2021FY Chinese Dollar Bond Market Report

2021FY Chinese Dollar Bond Market Recap

Chinese dollar bond market was volatile, mainly due to the tightening of financing environment and the frequent occurrence of credit events. Chinese dollar bond issuance had fallen compared with 2020, and the net financing amount had dropped significantly. Newly issued bonds in 2021 were mainly small-value issuances, there were 693 new bonds with a total issued volume of approximately USD187.9 billion, decreasing by 7.6% year-on-year ("YoY"). The net financing amount decreased significantly by 53.4% YoY to approximately USD31.7 billion. 2022 will see the peak of the maturity of Chinese dollar bonds, with an outstanding amount of USD167.2 billion, of which real estate and urban investment were USD49.0 billion and USD32.0 billion, respectively.

> The issuance of Chinese real estate dollar bonds dramatically dropped, with a negative net financing amount. The issued amount of financial and industrial sectors fell, while the issuance of Chengtou dollar bonds increased. From the perspective of sector distribution, real estate, Chengtou, financial institutions, and industrial enterprises accounted for approximately 23.7%, 16.4%, 29.8%, and 30.1% in 2021, respectively.

Amid a cautious market, the proportion of investment-grade issuances increased while highyield bond issuance dropped sharply. In 2021, there were 156 investment-grade issuers with a total issued volume of USD116.3 billion, a decrease of 7.0% YoY and accounting for 61.9% of the new issuance. There were 78 high-yield issuers in 2021, and the amount of new issuance was USD39.8 billion, decreasing by 24.2% YoY and accounting for 21.2% of the new issuance.

➤ The average coupon rate of newly issued Chinese dollar bonds dropped from 3.86% in 2021Q1 to 3.12% in 2021Q4. The full-year average coupon rate declined from 4.69% in 2020 to 3.51% in 2021. The average tenor of new issuance decreased from 3.86 years in 2020 to 3.35 years in 2021.

Real estate and financial bonds performed poorly due to regulations and credit events, while Chengtou bonds performed steadily. As of December 31, 2021, the Year-to-Date return on Chinese US dollar bonds was -5.88%, of which the return on investment-grade bonds was 0.36% and the return on high-yield bonds was -21.46%. In terms of sectors, as of December 31, 2021, real estate dollar bonds performed the worst, with a Year-to-Date return of -27.72%.

Rating Actions and Credit Events

- ➤ Credit quality of Chinese issuers were diverged, real estate issuers were intensively downgraded. In 2021, the three major international rating agencies took rating actions on 212 Chinese issuers, including 330 negative rating actions and 160 positive rating actions. In 2021Q4 alone, the three major international rating agencies took rating actions on 84 Chinese issuers, including 117 negative rating actions and 31 positive rating actions.
- The credit risk of weak companies continued to be exposed. According to Bloomberg, in 2021, 22 Chinese issuers defaulted in the offshore bond market and 20 obligors were newly added, with a default amount of approximately USD13.6 billion, and a default scale of approximately USD6.9 billion in the fourth quarter.

Outlook

- Against the backdrop of inflationary pressures and the increasing possibility of the Fed tightening monetary policy, the yields of long-term US Treasury bonds may rise slightly. As the liquidity of USD tightens and the existing credit risks evolve, high yield issuances will remain under pressure. The primary market is expected to suffer from the pressure in 2022Q1. For the secondary market, as the signal of onshore refinancing policies are being loosen aggressively, high-yield bonds yield is expected to rebound in stages, especially in the real estate sector. A temporary upward adjustment may result. On the other hand, the existing negative investor sentiment is still filling up the market, and high-yield bonds may still face downside risks.
- As the monitoring to the real estate sector is being normalized, companies with weaker fundamentals will be eliminated. Companies with weaker fundamentals are expected to default as liquidity risks tighten industry concentration. Huge improvement on access to refinancing is unlikely to happen, but the issuance volume may hit a new low in 2022. As the refinancing monitoring is tightened along with the negative investor sentiment in the market, the regional differentiation of Chengtou bonds has become more pronounced. At the same time, the lack of credit rating and the impact of article 15 on Chengtou companies should be bore in mind.

Chinese Dollar Bond Market Report

Authors

Charles Man 852-28607126

charles man@ccxap.com

George Wang 852-28607130

george_wang@ccxap.com

Other Contacts

Elle Hu 852-28607120

elle hu@ccxap.com

Date: January 27, 2022

Introduction

In 2021, although the world had not fully controlled the pandemic, global economic activities would gradually recover as governments began to ease restrictions. As inflationary pressures continued to increase, the Fed's policy stance had become hawkish, setting a timetable for reducing debt purchases and signaling strong interest rate hikes, while raising inflation expectations for 2021 and 2022. As a result, the long-term US Treasury yields fluctuated upward. Overall, credit events dominated the volatility of the Chinese dollar bond market throughout the year. In 2021H1, the negative news from China Huarong disrupted the investment-grade sector. In 2021H2, the frequent occurrence of credit events by real estate issuers had a significant impact on the high-yield sector. The issuance in the primary market, especially by the real estate companies, was hindered, while bond prices in the secondary market continued to be under pressure due to the default of real estate companies. Since the third quarter, investors' pessimism had further increased. In 2021Q4, the real estate companies defaulted one by one, which seriously affected investors' confidence in the issuers' willingness to repay debts, and high-yield real estate bonds suffered a sharp decrease. Meanwhile, Chengtou issuers had opted for financing in the offshore market due to the tightening of domestic policies. The new issuance of Chengtou dollar bonds had increased significantly, and SBLC had become the main issuance structure to provide credit enhancement for offshore bonds. Moreover, the regional differentiation of Chengtou bonds was obvious, and the market was shunning weak-qualified areas with a high proportion of non-standards, resulting in greater refinancing pressure. In 2021, the newly issued amount for Chinese dollar bonds was USD187.9 billion, a decrease from the same period in 2020. In addition, the matured amount of Chinese dollar bonds was huge. As a result, the outstanding amount increased to USD814.2 billion as of the end of 2021, compared with the same period in 2020.

2021 Chinese Dollar Bond Market Recap

Primary Market

Chinese dollar bond market was volatile, mainly due to the tightening of financing environment and the frequent occurrence of credit events. Chinese dollar bond issuance had fallen compared with 2020, and the net financing amount had dropped significantly. Affected by changes in investor sentiment and issuer structure, the pace of issuance in 2021 was volatile. Since 2021 was the peak debt repayment period for Chinese issuers, refinancing needs prompted issuance during the year. Newly issued bonds in 2021 were mainly small-value issuances, there were 693 new bonds with a total issued volume of approximately USD187.9 billion, decreasing by 7.6% year-on-year ("YoY"). The net financing amount decreased significantly by 53.4% YoY to approximately USD31.7 billion. Affected by Yongcheng Coal's default at the end-2020, some issuers had postponed their financing plans to early 2021. In addition to taking into account the peak maturity of dollar bonds, issuers, especially real estate companies, seized the financing window at the

beginning of the year. With a large issuance amount in January, the issuance of real estate companies accounted for 43.8%. Since then, issuances from February to May were relatively flat due to the credit events such as China Huarong, Chongqing Energy Investment, and China Fortune. Yet, the issuance in June rebounded because of the concentrated issuance of several financial institutions such as CMB international and Huatai International. After that, the credit events had continued to ferment. Although the issuance of dollar bonds in July was the same as that in June, the market sentiment began to weaken, and the regulation of real estate industry released a tightening signal. This resulted in a decline in new issuances in August, especially high-yield real estate dollar bonds. The new issuance amount rebounded again in September, mainly driven by the financial sector, including USD6.2 billion bonds issued by Industrial and Commercial Bank of China (ICBC). Some real estate companies had also seized the opportunity to refinance. However, default events occurred frequently from October to December including China Evergrande, Fantasia, Sinic Holdings, Modern Land, China Aoyuan, Kaisa Group, and Fujian Yango. Several real estate companies were also exposed to credit risks. The issuance of real estate companies fell sharply in the fourth quarter. Therefore, the overall investment sentiment in the Chinese dollar bond market was sluggish, which severely hindered the issuance in 2021Q4, and the issuance amount in October and December hit record lows.

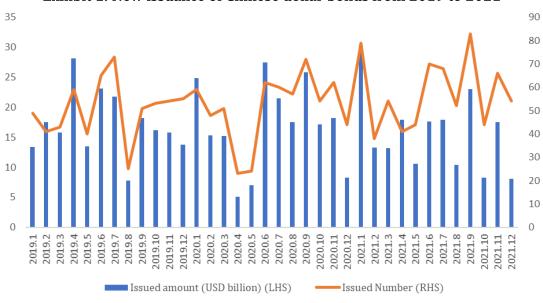


Exhibit 1: New issuance of Chinese dollar bonds from 2019 to 2021

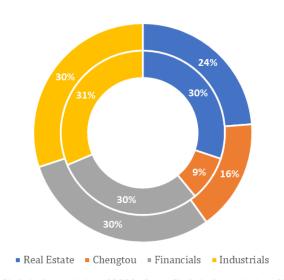
Source: Bloomberg, CCXAP Research

The issuance of Chinese real estate dollar bonds dramatically dropped, with a negative net financing amount. The issued amount of financial and industrial sectors fell, while the issuance of Chengtou dollar bonds increased. From the perspective of sector distribution, real estate, Chengtou, financial institutions, and industrial enterprises accounted for approximately 23.7%, 16.4%, 29.8%, and 30.1% in 2021, respectively. By industry, the newly issued amount of the financial sector was USD56.0 billion in 2021, a slightly decrease of 6.8% YoY. This is due to financial institutions, including banks and brokerages, have good credit quality and are less affected by the market fluctuations. The issuance of the industrial sector decreased by 11.6% YoY to USD56.5 billion. Although issuances increased significantly in the first half of the year, driven by large technology companies such as Alibaba and Meituan, the scale began to shrink in the third quarter, and new issuances dropped significantly in the fourth quarter.

In 2021, many real estate companies were exposed to credit risks, especially in the fourth quarter, with frequent default events. As investors were concerned about the credit risks of real estate issuers and the industry regulatory policies became stricter, the operating and financing environment had become difficult, and access to offshore financing for real estate issuers had been severely hampered. The real estate sector, which was dominated by highyield issuers, saw a sharp decrease in issuance, with significant decline from October to December. In 2021, the newly issued amount from real estate was USD44.6 billion, a decrease of 27.1% YoY. Among them, high-yield real estate companies were under obvious pressure, of which 49 high-yield issuers issued a total of USD29.6 billion, down by 61.9% YoY. In addition, as a result of the large scale of maturity of real estate dollar bonds and the tightening of policies on increase in debt, there was a large gap between the financing amount and the debt due. The net financing of the real estate sector dropped from USD20.3 billion in 2020 to USD-7.7 billion in 2021. For the first time since 2011, the annual net financing was negative. We expect that in the short term, the real estate industry will be in the cold winter stage, the investor sentiment would not calm, and real estate companies would have difficulties in rebuilding market confidence. Although the domestic financing policy has released positive signals so far, it is mainly due to structural easing, and the financing of low-quality real estate companies is still hindered. Therefore, it is expected that the financing environment will not improve significantly, and the net financing amount of the industry may further hit a low point.

On the contrary, in 2021, Chengtou dollar bonds were welcomed by the market and new issuance of Chengtou issuers was active. The regulatory policy of Chengtou issuance had been tightened since the beginning of 2021, and domestic regulatory agencies have strengthened the management of the issuance quota and the use of funds. Therefore, in order to broaden financing channels, some Chengtou issuers were looking for opportunities to issue offshore bonds to substitute the onshore market. In 2021, 153 Chengtou issuers issued a total amount of USD30.8 billion, representing 69.6% YoY growth. Among them, the new issuers were mainly in Zhejiang and Jiangsu Province, with USD6.9 billion and USD5.2 billion issued, respectively. Meanwhile, 77 Chengtou companies made initial offerings, with an amount of USD10.6 billion, accounting for 34.4% of the total issuance of the Chengtou sector. At the administrative level, the number of provincial-level bonds decreased in 2021, and the main contributors were prefecture-level and districtlevel bonds, accounted for 50.3% and 45.8%, respectively.

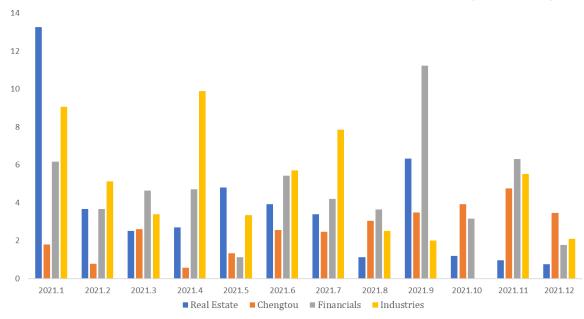
Exhibit 2: Sector distribution of Chinese dollar bonds in 2020 and 2021 (based on issuance amount)



Inner Circle is the statistics of 2020; Outer Circle is the statistics of 2021

Source: Bloomberg, CCXAP Research

Exhibit 3: Sector distribution of Chinese dollar bonds in 2021 (USD billion)

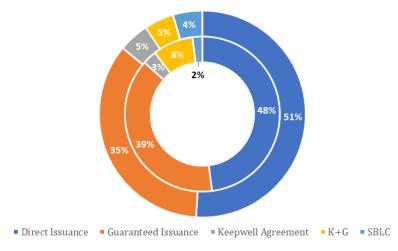


Source: Bloomberg, CCXAP Research

From the perspective of issuance structure, Chinese dollar bonds were mainly issued through direct and guaranteed issuance. In 2021, the amounts of direct and guaranteed issuance were USD95.8 billion and USD65.8 billion, respectively, accounting for approximately 51.0% and 35.0% of the new issuance volume. Against the background of fluctuating market risk appetite, companies with weaker credit quality have adopted credit enhancement measures to provide guarantees for offshore bond repayments. SBLC had become the main issuance method of Chengtou issuers, most of which were district and

county-level issuers. In 2021, there were 93 bonds issued through SBLC, with a total issued volume of approximately USD8.6 billion, representing 107.2% YoY growth. Among them, Bank of Jiangsu and Bank of Shanghai were the main participators, providing SBLC for 18 and 13 newly issued USD bonds, respectively. Moreover, due to the frequent occurrence of credit events, investors were paying more attention to the degree of protection. The limitation on the difficulty of confirming the rights when keepwell agreement defaults led to its decline. In 2021, a total of USD17.7 billion of Chinese dollar bonds were issued through the keepwell agreements, decreasing by 23.8% YoY.

Exhibit 4: Issuance structure of Chinese dollar bonds in 2020 and 2021 (based on issuance amount)



Inner Circle is the statistics of 2020; Outer Circle is the statistics of 2021

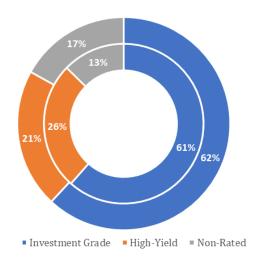
Source: Bloomberg, CCXAP Research

Amid a cautious market, the proportion of investment-grade issuances increased while high-yield bond issuance dropped sharply. In 2021, there were a total of 387 Chinese dollar bond issuers, 234 of which had been rated by the three international rating agencies. The offshore market was highly volatile with large credit differentiation of the issuers, and the investors preferred low risk. As a result, investment-grade issuers had an advantage in issuance and their share has increased. In 2021, there were 156 investment-grade issuers with a total issued volume of USD116.3 billion, a decrease of 7.0% YoY and accounting for 61.9% of the new issuance. There were 78 high-yield issuers in 2021, and the amount of new issuance was USD39.8 billion, decreasing by 24.2% YoY and accounting for 21.2% of the new issuance. Most of the high-yield issuers were real estate companies. The stricter financing environment, coupled with operational problems, led to a downgrade of the credit ratings of real estate issuers, making it more difficult for them to obtain financing in the offshore market. In addition, investors' risk appetite weakened, and issuance continued to be under pressure. Besides, there were 153 issuers with no ratings, of which 92 issuers were from Chengtou sector, accounting for more than 60% of the total number of Chengtou

¹As of December 31, 2021, if there are differences among credit ratings of the three international rating agencies, the statistics shall be based on the highest rating.

issuers. Chengtou issuers preferred to issue dollar bonds through SBLC, and the increase in the number of unrated issuers may lead to more ambiguity in the identification and analysis of the issuer's credit quality. In the future, the lack of ratings of Chengtou issuers deserves attention.

Exhibit 5: Credit rating distribution of Chinese dollar bond issuers in 2020 and 2021 (based on issuance amount)



Inner Circle is the statistics of 2020; Outer Circle is the statistics of 2021

Source: Bloomberg, CCXAP Research

The coupon rate of newly issued Chinese dollar bonds fell as the number of Chinese real estate high-yield issuers reduced in 2021. In 2021, the Federal Reserve's low-interest rate policy continued, and the yield of US Treasury bonds remained at a relatively low level. Meanwhile, the Chinese dollar bond market was volatile, and the issuance of high-yield bonds was hindered. The average coupon rate of newly issued Chinese dollar bonds dropped from 3.86% in 2021Q1 to 3.12% in 2021Q4². The full-year average coupon rate declined from 4.69% in 2020 to 3.51% in 2021. In terms of industries, the financing of real estate issuers had become more difficult with higher issuance costs because of the negative news. The average coupon rate of real estate bonds was 10.26% in 2021Q4, increasing by 115 basis points quarter-on-quarter and 198 basis points YoY. Chengtou issuers generally have good credit quality, while low-quality issuers adopted SBLC and were linked to the level of the bank, with cost advantages. In the fourth quarter, the new issuance of Chengtou bonds increased significantly, while the average coupon rate decreased by 15 basis points quarter-on-quarter to 3.04% and 77 basis points YoY. Overall, the number of high-yield real estate issuers had decreased, while the proportion of Chengtou dollar bonds had increased, resulting in a decline in the coupon rates of Chinese dollar bonds.

² Only bonds with fixed coupon rates with no repurchase or resale clauses were counted.

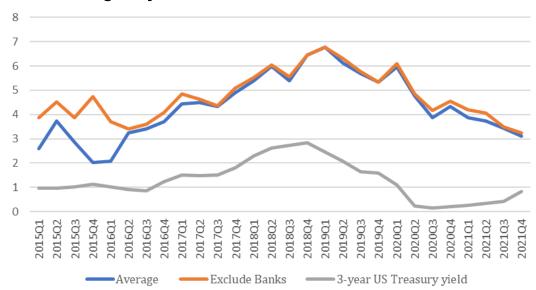


Exhibit 6: Average coupon rates of Chinese dollar bonds from 2015 to 2021 (%)

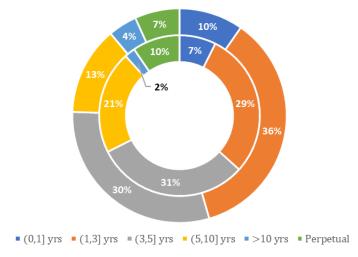
Source: Bloomberg, CCXAP Research

Mid and short-term Chinese dollar bonds were dominant, with shorter average maturities.

The average tenor of new issuance decreased from 3.86 years in 2020 to 3.35 years in 2021³. In 2021, most Chinese dollar bonds were mid and short-term bonds, of which total amount of USD142.0 billion with tenor less than 5 years was issued, accounting for 75.6% of the total issuance. Among them, bonds with a tenor of less than 1 year increased by 21.6% to 18.2 billion. For bonds with tenor between one to three years, 281 tranches of bonds worth USD67.3 billion were issued, representing a YoY increase of 12.8%. The bonds with tenor between three to five years decreased 10.1% YoY to USD56.4 billion. There were 45 tranches of bonds with tenor between five to ten years, with total amount of USD25.0 billion, representing a 40.6% YoY decrease and accounting for 13.3% of the total issuances. In addition, the proportion of the bonds with tenor more than 10 years was 4.4%, and a total of 8 tranches of bonds with the amount of USD8.2 billion were issued, increased by 87.2% YoY.

Only non-perpetual bonds were counted.

Exhibit 7: Issued tenor of Chinese dollar bonds in 2020 and 2021 (based on issuance amount)



Inner Circle is the statistics of 2020; Outer Circle is the statistics of 2021

Source: Bloomberg, CCXAP Research

As of December 31, 2021, the outstanding amount of Chinese dollar bonds was USD814.2 billion. Among them, the amounts that will mature in 2022, 2023, and 2024 are USD167.2 billion, USD127.2 billion, and USD135.3 billion, respectively. In addition, there are 38 puttable bonds in 2022, amounting to USD4.8 billion, of which real estate dollar bonds accounted for 44.2%. In terms of industry, the next two to three years will be the peak period for the maturity of real estate dollar bonds, which will put pressure on real estate issuers to refinance. The outstanding amounts that will mature in 2022 and 2023 are USD49.0 billion and USD43.1 billion, respectively. In terms of Chengtou dollar bonds, the outstanding amounts that will mature in 2022 and 2023 are approximately USD32.0 billion and USD17.0 billion, respectively. Jiangsu Province accounts for 22.5% of the outstanding amount in the peak of 2022. In the real estate sector, affected by the strict offshore bond financing policies and tightening refinancing environment, we believe that there will still be a gap in the amount of industry financing and due debts for a period of time, and real estate companies would have difficulties in rebuilding market confidence. It is also expected that net financing of this industry may further hit a low point.

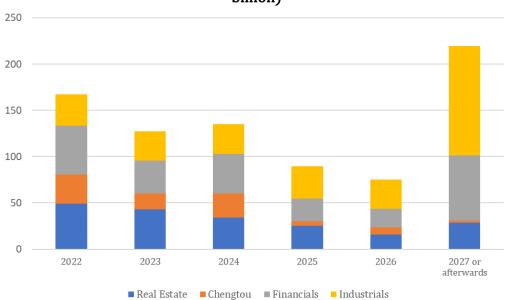


Exhibit 8: Maturity distribution of outstanding Chinese dollar bonds as of the end of 2021 (USD billion)

Source: Bloomberg, CCXAP Research

Secondary market

The frequent occurrence of credit events by real estate issuers has led to bond prices of high-yield real estate bonds to plummet. The secondary market for Chinese dollar bonds continued to fluctuate, and investment-grade bonds outperform high-yield bonds. The haze on the real estate sector spread across the whole high-yield segment. Sources revealed in early 2021 that the United States intended to blacklist some Chinese-funded companies for investments, causing investors to pre-sell some Chinese-funded companies' US dollar bonds. Despite the subsequent recovery in market prices, China Fortune's credit incident hindered market risk appetite and caused prices in the secondary market to fall. At the same time, due to the COVID-19 pandemic and the regulation on the real estate market, as the operating performance of some real estate companies failed to meet market expectations, their outstanding dollar bonds were undersold. In April, China Huarong experienced a debt crisis and postponed the disclosure of its financial reports, triggering a sharp drop in the price of Chinese dollar bonds. Benefiting from abundant liquidity, investor sentiment had rebounded, and some oversold bonds had recovered their losses. Nonetheless, since the end of May and the beginning of June, many real estate issuers such as China Evergrande had experienced credit events one after another. The price of highyield real estate bonds had plummeted as a result. In September, the debt situation of China's real estate industry had become more severe, and the risk of debt default by real estate companies increased sharply. Offshore real estate dollar bonds suffered a wave of sell-off. High-yield sector's rate of return was slashed. In November, a number of real estate firms suffered defaulted on their debts, resulting in a significant drop in the return on the high-yield sector. On the other hand, Sunshine's bond extension proposal was accepted by

the investors, and the market sentiment was still under an uncertain condition. In December, the Chinese Central bank announced a program to encourage financially sound real estate companies to buy out projects from companies with high default risks. The bank also mentioned that they expect financial institutions to buy out financial services projects from the endanger companies as well. The announcement benefitted the high-yield return rate but was still in a fluctuating state. As of December 31, 2021, the Year-to-Date⁴ ("YTD") return on Chinese US dollar bonds was -5.88%, of which the return on investment-grade bonds was 0.36% and the return on high-yield bonds was -21.46%.

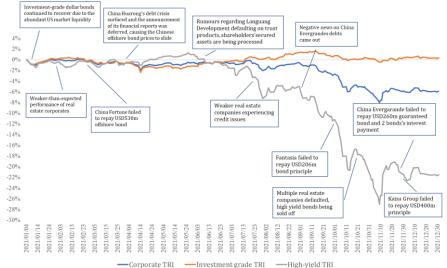


Exhibit 9: Markit iBoxx index's Chinese dollar bond rate of return in 2021

Source: Bloomberg, CCXAP research

Yield spread between investment-grade and high-yield bonds continued to widen, with rate of return for high-yield bonds hitting a record high in November. In terms of yield, as of December 31, 2021, the worst yield of Chinese US dollar bonds was 3.73%, which was 67bp wider than the beginning of the year. Among them, high-yield bonds rose sharply, with the worst yield widening by 941bp to 16.76% from the beginning of the year, and the worst yield of investment-grade bonds widened by 36bp to 2.55% from the beginning of the year. According to historical data, the yield of high-yield bonds had been much higher than the highest point of 14.10% in March 2020, surpassing the level amid US dollar bond sell-off triggered by the "dollar shortage".

⁴ Year-to-date return measures the return since January 4, 2021

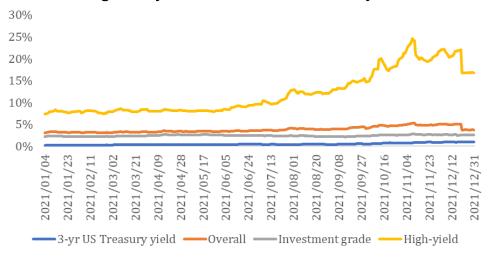


Exhibit 10: Bloomberg Barclays index's Chinese dollar bond yield-to-worst rate in 2021

Source: Bloomberg, CCXAP research

Real estate and financial bonds performed poorly due to regulations and credit events, while Chengtou bonds performed steadily. In terms of sectors, as of December 31, 2021, real estate dollar bonds performed the worst, with a Year-to-Date return of -27.72%, followed by financial (-10.34%), Chengtou (3.19%) and non-financial (1.34%). For real estate, the entire sector weakened in the 2021Q1 due to China Fortune's default. Subsequently, negative sentiments on real estate companies put pressure on the performance of the real estate high-yield index, with a return rate of -2.55% in the second quarter; in the third quarter, China Evergrande's credit event continued to ferment. At the same time, many real estate companies were facing the risk of default. In the fourth quarter, as the industry suffered from multiple materialistic defaults and causing cross defaults, the market started to have different opinions on bond extensions proposal, resulting in an uncertain market condition. The market was exaggerating the negative sentiment, leading to a sharp fall in the performance of high-yield real estate bonds. For Chengtou, investors are becoming more confidence on the bonds as they are more likely to believe the correlation between onshore and offshore bonds, and because Chengtou companies are more likely to generate cashflow within a certain period of time. Moreover, as the government is more likely to fund regions with limited resources, investors tend to believe that the level of willingness of government aid is relatively high, supporting the stable growth of the Chengtou sector to 3.19%. For the financial sector, defaults in the real estate industry hit the performance of high-yield bonds hard. The financial bond yield was at

-10.34% as the financial sector failed to rebound under huge pressure from the real estate industry and the negative sentiment from the investors. On the other hand, cyclical industries such as energy and materials are less risky as global economic activities gradually recover. At the same time, high yield non-financial bonds, which suffers from downward pressure in 2020, also rebounded in 2021, marking a 1.34% yield rate.

Table 1: Chinese dollar bond rate of return in 2021 (by industry)

Markit iBoxx Chinese dollar bond return index	Q1	Q2	Q3	Q4	Q1-Q4
Real Estate TRI	-1.26%	-1.54%	-12.08%	-15.80%	-27.72%
- Investment Grade TRI	-0.02%	0.96%	-1.15%	-4.87%	-4.89%
- High-Yield TRI	-1.71%	-2.55%	-16.69%	-21.90%	-37.36%
Financial TRI	-0.59%	-1.34%	-3.53%	-5.35%	-10.34%
- Investment Grade TRI	-0.24%	-1.33%	1.88%	-0.69%	-0.45%
- High-Yield TRI	-1.03%	-1.38%	-10.92%	-13.05%	-24.16%
Non-Financial TRI	-1.03%	1.97%	0.14%	-0.14%	1.34%
- Investment Grade TRI	-1.22%	1.97%	0.16%	-0.16%	1.17%
- High-Yield TRI	1.53%	2.00%	-0.22%	0.14%	3.84%
Chengtou TRI	-1.14%	2.04%	1.95%	0.36%	3.19%
- Investment Grade TRI	-1.17%	1.47%	1.21%	0.14%	1.60%
- High-Yield TRI	-1.06%	3.85%	4.01%	1.00%	7.96%

Source: Bloomberg, CCXAP research

Table 2: Changes in real estate yields in 2021 (by rating interval)

Rating Interval	Current (%)	1-Month	3-Month Year-to-Date	
		Change (bp)	Change(bp)	Change(bp)
Overall	25.42	147.10	758.10	837.30
- A+ to A-	2.13	19.30	37.90	36.60
- BBB+ to BBB-	3.49	6.40	72.00	71.10
- BB+ to BB-	10.74	-11.90	316.90	236.60
- B+ to B-	46.46	443.40	2.1M	2.4M
- CC+ to CC-	489.81	5.9M	35.3M	35.4M
- C+ to C-	160.78	3.1M	8.6M	8.9M
- N.A.	122.63	1.0M	4.0M	4.5M

Note: Data refers to Bloomberg's CBBT pricing, the Bloomberg composite rating takes the median, and M represents 1000

Source: Bloomberg, CCXAP research

Rating Actions and Credit Events

Credit quality of Chinese issuers were diverged, real estate issuers were intensively downgraded. In the 2021, the three major international rating agencies took rating actions on 212 Chinese issuers⁵, including 330 negative rating actions and 160 positive rating actions⁶. The proportion of negative rating actions was standing at 67.3%, similar to 69% in 2020. In 2021Q4 alone, the three major international rating agencies took rating actions on 84 Chinese issuers, including 117 negative rating actions and 31 positive rating actions.

⁵ 34 issuers have been both downgraded and upgraded

⁶ Rating actions include rating adjustment, outlook adjustment, and inclusion/removal from the watching list

Affected by default events, most of the negative rating actions were concentrated in the real estate sector. The main reason for the negative actions in 2021 was the normalization of domestic real estate supervision, including the new "three red lines" regulations promulgated in the previous year and the real estate loan control policy at the beginning of the year. Investors were concerned about the credit risks of real estate enterprises. The volatility in the secondary market had intensified, and real estate companies had encountered difficulties in financing. This, coupled with the impact of COVID-19 pandemic since 2020, some private issuers that had aggressively expanded previously had weakened financial strength and encountered difficulties with liquidity. In 2021, the real estate industry saw more negative rating actions, with 52 real estate issuers downgraded and only 19 upgraded. More negative rating actions had been taken against Chengtou issuers due to the decline in the possibility of obtaining government support and the weakening of corporate financing capabilities. Moreover, Fitch Rating decided to re-examine the willingness of the Chinese government to aid the Chengtou companies, and 14 issuers were adjusted to the negative watchlist. In 2021, 20 Chengtou issuers were revised downwards, and 9 Chengtou issuers were revised upwards. In addition, financial companies (excluding banks) have divergent credit qualities, with 16 being downgraded and 32 being upgraded, respectively. After the credit risk event of Huarong, its restructuring strategy is being approved by investors and it enjoys an improving credit condition.

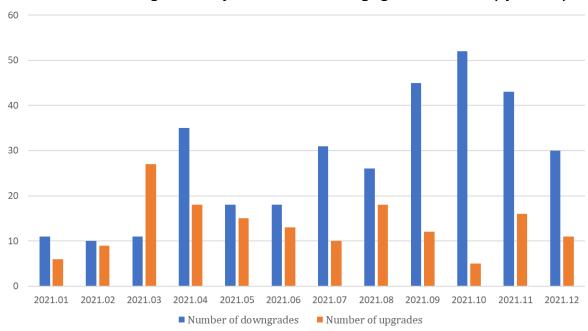


Exhibit 11: Rating actions by international rating agencies in 2021 (by month)

Source: Bloomberg, CCXAP research

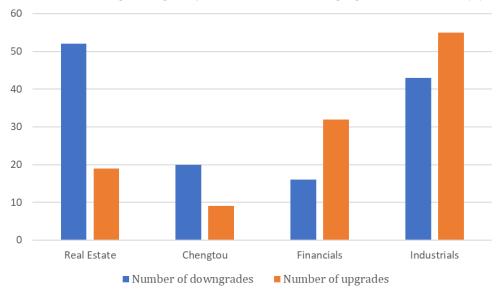


Exhibit 12: Issuer rating changes by international rating agencies in 2021 (by industry)

Source: Bloomberg, CCXAP research

The credit risk of weak companies continued to be exposed. According to Bloomberg, in 2021, 22 Chinese issuers defaulted in the offshore bond market and 20 obligors were newly added, with a default amount of approximately USD13.6 billion, and the scale of defaults in the fourth quarter was approximately USD6.9 billion. The current default rate was about 1.5%, a further increase from 2020. Although the defaulted entities came from different industries, the reasons for their default share certain commonalities. Often, these companies adopted a highly leveraged development strategy in the early stages of development and have weak internal governance. Under the torment of the COVID-19 pandemic and stricter industry regulatory policies, their operating conditions have deteriorated. Cash collections lagged behind and financing channels were blocked. Eventually, the capital chain ruptures and the debt defaults. In the fourth quarter, 10 real estate issuers defaulted on their debts, including China Evergrande, Fantasia, Sinic Holdings, China Aoyuan, Modern Land, Fujian Yango, and Kaisa Group. The liquidity position of China Evergrande continued to shrink, with huge short-term debt and weak cash flow, which eventually led to a default in Q4. Kaisa Group was the first Chinese issuer to default in 2015. As the liquidity risk and overleverage issue remained unresolved, the problems led to another default in 2021.

Table 3: Credit events of Chinese issuers in offshore market in 2021

Enterprise	Credit events
Macrolink Group	According to Bloomberg, Macrolink Group Ltd. ("Macrolink Group") defaulted on principal and interest payments for its
	USD210 million offshore bonds.
Tsinghua	On January 29, Tsinghua Unigroup Co., Ltd. ("Tsinghua Unigroup") announced that it defaulted on principal and interest
Unigroup	payments for a total of USD2 billion notes.
GCL New Energy	On February 1, GCL New Energy Holdings Ltd. ("GCL New Energy") announced that it was unable to repay the USD500
	billion bills due on January 30.

China Fortune	On February 26, China Fortune Land Development Co., Ltd. ("China Fortune") announced that it defaulted on principal and interest payments for its USD530 million debts due on February 28. On February 26, China Fortune announced that it defaulted on principal and interest payments for its USD940 million debts due on July 31.
Oceanwide Holdings	On May 24, Oceanwide Holdings Co., Ltd. ("Oceanwide Holdings") announced that it defaulted on principal and interest payments for its USD134 million debts due on May 23.
Tus-Holdings	On July 8, Tus-Holdings Co., Ltd. ("Tus-Holdings") announced that it was unable to repay interest for its USD550 million debts due on June 18. It failed to complete the payment within the 7-day grace period, constituting a substantial default.
Sunshine 100	On August 11, Sunshine 100 China Holdings Co., Ltd. ("Sunshine 100") announced that it failed to repay the USD200 million offshore debt due on August 11, which constituted a substantial default. The default triggered the company's cross-default clause for the USD220 million 13.0% senior green notes due in 2022.
Yestar Healthcare	On September 9, Yestar Healthcare Holdings Co., Ltd. ("Yestar Healthcare") announced that it failed to repay the USD200 million offshore debts due on September 15, which constituted a substantial default.
Suning Appliance	On September 11, Suning Appliance Group Co., Ltd. ("Suning Appliance") announced that it failed to repay the USD600 million offshore debt due on September 11, which constituted a substantial default.
Fantasia	On October 4, Fantasia Holding Group Co., Ltd. ("Fantasia") announced that it failed to repay the US\$210 million offshore debt due on October 4, which constituted a substantial default.
Sinic Holdings	On October 11, Sinic Holdings (Group) Co., Ltd. ("Sinic Holdings") announced that the company currently does not have sufficient financial resources to repay the USD240 million offshore debt due on October 18.
China Properties	On October 15, China Properties Group Ltd. ("China Properties") announced that the company currently does not have sufficient financial resources to repay the USD226 million offshore debt due on October 15.
Modern Land	On October 26, Modern Land China Co., Ltd. ("Modern Land") announced that it sought to redeem part of the senior notes due on October 25, 2021, with a coupon of 12.85%, and the remaining part of the maturity date would be extended by three months to improve liquidity and cash management, and to avoid any potential defaults.
Chongqing Energy Investment	On November 12, Chongqing Energy Investment Group Co., Ltd ("Chongqing Energy Investment") announced that HSBC has sent it an advanced redemption notice in November 8, 2021, which allocate the debt as default according to the terms.
Dr. Peng	On December 1, Dr.Peng Telecom & Media Group Co., Ltd. ("Dr. Peng") announced that the company currently does not have sufficient financial resources to repay the USD500 million offshore debt due on December 1. The debt repayment was extended from 1 June 2021 earlier.
China Aoyuan	On December 2, China Aoyuan Group Ltd ("China Aoyuan") received notification from bond holder regarding the advanced redemption with an amount of USD651.2 million. The company's credit rating was downgraded earlier. As of December 2, the company had not made the payment or arranging a substitute agreement for bond holders, which is classified as defaulted.
Kaisa Group	On December 3, Kaisa Group Holdings Ltd. ("Kaisa Group") announced that the company's exchange offers regarding the USD with a volume of USD400 million and expiring on December 7, was not accepted by the investor. As of December 3, the debt repayment was still not completed, classified as defaulted.
China Evergrande	On December 3, China Evergrande Group ("China Evergrande") announced that it might not have sufficient financial resources for any incoming payment. In addition, the announcement stated that China Evergrande had received a notice requiring the company to perform a guarantee obligation in the amount of USD260 million. If the company failed to perform the guarantee or other financial obligations, it might lead to creditors requesting accelerated maturity of the debt. On December 6, China Evergrande announced that considering the current operational and financial challenges the company was facing, the company's board of directors had decided to establish a risk mitigation committee. According to Bloomberg, China Evergrande did not pay about USD59 million in coupons before the grace period, constituting a substantial default.

Fujian Yango

 $On\ December\ 24, Fujian\ Yango\ Group\ Co., Ltd.\ ("Fujian\ Yango")\ announced\ with\ the\ impact\ of\ Covid-19, external\ economic$ factors and new policies, the company was suffering from liquidity risk. It announced that the company did not have sufficient financial resources to complete any interest payment for the offshore debt due on October 5, 2023. As the payment had passed the grace period and still not hadn't been paid, the debt was classified as defaulted.

	payment had passed the grace period and still not hadn't been paid, the debt was classified as defaulted.
Enterprise	Credit events
HNA Group	On January 29, due to the failure of HNA Group Co., Ltd. ("HNA Group") and its several subsidiaries to repay debts, their
	creditors applied to Hainan High People's Court for HNA Group's reorganization. HNA Group may expose to bankruptcy
	risk if it fails to restructure.
China Huarong	On April 1, China Huarong Asset Management Co., Ltd. ("China Huarong") announced that it will postpone the publication
	of its 2020 annual results. The announcement stated that as related transactions were yet to be confirmed, auditors need
	more data and time to complete the review procedures for the 2020 annual results. On April 8, Bloomberg referred to
	informed sources that China Huarong is seeking to divest non-core assets as part of a broader plan to boost profitability
	to avoid debt restructuring or government capital injections. As of December 31, China Huarong had 26 tranches of USD
	bonds, totaling approximately USD17.4 billion.
Languang	$On \ July\ 12, Sichuan\ Languang\ Development\ Co., Ltd.\ ("Languang\ Development")\ announced\ that\ the\ company's\ 2019\ first-part of the properties o$
Development	phase medium-term notes were to be redeemed on July 11. As of the redemption date, the issuer failed to raise the full
	$amount\ of\ repayment\ funds\ as\ agreed\ and\ repay the\ principal\ and\ interest\ in\ full\ on\ time, constituting\ a\ substantial\ default.$
	On October 15, Xinyuan Real Estate Co., Ltd ("Xinyuan") announced that the company had completed the exchange offer,
Xinyuan	91% of the USD229million notes due on October 15 was exchanged to a USD205 million notes due on October 15 and
	$USD19\ million\ cash.\ As\ of\ December\ 31, Xinyuan\ had\ 4\ tranches\ of\ USD\ bonds\ with\ outstanding\ amount\ of\ USD\ 820\ million.$
	On November 1, Yango Group Co., Ltd. ("Yango") proposed a major exchange offer proposal for existing bonds on both
Yango	onshore and offshore market. As of November 1, the company had 8 USD bonds with a volume of USD2.2 billion awaiting
Tango	to repay. The company is trying to negotiate exchange offers for 3 of the 8 debts and requesting approval for the terms'
	amendment for the remaining 5 debts.
	On December 15, Guangzhou R&F Properties Co., Ltd. ("R&F Properties") announced it was proposing a cash discount
R&F Properties	repurchases on a USD725 million unsecured note due on Jan 13, 2022. The proposal was also applying on the note due on
Red Troperties	$\label{thm:cond} \textit{Jul 13,2022}. \ It mentioned if the request wasn't approved, they wouldn't have enough finance resources for repayment. As a suppose that the request wasn't approved is a suppose that the request wasn't approved in the reques$
	of December 31, the company had 9 tranches of USD bonds, with a total volume of USD4.3 billion.
	On December 16, RiseSun Real Estate Development Co., Ltd. ("RiseSun") announced for an official approval request on
RiseSun	exchange offers for 2 bonds which due Jan 18, 2022 and April 24, 2022; volume of USD292 million and USD488 million
Riscouli	respectively. As of December 31, the company had 2 tranches of USD bonds in the USD market with a total amount of
	USD780 million.
	On January 6, DaFa Properties Group Limited. ("Dafa Properties") announced that it would seek an exchange offer for its
DaFa Properties	$unpaid\ USD\ bond\ due\ on\ January\ 18,2022, with\ a\ coupon\ rate\ of\ 9.95\%\ and\ an\ outstanding\ balance\ of\ USD\ 184.5\ million.$
DaFa Properties	$The exchange offer repays at least USD166.05 \ million \ or \ 90\% \ of the \ principal \ amount. \ Deadline \ for \ Exchange \ offers \ was$
	at 4:00 pm on January 12, 2022.
Shimao Group	On January 7, Shimao Group Holdings Ltd.'s ("Shimao Group") subsidiary was having 2 expiring RMB ABS with a total
	$volume\ of\ RMB1.2\ billion.\ The\ company\ was\ negotiating\ with\ the\ holders\ for\ an\ agreement.\ The\ initial\ plan\ was\ to\ repay$
	the principal by installment of 12 months. According to sources, the extension plan proposed by Shimao Group was to
	$repay\ 10\%\ of\ the\ principal\ in\ the\ first\ month,\ 5\%\ every\ month\ from\ February\ to\ November,\ and\ the\ remaining\ 40\%\ in$
	December. As of December 31, Shimao Group had 8 tranches of USD bonds, totaling about USD5.7 billion.
Shinsun Holdings	On January 11, Shinsun Holdings (Group) Co., Ltd. ("Shinsun Holdings Group") launched an exchange offer regarding the
	2 USD bonds due on Jan 23, 2022 with a total volume of USD292 million. The proposal can be applied to all holders. As of

December 31, Shinsun Holdings had 2 tranches of USD bonds, totaling about USD400 million.

On January 12, Yuzhou Group Holdings CO., Ltd. ("Yuzhou Group") initiated an exchange offer for two bonds with a total principal amount of RMB580 million, due on January 23, 2021 and January 25, 2022 respectively. According to the exchange offer plan, each USD1,000 principal amount of outstanding exchange notes will receive the exchange consideration consisting of USD50 principal repayment and USD10 in cash from Yuzhou Group, and USD950 in aggregate Yuzhou Group principal amount of new notes. In addition, holders who agree to the exchange offer plan will be able to charge a consent fee of USD2.5 for every USD1000 they hold. The new notes will bear interest at 7.81% per annual, which is expected to list on January 21, 2022 and mature on January 21, 2023.

Source: Public information, CCXAP Research

Outlook

The COVID-19 pandemic continued until the end of 2021. Countries have adopted a pandemic prevention strategy of coexisting with the virus, but there are still uncertainties in the future recovery process. The Fed announced its decision to formally reduce its debt purchases at its December meeting and will gradually reduce its debt purchases to zero in 2022. In the context of rising inflationary pressures and the possibility of the Fed tightening monetary policy, the long-term US Treasury bond yields are expected to continue to rise. Meanwhile, with the end of the quantitative easing policy in the United States, the US dollar exchange rate will also strengthen along with the recovery of US economy, leading to the shrinking of cost advantage for overseas financing. Since 2021, the Chinese dollar bond market remains turbulent and risk events of Chinese enterprises have occurred frequently. With the industry monitoring is being tightened along with the significant drop in high yield real estate bonds' price, it is expected that the financing channels of some weaker real estate issuers will have little improvement and credit risks may rise. As the Chinese real estate sector remains vulnerable, new issuance of high-yield bonds faces downward pressure. The Chinese dollar bonds in the primary market may continue to fluctuate in early 2022. The coming year will be the peak year of repaying existing bonds. Given the huge volume of expiring bonds in 2022Q1, new net financing and refinancing needs will be the main driver of the new issuances of Chinese dollar bonds. For the secondary market, as the signal of onshore refinancing policies are being loosen aggressively, high-yield bonds yield is expected to reach to a phasic recovery, especially for real estate sector which may experience a temporary upward adjustment. On the other hand, the existing negative investor sentiment is still filling up the market, and the high yield bonds may still be facing downward risks. Investment-grade bonds may outperform high-yield bonds in 2022.

As the monitoring to the real estate sector is being normalized, companies with weaker fundamentals will be eliminated. Companies with weaker profile are expected to default due to the liquidity risk which tightening the industry concentration. As the government has showed the ambition to soothe investors' negative sentiment by loosening monitoring policies, concerns regarding weaker profile companies' credit risk remain. Under these circumstances, the market isn't expected to improve much; the volume of issuance may be

reaching a new low in 2022. At the same time, with the tightening of financing supervision and the conservativeness of investors, Chengtou companies in areas with weaker qualifications may face greater refinancing pressures and higher requirements on debt and liquidity management. The regional differentiation of Chengtou bonds may become more pronounced. Issuances via SBLC are expected to be further increasing in the Chentou industry as SBLC allows investors to enjoy extra risk insurance, thereby boosting investors' confidence. At the same time, the lack of credit rating and fundamental analysis on Chengtou companies should be bore in mind, especially with the lack of non-standard debt indicator. Moreover, investors are expected to pay attention to Article 15 published by the Chinese government in 2021, which mentioned the spread of debt default and guarantee risks amid constrained Chengtou companies' financing and pressure on debt repayment.

中国诚信(亚太)信用评级有限公司(以下简称"中诚信亚太")对本文件享有完全的著作权。本文件包含的所有信息受法律保护。 未经中诚信亚太事先书面许可,任何人不得对本文件的任何内容进行复制、拷贝、重构、删改、截取、或转售,或为上述目的存储本 文件包含的信息。如确实需要使用本文件上的任何信息,应事先获得中诚信亚太书面许可,并在使用时注明来源,确切表达原始信息 的真实含义。中诚信亚太对于任何侵犯本文件著作权的行为,都有权追究法律责任。

本文件上的任何标识、任何用来识别中诚信亚太及其业务的图形,都是中诚信亚太商标,受到中国及中国香港商标法的保护。未经中诚信亚太事先书面允许,任何人不得对本文件上的任何商标进行修改、复制或者以其他方式使用。中诚信亚太对于任何侵犯中诚信亚太商标权的行为,都有权追究法律责任。

本文件中包含的信息由中诚信亚太从其认为可靠、准确的渠道获得。因为可能存在信息时效性及其他因素影响,上述信息以提供时状态为准。中诚信亚太对于该等信息的准确性、及时性、完整性、针对任何商业目的的可行性及合适性不作任何明示或暗示的陈述或担保。在任何情况下,a)中诚信亚太不对任何人或任何实体就中诚信亚太或其董事、高级管理人员、雇员、代理人获取、收集、编辑、分析、翻译、交流、发表、提交上述信息过程中造成的任何损失或损害承担任何责任,或 b)即使中诚信亚太事先被通知前述行为可能会造成该等损失,对于任何由使用或不能使用上述信息引起的直接或间接损失,中诚信亚太也不承担任何责任。

本文件所包含信息组成部分中的信用级别、财务报告分析观察,并不能解释为中诚信亚太实质性建议任何人据此信用级别及报告采取投资、借贷等交易行为,也不能作为任何人购买、出售或持有相关金融产品的依据。投资者购买、持有、出售任何金融产品时应该对每一金融产品、每一个发行人、保证人、信用支持人的信用状况作出自己的研究和评估。中诚信亚太不对任何人使用本文件的信用级别、报告等进行交易而出现的任何损失承担法律责任。



中国诚信(亚太)信用评级有限公司

地址: 香港中环康乐广场1号

怡和大厦 19 楼 1904-1909 室

电话: (852)2860 7111 传真: (852)2868 0656

网址: http://www.ccxap.com

China Chengxin (Asia Pacific) Credit Ratings Company Limited

Address: Suites 1904-1909, 19/F, Jardine House,

1 Connaught Place, Central, Hong Kong

Tel: (852)2860 7111 Fax: (852)2868 0656

Website: http://www.ccxap.com