential rates, implementing targeted RRR cuts, issuing targeted MLF, as well as providing more window guidance for credit to flow to the real economy.

This capital reallocation will help improve overall capital returns in China. For instance, looking at high-end manufacturing, the capital returns are more than double that of the property sector. And as more capital is reallocated from the less efficient property sector towards more efficient sectors, this will lift overall capital returns. We estimate this could boost GDP growth by about 0.2ppt to 0.4ppt per year. Meanwhile, increased returns and more efficient debt spending can also reduce the macro-leverage ratio (debt as a percentage of GDP), lowering the level of financial risk in the economy.

Not all capital is equal

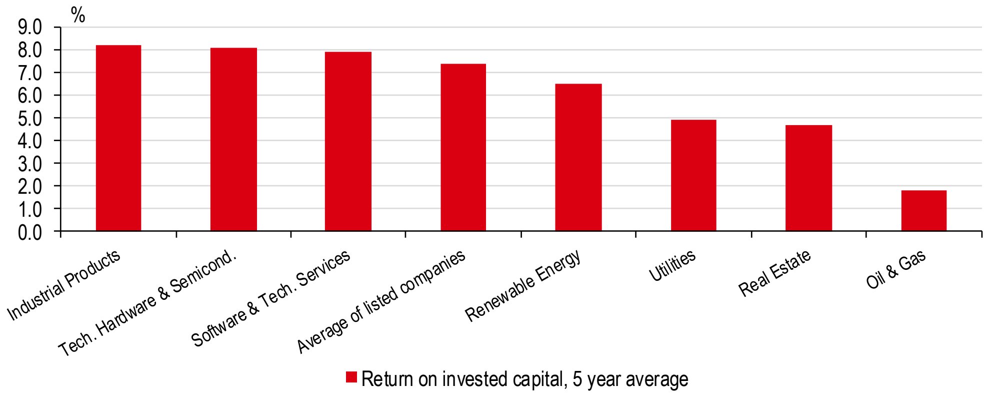
To help assess the efficacy of investment, we provide two perspectives. Firstly, we look at the return on invested capital, the expected returns for a company's utilised investments – in other words the total profits over the amount of assets less cash and non-deployed assets. For this exercise, we look at the universe of all listed companies in China (totalling over 4,000 between the Shanghai and Shenzhen stock exchanges) and take the five-year average ROIC as some capital investments may not directly correlate into profits for the year they are implemented.

$$ROIC = \frac{Net\ operating\ profit\ after\ tax}{Invested\ Capital}$$

Property and infrastructure investment have lower returns on invested capital

The results are fairly intuitive (see chart 3). For one, real estate developers are below average in terms of their capital efficiency with only a 4.7% ROIC compared to the 7.4% average across all companies. The lower rate for real estate relates back to high upfront costs for building investments and longer time horizon for returns to be realised. For similar reasons, infrastructure-related sectors like utilities and oil and gas had among the lowest ROICs as well, at 4.9% and 1.8%, respectively.

Chart 3. Listed Chinese companies' average ROIC by industry



Source: Bloomberg, HSBC

Technology intensive industries are more capital efficient

Meanwhile, more technology and knowledge intensive industries like technology hardware, semiconductors and software saw relatively higher rates of return, above the listed company average. This suggests that these industries are better able to realise direct returns from their investments and would be a more efficient utiliser of capital investment.

However, we find that renewable energy companies tend to have lower ROIC than the average of all companies at only 6.5%. This may be because the industry is relatively nascent and requires high amounts of capital for construction of new production facilities and R&D spending, while the direct returns are relatively more limited. This could change as carbon pricing and tax reforms are rolled out, providing a more measurable benefit from the renewable industry and likely lifting the return ratio and incentivise more green investment. That said, we see carbon taxes as more likely to be rolled out in the medium term as Beijing will also remain cautious about implementing tightening policies against the current growth backdrop. Thus, there is still a delicate balancing act that needs to take place between driving forward green investment and maintaining stable growth.

We should also look at capital returns from a broader economy perspective. For this method, we look to the marginal return of capital (MPK), which denotes the change in economic output over the change in invested capital. We use five-year averages of the nominal amount of fixed asset investment across different industries relative to the nominal gross value added of the specific industry.

$$MPK = \frac{\Delta\ Output}{\Delta\ Capital\ investment}$$

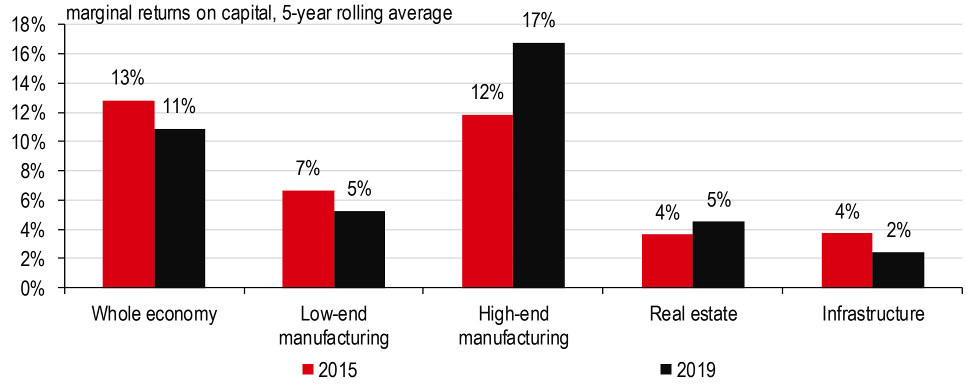
The economy-wide data showed similar results to those seen from the company data. Capital investment tends to be most efficient in the manufacturing sector and markedly lower in real estate and infrastructure (see chart 4). We estimate there is a roughly 4% to 5% return on investment in real estate, similar to the returns estimated from the company data. Note that we include land sales in fixed asset investment of real estate as these are a significant share of the capital cost. While from an output perspective, land has low value added at an intrinsic level (as opposed to the buildings constructed on it), it still presents an initial cost of investment for developers in order to acquire the land.

Infrastructure, which also has large upfront costs and long construction time horizons, is also less effective in terms of direct returns, at only about 2%. That said, there are wider indirect benefits to be gained from increased network effects, time savings, and boosting of innovation capacity that make it valuable in terms of continued growth and investment into infrastructure.

High-end manufacturing has seen some of the highest levels of investment returns

More interesting is the divergence within the manufacturing sector between high-end and low-end industries. While in the past, low-end manufacturing industries had relatively high returns on investment, surpassing that of high-end, there has been a shift in recent years. This in our view relates back to the typical industrialisation path from low-end towards more technology intensive industries as an economy develops.

Chart 4. Marginal returns on capital by industry based on economic output



Source: CEIC, HSBC

In the decade following China's inclusion in the WTO, there was a boom in low-skilled lower-end industries like textiles and furniture products that allowed China's to become the exporting powerhouse it is today. However, with continued economic development and diminishing marginal returns as lower-end industries matured, more technology intensive industries began to grow, following the typical path towards more capital intensive industries like steel and cement production, and now towards high-tech fields like electronics and medical products. This has in turn been reflected in an upturn in the returns of capital for high-tech manufacturing, which now surpass that of low-end (17% versus 5%).

Beijing has emphasised its intention to double down on industrial upgrading

This reinforces the idea that industrialisation is a key means of economic growth. We think that China is not done with its industrialisation phase, and premature de-industrialisation can actually be more damaging to a country's economic progress. Beijing has also emphasised its intention to double down on industrial upgrading as a longer term growth driver. We see strong potential for an acceleration in medium and high-tech manufacturing, given China's development path as well as strong supportive factors including high innovation capacity, the growth of skilled labour, particularly graduates in science, technology, engineering, and mathematics (STEM) fields, as well as a dynamic domestic market. Moreover, there is still relatively low hanging fruit from technology diffusion in non-frontier industries, such as increased modernisation or equipment upgrading to help support medium and high-tech manufacturing growth.

This presents further opportunities for capital investment in mid-range and high-tech industries, such as electrical machinery, and computer and communication products which have some of the highest returns on capital. These manufacturing industries will still need a large amount of capital to support growth such as in equipment upgrading, R&D spending, new production facilities and robotics. In our view, the favourable conditions and policy support should all help China's growth in investment of higher end manufacturing to maintain double digit gains in the coming five years.

We also note that high-end manufacturing has shown a reversal of the downward trend in return on capital since 2015, again emphasising that these manufacturing industries are advancing and continuing to lift productivity. With regards to the slowdown in return on capital over the last decade in most other industries, we think part of this is due to diminishing marginal returns as industries mature, but also external factors such as US-China trade tensions that may have more broadly affected sentiment and output.

Medium and high-tech manufacturing capital returns are more than double that of the property sector

Taking into account middle-level manufacturing industries in addition to high-end industries, we find that the average returns on capital are at about 10%, which is more than double that of the property sector. As we pointed out earlier, the property sector and infrastructure sector are set to see slower growth in the coming years, freeing up trillions of RMB in capital that can be channelled to the more efficient manufacturing sector.

More policy support for capital reallocation

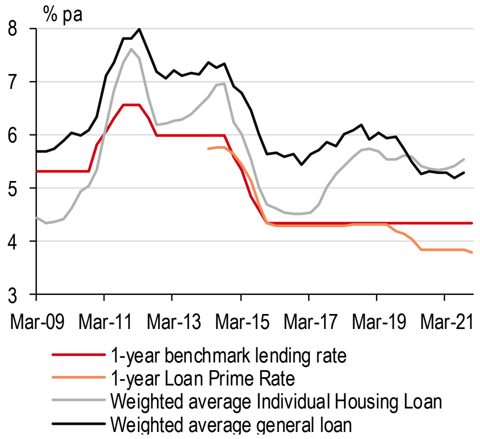
The varying levels for returns on investment and mismatch in investment structure show there is opportunity for more credit reallocation, especially to direct capital away from the relatively less efficient property sector and towards new growth drivers such as manufacturing and green development.

A clear follow-up question would be that if manufacturing returns are generally higher than the property sector, why has there been such strong capital flows going to the latter? This stems from a longstanding preference by financial institutions for collateralised debt due to the perception of less risk, which has driven more credit towards the property sector. However, in recent years, policymakers are seeing this mismatch in terms of effective returns, and have been proactively trying to channel credit to the real economy, such as manufacturing firms.

Real estate loan growth has dipped significantly

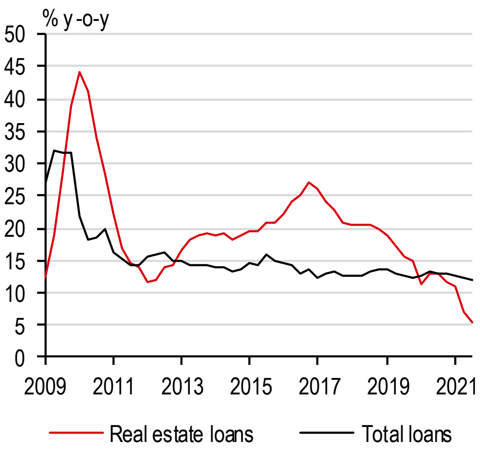
They can continue to guide more credit to more capital efficient sectors in a number of ways. For one, policymakers can use window guidance and other macro-prudential tools to drive credit away from the property sector and towards more efficient sectors, while also helping to drive down funding costs for other sectors. There has been more tightening of financing in the real estate sector, particularly over the last year to reduce overheating, as policymakers continue to emphasise that "housing should be for living in, not speculation". Since the start of 2021, with the rollout of the "three red lines" policy and caps on bank loan concentration ratios, there has been an increase in funding costs for individual housing loans, surpassing the average lending rate of all general loans for the first time (chart 5). Combined with dampened sentiment in the industry, partly due to the default risk of some developers, real estate loan growth has dipped significantly below the pace of total loan growth, indicating that the reallocation of capital is already underway.

Chart 5. Funding costs have diverged amid increased property sector scrutiny …



Source: CEIC, HSBC

Chart 6. … resulting in a drop in real estate-related loan growth



Source: CEIC, HSBC

The benefits of smarter capital allocation

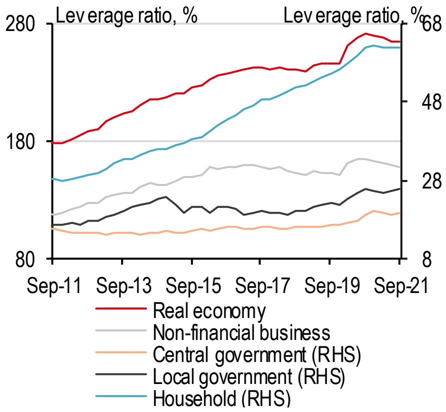
We construct different scenarios to assess the impact of credit reallocation. Firstly, we have a counterfactual state where real estate related loans would growth in line or faster than the total average bank loans, as has been the case historically. In our baseline we expect credit reallocation will continue to take place, with average real estate loan growth at similar levels as at the end of 2021 (i.e. 5%). We assume that the difference between these two would be redirected credit from the property sector to manufacturing sector. Should all of this be redirected into high-end manufacturing, and taking into account the estimated 17% return on investment, we estimate this would amount to a 0.4ppt boost to GDP per year. In a more conservative scenario, we estimate that most of the credit is allocated to medium and high-tech manufacturing, which has a return on investment of about 10%. This capital reallocation would result in a 0.2ppt boost to GDP per year.

But in a more aggressive scenario where more credit easing becomes redirected (we assume that the growth of real estate loans slows to zero), this would lead to a 0.6ppt boost if the credit is redirected towards high-end manufacturing, and a 0.4ppt boost if it goes towards medium and high-tech manufacturing.

More efficient capital allocation can reduce the debt-to-GDP ratio

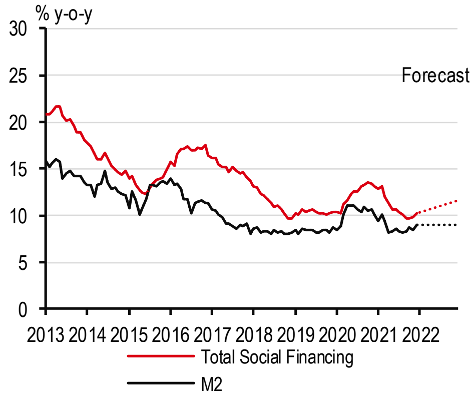
But it's not just the benefit to output. Policymakers are also worried about financial risk, and are wary of steep rises in the economy-wide macro-leverage ratio. However, by making debt more efficient and lifting overall capital returns, this has the added benefit of boosting output and reducing the macro-leverage ratio. This provides a means for policymakers to continue to provide credit support, without deviating from their overall de-risking strategy. This is particularly pertinent in the current environment as mounting headwinds are likely to prompt policymakers to ease up on credit growth this year, where we expect TSF growth will increase by 1ppt to 11.3% y-o-y (chart 8).

Chart 7. More efficient capital allocation can reduce the macro-leverage ratio



Source: Wind, HSBC

Chart 8. Policymakers will ensure continued credit growth to support economic growth



Source: CEIC, HSBC

With clear benefits to more efficient capital allocation as well as an expected slowdown in property and traditional infrastructure investment to come, we think policymakers will implement the following measures to prompt faster credit reallocation in the coming year:

Targeted credit support: The rollout of more re-lending facilities towards manufacturing upgrading, SMEs and green investment could be in the works. In addition to extending more re-lending facilities, Beijing may also lower the credit costs of these targeted re-lending facilities. Furthermore, targeted RRR cuts or targeted MLF would provide further incentives for banks to increase their lending to these areas.

Targeted fiscal support: Further tax cuts and fee reductions can help to prompt increased investment in more efficient credit areas. We expect continued use of R&D tax exemptions, which may be rolled out on a wider basis to include all industries to write off 100% of their R&D expenses (vs. 75% for non-manufacturing firms and 100% for manufacturing firms now). Tax cuts, which could come in the form of social security tax cuts, VAT cuts or tax credits for equipment upgrading, are also likely to be rolled out, particularly for SMEs and manufacturing firms. Meanwhile, increasing government guarantees for more manufacturing lending should help to lower cost of credit and crease the ease of access for credit to these firms.

Allow markets to play a larger role in capital financing: There is likely to be higher variation in returns among the economy wide sample compared with listed companies, which generally already have proven track records. Private funding (PE and VC) will have a higher risk tolerance than traditional bank financing and gravitate towards companies with higher return potential. Thus, allowing markets to play a larger role in financing high-tech companies can help to further lift capital returns. Expanding and streamlining the registration based IPO system to a wider market (e.g. including all A-shares) will incentivise further private capital financing. Meanwhile, further support for angel and VC funds through preferential tax policies and setting up more platforms to encourage more pooling of capital, which can also help to reduce capital risk, can help to encourage more early stage financing.

Continued opening and reform: Fostering a conducive environment for innovation through strengthening of IPR will help to increase healthy competition and increase technology investment. Meanwhile, continuing to join in trade deals (e.g. CPTPP) with other countries will help to increase trade flows, which can lead to more technology diffusion through flows of ideas, people and goods (such as for equipment upgrading).

This is an abridged version of a report by the same title published on 18-Jan-22.

The full note contains a look at key charts highlighting GDP growth, industrial production growth and demand, private consumption on the back of further COVID-19 lockdowns and the Winter Olympics, and fixed asset investment growth – including infrastructure investment, as well as a property market review, and key data around trade, consumer prices and inflation, exchange rates, and more.

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