Bridgewater*

Daily Observations

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Updating Our Observations on Chinese Equities

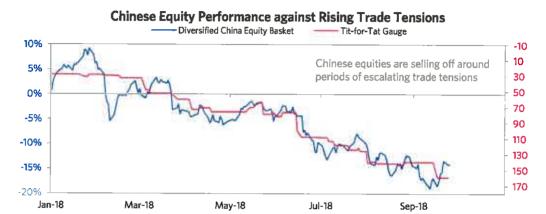
As we have described previously, we think it makes sense for global investors to have significant allocations to the increasingly open public markets in China. In a prior *Observations*, we provided our perspective on some of the biggest questions that we have had and have heard from clients. Since then, we have worked through some additional questions, iterated a bit on previous questions, and thought the update was worth sharing. Here is a list of the questions we will address in these *Observations*, so you can find those that most interest you.

- 1. How has the trade war impacted Chinese equities this year?
- 2. Why has Chinese equity performance been so weak in recent years, amid a global equity rally and strong growth in China?
- 3. Do the equity market outcomes line up with macroeconomic outcomes?
- 4. In recent years, Chinese EPS growth has been much weaker than profit growth as a result of significant share issuance and dilution. Is this normal?
- 5. How should investors think about Chinese equities' large concentration in state-owned enterprises (SOEs)? Given their significant underperformance in recent years, should one exclude them from one's portfolio?
- 6. Should I invest in Chinese stocks onshore given the risks of capital controls, government intervention, share suspensions, etc.?

1. How Has the Trade War Impacted Chinese Equities This Year?

While there are a number of dynamics influencing Chinese markets, trade tensions have been a particularly important influence, with Chinese stocks showing meaningful sensitivity to developments in trade policy sentiment. The impact has been broad-based across companies and sectors, indicating broader concern around the Chinese economy and not just the trade-focused companies.

As you can see in the chart below, equity prices are down 15% this year, and much of the sell-off has been concentrated during periods when trade tensions were rising. To illustrate this dynamic, below we show our "tit-for-tat gauge" (which shows our aggregate reading of global trade threats and actions, weighted by our assessment of the probability of implementation and the direct impact of those measures) versus the performance of Chinese equities.



Note: The Diversified China Equity Basket is a balanced mix of Chinese stocks reflective of the Chinese economy, including onshore A-shares companies and companies listed offshore

However, the sell-off has not been confined to trade-oriented equities; it's been fairly broad-based, indicating broader concern about the Chinese economy. The sell-off has been driven by compressing PEs as earnings have risen across all sectors thus far this year. Lower PE ratios and falling bond yields are indicative of some combination of rising risk premiums and lower expected earnings growth driving the market action. In the table below, we break out China onshore equities into a number of slices with different drivers: for example, companies that are more domestically oriented versus globally oriented, companies that are more exposed to the "new economy" sectors versus those in the "old economy," and so on. No matter how you slice it, all types of companies have seen declining PEs drive prices down.

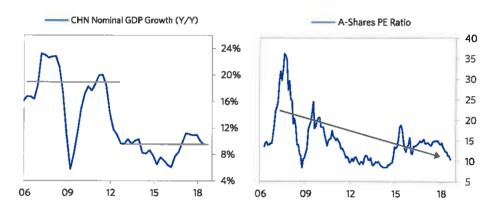
Chinese Onshore Stock Market - Performance Attribution by Slice

	Year-to-Date				
	Share of Mkt Cap	Price Return	EPS	PE	
Total Market		-15%	9%	-21%	
Financial	32%	-15%	2%	-17%	
Resources	15%	-11%	29%	-37%	
High Foreign Sales	13%	-19%	13%	-281	
Low Foreign Sales	41%	-14%	10%	-22%	
Old Economy (Non-Fin)	40%	-15%	16%	-26%	
New Economy (Non-Fin)	28%	-14%	12%	-24%	
SOE	66%	-13%	8%	-19%	
Non-SOE	34%	-18%	9%	-25%	
Cyclical (Non-Fin, ex-Rsrcs)	35%	-19%	11%	-27%	
Non-Cyclical (Non-Fin, ex-Rsrcs)	19%	-9%	10%	-17%	

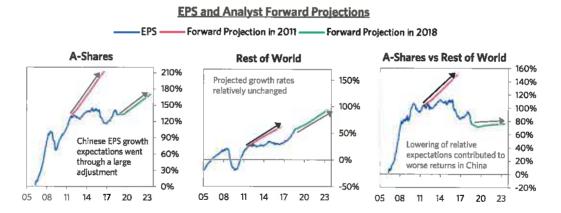
Prices down across the board this year, driven by significant PE compression

2. Why Has Chinese Equity Performance Been So Weak in Recent Years, Amid a Global Equity Rally and Strong Growth in China?

Markets discount future conditions and react to changes. Classically, markets tend to price in a continuation of the recent past, extrapolating recent conditions forward. A decade ago, nominal growth in China was running at about 20% a year and equity markets priced in such growth rates continuing indefinitely. As the Chinese economy shifted to more sustainable (though still very high) growth rates, discounted future growth rates declined, weighing on equity prices. This process looks much like what other equity markets experienced when significant shifts in growth rates took place.



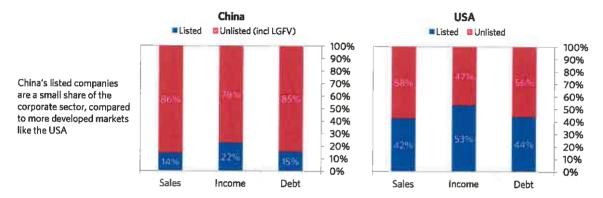
Coming out of the financial crisis, Chinese equity markets were pricing in a continuation of the rapid earnings-per-share growth experienced until that point. As actual EPS growth came in below what was discounted, the market's future expectations were gradually lowered. For comparison, the earnings growth rate discounted for the rest of the world hasn't meaningfully changed over the same time period, so the shift in long-term Chinese earnings expectations has meaningfully contributed to their poor relative performance.



3. Do the Equity Market Outcomes Line Up with Macroeconomic Outcomes?

Our by-and-large assessment is that, despite all the nuances, macro influences have been the dominant driver of the earnings evolution in China in a way that is not much different than we see in other countries.

One of our questions was whether the relatively small share that listed companies have in the aggregate corporate market would prevent them from tracking macro conditions well over time. This does not seem to be the case, as the listed companies look broadly representative of the corporate universe. The charts below provide perspective on the relatively small market share of China's listed equity markets, with the USA as a comparison.



But China's listed equities are fairly representative of the broader Chinese corporate universe. As shown below, their sector mix is not that different from the overall corporate sector (with energy companies being a notable exception).

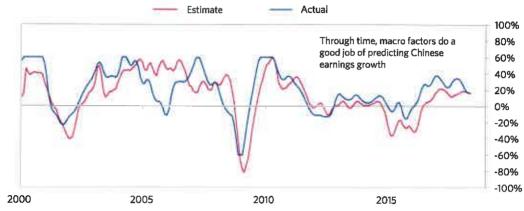
Sector Mix: Listed Versus Total							
	Sector M	ix by Sales	Sector Mix by Earnings				
Sector	Total Listed Only		Total	Listed Only			
Materials	29%	16%	27/4	1.7%			
Industrials	14%	12%	13%	10%			
Construction	13%	18%	7%	14%			
Cons Disc	10%	5%	9%	3%			
Cons Staples	9%	5%	14%	7%			
Technology	7%	7%	5%	7%			
Autos	6%	9%	6%	3%			
Utilities	5%	4%	5%	10%			
Energy	5%	20%	11%	24%			
Healthcare	2%	4%	3%	3%			

Even though listed companies are a small share of overall corporate sector, the composition is similar

Note: Approximation based on government and company reported data

The fact that the listed sectors are representative of the broader corporate sector is likely why their earnings growth is well-explained by China's macroeconomic factors (such as changes in domestic and foreign trade-partner economic growth, moves in currencies and commodities, and so on), which we combine together in the gauge below.

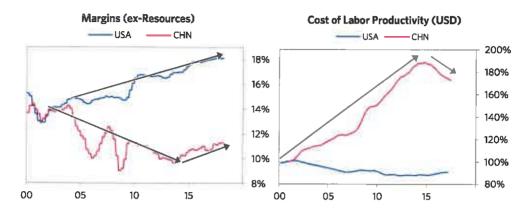




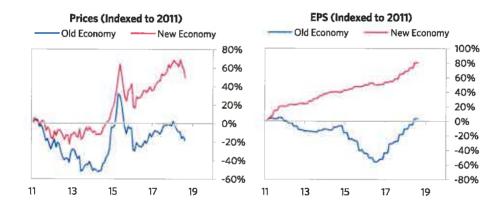
And the same is true for top-line sales as well. The chart below shows aggregate listed company sales growth against the economic growth of where they sell to, i.e., domestic or foreign (and within foreign, which countries).



Chinese corporate margins experienced a sizable decline since the early 2000s as the cost of Chinese labor (productivity adjusted) in global currency terms almost doubled (for reference, this moved the other way in the USA). In recent years, we have seen Chinese corporate margins improve from weak levels, which has been a support to earnings growth.



When we break the total equity market into slices, the evolution of earnings and prices has also been consistent with the ongoing rebalancing picture in China. Companies in the new-economy sectors (tech, consumer-focused, healthcare, etc.) have seen a stronger pace of earnings growth versus the ones in the old-economy sectors (resources, materials, industrials, etc.), which is consistent with the new-economy companies making up a larger share of economic activity.

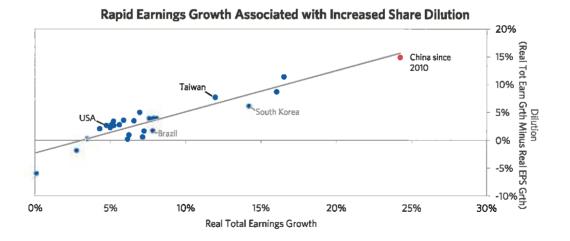


4. In Recent Years, Chinese EPS Growth Has Been Much Weaker Than Profit Growth as a Result of Significant Share Issuance and Dilution. Is This Normal?

The rapid pace of issuance and share dilution in China has actually been roughly in line with what has occurred in several historical cases when economies and capital markets underwent rapid expansions. Looking at a range of equity markets over time, significant dilution during periods of strong profit growth, as economies undergo growth spurts, is more the norm than the exception. Motivated by high potential returns, existing and new firms raise capital and compete to capture the strong growth in the economy, such that original investors in a company do not enjoy above-average rates of growth for sustained periods. We share our study across ~30 such cases. In recent years, Chinese EPS growth has been much weaker than companies' profit growth as a result of significant share issuance and dilution.



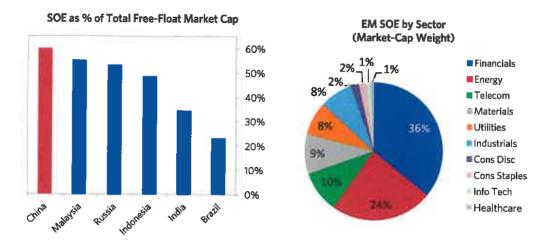
This rapid pace of issuance and shareholder dilution in China has actually been roughly in line with what has occurred in other cases through time. When we compare China to historical cases when economies and capital markets underwent a rapid expansion, China's pace of share dilution and issuance looks consistent. As shown below, across a large set of countries, we see significant dilution during periods of strong profit growth.



5. How Should Investors Think about Chinese Equities' Large Concentration in State-Owned Enterprises? Given Their Significant Underperformance in Recent Years, Should One Exclude Them from One's Portfolio?

State-owned enterprises comprise a meaningful part of many emerging-market equity indices. Our study of a large number of SOEs across the world suggests that they often have slower earnings growth and higher cash flow volatility than similar private companies for a host of reasons (e.g., weaker corporate governance standards). As a result, they typically trade at a valuation discount to compensate investors, just as high-yield bonds offer a higher coupon than investment-grade credit. In other words, we believe that markets appropriately discount SOEs' expected cash flows based on what is known and react to changes in expectations. Over time and across countries, SOEs have historically been as likely to outperform their privately held peers as they have been likely to underperform. Of course, there are alpha opportunities for investors who correctly assess mispricing in the markets.

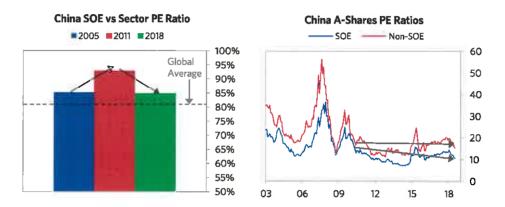
The charts below highlight how state-owned enterprises comprise a meaningful part of many emerging-market equity indices.



Chinese SOEs have significantly underperformed the broader markets in recent years and their performance has been a sizable drag on the overall index performance.

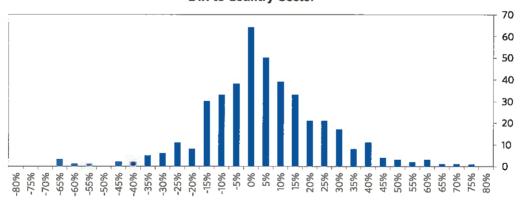


A significant driver of SOE underperformance has been investors in Chinese stocks pricing in overly optimistic earnings growth scenarios for SOEs post-crisis. As discussed above, across countries SOEs typically trade at a valuation discount to compensate investors for weaker earnings. In China, this traditional valuation discount was eroded a few years ago, as SOEs' valuations rose through 2011 relative to their peers within each sector. As SOEs' realized earnings came in weaker than expected, these expectations have been revised down. After years of underperformance, Chinese SOEs now trade at a more typical discount to their privately held peers.



Looking at a sample of SOEs across the emerging world, SOEs generally tend to have slower earnings growth than their private market peers, and markets price them at a discount to account for the slower growth and host of additional risks that come with government ownership. Because returns over any given period are driven by how things transpire relative to what is priced in, over time and across countries SOEs have historically been just as likely to outperform their privately held peers as they have been likely to underperform.

Distribution of Annualized 3-Year Returns for Biggest SOEs across EM Diff to Country-Sector



Note: This analysis consists of 427 observations of annualized 3-year rolling returns of the biggest SOEs across Brazil, India, Indonesia, Russia, Malaysia, and China. Data since 2000.

6. Should I Invest in Chinese Stocks Onshore Given the Risks of Capital Controls, Government Intervention, Share Suspensions, Etc.?

The onshore Chinese stock markets are developing rapidly and exhibit many of the challenges that are prevalent in markets undergoing similar expansion. When we look across a number of dimensions, the Chinese stock markets look within the range of typical emerging equity markets—worse in some measures (e.g., legal protections and foreign accessibility) and better in others (e.g., market capacity and political stability). Overall, Chinese financial markets are large, liquid, and increasingly accessible to foreigners, and the kind of issues associated with China are part and parcel of participating in a market like China, which offers its set of opportunities and risks.

Below, we roughly benchmark Chinese markets across a number of dimensions of market development, drawing on research done by Professor Andrew Karolyi at Cornell University, who has incorporated information from MSCI, the World Bank, etc., alongside our own research on China. Overall, the Chinese equity markets look roughly in line with a typical emerging equity market. In particular:

- Market Capacity: How large are financial markets relative to the size of the economy?
 - China's financial markets by this measure are already among the more developed among "emerging" economies.
- Operational Efficiency: How easy/cheap is it to buy, sell, and settle financial transactions?
 - China is about on par with other EMs, as low transaction costs and high trading volumes were offset by short-sale and other restrictions.
- Foreign Accessibility: Are there any restrictions on foreigners investing?
 - China still ranks low on this measure due to a multitude of regulations affecting foreigners (registration, ownership caps, taxes, etc.). However, these regulations are rapidly evolving, and Chinese financial markets are generally becoming accessible to foreigners.
- <u>Corporate Transparency</u>: Is information about company operations and financials accurate and freely available?
 - o China ranks around average on this measure.
- Legal Protections: Do they exist and are they robust?
 - o China is a bit weaker than average here, particularly around investor protection (e.g., enforcement of insider trading laws, stockholders' abilities to hold directors accountable, etc.).
- Political Stability: Are policy makers stable and policies consistent?
 - o China's political stability is above average in emerging markets.

The table below summarizes this benchmarking.

	Measure	Source	China Ranking vs EM
ial	Market Capacity	Karolyi	Above Average
Financial ccessibility	Operational Efficiency	Karolyi	About Average
<<	Foreign Accessibility	BW Data, Karolyi	Below Average
ate nent	Corporate Transparency	Karolyi	About Average
Corporate Environment	Legal Protection	Karolyi, BW Data	Below Average
	Political Stability	BW Data	Above Average

We Think It Is Best for Investors to Take Advantage of Onshore and Offshore Listings

While we have focused on the onshore A-shares market throughout much of this piece, it is important note that we believe the best way for global investors to get a diversified exposure to corporate cash flows in China is to buy the mix of Chinese companies that best reflects the Chinese economy, including both firms whose stocks are traded onshore in China as well as Chinese companies traded in stock markets outside of China.

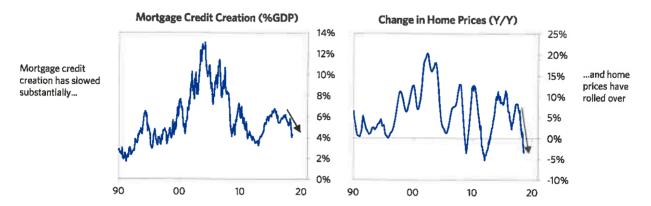
While the Secular Housing Tailwind Is Likely Ending, Strong Macroprudential Polices Put Australia in a Better Place to Deal with the Still Significant Downside Risks to the Economy

Jason Rotenberg | Gardner Davis | Paul Pasciucco

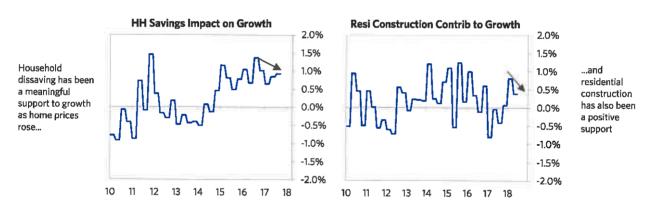
The Australian housing market and economy has been supported by a nearly continuous increase in household debt relative to incomes. There are now signs that the cycle has largely run its course, with housing going from a support to more neutral and with most of the risks to the downside. While predicting the exact turn is hard, understanding what a turn of this cycle will look like is both important for Australia and for understanding the risks from the pockets of excesses we see this cycle. We believe that a rollover of the Australian housing market is likely to be a bigger economic drag rather than a financial and banking problem. This doesn't mean that the economic implications of a material turndown in housing, when and if it occurs, won't be significant, but it makes a replay of the self-reinforcing and very rapid contractions in many countries following the financial crisis much less likely. What follows is an update of where the housing and household debt buildup in Australia stands:

- Over the last five years, housing looks to have contributed 1-1.5% to Australian growth. In short, housing is roughly 10% of the economy and contributing close to 50% of growth, which is inherently unsustainable.
- The Australian household debt levels are now the highest in the developed world. While low rates have kept debt service manageable, this still creates an important vulnerability and sensitivity to rate moves.
- Lending standards have been tightening for several years as regulators have introduced macroprudential
 measures. As a result, household ownership rates have been declining (the opposite of the recent US
 housing bubble) as foreign ownership has risen. A lot of the rise in debt, in other words, has been a
 reaction to foreigners and speculators pushing prices up.
- The level of inventories and the level of the construction boom are cyclically high, but well below excesses in Spain, and are unlikely to create a large excess of unsold homes.
- The RBA looks to have been vigilant in forcing banks to raise capital and reduce risky lending practices for the last several years, which increases their ability to handle a moderate shock.

As we show below, the cycle appears to be going from a support to neutral. We have seen similar pauses before, but with debt levels ever higher and macroprudential policies in place, it looks increasingly likely that the secular tailwind is behind us. The housing market is still not a material drag, however.



The support to growth this cycle has been significant and is likely to moderate. Some of the data below is quarterly and doesn't yet fully reflect what we are seeing in credit. Some of the effects on construction may take some time to flow through. Looking back, the direct impact of construction and the indirect impact of rising prices encouraging household dissaving have been meaningful supports to growth—together about 1.5% this cycle. If these were to fade or even reverse, it would have a significant impact on the Australian economy, even without a housing-loss cycle.



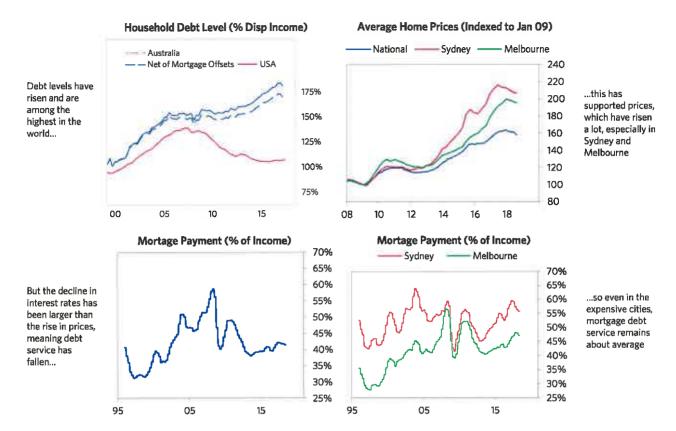
Debt Levels Remain Very High, but Affordability and Debt Service Are Not Overly Stretched Due to Low Interest Rates

When we look at how home prices have evolved relative to incomes and interest rates, we believe the cost of a home (measured in mortgage payments as a percent of income) is about average, even in the expensive cities (Sydney and Melbourne). So while prices and debts have risen, they have done so in line with the decline in rates. With the drop in rates behind us, however, it means that further price increases would stretch affordability.

3%

2%

10 20



Level of Residential Builling Has Risen but Remains Short of Other Big Housing Booms

3%

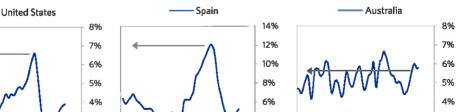
70 80 90 00

70

90 00 10 20

Apart from debt levels and prices, another place where one can see excesses in housing markets is construction, as builders extrapolate good conditions into the future, setting the market up for a reversal. In the US and Spain, this was a significant driver of the losses, as unsold homes flooded the market as demand dried up. In both cases, residential fixed investment was at recent highs (as a share of economic output). In Australia, the level has certainly been elevated, and there may be pockets where some excesses exist. But the numbers don't stand out relative to Australia's own history, and while similar to the US at its peak, it is half of the level that occurred in Spain. While we expect construction to slow and be less of a support to growth, the risk of a large overshoot of demand looks lower than in other housing booms.

Residential Fixed Investment (%GDP)



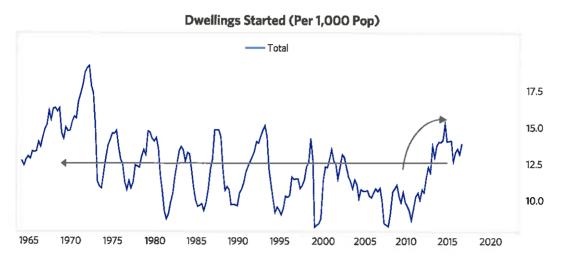
4%

70 80 90 00

Note larger scale

10 20

When we look at this in real terms, the number of units being built looks elevated but isn't rising, and is roughly in line with population growth. This also follows multiple decades of weak construction. It mostly doesn't appear the builders have extrapolated the past strong conditions into the future in an extreme way, which reduces the risk of price-insensitive supply flooding the market. This is not to say that the support to growth of about 40bps annually over the housing boom is likely to continue. Rather, we simply don't see an extreme level of building that could lead to large housing losses.



Macroprudential Policies Make It Less Likely Housing Debt Will Lead to a Financial Crisis That Would Exacerbate a Housing Downturn

Unlike in the US and Spain, there hasn't been a deterioration in lending standards, and the average Australian homebuyer today is higher up the income spectrum than they were 5 or 10 years ago. The table below highlights Australian regulators' macroprudential tightening measures. Since early 2017, they've ramped up their attempts to cool down the housing market, mostly targeting riskier forms of leverage and forcing banks to hold more capital against these loans while keeping overall policy easy to support the broader economy. For example, investor mortgage growth was capped at 10% and interest-only loans were limited to no more than 30% of new mortgage lending. In addition, APRA (Australia's bank regulator) was vigilant against high loan-to-valuation mortgage lending, instructing lenders to pay closer attention to loan serviceability criteria.

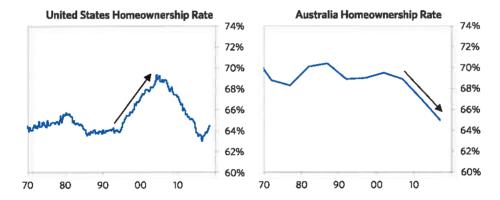
A	D		4.44	1 45 1 8 8	
Australian	i Kegulators'	Announce	d Macropri	idential Measi	IPAC

Date	Measure
February 2018	Risk weights raised for risky mortgages (inc. interest-only & investor)
November 2017	Vacancy tax on foreign owners who leave homes unoccupied
July 2017	Increased capital requirements for banks
March 2017	Interest-only lending limited to 30% of all new mortgage origination
March 2017	Increased scrutiny on riskier forms of lending
December 2014	Investor mortgage growth capped at 10% year over year
December 2014	Banks required to hold more capital against their mortgage assets

As you can see below, lending standards have tightened and credit has been redirected away from riskier forms of investor and interest-only mortgage lending, targeted by the APRA policies.

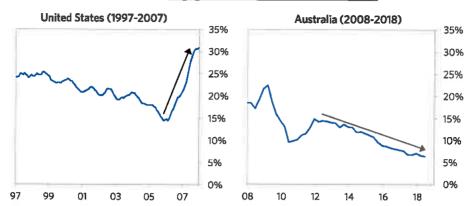


Homeownership rates typically rise during the late stages of a housing bubble, as falling lending standards allow increasingly unqualified buyers to borrow and purchase homes. The opposite has been true in Australia over the past several years, with rates falling as standards rose as banks were prodded by the RBA to hold the line. While this doesn't mean Australian households aren't stretched by high debt levels, it does mean that the bubble psychology of rising prices leading to extrapolations of further price increases and spending are much less prevalent in Australia.

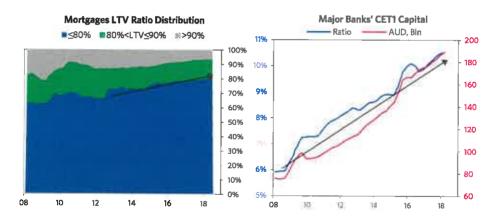


This dynamic is pretty different than a typical housing crisis that is reinforced by a financial crisis like in the US or Spain a decade ago. While the LTV ratio is only one factor in the riskiness of a loan, it is a pretty indicative one and directly related to the loss a homeowner can take. In the US, high-LTV loans were a meaningful share of credit creation and rose during the crisis. In Australia, they have been falling significantly and now are at all-time lows. This is locking some homebuyers out of the market, as shown above, but decreasing the risk of fragile borrowers facing difficulties from home-price declines.





In addition to the measures focused on the mortgage market, banks have also been forced to raise capital and generally have strong balance sheets. While a broader turn in Australia's housing cycle clearly poses a threat to domestic growth, regulators appear to have been successful in mitigating the risks to the financial system, both through policy and through moral suasion. Beyond capping the amount of riskier mortgages banks could originate, regulators limited maximum loan-to-value ratios and required banks to hold a material amount of extra capital. As a result, banks now have large buffers against potential losses, with the vast majority of mortgages having an 80% loan-to-value ratio or less and CET1 capital ratios well above 10% (Basel III requirements are for an 8% ratio for the large Australian banks).



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