OCBC Bank

Singapore Mid-Year Credit Outlook 2022

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- **The SGD corporate credit market in 1H2022 has offered relative shelter, with SGD related indices and funds performing better than those for Asia (Ex-Japan) bonds. SGD issuances have also held up better, increasing ~6% y/y to SGD11.7bn, while Asiadollar volumes fell ~40% y/y. However, this relative strength is being tested as existing issues are repriced by new issuances that come in at wider spreads and larger new issue concessions. Unlike prior years where investors sought longer-dated bonds and perpetuals in a hunt for yield, the tone has changed to a defensive one with an increased number of issuances in the shorter part of the belly.**

- **Today's environment is significantly more challenging than that of the past decade. Aside from slowing global economic growth and geopolitical risks, inflation rates have shot up to multi-decade highs while rapidly rising rates have resulted in total returns turning negative, even in nominal terms, across most papers regardless of tenure and credit profile. Despite already better-positioned within subordinated and cross-over papers, our model portfolio recorded its first half-year loss of 0.69%.**

- **With the focus honed on capital preservation, we shun longer-dated papers, lower our recommendations for perpetuals and bank capital instruments to neutral while increasing our preference for crossover short-dated bullets and near-cash issues. This should reduce any mark-to-market impact while increasing the flexibility to redeploy into new issues should they be priced at even wider spreads. Bottom-up selectivity should also play a major role, with emphasis on issue structure and relative valuation.**

- **While fundamentals for Financial Institutions remain stable, the same cannot be said for technicals as bank capital instruments head into unchartered territory. With rising rates and an uncertain outlook driving noticeably wider reset spreads for new bank capital issues, the economics of existing bank capital instruments have come into question as they now face higher non-call risks. With this in mind, we are adjusting our views on bank capital instruments from top-down to bottoms-up, turning neutral from overweight on existing bank capital instruments. We favour bank capital instruments with near term call dates that may still benefit from a potential reset at a higher benchmark rate and prefer Tier 2s over AT1s as the incentive to call is higher for Tier 2 instruments in our view.**

- **With the uplifting of pandemic related restrictions and reopening of borders, we see brighter outlook for both the Hospitality REITs and Retail properties. Given that these two industries were the hardest hit during the pandemic, the rebound is likely due to pent up demand from locals, tourist and business travellers. For Commercial REITs (office), we expect the high growth in rental rates to start tapering in 2H2022 as demand from previously hot sectors like technology starts to fizzle. In addition, more new supply is expected to be completed in 2023. Meanwhile, we expect the Industrial REITs to continue being stable going into 2H2022 though as previously delayed projects gets added into the Singapore market, completions are expected to be significant in 2022.**

- **Private residential property prices grew by a more muted 0.7% q/q after a strong 5.0% q/q increase in 4Q2021. We expect prices to rise by 5-7% in 2022 to set another all-time high due to firm demand, dwindling supply and higher development and construction costs. We are not overly worried over rise in mortgage rates as the historical correlation between rates and property prices are weak, household balance sheets remain strong and the rise in rents should offset rise in mortgage repayments.**

- **In the Green, Social, Sustainability and Sustainability-linked ("GSSSL") space, for 2H2022, we think issuers may play catch up before further expected rate hike and we see possibility of 2022 recording more GSSSL issuances than 2021 for the SGD space. Apart from corporates, we are also seeing more governments issuances in the green space. In addition, we are seeing an increased variation in the type of related bonds like gender bonds. We also expect emergence of a new category of issuance where both environmental and social related frameworks are combined.**

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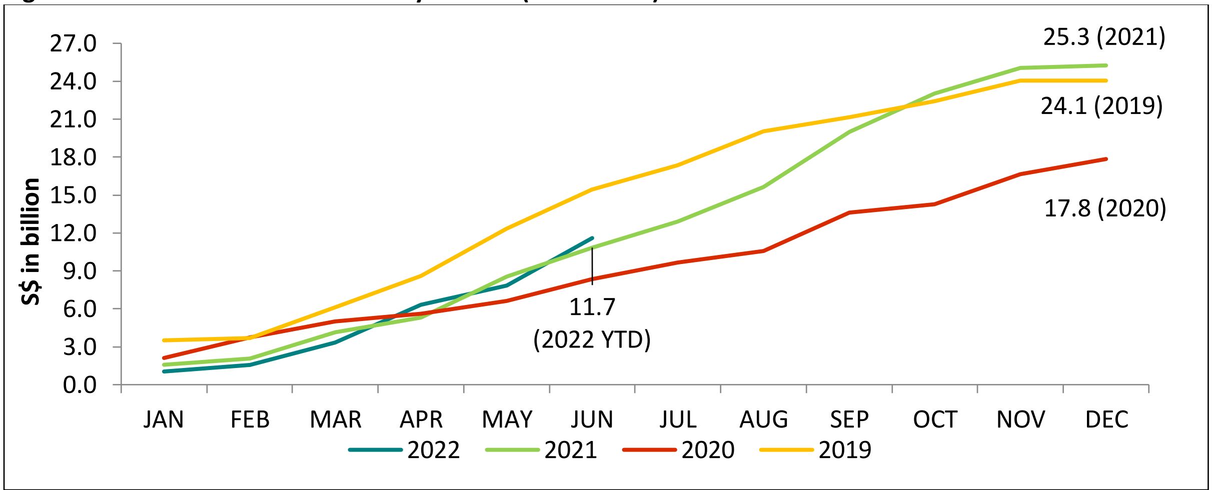
1H2022 Singapore Corporate Bond Market Review

Overall lower but nonetheless resilient issuance volumes y/y amidst challenges

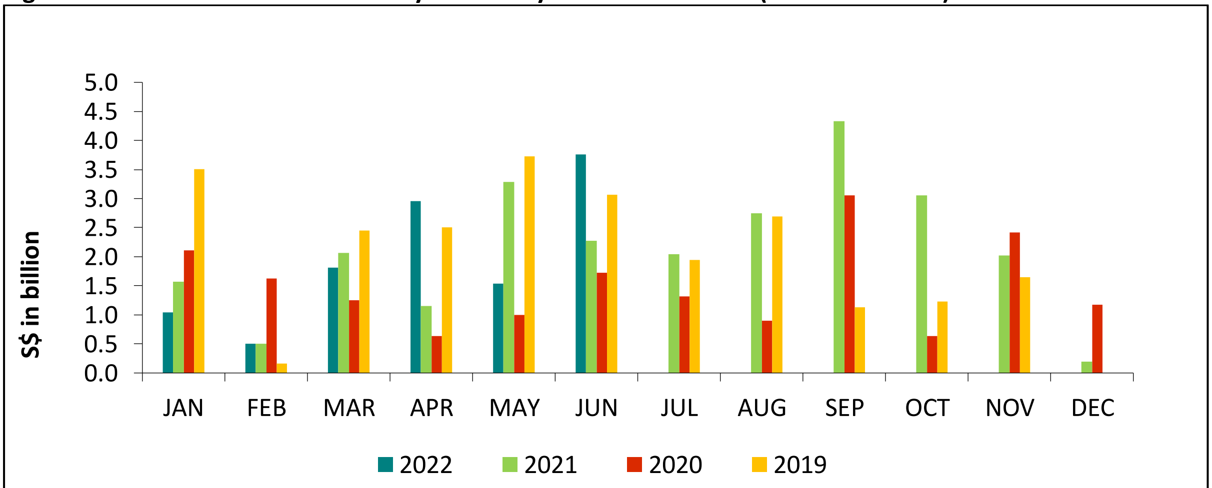
While 2021 was a stand-out year for the SGD corporate bond market with issuance volumes reaching a nine-year record high, this has not been the case this year thus far. The macroeconomic operating environment has proved to be challenging in the first half of 2022 ("1H2022"), clouded by numerous challenges including rapidly rising interest rates, quantitative tightening (thus far by letting maturing bonds roll-off rather than selling bond holdings), and stagflation concerns exacerbated by the Russia-Ukraine conflict. Compared to 2H2021 which saw issuances totalling SGD14.2bn anchored primarily by government-linked issuers, issuance volumes were ~18% lower h/h in 1H2022 amidst these macroeconomic headwinds, totalling SGD11.7bn across 44 issues. While the SGD primary corporate bond market has not been spared from the ills facing global credit markets, issuances have remained comparatively resilient on a y/y basis – up by ~6% y/y (1H2021: SGD11.0bn). Overall, this broad resilience can be attributed to (1) the overall quality of issuers with solid fundamentals, (2) the likely nature of a significant pool of SGD corporate credit investors being buy and hold investors through volatile times, and (3) willingness by issuers to price with new issue concessions (which factors in heightened risk of future rate increases and other market volatility events), resulting in relatively attractive yields on new issuances.

Figure 1: SGD bond issuances monthly volume (cumulative)



Source: Bloomberg, OCBC Credit Research

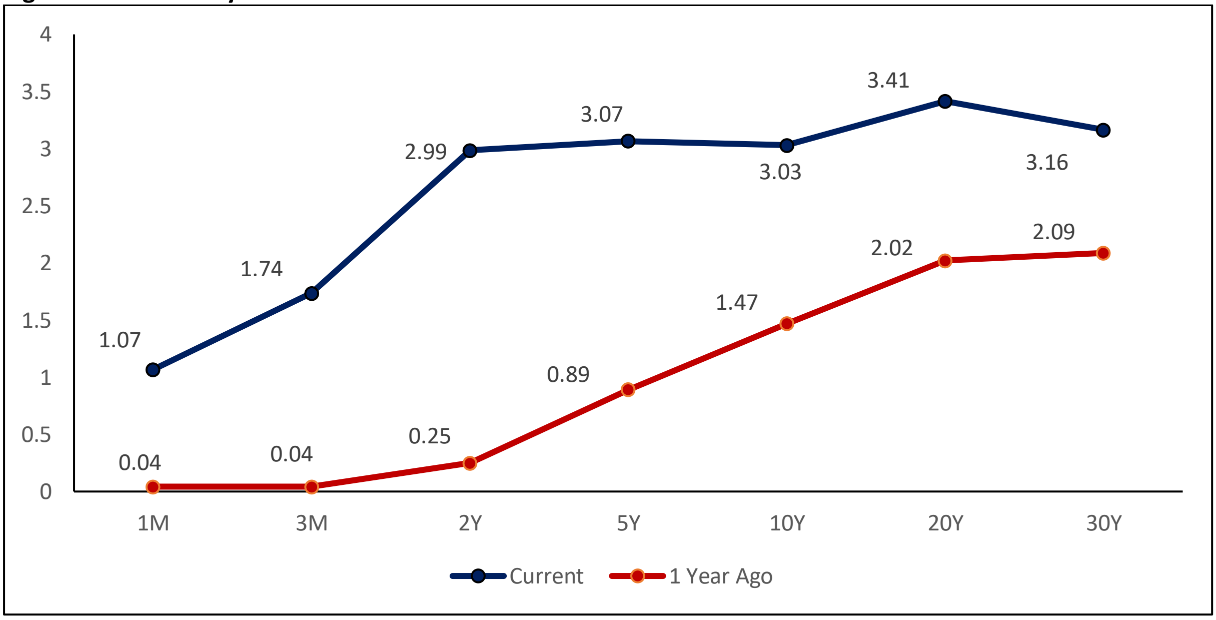
Figure 2: SGD bond issuances monthly volume by individual months (non-cumulative)



Source: Bloomberg, OCBC Credit Research

We mentioned in our Singapore Credit Outlook 2022 published on 31 December 2021 that investors would need to contend with the continuing threat of higher inflationary expectations on one end and the looming possibility of a policy misstep at the other end, leading to a financial market pullback should the market view the Fed was rising rates and tightening too quickly. Since then, concerns have increasingly evolved to fears of stagflation as inflation is proving persistent against an expected fall in economic growth (albeit from a high base) in the US. As of writing, Europe is facing a larger stagflation threat. The Russia-Ukraine conflict and China's prolonged lockdowns particularly exacerbated pre-existing inflationary pressures from a large increase in money supply and pandemic-battered supply chain disruptions. In view of this, major Central Banks around the world (barring Japan) have adopted increasingly hawkish stances, with the Federal Reserve commencing on 16 March 2022 its first interest rate hike since December 2018, raising rates by 25bps. Following that, the Fed adopted more aggressive hikes of 50bps at its May Federal Reserve Open Market Committee ("FOMC") meeting, and 75bps at its latest June meeting, amid efforts to dampen the 40-year record high inflation of an 8.6% y/y increase recorded in May. Against the shift to tighter monetary policy conditions and heightened investor rate hike expectations, UST yields saw a significant upward shift across the curve over the year (**Figure 3**), with the 2Y and 10Y rising by 231bps and 158bps y/y respectively as at 29 June 2022. Additionally, as concerns over recession and the Fed's ability to engineer a "soft landing" amidst accelerated tightening picked up over the course of the year, so did the focus on yield curve inversions – with an inversion in the 5-30Y UST spread on March 28 for the first time since 2006 and again in mid-June, and brief inversions in the key 2-10Y UST spread on 1 April for the first time since 2019 and again on 13 June. The Singapore economy and bond market were not immune to these macroeconomic headwinds, with the Singapore Overnight Rate Average ("SORA") yields mirroring the volatility and upward shift in UST yields. Over this remaining piece, we will further dive into the macroeconomic events that drove the markets, as well as the performance of the Singapore primary credit market over the year-to-date ("YTD", 1 January 2022 to 30 June 2022). We also present the YTD performance of our model portfolio in later sections.

Figure 3: US Treasury Yields



Source: Bloomberg, OCBC Credit Research

Overall, as seen in **Figure 2** above, the SGD corporate bond market generally saw lower monthly issuances in 1H2022 compared to the same months in the past three years. The SGD market faced similar global inflationary pressures – with food, retail goods, electricity and gas price increases driving headline and core inflation to a 5.4% y/y and over 10-year record high 3.3% y/y increase respectively in April. This prompted an extension of hawkish moves from the Monetary Authority of Singapore ("MAS") in 1H2022, through (1) raising the rate of appreciation of the Singapore dollar nominal effective exchange rate ("S$NEER") policy band in an off-cycle move in January, and (2) a double-barrelled move re-centring the mid-point and slightly increasing the rate of appreciation of the policy band in April to curb inflationary pressures. Despite the inflation figures, April recorded significantly higher issuance volumes of SGD3.0bn in the SGD corporate bond market, registering the highest monthly volume recorded in April since 2021. Possibly this was due to a catch up, with 1Q2022 seeing only SGD3.4bn in aggregate, where issuers also wanted to lock in rates before further increases in rates (we note that forward rates legged up since March). Interestingly, the latest month of June also saw higher monthly issuance volumes in the SGD corporate bond market than that over in June over the past three years, with a sizable total issuance amount of SGD3.8bn, almost all of which were issued by Financial Institutions (with the exception of ESR-LOGOS REIT which priced a SGD150mn perpetual). Individual issuance amounts also look rather healthy compared to previous years despite the rising rates, with the median bond size at SGD175mn, down just slightly against SGD200mn in FY2021 (1H2021: SGD150mn, 2H2021: SGD275mn). Of note, the Housing & Development Board ("HDB"), a frequent statutory bond issuer, priced deals that were on the larger end of its usual issuance size. HDB priced a SGD950mn 7-year bullet in January, debuted a green bond in March (SGD1.0bn 5-year bullet) and priced a SGD900mn 3-year bullet in May.

Starting off the year, issuances in the SGD space rebounded m/m following seasonally low volumes in December but came in weaker y/y at a ~34% y/y decrease amounting to SGD1.04bn from just three issues in January (January 2021: SGD1.6bn), amidst the prevalence of technical influences. January saw central banks starting to pivot towards an increasingly hawkish stance in view of persistent inflationary risks – with US Federal Reserve Chair Jerome Powell signalling at the January 25-26 FOMC meeting his readiness to commence rate hikes in March assuming "appropriate" conditions. At the same time, the MAS raised the rate of appreciation of the S$NEER policy band in a surprise hawkish off-cycle move on January 25. Interestingly on the next day (January 26) following the MAS' tightening, QNB Finance Ltd priced a 2-year senior unsecured bond at 1.37% – albeit a small one at just SGD32mn. The largest deal of the month was issued by HDB, which priced a SGD950mn 7-year senior unsecured deal at 1.971%. Notably, it was upsized from the initial amount of SGD800mn to SGD950mn, with net proceeds to be used for financing its development programs and refinancing existing borrowings. Separately, key corporate developments over the month included the acquisition of Citigroup's consumer banking business in Indonesia, Malaysia, Thailand and Vietnam by United Overseas Bank Ltd ("UOB"), which we see as credit supportive. Olam International Ltd ("Olam") also announced a consent solicitation exercise ("CSE") on its bonds and perpetuals as part of a wide-ranging corporate reorganisation exercise.

In February, the SGD space saw lower issuances m/m with just SGD525mn priced from three issues in February, which is approximately half the amount priced in January. In line with historical norms of lower issuances in February due to the Chinese New Year holiday, this amount was in fact ~2% higher y/y (February 2021: SGD513mn). The largest deal came from French bank BNP Paribas SA ("BNPP") in the middle of the month, which priced a SGD350mn 10NC5 tier 2 subordinated bond at 3.125%, tightening from an IPT of 3.3% area. Separately, February also saw the release of FY2021 financial results across various SGD issuers – including financial institutions, REITs, property developers and telecommunication providers. Results were generally decent with y/y recovery reported due to the low base in 2020, although companies increasingly flagged cost increases in labour, electricity and goods. Aside from historical norms due to the Chinese New Year holiday, the intensification of the Russia-Ukraine conflict from late February likely also contributed to lower issuance volumes. As a mark of significant market volatility, the UST 10Y yields dropped ~15bps in intraday trade at one point.

In March, the SGD market recorded higher issuances m/m with SGD1.8bn priced over 8 issues, close to 2.5 times that of the issuance volumes in February. However, in comparison to the SGD2.1bn priced in March last year over 6 issues, the amount issued in March this year was ~12% lower y/y. The largest deal of the month came from HDB, which priced a SGD1.0bn 5-year senior unsecured green bond at 1.845% for financing or refinancing eligible green projects in line with HDB's green finance framework. Notably, this debut green bond by HDB is also the largest bond issued in the SGD market YTD. Last year in March, HDB was also the largest bond issuer with its SGD900mn 7-year senior unsecured bond.

In April, the SGD space saw higher issuance volumes of SGD3.0bn. In contrast to the Asiadollar space which recorded a ~37% m/m and ~28% y/y decrease in new issuances for April on the back of heightened rates volatility and risk aversion sentiments, volumes in the SGD space held up rather resiliently and even increased by ~67% m/m and ~162% y/y. Interestingly, this was driven by significant issuances in the SGD Green, Social, Sustainability, Sustainability-linked ("GSSSL") bond space, building on HDB's green bond in March. Within the space, April saw the pricing of Ascendas REIT's SGD208mn 7Y green bond at 3.468%, Ascott Residence Trust's SGD200mn 5Y sustainability-linked bond 3.63% and Sembcorp Industries Ltd's SGD200mn 7Y sustainability-linked bond at 3.735%. We expect such GSSSL issuances to become more mainstream going forward, with issuers signalling their sustainability credentials and taking their sustainability commitments more seriously. Interestingly, a sizeable 46.3% of total April issuances was priced only following MAS' double-barrelled tightening move on 14 April, with the largest deal of the month being PSA Treasury Pte Ltd (Guarantor: PSA International Pte Ltd)'s SGD650mn 2.9% 5Y unsecured bond priced on 20 April 2022.

In stark contrast to April, May saw significantly lower issuances in the SGD space amounting to SGD1.5bn – which was ~49% lower m/m and ~53% lower y/y. Stagflation concerns took centre stage for global investors in May, amidst heightened concerns surrounding spill over economic growth implications of aggressive monetary policy tightening. Amidst a challenging global operating environment, the US and Asiadollar markets also recorded significantly lower m/m and y/y issuances. With the public holidays in the first half of May shortening the work week early in the month, issuance volumes were further dampened in the SGD space, kickstarting only on 17 May. The first deal of the month was issued by NTUC Fairprice Co-operative Ltd, which priced a SGD300mn 7-year unsecured bond at 3.46% in its debut issuance for general corporate purposes, while the largest deal of the month was a SGD900mn 3-year bond issued by HDB. Separately, StarHub Ltd announced it will not be exercising the call of its 3.95% perpetual on its first call date. We think StarHub Ltd may refinance the existing perpetual only when new perpetuals can be priced at a rate around or lower than the existing perpetual and see low chance for a redemption before the reset date in 2027 given the current rising rates environment.

Rounding out the first six months of the year, issuance volumes recovered markedly in June despite persisting fundamental and technical concerns including significant rates volatility amidst the release of the higher-than-expected 41-year high US May inflation figures. This paved the way for a 75bps rate hike at the June Federal Reserve Open Market Committee ("FOMC") meeting, coming in higher than prior announcements by Federal Reserve officials communicating a 50bps hike. At the same time, the spectre of a recession became larger as global growth forecasts were lowered. In contrast to this challenging macroeconomic backdrop, issuances were ~145% and ~57% higher m/m and y/y respectively, totalling SGD3.8bn across 8 issues in June as at time of writing. The largest deal of the month was HSBC Holdings PLC's SGD900mn 10NC5 Tier 2 issue that was priced at 5.25%. The bond received over SGD1.4bn in orders from more than 80 investors according to Bloomberg. The second largest deal of the month as at time of writing came from ABN Amro Bank NV ("ABN") which also priced a Tier 2 issue, a SGD750mn 10.5NC5.5 issue that was priced at 5.50%. This deal had relatively stronger demand, with over SGD1.5bn in orders across 91 accounts. ABN's previous Tier 2 (ABNANV 4.75% '26c21s) were called at first call date on 1 April 2021. ABN's issue was the fifth SGD issuance from a Financial Institution in a row, a relative resurrection in issuance from the sector following sparse volumes a few years prior.

Flurry of Financial Institutions issuance in June taking the sector to first place

Replacing the Government-linked sector which stood as the largest contributor to total issuance volumes in both 1H2021 and FY2021, is the Financial Institutions sector. 1H2022 saw issuers in this sector pricing SGD4.8bn across 19 issues, ~226% higher y/y (1H2021: SGD1.5bn across 8 issues) and over six times the amount h/h (2H2021: SGD755mn across 3 issues). This SGD4.8bn issuance amount contributed to over one-third, or 41.5% of total YTD SGD issuances, up from just 5.3% of total issuances in 2H2021. Across the different issues, individual issue sizes ranged from small amounts below SGD50mn to larger ones at SGD500mn and SGD900mn, which is similar to 2021. The significantly higher volumes priced in this sector YTD were primarily driven by a larger number of Financial Institution issuers coming to the market in 1H2022, rather than exceptionally large bond issuances from specific issuers. Amongst these issuers, the largest issuance was from HSBC Holdings PLC ("HSBC") which priced a SGD900mn Tier 2 10NC5 at 5.25% in late June. As compared to 2021 where only one local bank tapped the SGD corporate bond market, two local banks did so in 1H2022.

Aside from HSBC, other European Financial Institutions which priced notable SGD denominated issuances in 1H2022 were BNPP, Standard Chartered PLC, Credit Agricole SA, ABN AMRO Bank NV, and Barclays PLC. Despite the ongoing Russia-Ukraine conflict, direct risks to the European banks under our SGD coverage universe have been mostly contained, and the fundamental credit profiles of these issuers have mostly remained resilient on the back of past actions to improve bank fundamentals, strong market positions, diversified business offerings as well as solidly capitalized balance sheets acting as a shock absorber against the volatility.

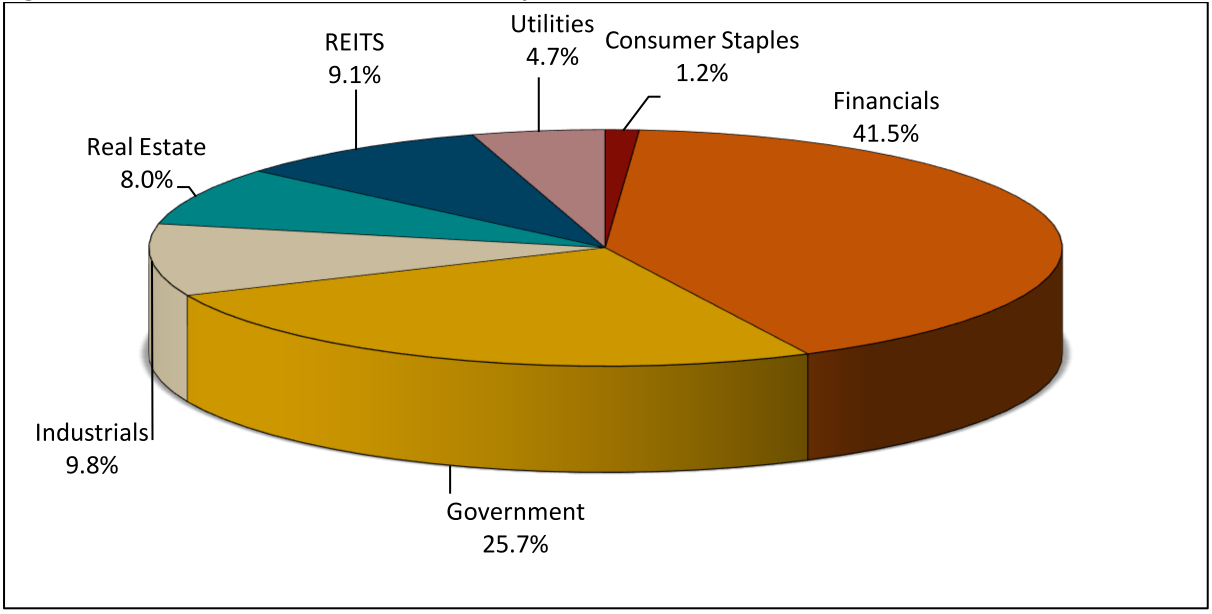
While the timing for most of these new Financial Institution issues was somewhat concentrated (Financial Institutions contributed seven of eight issues in the SGD space in June, amounting to ~78% of YTD Financial Institution issuance), there was a solid diversity of issuers by primary place of business (China, UK, Singapore, Netherlands, HK) and issues across the capital structure (Additional Tier 1, Tier 2, Seniors). The relatively large issue sizes also indicated still solid demand for bank capital instruments in the SGD space after a hiatus for the past few years which, while loss absorbing, are rated and come from good quality, regulated issuers. That said, this demand is coming at a much higher cost compared to existing bank capital instruments in the market that were issued in more benign operating environments and periods of low interest rates. Reasons behind the flurry of new Financial Institutions issues in our view could be expectations of funding costs going higher, building of capital buffers against possible valuation losses on financial instruments, the relative lack of supply of SGD bank capital instruments in the past 1-2 years and that it is relatively cheaper to issue in SGD against other currencies based on recent reset spreads.

1H2022 saw slightly higher volume of issuances y/y from the Government-linked sector, with a total of SGD3.0bn priced across four issues (1H2021: SGD2.9bn across four issues). While this was 57% lower h/h (2H2021 saw SGD7.0bn priced across eight issues, driven by large issuances from the statutory boards, HDB and the National Environmental Agency ("NEA")), government-linked issuers continued to contribute to the bulk of issuances in the SGD corporate space in 1H2022 at 25.7% (1H2021: 26.4%). In addition to HDB, the other issuer in this space in 1H2022 was Singapore Management University ("SMU"), which priced a SGD150mn 5-year senior unsecured bond at 2.85% in late May that was most likely privately placed. SMU's new bond continues a trend where university issuances are no longer concentrated on those issued by the National University of Singapore. In 2H2021, the National Technological University priced a SGD650mn 15-year sustainability-linked bond in a landmark deal.

Compared to last year where Industrial sector companies priced less than 10% of issuances (1H2021: 9.0%, 2H2021: 8.5%), this sector's contribution rose slightly to 9.8% in 1H2022, amounting to a total of SGD1.2bn across 4 issues. Issuances in this space were notably dominated by two logistics related companies – namely, postal company Singapore Post Ltd ("SPOST") and transhipment hub operator Port of Singapore Authority ("PSA"), both of which are externally rated as investment grade. PSA Treasury Pte Ltd (guaranteed by PSA International Pte Ltd) issued close to 70% of these issuances amounting to SGD800mn, pricing a SGD650mn 5-year senior unsecured bond at 2.88% and a 15-year senior unsecured bond at 2.675%. The two remaining issues were priced by SPOST, which came to the market with a smaller than expected SGD100mn 5-year senior unsecured bond at 3.23% and a SGD250mn PerpNC5 subordinated bond at 4.35%.

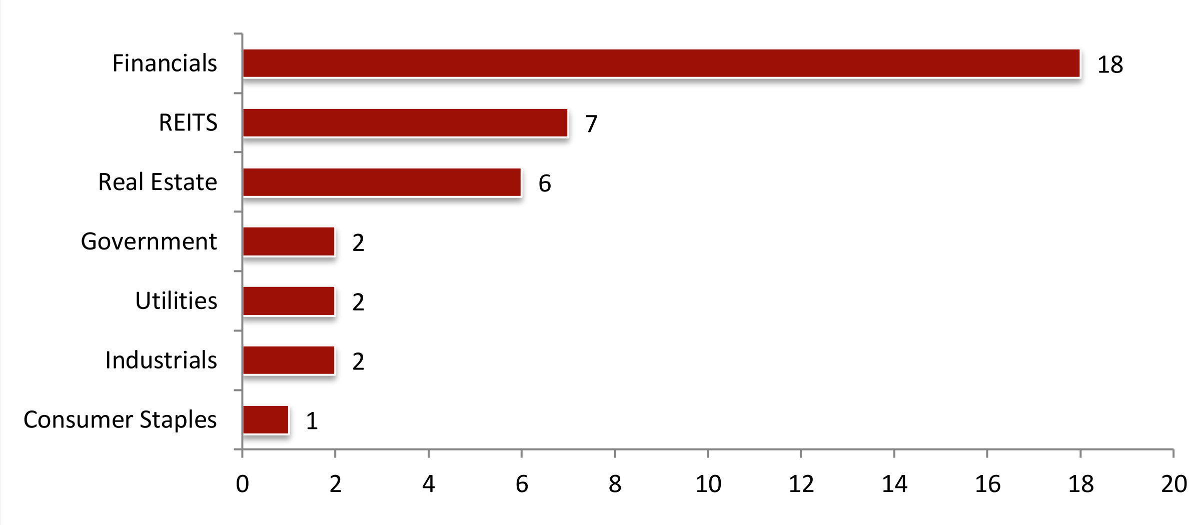
On the other hand, issuance momentum slowed down slightly in the S-REITs space, with SGD1.1bn priced across eight issues in 1H2022, down by ~36% y/y (1H2021: SGD1.7bn) and 19% h/h (2H2021: SGD1.3bn). The largest REIT issuance was by Ascendas REIT, which priced a SGD208mn 7-year senior unsecured green bond at 3.468%, for financing eligible projects in line with its green finance framework. Emblematic of the larger trend of rising GSSSL issuances in the SGD space, it is notable that the largest issuance in the S-REITs sector was also a GSSSL bond, like the case for government-linked issuers. Tenor-wise however, unlike 1H2021 which saw five out of the seven S-REIT issues being perpetuals, REIT issuers did not tap this market as much YTD as an alternative way to boost liquidity, with just two out of the eight S-REIT issues in 1H2022 being perpetuals. Nonetheless, among the individual issuance amounts in this sector, these were in reasonable sizes compared to historical issuances, with Lendlease Global Commercial Trust pricing a SGD200mn PerpNC3 and the recently renamed ESR-LOGOS REIT ("ELOG", formerly known as ESR-REIT) pricing a 5.25% SGD150mn PerpNC5 subordinated bond at 5.50%. Notably, this is the first deal from ELOG since its combination with ARA Logos Logistics Trust in early May.

Figure 4: Breakdown of 1H2022 issuance size by sector



Source: Bloomberg, OCBC Credit Research

Figure 5: Breakdown of 1H2022 issuers by sectors



Source: Bloomberg, OCBC Credit Research

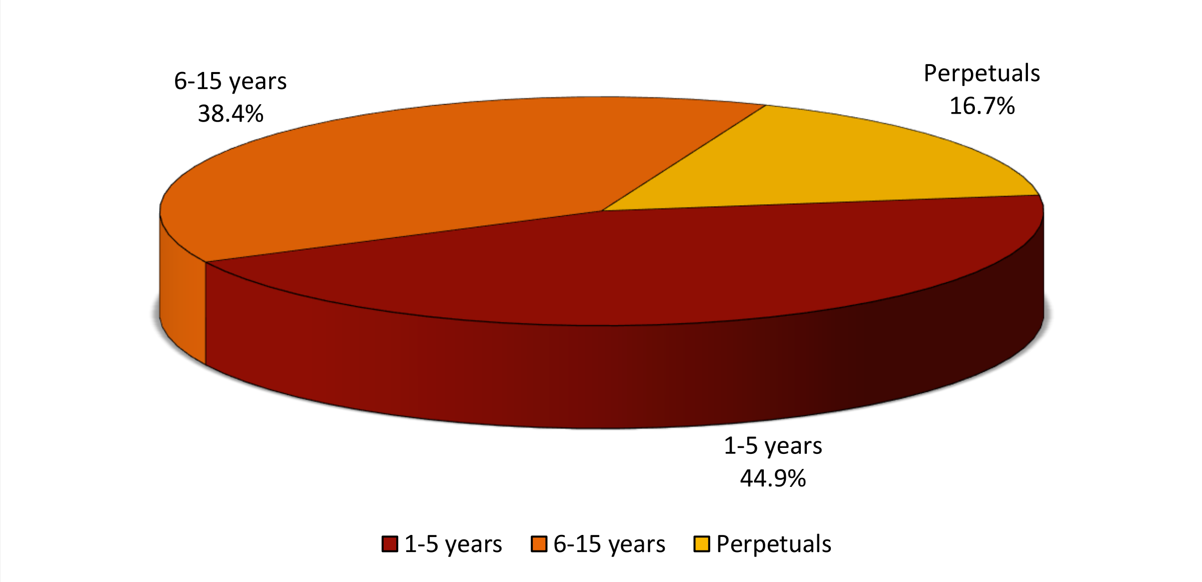
Concentration of issuances in the short to belly end of the curve

In 1H2022, issuance volumes have been largely contained within the shorter-to-belly end of the curve. Close to half, or 44.9% of YTD issuances amounting to SGD5.2bn are shorter-dated bonds with maturities ranging between 1 to 5 years. This is significantly higher than the proportion of shorter-dated issuances compared to last year (1H2021: 22.3%, 2H2021: 24.1%), and can be largely attributed to the current rising rates environment which shorter dated bonds with less duration risk are comparatively less sensitive to. In particular, there is a concentration in 5-year bonds that make up slightly over a quarter of total issuances at SGD3.3bn or 28.1%. We believe this is the part of the curve that satisfied both issuers and investors where investors want to decrease their duration risk and issuers get to lock in rates for a longer period of time versus short-dated bonds. This is followed by issuances in the 6-15 years bucket, which accounts for 38.4% of YTD issuances at SGD4.5bn (1H2021: 39.4%, 2H2021: 36.6%). On the other hand, longer term bonds namely perpetuals (which have no fixed legal maturity date) accounted for the smallest proportion of issuances at just SGD2.0bn, or 16.7% of total issuances respectively. Given that perpetuals have no fixed legal maturity date, there were no issuances this year maturing beyond 15 years.

Across the curve, this overall percentage composition is rather different compared to last year where interest rates were still low (even if they had risen from the ultra-low rates of 2020). While issuance volumes in the >15 years maturity bucket remained the lowest in 1H2022 as in 2021, 2021 saw volumes mostly concentrated within the belly-to-long end of the curve rather than the shorter-to-belly end. Notably, 6-15 year, >15 year maturity and perpetual issuances made up 36.6%, 20.4% and 18.8% of total issuances in for 2H2021 respectively (1H2022: 38.4%, 0%, 16.7%). Perpetual issuances were particularly active in 2021, largely due to a few reasons: (1) the low supressed interest rates which likely spurred issuers to lock in cheap funding for a longer duration, (2) the equity-like nature of perpetuals allowing issuers to improve their capital structure while maintaining their credit health, and (3) the lack of supply which likely starved investors of alternatives, driving yield-hungry investors to chase down the capital structure. Amidst the backdrop of persistent inflation fuelling rapidly rising interest rates however, this same narrative no longer holds this year.

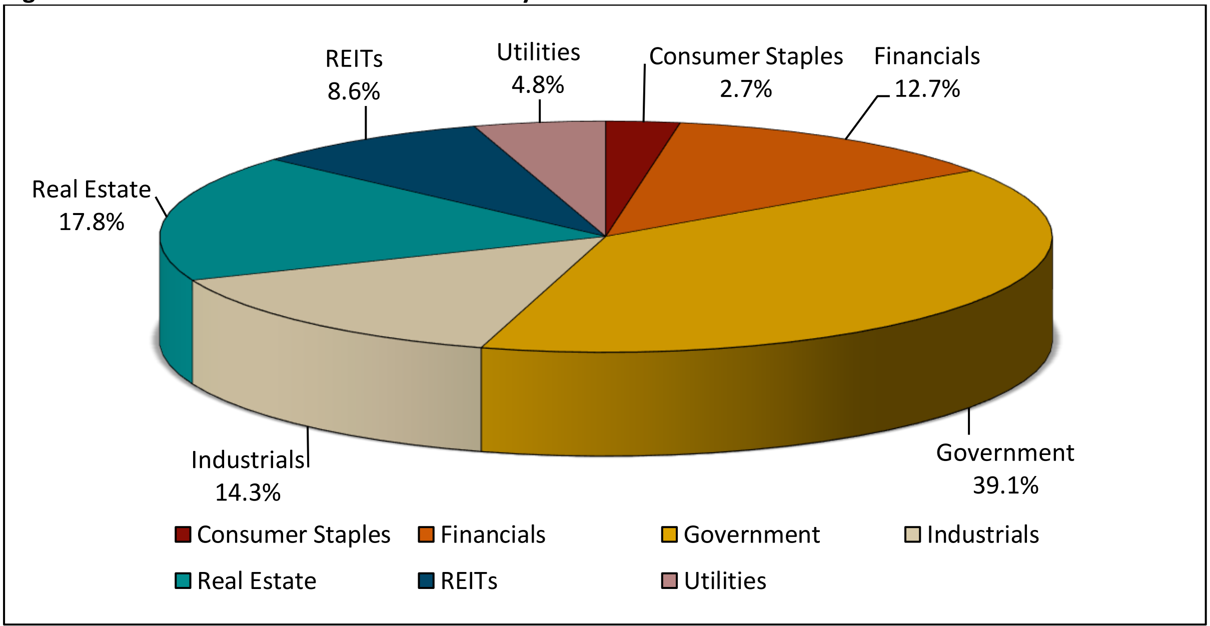
In contrast to 2021, the 1H2022 tenor composition is more similar to that in 1H2020, where volumes were largely concentrated in the shorter-to-belly end of the curve as well, though for different reasons. The uncertainty with COVID-19 then discouraged investors to visit the longer end of the curve while in 1H2022 this was driven by heightened duration risk and the flat yield curve. 1H2022 issuances in terms of tenure composition show a similar composition to 1H2020 issuances, with the bulk or 86.7% of 1H2020 issuances maturing between 1-year to 15-years (1H2022: 83.3%), while perpetuals accounted for the least proportion at 13.4% (1H2022: 16.7%) as few corporates were able to price bonds >15 years then, beyond government-linked issuers. In view of the rising rates environment where shorter-dated bonds offer comparatively less duration risk, we see issuances for the full 2022 possibly also concentrated to the short-to-belly part of the curve. Given the attractiveness of well-structured SGD perpetuals to investors against the rising rates backdrop through 1H2022, perpetual issuances may still increase and taking up a larger proportion of issuances for the remainder of 2022. In our view, perpetuals that are able to get priced would need to come with a call date (with reset date) that is in the short-to-belly tenor and at terms that economically incentivises a call and adequately compensates for duration risk.

Figure 6: Breakdown of 1H2022 issuance size by tenor



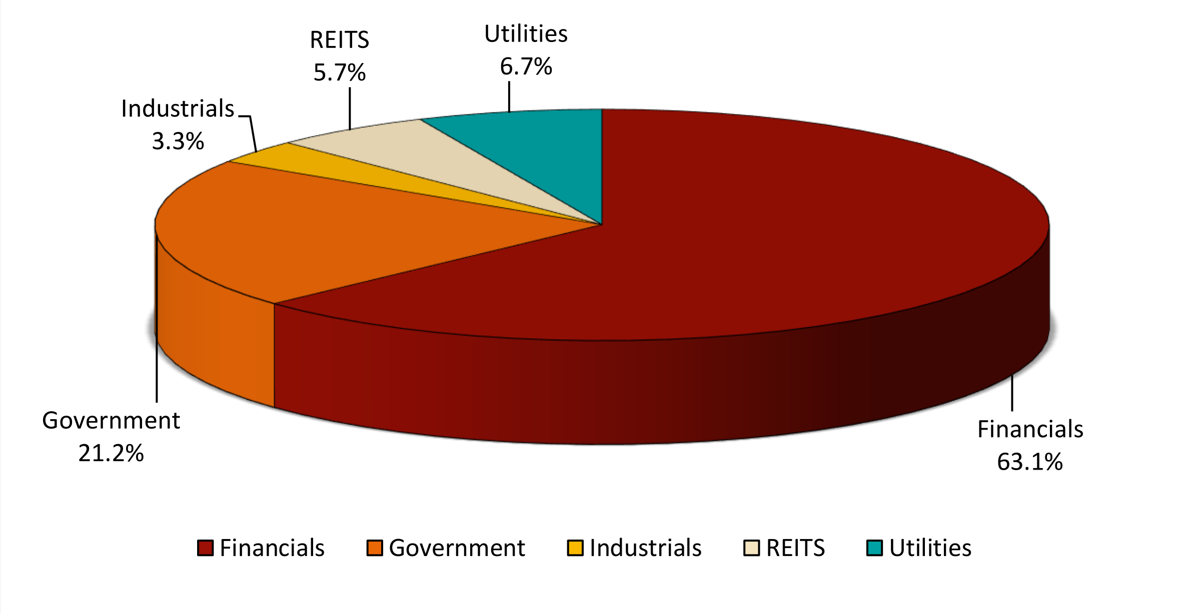
Source: Bloomberg, OCBC Credit Research

Figure 7: Breakdown of 1H2022 issuance size by sector for 1-5Y tenor



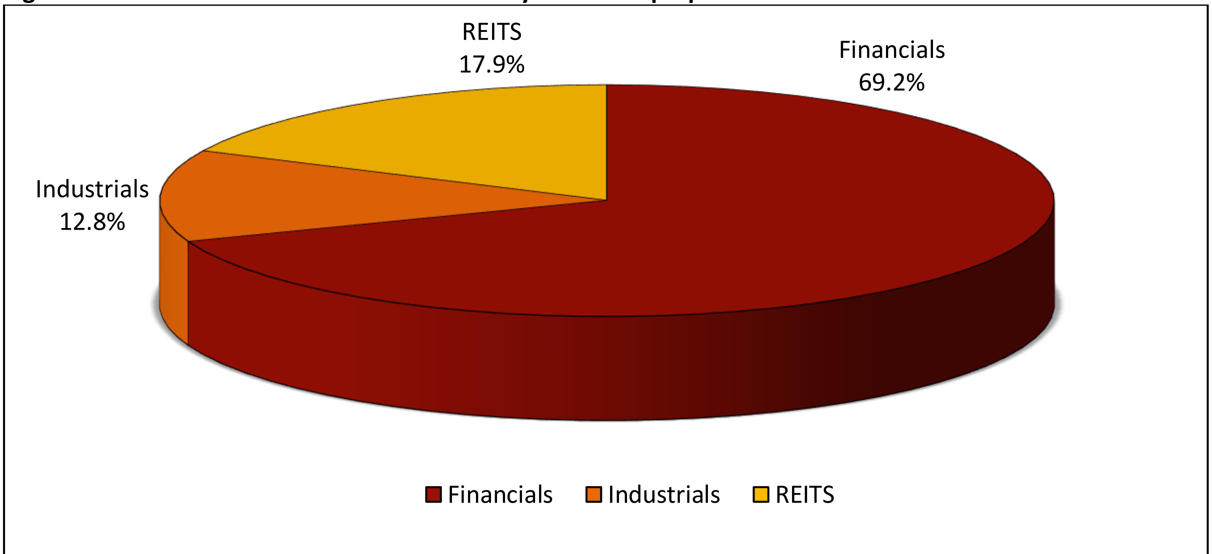
Source: Bloomberg, OCBC Credit Research

Figure 8: Breakdown of 1H2022 issuance by sector for 6-15Y tenor



Source: Bloomberg, OCBC Credit Research

Figure 9: Breakdown of 1H2022 issuance size by sector for perpetuals

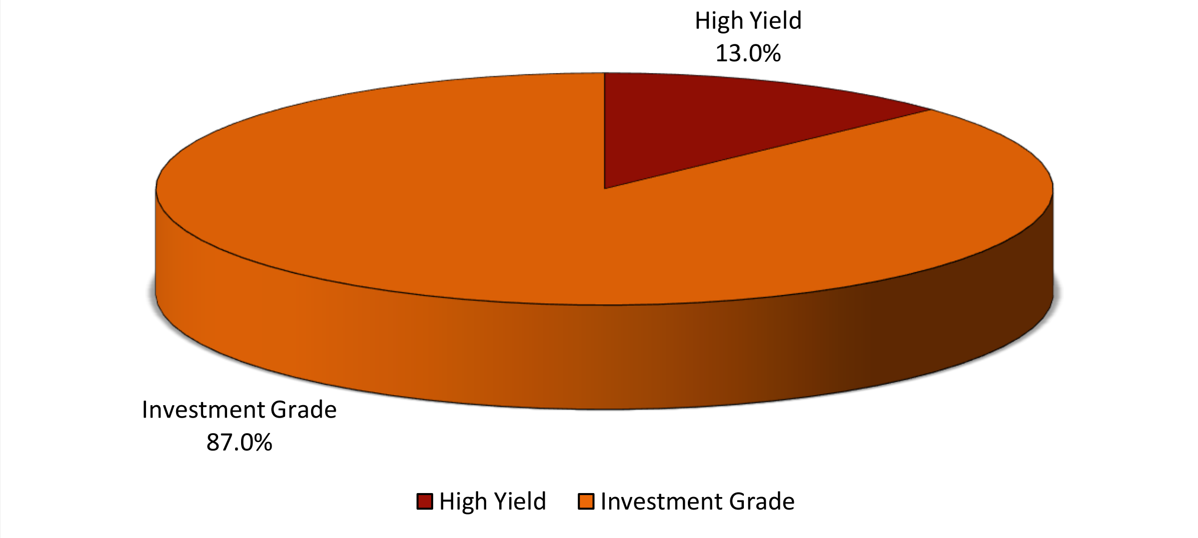


Source: Bloomberg, OCBC Credit Research

Investment Grade issuances continue to constitute the majority of the market

In view of the higher interest rates environment currently with the SGD 5Y SORA trading 145bps higher to 2.72% over 2022 YTD (31 December 2021: 1.27%), we have revised our definition of High Yield in the largely unrated SGD space as papers with ask yield-to-worst of higher than 5% (2021: coupon higher than 3.5%). Under this revised definition, the proportion of high-yielding papers for 1H2022 now stand at just 13.0%, lower than that in 2021 (1H2021: 21.7%, 2H2021: 17.1%). On an absolute basis, the SGD1.5bn of high yield bonds issued this year under this comparison is ~37% and ~36% lower on a h/h and y/y basis (1H2021,2H2021: SGD2.4bn). Though this may be partly due to the higher 5% cut-off definition for high-yield papers, a larger driver in our view is the composition of the high yield market in SGD which is concentrated on subordinated issuances (including perpetuals issued by higher grade banks and corporates), with only a handful of bullet bonds issued by high yield issuers, what we term as true high yield. YTD, there has only been SGD2.0bn of new perpetual issuances across banks and corporates, which is less than half that of the SGD4.2bn over the same time last year.

Figure 10: Breakdown of 1H2022 High-Yield issuances (>5% Ask Yield-to-Worst)



Source: Bloomberg, OCBC Credit Research

Credit Outlook for 2H2022 – Searching for a Shelter to Hide

1H2022 presented a challenging set of macroeconomic conditions which look to persist into the remainder of the year. Inflation rates have shot up to multi-decade highs, fuelled by supply chain disruptions that have been exacerbated by the escalation of the Russia-Ukraine conflict (resulting in food, oil and gas cost pressures) and higher demand from expansion in monetary supply during the pandemic and post-pandemic recovery. In turn, central banks in major markets (barring Japan) are responding via tighter monetary policy. Rapidly increasing interest rates and lower liquidity threaten to dampen growth and raise the possibility of stagflation or a recession. Although economic recovery has thus far continued in the US and Singapore and our OCBC Treasury Research colleagues continue to project growth in 2022 (OCBC 2H2022 Global Outlook, 23 Jun 2022), growth expectations have inevitably been pared back significantly.

So far, 1H2022 has panned out largely in-line with the key themes we presented in our "SGD Credit Outlook 2022" publication which centred on rising inflation and higher cost of borrowings. At that point though, we did not account for unforeseen geo-political developments such as the situation in Russia-Ukraine which has led to these key themes playing out at an accelerated speed.

Global Key Themes for 2H2022

Noting the exceptional environment that we are currently operating in, we see key themes in slowing economic growth, higher borrowing costs and geopolitical risks playing out over the remainder of 2022 as follows:

(A) Challenges to global economic growth: The outlook for economic growth continues to remain challenging, amidst risks from rising inflation rates, Russia-Ukraine conflict and fluid COVID-19 control measures in China.

- **Rapidly rising inflation:** Inflation has proved to be an increasingly tough genie to force back into the bottle, with the latest US consumer price index ("CPI") coming in at a notable close to 41-year high record 8.6% y/y increase for May, and Singapore CPI coming in at an elevated level of a 5.6% y/y increase in May. Our Treasury Research colleagues forecast inflation rates to remain elevated over the next six months before tapering somewhat in 2023. As such, we see continued risks of spiralling inflation expectations feeding into higher production costs and prices of goods and services. Already, labour strikes are taking place in the UK and Europe to demand for higher nominal wages with inflation eating away at spending power.
- **Prolonging Russia-Ukraine conflict:** Cutting off a major energy and food producer due to the conflict has led to dampening in growth outlook. Signs increasingly point to the Russia-Ukraine conflict turning protracted. North Atlantic Treaty Organization ("NATO") secretary general Jens Stoltenberg commented that it could likely "take years" before a resolution, and British Prime Minister Boris Johnson echoed that the public should steel themselves "for a long war".
- **Continued bite from China's COVID lockdowns:** China's pursuit of its zero-COVID mandate has resulted in significant movement restrictions including in Shanghai (a major commercial and financial hub) and parts of Beijing. More movement restrictions may follow in the remainder of 2022 should cases continue to emerge.

With continued uncertainty, Chinese consumers and companies can be expected to turn increasingly risk-adverse, erring on the side of caution in terms of production, investments, and consumption expenditure. That said, unlike other major economies, China does not have a high inflation problem as of writing.

- **OCBC Credit Research takeaway:** There are downside risks to growth ahead which in turn may impact credit profiles of corporates. Accordingly, our OCBC Treasury Research colleagues have revised the economic growth forecast downward for the US to 1.7% from 2.8%, though our GDP forecast for Singapore has been maintained at 3.8% for now. The slowdown looks to be a global one, with the World Bank in its 7 June "Global Economic Prospects" report forecasting sharply decelerated growth in advanced economies to 2.6% (down from 3.8% forecasted in January 2022), and 3.4% for emerging market and developing economies (down from 4.8% annual average over 2011-2019). The weaker growth expectations for the global economy may lead to credit spread widening should corporate earnings falter and impact debt financing ability. A reduction in investments from a weaker growth outlook could also delay issuers' need to come to the market and pressure issuance volumes.

(A) Accelerated tightening pushing up borrowing costs: In terms of rate hikes, we expect front-loading by central banks to remain the name of the game.

- **Rate hikes across major central banks:** Majority of the central banks around the world have tightened monetary policy and may continue tightening further. The Federal Reserve has hiked rates by 25bps, 50bps and 75bps in March, May and June meetings respectively. In Singapore, the Monetary Authority of Singapore ("MAS") undertook an off-cycle tightening in January and a double-barrelled tightening move in April. The early movers such as the Bank of England ("BoE"), Bank of Korea ("BoK") and Bank of Canada ("BoC") which commenced rate hikes from late 2021 look to continue tightening rates still. Meanwhile, laggards including the European Central Bank ("ECB"), Bank Negara Malaysia ("BNM"), Bank of Indonesia and Bank of Thailand are coming under increasing pressure to act more aggressively on their hiking agenda. Beyond upward pressure on front-end yields, terminal rates have rose to levels higher than the peaks in the previous cycles.
- **Quantitative tightening:** Aside from raising interest rates, tighter monetary policy conditions have also manifested in the form of quantitative tightening ("QT") adopted by the Federal Reserve and the BoE. Given that QT is a multi-year endeavour however, we acknowledge that there remains much uncertainty as to how far it can go before the next easing cycle would need to kick in. Our Treasury Research colleagues expect the impact of this liquidity tightening to be felt sometime later in the year, or in early 2023.
- **OCBC Credit Research takeaway:** It is increasingly expensive for companies to tap the debt capital markets given rising rates and widening spreads. Issuers may rush to tap the markets before funding costs increase further. Thus far, a number of financial institutions have issued replacement capital at coupon/distribution rates which are significantly higher than previous years.

(B) Spotlight on geopolitical conflicts: The impact of the Russia-Ukraine conflict can reverberate across different economies. With the countries in conflict being key commodity suppliers, countries reliant on such supplies have had to seek alternative sources, and the uptick in commodity prices has stoked food and fuel price inflation concerns.

- **Second-order effects on financial stability:** Aside from its direct impact including the default by Russia on its foreign debt, the outbreak of the Russia-Ukraine conflict has also stoked political conflicts in Sri Lanka (a key Asiadollar high yield bond issuer) that is currently facing hyperinflation and has defaulted on its debt. Other debt hotspots include Pakistan that is curtailing some imports and has negotiated for a loan from a consortium of Chinese banks in recent days. Laos' credit rating had been cut, although the country's political system is tightly control as a one-party state.
- **Reminder of other potential geopolitical hotspots in the region:** The escalation of the Russia-Ukraine conflict has given rise to concerns over potential conflicts in other parts of the world including the Asia-Pacific region. This has come against the backdrop of continued rivalry between the US and China.
- **OCBC Credit Research takeaway:** The potential for outright conflict escalation appears to be minimal at this point. That said, we are watchful if trends of deglobalisation deepen, and the rising geopolitical temperature may add to the list of market concerns that are impacting regional economic prospects and potential supply chains disruptions in the key semiconductor sector.

<u>Relative Resilience of SGD Bonds</u>

The SGD corporate credit market has held up better compared to the Asiadollar market in YTD2022. That said, given that we are in a highly challenging market environment, the relative strength of the SGD bond market is also being tested. While we observe that SGD investors tend to be yield-sticky rather than spread-sticky, existing issues have nonetheless been repriced by new issuances which are come in at wider spreads and with significant new issue concessions. Please refer to our "Of Conflict and Concerns" Special Interest Commentary published in March, where we elaborate on the main factors that drives resilience and relatively favourable positioning of the SGD corporate credit market.

Notable Opportunities in the Green, Social, Sustainability, Sustainability-Linked ("GSSSL") Space

For sustainability-focused investors, opportunities are emerging within the SGD GSSSL bond space. In June 2022, Singapore unveiled the Singapore Green bond Framework, with the market expecting the country's first ever sovereign green bond in 2H2022.

Despite the SGD bond market lagging in GSSSL issuances historically, there has been a notable rise in corporate GSSSL issuances this year, where we have seen SGD1.8bn of issuances YTD (including SGD1.0bn of green bonds from Housing & Development Board ("HDB")). This is approximately 90.3% higher y/y compared to SGD950mn issued over the same time period last year over 1H2021. We continue to think that the GSSSL market would be an increasingly mainstream part of the SGD corporate bond market going forward. While we do not yet observe significant pricing advantages or "greenium" on these SGD denominated GSSSL bond issuances, per Bloomberg, this has started to emerge in some sectors within the global GSSSL bonds space, in particular the automotive sector. Should this emerge for SGD issuers too, it could be another tailwind driving our optimistic outlook for more of such issuances.

2022 Singapore Bond Market Maturity and Supply Outlook

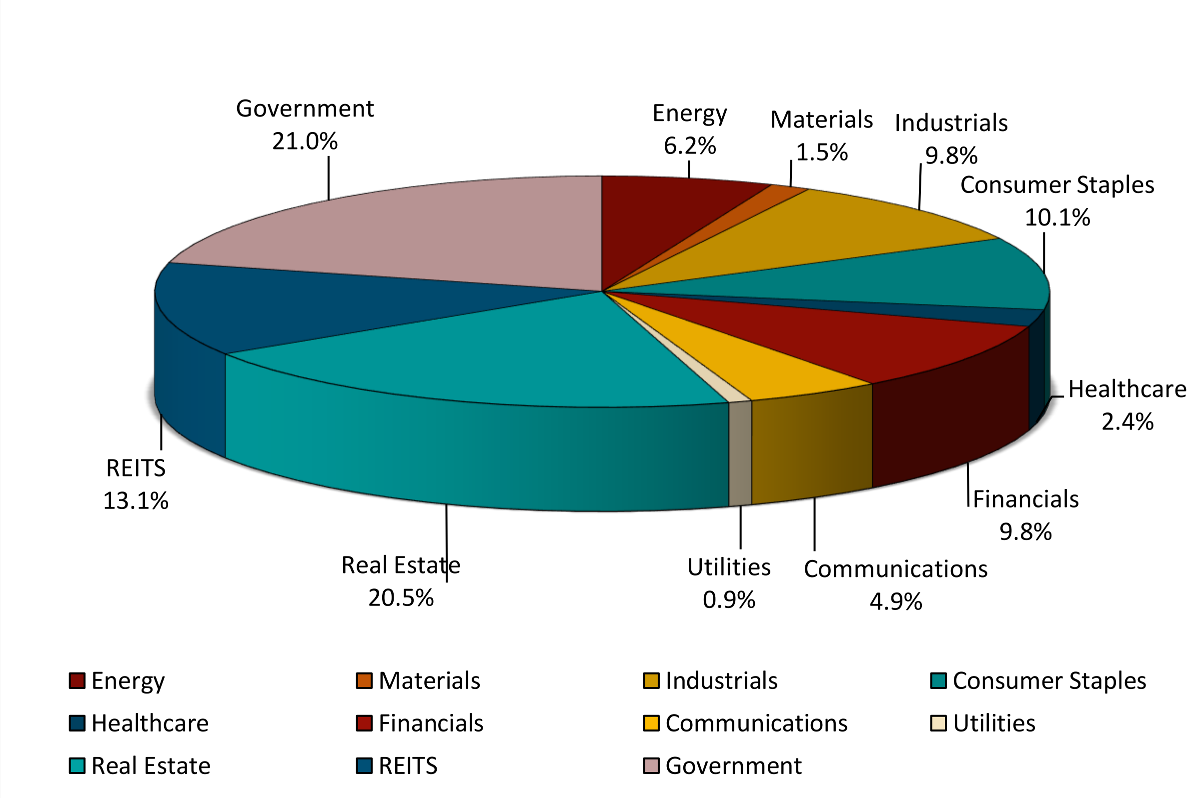
For 2H2022 (from 1 July onwards to 31 December 2022), based on Bloomberg data, approximately SGD11.7bn of SGD bonds are expected to mature or become callable (excluding Certificate of Deposits, zero coupon bonds, convertible notes/bonds, and MAS or Singapore Treasury and government bonds). Among the remaining issuances that are expected to mature or become callable, the majority are from issuers in the Real Estate (20.5%) and Government (21.0%) sectors respectively. Other large issuances with upcoming maturity / call dates over the remainder of this year come from the government sector – with HDB's SGD600mn 1.825% 5-year bond due in August and Land Transport Authority of Singapore ("LTA")'s SGD600mn 2.57% 7-year bond, also due in August.

However, we expect several issuers not to exercise the call. StarHub Ltd ("StarHub") recently opted not to call its STHSP 3.95%-PERP on the first call date, citing the higher cost of replacement capital. Other perpetual-issuers may follow. For instance, Mapletree Treasury Services Ltd (Guarantor: Mapletree Investments Pte Ltd ("Mapletree")), faces the first call date on its SGD700mn MAPLSP 3.95%-PERP on 12 November this year. Based on current forward rate expectations, a replacement perpetual may cost more than 3.95%. The similarity between both StarHub's and Mapletree's perpetuals are that their first call dates and reset dates do not coincide. As such, we see a 75% probability of the MAPLSP 3.95%-PERP not being called this year due to economic reasons.

Going forward into the remainder of 2022, we see issuers with manageable credit fundamentals and demand-supportive new issue concessions (which factors in risk premium for future rates volatility) to remain as tailwinds that should continue to support issuances. We expect investors to be biased towards bullets with a maximum tenor of 5-years or less and perpetuals with investor-friendly structures. Fixed-for-life perpetuals that were introduced during the ultra-low interest period are likely to remain out of favour among bond investors (even though we think these make decent substitutes for preference shares investors).

We expect issuances for full year 2022 to be lower y/y but not falling off a cliff versus 1H2022. Thus far, SGD issuances have proved to be relatively resilient with 1H2022 issuances higher by 2.3% y/y (including bonds from statutory boards and an issuance that is priced today). This contrasts to Asiadollar volumes which have fallen by ~40.6% y/y. We think issuances should also be supported by demand from issuers looking to refinance. Even if we exclude the SGD700mn from MAPL, there remains ~SGD11.0bn of bonds and perpetuals that would need to be replaced as they come due (or gets called).

Figure 11: Bond Maturities breakdown by sector for 2H2022



Source: Bloomberg, OCBC Credit Research

Conclusion

Going into 2H2022, we expect greater challenges. Investors would need to contend with still persistent inflation, elevated borrowing costs and slower economic growth. Amid higher interest rates and tighter monetary policy, we also see weaker secondary market performance and generally lower y/y primary issuance volumes for both the SGD and global fixed income markets. Although SGD bonds offer a relative shelter against the broader market, the drawdown in the SGD market is nonetheless significant.

From a top-down perspective, we expect investors to reduce allocation to bonds and increase their allocation to assets such as near-cash instruments, commodities, property (both residential and commercial property), and infrastructure (provided that the asset is inflation pegged and have manageable debt burden). Whilst fixed income as an asset class is not a natural investment option in an inflationary environment, we expect income-seeking investors to continue holding a portion of fixed income as part of a diversified portfolio. We think at some point in the next 6-12 months, investors could be very well served by switching back into the longer dated investment grade space, though credit spreads of the existing papers in this bucket are currently unattractive.

In view of the rates headwind and geopolitical uncertainties, we continue to keep our focus honed on preserving capital for 2H2022. This has been a constant theme for us since the beginning of 2022. We had been advocates of perpetuals (both corporate and bank capital instruments) and we still continue to think investors can seek yield in this space. In 1H2022, our model portfolio, which comprised 67.0% in perpetuals (as of Monthly Credit View published on 2 Jun 2022), returned -0.69%. However, we see elevated volatility in this space for 2H2022, particularly among bank capital instruments where bank issuers have been proactively tapping international bond markets. That said, such volatility will be technical rather than fundamentals driven. Whilst we are not concerned over the credit fundamentals of the financial institution issuers we cover, recent new issuances have come with wide spreads, repricing existing instruments downwards. Due to the credit spread widening, this by implication also increases the risk of non-call at first call among existing instruments.

For our 2H2022 for the SGD corporate credit market specifically, we are lowering our top-down outlook call for perpetuals and bank capital instruments to neutral and increasing our preference for crossover bullet bonds, laddered across different shorter dated maturities, particularly bullets with higher coupons to cut down duration risk even further. While such a strategy may still result in a mark-to-market loss by year-end, we think a shorter maturity portfolio means this impact is smaller. Also, in a bond ladder, shorter maturity bonds may be reinvested at higher yields down the road as they reach maturity. This optionality is very useful in this environment in our view, as the proceeds can be reinvested at higher rates. Our top-down view is reflected through adjustments in our model portfolio, where we reduced the exposure of perpetuals to 43.1% of the portfolio, with a shorter portfolio duration of 2.3 years to first call/maturity (from 2.9 years). While our exposure to perpetuals and bank capital instruments remains large, this is driven by bottoms-up selection where issue structure and relative valuation form the key considerations.

The Fed's last tightening cycle lasted three years (where the tightening was particularly felt in the last two years of the cycle) before it switched course. This time, rate hikes are more front-loaded which, in our view, means a good chance of an economic slowdown occurring sooner. Our macroeconomic colleagues are forecasting a US GDP growth rate in real terms of 0.9% for 2023.

We remain mindful of further downside risks. Pockets of the economy (albeit the more overheated ones in our view) have announced sizeable job cuts, both in the US and SG. That said, on an overall basis, the US and Singapore jobs market remains tight, and we are not yet at-risk of a near-term stagflation. However, if current measures to tackle high inflation proves illusory and Central Banks continue to push through measures that prioritise price stability more so than growth, we would enter into an unfamiliar territory (at least as far as our career histories are concerned). In this scenario, interest rates may be at a much higher rate and staying elevated for much longer.

As we enter into a tricky 2H2022, we continue to be ever grateful for our readers' support and feedback and hope you find our publications useful in the rest of the year ahead. We hope you and your close ones stay healthy in mind and body.

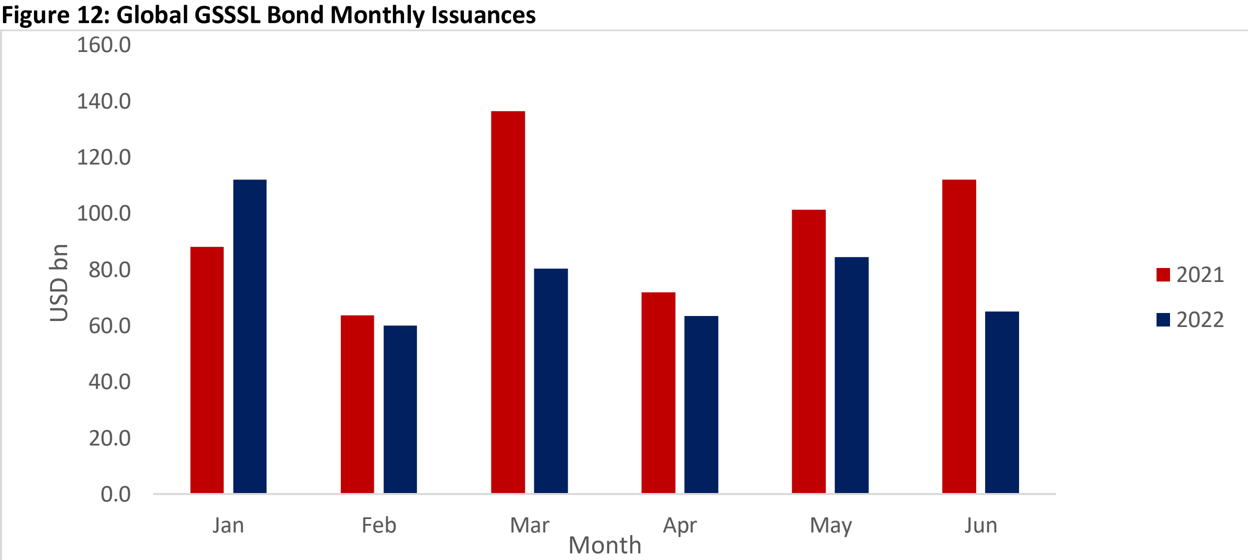
With appreciation, OCBC Credit Research

Expanding the Green, Social, Sustainability and Sustainability-linked ("GSSSL") Market

Global Performance of GSSSL: Globally, GSSSL bond sales from governments and corporates total USD440.6bn YTD, down 20.5% y/y from the same period last year. Of this amount, more than half are from green bond sales, per data from Bloomberg. This lower figure may be due to potential headwinds from rates volatility and economic growth slowdown concerns, delaying corporate bond market issuers' decisions in coming to the market. However, we think that demand for bonds linked to environmental, social and governance ("ESG") initiatives may remain strong due to the increased awareness of risk for traditional business models in the path to decarbonisation, asset management firms' investment mandates and investors' preferences and beliefs. A PwC 2021 Global Investor Survey reported that 79% of respondents consider ESG risks to be an important factor in investment decision-making, while 82% think that companies should embed ESG as part of their corporate strategy. As of writing, YTD ESG and green bond investments based on the Bloomberg MSCI Global Aggregate Index returned -14.29% (on a total return basis). Though this is in the negative territory, it stands 0.99% higher than the Bloomberg Global Aggregate Treasuries Bond Index Total Return YTD over the same period.

Do note that for the purposes of this piece, we are using the catch-all term "GSSSL bond", although the information also applies to perpetuals. In the SGD corporate credit market, there is one green perpetual outstanding as of writing.

Figure 12: Global GSSSL Bond Monthly Issuances



Source: Bloomberg

GSSSL and more: For ease of identification of the various bonds, at OCBC Credit Research, we are opting to use the following stand-out icons to label these GSSSL instruments specifically going forward.

Icon	Type of bonds	Definition
	Green bond	Proceeds from these bonds are specifically allocated to financing new and existing projects or activities with positive environmental impacts.
	Social bond	To qualify as a social bond, the proceeds must be used to finance or refinance social projects or activities that achieve positive social outcomes and/or address a social issue.
	Sustainability bond	Sustainability bonds are issues where proceeds are used to finance or re-finance a combination of green and social projects or activities.
	Sustainability-linked bond	These bonds are structurally linked to the issuer's achievement of climate or broader United Nations Sustainable Development Goals ("UN SDG") targets. Sustainable performance target ("SPT")'s that are not met then results in a decrease or increase in the instrument's coupon rate.
	Gender bond	A type of social bond where proceeds are used to support the specific purpose of raising awareness on gender inequality and women empowerment.
	Blue bond	A type of green bond where proceeds are used on projects or strategies leading to a healthy and productive ocean and marine life.

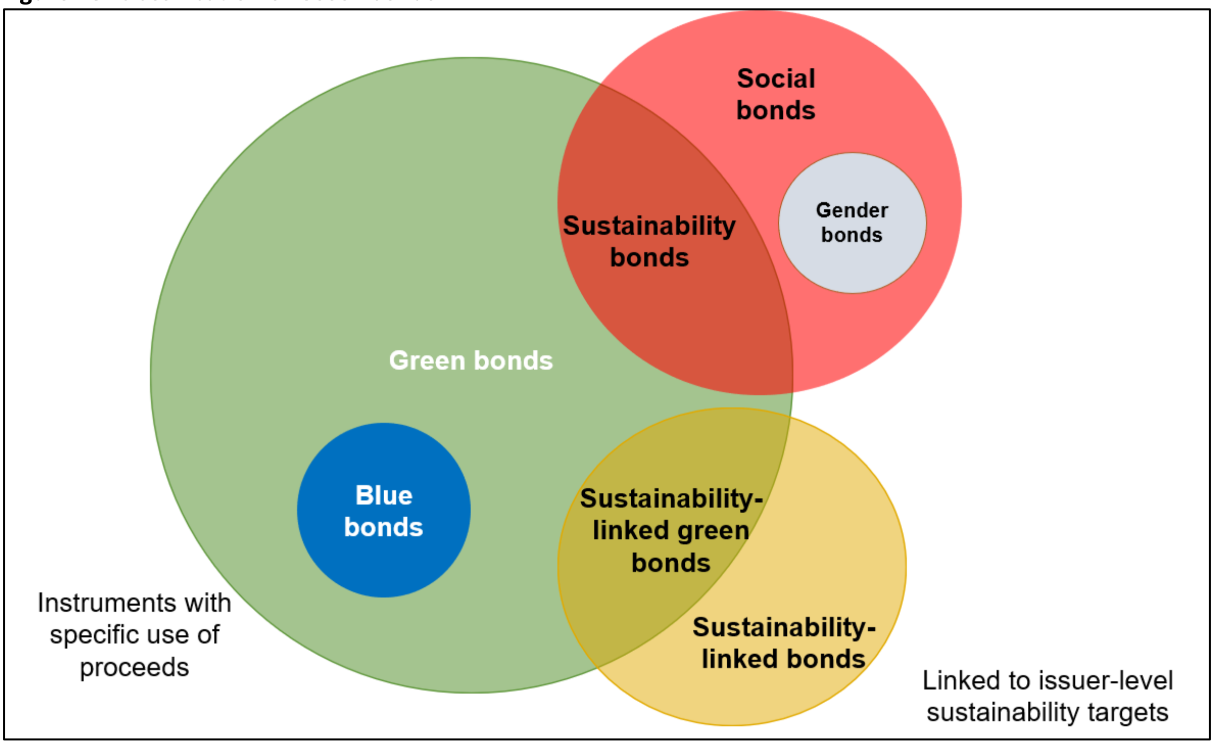
Source: OCBC Credit Research

Apart from GSSSL, we are seeing an increased variation in the type of related bonds, leading us to update Figure 13 below. In the Asia-Pacific region the Asian Development Bank ("ADB") has been issuing gender bonds, with the latest issuance being a 5-year NZD850mn Kauri gender bond in May 2022. The proceeds will be used for eligible projects which promote gender equality and women's empowerment either directly or indirectly through governments or financials or other institutions in private sector projects. Another new issuance in the market was a USD230mn sustainability-linked green bond by Yunnan Energy Investment Overseas Finance Co Ltd. Use of proceeds would be for refinancing existing offshore indebtedness which has been incurred in connection with financing and/ or refinancing of eligible green projects under its sustainable finance framework. Additionally, as a SLB, sustainability performance targets are also tied to this bond – in this case, the targets relate to the company's wind and solar power generating capacities, with a coupon step-up penalty of 15bps per annum and 10bps per annum should the company fail to meet these respective wind and solar power targets.

Going forward, a new category of issuance can be expected too. In Japan where companies are lagging other major economies in terms of the percentage of women in executive positions, its largest real estate developer Mitsubishi Estate Co. ("MEC") is planning to price a novel bond, where it would have both environmental and diversity related goals linked to it. This stands out, as companies typically have separate frameworks for their environmental and social objectives, rather than a combined one. Under this framework, MEC plans to cut emissions, and also increase the proportion of its female managers from 5.8% in FY2020 to 40% by FY2050. If MEC misses these targets, it will purchase international third party accredited voluntary carbon credits or make donations.

In addition, as mentioned in our outlook, the greenium on GSSSL bonds have begun to emerge in some areas, particularly in the automotive sector which currently commands the largest price advantage both in the United States and European corporate debt markets per Bloomberg. Such greenium provides a price advantage for issuers and could encourage more issuances in the GSSSL space going forward. However, such greenium should not be overstated – according to a Federal Reserve paper published in June 2022. The greenium paid on such GSSSL issuances over conventional bonds is not linked to the credibility of the projects they fund, but rather, biased towards issuances from investment-grade European firms.

Figure 13: Classification of GSSSL bonds



Source: OCBC Credit Research
Note: As far as we are aware, there have not been any SGD blue, sustainability-linked green bond or gender bonds yet.

Singapore actively issuing GSSSL bonds: In 1H2022, Singapore issuers have been active in issuing GSSSL bonds. In this piece, we focus on green, social and sustainable bonds ("GSS") in Singapore. To recap, GSS bonds are required to be tied to a specific green or social project, while SLBs are bonds which are not tied to specific use of proceeds but have coupon adjustments linked to SPT. In a later piece, we focus on sustainability-linked bonds ("SLB").

As of 30 June 2022, a total of SGD1.81bn SGD GSSSL bonds were issued in Singapore YTD, with the flurry of GSSSL bonds issuances seen in the month of March and April this year. These consist of two green bonds, one social bond and two SLBs, as compared to just three GSSSL issuances in 1H2021. For 2021, there were a total of ten GSSSL issuances. With the rising rates environment, issuers may play catch up with issuances in 2H2022, before further expected hikes. In view of this and the already higher y/y issuances in 1H2022, we see possibility of 2022 recording a higher number of GSSSL issuances than the ten in 2021.

The largest issuance came from Housing and Development Board ("HDB"), a statutory board under the Ministry of National Development responsible for Singapore's public housing. HDB priced a SGD1.0bn 5-year senior unsecured green bond at 1.845%, with net proceeds to be used exclusively for financing or refinancing its green projects under the project category of green buildings. Notably, this is HDB's first green bond issuance following its green finance framework established on 13 January 2022. Eligible projects under this framework include the development of new residential and non-residential HDB projects which are planned to obtain the Building and Construction Authority ("BCA") Green Mark certification of Gold Plus or above. These projects are expected to yield environmental benefits, including a reduction in energy usage and carbon emissions in line with the UN SDGs and Singapore's 2030 Green Plan.

The other green bond was from Ascendas Real Estate Investment Trust ("AREIT"), a leading Industrial REIT listed in Singapore. AREIT is a well-known issuer in Singapore and in the GSSSL space. Notably, AREIT was the first REIT in Singapore to issue a SGD green bond in August 2020 and subsequently a green perpetual in September 2020. In April 2022, it priced a SGD208mn 7-year green bond at 3.468%, tightening from an initial price target ("IPT") of 3.75% area. As a green bond, similar to the HDB issuance mentioned above, net proceeds are to be used for financing or refinancing projects in line with the company's green finance framework, such as those relating to green buildings, renewable energy, sustainable water management, and clean transportation.

First REIT, also a Singapore listed REIT, though invests primarily in real estate used by healthcare and healthcare-related sectors, priced a SGD100mn 5-year senior unsecured social bond at 3.25%, tightening from an IPT of 3.5% area. This issue was guaranteed by the Credit Guarantee & Investment Facility ("CGIF"), a trust fund of the Asian Development Bank. As a social bond, net proceeds from this issuance will be used to refinance the company's current term loan in line with the eligible projects under its social financing framework. Under this framework, eligible projects include those relating to hospitals that offer essential healthcare services, nursing homes, and healthcare properties with a direct social impact on its target population. For context, First REIT established its Social Finance Framework in Mar 2022 to serve as a platform for the issuance of loans and bonds to attain specific social benefit outcomes and to fulfil one of the many United Nations Sustainable Development Goals ("UN SDGs"), of Good Health and Well-Being. Notably, this is SGD corporate credit market's first social bond to date.

Table 1: SGD Green/ Social Bonds issued in 2022

Type	Issuer	Issue	Amount Outstanding (SGD mn)	Current Ask Price	Current Ask YTM	Bond Recommendation	Issuer Profile
	Housing & Development Board	HDBSP 1.845% '27s	1,000	94.13	3.20%	NA	Unrated
	First Real Estate Investment Trust	FIRTSP 3.25% '27s	100	99.30	3.41%	OW	Neg (6)
	Ascendas Real Estate Investment Trust	AREIT 3.468% '29s	208	99.38	3.57%	UW	N (3)

Indicative prices as at 30 Jun 2022 Source: Bloomberg, OCBC Credit Research

Growing efforts on the government front: In June 2022, the Singapore government published the Singapore Green Bond Framework. This is a governance framework for sovereign green bond issuances under the Significant Infrastructure Government Loan Act 2021 ("SINGA"). The framework detailed the intended use of proceeds from green bonds, the governance structure to evaluate and select eligible projects, operational approach in managing the green bond proceeds and commitment to post-issuance allocation and impact reporting. The Singapore government will be issuing up to SGD35bn of green bonds by 2030 with its inaugural sovereign green bond under the SINGA in the coming months. These issuances will also be known as Green SGS (Infrastructure) bonds and will finance nationally significant infrastructure which meet the green criteria under the Framework. Increasingly, we are seeing more government issuances in the green space. In Greater China, the Hong Kong Monetary Authority ("HKMA") priced its first retail green bond (HKD20bn) on 18 May 2022. The Hong Government is not a new issuer in this sphere. It has previously priced green bonds with the bulk of issuance in 2021 in various currencies like CNY, EUR and USD with a total of approximately USD8.75bn. The 3-year retail green bond has a yield tied to inflation or 2.5%, whichever is higher. Proceeds raised from this bond will be used to back nine types of green projects. HKSAR plans to increase usage of wind and solar power and using waste to generate electricity as it strives to reach carbon neutrality by 2050. In Europe, Austria is also joining the bandwagon in sovereign green bond issuance. Austria issued its inaugural green bond of EUR4bn yielding 1.876% maturing in 2049. Proceeds of the bond will be used to partially or fully finance green projects benefiting environmental and climate-related areas. Austria aims to increase its share of renewable from the current 75% to 100% by 2030.

Classification of activities to be rolled out in short term and others: In May 2022, the Green Finance Industry Taskforce ("GFIT"), a taskforce convened by the Monetary Authority of Singapore ("MAS") comprising of market participants, published the second version of Singapore's green and transition taxonomy for public consultation. The taxonomy classifies economic activity into a traffic light system of green, amber and red, based on how environmentally sustainable (or conversely, harmful) an activity is, focusing on identifying activities which are green. In our view, the eventual roll out of this taxonomy, which is targeted to be finalised in 2023, means less scope for greenwashing to happen as arrangers, issuers and investors alike would have a commonly accepted reference point when assessing an issuer's activities. Issuers who have no green activities per the taxonomy may still be able to access the GSSSL market in our view, so long as they are credibly transitioning. Since SLBs are not tied to specific underlying projects, the quantum of SLBs that could be potentially issued by corporate credit issuers is higher versus instruments with specific use of proceeds in our view. We expect large scale green projects (and hence volume of green bonds) in Singapore to be driven by the public sector going forward.

Categories of Eligible Green Projects:

Renewable Energy	Sustainable Water and Wastewater Management
Energy Efficiency	Pollution Prevention, Control and Circular Economy
Green Building	Climate Change Adaptation
Clean Transportation	Biodiversity Conservation and Sustainable Management of Natural Resources and Land Use

Source: GFIT, MAS

The Singapore Exchange Regulation ("SGX RegCo") and the Accounting and Corporate Regulatory Authority ("ACRA") have jointly set up a Sustainability Reporting Advisory Committee ("SRAC") to serve as an advisor on the suitability of international sustainability reporting standards for implementation in Singapore, and to look into the development of a roadmap for wider implementation of sustainability reporting for Singapore-incorporated companies, beyond those listed on SGX. The incorporation of SRAC comes ahead of several sustainability reporting requirements for companies, including mandatory climate reporting for issuers in the financial, energy, and agriculture, food and forest products industries from 2023, and for listed companies from the materials and buildings, and transportation industries from 2024.

Updates in the Sustainability-Linked Bonds ("SLB") market

Continued issuances of SLBs in SGD: In February 2021, the SGD bond market saw the first SLB priced from Surbana Jurong Pte Ltd ("SRBJNG"), an unlisted global urban, infrastructure and managed services consulting firm which raised SGD250mn. Since then, there has been four more SLB issuances that came to market, raising ~SGD1.8bn. Two SLBs totalling SGD500mn was priced YTD, representing half of all green, social, sustainability, sustainability-linked ("GSSSL") instruments priced so far (excluding GSSSL from statutory boards).

Some recap: Unlike green bonds where the use of proceeds are catered for specific green projects, according to Bloomberg, SLBs can be viewed as behaviour-based debt, where the intent is to encourage issuers to modify their behaviour. Like sustainability-linked loans ("SLL") which has a longer history in Singapore, SLBs are structurally linked to the issuer's sustainability targets, expressed through key performance indicators which are measurable and trackable. These key performance indicators are termed as Sustainability Performance Targets ("SPTs") for SLB issuances. If structured appropriately, these should catalyse change across the issuer's entire business operations.

SLBs are instruments that can finance transitions: At OCBC Credit Research, we continue to hold the view that transition finance is an important part of the financing equation on the quest towards decarbonisation and that SLLs and SLBs are key instruments in meeting such transition needs. This is especially more so as transition-labelled bonds (a use of proceeds bond) is lacking traction. As at 10 June 2022, there are only ~SGD17.2bn of transition bonds outstanding globally per Bloomberg data (including self-reported ones), in contrast to ~SGD216bn of outstanding SLBs. This is in part due to lack of clarity on what constitutes transition activities. Lack of clarity over transition activities can also apply to SLBs, although unlike transition-labelled bonds, SLBs are explicitly linked to behavioural changes. While certain investors still prefer green bonds over SLBs, SLBs is becoming the main format for transitioning companies where growth in SLBs is being aided by International Capital Market Association ("ICMA") Sustainability-Linked Bond Principles 2020 (rolled out as voluntary guidelines since June 2020). It is perhaps no coincidence that the largest SLB issuer so far in the SGD corporate credit market with SGD975mn outstanding is Sembcorp Industries Ltd ("SCI") and where SCI is also a green bond issuer. Power generation is a key business for SCI. Whilst the company still generates power using fossil fuel, the company has invested in renewable power since 2012 and is in the midst of transitioning to becoming greener. For more details on SLBs please refer to our SGD Year 2022 Credit Outlook.

SGD SLBs more insulated from allegations of greenwashing? In the past 12 months, allegations of greenwashing have come to the fore, culminating in US and German regulators investigating certain asset management companies. As far as we are aware, there have been no significant concerns in the SGD GSSSL market thus far with regards to greenwashing allegations. While we cannot claim that greenwashing does not happen in Singapore, in our view it is less likely in the SGD GSSSL market, which only started to become more active in 2020. By 2021, greenwashing was already a prevalent concern which market participants and regulators in Singapore were well aware of, making it less likely for an issuer with unsubstantiated claims to successfully come to market. We note that all four companies who had issued SLBs had set up their sustainability-linked financing framework to be aligned with the ICMA Sustainability-Linked Bond Principles 2020. All four companies had subjected their frameworks and SPTs to external party commentary, although with different levels of surveillance in our view.

Figure 14: Overview of SGD-denominated SLBs

Issuer	Issuer's Key Industry Segment	Issue	UN Sustainability Development Goal Mapping	Nature of Sustainability Performance Targets ("SPT")[1]	External Opinion
Sembcorp Industries Ltd	Power generation and urban development	SCISP 2.66% '32s SCISP 3.735% '29s	Goal 7 and 13	• Reduction of greenhouse gas ("GHG") emissions intensity • Reduction of absolute GHG • Renewable energy capacity	Second Party Opinion by DNV
Ascott Residence Trust	Hospitality REIT; service apartments, hotels and other type of long stay property owner	ARTSP 3.63% '27s	Goal 7, 11 and 13	• Reduction of carbon emissions intensity • Reduction of energy intensity • Green buildings	Second Party Opinion by Vigeo Eiris
Nanyang Technological University ("NTU")	Education	NTUSP 2.185% '36s	Goal 3, 4, 7, 11 and 13	• Reduction of carbon emissions intensity • Carbon neutrality for NTU Yunnan Campus in Singapore	Report on certain agreed upon procedures by PwC
Surbana Jurong Pte Ltd	Urban, infrastructure and managed services consulting	SRBJNG 2.48% '31s	Goal 3, 7, 9 and 11	• GHG emissions intensity • Number of consultancy mandates relating to design of green buildings • Energy consumption levels of company's offices	Report on certain agreed upon procedures by PwC

Source: Bloomberg, Company, OCBC Credit Research
Note: (1) SPTs per the Sustainability-Linked Finance Framework of the issuers; each SLBs may be structured such that they are linked to one or more SPTs
(2) All four of the frameworks are aligned to ICMA Sustainability-Linked Bond Principles 2020

Longer list of potential SLB issuers: Whilst the SGD market only has five SLBs outstanding (from four issuers), a larger number of SGD corporate bond issuers are present in the sustainability-linked financing market through being SLL borrowers and/or have issued sustainability-linked derivatives. In our view, these companies are a pool of potential issuers of SLBs as the market develops further. Aside from those with specific experience in linking their financing to sustainability targets, we also see the SGD corporate credit issuers who are already issuers in the GSSSL market as possible future issuers of SLBs.

Figure 15: SGD Corporate Credit Issuers Present in the Sustainability- Linked Financing Market

Company	Key Industry Segment
ARA Asset Management Ltd	Property investment and management
Ascott Residence Trust	Hospitality REIT
Cagamas Berhad	National mortgage corporation
CapitaLand China Trust	Diversified REIT
Capitaland Group Pte Ltd	Property investment, management and development
CapitaLand Integrated Commercial Trust	Commercial REIT
City Development Ltd	Property development
China Construction Bank Corp	Financial Institution
CPI Property Group SA	Property development
Cromwell European REIT	Industrial REIT
ESR Cayman Ltd	Property investment, management and development
ESR LOGOS REIT	Industrial REIT
Ford Motor Company	Automaker
Frasers Centrepoint Trust	Retail REIT
Frasers Logistics & Commercial Trust	Diversified REIT
Frasers Property Group	Property investment, management and development
Indorama Ventures PCL	Property investment, management
Keppel Corporation Ltd	Property, infrastructure, sustainability solutions, telecommunications
Keppel Infrastructure Trust	Business trust focused on owning infrastructure assets
Lendlease Global Commercial REIT	Commercial REIT
Mapletree Industrial Trust	Industrial REIT
Mapletree Investments Pte Ltd	Property investment, management and development
Mapletree Logistics Trust	Industrial REIT
Nanyang Technological University	Education
Olam International Limited	Agri-business
OUE Commercial Trust	Diversified REIT
PSA Marine Pte Ltd	Port and harbour operator
Sembcorp Industries Ltd	Power generation and urban development
Sembcorp Marine Ltd	Marine and offshore engineering solutions
Singapore Telecommunications Ltd	Telecommunications
StarHub Ltd	Telecommunications
Suntec Real Estate Investment Trust	Commercial REIT
Surbana Jurong Pte Ltd	Urban, infrastructure and managed services consulting
UOL Group Ltd	Property investment, management and development

Source: Company, OCBC Credit Research
Note: (1) Non-exhaustive list
(2) Companies (or their subsidiaries) who has set up Sustainability Linked Financing Frameworks and/or who has issued sustainability linked financing instruments (eg: SLBs, SLLs, derivatives)

Stacking of Sustainability Credentials: Thus far in the SGD corporate credit market, green bonds and SLBs are two distinct instruments though globally, there has been issuances of green SLBs where the bond is linked to specific SPTs whilst at the same time the use of proceeds are for green purposes. Verbund AG, a leading Austrian-based power generation company priced the first green SLB in March 2021 (EUR500mn, 20-year maturity), which was well received by investors. According to the company, more than 90% of the bond deal was allocated to sustainability focused investors. Green SLBs are still a very niche market. We calculate ~SGD5.0bn of such bonds outstanding globally as at 10 June 2022 using Bloomberg's data. The largest green SLB is a RMB-denominated RMB10bn (~SGD2.1bn) 3-year bond priced in May 2022 from China Construction Bank Corp, a big four Chinese bank and one of the largest banks globally. In April 2022, Yunnan Energy Investment Overseas Finance Company Ltd (Guarantor: Yunnan Energy Investment Group Co Ltd, a China-based power generation company) became the first green SLB issuer in the Asiadollar space, pricing a USD230mn 3-year green SLB.

SLBs are still mainly corporate credit instruments: The first SLBs were issued in September 2019 and since then have managed to gain support from corporate credit issuers and investors alike but is little used by governments. According to data from the Climate Bonds Initiative ("CBI"), a not-for-profit funded by various foundations and multilateral organisations, ~88% of SLBs issued in 2021 by volume (in USD billions) were from non-financial corporates, ~5% were from financial corporates while government-backed entities (eg: utilities, airports and universities) comprise the remaining ~7%.

……although no longer just for corporates: However, in January 2022, the City of Helsingborg in Sweden (population of around 150,000) priced an SLB with SPTs linked to absolute GHG emissions, becoming the first public sector issuer to do so. The city has a target of becoming socially, environmentally and economically sustainable by 2035 while Sweden was the first country to legally bind the country to reach net-zero. Legislation was passed in 2017 for Sweden to reach net-zero by 2045. CBI reports that in February 2022, the Arizona Industrial Development Authority priced USD200mn of SLBs in two parts to finance forest restoration activities, becoming the first US municipal issuer of SLBs. In the sovereign space, Chile priced a landmark USD2bn 20-year SLB in March 2022, becoming the first sovereign SLB issuer globally. The bond's orderbook reached more than USD8bn per S&P Global. Chile's SLB follows on from the country's established track record as a sovereign GSSSL bond issuer. This SLB is linked to absolute GHG emissions and share of non-conventional renewable energy generation in the national electric system. Whilst Singapore has unveiled the Singapore Green Bond Framework which would cater for the upcoming green bond issuance, it remains to be seen if the country will take the next leap into the SLB space. In our view, a sovereign SLB is more demanding vis-à-vis a green bond. If SPTs are selected appropriately, this puts a limelight on a sovereign's commitment to the Paris Agreement which is then tracked closely by the bond market, in contrast to the specific use of proceeds nature of a green bond.

Navigating Corporate Reorganisations

Corporate reorganisations in the market: Since 2021, the SGD corporate credit market has seen a number of large and complex corporate reorganisations happening including at Olam International Ltd, Keppel Corporation Ltd, CapitaLand Group Pte Ltd, Singapore Press Holdings Ltd and ARA Asset Management Ltd. Such reorganisations are not new, and they follow numerous corporate issuers who have been acquirers or targets in mergers and acquisitions ("M&A") activity and take private situations in prior years. Given that such reorganisations invariably impact an issuer's credit fundamentals and are likely unexpected before their announcement, they offer valuable case studies for bond and perpetual holders who face such event risk.

Different from debt restructurings: Summarising some definitions we have gleaned from corporate lawyers, corporate reorganisations generally refer to internal transactions involving the transfer of assets, whole businesses or shares between entities within the same group. To note, corporate reorganisations are not the same as debt restructurings. In the former where corporate issuers undertake corporate restructurings, issuers are typically solvent and able to meet their long-term debt and other obligations. In fact, many such issuers that underwent corporate reorganisations are considered higher grade issuers who are also leaders in their respective business segments. In the latter where corporate issuers undertake debt restructurings, participants of the Singapore dollar corporate credit market may recall credit defaults from a number of offshore companies stemming from the oil crash of 2014-2016 and a high-profile water treatment company in credit default that is currently being investigated.

Corporate reorganisations typically impact the credit profile: While internal corporate reorganisations do not typically lead to credit default, such reorganisations result in changes to the credit profile of the issuer and consequently shifts the risk-reward for investors. This is especially so because corporate bonds and perpetuals tend to be unsecured, unlike bank loans that are usually secured with collateral. When the legal entities get reshuffled around during a corporate reorganisation, the business profile changes for the entity that issues and/or guarantees the corporate bonds and perpetuals. There may be no recourse for investors if the credit profile of the issuing entity or guarantor weakens post reshuffling (which can happen if assets are transferred away).

……or are a precursor to future event risks: Even if the corporate reorganisation does not immediately impact the credit profile, such as in the case where the holding company still ends up holding 100 per cent of all its businesses and assets, such corporate reorganisations and changes to the corporate structure can be carried out as a precursor to, and to facilitate, other future corporate transactions. As a non-exhaustive list, these could include (1) M&A which may involve a change of control and/or a change in capital structure and/or a change in business nature, (2) carve-outs where business divisions are partially sold, (3) spin-offs where a subsidiary becomes a new separate company and the shares are distributed to current shareholders, (4) demergers or (5) a take-private. Corporate reorganisations are not necessarily for the worse even though these are typically unexpected and entail event risks. The outcome depends on the rationale and exact nature of the transaction and the terms and conditions (e.g. protections/covenants) that apply to the specific bond and/or perpetual instrument. For instances involving M&A, the credit profile of the acquirer may be very different from that of the target company, which in turn results in credit implications for investors depending on the eventual credit profile of the issuer/guarantor. There is also the consideration of whether the acquirer is financially or strategically motivated. Separately, near-term price dislocations caused by events may be opportune timing to invest at a lower entry price.

Bondholders have limited say: Corporate reorganisations typically have improvement of shareholders returns in mind, especially in a matured market where organic growth rates are lower. This means we should expect transactions to tilt more shareholder-friendly than creditor-friendly. This is especially so as unlike shareholders, bond and perpetual investors typically do not have the right to directly vote on whether or not corporate reorganisations can proceed.

Some clauses that may partly mitigate: Clauses in the form of covenants may exist that protect bondholders or partly mitigate against adverse impacts from corporate reorganisations. These include a Change of Control covenant which may compensate bondholders (e.g. by increasing the coupon rate) when the beneficiary owners of the issuer changes as well as Delisting Puts which allow investors to compel the issuer to redeem the bond when an issuer is taken-private. Outside of event-related covenants, there are other covenants which protect the bondholder. The existence of Financial covenants may disallow excessive debt to be taken (as debt is often used in acquisitions) and/or require the issuer to maintain a minimum level of assets in the company (assets may be sold or transferred away in corporate reorganisations). The Non-Disposal covenant is also crucial which disallows significant or material assets to be disposed or transferred away, which is relevant for companies that own performing or hard assets (versus asset-light companies). If the covenant (e.g. Financial, Non-Disposal) is breached and if this constitutes an Event of Default, bondholders would be able to demand an acceleration of or upfront repayment. However, not all issues are structured with sufficient protections, especially among higher grade bonds and perpetuals which are typically covenant-lite.

No free lunches in consent solicitation exercises linked to corporate reorganisations: The presence of covenants may compel issuers to either (1) request bondholders to waive a potential breach of key covenants through a consent solicitation exercise ("CSE"), usually in return for some compensation, or (2) repay in full before taking actions that are detrimental to the credit profile of the company. Although certain CSEs are not expected to have a credit impact (e.g. change in trustees), the same cannot be said for corporate reorganisations. Bond and perpetual holders should carefully consider the details of such CSEs when a company's credit profile is expected to undergo significant changes, and to weigh the cost and benefits of agreeing to such a CSE as short term gain may lead to long term pain. It is possible for investors to come together to negotiate for a better investment outcome. We have seen a recent CSE that saw a resolution dropped due to lack of quorum, and in our view, eventually result in a more advantageous outcome for that group of investors. However, more often we have observed investors agreeing to CSEs for a small one-off cash payment, when rejection of the CSE would have resulted in a higher investment return.

Why would investors leave money on the table? Corporate reorganisations often involve multiple steps, with details varying transaction to transaction. This means that even if investors are familiar with the broad concepts of corporate reorganisations, specific terms and conditions governing the instrument need to be taken into context. Given the complexity, we believe investors have a tendency in opting for the easiest rather than the most optimal decision. Unlike the public equity market where timelines and documentation required on takeovers and other significant corporate transactions are spelt out, there are no guidelines governing the timeframes required for decision-making in CSEs, as far as we are aware. This means that a company can launch a CSE with a compressed timeline that may not adequately consider investors' need to digest the information. Another aspect that increases the relative complexity for the corporate credit market is that companies often issue different instruments (e.g. varying maturity, subordination, perpetual), while there is generally only one equity instrument for each listed company.

"Prisoner's dilemma" at play: An astute colleague of ours pointed out that choosing the easiest rather than the most optimal decision could also happen due to "prisoner's dilemma" where individual decision-makers are incentivised to make a decision that may seem to be in their best-interest but sub-optimal for the investor group as a whole. For example, issuers usually dangle small incentives for individuals to agree to CSEs quickly such as an "early consent fee". Assuming a single individual's vote is unable to change the outcome of the CSE, the rational decision for the individual should be to agree to the CSE. This will allow the individual to capture the small incentive should the CSE pass with no downside should the CSE fail. This is despite the likelihood of a sub-optimal outcome for the group in the passing of the CSE if every individual agrees to the CSE. However, we acknowledge that circumstances surrounding the CSE may not necessarily be so black and white for everyone. Different investors have different investment risk tolerance levels, different investment timeframes and may perceive the future credit profile trajectory of companies differently. Compared to times where the underlying credit profile is stable, this dispersion is greater at times when the fundamentals of the company are undergoing a change as in a corporate reorganisation and other corporate transactions.

Figure 16: Prisoner's dilemma when incentives offered are small versus the risk

		Individual bondholder	
		Disagree	Agree
Other bondholders	Disagree	Most optimal outcome. CSE fails, bond protection remains	Most optimal outcome. CSE fails, bond protection remains
	Agree	Worst outcome. CSE passes, bond protection removed.	Second worst outcome. CSE passes, bond protection removed, small incentive

Source: OCBC Credit Research

Market has become more dispersed: On first glance, the SGD corporate credit market should not succumb so easily to the above described scenario of prisoner's dilemma as several institutional investors have a significant presence in the market. An institutionalised market implies potentially more coordination in seeking a better investment outcome, in addition to being better equipped to analyse the credit implications of a corporate reorganisation. However, as the SGD corporate credit market evolves overtime, holdings have become more dispersed across many individual investors. Perhaps, it is time for minority investors to seek better.

Governance – The Driving Force Through Difficult Conditions

As we have written previously, current market dynamics have caused us to constantly revisit our views of where investors can seek shelter, perhaps more so this year than most. That said, 2022 so far is but a subset of an extraordinary last two to three years that can only be described as eye opening at best and volatile at most. However, while operating conditions continue to change, it is comforting to know that the reliability of key credit fundamental influences remains. While we have touched on certain credit fundamentals, we highlight the more subjective, but perhaps the most important, aspect of governance within credit analysis that is rising in prominence.

Mapping the journey

In the context of recent material events including the pandemic and the direct and indirect aspects of the ongoing Russia-Ukraine conflict, we previously highlighted: (1) The importance of a strong and defendable market position to help corporates pass on higher costs to its customers; and (2) A conservatively leveraged balance sheet and/or strong liquidity through either stable cashflows from earnings or access to committed external financing. These key aspects of business and financial risk analysis can be best exemplified with the concept of driving a car:

- Business risk analysis defines the environment along which the car is driving and the car itself through the appropriateness of the car model (business-specific factors such as product and geographic diversity, competitive advantage and market position) for the conditions in which it is driving (i.e. the weather and the road through country and industry risk). That is, business risk analysis sets the scene for what's down the road.
- Financial risk analysis seeks to identify how much fuel is in the tank through how much cash the issuer makes from its operations (profitability, cashflow), how much cash the issuer has (leverage), how much cash the issuer needs to keep things going (maintenance/growth), and how can it cover any gap that exists (liquidity). In other words, financial risk analysis quantifies how far down the road the car can go.

Who is behind the wheel?

Having clear roads, the latest car model and a full tank can mean nothing if you don't have someone experienced and proficient behind the wheel. It can mean that a car may run into trouble earlier than expected, meet with an unforeseen accident, or fail to even start. This is where the analysis of ownership and management influence comes in. Key aspects of this subjective component of business analysis include the capability of management through their experience, and the thoroughness of its strategic plan. Questions to consider include:

- How achievable or aggressive is management's strategic plans and do they fit in with the issuer's core competencies?
- What is management's track record in achieving its previously stated objectives?
- Have there been any corporate governance issues of note.
- Finally (or perhaps consequentially), does management maintain a good relationship with banks/capital markets (equity issuance or bond issuance) so that it can access external funding when it needs to?

While we strive to assess the influence of ownership and management as we do other more fundamental aspects of credit analysis, its impact on the outcome is not uniform and the score may not explicitly alter the outcome of our overall Business Analysis. This is because a positive or neutral assessment for higher grade credits is unlikely to improve the overall business assessment. Conversely, a somewhat weaker assessment of ownership and management for higher yielding credits can weigh on the overall business assessment, particularly if management is: (1) Weak and/or exposes the issuer to agency problems; or (2) Owners/management have acted or continue to act in a credit negative way. These can ultimately impact the financial analysis as a negative view of ownership or management by capital providers can strain liquidity.

Amplifying influence of ownership and management with the rise in "Responsible" Investing

The rise of Responsible Investing has been well documented. According to data compiled by Bloomberg, 2021 green, social, sustainability and sustainability-linked ("GSSSL") bond sales from government and corporates totaled USD1,106.4bn globally, which was ~93% higher y/y. That said, GSSSL bonds have not been insulated from current challenging market conditions – YTD green, social, sustainability and sustainability-linked bond sales from government and corporates total USD469.4bn, which is ~21% lower than the same time last year.

Within this however, Environmental and Social issues have taken centre stage. Of the GSSSL bonds issued in 2021 and YTD 2022, ~55% are green bonds, ~14% are social bonds and ~31% are sustainability or sustainability linked bonds. Part of this may be due to investors' clearer understanding of these issues and the ease of assessing these aspects of Responsible Investing for the purposes of meeting targets. Even within these categories is some dispersion in issuance. YTD green bond sales total USD260.36bn in 2022, down ~4% y/y while YTD social bond sales total USD63.6bn, down ~59% y/y. This indicates the somewhat temporal nature of social issuances that could be tied to the easing pandemic situation globally and the ever present and visible impacts of climate change.

So, does this make Governance a less important component of Responsible Investing? Arguably not as the same principles mentioned in our discussion of fundamental credit analysis continue to hold true. Governance drives the quality of the decision making that influences an issuer's environmental and social and overall sustainability performance. Indeed, goal 16 of the United Nations Sustainable Development Goals ("SDGs") titled "Peace, Justice And Strong Institutions" recognises that "We cannot hope for sustainable development without peace, stability, human rights and effective governance, based on the rule of law." Poor governance not only has sustainability and human consequences – there have been many instances in the past where it has also led to direct and indirect financial consequences for issuers and recognition of heightened credit risk.

In March 2022, Japanese automobile manufacturer Toyota saw its shares fall markedly after its commercial vehicle subsidiary, Hino Motors ("Hino"), admitted to having manipulated and cheated in its diesel emissions tests. Following this, Hino suspended sales of its trucks and buses that were equipped with the problematic engines in question. Hino saw its share price falling 17% on the back of the disclosure. Moving forward, Hino has committed to conduct a thorough investigation of its engine certification procedures and will take corrective measures following an in-depth analysis and reform. Archegos Capital Management ("Archegos") continues to have impacts on Credit Suisse Group AG ("CS"), one year after CS first disclosed that it may face significant losses related to Archegos that defaulted on margin calls. So far, CS has raised well over USD4.4bn in provisions, dealt with significant management turnover and staff departures, and reported increased expenses and lower revenues tied with a material corporate restructuring and higher compliance investment. In CS' recent Annual General Meeting, shareholders voted not to absolve the bank's board from legal liability for errors that may have led to losses from Archegos. The vote to protect the right to pursue legal liability means legal issues for CS may continue to be an overhang for investors. The Employees Retirement System for the City of Providence is currently pursuing legal proceedings through suing CS' current and former board members for alleged risk management failings over the collapse of Archegos.

While we believe that the influence of Governance on Responsible Investing will continue to rise, its influence on issuers and GSSSL issuance will remain indirect. This is due to the primary influence of governance concerns on investor perception and an issuer's reputation from both a fundamental and sustainability standpoint.

Turning something subjective into objective

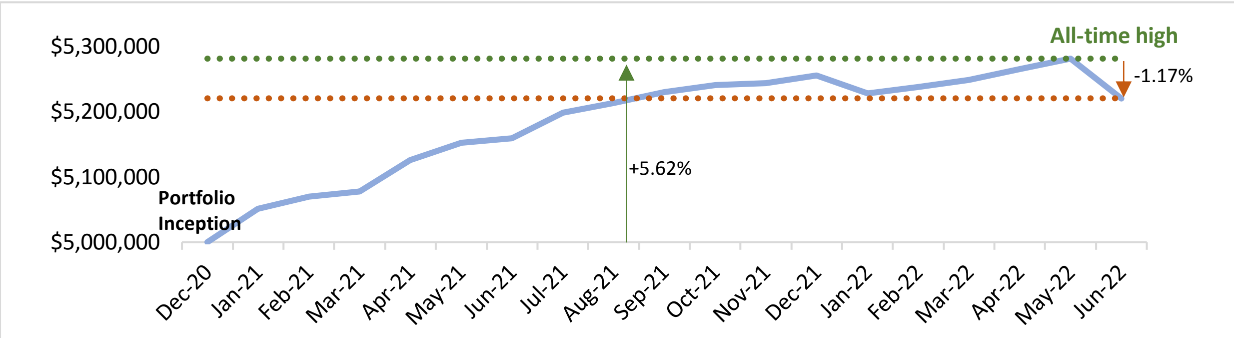
Assessing management, ownership and governance can be difficult. While adverse regulatory judgements and penalties or legal proceedings indicate underlying corporate governance issues, the existence of them is similar to a sunk cost for an investor. At the same time, their absence doesn't necessarily mean that such issues will never surface, as it is no guarantee that governance issues won't arise in the future. Going back to the earlier analogy, the challenge therefore lies in accurately assessing the drivers' skill in different driving conditions before an accident can happen. Doing this entails turning the subjective assessment of management, ownership and governance into an objective one.

The ongoing development of the quality and quantity of disclosures in the Responsible Investing space can help in this regard. A possible solution lies in one of the key targets of SDG16 where it relates to Governance - developing effective, accountable and transparent institutions. Effectiveness can be assessed by looking at management's past strategic plans and the success in achieving them. Accountability can be sourced by looking at the remuneration policies for key employees (according to the United Nations' Principles for Responsible Investment, more companies continue to announce the linking of executive pay to their firm's Responsible Investing performance). Finally, transparency can be assessed by the quality and quantity of the issuer's disclosures, something that all stakeholders are becoming increasingly vocal about given the rising importance of governance within Responsible Investing.

Model Portfolio – Keeping Head Above Water

When the model portfolio was incepted in end-2020, the challenge was to hunt for yield amidst a low-yield environment, with trade-offs to be made between high yield, low risk and short duration. Our strategy to position around the belly of the curve and in crossover names has served well, with the portfolio recording 12 consecutive months of gains till end-2021, and further reaching its all-time high (+5.62%) in end-May 2022.

Figure 17: Performance Since Inception (Total Return)



Source: OCBC Credit Research
Note: (1) Total return of +5.62% cumulatively from inception to end-May 2022
(2) Negative total return of 1.15% from all-time high to date

Under water everywhere with regime change: Today's environment is significantly more challenging. Due to rapid increase in rates, coupled with new issuances that came in with wide spreads, most issues in the secondaries have been repriced with capital losses that outweighed returns from coupons/distributions. In June 2022, we recorded our largest drawdown in a single month (-1.17%) that led to a YTD loss of 0.69%. The largest losers in the portfolio were in the financials space, which include CS 5.675%-PERP, SOCGEN 6.125%-PERP and ACAFP 3.95% '32 following the influx of new issuances of AT1s and Tier 2s. Prices of non-financial corporates also dipped somewhat, though held up relatively better than the financial peers in general. The return in June 2022 was also weighed by the larger than usual turnover in the portfolio while bid-ask spreads have widened. Outside of the model portfolio, save for papers that have imminent maturities within a few months, we observe that total returns have been negative across the board; prices fell for both investment grade and higher-yielding papers, regardless of tenures except for the ones with imminent maturities. As an illustration, total YTD2022 returns for a SGD investment grade corporate bond exchange traded fund listed on the Singapore Stock Exchange is at ~-6.1%.

Stay afloat by shedding weight: We removed nine issues from our model portfolio, which includes WINGTA 3.68% '30s, GUOLSP 4.6%-PERP, SUNSP 3.8%-PERP, OUECT 3.95% '26s, OUECT 4.2% '27s, LREIT 4.2%-PERP, KITSP 3% '26s, OLGPSP 5.375%-PERP and ACAFP 3.95% '32c27. As most of these are non-financial corporates, we have in effect shifted our relative positioning towards financials. While non-financial corporates have thus far held up better, we now see better value in the financials space which repriced following the deluge of issuance. In addition, by shedding these papers which on average have a longer duration than the rest of the portfolio, the portfolio duration to first call/maturity (excluding bills) has reduced to 2.3 years (from 2.9 years), thereby reducing the sensitivity to rates. We take the call dates on perpetuals to derive the portfolio duration.

Shifting strokes amidst a tsunami: Although most papers are drifting lower or are already outright under water, opportunities may emerge with yields turning higher. To reduce the potential for mark to market losses, we added crossover short-dated bullets which include OLAMSP 6% '22s, CATHAY 3.375% '23s, FULIN 3.7% '23s and OUESP 3.55% '23s. We are also mindful of potential opportunities as we redeployed into a couple of Tier 2s which priced recently (ABNANV 5.5% '32c27s, HSBC 5.25% '32c27s) given their wider spreads versus existing papers. We keep the remainder of the cash in SITB 07/26/22s which has a very short-term maturity with a view to redeploy into new issues should they be priced at even wider spreads.

Calculated risk through bottom-up analysis: Nine out of 18 issues that remain in the portfolio are perpetuals (across corporates and banks). Three are corporate perpetuals (AAREIT 5.65%-PERP, CERTSP 5%-PERP and ESRCAY 5.65%-PERP) structured with wide reset spreads which should incentivise the issuers to exercise the call. The remainder are bank capital instruments. Although recent issuances indicate that replacement capital could be more expensive, thus far financials have tended to call, and in any case, this is partly mitigated by the short call/reset date that allow distributions to be reset higher amidst higher rates should the call not be exercised. We also expect credit profiles of financials to be enduring (see section on "Financial Institutions – rates, recession and returns").

Table 2: Model Portfolio 2022

Issue Name	OCBC Issuer Profile Rating	Yield to Worst	Maturity / First Call Date	Cost of investment (incl. acc. interest)	Current Value (incl. acc. interest)	Total coupons received	Total Gain/Loss
Property Developers							
OUESP 3.55 05/10/23	5	3.25%	10/05/2023	$252,012	$252,012	$0	$0
METRO 4.3 04/02/24	4	3.48%	02/04/2024	$254,397	$255,112	$16,140	$16,854
REITs							
AAREIT 5.65 PERP	4	5.07%	14/08/2025	$258,838	$258,972	$14,125	$14,259
CERTSP 5 PERP	Unrated	6.34%	24/11/2026	$248,181	$236,828	$6,250	-$5,103
Financial Institutions							
UBS 5 7/8 PERP	3	4.95%	28/11/2023	$265,397	$253,405	$22,031	$10,040
SOCGEN 6 1/8 PERP	4	6.95%	16/04/2024	$264,948	$248,393	$22,927	$6,373
CS 5 5/8 PERP	4	7.14%	06/06/2024	$264,341	$239,329	$21,094	-$3,919
STANLN 5 3/8 PERP	4	5.25%	03/10/2024	$262,020	$251,808	$20,156	$9,945
ABNANV 5 1/2 10/05/32	Unrated	5.43%	22/07/2027	$250,845	$250,845	$0	$0
HSBC 5 1/4 06/27/32	3	4.96%	23/01/2023	$253,364	$253,364	$0	$0
CMZB 4.2 09/18/28	4	4.30%	18/09/2023	$253,029	$252,534	$0	-$495
HSBC 5 PERP	3	4.52%	24/09/2023	$256,992	$254,139	$0	-$2,852
UBS 4.85 PERP	3	5.09%	04/09/2024	$258,118	$251,160	$0	-$6,957
Others							
OLAMSP 4 02/24/26	5	4.57%	24/02/2026	$253,341	$248,010	$15,041	$9,710
FULIN 3.7 04/15/23	Unrated	3.43%	15/04/2023	$252,582	$252,582	$0	$0
CATHAY 3 3/8 01/22/23	Unrated	3.49%	22/01/2023	$253,643	$253,643	$0	$0
ESRCAY 5.65 PERP	Unrated	5.60%	02/03/2026	$255,577	$254,304	$14,125	$12,852
OLAMSP 6 10/25/22	5	2.88%	25/10/2022	$255,247	$255,247	$0	$0
SITB 07/26/22	Unrated	1.75%	26/07/2022	$698,154	$698,154	$0	$0
Total Gain/Loss since portfolio inception							$220,325

Statistics	Simple Avg, Issuer Profile	Simple Avg, Yield*	Simple Avg, Tenor	Total, Invested Amount	Cash Balance	Unrealised Profit	Portfolio Value
	3.9	**4.82%**	**2.3Y (6.6Y*)**	**$5,311,026**	**$483**	**-$91,183**	**$5,220,325**

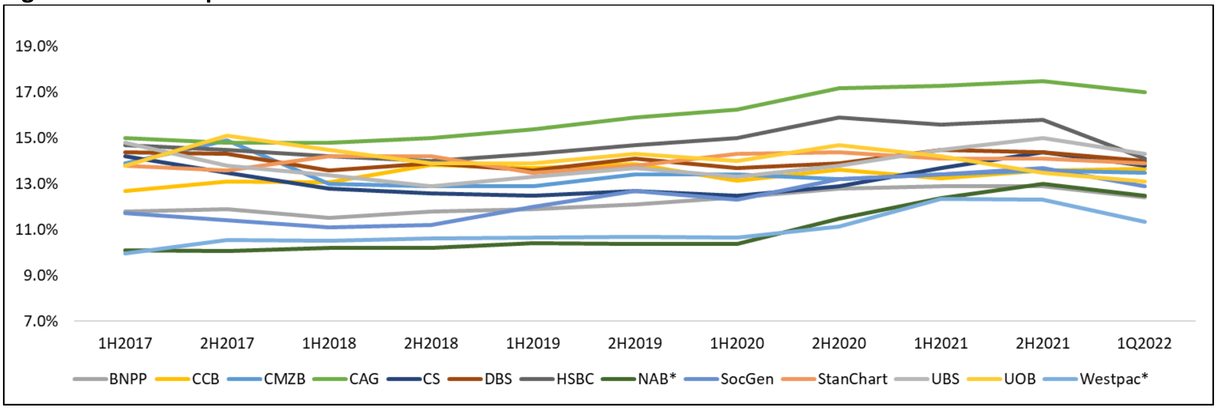
*Assuming maturity of perpetuals = 10Y, excludes SITB

Financial Institutions – Rates, Recession and Returns

We signed off our 2022 outlook for Financial Institutions on new year's eve of 2021 on a positive tone despite volatile operating conditions based on stable fundamentals and an overweight view on bank capital instruments. Expectations for a better 2022 drove many Financial Institutions to plan on elevated shareholder distributions on business growth and rising interest rates. However, with the material shift in operating conditions and the rise of new concerns, our baseline assumptions warrant a revisit. Some key questions are now being asked, particularly focused on the performance of bank capital instruments.

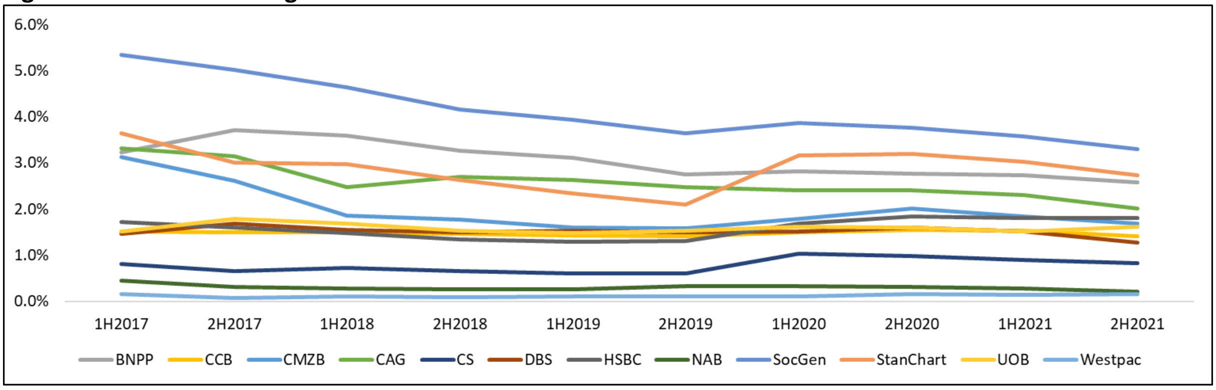
Will they be repaid?
This question speaks to fundamentals and our view remains the same. Stability in Financial Institution credit profiles are expected to be enduring owing to solid underlying fundamentals from strong domestic market positions and diversified businesses. Adding to this and further preserving the resilience of credit profiles for the Financial Institutions under our coverage are past actions by Financial Institutions and regulators to improve earnings and balance sheet quality, timely and explicit government support, and the essentiality and systemic importance of Financial Institutions. These drivers should keep key credit ratios and fundamentals stable for the remainder of 2022.

Figure 18: CET1 Capital Ratios



Source: Bloomberg, OCBC Credit Research, * Results for 1HFY2022

Figure 19: Non-Performing Loans to Total Loans



Source: Bloomberg, OCBC Credit Research

The stability in credit profiles was recently reinforced by regulators providing confirmation of the ability of Financial Institutions to withstand current and stressed operating conditions. The US Federal Reserve recently released the results of its most recent stress test with all Financial Institutions included in the test passing. This means that Financial Institutions such as JPMorgan Chase & Co., Morgan Stanley and Goldman Sachs Group Inc. (Financial Institutions we do not currently cover) held enough capital to meet a stressed scenario including a severe global recession and heightened stress in commercial real estate and corporate debt markets. Domestically, the US unemployment rate was stressed to peak at 10%, real gross domestic product to fall 3.5% from the end of last year and equity prices to fall 55%. Of note though is that the scenarios were set in February 2022 before the current heightened inflation and rate hike expectations. Therefore, the gap between current conditions and the stress test is now shallower than previously. Still, the passing marks confirm to regulators that Financial Institutions have enough capital to lend to the economy in a severe recession.

The results also allow management to consider whether to return capital to shareholders via dividends and share buybacks. This was an expectation for many Financial Institutions at the start of 2022 given strong capital positions post-pandemic and the reduction in shareholder distributions during the pandemic. These expectations though were before the rise of geo-political developments, persistent inflation and recession concerns and whether Financial Institutions actually recommence shareholder distribution plans as previously expected remains uncertain. More on that below.

Similarly in Europe, Switzerland's central bank, the Swiss National Bank ("SNB") in its 2022 Financial Stability Report in mid-June, acknowledged improved capital positions for both UBS Group AG ("UBS") and Credit Suisse Group AG ("CS") following the last Financial Stability Report in June 2021 that remain above minimum requirements. This places the Financial Institutions well in facing higher challenges and uncertainties in 2022 as well as risks related to the Russia-Ukraine conflict. Nevertheless, SNB highlighted more challenging economic and financial conditions in 2022 following a solid recovery in 2021 with very high uncertainty for the global macro-economic outlook and existing vulnerabilities increasing the sensitivity of economies, real estate and financial markets to adverse shocks. All up, SNB appears comfortable with the capital positions of UBS and CS as globally active banks in the context of maintaining Switzerland's financial stability.

However the outlook is now more uncertain and Financial Institutions may become more prudent with their initially proposed share buyback plans. HSBC Holdings PLC's ("HSBC") capital position weakened more than expected q/q as at 31 March 2022 with its CET1 ratio at 14.1%, down 170bps from 15.8% as at 31 December 2021. Driving the reduction were higher risk weighted assets (methodology changes and growth in customer lending, particularly in mortgages and term and trade lending in Commercial Banking), a fall in CET1 capital from regulatory changes, valuation losses, and the impact of share buybacks of USD1bn. While a weaker capital ratio was previously expected through organic risk weighted asset growth from regulatory developments and business growth as well as further capital returns, the ratio remains just within its target range of 14%-14.5% and management have indicated that share buybacks above what has been previously announced (a further USD1bn share buyback is expected following the completion of its USD2bn buy back announced in October 2021) are unlikely.

While lower capital ratios in 2022 were previously expected on assumptions of rising rates and rising business volumes that would keep internal capital generation high, this expectation has instead been upended by current recessionary concerns that have lowered growth expectations and credit demand forecasts and raised concerns on future loan quality that, for some Financial Institutions, has been amplified by the Russia-Ukraine conflict. Credit Agricole Group ("CAG") reported a 65.5% y/y rise in the cost of risk to EUR888mn in its 1Q2022 results. This comprised EUR195mn for specific items and EUR693mn in underlying risk costs, with the specific items related to the full provisioning for Ukrainian equity risks. Underlying risk costs comprised EUR480mn in stage 1 and 2 risk costs including EUR346mn in risk costs raised for performing exposures in Russia. Other movements in risk costs were pre-emptive with provisioning for stage 1 and 2 (or performing) loans up 227% y/y that overshadowed a 49% y/y fall in provisioning for stage 3 exposures. For DBS Group Holdings Ltd ("DBS"), allowances for credit and other losses of SGD55mn in 1Q2022 comprised a general allowance write-back of SGD112mn from credit upgrades and transfers to non-performing assets that was offset by SGD167mn in new stage 3 allowances with new non-performing assets of SGD465mn in 1Q2022, higher than each quarter's new non-performing asset formation through 2021. This pushed total allowance charges to rise 67% q/q (4Q2021: SGD33mn) and over 100% higher y/y (1Q2021: SGD10mn).

The persistent inflation and increasingly hawkish rates outlook are proving to be a wolf in sheep's clothing as the benefits for Financial Institutions of higher interest rates is being offset by potentially reduced credit demand and concerns on loan quality/performance. At the same time, rising rates are hitting asset valuations and causing some Financial Institutions to address potential mark to market losses. HSBC recently announced a USD3.1bn equity valuation loss in its 1Q2022 results that impacted its capital position (see above).
With this in mind then, Financial Institutions have turned to capital preservation and accumulation mode rather than capital distribution, thus raising another question for investors in bank capital instruments.

Will they call?
This question is arguably more tricky and somewhat more uncertain because it depends on a variety of factors, some enduring and some temporal. These factors also have different influences for different Financial Institutions depending on their idiosyncratic circumstances.

As we have covered in various publications in the past, bank capital instruments as an asset class are nuanced. On face value, they represent higher return for a somewhat unquantifiable risk – the risk of write-down or loss absorption at the discretion of the regulator. While a call option exists that can shorten the duration of the bond and influences its pricing on issuance, that option is held by the issuer which ultimately allows them to benefit from favourable movements (i.e. decreases) in interest rates and credit spreads. It also allows them to benefit from unfavourable movements (i.e. increases) in interest rates and credit spreads, in particular the latter, that makes calling a bank capital instrument uneconomical when the replacement cost of a new bank capital instrument is higher than if the existing bank capital instrument were allowed to reset at a reset spread that is lower than what the market is demanding for the replacement one. Arguably in both instances, the investor can lose out due to reinvestment risk. That said, these two risks of loss absorption and reinvestment risk do not always manifest as often as can be expected and in the circumstances that they are expected to. This can ultimately skew the risk/reward equation in favour of investors who are compensated for these risks by a structurally higher yield.

Pro-active and Pragmatic Regulators

For one, regulators are pragmatic in protecting systemic risk. We saw this most recently during the pandemic with the relaxation of various prudential requirements by Financial Institution regulators to create balance sheet buffer for Financial Institutions to continue lending. At the same time, various regulators cancelled shareholder distributions to reinforce efforts to protect capital, highlighting the highly regulated nature of the banking industry as well as the systemic importance of financial institutions in keeping the economy going.

Pre-pandemic, we also saw selective use of existing bank resolution regulations in 2017 depending on idiosyncratic developments. The first was the regulator directed resolution and write-down of bank capital at Banco Popular SA that caught investors somewhat by surprise despite Banco Popular SA's problems being well known. This was because Banco Popular SA's capital ratios were above the regulatory minimum and there were several positive developments for Spain's economy and banking sector at the time. However, several idiosyncratic factors resulted in regulators seeing resolution as a way to limit banking sector contagion risk rather than amplify it. These factors included, amongst others, over-capacity of the Spanish banking sector and the presence of strong domestic player (Banco Santander S.A) with capacity and willingness to acquire Banco Popular SA and its solid small and medium-sized enterprises business.

Developments at Banco Popular SA contrasted with the EU approved acquisition of Banca Popolare di Vicenza SpA & Veneto Banca SpA by Intesa Sanpaolo SpA in Italy. This was under local insolvency laws with Italian Government support provided through a capital injection and provision of guarantees to Intesa Sanpaolo SpA. Again, the different outcome was driven by circumstances specific to the problem and solution including Italy's very weak and more highly fragmented banking sector as a whole, lack of an obvious acquirer, and presence of a large number of retail bond holders who were facing losses in a resolution scenario without any state aid. This in itself could have led to contagion risk given the prevalence of retail bond holders as a source of funds in Italy's banking sector. For this reason, wind down with state support was seen as necessary to limit contagion risk rather than amplify it.

Finally and more recently in China, following the takeover of Baoshang Bank by China's regulators and the resultant market volatility in May 2019 that ensued, issues at the Bank of Jinzhou were managed by three strategic investors investing in the bank to shore up its capital. The introduction of strategic investors along with support for the issuance of certificate of deposits by the Bank of Jinzhou through guarantees (Credit Risk Mitigation Warrants) resulted in improved market liquidity following the Baoshang Bank takeover and indicated regulator willingness to try alternative measures and commitment to contain financial risk.

What these examples show is that regulator decision making is driven by practicalities and idiosyncratic factors rather than theory with regulators using the flexibility within their regulatory frameworks as well as ongoing pro-active oversight to ensure systemic stability. This is despite regulator intent to reduce taxpayer burdens for financial sector stress and eliminate moral hazard as included in global bank resolution regulations. This has seen regulators use the same bank resolution mechanism, or the flexibility within their regulatory frameworks, to achieve different outcomes specific to the circumstances at hand.

Permanence Expands Influences Past Pure Economics

Secondly, the existence of bank capital instruments is driven by regulatory needs first and economic considerations second. Financial Institutions are subject to regulatory minimum capital requirements, and these are likely to continue rising in our view given the benefits of holding excess capital at the heights of the pandemic, higher systemic leverage and the future implementation of climate stress tests as part of government Climate Risk actions. As bank capital instruments are therefore a necessary and permanent part of the capital structure, it means that pure economic considerations at the time of a call are not the over-riding determinant vis-a-vis corporate perpetuals that also face call risk. In particular, regulators and Financial Institutions seek to balance both the ongoing requirement for higher minimum capital requirements to maintain financial system stability and maintaining an overall manageable cost of capital to ensure Financial Institutions continue to support the economy.

As such, there have been instances in the past where, although it may be more economical not to call based on prevailing interest rates or credit spreads, Financial Institutions have been willing to go through short term pain for long term gain by calling a bank capital instrument when due and protect both their reputation for calling these instruments as well as their future cost of capital when other bank capital instruments come due. Credit Suisse Group AG's ("CS") recent USD Additional Tier 1 ("AT1") issue is a good example of this, coming at a time of elevated risk-off sentiment towards CS following a string of bad news over the past 18 months and repeated profit warnings and quarterly losses. CS priced USD1.65bn of new AT1 notes in mid-June at a historically high coupon of 9.75% to refinance the 29th of July call of a USD1.5bn 7.125% AT1 bond that could have been extended at a lower cost of about 8.6%. Of interest was that the 7.125% issue was quoted at a cash price of 95.50 pre-announcement, indicating that investors had been expecting it to be extended. We think CS ultimately chose to protect its reputation and future market access by calling the 7.125% issue against market expectation. There may also have been a desire to send a signal of confidence to the market and avoid amplifying any perception of underlying credit stress.

The CS call and subsequent new issue also highlighted other considerations for issuing higher cost replacement capital that superseded economic considerations. These were primarily related to simplifying CS' AT1 portfolio including:

- The 7.125% note differed in structure from the rest of CS' AT1s in that it would convert to equity in the event of bail-in. The new 9.75% issue and all of CS' other AT1s are structured with a permanent write-down feature.
- The old note references to Libor which is being phased out. The likely cost to extend and amend documentation to reflect a replacement benchmark would have reduced the savings by extending it.

There have obviously been instances when economics prevailed at time of a call, however they have been few and far between and they did not lead to a contagion of other bank capital instrument extensions at the time. This is despite likely similar economic incentives at the time and possibly indicating other idiosyncratic reasons for these extensions:

- During the heights of the COVID-19 pandemic and amidst the global dislocation in financial markets, several Financial Institutions decided to take a conservative and economically prudent approach to capital conservation by deciding not to call bank capital instruments at first call. These included Lloyds Banking Group Plc as well as German Financial Institutions Aareal Bank AG and Deutsche Bank AG.
- Pre-pandemic in February 2019, Banco Santander SA opted not to call a 6.25% EUR1.5bn AT1 instrument in a move that was expected by investors. While economics were at play at the time (the EUR1.5bn note was reportedly extended at 5.55%), structural considerations likely also played a part with the coupon for the extended AT1 instrument reset for the next five years and Banco Santander retaining a call option every three months. These terms were highly advantageous to Banco Santander who could call when it made sense for the bank.
- Further back in November 2016, Standard Chartered PLC announced it would not call USD750mn in legacy AT1 hybrids (perpetual preferred notes) at first call in January 2017. In this instance, the economic incentive was unusually significant with the bond resetting from 6.4% to 2.4% until next call date in 2027 based on 3 month LIBOR and a very tight credit spread of 151bps that was set before the Global Financial Crisis.
- Just this week, Indian mortgage lender Indiabulls Housing Finance Ltd decided not to redeem its INR denominated IHFLIN 10.6% Tier 1 capital perpetual on 28 June due to rising refinancing costs. Per Bloomberg, this 10 year old note did not have a step up in the event of a non-call that is common for these instruments.

It should be noted though that in Banco Santander SA's and Standard Chartered PLC's cases, the non-calls resulted in their bond curves reflecting a reputational discount (or higher yields) for the non-call. Standard Chartered PLC's 6.409% note fell 14 cents on announcement that the call won't be exercised.

Heading Into Unchartered Territory For SGD Bank Capital

While non-call risk can be nuanced and idiosyncratic and therefore somewhat uncertain to quantify, what is certain for now is that the current environment for raising bank capital has been impacted by prevailing recession and rate hike concerns. With rising rates already exerting downward pressure on existing secondary issues, an uncertain outlook is now driving noticeably wider reset spreads for new bank capital issues than existing ones based on recent new issues.

In our view, this seems to be a technical development rather than a fundamental one. However it puts into view the economics of existing bank capital instruments that now face higher non-call risks against the current cost of capital amidst multiple risk-off influences. With this in mind, we are adjusting our views on bank capital instruments from top-down to bottoms-up.

We are turning neutral from overweight on existing bank capital instruments as we expect the double impact of rising rates and rising spreads to put pressure on prices of existing issues, especially those with thin reset spreads:

- Our neutral call factors in the fundamental strength of the Financial Institutions we cover while we believe that investors who can tolerate price volatility can continue to stay invested in bank capital instruments because economics is not the only driver for the non-call risk as we have covered above.
- Within this bucket, we favour bank capital instruments with near term call dates that may still benefit from a potential reset at a higher benchmark rate.
- We do expect though some selective value to resurface as secondary bonds further reprice, in particular for those issues in the Neutral (4) issuer bucket that have moderately higher reset spreads. Bank capital instruments with relatively thin reset spreads are likely to remain under technical pressure.
- We prefer Tier 2s over AT1s as the incentive to call is higher for Tier 2 instruments in our view. Non-call would make them a relatively expensive cost of funding. Furthermore, the market signal of electing to reset a Tier 2 would likely result in a drag on the valuations of instruments that are more junior in the Financial Institutions' capital structure including its AT1 instruments.

We see new issues of bank capital instruments which are priced with wide new issue concessions as attractive in general considering Financial Institutions' solid underlying fundamentals based on entrenched market positions, systemic importance, criticality of services and oversight by pro-active and pragmatic regulators. Investors though need to consider the reset spreads and whether they will incentivise a call sometime in the future.

Singapore REITS – Rising interest rates impact on S-REITs comes into focus

REIT equity broadly saw a correction though individual differences exist: At the beginning of the year, the focus of investors was on which REITs would do well as a re-opening play as we learnt to live with COVID. Capitaland Integrated Commercial Trust ("CICT"), the largest commercial REIT (retail and commercial) returned 6.1% year-to-date ("YTD", 1 January 2022 to 30 June 2022) on a total return basis (takes into account both price and dividend yields) while Ascott Residence Trust, the largest hospitality REIT did even better at 10.5%. The iEdge S-REIT Index, regarded as the REIT benchmark for Singapore REIT equities reported a positive total return of 1.3% from 1 January 2022 until the end of 1Q2022, however, took a turn from early April 2022 amidst high inflation and rate hike cycle which has also soured risk taking appetite among investors. From 1 April 2022 to date, the iEdge S-REIT Index reported a negative total return of 1.3%, resulting in an overall YTD small positive total return of 0.2%, where dividend income still provided a reasonably good buffer against the price fall.

High grade REITs long dated bullet bonds underperformed: In the SGD corporate credit market, the two main REIT issuer sub-segments are (1) Benchmark issuers externally rated by international rating agencies as high-grade and (2) Smaller-to-mid size REITs which we would consider to be more crossover issuers and generally unrated externally. REITs retained access to debt capital markets financing with SGD1.0bn priced YTD, albeit a smaller amount versus same time last year amidst the more challenging primary market conditions. High grade and longer dated REIT bonds that we track saw total returns of negative 9%. In stark contrast, when priced-to-call, perpetuals issued by these same issuers only saw a ~1% negative total return. Performing even better were perpetuals issued by crossover REIT issuers which was broadly flat on a total return basis. There are a few key reasons why this was the case. (1) Interest rate sensitivity is higher for longer duration paper (2) Investors are paid for taking credit risk for crossover issuers (3) Investors are getting paid for taking subordination risk in the case of perpetuals. All things equal, duration risk is lower for papers with higher coupon and/or distribution rate, and therefore less sensitive to the interest rate rise. Lastly, we also think some market segmentation exists between institutional funds who concentrate on REIT bullet bonds and individual investors who are able to invest across both bullets and perpetuals The divergence may possibly be explained by institutional funds who are subject to mark-to-market pulling back more sharply from high grade bullet bonds.

Pays to take credit risk and subordination risk when credit conditions are manageable: Despite the rise in interest rates and borrowing more expensive, crossover issuers are still able to access financing, albeit in short-to-medium tenors. The operating environment for Singapore REITs is also still benign. There is no sign of widespread occupancy or tenant repayment issues, making it worthwhile for investors to have gone down the corporate credit curve within REITs as interest rates were rising. Aside from the fundamental credit profile of a REIT issuer, increasingly REITs have also issued perpetuals (which are subordinated to senior unsecured bonds) and such perpetuals are well traded in secondary markets. Because perpetual holders are ranked behind senior unsecured bonds (and other lenders) in a liquidation scenario, perpetual holders are also paid more to assume this risk.

Pays to take on risk of non-call but individual security selection is key: While perpetuals last in perpetuity in name, SGD-denominated perpetuals issued by REITs have reset dates that coincide with their first call dates. Despite having no step-up margin, issuers would still be incentivised economically to call if they are able to get a cheaper cost of funding from the market vis-à-vis the reset distribution rate. This is not to say that all REIT perpetuals will get called (we have seen cases of non-call), but the reset mechanism in place is valuable in a rising rate environment. Effectively, a REIT perpetual that would be called at first call (generally for REIT perpetual this is at year five, though can be shorter) has a lower duration versus the long-dated bullet bonds.

What if the REIT perpetual does not get called? In the past, we have shared the view that the market value of REITs is underpinned by a REIT's consistent ability to pay out dividends. REIT perpetuals tend to come with dividend stoppers. In the off-chance that a REIT perpetual is not called at first call and barring a credit stress scenario, the probability of REITs still continuing to pay perpetual distributions is high, in our view. Prices would adjust downwards in that scenario, however, this is buffered by the ability of the REIT to still pay distributions consistently. Should this happen, we see the perpetual as effectively more like a preferred equity instrument and would look to its yield-in-perpetuity. REIT perpetuals also tend to give the right to issuers to call at every six-month interval (coinciding with perpetual distribution dates) which means that a REIT perpetual that is not called at first call may still be called when it is economically opportune for issuers to do so.

Rising rates to hit EBITDA interest coverage: Singapore REITs under our coverage have hedged their interest rate exposure to a relatively high degree (average of 72% based on 31 March 2022), though it still leaves REITs partly exposed to rising rates on their floating debt. While some REITs have hedged their interest rate exposure to match their underlying weighted average debt profiles, for others, hedging may only be applicable for the short term. Data on how long interest rates have been locked in is not generally publicly available (or if available, not shared in a consistent format across REITs). As an illustration, we present below the interest coverage impact for a hypothetical mid-size REIT with SGD2.0bn of total assets and an EBITDA yield of 3.0% p.a.

Figure 20: Illustration of Interest Rate Sensitivity on EBITDA/Interest Coverage Ratio

Interest Rate	Reported Aggregate Leverage: 35%	40%	45%
2.00%	4.3x	3.8x	3.3x
2.50%	3.4x	3.0x	2.7x
3.00%	2.9x	2.5x	2.2x
3.50%	2.4x	2.1x	1.9x
4.00%	2.1x	1.9x	1.7x
4.50%	1.9x	1.7x	1.5x

Source: OCBC Credit Research

Singapore REITs have kept aggregate leverage to below 45%: The Monetary Authority of Singapore ("MAS") currently sets a 50% aggregate leverage cap as the primary way to keep credit risk in check for the REIT sector (perpetuals are not included as debt for this 50%). Additionally, from 1 January 2022 onwards, REITs would also need to meet a minimum interest coverage ratio ("ICR") of 2.5x (or adjusted ICR if the REIT has perpetuals) before they are allowed to lever up to 50% as another credit check measure. Based on our illustration, we find that the illustrative REIT as able to cover their interest expenses although may fail to meet the 2.5x minimum ICR (or adjusted ICR). In practice though, we find no Singapore REITs who have levered themselves up to 50% for a prolonged period of time despite being allowed to do so.

Inconclusive that higher interest rates lead to fall in prices and rents: Aside from income generating ability, the credit profiles of REITs are also underpinned by asset values. At least once a year, independent valuers are appointed to carry out valuation of the underlying properties owned by REITs. While the exact methodology among each independent valuer may vary, broadly these are either comparable base (where properties are compared against recent transactions in the underlying property market and/or the valuations of other similar properties) or discounted cash flow where the value is based on future rental income. Both these methods are linked to benchmark rates in the discount rates, whether direct or indirectly. Theoretically, an increase in interest rates should lead to higher discount rates and lower valuation for properties. However, this would only hold true if rents also stay constant. Using data from the past two previous interest rate hike cycles since 2000, we find no strong correlation between office and retail prices (as well as rents) against long term interest rates.

Property as an inflation hedge? Thus far, the underlying property investment market remains active despite the threat of rising interest rates. Data from Cushman & Wakefield shows that excluding residential property, total investment activity was SGD3.1bn in Singapore in 1Q2022 (4Q2021: SGD4.6bn). Since then, activity has continued to pick up with the acquisition of the 68.2% stake it does not already hold in JEM (retail mall with office component) by Lendlease Global Commercial REIT ("LREIT") at an agreed property value of SGD2.08bn, the acquisition of 79 Robinson Road (a commercial office) by Capitaland Integrated Commercial Trust ("CICT") and a private real estate private equity fund managed by CICT's Sponsor for ~SGD1.3bn. In May 2022, a consortium comprising of Perennial Holdings Pte Ltd, Far East Organisation and Sino Land bought the iconic Golden Mile Complex for SGD700mn to be redeveloped into a mixed-use property. More recently, Mercatus Co-operative Ltd ("MRCOOP") announced that it is conducting a strategic review of some of the real estate investments and holdings within its portfolio and reportedly has appointed bankers on this. The media has reported a price tag of ~SGD4bn for this portfolio and if sold, would be the largest retail mall sale in recent years.

Mergers and acquisitions continue: In early May 2022, ESR-REIT completed its second REIT combination since inception, with ARA LOGOS Logistics Trust to form a larger REIT with total assets of SGD5.5bn. In June 2022, the newly renamed ESR-LOGOS REIT ("ELOG") priced its first paper since the combination, a SGD150mn perpetual NC5 with first call date in June 2027. With ELOG already showing its hands in trying to consolidate Sabana Industrial Real Estate Industrial Trust (though did not go through) and its Sponsor, ESR Cayman Ltd also an active acquiror, we continue to expect roll-ups to happen in the Industrial REIT space. Outside of Industrial REITs, unitholders of both Mapletree Commercial Trust ("MCT") and Mapletree North Asia Commercial Trust ("MNACT") approved for the proposed combination of these REITs to form a mega-REIT with SGD17.4bn of total assets (using 31 March 2022 numbers). The transaction is expected to complete in August 2022 with the new mega-REIT to be known as Mapletree Pan Asia Commercial Trust ("MPACT").

New issue structures in Singapore REITs: In April 2022, OUE Commercial Trust ("OUECT") priced a SGD150mn 5-year bullet bond that came with an interesting step-down coupon. If OUECT is able to obtain an investment grade rating from at least one external rating agency within 18 months from issue date, the REIT is able to save on its financing cost. The step-down is 25bps which economically incentivises the REIT to reach this target. Currently, OUE is an unrated issuer. If the rating agency have withdrawn the rating or if the ratings have fallen below investment grade, the coupon rate will step-up to its initial 4.2%. At least one other crossover REIT issuer since the OUECT issuance had expressed to investors its intention to seek an external credit rating. After years of REITs requesting to withdraw their external ratings, this potential reinstatement is a development that is worth watching in our view, especially for corporate credit investors with investment mandate constraints to only invest in the rated space.

YTD, the SGD corporate credit market also saw growth of instrument types in the green, social, sustainability and sustainability linked ("GSSSL") market with the first social bond coming from First Real Estate Investment Trust ("FIRT"), where the bond was guaranteed by the Credit Guarantee and Investment Facility, a trust fund of the Asian Development Bank ("CGIF"). Ascott Residence Trust ("ART") returned to the corporate credit market for the first time since the pandemic by issuing the first sustainability-linked bond from a Singapore REIT. The SLB is linked to sustainability performance target of greening 50% of its total portfolio (by gross floor area) by end-2025. In April 2022, LREIT priced its second perpetual issuance, in a more challenging market condition versus its debut perpetual in May 2021. In our view, the new perpetual which was structured in a NC3 format rather than the more common NC5 structure provided a win-win situation for both the issuer and investors who were demanding short-dated papers. The perpetual was priced at a wide 5.25% and has since performed well in the secondary market, tightening to YTC of 4.75% as of writing.

Electricity cost escalation: Through 2H2021, Singapore REITs had faced rising power prices and YTD with the escalation of oil and gas prices following the Russia Ukraine conflict, the elevated power prices is unlikely to fall within the near term. This means that when electricity contracts come up from renewal for the REITs, the costs are very likely to be at a higher rate (may be two to three times higher). Energy cost prices is expected to affect each Singapore REIT differently where the key factors influencing how much additional cost they need to bear is dependent on where assets are located (different geographies are facing electricity cost pressures differently), whether leases are on triple-net basis (where utilities expenses are paid by tenants) and the amount of electricity used in common areas (or shared space) where REIT as property owner is in charge of paying and the bargaining power between REITs and tenants which affects how much of the cost escalation that can be passthrough to tenants. According to the Industrial REITs we cover, data centres they own are generally under triple-net leases despite data centres being electricity guzzlers. One mitigating factor for bond and perpetual holders in our view are the very high net property income margins for REITs and if need be, REITs are able to passthrough the higher costs to tenants. Based on the latest half yearly financials available for the REITs we track, NPI margins were at least 61% and generally ranging higher at 70-80%.

REITs actively managing foreign exchange? The bulk of the Singapore REITs we track now have a sizeable portfolio value of assets located outside of Singapore. We note that the balance sheet exposure of REITs to assets located overseas is not necessarily hedged at the same level versus the overall portfolio's reported aggregate leverage level (simplistically total debt over total assets). For example, as of 31 March 2022, AREIT has AUD2.5bn of Australia asset and AUD1.6bn of AUD-denominated debt vis-à-vis its reported aggregate leverage of 36.8%. We note a similar situation for its USD, GBP and EUR assets where foreign debt is 70% or more of foreign asset value. In a scenario where the foreign currency weakens against SGD and everything else stays constant, reported aggregate leverage would fall since the debt is higher than the asset value. However, should SGD weaken against foreign currencies, the flipside could occur with reported aggregate leverage increasing.

Figure 21: REIT statistics (as of 31 March 2022 unless otherwise stated)

	Aggregate Leverage (%)	Interest Coverage Ratio[1]	Debt Duration (years)	Debt Cost (%)	Proportion of debt fixed/hedged (%)
Commercial					
CapitaLand Integrated Commercial Trust	39.1	4.2	3.9	2.3	85.0
Keppel REIT	38.7	3.8	3.1	1.8	71.0
Mapletree Commercial Trust	33.5	5.0	3.3	2.4	80.3
Suntec REIT	43.3	2.6	2.3	2.4	53.0
Frasers Centrepoint Trust	33.3	5.7	2.1	2.2	68.0
Lippo Malls Indonesia Retail Trust	42.9	2.0	2.6	6.7	42.5
Mapletree North Asia Commercial Trust	41.5	4.3	2.7	1.8	78.0
Starhill Global REIT	36.1	3.0	3.5	3.1	90.0
CapitaLand China Trust	38.1	4.8	3.2	2.6	71.0
SPH REIT[2]	30.1	7.7	2.6	1.7	73.0
LendLease Global Commercial REIT	27.7	3.4	1.8	1.0	90.0
Average	**36.8**	**4.2**	**2.8**	**2.5**	**72.9**
Industrial					
Ascendas REIT	36.8	5.3	3.5	2.1	79.1
Mapletree Industrial Trust	38.4	5.7	3.8	2.4	70.5
Mapletree Logistics Trust	36.8	4.9	3.8	2.2	79.0
AIMS APAC Industrial REIT	37.5	2.9	3.3	2.7	62.0
Frasers Logistics and Commercial Trust	33.1	12.5	2.9	1.6	71.3
ESR LOGOS REIT^	39.5	3.0	2.2	3.3	93.3
Cromwell European REIT^	38.6	6.8	3.1	1.7	100.0
Average	**37.2**	**5.9**	**3.2**	**2.3**	**79.3**
Hospitality					
Ascott Residence Trust	37.8	3.5	2.6	1.6	70.0
Frasers Hospitality Trust	42.3	2.3	2.0	2.2	77.1
Average	**40.1**	**2.9**	**2.3**	**1.9**	**73.6**
Others					
First REIT	35.7	5.7	2.0**	3.4	-
OUE Commercial Trust	39.4	2.9	2.8	3.0	70.0
Average	**37.6**	**4.3**	**2.4**	**3.2**	**35.0**

Source: OCBC Credit Research, company financials and investor presentations
** OCBC Credit Research estimates
^ OCBC Credit Research does not currently maintain official coverage of these names
Note: (1) For the trailing 12 months to 31 March 2022; refers to reported Adjusted Interest Coverage where it is provided (2) SPH REIT numbers as at 28 February 2022 given its August financial year end

Singapore Industrial REITS – Supply coming back to the market

In 1Q2022, q/q price index increased by 2.1% for all industrial properties while on a y/y basis this was up by a 5.6%, superseding pre-pandemic levels. Per data from Cushman & Wakefield, a real estate consultancy, in 2021, Singapore industrial investment sales saw robust demand at SGD4.4bn (slightly more than double that of 2020), though this was only SGD122mn in 1Q2022.

The rental index for all industrial properties increased by 1.0% q/q (up 2.4% y/y) which is a good showing for industrial properties relative to its historical performance. In particular, the warehouse segment saw a 1.5% increase q/q, although the business park segment saw flat rental growth. However, with much higher new supply expected, the pace of growth may fall and Colliers, a real estate consultancy has opined a 3.5% rental growth for the industrial space sector for the full year 2022.

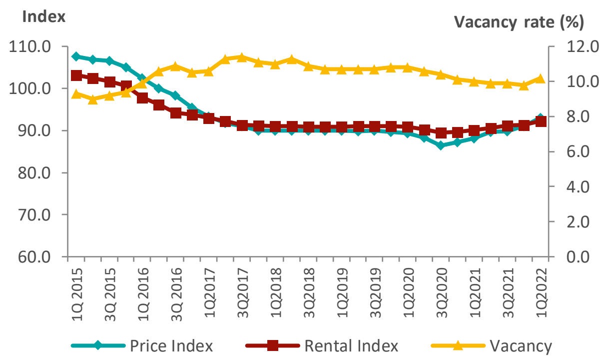
The original pipeline for 2020 and 2022 was projected to be significant, however, construction schedules were severely disrupted. Based on the potential supply provided by JTC, the supply expected for the nine months of 2022 from 1 April 2022 to 31 December 2022 was 2.4mn sqm, significantly higher than the 1.1mn sqm on average in the three years before the pandemic. Single-user factory is significant at 1.1mn sqm though these are typically built with an end-user in mind rather than speculative builds. Of the business park properties that are in the pipeline from 2Q2022 to 2026, ~52% by area are public sector projects, notably, business park developments at Punggol Way and the redevelopment at Science Park by a joint venture between CapitaLand Group Pte. Ltd. and Ascendas REIT.

All industrial vacancies had edged up to 10.2% in 1Q2022, after a tight market situation in the 12 months prior. Per JTC, this is driven by new completions which has picked up significantly. We note that in 2020 and 2021, only 1.0mn sqm of new supply in aggregate was completed, however, in 1Q2022 alone, 0.3mn sqm of space had been completed. Per Colliers, new additions in 1Q2022 were driven by single-user space.

In May 2022, the Singapore Purchasing Manager Index – Manufacturing was 50.4, marking the 23rd consecutive month of expansion. Our macro colleagues are projecting a full year manufacturing growth forecast of 3.8% y/y.

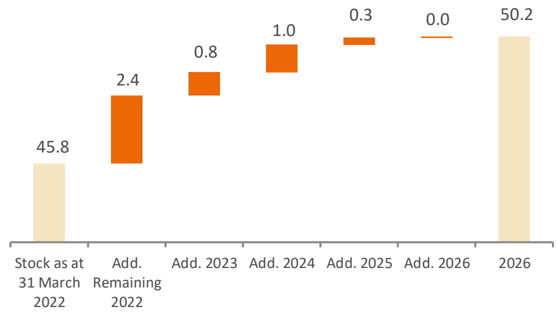
Demand for new industrial space is likely to continue in high specification buildings, data centres (moratorium reportedly lifted), business parks and logistics assets.

Figure 22: Industrial Price, Rental and Vacancy



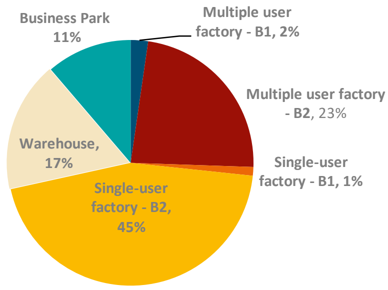
Source: JTC, OCBC Credit Research

Figure 23: Industrial stock and supply pipeline



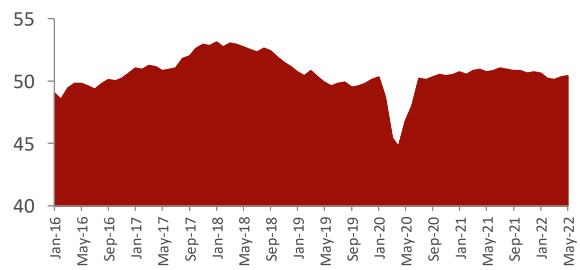
Source: JTC, OCBC Credit Research

Figure 24: Additional supply by sub-segment Cumulative 2Q2022 to 2026



Source: JTC, OCBC Credit Research

Figure 25: Singapore PMI - Manufacturing Index



Source: Singapore Institute of Purchasing and Materials Management

Singapore Commercial Office REITS – A strong year but outlook a little dimmer

Per data from Colliers, a real estate consultancy, offices in the Central Business District ("CBD") premium and Grade A market saw a 5.6% q/q increase in capital values in 1Q2022 (17% y/y). Per data from Cushman & Wakefield ("C&W"), in 2021, Singapore office investment sales totalled SGD4.8bn. This was lower than recent history although around half of the 2021 investment sales occurring in 4Q2021. Continuing the positive momentum, we calculate office investment sales for 1Q2022 at ~SGD1.1bn (Cross Street Exchange and 55 Market Street).

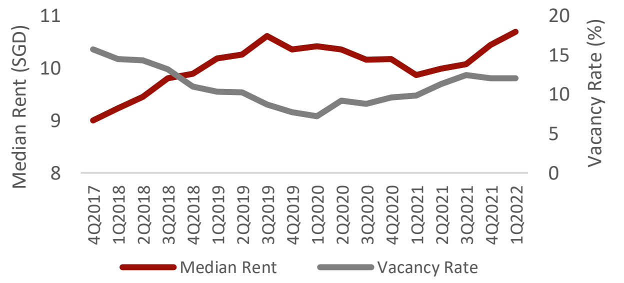
CBRE sees the Singapore office rental market as two-tier, with tenants preferring prime office buildings and rental for Grade B buildings tepid for 2021. Singapore REITs own mainly prime office. Using data from the Urban Renewal Authority ("URA"), median rent for Category 1 (representative of prime CBD rents) increased by 2.4% q/q (8.4% y/y) to reach SGD10.69 per sq ft per month, amidst limited new supply.

A nine-month survey by the Institute of Policy Studies show that more than 40% of Singapore respondents still prefer flexible working arrangements as of 11 April 2022, even though numbers have dipped from 1Q2022. Whilst there have been high-profile instances of banks giving up space as they move towards a flexible and progressive approach to working formats, office occupancy for 1Q2022 held up q/q at 88%. Going forward, it remains to be seen if the voluntary Tripartite Standard on Flexible Work Arrangements guidelines would lead to a gradual change in office space demand.

New demand sources from non-bank financial companies, technology companies and companies looking to diversify their Asia-Pacific geographical presence kept demand and rents buoyant. However, we think the pace of rental growth may fall going forward with a number of headwinds to GDP growth in the coming months. Notably also, 39% of leasing demand in 2021 per C&W was from the technology sector versus only 16% in 2019 before COVID. With the astronomical jobs growth in this sector fizzling, it is unlikely that the sector will continue to push up rental rates.

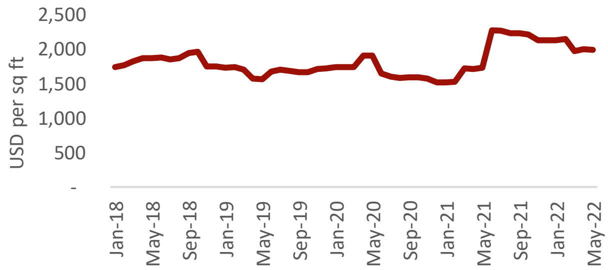
Construction schedules that were disrupted meant that certain projects that were due for completion in 2022 had been pushed back. As at 31 March 2022, 227,000 sqm of office space is expected to be completed in 2023, where half comprise of IOI Central Boulevard Towers. This means that unlike 2022 where supply was constrained, rental growth may also be limited by new supply.

Figure 26: Singapore Office Rent and Vacancy



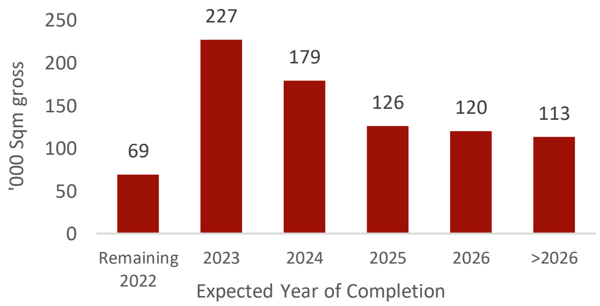
Source: URA
Note: (1) Office space in buildings located in core business areas in Downtown Core and Orchard Planning Area which are relatively modern or recently refurbished, command relatively high rentals and have large floor plate size and gross floor area

Figure 27: Singapore Office Price



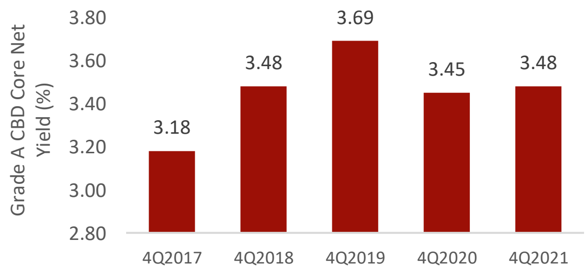
Source: RCA

Figure 28: Pipeline Supply of Office Space



Source: URA

Figure 29: Office Net Yield



Source: CBRE
Note: Grade A CBD Core (defined by CBRE as Raffles Place, Marina Centre and Shenton Way)

Singapore Retail REITS – Thriving again with the reopening

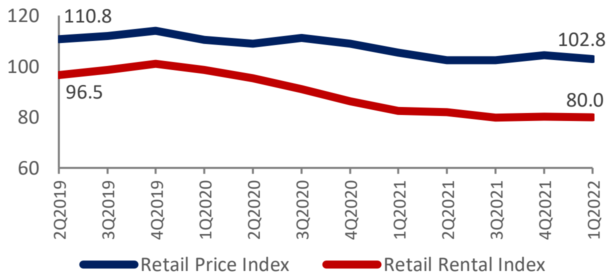
With the easing of pandemic restrictions locally, the retail sector may flourish in the coming months as compared to same time last year. Starting from 26 April 2022, group limits and safe distancing requirements were removed in Singapore. Retailers and food and beverage ("F&B") operators will reap benefits of the uplifting of these restrictions. Simplified cross-border travels will also contribute to the recovery for retail properties on the Orchard Road belt, which are very much dependent on tourist arrivals.

Prices of retail space fell slightly by 1.4% q/q in 1Q2022. Similarly, rental rates for retail space saw a slight dip over the same time period. The stock of retail space increased by a mere 1,000 sqm in 1Q2022 as compared to 25,000 sqm in the previous quarter. With no or low planned supply pipeline for FY2022 and the following two years, coupled with growing demand for retail space in line with the broad recovery trend, we think this would translate to an uptick in prices and rentals for retail. Vacancy rate improved marginally y/y from 8.5% to 8.3% as at 1Q2022, though it fell by 0.2% q/q. While this remains below the pre-pandemic level of 7.5% in 3Q2019, the situation has improved notably from the peak of the pandemic (2020: 9.6%). Interestingly, we are seeing Mercatus Co-operative ("MRCOOP"), a substantially owned enterprise by NTUC, exploring strategic options to review the properties within its portfolio. Among which, MRCOOP owns AMK Hub, Jurong Point, and Swing By@Thomson Plaza, and co-owns NEX. The media has reported that MRCOOP may be looking to sell a retail portfolio at a consideration of ~SGD4bn.

Similarly, total retail sales increased by 12.1% y/y in April 2022 to SGD3.7bn, extending the 8.8% increase seen in March 2022. Excluding motor vehicles, retail sales rose 17.4% as compared to the 13.6% increase in March 2022. Overall, in April 2022, most trade sectors saw an increase in sales, except for Motor Vehicles, Mini-marts and Convenience Stores. Sectors like Wearing Apparel & Footwear (+46.6%), Food & Alcohol (+28.4%) and Department Stores (+36.5%) contributed to the larger y/y growths across the trade sectors. Given that these sectors were the hardest hit during the pandemic, the rebound in growth is likely attributed to pent up demand and higher tourist spending. Amongst the REITs that we cover, tenant sales have increased for most of them (eg: Starhill Global REIT, Suntec REIT).

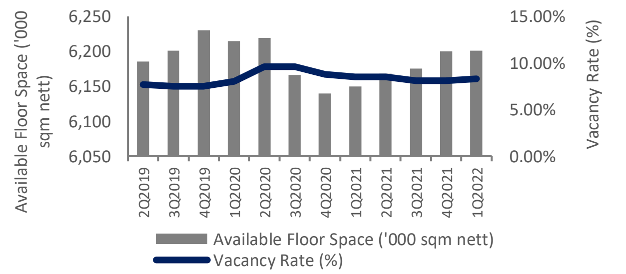
In contrast, the proportion of online sales excluding motor vehicles fell m/m from 17.4% to 14.2% in April 2022, with the lower percentage in online sales likely due to more online promotional events in March 2022 per Singstat. Broadly, we think that the growing online shopping trend will be entrenched with the adoption having been expedited by the pandemic. The retail landscape will continue to evolve as shoppers seek newer experiential shopping experiences.

Figure 30: Central Region Retail Price and Rental Index



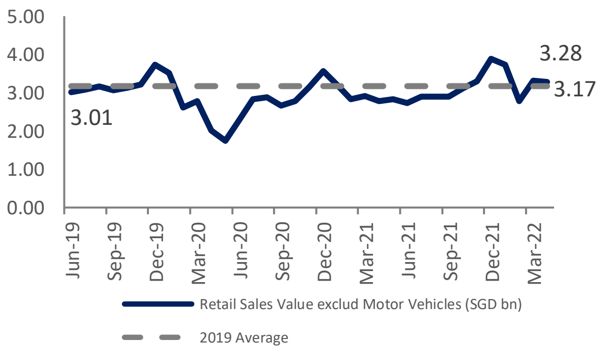
Source: URA, OCBC

Figure 31: Available Retail Floor Space and Vacancy Rate



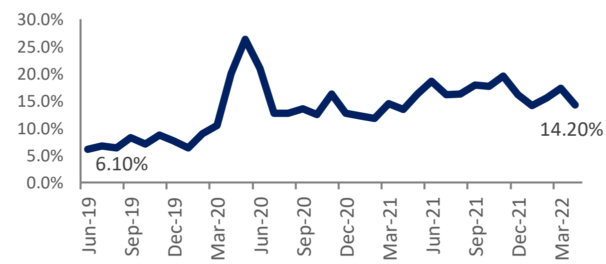
Source: URA, OCBC

Figure 32: Retail Sales Value, SGD bn (Excl. Motor Vehicles)



Source: Singstat, OCBC

Figure 33: Online Sales as a % of retail sales (Excl. Motor Vehicles)



Source: Singstat, OCBC

Singapore Hospitality REITS – Same picture but brighter outlook

With half of 2022 now coming to a close, more than two years have passed since the onset of the border closure. Though lingering effects of the pandemic still exist in certain parts of our lives like the need to be masked up in indoor or confined areas, this is a vast improvement from what we previously experienced in 2020 and 2021. Cross border travel restrictions have now eased for most countries, as long as travellers carry a valid vaccination certificate. According to the World Tourism Organisation ("UNWTO"), a survey from experts reported brighter outlook for international tourism for 2022, with more than half of the rebound expected to happen in 3Q2022.

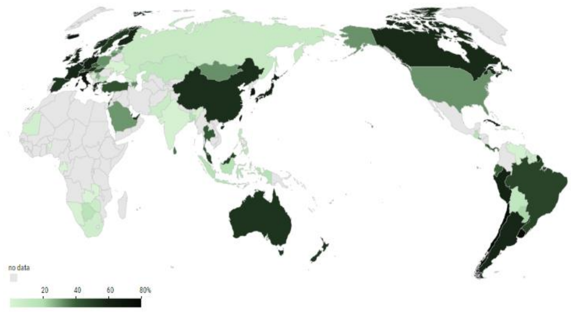
Singapore, the first country in the Asia-Pacific region to reopen its borders back in September 2021, has seen an increase in international tourist arrivals. Consistent with statistics from Singapore Tourism Board, total international visitors' arrivals saw a significant increase from 25,737 in April 2021 to 294,304 in April 2022, though still remains below the pre-pandemic monthly average of ~1.6mn visitors. Evidently, improvements have been seen in the hospitality REITs under our coverage. For example, Ascott Residence Trust reported an uptick in international corporate and leisure bookings.

Going forward, further increase in tourist arrivals is expected for Singapore. Transport Minister S. Iswaran stated that the growth in air travel experienced in the previous months exceeded what was anticipated. In line with this, Changi Airport Group announced the reopening of Changi Airport's Terminal 4 which had its operations suspended previously in May 2020 due to the precipitous decline in air travel brought about by the pandemic. Notwithstanding any abrupt change in travel restrictions, it is expected that the momentum of this growth trajectory will continue.

Apart from leisure travel, more companies are now allowing for domestic and international employee travel. A survey by the Global Business Travel Association ("GBTA") for April 2022 unveiled that 74% of respondents reported their companies now allowing international travel, up from 26% in February. Besides that, employees are now also more willing to do so, with nine in ten being "willing" or "very willing" to travel for business in the current environment.

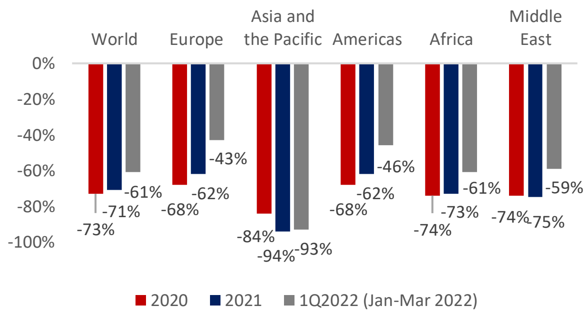
There is also a robust pipeline of meetings, incentives, conventions and exhibitions ("MICE") events. Singapore has managed to secure at least 66 international events for the rest of 2022. Additionally, events that will be held in 2023 have also been lined up and confirmed. Major international MICE events are expected to not only boost visitors' arrival and hotel stay receipts, but venues like Suntec Singapore Convention and Exhibition Centre ("Suntec SG") and Singapore Expo are expected to be bustling again. Suntec REIT ("SUN") under our coverage reported a narrower loss for its convention sector for quarter ending 2022. As of writing, there are 19 trade shows that will be held in Suntec SG.

Figure 34: Vaccines Administered Globally



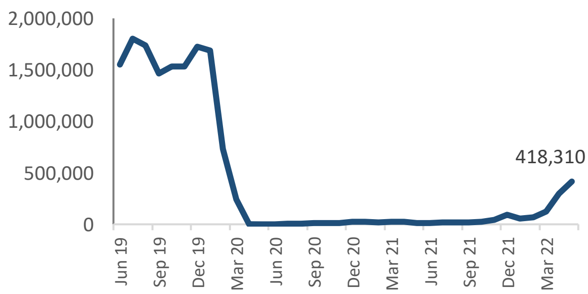
Source: Nikkei Asia

Figure 35: Change in International Tourist Arrivals (%, compared to 2019)



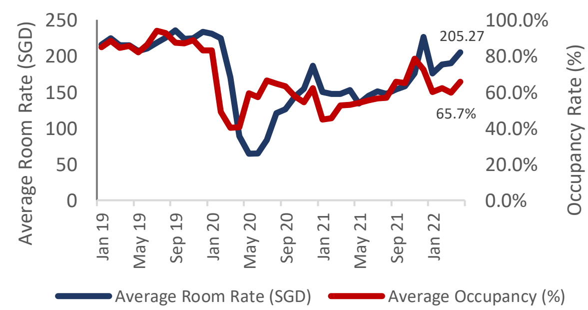
Source: UNWTO

Figure 36: International Visitor Arrivals to Singapore



Source: Singapore Tourism Board

Figure 37: Singapore Average Room Rate and Occupancy

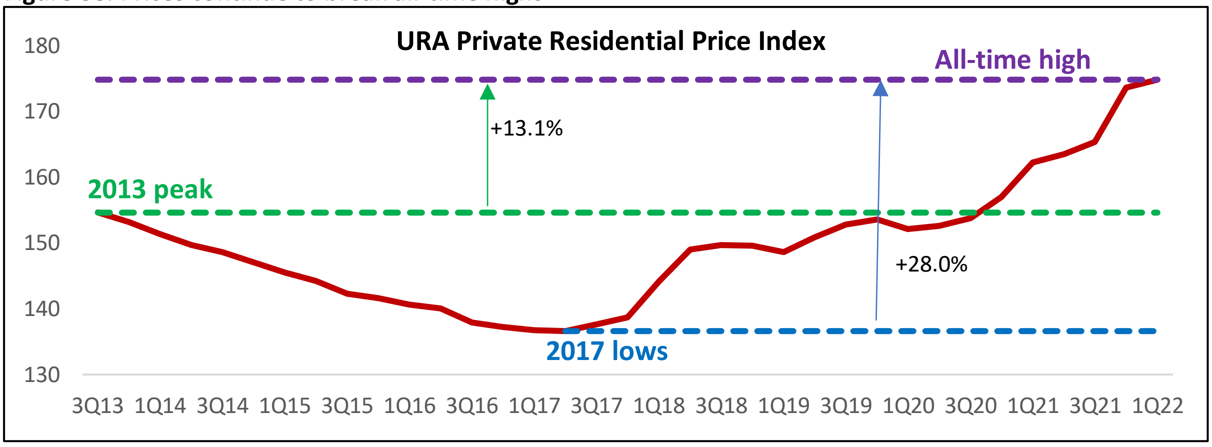


Source: Singapore Tourism Board

Singapore Residential Property – A relative shelter amidst the storm

Slower price growth after a strong rally: 1Q2022 private residential property prices grew by a more muted 0.7% q/q after a strong 5.0% q/q increase in 4Q2021, though this has set another all-time high. The growth in 1Q2022 was mainly due to Outside Central Region which saw prices grew by 2.2% q/q (4Q2021: +5.7% q/q), though this was offset by prices declining 2.7% q/q in Rest of Central Region (4Q2021: +6.7% q/q) and prices declining 0.1% q/q in Core Central Region (4Q2021: +2.7% q/q). Meanwhile, developers sold just 1,825 units in 1Q2022 (4Q2021: 3,018).

Figure 38: Prices continue to break all-time highs



Source: URA, OCBC

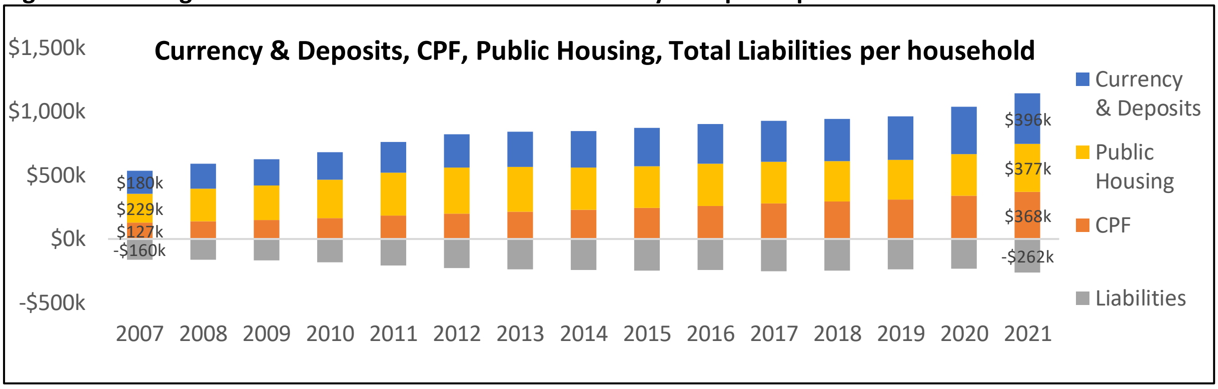
Slowdown likely due to wait and see due to property cooling measures: Slower price growth in 1Q2022 is likely attributable to the property cooling measures introduced in December 2021 following the large run-up of prices in 4Q2021. We believed buyers and sellers stayed sidelined as they adopt a wait and see approach, as evidenced by the decline in the number of developer sales to just 1,825 units in 1Q2022 (4Q2021: 3,018 units) while property launches fell to just 613 units in 1Q2022 (4Q2021: 2,275 units).

Resumption of growth post 1Q2022: That said, we think the impact from the property cooling measures is likely transitory. According to SRX, non-landed resale prices as of 5M2022 is up 3.1% compared to December 2021. Meanwhile, developer sales in April-May 2022 rebounded to 2,016 units, with two major projects Piccadilly Grand and Liv@MB selling more than 75% of total units over their weekend launches, with Piccadilly Grand (which is linked to Farrer Park MRT) in particular setting a new pricing benchmark for District 8, according to EdgeProp.

Going forward, we retain our forecast for property prices to rise by 5-7% in 2022 and further break the all-time high. This is due to (1) firm demand, (2) dwindling supply and (3) higher development and construction costs which should outweigh headwinds in rising rates.

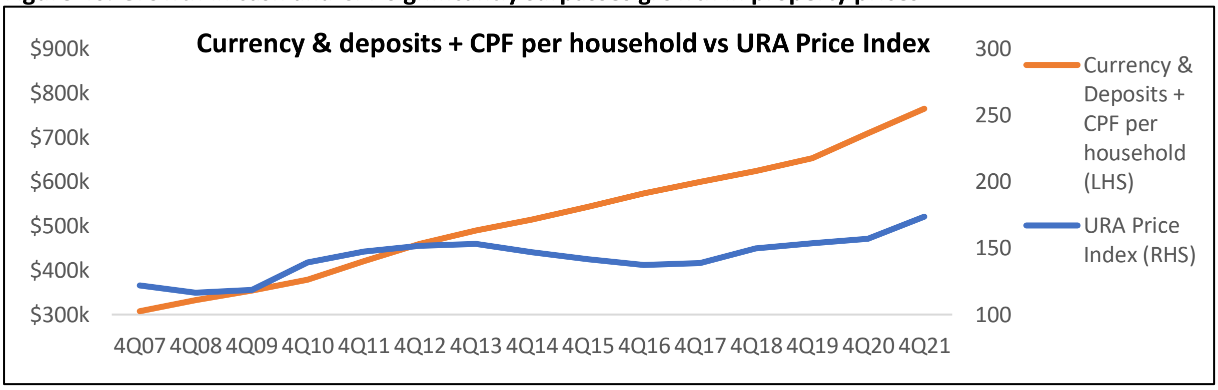
<u>Factor 1: Firm demand</u>
Singaporeans as the true buying force: Both Liv@MB and Piccadilly Grand reported that over 90% of the buyers were Singaporeans, despite selling prices of SGD2,387 psf and SGD2,150 psf respectively. In general, Singaporeans are by far the largest buying force in the property market. According to data from URA Realis, Singaporeans (~84%) and Singapore PRs (~11%) account for ~95% of developer sales (excluding EC) from June 2021 to May 2022. This is due to Singaporean households who grow increasingly affluent (Credit Outlook 2020) and aspirational (Credit Outlook 2020). If demand from foreigner picks up significantly, there may be further upside risks to prices.

Figure 39: Strong and near consistent ~8% CAGR in currency & deposits per household



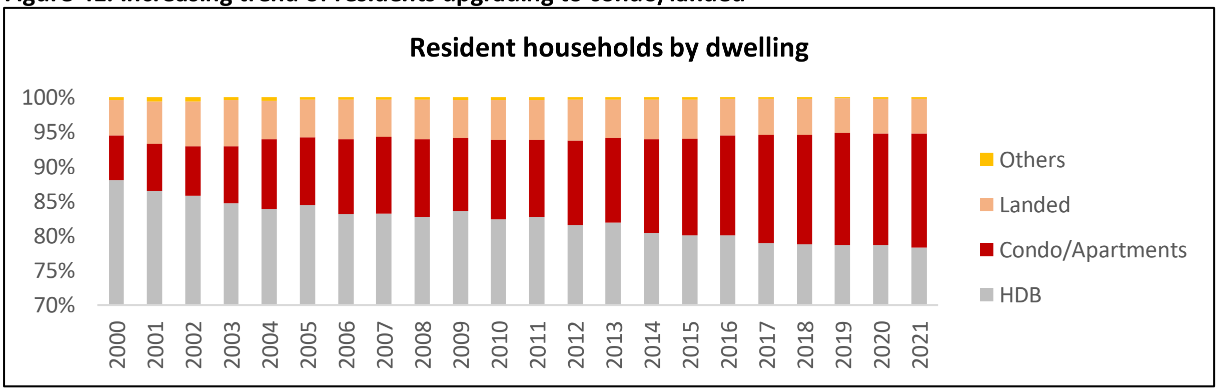
Source: SingStat, OCBC

Figure 40: Growth in cash and CPF significantly surpasses growth in property prices



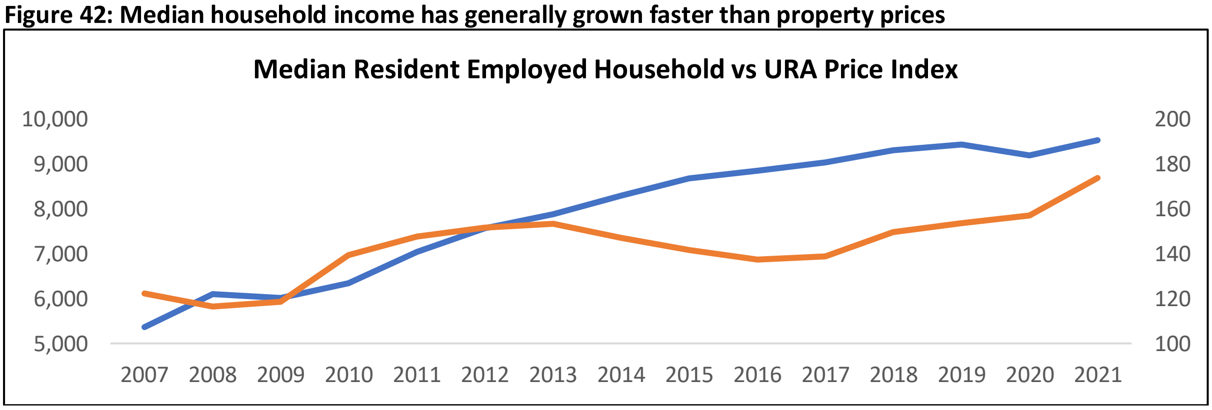
Source: SingStat, URA, OCBC

Figure 41: Increasing trend of residents upgrading to condo/landed



Source: SingStat, OCBC

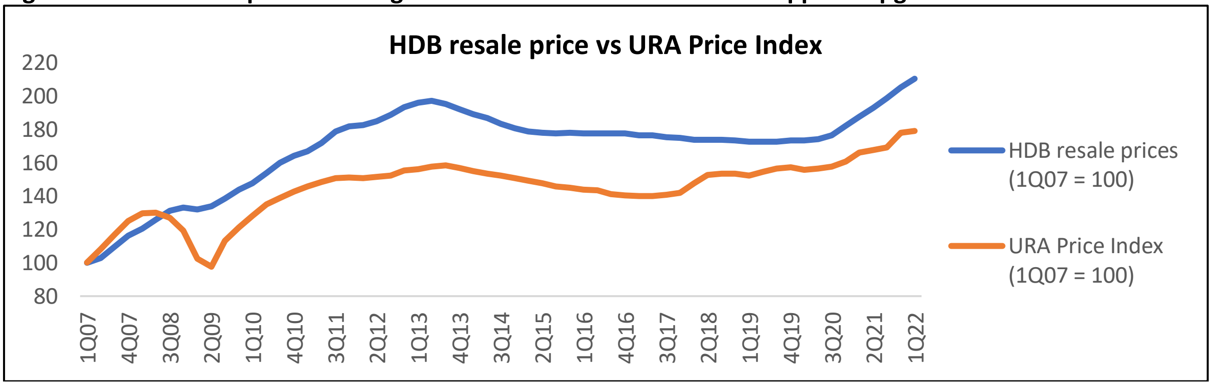
Figure 42: Median household income has generally grown faster than property prices



Source: SingStat, URA, OCBC

HDB millionaires coming out in force: HDB resale prices similarly continue to make fresh highs. In May 2022, 30 HDB resale flats were transacted for at least SGD1mn, lifting the million-dollar HDB flats transacted to 135 units according to SRX in 5M2022 (2021: 261 units).

Figure 43: HDB resale prices which grew faster than URA Price Index supports upgraders

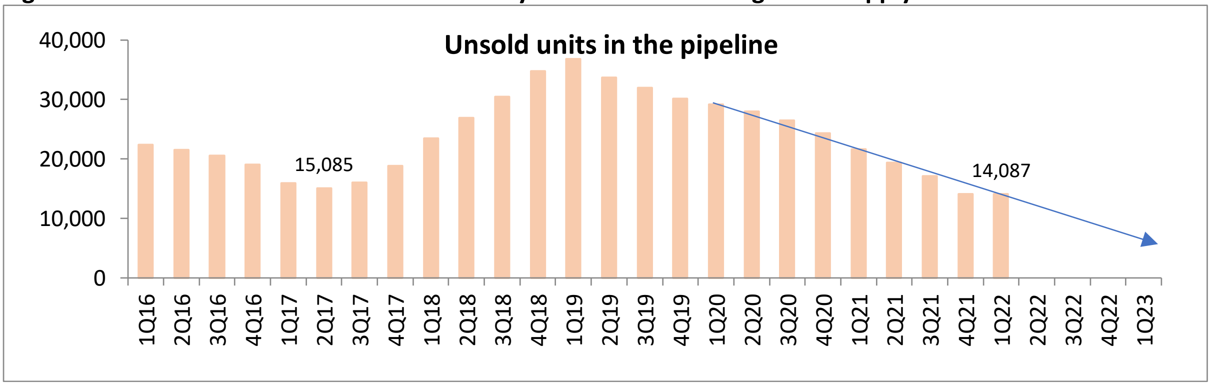


Source: HDB, URA, OCBC

Factor 2: Dwindling supply

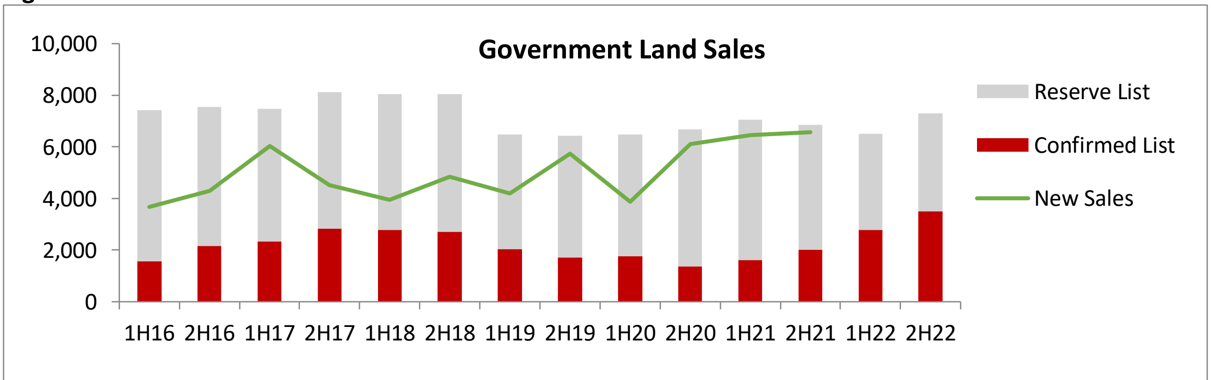
Dwindling supply of private housing: Unsold units fell to a mere 14,087 units, which is lower than the lows seen in 2Q2017. Although the confirmed list of government land sales in 2022 has risen 74.5% y/y to 6,290 units, this is still below developer sales. In 2021, 13,369 units were sold by developers (excluding 2021, 10,127 units on average were sold in 2016-2020). Meanwhile, the enbloc market has largely cooled following the property cooling measures implemented in December 2021 with developers additional buyer's stamp duty increased to 35% from 25%.

Figure 44: Unsold units reached more than 15-year lows and heading into a supply crunch



Source: SingStat, URA, OCBC

Figure 45: Increase in 2022 GLS confirmed list is still small relative to new sales

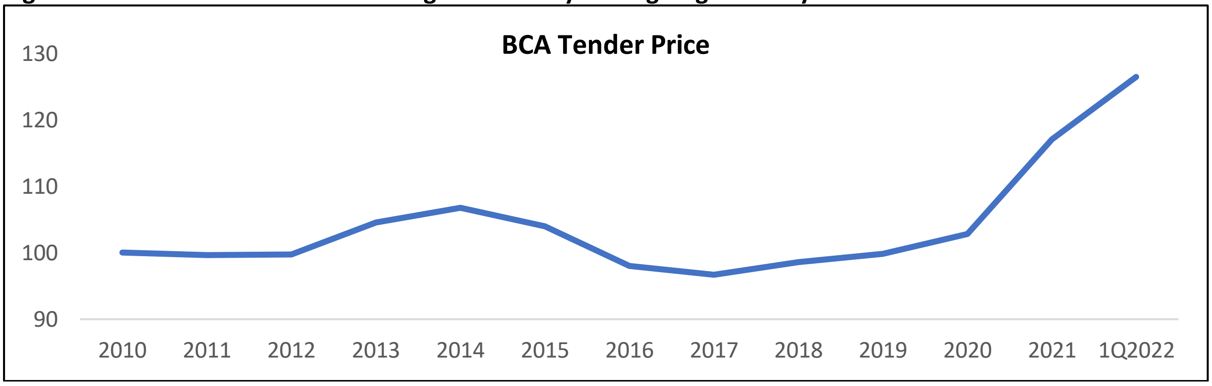


Source: URA, OCBC

Factor 3: Higher construction costs

Costs have surged significantly…: According to Singapore Contractors Association Ltd in April 2022, construction costs have risen by an average of 10 to 20% since the Russia-Ukraine conflict (in February 2022), driven by higher prices of material costs and higher energy prices impacting production and transportation costs. We note that this increase in costs follows that of a significant increase in BCA Tender Price in 2021 (+13.9% y/y). According to the Singapore Construction Market Review and Outlook 2022 which was released in April 2022, tender prices are still expected to continue increasing by a further 5 to 10% due to rising construction material costs, logistic cost and continued shortage of manpower. According to NUS-Redas, as of 1Q2022 100% of developers are concerned about building materials and labour costs.

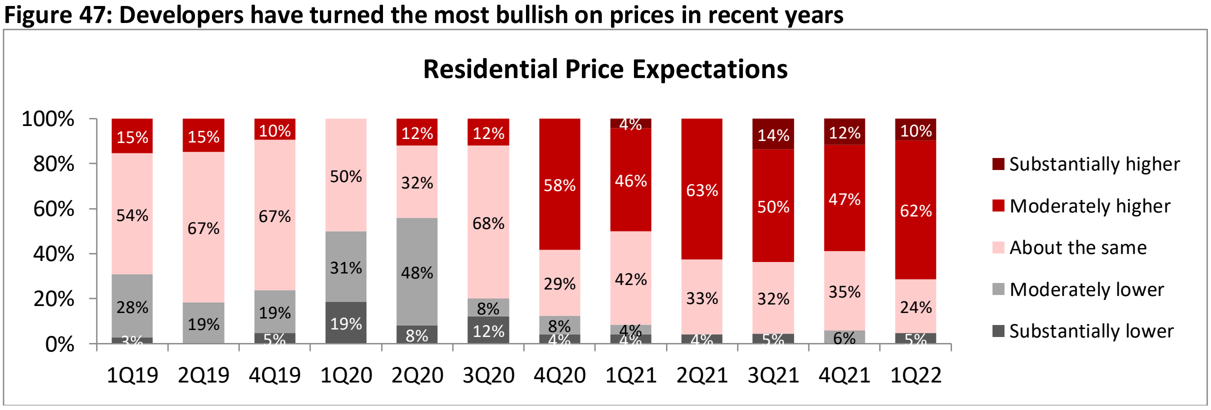
Figure 46: Construction costs have surged and likely to surge significantly more



Source: BCA, OCBC

…and higher costs are expected to be passed on: With developer margins generally around single digit to low double digit, we expect developers to pass on cost increases to maintain profitability. Developers are also expected to price new launches higher given the recent blockbuster sales for Piccadilly Grand and Liv@MB. 72% of developers are expecting prices to increasing moving forward.

Figure 47: Developers have turned the most bullish on prices in recent years

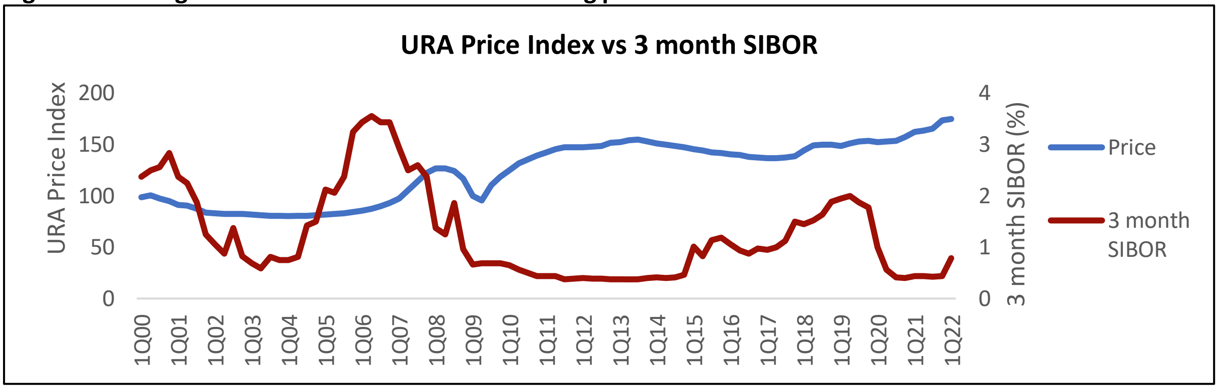


Source: NUS-Real Estate, OCBC

Would rise in rates halt the rise in property market?

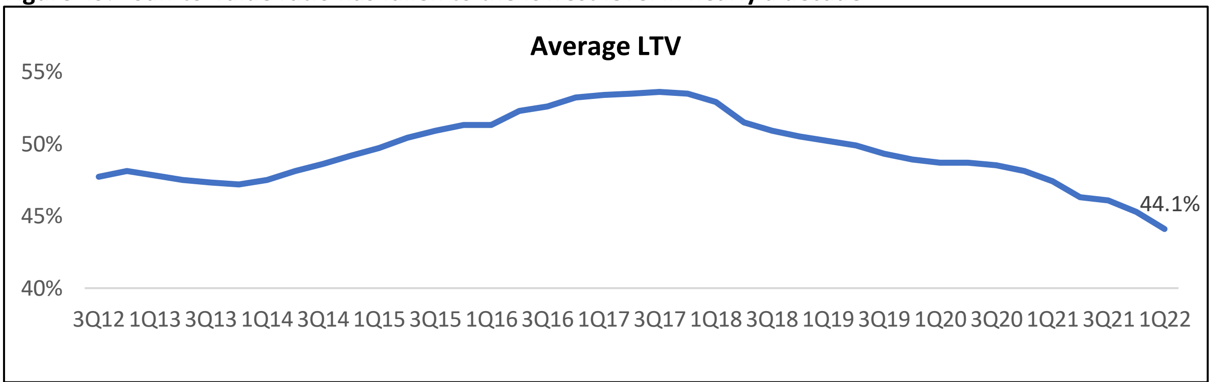
Recently, local banks have increased rates on home loans, and we think rates may increase further given the interest rates trajectory. That said, we are not overly worried about the impact on the property market for several reasons. The historical correlation between interest rates and property prices has been weak. Meanwhile, household balance sheets remain strong with a manageable loan-to-value ratio of 44.1% as of 1Q2022. We believe households can afford mortgage repayments even if interest rates rise somewhat further (with total debt servicing ratio tested against 3.5% interest rates). Together with other property cooling measures imposed since 2010s, this should ensure that there should be few forced sellers even if interest rates rise. For investment property owners, the rise in rents (13.9% since 4Q2019) for now should roughly offset the rise in mortgage repayments. Overall, the rise in rates should have limited impact on Singapore's housing market.

Figure 48: No significant correlation between housing price and rates



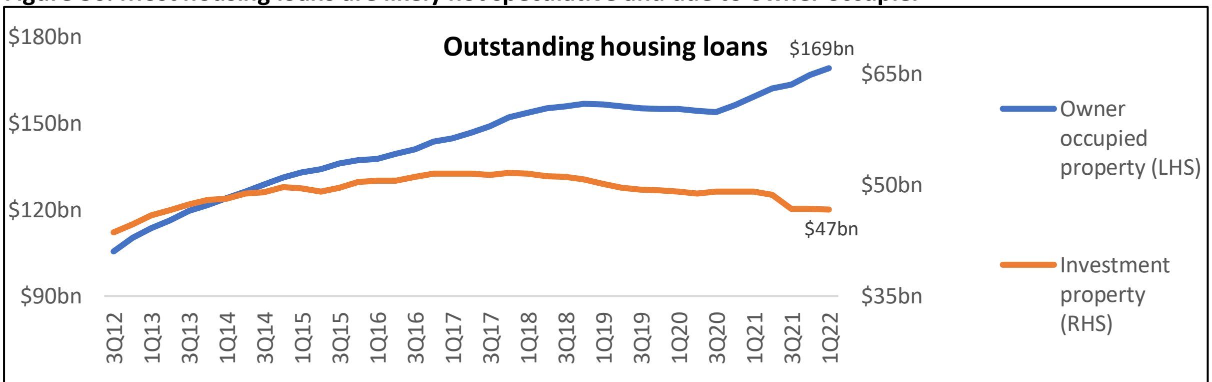
Source: URA, Bloomberg, OCBC

Figure 49: Loan-to-value ratio has fallen to the lowest level in nearly a decade



Source: URA, Bloomberg, OCBC

Figure 50: Most housing loans are likely not speculative and due to owner occupier



Source: URA, Bloomberg, OCBC

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Explanation of Issuer Profile Rating / Issuer Profile Score

Positive ("Pos") – The issuer's credit profile is either strong on an absolute basis or expected to improve to a strong position over the next six months.

Neutral ("N") – The issuer's credit profile is fair on an absolute basis or expected to improve / deteriorate to a fair level over the next six months.

Negative ("Neg") – The issuer's credit profile is either weaker or highly geared on an absolute basis or expected to deteriorate to a weak or highly geared position over the next six months.

To better differentiate relative credit quality of the issuers under our coverage, we have further sub-divided our Issuer Profile Ratings into a 7-point Issuer Profile Score scale.

IPR	Positive		Neutral			Negative	
IPS	1	2	3	4	5	6	7

Explanation of Bond Recommendation

Overweight ("OW") – The bond represents **better relative value** compared to other bonds from the same issuer, or bonds of other issuers with similar tenor and comparable risk profile.

Neutral ("N") – The represents **fair relative value** compared to other bonds from the same issuer, or bonds of other issuers with similar tenor and comparable risk profile.

Underweight ("UW") – The represents **weaker relative value** compared to other bonds from the same issuer, or bonds of other issuers with similar tenor and comparable risk profile.

Please note that Bond Recommendations are dependent on a bond's price, underlying risk-free rates and an implied credit spread that reflects the strength of the issuer's credit profile. Bond Recommendations may not be relied upon if one or more of these factors change.

Other

Suspension – We may suspend our issuer rating and bond level recommendation on specific issuers from time to time when OCBC is engaged in other business activities with the issuer. Examples of such activities include acting as a joint lead manager or book runner in a new issue or as an agent in a consent solicitation exercise. We will resume our coverage once these activities are completed. We may also suspend our issuer rating and bond level recommendation in the ordinary course of business if (1) we believe the current issuer profile is incorrect and we have incomplete information to complete a review; or (2) where evolving circumstances and increasingly divergent outcomes for different investors results in less conviction on providing a bond level recommendation.

Withdrawal ("WD") – We may withdraw our issuer rating and bond level recommendation on specific issuers from time to time when corporate actions are announced but the outcome of these actions are highly uncertain. We will resume our coverage once there is sufficient clarity in our view on the impact of the proposed action.

*OCBC Credit Research team would like to acknowledge and give due credit to the contributions of **Liu Hongying** and **Wong Yu Le**.*

Analyst Declaration

The analyst(s) who wrote this report and/or her or his respective connected persons held financial interests in the following above-mentioned issuers or companies as at the time of the publication of this report: Singapore Airlines Ltd, GuocoLand Ltd, Oxley Holdings Ltd, Frasers Centrepoint Trust, Suntec Real Estate Investment Trust, Mapletree Commercial Trust, Frasers Hospitality Trust, Lendlease Global Commercial REIT, Ascott Residence Trust.