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Global Economic Outlook & Strategy

On social change and markets

Flagship

CITI'S TAKE

International anxiety about the consequences of China's slowdown are unlikely to dissipate soon, but we think China is much more likely to transmit 'real' economic contagion than 'financial' contagion. Yet in the background of China's problem is an attempt to deal with social change – rising inequality, in particular – which has many echoes in Western policymaking. The link between social change and financial markets will need to become a more central concern for us all.

In the background of China's current woes is the effort to respond to rising inequality and imbalanced growth — China's policy mantra, 'houses are for living in, not for speculating on', is an important reason why credit supply to the real estate sector has been in decline, particularly now that countering the 'unrestrained expansion of capital' has become an important policy objective in the pursuit of 'common prosperity'.

It's not just China where efforts to address inequality are influencing the policymaking process — Addressing inequality is a theme of policymaking in a number of Western countries, not least in the US, where a debate about taxation is active, albeit that it may not yield quick change.

Inequality, according to some, has been responsible for the decline in the equilibrium real interest rate — Academic investigations of the link between inequality and r* run in both directions: some argue that inequality causes r* to fall, while some argue that the fall in r* intensifies inequality.

Whatever the precise links are between social change and financial markets, these issues aren't going away — Social change from other sources, in particular evolving demographic change, will inevitably have important consequences not just for economic activity but also for asset prices. We don't have the answers, but the questions won't disappear soon.

Overview of September projections — We have kept our global growth forecasts unchanged from August at 5.8% for 2021, and have raised our 2022 forecast by 0.1pp to 4.4%. We raise our global inflation forecast by 0.1pp to 3.2% for 2021 and by 0.2pp to 3% for 2022. For our forecasts, click here.

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See Appendix A-1 for Analyst Certification, Important Disclosures and Research Analyst Affiliations.

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Prepared for Ariff Roduan

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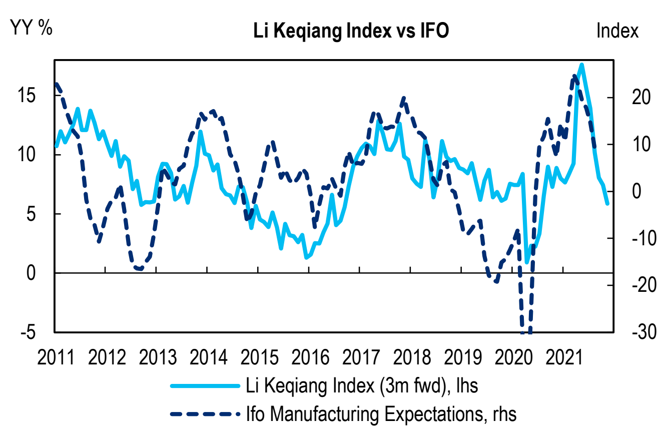
The downside risk to Chinese growth has assumed global significance now, but in the background are social issues that affect plenty of Western countries too. We've been warning since July[1] that downside risks to Chinese growth were becoming evident, but it occurs to us that one important reason for this downside risk is the increasing importance that Chinese policymakers attach to addressing some of the social imbalances that have accompanied the economy's rapid growth. In this essay we discuss the effect of social change on Chinese policymaking, but it is important to note that some of the pressures affecting Chinese policy – especially with respect to inequality – are evident in the West too. In the near term in China, it seems that the most obvious risk is weaker economic activity. But at the same time, both China and the West face a raft of similar problems, not just to do with inequality but also to do with demographics. We don't pretend to have a full model of how social change – due to rising inequality and lower labor supply growth – will affect markets, but we feel sure these issues need monitoring.

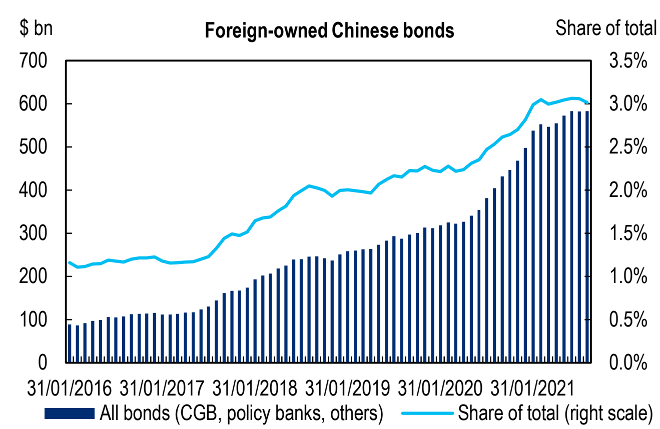
In the near term, China is capable of generating a significant amount of 'real', or economic, contagion globally, but much less 'financial' contagion. The case for thinking that China generates real economic contagion is based on the idea that since China has, during the past decade, accounted for around half of global investment growth on average, China therefore has a disproportionate influence on both open economies and commodity-dependent economies. So, economies from Germany to Brazil are negatively affected by a Chinese slowdown, and this is a very considerable threat to global economic activity (Figure 1). On the question of whether China can produce a 'Lehman' moment, though two facts are relevant. First, China has run more or less persistent current account surpluses in the past 30 years; and, second, China still has a substantial network of capital controls which limit (albeit imperfectly) the flow of capital out of the country. China's surpluses mean that its lack of dependence on foreign funding has restricted the build-up of any 'bubble' in the economy, and limits the risk of non-Chinese creditors finding themselves with non-performing loans. And the capital controls means that the 'escape valve' from Chinese financial markets is restricted, though to be sure the international integration of Chinese capital markets has increased in recent years (Figure 2). What we find most interesting, though, is the *social* agenda that lies behind the concerns of Chinese policymakers about the country's property sector.

Figure 1. China can transmit significant amounts of 'real' economic contagion, illustrated here by Germany's China-dependence…



Source: Citi Research, Bloomberg

Figure 2. ...but while there is almost $600bn of Chinese bonds owned by foreigners, 'financial' contagion is fairly limited for now



Source: Citi Research, Wind, CEIC

[1] See July GEOS, 'Beyond Peak Optimism'.

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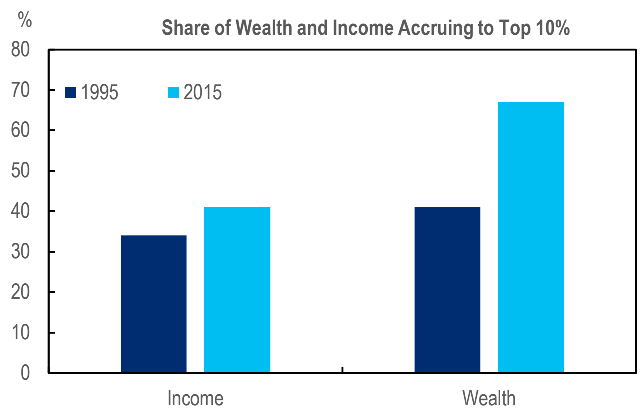
Chinese authorities' emphasis on the idea that 'houses are for living in, not for speculating on', reflects their growing concern about income and wealth inequality. Indeed, these inequalities, especially with respect to wealth, have grown substantially in the past couple of decades, as Figure 3 shows. Data from the World Wealth and Income Inequality Database and one of its working papers[2] suggests that the top 10% of the population took 41% of national income in 2015, while the bottom 50% took only 15% - a far cry from the situation in 1978, when the share of national income going to both groups was 27%. There has been a similar trend in China's wealth distribution: in 2015, the top 10% had more than 65% of wealth while the bottom 50% had less than 10%.

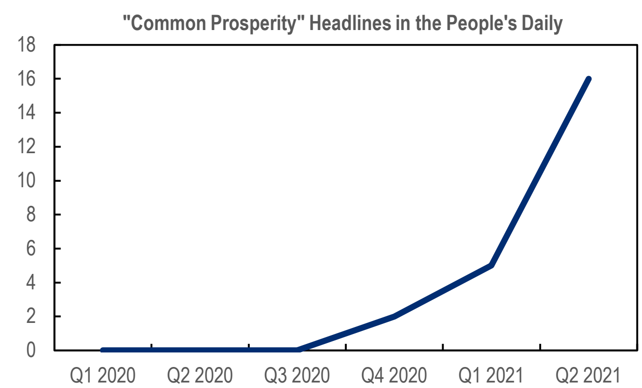
Inequality and the balance of power between labor and capital have become a visible theme of policymaking in China, where two new concepts have become popular in recent months. One is an official dissatisfaction with the 'unrestrained expansion of capital', by which is meant private sector activities that have unwelcome social consequences from the CCP's point of view. In adherence to this concept, for example, restrictions have been imposed in recent months on China's gaming industry, and on China's private education sector, both in terms of restricting licenses for private schools as well as imposing limits on the private home tuition industry.

Figure 3. Wealth inequality in particular has risen sharply in China during the past decades…



Source: Citi Research, World Wealth and Income Inequality Database

Figure 4. …which sets the background for the government's new emphasis on 'Common Prosperity' which could affect the tax regime



Source: Citi Research, People's Daily

In addition, 'Common Prosperity' has become a dominant theme of Chinese policymaking. This phrase has a history in CCP thinking which dates back to 1953, but which has become a newly significant ambition for CCP leadership.[3] Although this phrase has many meanings, it is understood that the new emphasis on this idea by the party leadership has opened a door to redistributive policies including property taxes, capital gains taxes, income tax increases for high-earners, more rigorous tax collection and salary caps for some individuals. Party officials have stressed that Common Prosperity is not a sudden lurch towards egalitarianism (a concept associated with the Mao era), or an effort to 'rob from the rich and give to the poor'. However, it seems fairly clear that the Party wishes to raise the labor income share of GDP. As Xi Jinping put it in January: "*Realizing common prosperity is more than an economic goal. It is a major political issue that bears on our Party's*

[2] Thomas Piketty, Li Yang and Gabriel Zucman, 2017, Capital Accumulation, Private Property and Rising Inequality in China, 1978-2015

[3] See China Media Project, 'A History of Common Prosperity', https://chinamediaproject.org/2021/08/27/a-history-of-common-prosperity/

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governance foundation. We cannot allow the gap between the rich and the poor to continue growing—for the poor to keep getting poorer while the rich continue growing richer. We cannot permit the wealth gap to become an unbridgeable gulf"..[4] Or, in the language of the CCP's theoreticians, the Party's 'principal contradiction' is no longer that between the people's desire for material well-being and the inadequacy of production; but rather "between unbalanced and inadequate development and the people's ever-growing needs for a better life".

Figure 5. China has been on a sustained, 'cross-cyclical' effort to restrict the property sector's access to credit…

Source: Citi Research, CEIC, IMF

Figure 6. …but the economy's dependence on the sector has increased in the past two years

Source: Citi Research, CEIC, IMF

While it is still way too early to identify what policies might be introduced in the name of promoting 'Common Prosperity', large firms are responding to changing political priorities. In China, one tool to promote Common Prosperity is what's called 'tertiary distribution', namely firms' own effort to redistribute income and wealth outside the tax system. In that context, it is worth considering the large firms that have recently established funds whose goal is to support 'tertiary distribution' efforts. Tencent, for example, has announced a RMB 50bn 'Special Plan for Common Prosperity', an initiative echoed to date both by Pinduoduo and by Alibaba.

All this raises questions of whether 'animal spirits' will be negatively affected, and indeed whether Chinese housing prices need to fall. Either way, 'combating the chaos of big capital'[5] suggests that asset price inflation is now a focus of policymaking in China, with consequences that likely mean a more sustained effort to restricting housing price growth. In recent months we have emphasized two sources of downside risk to economic activity in China: a deliberate withdrawal of credit stimulus by authorities keen to avoid an excessive build-up of leverage; and factors connected to the declining profitability of Chinese SMEs which results from very high producer price inflation, and the negative impact this is having on household confidence.[6] Now that the Common Prosperity agenda provides a new, 'ideological' reason to exert downward pressure on asset prices, there is a new threat to economic activity, though one which raises a question of whether Chinese officials can throw out the 'bathwater' of too-high property prices without threatening the 'baby' of real economic activity, given the sector's huge importance in China's investment-led economy (Figure 5 and Figure 6).

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[4] Understanding the New Development Stage, Applying the New Development Philosophy, and Creating a New Development Dynamic (qstheory.cn)

[5] See "China Commentary Calls Xi's Crackdown a 'Profound Revolution'", Bloomberg News, 30 August 2021

[6] July GEOS

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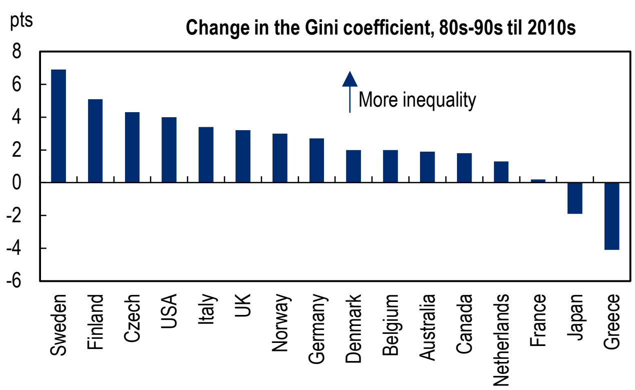
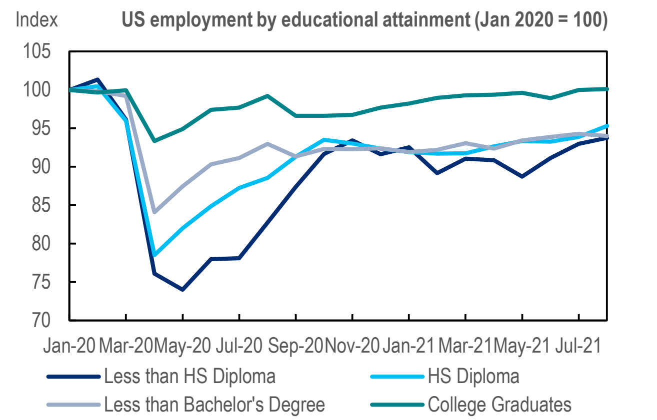
Meanwhile, inequality in the West is as pressing a concern as it seems to be in China. It has been documented by many observers that the labor share of GDP has been decreasing over the last several decades in a number of countries. A variety of explanations have been proposed for this phenomenon, such as capital-biased technological change, automation, global integration, declining relative price of capital and network effects. A recent Bank of England working paper claims that when the labor share is measured appropriately (i.e. adjusting for housing services and the self-employed), this phenomenon is US-specific and not global in scale. While the debate on this remains open, it is clear that at least in the US, the labor share has been decreasing steadily in the post-WWII period, and then decreased sharply in the first decade of the 21st century. It has then moved largely sideways since 2010, except for spiking briefly in 2020 (this was almost mechanical as GDP, which plunged in 2020, enters the denominator when calculating the labor share). In any case, it remains significantly lower than what it was at the turn of the century, which could be further exacerbating inequality given that capital ownership tends to be concentrated among individuals in the top of the income distribution.

Figure 7. It is not just the US that has seen a rise in inequality during the past few decades...



Source: Citi Research, National Sources

Figure 8. ...and there is evidence that the pandemic has intensified the pressure on lower income groups



Source: Citi Research, National Sources

The coronavirus pandemic has arguably intensified these problems of inequality. In the US, the Gini coefficient of income inequality has increased again in 2020 to a new high (Figure 7) and other measures of inequality such as the household income ratios have continued to increase. Prospects for the future point in the same direction. Given that long-term unemployment spells can have a negative effect on future earnings, the persistent disproportionate effect of the pandemic on workers who on average earned less to start with, could contribute to rising income inequality for years to come (Figure 8). Equally, demographic groups that were hardest hit during the pandemic – younger workers, less educated workers and women – were the ones that typically participated less in the labor market and earned lower wages even before the pandemic.

Just as in China, inequality is fueling a debate about public policy in the West. This is an acutely sensitive issue in the UK, for example, where ‘levelling up’ is a theme of government policy, and in the US, where the Biden administration’s proposal for a multi-trillion dollar spending bill aims to be offset by new tax revenues, ensuring that the wealthy and large corporations pay their fair share of taxes. In April, the Biden administration proposed the Made in America Tax plan, which aims to implement a series of corporate tax reforms to raise revenues by

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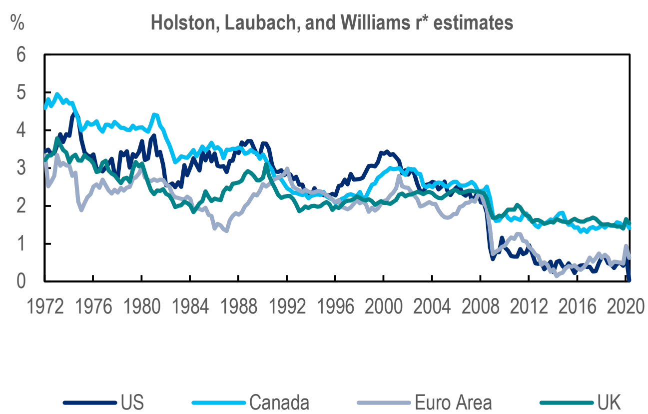
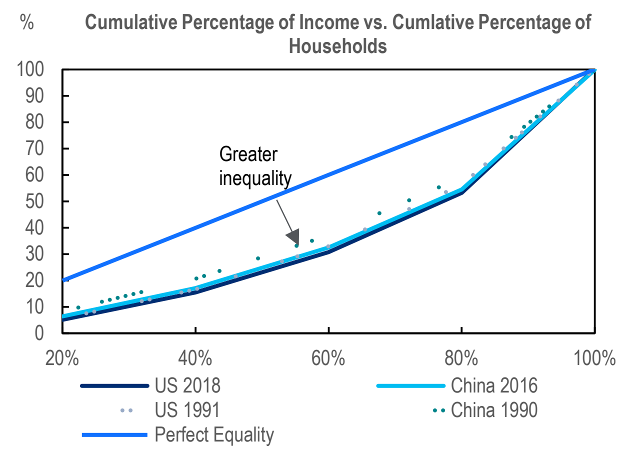
dissuading corporations from shifting their production and profits overseas. It is certainly the case that that the White House's proposal to raise the corporate income tax rate to 28% will be watered down – our US economists suggest that this may end up at 25% based on what moderate Democrats will support – and indeed, there are concerns on the extent to which the watered down version of the bill will serve to mitigate inequality. For example, while the Biden administration was earlier in favor of doubling the current 20% capital gains tax to 39.6% for individuals earning more than $1 million, House Democrats have proposed to increase the tax to 25%. In addition, our US economists note that the proposed 3% additional tax on income above $5 million, which is worth another ~$150bln, has an uncertain fate. All this being said, the inequality agenda is now entrenched in US political debate in a much more visible way, and it is reasonable to suggest that this will affect policy in the medium term. And this in turn raises the question of what the financial market implications might be.

Figure 9. Equilibrium real interest rates have fallen not just in the US but almost everywhere…



Source: Citi Research, New York Federal Reserve

Figure 10. …a fact which may have something to do with rising inequality (which of course is not just a US phenomenon)



Source: Citi Research

One very important question: is inequality the cause or the consequence of the decline in real interest rates in the West? A paper presented at last month's Jackson Hole conference by Mian, Straub and Sufi[7] may be an important contribution to the debate about where r* is heading in the US. Examining two potential causes of the r* decline in the US – rising income inequality and demographic shifts – this paper concludes that high inequality is the cause, not a symptom, of low interest rates. The authors found that within a given birth cohort, the savings rate of high income households are significantly higher than that of low and middle income households. The shift in income to high income households has led them to saving 3-3.5% more of national income when compared to the pre-1980 period. This savings glut causes interest rates to fall, resulting in high income households becoming even wealthier. The authors suggest that *"If the inequality view is correct, then it suggests that macroeconomic forecasters should closely track the evolution of inequality when forecasting movements in r∗ going forward. It also suggests that inequality should play a more central role in macroeconomic models used for policy analysis".*

[7] See "What explains the decline in r*? Rising income inequality versus demographic shifts", https://www.kansascityfed.org/documents/8337/JH_paper_Sufi_3.pdf, August 2021

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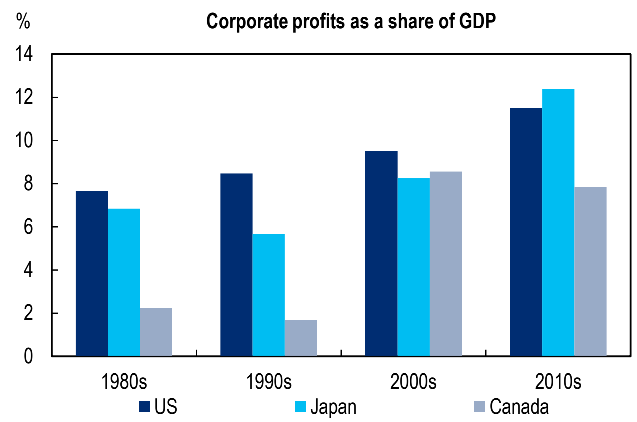
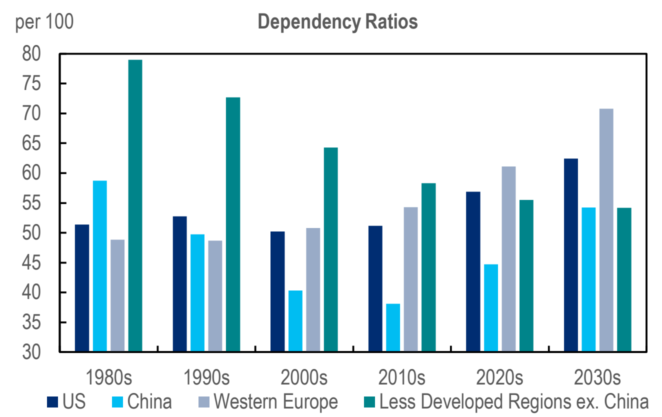
Equally it is possible to argue that falling r* is not the consequence of rising inequality, but rather its cause. If Mian, Straub and Sufi are arguing that declining real interest rates are the consequence of rising inequality, the corollary of this must be that credible efforts to reduce inequality could end up reversing the fall in r*, leading to a generation of rising, rather than falling, real interest rates. The current tax debate in the United States, and the difficulties faced by the Biden administration in 'making the rich pay', suggest that any reversal of the increase in American inequality will only happen very slowly, if at all. But the idea that r* might rise because of slow-burning social change can be detected in other recent academic work. In a 2020 book by Charles Goodhart and Manoj Pradhan, for example, part of their argument suggests that r* might rise over time because of the impact of demographics on the bargaining power of labor, and on the future of the savings-investment balance.[8] They argue that the past 30 years have seen a very large positive shock to global labor supply, resulting from favourable demographics and from the insertion of China in the global labor market. As a result of this process, the bargaining power of labor declined – illustrated, for example, in substantial decline in unionization. The consequence of these shifts, the authors argue, is that corporate profits have risen as a share of GDP and – at least in some countries – the share of labor income in GDP has fallen. The effect of all this was to help inflation fall, making room for i) interest rates to go lower, ii) asset prices to rise and iii) inequality to increase, because it is the wealthy who own assets whose prices are supported by declining discount rates.

Figure 11. The profit share of GDP has risen in a number of countries in the past few decades…



Source: Citi Research, National Sources

Figure 12. …but demographic change could push down global savings with the result that r* might be subject to upward pressure



Source: Citi Research, National Sources

Even if there are ways of arguing that social change might cause r* to rise in the coming years, plenty of factors can get in the way of this process. First and foremost, there are opposing ways of setting out arguments about the future of real interest rates. The Congressional Budget Office, for example, has argued in a 2020 paper[9] that since many of the factors which they think have caused r* to fall – slowing trend growth, secular stagnation – are likely to remain in place, and so real interest rates will remain low over the next decade, albeit higher than their current level. One of their reasons for thinking that real interest rates might rise has to do with the likely continued increase in the US public debt burden. But even if the *equilibrium* interest rate rises over time, the actual real interest rate might not if

[8] See Charles Goodhart and Manoj Pradhan, 'The Great Demographic Reversal: Ageing Societies, Waning Inequality and an Inflation Revival', Palgrave Macmillan, 2020.

[9] See The Historical Decline in Real Interest Rates and Its Implications for CBO's Projections, December 2020.

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financial repression plays a role. Carmen Reinhart and colleagues, for example, have documented that real interest rates were kept extremely low in the decades after the Second World War precisely in order to assist in the process of managing down the US government's debt/GDP ratio. As she puts it: *"The World War II debt overhang was importantly liquidated via the combination of financial repression and inflation"*[10]. Her view is that the decades after WW2 were an era of financial repression, in which 'real interest rates in both advanced and emerging economies would remain consistently lower than the eras of freer capital mobility before and after the financial repression era'. With all this in mind, we frankly find it impossible to say how social change – whether that's understood as related to demographics or inequality – will affect financial markets in the long-run, but we're sure that recent news out of China is partly influenced by the way economic policy is influenced by these kinds of long-term social forces.

Overview of September Projections

We have kept our global growth forecasts unchanged from August at 5.8% for 2021, and have raised our 2022 forecast by 0.1pp to 4.4% (2020: -3.5%).

- For 2021, we have kept our Advanced Economy (AE) forecast at 5.1% but cut our Emerging Markets (EM) forecast to 6.6% (-0.1pp). Among those that raised their forecasts include, Japan (+0.1pp), Euro Area (+0.6pp). We also cut for the United States (-0.2pp), Australia (-2.2pp), and China (-0.5pp) among others.

- For 2022, we kept our AE forecasts at 4%, while nudging up our EM forecast (+0.2pp) to 4.9%. While the US and Euro Area saw an upward adjustment of +0.2pp, and India of +3.2pp, there were downward adjustments for, among others, Japan (-0.2pp), Poland (-0.5pp).

We raise our global inflation forecast by 0.1pp to 3.2 % for 2021 and by 0.2pp to 3% for 2022 (2020: 2.0%).

- For 2021, our AE and EM forecast were unchanged at 2.6% and 3.9% respectively. There were downgrades, among others, in Japan (-0.4pp) and India (-0.3pp), balanced by upgrades to the Euro Area (+0.3pp), and Poland (+0.5pp).

- For 2022, we raise our AE forecast +0.3pp to 2.4% and our EM forecast +0.1pp to 3.8%. We have raised our forecast for Euro Area (+0.7pp), the UK (+0.6pp), Poland (+1.1pp) among others.

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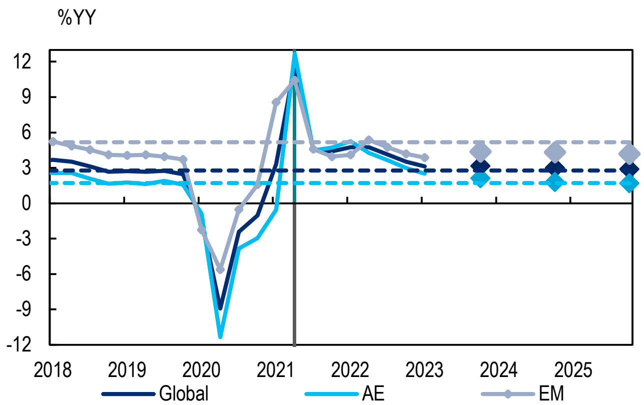
[10] See 'The Liquidation of Government Debt', by Carmen M. Reinhart and M. Belen Sbrancia, IMF Working Paper 15/7, January 2015, https://www.imf.org/external/pubs/ft/wp/2015/wp1507.pdf

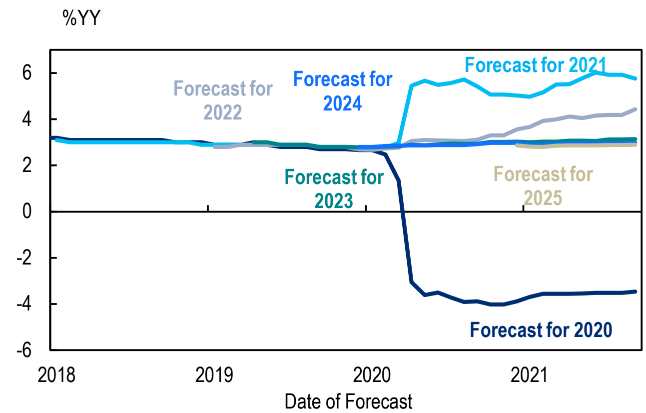
Figure 13. Global, AE, EM – GDP Growth (%YY), 2018-2025F



Note: At market exchange rates. Horizontal lines are respective LT averages (2000-2019) for Global, AE and EM %YY GDP growth.

Source: Citi Research, National Statistical Sources, IMF

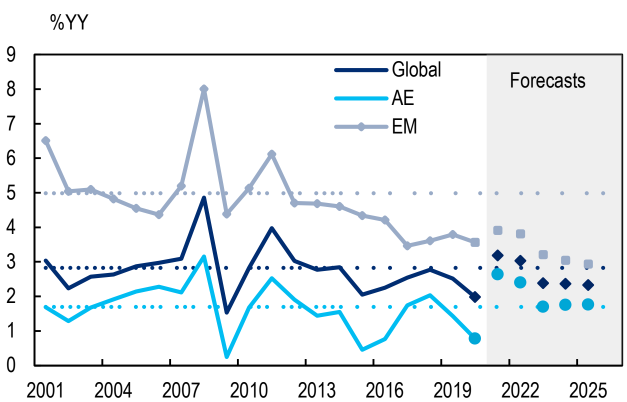
Figure 14. Global – GDP Growth Forecast Revisions (%YY), 2018-2021 Sep



Note: At market exchange rates.

Source: Citi Research, National Statistical Sources, IMF

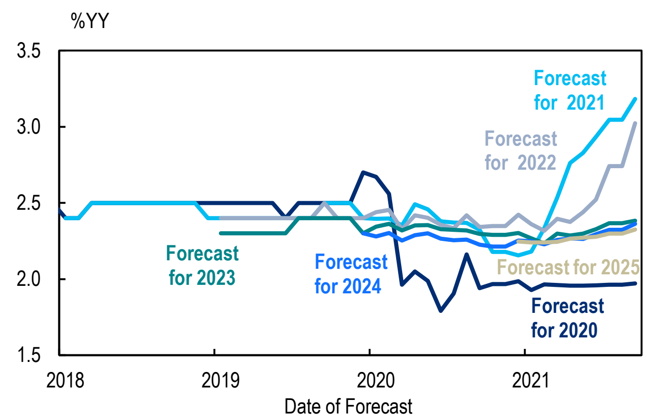
Figure 15. Global, AE, EM – Inflation (%YY), 2001-2025F



Note: At market exchange rates. PCE for the US. Horizontal lines are respective LT averages (2000-2019) for Global, AE and EM %YY inflation.

Source: Citi Research, National Statistical Sources, IMF

Figure 16. Global – Inflation Forecast Revisions (%YY), 2018-2021 Sep



Note: At market exchange rates. PCE for the US.

Source: Citi Research, National Statistical Sources, IMF

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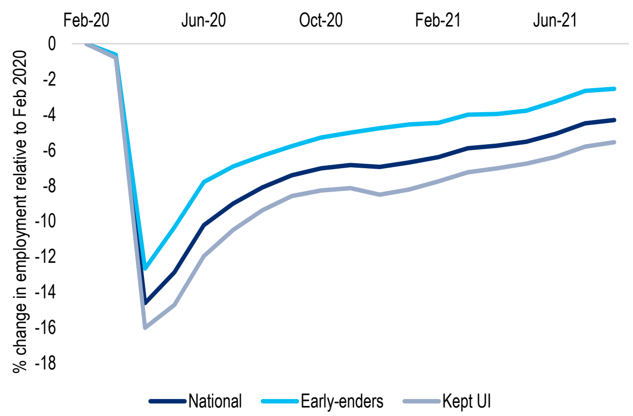
Key Insights

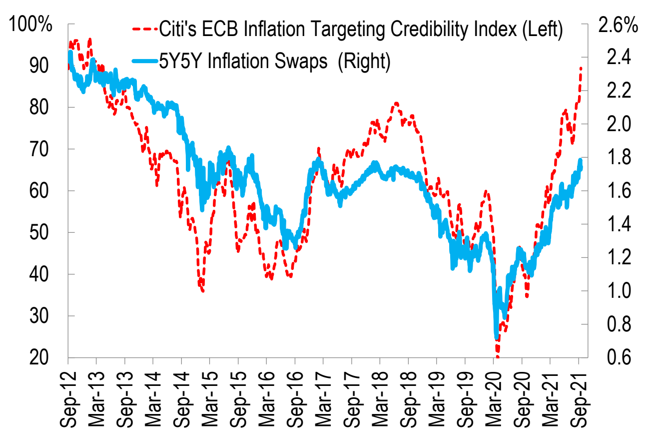
Figure 17. Employment in states ending unemployment benefits early has followed a similar pattern recently to other states



Source: Citi Research

There is still limited evidence of a return to work despite some states ending their benefits earlier than the national September 6th cut-off. Early-ender states accounted for just about 25% of the job gains in August while accounting for about 45% of total employment levels. Employment rose by only 0.02%MoM on average in states that ended benefits early compared to 0.16%MoM average increase in the other states. It could be the case that the impact of benefits ending is lagged due to accumulated savings during the pandemic allowing workers to remain more selective. While there is some modest evidence that ending unemployment benefits can lead to greater increases in employment over time, the recent data points more towards labor shortage problems persisting over the coming months. See: US Economics Weekly - The Great Inflation Debate Continues

Figure 18. Euro Area – Citi's ECB Inflation Targeting Credibility Index and 5Y5Y Inflation Swaps (%), Sep-12 to Sep-21



Source: Citi Research, Bloomberg

The inflation market is giving more credibility to the ECB's inflation targeting strategy. Our composite measure has moved above 90% (on 19 Sep) for the first time since Apr-13, almost a year before the ECB embarked on its negative interest rate experiment. This meaningful development coincides with the greater degree of confidence that seems to inhabit the Governing Council about the medium-term outlook for inflation, even if the 1.5% 2023 HICP mid-point remains some distance away from the 2% symmetric target. Until the ECB feels more confident about closing the inflation gap, we think that adjustments to PEPP are likely to be small. By the Dec-21 meeting, we would expect the GC to agree to end the PEPP in Mar-22 as planned and likely increase the APP from around €20bn/month to around €40bn/month, probably at least until mid-23. For more details, see European Economics Weekly - ECB: Asset Purchases, For Which The Bell Tolls.

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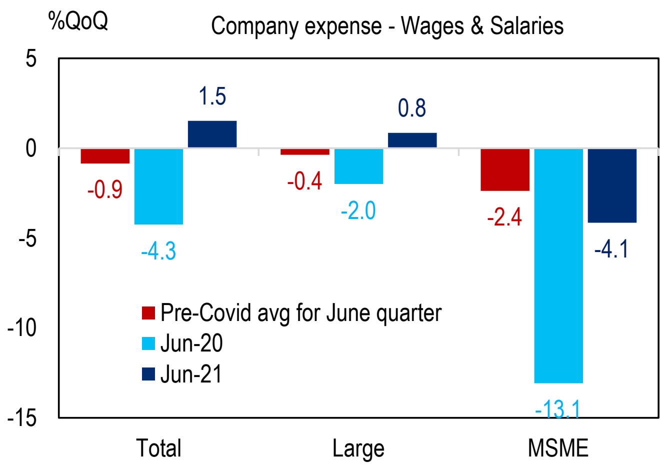
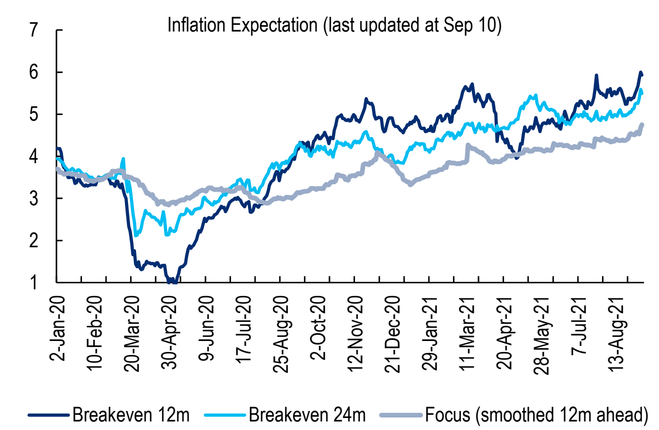
Figure 19. India wage cost growth: Second wave impact much lower than first wave even for MSMEs



Source: Citi Research, Prowess, Company Reports

Not just employment but wages in the organized sector seems to have fared better during the second wave than first wave. Wage cost of large listed companies grew by 0.8%QoQ in Jun-21, better than 2.0%QoQ fall in Jun-20 and even the pre-Covid trend of -0.4%QoQ for the June quarter. Wage cost of listed MSMEs fell more than trend in Jun-21 (-4.1%QoQ vs -2.4% trend) but much less than Jun-20 (-13.1%QoQ). Nominal private consumption has dropped 15%QoQ in Jun-21 despite a small QoQ increase in wages, leaving some purchasing power with consumers. There is now little reason to believe that the pent-up demand led consumption recovery after the second wave will be necessarily weaker than the first wave. We hope that the catch-up in consumption would happen at least in 2QFY22 and to a lower degree in 3Q festive season but is likely to fade away post the festive season. See India Economics - Labor Market Weathers Covid Shock, Read Through For Consumption

Figure 20. Brazil inflation continues surprising to the upside

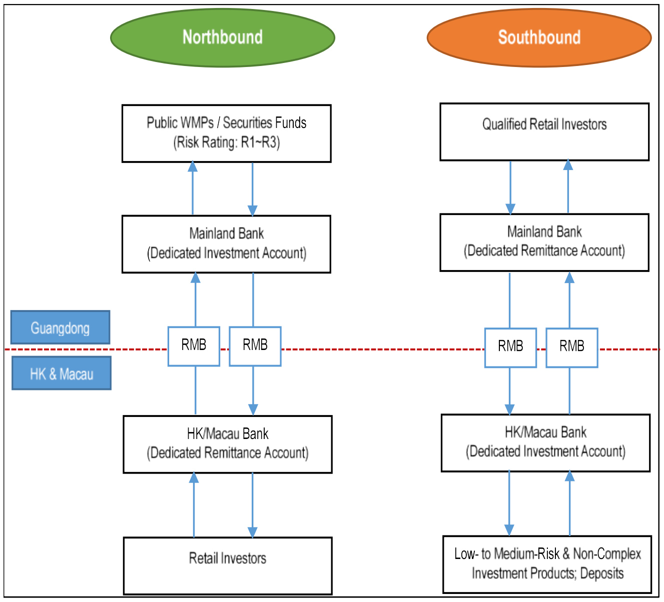


Source: Citi Research, Anbima, BCB

On the one hand, inflation continues surprising to the upside. Both July and August's CPI inflation print came in higher than expected and, perhaps more importantly, indicated a more widespread and persistent inflation dynamics. That said, we expect Copom to increase its 2021 inflation forecast to 8.0% (from 6.5%; Citi at 8.3%), and warn that, depending on the scenario it has for the ongoing energy crisis in 2022, its 2022 inflation forecast might stay around the target, but under a much higher Selic rate (8.0% from 7.0%). In addition, Copom will likely keep its asymmetric balance of risks, indicating it would pursue a Selic rate level above the one suggested by its inflation forecast. All in all, the worse inflation expectations lead us to now expect Copom to hike the Selic rate by 150bps in September's meeting, closing the hiking cycle with the Selic rate at 8.75% by yearend. See: Brazil Economics: Copom: No Time to Blink

Prepared for Ariff Roduan

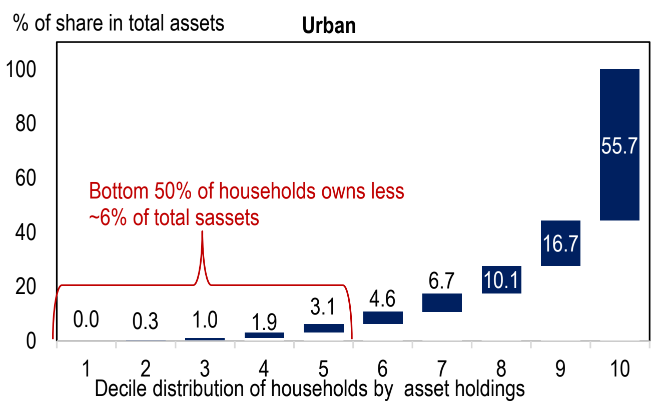
Figure 21. How the Cross-boundary Wealth Management Connect works in the Greater Bay Area



Source: Citi Research, PBoC, HKMA

On 10 September, China launched the Cross-boundary Wealth Management Connect Pilot Scheme (WMC) in the Greater Bay Area (GBA). Under the WMC, RMB funds flows are subject to closed-loop and quota management. We believe the WMC will be attractive for residents in both sides: The Southbound Scheme can serve as an effective channel for qualified onshore investors to diversify their portfolio, while the Northbound Scheme may allow HK/Macau-based investors to earn some extra returns. At the same time of the WMC's launch, the PBoC indicated the Southbound Bond Connect would open "in the next few days". And Shenzhen will become the first local government to issue offshore RMB bond. We see the developments as a new boost to the GBA integration. Finally, the WMC represents a profound step towards China's capital account liberalization. The various special zones, including the GBA, are becoming test beds of more cross-border liberalizations like WMC. The WMC's requirements for all remittances to be conducted in the RMB and for all related FX exchanges to be performed in the offshore markets showed a clear policy intention to promote RMB internationalization and offshore RMB market development. See China Economics: Embracing Wealth Connectivity in the Greater Bay Area

Figure 22. India: 50% of urban households own ~6% of total assets



Source: Citi Research

The recently released All India Debt and Investment Survey report for 2018 provides detailed data on asset holding and indebtedness of rural and urban households. We observe asset growth has moderated significantly between 2012 and 2018 (CAGR of 8%/3% in rural and urban) likely caused by sluggish income growth and valuations. Pace of indebtedness also moderated but still debt-to-asset ratios have been increasing markedly. The cost of borrowing appears to be almost structurally lower even before the post-pandemic monetary easing. The rural urban gap in asset holding is narrowing but asset inequality is quite stark. Urban households in the top decile own 55% of the total assets while the bottom-5 deciles put together hold only 6%. Richer states have higher asset inequality in rural areas but no distinct pattern for urban. Pandemic might have worsened this asset inequality and reinforced the need for a growth-stimulative and redistributive policy environment. See India Economics - Financial Status of Households: Findings from a New Database

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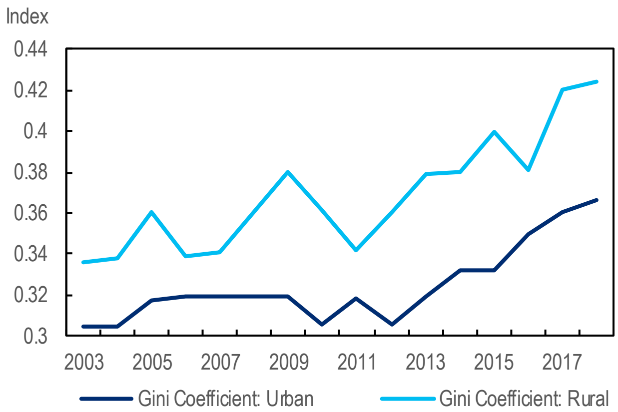
Figure 23. Urban and rural Gini coefficients on the rise in China



Source: Citi Research

The CCP leadership recently picked up the common prosperity theme and called for steady advancement of this long-term goal. Together with recent regulatory actions enacted on internet platform companies, the policy statement on income redistribution raised concerns among investors about an abrupt shift in policy direction. A senior CCP official has clarified some misconceptions about the term 'common prosperity'. According to the official, common prosperity is not egalitarianism. Instead, it is a long-term goal, and one that should be achieved both by economic growth and careful adoption of redistribution policies. He also reiterated that recent regulatory measures are not targeting privately-owned internet companies. We think this is an important clarification, though more concrete actions may be needed before investor concerns about regulatory policies are fully allayed. See China Economics - 'Common Prosperity Is Not Egalitarianism'

Figure 24. Contours of future Indian monetary policy normalization

MPC meet	Stance	VRRR	G-SAP	Durable liquidity	Reverse Repo rate	Repo rate	What is the likely market pricing?
Oct-2021	--	Increase 14-day amount/introduce long tenor possible	Lower quantum to 1trn or below	--	--	--	+15bps
Dec-2021	--	Longer than 14-day tenor	Further lower amount	--	+15bps	--	+15bps
Feb-2022	--	--	--	Some absorption measures	+25bps	--	+20bps
Apr-2022	"Accommodative" to "Neutral"	--	G-SAP decision basis FY23 budget	More liquidity measures	--	--	--
Jun-2022	--	--	--	Bring liquidity closer to the "neutral" territory	+25bps	+25bps	+25bps
Aug-2022	--	--	--	--	Hold	Hold	+30bps
Oct-2022	--	--	--	--	+25bps	+25bps	+31bps
Dec-2022	--	--	--	--	Hold	Hold	--
Feb-2023	--	--	--	--	+25bps	+25bps	--
Apr-2023	--	--	--	--	Hold	Hold	--
Jun-2023	--	--	--	--	+25bps	+25bps	--

Source: Citi Research

In this note we address multiple debates regarding RBI's policy normalization path and present our granular view on sequencing. Expansion of VRRR auctions to include long-tenor ones likely to be followed by a reverse repo hike in Dec and a change in policy stance to "Neutral" in April. First repo hike not expected before June but withdrawal of "durable liquidity" should be a parallel process to bring the operative rate closer to repo. We discuss the nuances of various liquidity absorption measures based on how they've been used in the past and conclude that return to pre-Covid liquidity conditions looks difficult before end of FY23. Terminal repo rate of 5.0-5.25% expected to be achieved gradually as real policy rate is kept structurally lower. See India Economics & Strategy - Framing RBI's Policy Normalization Debate in 10 Questions

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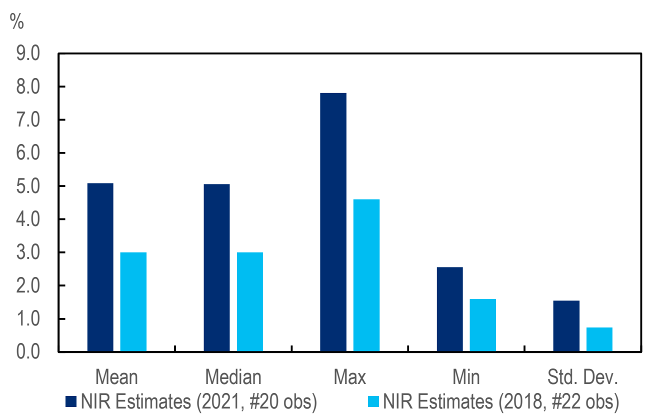
Figure 25. The US 2s10s curve flattened in conjunction with the selloff in large-cap China equities incentivized "safe" asset flows into longer-duration Treasuries

Source: Citi Research

The 5y sector has underperformed on the curve driven by more hawkish Fed expectations over the past few months (see the 2s5s10s fly). The 10y sector however has remained on the richer side driven by a compression in 10y term premium. One key driver is foreign demand, most recently evidenced by the previous two 10y auctions (the August auction was the strongest going back to 2012). Looking back further there is a clear pattern of the 2s10s curve flattening in conjunction with the selloff in large-cap China equities. This was driven by concerns over regulatory changes, leverage/default issues in the property sector, and a broader China slowdown which incentivized "safe" asset flows into longer-duration Treasuries. This cuts both way, a stabilization of equity/HY concerns in China could release pressure on long-end rates increasing term premium. Still, we see a China slowdown as a key risk to our 10y yield forecast. US Rates Weekly - The Fed takes center stage):

Figure 26. Natural rate of interest estimates for Turkey



Source: Citi Research, Bloomberg, Haver Analytics

We believe that the CBT's policy actions are likely to be one of the most significant determinants of asset prices in the near-term. Our analysis not only challenges the case for monetary policy easing, but also demonstrates that a tighter stance would be more prudent. While we believe that the CBT is likely to refrain from easing during the remainder of the year, the Bank's recent emphasis on core inflation and supply shocks—along with our empirical findings regarding monetary policy reaction function—leads us to remain cognizant of the risk of a premature easing, particularly if the currency remains stable. SeeTurkey Economics: What will the CBT do next?

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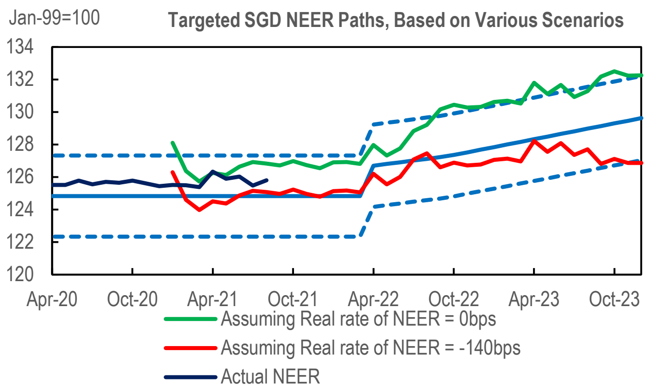
Figure 27. Singapore: Assuming 150bp upward re-centring & c.150bp slope steepening in Apr and Oct-22



Source: Citi Research

Examining various combinations of policy band adjustments needed to accommodate a "neutral" real rate of NEER appreciation into 2023 suggests an Oct-21 normalization remains a plausible risk scenario, more so if the 2%-pt GST hike is announced before Oct and/or MAS's implicit tolerance threshold (or "target" for short) for core falls below the historical average of 1.7%. Our base case of an Apr-22 normalization now seems more likely to involve a concurrent slope steepening and upward band re-centring to accommodate the likely step up in core CPI from the GST hike. See Singapore Economics - Considering Various MAS Normalization Scenarios

Figure 28. Japan: Our estimates of how many votes each candidate will get in the first ballot

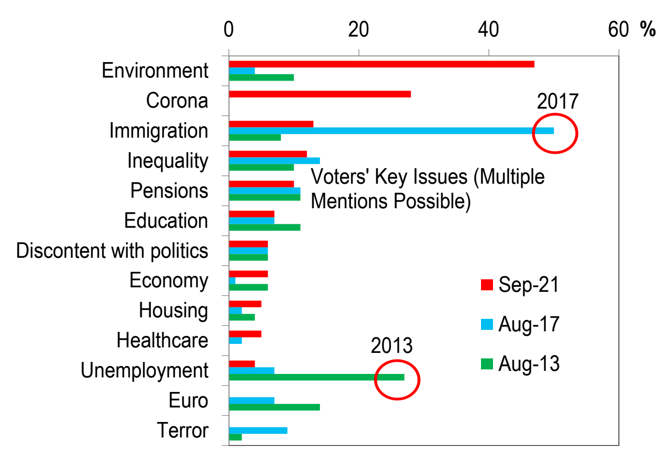
	Number of total votes obtained		
		Diet members	Party supporters
Fumio Kishida	249	167	82
Taro Kono	331	115	216
Sane Takaichi	150	80	70
Seiko Noda	35	20	15
Total	764	382	382

Note: If no candidate gets the absolute majority (383) in the first ballot, a runoff by top two candidates is held. While Kono will probably win first place in the first ballot, he is likely to lose the runoff with Takaichi's votes expected to shift to Kishida.

Source: Citi Research

While the situation remains highly fluid, we currently expect Fumio Kishida is more likely to win the LDP presidential election (to be held on September 29th) than Taro Kono despite Kono's higher popularity among the grass-root Party supporters. Kishida's economic policies are more in line with the LDP's tradition and he is already committed to a new economic package amounting to some 30 trillion yen. The package is likely to include financial supports for companies and households beleaguered by COVID-19. Meanwhile, Kono focuses more on micro policies (such as carbon neutral society and digitalization) than macro. We expect the LDP to maintain the absolute majority in the upcoming Lower House Election (in Oct/Nov) with a wide margin under a new PM.
Japan Economics Weekly - LDP leadership election: New twists every day

Figure 29. Germany – Voters' Top Concerns (%)



Source: Citi Research, Forschungsgruppe Wahlen

Ahead of the 26 September election, climate change tops voters' list of concerns according to polls, in contrast with immigration in 2017 and the economy in 2013. Yet the Greens are lagging behind in the polls due to a poor campaign. The Green party is under pressure to become junior partners in the next government, which makes coalitions without them unlikely. Our top scenarios all involve the Greens. The Greens in government would bring more public investment and higher taxes to accelerate emissions reduction. They would probably also influence German foreign and trade policy. Instead of commercial interests, cooperation on climate change and other values could become a bigger factor in Germany's choice of partners. See Germany Economics and Multi-Asset - How would Markets Welcome a Potential Chancellor Scholz?

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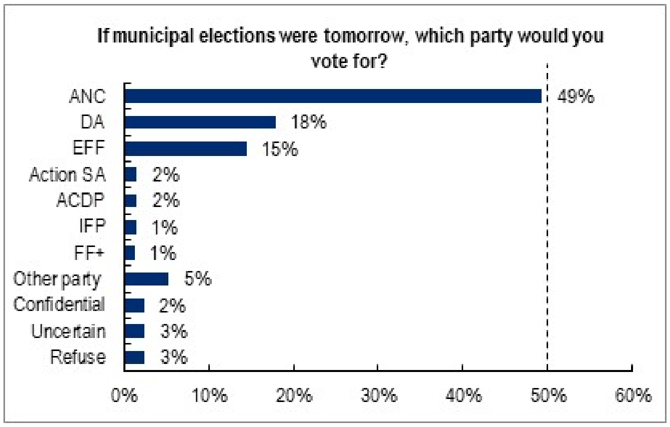
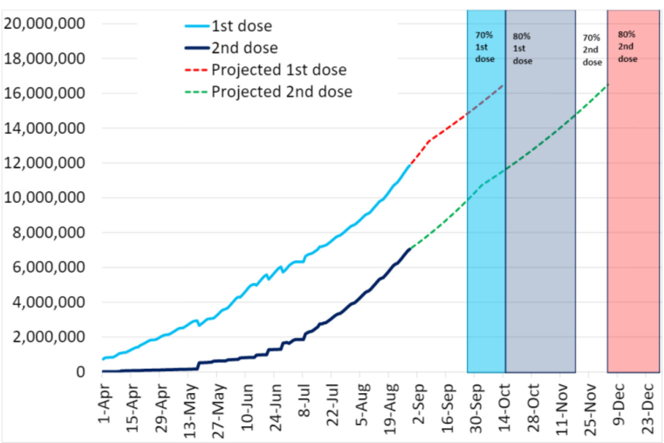
Figure 30. South Africa Ipsos August 2021 poll: No party receives >50%



Source: Ipsos, Citi Research

South Africa will hold local elections on 1 November. These typically have a lower voter turnout than the national and provincial elections, but distinguishing whether this is due to the pandemic or voter apathy we think will be key to analyzing the outcomes. Service delivery is key in local election outcomes and the dire current situation of many municipalities is very likely to be reflected in voting patterns. There are many issues at stake for political parties, especially the ANC, given how close it came to losing its majority in the Gauteng province in the 2019 provincial election. See South Africa Economics - Politics: The 2021 Local Elections – Where Things Stand

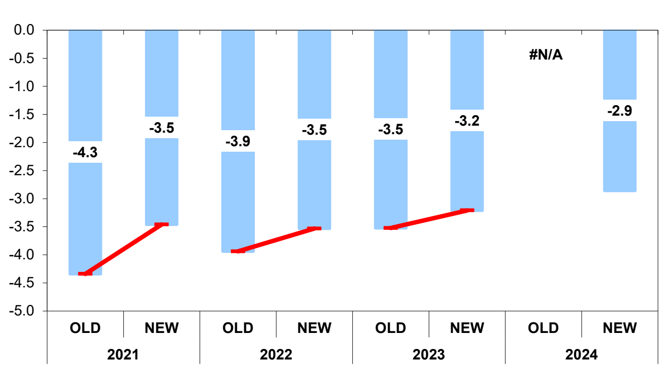
Figure 31. Australia first and second dose vaccine target projections



Source: Citi Research, Australian Department of Health

The path to reopening the Australian economy is through achieving the National Cabinet's stated Covid vaccination targets. Herd-immunity via vaccinations is achievable in Australia this year. We believe this could be around early to mid-December. Our approximation of the key milestones are: 70% 1st dose; mid-late September, 80% 1st dose; mid-late Oct, 70% 2nd dose; early-mid Nov, 80% 2nd dose; early-mid Dec. The risk is that vaccination rates may slow as we approach 80%, especially in states with a higher amount of vaccine hesitant adults. Moreover, there hasn't been official advice on booster shots. Reopening at 80% could be complicated if there is an increase in breakthrough infections or if vaccine efficacy wanes for known Covid strains. These risks could materialise in late 2021 or early 2022. See Australia Economics - Tracking the pandemic in Australia: Reopening in sight but risks persists

Figure 32. Turkey central budget balance (% of GDP)



Source: Citi Research, Official Gazette of the Republic of Turkey

On September 5, the authorities released the Medium-term Program (MTP) for 2022-2024. Compared with the previous program (2021-2023), the new MTP envisions a stronger growth performance, but looks for a less ambitious disinflation path and an external adjustment trajectory. The projected fiscal stance (IMF-defined primary balance) does not appear to be particularly tight in light of the envisaged cyclical position of the economy. In our view, the country's ability to grow at a steady rate of 5.0-5.5% in the coming years would require significant productivity and competitiveness gains, which may prove to be difficult to achieve. See Turkey Economics: A preliminary assessment of the new Medium-term Program

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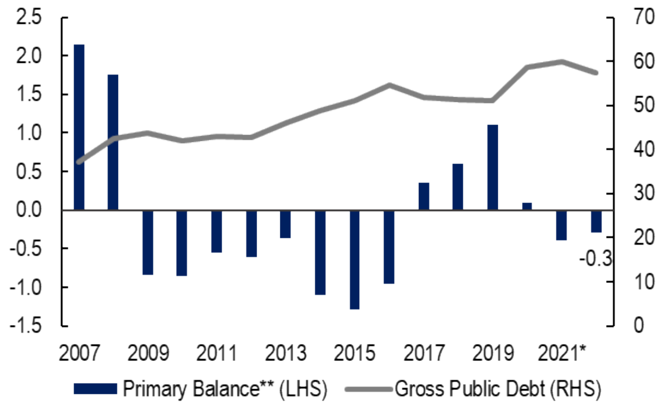
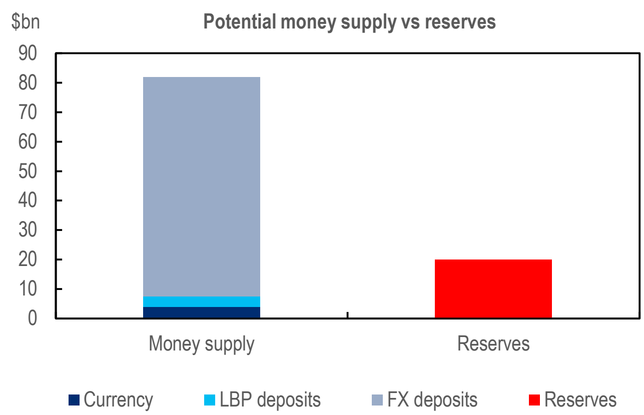
Figure 33. Mexico primary balance and gross public debt, % of GDP



Source: Citi Research, National Sources

Primary deficit should persist in 2022 as spending pressures increase and the structural weakness on tax revenue remains. In the MoF's 2022 Budget proposal we see more nuances of realism/pragmatism than in previous years. While macro assumptions are optimistic in terms of GDP and oil production, parameters for the USDMXN and the oil price are conservative. As we expected, proposed changes to the legislation are modest —they mainly consist in adjustments that simplify tax payments and improvements in control by the tax authority—, as well as their impacts on revenues. The structural solution to revenue weakness (as discussed here) was thus postponed. On the spending side, austerity prevails excepting for AMLO's priorities (flagship programs and few infrastructure projects), while pressures keep rising. Thus, the MoF and we expect a modest primary deficit for 2021 and 2022 (around 0.5% of GDP) and the net to GDP ratio at 51% of GDP (higher than pre-pandemic levels, but still moderate in an international comparison).

Figure 34. Lebanon: Back-of-the-envelope calculation suggests USDLBP of 10,000 could see money supply sufficiently backed by reserves



Source: Citi Research

The formation of a new government under Prime Minister Najib Mikati means the first hurdle towards an eventual resolution of the crisis has been taken. The next challenge is to come up with a plan for economic stabilisation to take to the electorate next year. In such a programme, the new exchange rate will be key in determining fiscal and external sustainability. Two simple metrics suggest an exchange rate of 10,000 against the dollar could close current account gaps and back up domestic money supply with sufficient reserves. The implication is that large scale restructuring of Lebanese fx liabilities is unavoidable as the size of the economy would significantly shrink in dollar terms. Add link in this box as well. See Lebanon Economics - At what level could a new exchange rate be set?

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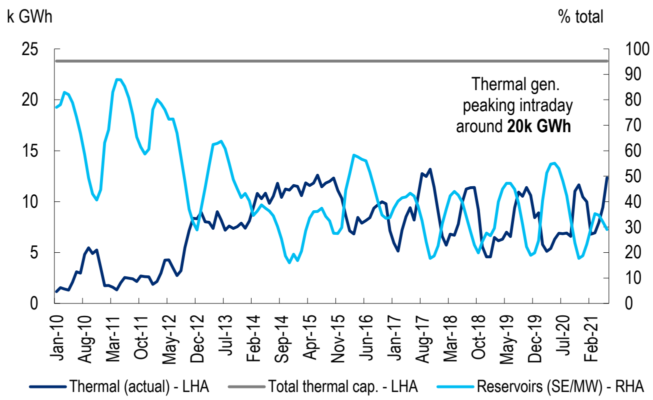
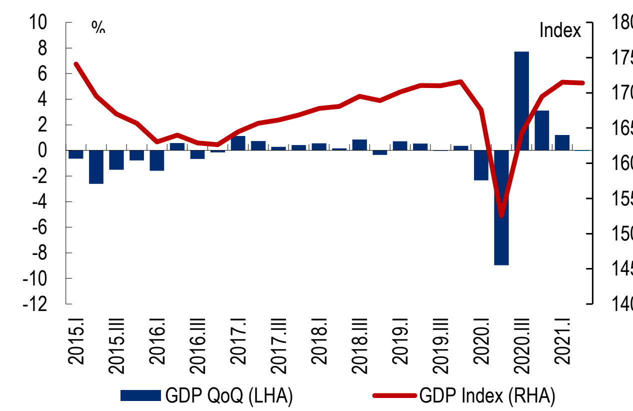
Figure 35. Brazil thermal power plants are running close to the limit



Source: Citi Research, ONS

What is happening? The more-severe-than-expected drought season is making the level of water reservoirs decline sharply. As Brazil is highly dependent on hydro power plants, the risk of a power shortage has been increasing. What do we expect? Although we do not expect large-scale shortages, the economic impact of higher power prices are inevitable, in line with our higher-than-consensus CPI inflation forecast for 2021 (+8.3%). As the BCB is proving to be more hawkish than previously expected, we maintain for now our +3.5% CPI inflation forecast for 2022. This tough power situation also reinforces our lower-than-consensus growth forecast for 2022 (1.5%). What do we expect? Looking ahead, the main risk would be a delay in the southeast/Midwest rainy season (as of 4Q21), putting the power matrix on the edge of collapse. See: Brazil Economics: Turn off the lights

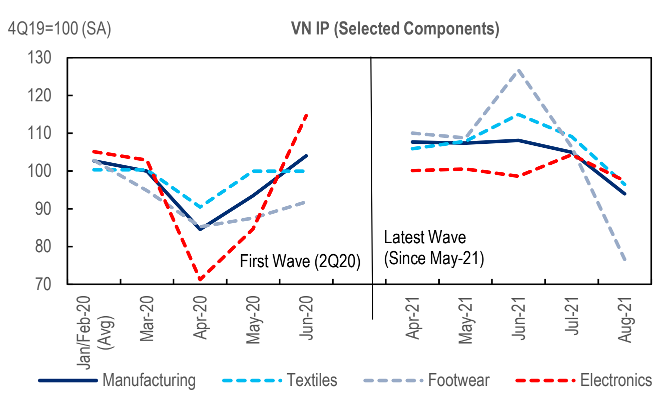
Figure 36. Brazil: GDP roughly at the pre-pandemic's level



Source: Citi Research, IBGE

The 2Q21 GDP reinforced our perception that the relevance of the Covid-19 pandemic to the economic activity continues to decrease. Moreover, our demand/supply analyses continue to indicate economic recovery ahead, but no further quarterly growth acceleration next year. Firstly, there are growing monetary and credit headwinds taking place (real interest rates are already in contractionary terrain, while interest rates charged on loans are likely to continue rising). Secondly, the global tailwind is becoming softer as growth and commodity prices are stabilizing/declining. Thirdly, inputs shortage and the escalating power crisis are not likely to improve materially until yearend, constraining economic growth. That said, we maintain our 5.1% GDP growth estimate for 2021, but reduce our 2022 forecast to 1.5% (from 1.8%), both forecasts are below consensus estimates. See: Brazil Economics: Stronger Headwinds and Softer Tailwinds Point to Lower GDP

Figure 37. Vietnam: Textiles and especially footwear amongst the worst hit due to factory shutdowns in Jul-Aug



Source: Citi Research

Jul-Aug activities fell sharply amidst the tightening of restrictions and factory shutdowns. Production for textiles and especially footwear were amongst the worst affected, and there is already evidence of production shifting away from Vietnam. Since mid-Jul, lockdowns in Vietnam have been stricter and more prolonged than we earlier expected, with restrictions in HCMC now extended by a further 2 weeks. Accordingly, we lower our 2021 GDP forecast to 3.6% (Previous: 5.7%). The current set of fiscal measures appear relatively modest, with recent surveys suggesting that more support is warranted for those affected. See Vietnam Economics - Lowering 2021 GDP Forecast to 3.6% As Strict Restrictions in HCMC Are Extended

Prepared for Ariff Roduan

What to Watch Next Month

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Since last GEOS, Covid vaccination rates have risen across the world. Breakthrough infections continue but there is now a clear split between those countries that are still pushing a Covid-zero strategy and those that are accepting Covid as an endemic disease. As those following the latter strategy start to open up to fully vaccinated travelers, it remains to be seen how these two strategies play out.

On **26 Sep**, Germany will hold elections. Climate change tops voters' list of concerns according to polls, in contrast with immigration in 2017 and the economy in 2013. Our top scenarios all involve the Greens. The Greens in government would bring more public investment and higher taxes to accelerate emissions reduction. They would probably also influence German foreign and trade policy. Instead of commercial interests, cooperation on climate change and other values could become a bigger factor in Germany's choice of partners.

The US Congress will need to address the debt ceiling on or before November 3rd according to our projections to avoid a situation where it would not be able to meet all its obligations, creating a risk for financial markets in October.

There are a number of monetary policy meetings in the coming month with the Federal Reserve (**22 Sep**) Bank of England (**23 Sep**), and Reserve Bank of Australia (**5 Oct**). The MAS is also expected to meet in October.

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Global Event Calendar

Figure 38. Global – Event Calendar for 2021-2022

2021			
Date	**Economy**	**Data / Event**	**Comments**
23-Sep	UK	BoE Policy Meeting	
26-Sep	Germany	Federal Election	The general election marks the end of Chancellor Angela Merkel's 16-year reign and the beginning of coalition negotiations to form the next government. While the focus will be on the evolution of economic policy, many will wonder whether and how Merkel's successor will fill her role in managing EU and Eurozone policies, especially in times of crisis.
8-9 October	Czech Republic	General Elections	Voters' preferences suggest the ruling senior party ANO will win, while the support for two newly created blocs of five opposition parties (Together: mix of centre to right-wing; Pirates&Mayors: liberal to conservative parties) stagnating and falling respectively. However, both ANO and the block of opposition parties are likely to be short of a majority in the new Lower House. And if they create coalition with less favourable partners (ANO with populist SPD and Together/PirMay with socialist CSSD), they would be close to or just above the majority. By contrast, the coalition of ANO and Together could get around 114-122 of 200 seats in the new Lower House (depending whether three smaller parties will meet the 5% threshold). This would be a game-changer after a centre to left-wing coalition governments being in place for the past eight years in row. This may ease the tone of accommodative fiscal policy and thus modify the overall economic policy mix. However, this coalition is unlikely to be agreed soon, if at all, after the general elections.
10-Oct	Iraq	Parliamentary Election	
14-15 Oct	EU	European Council Meeting	
15-Oct	IMF/World Bank	Annual Meeting	
21-22 Oct	Europe	European Council Meeting	
22-Oct	Japan	General election	The most likely timing of the Diet dissolution and subsequent general election is autumn 2021, in our view. The LDP administration is most likely to continue.
24-Oct	Argentina	Legislative elections	Legislative elections (AKA midterms) will take place in 2021. Half of the seats of the House of Representatives are to be elected, while one third of the Senate will also be renewed. The midterm elections will be key to gauge the support of the Fernández Administration, and the likelihood of a regime change in the 2023 presidential elections. Unless the current election law is revised, open, mandatory and simultaneous primaries (PASO) should be scheduled for the first half of August.
28-Oct	Eurozone	ECB Policy Meeting in Frankfurt	A press conference will follow.
November	Bahrain	Council of Representatives Election	
1-Nov	South Africa	District & Municipal elections	
1-12 Nov	UN/UK	COP26	26th UN Climate Change Conference (COP 26) takes place in Glasgow, UK
2 – 3 Nov	US	FOMC Meeting	
4-Nov	UK	BoE Policy Meeting	
21-Nov	Chile	Presidential Election (1st round), Congressional Election	A first round presidential election is scheduled for this date. At this point, the race remains very open and candidates have not been confirmed. Congressional elections are also scheduled for this date. If no presidential candidates obtains a majority in the first round, a second round will be scheduled for December 19.
14 – 15 Dec	US	FOMC Meeting	Meeting associated with a Summary of Economic Projections.
Mid Dec	China	Central Economic Working Conference	The Central Economic Working Conference will set the policy agenda for economic development and reforms in 2022.
16-Dec	Eurozone	ECB Policy Meeting in Frankfurt	A press conference will follow.
16-Dec	EU	European Council Meeting	
16-Dec	UK	BoE Policy Meeting	
19-Dec	Chile	Presidential Election (2nd round)	If no presidential candidates obtains a majority in the first round on 21 November, a second round will be scheduled for December 19.
19-Dec	Hong Kong	Legislative Council election	The 7th LegCo election will be delayed for the second time to 19th Dec 2021 to accommodate for changes imposed under the new electoral framework approved by National People's Congress. New LegCo set up will have a total number of 90 seats (20 more than previous setup), of which 20 seats will be directly elected from geographical constituency (public vote).
By end of the year	Bulgaria	Presidential election	The position of the President is largely a symbolic one. However, recent developments have demonstrated that disagreements between the President and the government may lead to increased tension, undermining sentiment. Against this backdrop, the focus will be on whether the new elected president and the Prime Minister would be able to work well together.

Source: Citi Research

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Figure 39. Global – Event Calendar for 2021-2022 (cont.)

2022			
Date	**Economy**	**Data / Event**	**Comments**
25 - 29 January	World Economic Forum	World Economic Forum in Davos	
25 - 26 Jan	US	FOMC Meeting	
February	Costa Rica	Presidential and General Elections	
3-Feb	UK	BoE Policy Meeting	
27-Mar	Hong Kong	Chief Executive election	
9-Mar	South Korea	Presidential Election	
13-Mar	Colombia	Presidential and General Elections	
17-Mar	UK	BoE Policy Meeting	
Before April	Serbia	General Election	
April	France	Presidential Election	
April	Hungary	General Election	
May	Iraq	General Election	
May	Lebanon	General Election	
5-May	UK	BoE Policy Meeting	
9-May	Philippines	Presidential and General Elections	
June	France	General Election	
5-Jun	Slovenia	Parliamentary Election	
16-Jun	UK	BoE Policy Meeting	
4-Aug	UK	BoE Policy Meeting	
9-Aug	Kenya	Presidential and General Elections	
11-Sep	Sweden	General Election	
15-Sep	UK	BoE Policy Meeting	
2-Oct	Brazil	Presidential and General Elections	
November	Bahrain	General Elections	
3-Nov	UK	BoE Policy Meeting	
8-Nov	US	Mid-term elections	All 435 seats in the House of Representatives and 34 of the 100 seats in the Senate will be contested.
15-Dec	UK	BoE Policy Meeting	

Source: Citi Research

Prepared for Ariff Roduan

Figure 40. Citi Global Economics Team (For Informational Purposes Only)

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Source: Citi Research

Prepared for Ariff Roduan

Figure 41. Summary of economic forecasts

	GDP Growth			CPI Inflation			Central Bank Policy Rates			Current Account (Pct of GDP)			Fiscal Balance (Pct of GDP)			Government Debt (Pct of GDP)		
	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022
Global	-3.5	5.8	4.4	2.0	3.2	3.0	1.83	1.70	1.89	0.5	0.9	0.4	-10.2	-8.3	-4.5	101.1	105.2	104.9
Based on PPP weights	-3.3	6.0	4.6	2.8	4.2	3.6	2.88	3.11	3.36	0.6	0.6	0.1	-9.4	-7.5	-4.5	93.8	96.3	96.8
Industrial Countries	-4.8	5.1	4.0	0.7	2.6	2.4	0.25	0.11	0.15	-0.4	0.0	-0.2	-13.3	-11.4	-5.1	125.3	132.5	132.7
Australia	-2.4	3.5	3.0	0.8	2.6	2.3	0.21	0.10	0.10	2.7	3.4	1.9	-4.3	-7.8	-5.0	42.9	49.3	54.8
Canada	-5.3	5.0	3.9	0.7	3.2	2.6	0.25	0.25	0.31	-1.8	0.5	0.4	-15.1	-5.7	-1.9	106.7	107.1	106.3
Euro Area	-6.5	5.2	4.7	0.3	2.3	2.3	0.00	0.00	0.00	2.1	3.0	3.1	-7.2	-7.0	-4.3	98.0	102.7	102.9
Japan	-4.6	2.2	3.7	0.0	-0.2	0.7	-0.10	-0.10	-0.10	3.2	2.7	2.6	-18.0	-10.0	-4.0	270.0	274.0	274.0
Switzerland	-2.7	3.2	2.9	-0.7	0.5	0.9	-0.75	-0.75	-0.75	3.8	6.8	5.9	-2.8	-3.5	-1.0	30.8	35.2	34.4
United Kingdom	-9.8	6.6	4.7	0.9	2.4	3.4	0.21	0.10	0.10	-3.5	-4.1	-6.6	-15.7	-7.9	-4.0	100.9	104.2	104.7
United States	-3.4	5.8	3.8	1.2	3.6	2.7	0.54	0.25	0.31	-2.9	-2.7	-2.6	-16.9	-16.5	-6.7	126.0	138.0	140.0
Emerging Markets	-1.7	6.6	4.9	3.6	3.9	3.8	3.92	3.70	3.99	1.7	1.9	1.2	-6.1	-4.4	-3.7	68.9	70.8	71.5
EM Asia	-0.1	7.4	5.6	2.6	2.0	2.6	2.94	2.77	2.91	2.6	2.5	1.6	-5.3	-4.2	-3.6	79.5	82.5	82.9
Latin America	-6.7	6.3	2.4	6.7	9.9	8.4	8.07	7.14	9.13	-0.2	-0.7	-1.1	-8.9	-5.9	-5.5	70.8	67.0	67.8
EM Europe	-2.5	5.0	3.5	4.9	7.6	6.0	4.64	6.11	6.12	0.3	0.8	0.4	-5.0	-3.5	-2.3	37.1	37.8	38.0
Mid East/Africa	-4.0	3.5	4.5	4.4	5.8	4.7	4.92	3.39	3.46	-0.8	2.4	1.9	-9.5	-4.7	-3.6	33.5	32.5	32.8
Brazil	-4.1	5.1	1.5	3.2	7.9	5.9	2.81	4.90	8.58	-1.8	-0.1	-1.2	-13.7	-6.8	-7.3	88.8	81.5	83.5
China	2.3	8.2	5.5	2.5	1.2	2.2	3.00	2.95	2.95	1.9	2.4	1.2	-3.6	-3.2	-2.8	90.0	93.5	93.7
India	-7.3	9.5	9.0	6.2	5.3	4.7	4.03	4.00	4.38	0.9	-0.6	-0.6	-13.8	-9.4	-8.7	91.6	86.5	85.2
Indonesia	-2.1	3.4	4.7	2.0	1.5	2.4	4.13	3.50	3.75	-0.4	-0.7	-1.7	-6.2	-5.6	-4.4	40.7	43.6	45.9
Korea	-0.9	4.0	3.1	0.5	2.1	1.8	1.38	0.69	1.38	4.6	4.8	3.8	-3.7	-3.9	-2.8	48.3	50.9	53.3
Mexico	-8.3	5.9	2.7	3.4	5.4	4.2	7.63	4.40	5.15	2.4	0.3	0.0	-3.9	-4.5	-4.0	58.6	57.5	56.6
Poland	-2.8	5.2	5.3	3.4	4.6	4.6	0.44	0.10	0.46	3.5	2.3	1.0	-7.0	-5.0	-3.0	47.8	44.8	42.0
Russia	-3.0	4.0	2.6	3.4	6.1	4.7	5.05	5.77	6.54	2.3	3.8	2.7	-3.8	-0.8	0.3	20.5	21.3	22.0
Taiwan	3.1	6.0	4.0	-0.2	1.8	1.9	1.13	1.13	1.25	14.1	13.2	12.1	-1.0	-1.6	-1.0	32.7	36.0	36.6
Thailand	-6.1	0.9	3.6	-0.8	1.1	1.2	0.68	0.50	0.50	3.5	-1.5	0.5	-5.1	-5.3	-4.6	49.4	57.0	60.0
Turkey	1.8	7.6	2.7	12.3	17.5	13.7	10.52	18.56	16.56	-5.2	-2.3	-2.2	-3.4	-3.6	-3.9	39.8	42.1	44.8

Source: Citi Research

Figure 42. Summary of commodities and rates forecasts

		Quarterly							Annual					
		Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	2020	2021	2022	2023	2024	2025
Commodities														
COMEX Gold	USD/T. oz	1,800.00	1,700.00	1,625.00	1,600.00	1,565.00	1,550.00	NA	1,780.00	1,778.00	1,585.00	1,475.00	N/A	N/A
NYMEX WTI	USD/bbl	70.00	71.00	69.00	65.00	62.00	59.00	NA	39.00	66.00	64.00	52.00	49.00	48.00
Rates														
10 Year Treasury Yield	%	1.81	1.91	2.00	2.00	2.00	2.00	2.00	0.91	2.00	2.00	2.00	2.00	2.00
10 Year Bund Yield	%	-0.21	-0.25	-0.15	-0.15	-0.10	-0.05	-0.05	-0.52	-0.24	-0.11	0.02	0.23	0.42

Source: Citi Research

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Rates Strategy

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US: Key drivers for yields over the next few weeks will be the FOMC, political ramifications around the debt ceiling and fiscal packages, and concerns around leverage in the property sector of China. The September FOMC is unlikely to drive bearish price action given the probable delay of a taper announcement although the 2024 dot is a risk. The party-line reconciliation package is unlikely to come in at the full $3.5tn at this time (as Senators Machin and Sinema are reportedly opposed to the full size) although we do expect the debt ceiling to be averted by a short-term suspension by ME. The China story is important given the 2s10s curve has flattened in conjunction with the selloff in large-cap China equities over the past few months as USTs remain an important flight to quality destination. Indeed, Foreign demand for USTs in general has been a strong technical flow keeping term premium depressed as evidenced by the previous two 10y note auctions which were some of the strongest auctions in the past few years.

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Core Europe: Bund yields have shifted higher since the August forecast round, in line with our expectations, and primarily reflecting a reversal from rich summer valuations. This is unlikely to be the start of a sustained sell-off, however. The ECB's new forward guidance on policy rates set in July – which sets tough conditions on the inflation outlook as a precondition for lift-off – is likely to provide a long lasting anchor for Bund yields. The recovery also appears to be losing strength. So while yields have shifted higher, we actually nudge lower our Bund yield projections with 10s likely to stay negative for the entire horizon to 1Q23. Near-term, we project -0.25% on average for Q4 (vs -0.15% previously): we still think Bunds could touch -0.15% this year, but are less convinced it can be sustained. The main risk stems from USTs should the long-awaited sell-off finally arrive, but the beta for Bunds is likely to low. Another bearish risk is the slowing of ECB asset purchases, but we suspect this impacts EMU spreads more than outright yields (given the policy rate anchor). Lastly, the German election could cause volatility, but most scenarios seem relatively benign for Bunds except for a left wing coalition.

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EMU Periphery: EGB spreads are likely to be supported in the near-term by negative net supply and potentially a strong left-wing performance in the 26 September German election, but medium-term risks have increased with the ECB policy shifting away from asset purchases. Therefore, we now expect less widening near-term, but more medium-term. We expect 10yr BTP-Bund at 110bp in Q4-21, widening to 125bp in Q1-22 on QE taper, French election and heavy supply, and then tighten to 115bp over Q2-Q3 as some of these risks wane before widening again towards 130bp by Q1-23 on Italian election risk. Elsewhere in the periphery, Bonos could remain supported near-term, but widen in 2022 on a weak political backdrop. PGBs could continue to trade through Bonos as rating upgrades likely resume. For the semi-core, the French election is the key risk. We forecast 10yr OAT-Bund at 45bp in Q4-21 as investors positioning for the event risk, peak at 55bp in Q1-22 and tighten towards 40bp by Q2-22 under our base-case of a Macron win, but remain wider than current 33bp on the lack of a parliamentary majority for the President. OLOs/IRISH should be most susceptible to this OAT widening, but outperform OATs in coming quarters.

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UK: Gilt yields have underperformed in recent weeks with the market cementing expectations for BoE lift-off in 2022, but still not anticipating a meaningful cycle thereafter. The BoE has earned a reputation as a leading hawkish central bank with guidance to tighten over the coming years, a relatively early end to net QE (this December) and a plan to unwind QE. Higher inflation and a tight labour market adds to the market's hawkish pricing, but there is still a significant offset from weaker growth and uncertainty as furlough comes to an end. The Citi house view is still for no change in Bank Rate until August 2023. As such, we stick with our Q4 10yr gilt

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yield forecast of 0.8% and only a modest further rise in yields thereafter, but the risks appear skewed to higher yields, especially given the bearish house view on UST. The 10s30s gilt curve continues to flatten - and may continue to do so near-term given a likely sizeable reduction in the gilt remit at the 27 October Budget – but the end of net QE will vastly change the supply burden to the private market from 2022 and prompts us to pencil in a steepening bias in the forecasts as well as weakness in gilt swap spreads.

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Japan: Based on our US interest rate forecast, there is a real possibility that 10yr JGB yields will test 10bp towards the year-end. However, given that the BoJ remains in control of the market, we believe any such moves would only correct excessively low yields seen during summer. The issuance of fixed coupon bonds to finance prospective fiscal policy measures look unlikely to be sizable.

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- **Summary view** – Supply side constraints are reducing growth, but this may rebound in 2022 as inventories are restocked and unfilled orders are backfilled. The Delta variant reduced demand for travel, but otherwise the US economy has been resilient. Inflation for some goods has moderated but the tight labor market has potential to lead to more persistent wage growth and inflationary pressure. We expect the Fed to taper asset purchases in coming months and raise interest rates in late 2022.

Supply-side constraints have begun to substantially constrain US economic growth. Auto sales and housing starts in particular have dipped reflecting shortages of labor and intermediate goods used by these sectors. The slowdown in activity is despite historically low interest rates and elevated savings, which have boosted demand for consumer durables and real estate investment. Some surveys suggest that higher prices may be in the early stages of damping the robust demand. Goods spending has held up surprisingly well despite the rebound in services spending to more normal levels. Aside from travel, the rise of the Delta variant had only a modest impact on services spending with categories like restaurant spending remaining close to its pre-pandemic trend.

After reaccelerating in June and July job gains slowed in August to just 235K. While many analysts viewed the zero job creation in the leisure and hospitality in August as a sign that the Delta variant reduced demand for in-person activity, the rapid rise in wages and elevated vacancies in the sector suggest to us the weak hiring has more to do with a worker shortage issue than a lack of demand. More generally, the labor market has tightened faster than expected and the early end of $300/week enhanced benefits has not led to a significant loosening.

Inflationary pressures are building across both goods and labor markets. The most recent inflation data has moderated as one-time normalization in categories like hotels has played out and the intense price pressure in used autos have moderated. However, we see continued upside from shelter prices along with more generalized wage pressure as factors that can cause higher core inflation rates to be more transitory than most Fed officials expect. Inflation expectations remain very important for Fed officials, with the University of Michigan 5-10y expectation remaining around 3.0%, a level most officials will see as consistent with the Fed's target (this metric tends to run above realized inflation).

Markets continue to price a Fed policy path close to our base-case which includes a tapering of $120bln/mth asset purchases in Q4 '21 and a first rate hike in December 2022. The Fed is in the process of giving increased guidance regarding the exact announcement date and pace of tapering of asset purchases. For now Fed officials see inflationary pressure as largely "transitory" and whether or not the data bears out this assumption will determine the path of future policy rates.

Fiscal developments present a pronounced risk to markets over the remainder of 2021. A government shutdown will need to be averted on September 30th. The country faces a "hard" debt ceiling which we project on November 3rd. A $550bln infrastructure bill has passed in the Senate. However, progressives in the House may not support the bill if it is not paired with a party-line reconciliation bill that is large enough in size and scope. The reconciliation bill has a $3.5trln proposed size, but moderates in the House and Senate plant to reduce the size of it. The corporate tax rate will likely rise from 21% but rather than going to 28% as originally proposed will likely be legislated somewhere around 25-26.5%.

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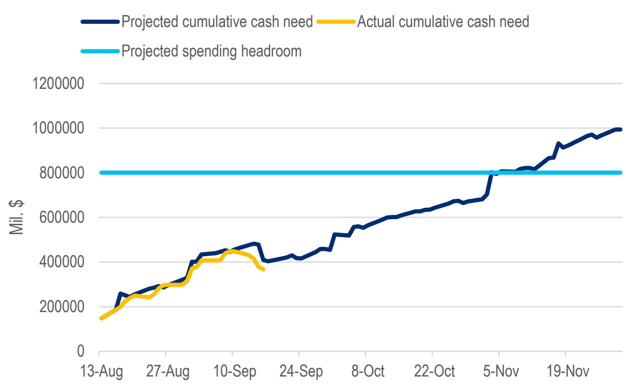
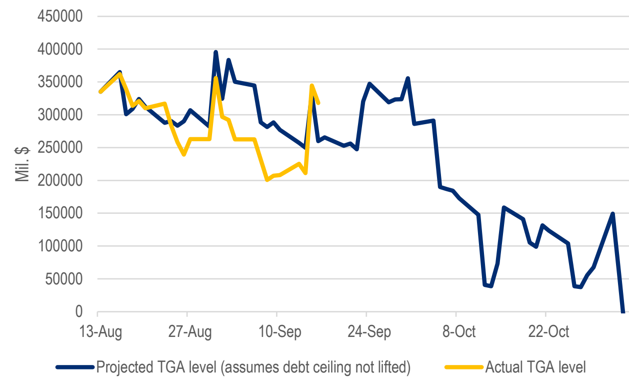
Figure 43. Limited room left below debt ceiling



Source: Citi Research, National Sources

Figure 44. Treasury cash balance will move lower as debt ceiling approaches



Source: Citi Research, National Sources

Figure 45. United States — Economic Forecasts, 2020-2022F

		2021F	2022F	2021 Q2	Q3	Q4	2022 Q1	Q2	Q3	Q4	2023 Q1
GDP	SAAR			6.5	4.7	5.0	3.7	2.9	2.2	1.9	1.9
	YoY	5.8	3.8	12.2	5.5	5.6	5.0	4.1	3.5	2.7	2.2
Domestic Demand	SAAR			7.9	3.8	4.8	3.6	2.9	2.8	2.4	2.4
	YoY	7.0	3.8	12.9	6.7	6.7	5.0	3.8	3.5	2.9	2.6
Consumption	SAAR			11.8	4.2	5.7	3.9	2.9	2.8	2.3	2.3
	YoY	8.4	4.3	16.2	7.7	8.3	6.4	4.2	3.8	3.0	2.6
Business Investment	SAAR			8.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	YoY	7.6	4.6	13.0	9.4	7.4	5.3	4.4	4.4	4.4	4.4
Housing Investment	SAAR			-9.8	0.0	5.8	5.8	6.8	3.9	1.9	1.9
	YoY	11.0	3.7	21.7	8.3	2.0	0.3	4.6	5.6	4.6	3.6
Government	SAAR			-1.5	2.2	1.0	1.0	1.0	1.0	1.0	1.0
	YoY	1.0	1.0	0.0	1.1	1.5	0.7	1.3	1.0	1.0	1.0
Exports	SAAR			6.0	6.0	5.0	5.0	4.2	4.3	4.3	4.3
	YoY	4.7	4.9	18.1	7.5	3.4	5.5	5.0	4.6	4.4	4.3
Imports	SAAR			7.8	9.1	6.5	6.5	6.5	6.5	6.5	6.6
	YoY	14.0	6.9	30.8	14.0	8.2	7.5	7.2	6.5	6.5	6.5
PCE Deflator	YoY	3.6	2.7	3.8	4.2	4.5	3.9	2.8	2.1	2.1	2.0
Core PCE Deflator	YoY	3.1	2.8	3.4	3.6	3.9	3.7	2.8	2.3	2.3	2.0
Unemployment Rate	%	5.3	3.9	5.4	4.8	4.4	4.2	4.0	3.8	3.7	3.7
Federal Gov't Balance (Fiscal Year)	US$bn	-3300	-1600								
	% of GDP	-14.8	-6.7								
General Gov't Balance (Cal Year)	% of GDP	-16.5	-6.7								
Federal Debt (Fiscal Year)	% of GDP	107	107								
General Gov't Debt (Calendar Year)	% of GDP	138	140								
Current Account	US$bn	-616	-628	-550	-560	-570	-570	-570	-570	-570	-569
	% of GDP	-2.7	-2.6	-2.4	-2.5	-2.5	-2.4	-2.4	-2.4	-2.3	-2.3

	2020	2021	2022	2023	2024	2025
Real GDP (%)	-3.4	5.8	3.8	1.8	1.8	1.8
Consumer Inflation (%)	1.2	3.6	2.7	2.0	2.0	2.0
Short-Term Interest Rates (%)	0.5	0.3	0.3	1.1	1.8	1.8
Current Account (% of GDP)	-2.9	-2.7	-2.6	-2.7	-2.6	-2.5
Fiscal Balance (% of GDP)	-16.9	-16.5	-6.7	-5.3	-5.5	-5.5
Gen Govt Debt (% of GDP)	126.0	138.0	140.0	141.0	141.0	141.0
Federal Budget % of GDP	-16.7	-14.8	-6.7	-5.1	-5.1	-4.9
Federal Govt Debt % of GDP	97	107	107	108	109	110

Note: F Citi forecast. YoY Year-to-year percent change. SAAR Seasonally adjusted annual rate. Domestic demand excludes inventories and net exports.

Source: Citi Research, Bureau of Economic Analysis, Bureau of Labor Statistics, I/B/E/S, Treasury Department, Wall Street Journal

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- **Summary view –** Political situation has become quite fluid since PM Suga stepped down from the LDP presidential election. Now we think Mr. Kono is less likely to win with a majority in the first ballot and Mr. Kishida would probably win in a likely run-off. Regardless of who wins, it seems there will be no difference at all in monetary policy for the time being. Growth will likely accelerate from Q4.

Who will win the LDP presidential election? Political situation has become quite fluid since PM Suga decided to step down from the LDP presidential election (which will be held on September 29) as the LDP could have suffered a defeat in the upcoming Lower House elections if he had continued the government. Two weeks ago, the situation for the presidential election appeared to favor Taro Kono when Shigeru Ishiba seemed likely to support Mr. Kono instead of running himself. However, complications have developed since then and now we think Mr. Kono is less likely to win with a majority in the first ballot. We believe a run-off is likely, and think Mr. Kishida could probably win the run-off, though an upcoming series of public debates, town meetings, and other events could shake up the leadership race again. There seem to be some high financial market expectations for Mr. Kono's economic policy, but we currently see little concrete support for such expectations. Mr. Kishida's policy is in the traditional LDP mold, implying stability (and predictability) but also perhaps lacking fresh appeal. Ms. Takaichi is carrying on Abenomics (the three arrows), but she has a different emphasis and we do not think descriptions such as a simple rehash do her policies justice (see Figure 46 and Japan Economics Weekly - LDP leadership election: New twists every day for the details).

Will monetary policy be changed under a new administration? Regardless of who wins the LDP presidential election, we think there is little likelihood of a major turning point in economic policy like Abenomics. In particular, it seems there will be no difference at all in monetary policy for the time being. The current NIRP and YCC will likely be maintained during Governor Kuroda's tenure (through spring 2023). In our view, his successor will take on the first rate hike but the political situation at that time will inevitably have an effect on the selection/appointment of the successor.

Growth will likely accelerate from Q4 this year. We have kept our GDP growth forecasts for 2021 unchanged at +2.2 % as of July, while slightly revising down 2022 forecast to +3.7% from previously +3.8%. We expect growth to accelerate from Q4 this year, given: 1) a decline in COVID-19 cases, 2) the resulting relaxation of limitations on economic activity, 3) further progress in vaccination, and 4) initiatives that take simultaneous account of economic activity and the virus situation (e.g., a relaxation of restrictions on behavior). Our real GDP forecast for Q4 is 1.2% growth QoQ, and 5.0% QoQ annualized, which we see as the start of a catch-up with the US and Europe, having opened up a wide gap through 3Q. Especially, we see personal consumption growth centered on in-person services as the driver for economic activity. In 2022, we expect personal consumption's revival to spill over into non-manufacturing industry capex.

CPI inflation will remain subdued. Our core CPI inflation forecast (i.e., excluding just fresh food but including energy) for 2021 was significantly revised down to -0.2% from +0.3% as of July (2020 outcome includes the net impact of the consumption tax hike and free education, which would be +0.2ppt). This is due to the CPI rebasing to a 2020 base year that brought a large 0.7ppt downward revision from a 0.2% YoY rise in June before the rebasing. However, we note the downward revision caused by this technical factor should have no implications for monetary policy. Meanwhile, 2022 forecast remains unchanged at modest +0.6% as we would

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be cautious on whether the above-trend growth of personal consumption translates into a meaningful boost for inflation going forward.

Figure 46. Comparing the three candidates (Taro Kono, Fumio Kishida, Sanae Takaichi)

	Taro Kono	Fumio Kishida	Sanae Takaichi
Key characteristic	Focusing more on micro policies than macro Succeeding Suga's policies	Focusing on addressing income disparity and shifting away from neoliberalism More traditional LDP policies (in line with his faction's tradition)	Succeeding Abenomics with important revisions
Positives	He will probably take on vested interests regarding micro policies to attract interest and support from the public.	Macro-economic polices are predictable as they are in line with the LDP's tradition	The three pillars are 1) bold monetary easing, 2) strategic fiscal stimulus confined to emergency situations, and 3) bold investment in crisis management and economic growth. Under 3), she plans to spend money on potentially high growth areas.
	Likely focusing on COVID-19, carbon-neutral society and digitalization	Upcoming economic package is also predictable as Kishida referred to 30 trillion yen package	These areas include semiconductors, AI and phama
Negatives (risks)	He doesn't have a coherent macro-economic policies at this point.	Thee could be a mismatch with what equity markets are looking for..	A risk of excessive dependence on fiscal and monetary policy (as with Abenomics)
	Yet to explain how his micro policies will lead to improvement in productivity and potential growth		

Source: Citi Research

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Figure 47. Japan – Economic Forecasts, 2020-22F

		2020	2021F	2022F	2021 2Q	3QF	4QF	2022 1QF	2QF	3QF	4QF	2023 1QF
Real GDP	YoY	-4.6	2.2	3.7	7.7	2.4	0.8	3.2	3.9	4.3	3.3	2.2
	SAAR				1.9	0.8	5.0	5.3	4.5	2.5	1.2	0.8
Domestic Demand	YoY	-3.9	1.5	3.8	4.4	2.0	1.4	3.5	3.8	4.3	3.4	2.4
	SAAR				3.2	0.9	4.8	5.2	4.5	2.6	1.5	1.2
Private Consumption	YoY	-5.9	1.7	4.3	7.3	1.6	0.9	3.7	4.3	5.2	3.9	2.5
	SAAR				3.8	-1.0	6.2	6.1	6.2	2.4	1.0	0.5
Business Investment	YoY	-6.2	1.7	5.3	3.2	6.5	3.0	6.1	5.0	5.2	5.0	3.9
	SAAR				9.5	4.4	3.8	6.8	5.1	5.3	2.8	2.4
Housing Investment	YoY	-7.0	0.1	2.5	-2.8	3.5	4.3	3.9	2.1	2.1	1.8	2.1
Public Investment	YoY	3.7	0.2	2.0	-1.2	-1.0	-0.6	1.5	3.0	2.0	1.5	1.0
Exports	YoY	-11.8	12.8	4.3	26.2	18.9	8.0	6.5	4.3	3.8	2.8	2.3
	SAAR				11.8	4.5	6.1	3.8	2.8	2.5	2.0	1.8
Imports	YoY	-7.3	7.8	4.9	5.0	15.9	11.9	8.5	4.1	3.6	3.4	3.5
	SAAR				21.4	5.4	4.8	3.2	3.2	3.4	3.7	3.5
CPI	YoY	0.0	-0.2	0.7	-0.7	-0.1	0.6	0.3	0.9	0.8	0.7	0.7
Core CPI	YoY	-0.2	-0.2	0.6	-0.6	0.0	0.4	0.0	0.9	0.8	0.7	0.7
Nominal GDP	YoY	-3.8	1.7	4.1	6.4	1.6	0.6	3.3	4.3	4.8	4.0	3.0
Current Account	¥ tn	17.0	14.8	14.7	14.2	12.8	13.7	14.3	14.6	14.9	14.9	15.0
	% of GDP	3.2	2.7	2.6	2.6	2.3	2.5	2.5	2.6	2.6	2.6	2.6
Unemployment Rate	%	2.8	2.9	2.7	2.9	2.9	3.0	2.8	2.8	2.7	2.7	2.6
Industrial Production	YoY	-10.6	7.8	3.8	19.8	9.8	5.2	3.6	3.6	4.3	3.5	2.8
Corporate Profits (Fiscal Year)	YoY	-6.5	20.0	20.0								
General Govt. Balance	% of GDP	-18.0	-10.0	-4.0								
General Govt Debt	% of GDP	270	274	274								

F Citigroup forecast. SAAR Seasonally adjusted annual rate. YoY Year-to-year percent change. Corporate profits are TSE-I consolidated recurring profits.

Note: Forecasts for CPI and core CPI reflect impacts from the consumption tax hike and free education.

Source: Citi Research, National Sources

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- **Summary view** – We upgrade our GDP and HICP forecasts, with real GDP set to expand by 5.2% (+0.6pp) in 2021 and 4.7% (+0.2pp) in 2022, while HICP is likely to jump to 2.3% (+0.3pp) in 2021 and stay at 2.3% (+0.7pp) in 2022. Continued progress on the vaccination front, and ample monetary policy support makes us more confident that real GDP will return to its pre-pandemic trend by the end of 2022, helping to close the gap to the ECB's symmetric inflation target.

Optimism off-record highs as economic activity momentum is peaking – Surveys suggest that maximum optimism is probably behind us as the Euro area economy recovers rapidly from the pandemic shock. After a gain of 2.2% QQ in 2Q-21 GDP, we estimate that real GDP will likely increase again by ~2.2% QQ in 3Q-21 before softening significantly to around 0.9% QQ in 4Q-21. If our forecast is accurate, Euro area GDP will finish the year 0.5% above its 4Q-19 level. Once again, we upgrade our 2021-23 GDP forecasts to 5.2% in 2021, 4.7% in 2022 and 2.6% in 2023. We now estimate that real GDP will likely catch-up with its pre-pandemic trend by the end of 2022.

Could the delta variant derail the recovery? While Covid-19 cases rose again during the summer, evidence so far in Europe from the delta impact suggest that risks of an economic downturn are moderate. To be sure, containment measures are changing in nature and are no longer driven by (just) infection rates, as vaccines help a lot in easing the infection/hospitalization link. We also argue that the connection between health restrictions and people's mobility is now weaker than in previous waves, as well as the relationship between mobility and economic growth. Our base case scenario still does not envisage full normalization of public health limitations and/or behavior until well into 2022. For more details on downside/upside scenarios for the GDP trajectory, see Europe's Delta Wave: Longer but Lingering.

Change of EU fiscal rules? – The Eurogroup began discussing changes that could apply from 2023, so that countries could submit updated stability programmes in Apr-22 perhaps incorporating a green golden rule, as well as agreeing on strategies to deal with much increased government debt. We think that a framework focusing primarily on a debt-reduction rule could guarantee a more balanced policy trade-off between supporting (nominal) GDP and reducing budget deficits.

HICP: rising strongly into year-end, to peak at ~3.5% YY in 4Q-21 – At the start of September, we lifted our 2021 HICP forecast to 2.2% and the 2022 to 1.9% (from 1.6%). The latest surge in energy prices, and in particularly oil and natural gas, is likely to push HICP annual inflation to at least to 3.7% YY in Nov and Dec-21. We therefore add another 0.1pp to the 2021 HICP forecast to 2.3% and 0.4pp to 2022 which should also average 2.3%. We continue to think that this inflation spike will prove transitory, expecting HICP to fall back to around 1.5% in 2023. Inflation markets meanwhile attach a much higher degree of credibility to the ECB's ability to deliver inflation on its new symmetric inflation mandate.

ECB: a continuous shift toward policy conservatism – While the ECB governing council's decision on 9 Sep matched quite accurately our own expectations, and generally that of the majority across the market, the explanation provided strikes us as confirming the interpretation we offered last week, that of a continuous shift of the reaction function in a conservative direction. More specifically, we draw three conclusions from the announcement and Q&A. First, the ECB assigns greater importance to interest rate policy compared to asset purchases. Second, it seems that the majority of the council appears to have concluded that risks to inflation are to the upside. Third, upward revision to GDP and HICP projections seem to us to indicate a view by the ECB that output and prices will converge reasonably rapidly towards the pre-pandemic path.

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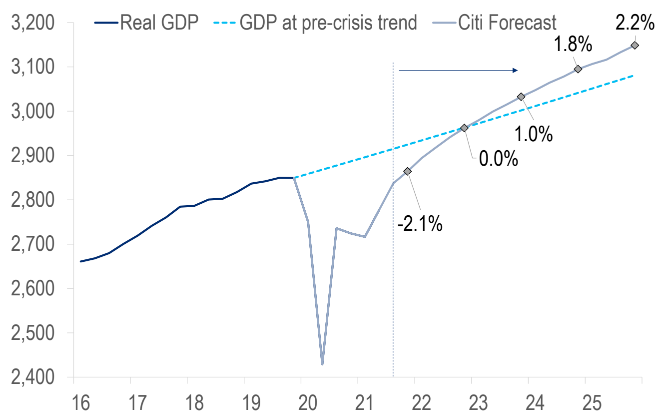
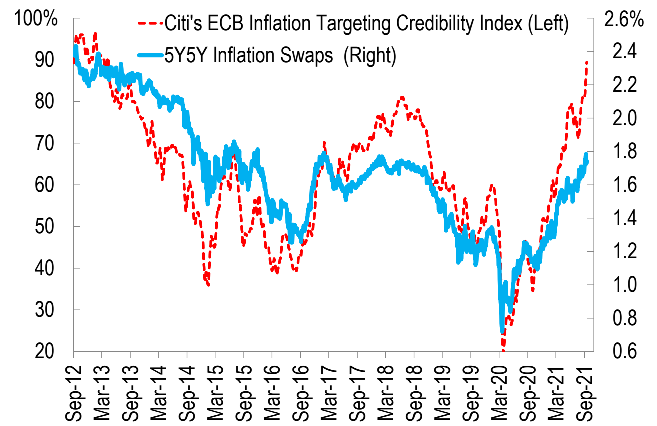
Figure 48. Euro Area – Real GDP (€bn), 2016-2025F



Source: Citi Research, Eurostat

Figure 49. Euro Area – ECB Inflation Targeting Credibility Index and 5Y5Y Inflation (%), Sep-12-Sep-21



Source: Citi Research, Bloomberg

Figure 50. Euro Area — Economic Forecasts, 2020-2023 1QF

		2020	2021F	2022F	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
Real GDP	YoY	-6.5	5.2	4.7	14.3	3.7	5.1	6.5	5.1	3.7	3.4	2.9
	SAAR	-	-	-	9.2	9.0	3.8	4.3	3.3	3.3	2.8	2.4
Final Domestic Demand	YoY	-6.1	3.6	4.3	12.0	2.0	4.2	6.3	4.6	3.3	2.9	2.7
Private Consumption	YoY	-8.0	2.7	4.7	12.1	0.5	4.7	8.0	5.1	3.2	2.8	2.5
Government Consumption	YoY	1.4	3.5	2.3	6.8	2.1	2.3	3.0	2.3	2.1	1.8	1.7
Fixed Investment	YoY	-7.5	6.2	5.2	17.9	5.8	5.0	5.8	5.9	4.9	4.2	4.3
— Business Equipment	YoY	-10.8	6.7	6.9	20.0	8.0	6.6	8.8	7.7	6.0	5.2	4.3
— Construction	YoY	-5.7	5.7	3.3	15.7	3.4	3.2	2.5	3.9	3.6	3.2	4.2
Stocks (Contrib to YY GDP Growth)	a	-0.1	0.8	0.5	0.4	1.7	1.2	0.7	0.5	0.5	0.4	0.2
Exports	YoY	-9.3	9.2	5.0	24.5	9.2	6.0	6.1	5.4	4.1	4.3	4.2
Imports	YoY	-9.1	7.7	5.3	20.6	10.0	6.7	6.9	5.6	4.5	4.2	4.2
HICP	YoY	0.3	2.3	2.3	1.8	2.8	3.6	2.9	2.8	2.1	1.5	1.3
CPI Ex Energy and Food	YoY	0.9	1.4	1.4	0.9	1.4	2.0	1.4	1.8	1.5	1.1	1.2
Unemployment Rate	YoY	7.8	7.8	7.6	7.8	7.7	7.6	7.6	7.8	7.5	7.3	7.2
Current Account Balance	EUR bn	239.1	370.0	396.3								
	% of GDP	2.1	3.0	3.1								
General Government Balance	EUR bn	-820.2	-850.1	-551.8								
	% of GDP	-7.2	-7.0	-4.3								
Government Primary Balance	% of GDP	-5.7	-5.4	-2.6								
General Government Debt	EUR bn	11163.4	12519.9	13297.9								
	% of GDP	98.0	102.7	102.9								
Gross Operating Surplus	YoY	-4.9	9.4	6.8								

Note: F Citi forecast. We publish further details of our European forecasts monthly in European Economic Forecast Monthly

Source: Citi Research, Eurostat

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Germany

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- **Summary view** – The economy grew strongly over the summer, but supply shortages and inflation trigger another slight downgrade. Once resolved, stronger growth in 2022 might be amplified by a new, more left-leaning government.

We are still hopeful that the economy can deliver 3% growth this year and merely adjust our headline GDP growth forecast for the slight undershoot of our 2Q estimate (1.8% QQ vs. our July expectation of 2.1%). Our confidence that growth will be stronger in Q3 mostly rests on the fuller re-opening of the economy over the summer. Google mobility rose as much between Q2 (81% of the baseline) and Q3 (95%) as it did between Q1 (67%) and Q2. OpenTable restaurant bookings growth even accelerated from 0% of normal in Q1 to 40% in Q2 and now 140% in Q3. So far, Germany has evaded a significant new wave of the pandemic. The relatively moderate increase in case numbers in August has already levelled off. On a separate note, but also importantly, industrial output looks set for a moderate gain in Q3, following declines in Q1 and Q2. Finally, net exports probably made a positive contribution to GDP growth in Q3.

However, the manufacturing sector continues to face headwinds from supply shortages (Germany - Economic Headwinds are Blowing Stronger). As a result, production is falling ever further behind factory orders. Increasing fragilities in the Chinese economic outlook risk having an outsized effect on German business confidence and thus investment. We stress, however, that so far relevant Chinese growth, i.e. the Li Keqiang index which leads Ifo Manufacturing expectations by 1-2 quarters, remains high enough for a continued German expansion.

Another problem for the growth outlook is high inflation, which seems to be weighing on consumers' willingness to spend. Consumer price inflation is now running at 4%, half a percentage point higher than we expected in the last forecast round. Sharply higher goods prices due to increasing commodity costs and production disruptions have triggered large price hikes for households, reducing their spending power. Since households seem to see these price hikes as largely temporary, they may be postponing purchases. Purchasing intentions have not recovered as they did last summer. Retail sales look essentially flat in Q3 and car registrations have barely rebounded from the sharp drop in Q2. While headline inflation rates will drop sharply at the start of next year, the next price shock is already in the making in electricity prices, with producer prices up 13% so far this year, the largest annual increase since 2006.

For the time being, we anticipate that supply shortages and price spikes ease over the coming months. Unions' wage demands this autumn remain subdued with 5.0% for state public sector workers and 5.2% for construction workers, both below the standard 6%, suggesting no second-round effects so far. That would allow households to spend their pent-up savings, which we estimate at €180bn by Q2 2021 and thus over 5% of GDP. Even more urgently, it would re-launch the multi-year manufacturing upswing we are expecting, raise employment, productivity and wages and lead to a more sustained closing of the output gap.

We revise our growth forecasts up for 2022 and 2023 slightly to reflect our changed political base case. Our two most likely scenarios for the next coalition are both led by the SPD and the Greens (see Germany Economics and Multi-Asset - How would Markets Welcome a Potential Chancellor Scholz?). Compared to our previous base case of a 'Jamaica' coalition, that should add 0.5-1% of GDP of fiscal tailwind (less tightening) in the form of increased welfare and additional public investment. While we expect this stimulus to be reversed later, mainly because of tax hikes, this boosts our forecasts by 0.2pp for the coming two years compared to our July calls.

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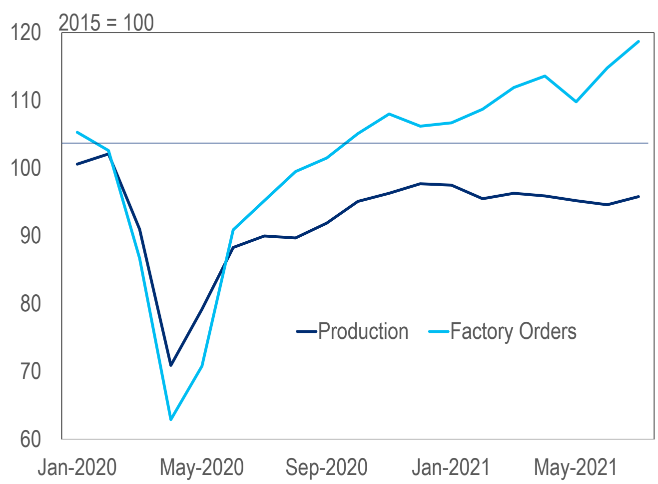
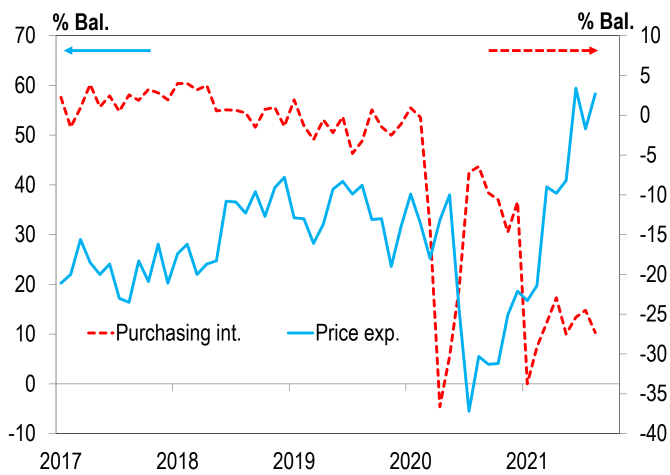
Figure 51. Germany – Manufacturing Output and Factory Orders (2015 = 100)



Source: Citi Research, Destatis

Figure 52. Germany – GfK Purchasing Intentions vs. Price Expectations (Index)



Source: Citi Research, GfK

Figure 53. Germany — Economic Forecasts, 2020-2023 1QF

		2020	2021F	2022F	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
Real GDP	YoY	-4.9	3.1	5.2	9.4	3.1	3.5	6.8	6.1	4.2	3.7	3.2
	SAAR	-	-	-	6.7	11.4	4.7	4.4	4.0	3.7	2.6	2.6
Final Domestic Demand	YoY	-3.3	1.1	5.3	5.7	0.8	3.0	7.4	6.1	4.3	3.6	3.1
Private Consumption	YoY	-6.1	-0.4	6.7	6.1	-1.1	3.4	10.4	6.1	5.0	3.7	3.0
Government Consumption	YoY	3.5	2.7	2.3	3.7	2.5	2.1	3.3	2.0	2.0	2.0	2.0
Fixed Investment	YoY	-3.0	3.1	5.1	6.7	4.1	2.8	4.7	5.6	5.0	4.9	4.6
— Business Equipment	YoY	-12.3	7.8	9.5	18.9	6.5	6.7	9.5	11.6	9.1	8.0	6.7
— Construction	YoY	1.6	1.5	3.2	2.0	4.1	1.7	2.6	3.3	3.2	3.6	4.1
Stocks (Contrib. to Y/Y GDP Growth)		-0.9	1.5	0.0	0.9	2.5	2.0	0.1	0.0	0.0	0.0	0.0
Exports	YoY	-10.1	8.3	3.9	25.3	7.8	3.7	3.3	3.9	3.9	4.4	4.2
Imports	YoY	-9.2	8.0	4.0	19.4	9.7	7.7	4.3	3.3	4.0	4.2	4.1
HICP	YoY	0.4	3.0	2.4	2.2	3.5	4.5	2.8	2.4	2.3	2.0	1.5
Unemployment Rate	YoY	3.9	3.8	3.7	3.8	3.8	3.6	3.4	3.6	3.9	3.8	3.5
Current Account Balance	EUR bn	228.8	268.4	256.7								
	% of GDP	6.8	7.6	6.9								
General Government Balance	EUR bn	-140.9	-223.0	-130.9								
	% of GDP	-4.2	-6.4	-3.5								
Government Primary Balance	% of GDP	-3.5	-5.6	-2.9								
General Government Debt	EUR bn	2325.5	2583.5	2714.4								
	% of GDP	69.9	73.6	72.5								
Gross Operating Surplus	YoY	-10.2	15.5	14.1								

Note: F Citi forecast. YoY Year-to-year growth rate. The German annual figures are derived from quarterly Bundesbank data and adjusted for working days. Forecasts for GDP and its components are calendar adjusted.

Source: Citi Research, Deutsche Bundesbank, Statistisches Bundesamt

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France

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- **Summary view** – We upgrade our 2021/22 forecasts again to 6.3% (+0.3pp) and 4.1% (+0.3pp) respectively, to reflect high levels of confidence across sectors, while the pick-up in vaccinations points to a more complete recovery. Politics are likely to stay in a state of flux as the focus shifts to the elections of 2022.

Revising up 2021 GDP – Estimates from BdF & INSEE suggest that real GDP was unchanged at 1% below its pre-pandemic level in August, the same as in July, and up from -2% in June. For Sep-21, activity looks set to progress to around 0.5% below the pre-pandemic level. We forecast that GDP growth will likely to soften from around 2% QQ in 3Q-21 to ~1.5% QQ in 4Q-21 as the economy returns slightly above its pre-pandemic level. We add 0.5pp to our 2021 GDP forecast to 6.3%.

Still strong GDP growth expected in 2022 – A key assumption for 2022 is that Covid-19 cases remain low, and that herd immunity is achieved by end-21 through a continued increase in vaccination. A major input of the 2022 forecast will be how much of the savings accumulated during the pandemic households are willing to spend, especially if progress in the labour market stalls and inflation surprises to the upside. As support measures begin to be withdrawn, GDP will gradually return to its potential level. We add 0.3pp to our 2022 GDP forecast to 4.1%.

Energy-driven spikes in inflation – In the short-term, an important driver of the inflation forecast will be the extent to which higher energy prices, in particular oil and natural gas, will feed through into the CPI. In September, we add 0.4pp to the 2021 HICP forecast to 2.0% and 0.8pp to the 2022 HICP forecast to 2.2%, even if we see the annual HICP rate falling back from a peak of around 3.1% in Oct-21 to 1.5% YY in Dec-22. The extent of the rise in energy inflation is such that the government is planning to give eligible households a supplementary energy voucher worth €100 in Dec-21, in addition to the €150 voucher that 5.8mn lower income households already receive.

Hiring difficulties, supply-chain tensions and wages – In coming quarters the main worry is that inflation could increase if, in addition to the fact that some 50% of firms [+2pp vs. July] report supply-side issues, the proportion of firms reporting hiring difficulties (51% [+2pp] in industry and 61% [+1pp] in construction in August compared to July according to BdF) fails to decline as the partial employment support schemes comes to an end. This would likely drive wages up, especially as the government announced in early September that the minimum wage would increase by 2.2% on 1 Oct (worth €35/month in light of the upside surprise in inflation), on top of the €15/month increase that took place on 1 January 2021.

Fiscal policy: a little bit more room for manoeuvre? – It is hard for a President who is likely to campaign for a second term in the spring of 2022 not to use fiscal policy to his advantage, ensuring that any tightening will be both delayed and limited. To be sure, faster-than-expected GDP growth is allowing the government to spend a little bit more than planned, but a part of the windfall from higher revenues is still likely to be directed towards reducing the debt burden after the pandemic.

2022 Presidential elections – Polls are beginning to incorporate Eric Zemmour, (positioned on the far-right of the spectrum, pushing a deep-rooted nationalist, anti-immigrant agenda and who has recently taken aim at RN's Marine Le Pen) in their sample of voting intentions for the first round on 10 April. Importantly, whoever becomes President might suffer from limited legitimacy if the turnout is lower than in 2017, replicating the trend in recent intermediate elections. Without a strong/stable majority in the lower house, a President would be hard pressed to deliver on his/her domestic electoral manifesto, and influence the European project.

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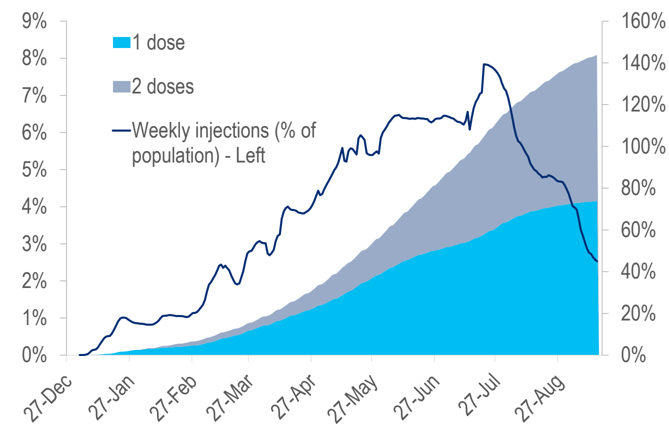
Figure 54. France – Demand Forecasts, Employment and Selling Price Expectations (SD from L-T Avg.), Jan-07-Sep-21.

Source: Citi Research, INSEE

Figure 55. France – Percentage of people vaccinated with one or two doses and weekly injections (% of population), Dec-20-Jul-21



Source: Citi Research, Public Health Authority

Figure 56. France — Economic Forecasts, 2020-2023 1QF

		2020	2021F	2022F	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
Real GDP	YoY	-8.0	6.3	4.1	18.7	2.1	4.8	5.8	5.2	3.4	2.3	1.8
	SAAR	-	-	-	4.5	8.5	6.2	4.0	2.0	1.5	1.5	2.1
Final Domestic Demand	YoY	-6.7	6.0	3.4	18.9	0.5	4.2	5.1	4.2	2.6	1.9	1.4
Private Consumption	YoY	-7.2	3.1	3.5	13.0	-2.5	4.2	5.2	4.6	2.6	1.9	1.5
Government Consumption	YoY	-3.2	5.0	1.6	17.6	-0.2	0.8	1.9	1.5	1.5	1.3	0.9
Fixed Investment	YoY	-8.9	13.3	4.7	32.9	7.9	7.0	7.6	5.7	3.5	2.2	1.5
— Business Equipment	YoY	-8.1	14.0	5.0	34.1	7.5	7.9	7.8	6.3	3.8	2.1	1.4
— Construction	YoY	-	-	-	-	-	-	-	-	-	-	-
Stocks (Contrib. to Y/Y GDP Growth)		-0.2	0.4	0.6	0.1	0.2	0.4	0.1	0.1	0.1	0.1	0.1
Exports	YoY	-16.1	8.1	4.9	27.7	8.8	5.9	6.6	6.3	3.8	2.9	3.0
Imports	YoY	-12.2	7.8	4.2	21.8	7.3	7.0	6.3	5.2	3.0	2.4	2.6
HICP	YoY	0.5	2.0	2.2	1.8	2.2	3.0	2.7	2.6	1.8	1.6	1.3
Unemployment Rate	YoY	7.9	7.7	7.5	7.8	7.7	7.6	7.5	7.6	7.5	7.5	7.4
Current Account Balance	EUR bn	-44.0	-26.3	-24.4								
	% of GDP	-1.9	-1.1	-0.9								
General Government Balance	EUR bn	-211.5	-198.3	-117.1								
	% of GDP	-9.2	-8.0	-4.4								
Government Primary Balance	% of GDP	-7.9	-6.8	-3.5								
General Government Debt	EUR bn	2650.1	2848.4	2965.5								
	% of GDP	115.2	114.7	112.6								

Note: F Citi forecast. YoY Year-to-year growth rate

Source: Citi Research, Insee

Prepared for Ariff Roduan

Italy

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- **Summary view** – We upgrade our 2021 GDP forecasts on the back of an earlier-than-expected re-opening, fast vaccinations, and favourable financial conditions. The recovery plan will lift investment and GDP in 2023-2025, likely setting the public debt/GDP on a downward trend.

2Q GDP rebounded more strongly than we expected (+2.7% QQ), thanks to a faster vaccination campaign and earlier re-opening of economic activities. Monthly data for 3Q point to another fast QQ pace, albeit probably slower than 2Q. The risks associated with the Delta variant have so far been relatively contained, and this did not seem to have impacted the summer tourism season in a meaningful way. Italy has one of the lowest Covid incidence rates at the moment in Europe, and one of the highest vaccination coverage among the vulnerable groups, thus limiting the risks of new lockdowns in the winter. We revise our 2021 GDP growth up to 6.3% (Bloomberg consensus: 5.9%, from 5% in July). Growth should stay strong in 2022 too, although GDP pre-Covid *trend* will not be reached until late 2023. Growth will slow in 2023-24 (to ~2.5% annually) as the post-Covid technical rebound fades, but it will still be supported by strong investment funded via the NextGenEU.

Headwinds… The losses accumulated during the pandemic are still partly hidden: some €71bn loans are still subject to the moratoria, equivalent to ca. 5% of outstanding loans to NFC and households, still potentially resulting in higher NPLs in 2022. However, loans under moratoria have been falling fast since March, without any noticeable impact on NPLs so far. We expect the jobless rate to remain at above pre-Covid levels until the pool of furloughed workers is re-absorbed, which may take a while. We believe the post-Covid economic reconfiguration to be slower in Italy due to a less efficient and less flexible re-allocation of labour and capital.

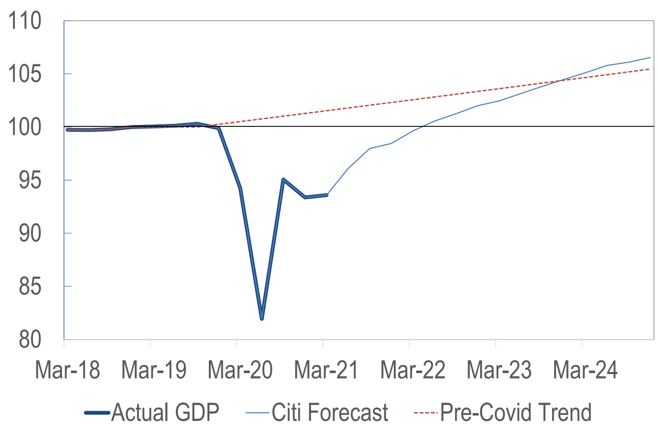
… and tailwinds. Two additional fiscal packages since the start of the year – worth some 4.5pp of GDP – on top of an already-expansionary 2021 budget put Italy well ahead of other EA countries in terms of fiscal support. Yet, stronger than expected tax revenues and a lower draw-down from the fiscal support measures imply the 2021 budget deficit may be much smaller than the targeted 11.8% of GDP, probably closer to last year's (still-elevated) level (9.5%). We believe ample fiscal support will continue in 2022, which remains necessary to limit scarring from the pandemic and help medium-term fiscal sustainability. This is obviously dependent on sustained European support (via the ECB, and NextGenEU).

All-in on the NextGenEU. Italy's plans to draw down from the NextGenEU are among the most ambitious: some 10% of GDP additional public investment/tax breaks over the next 6 years, of which 4.6pp of GDP funded via grants. We assume not all funds will be deployed (due to difficulties in spending on public investment), but still expect a boost to 2022-24 investment and GDP, helping to return Italy to the pre-crisis *trend* by 2024.

Politics vs. policy. Political uncertainty may still resume after the municipal elections on 3-4 October, but risks of an early election in 1H-22 have diminished in our view. Draghi is unlikely to remain as PM after the next election (although this scenario is not completely impossible), as more likely to become the next President of the Republic. The centre-right bloc is likely to win the next election in 2023 but this would not entail the same degree of uncertainty as in the past because: (i) Draghi's recovery plan provides a straitjacket for any future administration on economic policy; (ii) anti-EU rhetoric is not a vote-winner any more. Deviations from the recovery plan's policy path are possible, but costly in terms of withholding of EU funds. The reform drive will probably slow after Draghi departs as PM, but it is unlikely to be reversed, in our view.

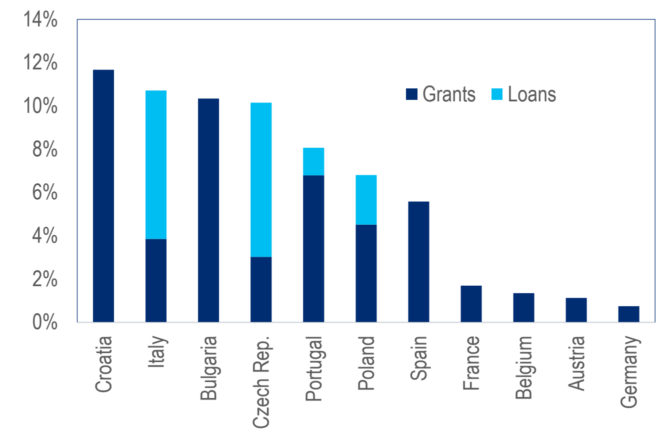
Prepared for Ariff Roduan

Figure 57. Italy: Real GDP Forecasts, 2018-2025F



Source: Citi Research, National Sources

Figure 58. Recovery&Resilience Facility: Draw-Down Plans (% of GDP)



Source: Citi Research, National Sources

Figure 59. Italy — Economic Forecasts, 2020-2023 1QF

		2020	2021F	2022F	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
Real GDP	YoY	-8.9	6.3	4.5	17.3	3.1	5.4	6.5	4.6	3.3	3.6	2.8
	SAAR	-	-	-	11.2	8.1	2.0	4.9	3.8	2.8	3.0	1.8
Final Domestic Demand	YoY	-8.1	6.3	4.8	15.4	3.7	6.0	7.0	4.6	3.7	3.7	3.7
Private Consumption	YoY	-10.7	5.0	4.7	14.2	3.0	6.7	8.6	4.3	2.9	2.9	2.8
Government Consumption	YoY	1.6	1.1	2.6	1.6	1.0	0.2	1.4	3.0	2.9	2.8	2.8
Fixed Investment	YoY	-9.2	17.2	7.3	38.2	8.7	10.0	7.9	7.3	6.9	7.0	7.0
— Business Equipment	YoY	-11.3	12.2	8.0	26.4	7.9	7.9	8.2	8.4	7.7	7.7	7.7
— Construction	YoY	-6.6	23.5	6.5	54.0	9.7	12.4	7.6	6.1	6.1	6.1	6.1
Stocks (Contrib. to Y/Y GDP Growth)		-0.3	-0.4	-0.2	-1.1	0.4	-0.1	-0.8	0.0	0.0	0.0	0.0
Exports	YoY	-14.5	13.7	5.4	38.4	8.3	7.0	7.5	5.5	4.0	4.6	4.6
Imports	YoY	-13.1	12.6	5.6	27.2	13.0	8.8	6.4	5.5	5.4	5.1	6.5
HICP	YoY	-0.1	1.8	2.6	1.2	2.0	3.4	2.9	3.3	2.5	1.6	0.0
Unemployment Rate	YoY	9.3	9.8	9.3	9.8	9.8	9.7	9.5	9.3	9.2	9.1	8.9
Current Account Balance	EUR bn	58.6	55.5	47.5								
	% of GDP	3.5	4.0	3.2								
General Government Balance	EUR bn	-156.9	-164.1	-107.7								
	% of GDP	-9.5	-9.3	-5.7								
Government Primary Balance	% of GDP	-6.0	-6.1	-2.8								
General Government Debt	EUR bn	2573.4	2737.5	2845.2								
	% of GDP	155.9	154.4	151.5								

Note: F Citi forecast. YoY Year-to-year growth rate

Source: Citi Research, ISTAT

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Spain

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- **Summary view** – After a severe hit from the pandemic in 2020, the economy has been recovering faster than expected in 2021. We make noticeable up-revisions to 2021 and 2022 GDP forecasts. We still see some risks around disbursements of EU funds, due to difficulty in delivering on the reform agenda.

The impact of the fifth Covid wave through the summer has been much smaller than we initially feared. Despite some localized restrictions, and limitations to foreign tourist inflows, domestic demand and job growth were strong. Very high vaccination rates, especially among vulnerable groups, allowed the link between new infections and hospitalizations to be cut back. We do not see major risks of new lockdowns in the winter. We revise 2021 GDP growth up from 5.2% to 6.4% and 2022 from 5.7% to 6.1%. We expect the recovery to be mainly driven by investment and exports.

Bigger drop, bigger rebound. 2020 Spanish GDP experienced one of the largest declines in Europe due to the pandemic. This implies that: (i) the near-term rebound is bound to be sharper than elsewhere and (ii) scarring from the pandemic could be more significant than elsewhere, after the technical rebound. Defaults, kept in check until now by loan moratoria, may rise in 2H-21.

The inflation hit – Spain, more than other countries, is sensitive to gas price swings. The latest surge in natural gas prices has sent inflation above 3%, while core inflation remains just above 0%. Despite the latest government measures to offset the electricity price increases, we still think consumption will be hit in 4Q-21 and 1H-22 by the loss in real purchasing power.

Long-lasting impact of Covid on tourism – Tourism accounts directly and indirectly for around 15% of Spanish GDP and ca. 60% of tourism expenditure is made up by foreigners, a much larger share than in Italy or France. Hotel occupancy in July, was still 30% below 2019 levels, 57% below for foreign tourists. We do not see tourist inflows reaching pre-Covid levels until summer 2022 at the earliest. Ample spare capacity remains in the sector, putting downward pressures prices.

NextGenEU – The Spanish RRP allocates €69.5bn in grants (5.6% of GDP), while the decision to utillise the loans (€70bn) is postponed to 2023. This makes it a relatively smaller spending plan than others. Spain is reportedly asking for €19bn, 1.6% of GDP, already in 2021 as pre-financing, making the spending timeline more front-loaded than in other countries. However, given delays in adopting the NextGenEU, we expect only a small fraction of spending to start in the near term.

The main hurdle we see to the deployment of the EU funds is the ability to deliver the reform agenda. Spain has committed to three main reforms: (i) of the **labour market** aimed at reducing temporary jobs and structural unemployment; (ii) of the **pension system** to increase retirement age and raise social security contributions of the self-employed; and (iii) **higher taxation** to reduce the structural budget deficit. All three reforms can be very controversial within the minority coalition government, let alone within the opposition conservative parties (which polls suggest may win the next general election).

Sovereign rating risks – The budget deficit will likely drop to around 8% of GDP in 2021, from 11% in 2020, but we expect it to remain elevated in coming years as the scars of the pandemic will likely affect the tax base. Fiscal deterioration and the ongoing political polarization represent downside risks for the sovereign rating, in our view. Despite the improving relationship with pro-independence Catalonia recently, a major hindrance on rating upgrades in the past few years, tensions may re-emerge in case of the centre-right bloc coming to power after the next election.

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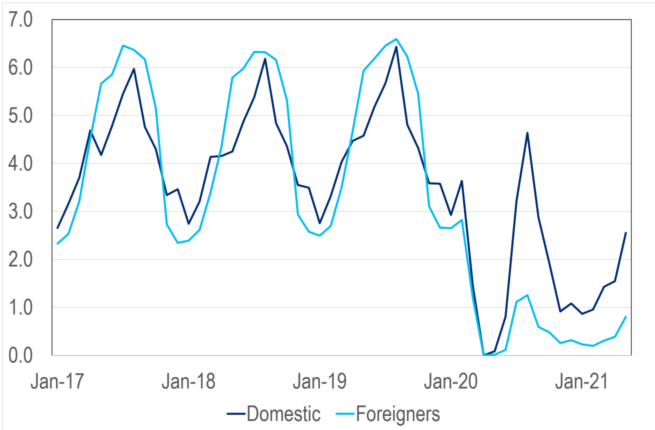
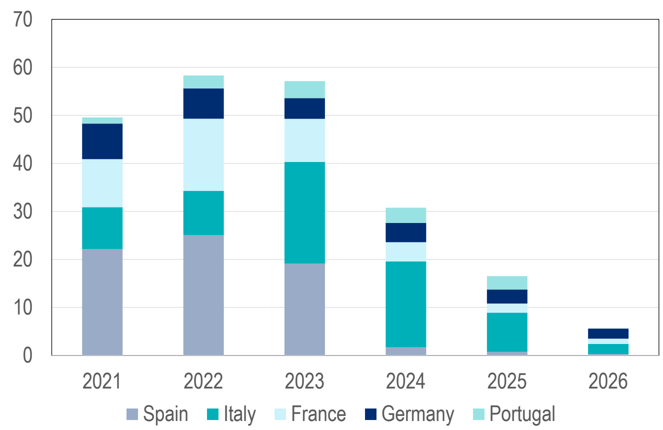
Figure 60. Hotel Occupancy (mln of travelers)



Source: Citi Research, National Sources

Figure 61. EU Recovery Fund: Expected Payouts of Grants (EUR bn)



Source: Citi Research, National Sources

Figure 62. Spain — Economic Forecasts, 2020-2023 1QF

		2020	2021F	2022F	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
Real GDP	YoY	-10.8	6.4	6.1	19.8	5.9	6.3	8.4	6.4	4.7	5.3	4.4
	SAAR	-	-	-	11.5	14.8	1.3	6.3	3.6	7.6	3.7	2.9
Final Domestic Demand	YoY	-8.8	7.6	5.5	20.7	5.6	6.4	8.1	5.1	4.3	4.3	3.9
Private Consumption	YoY	-12.2	10.3	5.7	28.7	7.9	8.7	10.9	4.6	3.5	3.9	2.4
Government Consumption	YoY	3.8	2.9	2.4	3.4	2.6	2.4	3.0	2.7	2.3	1.4	1.1
Fixed Investment	YoY	-11.4	5.7	8.2	19.9	2.0	4.3	5.5	9.5	8.9	8.8	11.5
— Business Equipment	YoY	-9.0	12.9	9.5	32.1	7.2	8.5	8.4	9.7	10.3	9.4	11.6
— Construction	YoY	-14.0	-1.2	5.7	10.4	-4.0	-0.7	1.9	5.9	7.2	7.9	11.3
Stocks (Contrib. to Y/Y GDP Growth)		-0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Exports	YoY	-20.2	11.5	10.4	34.1	13.9	7.7	11.9	13.5	6.8	9.4	7.7
Imports	YoY	-15.8	13.3	11.1	36.8	13.1	8.6	12.2	12.1	9.5	10.4	9.9
HICP	YoY	-0.3	2.4	1.9	2.3	3.3	3.3	2.8	2.2	1.5	1.2	1.1
Unemployment Rate	YoY	15.5	14.8	13.0	15.3	13.9	14.1	14.0	13.2	12.3	12.8	12.9
Current Account Balance	EUR bn	7.7	10.6	15.7								
	% of GDP	0.7	0.9	1.2								
General Government Balance	EUR bn	-123.1	-99.2	-68.0								
	% of GDP	-11.0	-8.2	-5.2								
Government Primary Balance	% of GDP	-8.7	-6.1	-3.2								
General Government Debt	EUR bn	1345.6	1444.8	1512.8								
	% of GDP	120.0	118.7	115.3								

Note: F Citi forecast. YoY Year-to-year growth rate.

Source: Citi Research, INE

Prepared for Ariff Roduan

Greece and Portugal

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Greece

Domestic resilience. Despite the sizable reliance on the tourism sector and the large drop in tourist inflows since the start of the pandemic, the GDP decline in Greece was broadly similar to the rest of Europe, thanks to resilience in domestic demand. The 2021 tourism season has been better than expected, approaching close to 2019 levels. We are revising up 2021 GDP growth to around 9% from (around 5.3% before), and revising 2022 down slightly to reflect a higher starting point.

Ample NextGenEU resources should support growth in coming years. The Greek recovery plan commits the largest amount of resources as a pct. of GDP in the Eurozone, at 16% of GDP in the next 6 years (of which nearly 10% in grants). The grants will go towards financing public investment projects – mainly redeveloping the transportation system, building renovation and providing support to Covid-hit tourism and cultural services industries. The loans will be used to co-finance private investment at market conditions, therefore adding to gross public debt but probably not to net debt. The clear main aim of the RRP is to kick-start investment (both domestic and foreign), after a decade-long underperformance, and to improve the overall business environment. The bulk of the reforms is concentrated simplification of the business environment and licensing, and on ways to improve the ease of doing business.

The Greek recovery plan has good chances to succeed in its main objectives, in our view. The GDP boost will be substantial – the Bank of Greece estimated some 7pp by 2026, which is almost 1.5pp higher GDP growth per year. Given the prolonged underinvestment and the scope for reforms, there is ample scope for investment opportunities.

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Portugal

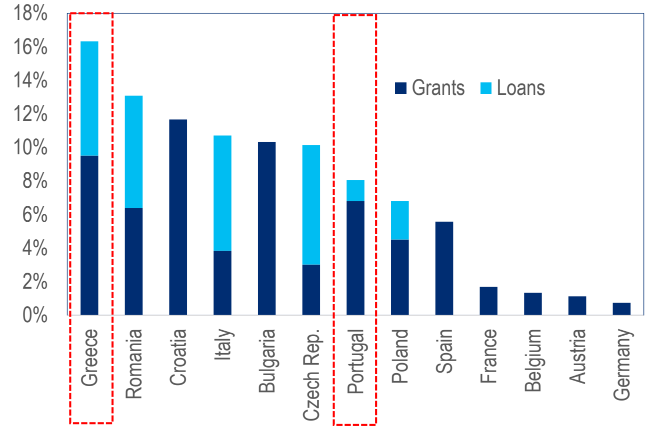
Despite the resurgence of Covid cases in early summer, the impact on GDP has been much smaller than in previous waves. Moreover, 2Q GDP came well above expectations (+4.9% QQ). We are revising 2021 growth up and expect growth to accelerate still further in 2022. Portugal should benefit from the manufacturing rebound and the easing of supply chain disruptions, which helps to offset the drag from tourism. The construction boom has accelerated during Covid, in contrast to a downturn in Spain, and given ongoing very favourable financing conditions this is expected to continue.

Portugal's recovery plan envisages total EU resources available for about 8% of GDP. The main objective of the plan is to improve "economic resilience" and foster export competitiveness – this transpires in the investment priorities and in the reform agenda. Lifting exports as a share of GDP (to 53% of GDP by 2030 from 43% in 2019), improve the quality of human capital (via more investment in education) and doubling R&D investment are among the main stated priorities, which clearly differentiate the Portuguese plan from others. The largest investment component envisages direct capitalization of private companies (€2.9bn), followed by investment in affordable housing, public healthcare and education services.

The government estimates that GDP could receive a knock-on effect from the RRP of 0.7pp per year until 2026 and we think these are relatively realistic expectations. We expect higher aggregate demand, via private and public investment in the next three years, but more importantly we think the plan could have a meaningful effect on medium-term potential output. We expect higher nominal growth to push down the public debt ratio.

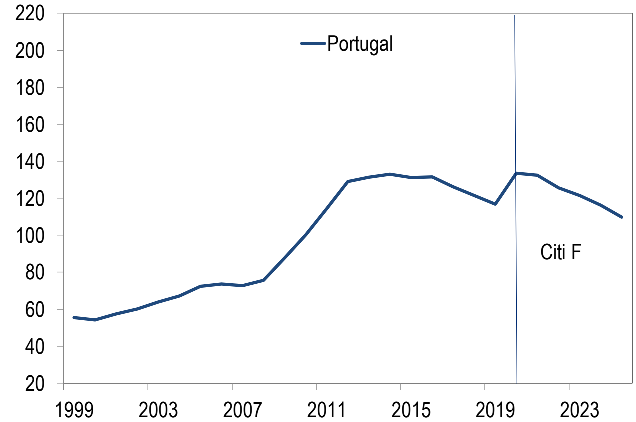
Prepared for Ariff Roduan

Figure 63. Recovery Fund Draw-Down Requests (% of GDP)



Source: Citi Research, National Sources

Figure 64. Public Debt (% of GDP)



Source: Citi Research, National Sources

Figure 65. Greece and Portugal – Economic Forecasts, 2020-2022F

		Greece			Portugal		
		2020	2021F	2022F	2020	2021F	2022F
Real GDP	YoY	-7.8	8.8	4.6	-7.6	5.2	6.5
Final Domestic Demand	YoY	-2.7	4.2	3.7	-4.1	5.8	4.9
Private Consumption	YoY	-4.8	1.3	2.9	-5.8	5.8	4.7
Government Consumption	YoY	2.7	4.0	2.8	0.4	4.9	3.7
Investment (ex stocks)	YoY	1.0	12.5	9.7	-1.8	7.1	7.0
Exports	YoY	-18.0	12.0	10.9	-18.7	12.3	10.5
Imports	YoY	-6.9	10.3	8.2	-12.0	11.4	6.3
CPI	YoY	-1.3	0.0	1.2	-0.1	0.8	1.6
Unemployment Rate	YoY	16.3	15.3	13.4	7.0	7.0	5.9
Current Account Balance	EUR bn	-11.1	-5.8	-4.8	-2.2	0.5	0.1
	% of GDP	-6.7	-3.2	-2.5	-1.1	0.2	0.0
General Government Balance	EUR bn	-16.1	-14.6	-10.0	-11.5	-11.6	-7.8
	% of GDP	-9.7	-8.1	-5.2	-5.7	-5.4	-3.4
Government Primary Balance	% of GDP	-6.7	-5.3	-2.7	-2.8	-2.7	-0.9
General Government Debt	% of GDP	-	-	-	133.6	131.3	125.2

Note: F Citi forecast. YoY Year-on-year growth rate

Source: Citi Research, National sources

Prepared for Ariff Roduan

Netherlands and Belgium

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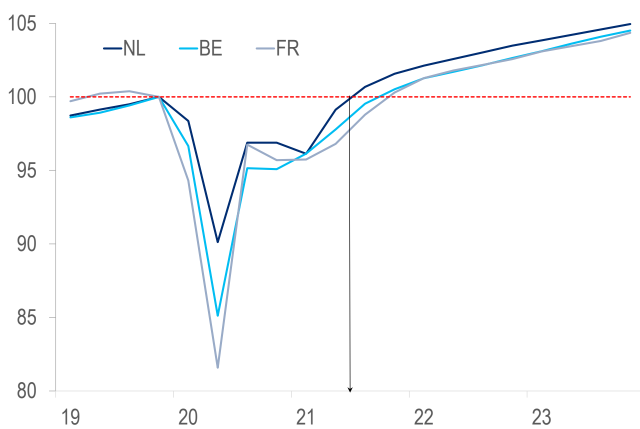
Netherlands

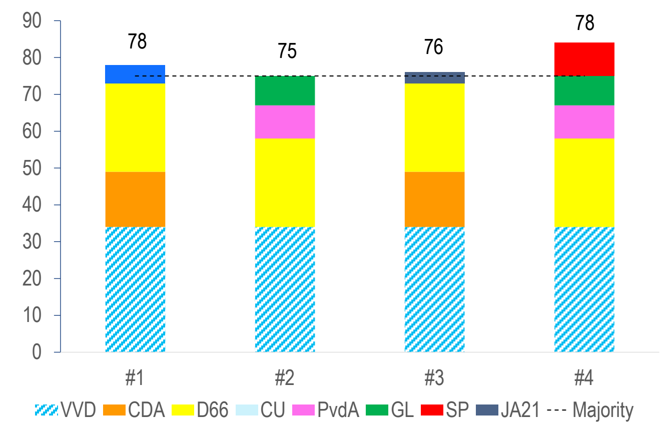
The pace at which PM Rutte relaxed restrictions in the latter part of the second quarter saw activity recover strongly and GDP jump by 3.1% QQ. Despite a surge in new Covid-19 cases in late July and early August, we still think that real GDP should return to its pre-pandemic level by 3Q-21. As a result, we also lift our 2021 GDP forecast from 2.8% to 4.0%, and raise 2022 GDP by 0.3pp to 3.4%. Politically, progress has been very slow. Rutte's conservative liberals (VVD) and Christian Democrats (CDA) continue to reject a coalition option with the Labour party (PdvA) and Greens (GL). Junior coalition partners Christian Union (CU) and Democrats (D66) also have irreconcilable differences on some issues. Press reports suggest that a three-party minority coalition of VVD, D66 and CDA, with a combined 73 seats (3 short of the 76-majority in the 150-seat lower house) is now the most likely outcome, with ad-hoc support to be provided by other parties on different issues.

Figure 66. Netherlands, Belgium and France – Real GDP Levels (100 = 4Q-19), 1Q-19-4Q-23



Source: Citi Research, Eurostat

Figure 67. Netherlands – Possible Coalition Scenarios (Seat Numbers), Legislative Election Results From 17 March 2021.



Source: Citi Research, Netherlands parliament

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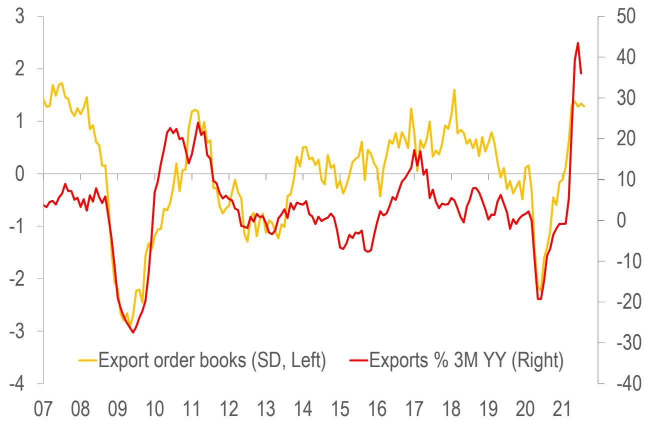
Belgium

We continue to add to our GDP forecast, lifting 2021 from 4.9% in July to 5.9% in September thanks to a solid 1.7% QQ gain in 2Q-21, which brought activity within 2.2% of its 4Q-19 pre-pandemic level. We suspect that Belgium's outperformance of its peers with respect to vaccination (with more than 71% of its total population now fully protected) is a key driver behind the rapid normalisation of economic activity. Although business and household confidence is levelling off and could fall slightly towards year-end, we are confident that 3Q-21 GDP will likely expand strongly, probably worth around 1.8% QQ. The main downside risk to our forecast relates to the continuation of supply constraints affecting global manufacturing chains and albeit to a lesser extent the likelihood of softening of activity in the global economy due to the situation in China and the uneven distribution of Covid-19 vaccines.

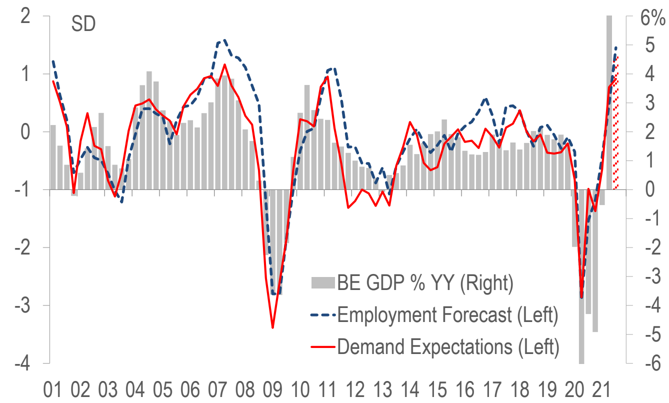
Prepared for Ariff Roduan

Figure 68. Belgium – Export Order Books (SD from L-T Average) and Goods Exports (3M % YY), Jan-07-Jun-21



Source: Citi Research, Belgium National Bank

Figure 69. Belgium – Real GDP (% YY), Employment and Demand Forecasts, 1Q-01-3Q-21



Source: Citi Research, Belgium National Bank

Figure 70. Netherlands and Belgium – Economic Forecasts, 2020-2022F

		Netherlands			Belgium		
		2020	2021F	2022F	2020	2021F	2022F
Real GDP	YoY	-3.8	4.0	3.4	-6.3	5.9	3.5
Final Domestic Demand	YoY	-3.5	2.7	2.8	-6.1	6.6	4.1
Private Consumption	YoY	-6.6	1.8	3.5	-8.7	4.3	4.1
Government Consumption	YoY	1.0	3.1	2.4	0.6	6.7	3.9
Investment (ex stocks)	YoY	-4.2	5.2	3.3	-6.9	11.3	4.1
Exports	YoY	-4.8	6.7	4.1	-4.6	7.0	5.3
Imports	YoY	-5.5	3.8	3.0	-4.3	6.0	5.9
CPI	YoY	1.1	2.3	2.7	0.4	2.4	2.5
Unemployment Rate	YoY	3.8	3.2	2.9	5.6	6.1	5.8
Current Account Balance	EUR bn	55.8	101.9	96.7	-0.7	3.1	2.2
	% of GDP	7.0	12.0	10.7	-0.2	0.6	0.4
General Government Balance	EUR bn	-34.0	-27.9	-24.0	-42.3	-26.7	-19.9
	% of GDP	-4.2	-3.3	-2.7	-9.4	-5.4	-3.8
Government Primary Balance	% of GDP	-3.5	-2.6	-2.0	-7.4	-3.6	-2.1
General Government Debt	EUR bn	434.9	462.8	486.9	515.0	541.7	561.5
	% of GDP	54.4	54.3	53.9	114.1	110.0	107.6

Note: F Citi forecast. YoY Year-on-year growth rate

Source: Citi Research, National sources

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- **Summary view** – After a strong rebound in Q2, economic momentum has faded sharply over the summer. Widespread reconfiguration is now a looming challenge. With many parts of the economy propped up by income support, these effects have so far resulted in tightness in input markets. We expect these effects to reverse in the second half of the year as support is wound down, with higher unemployment likely pushing back policy tightening into 2023. Upside risks to inflation expectations still risk an earlier move, however, as inflation accelerates sharply in the months ahead.

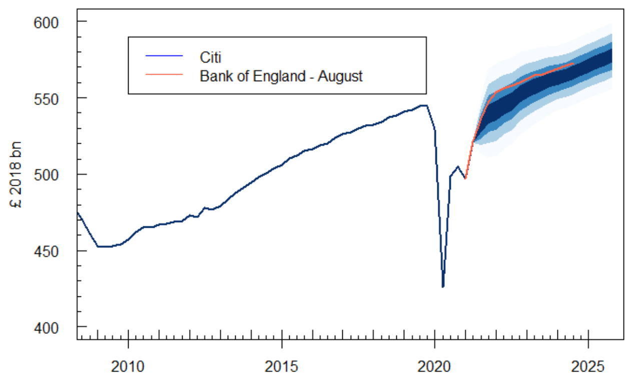
Emerging headwinds – Having surprised to the upside in H1, the outlook for the second half of the year seems more challenged. Covid, we think, is likely to continue to weigh on activity – though a widespread lockdown should be avoided. The 'reopening rebound' in Q2, while strong, also remained compositionally narrow, suggesting little in terms of a wider pick-up. Growth in July fell to a snail's pace and faster indicators of economic activity have generally either stagnated or rolled over. The slowdown is broad based. Consumer demand seems to have softened, with retail sales in particular falling back. The latest Bank of England Decision Maker Panel Survey also suggests a slightly weaker outlook for investment than that expected in Q2, with the pandemic proving a larger ongoing drag. Acute input shortages have constrained manufacturing and construction – these effects may dissipate over the coming 12 months driving stronger growth. However, within the all-important services sector, the picture seems more balanced, with outstanding business and output falling in tandem. We expect the slowdown here to prove more persistent. We now expect growth of just 2.0% QQ in Q3 and 1.4% QQ in Q4. With output lagging its pre-pandemic trajectory by 6.7% in Q2, a marked gap is likely to persist as income support is wound down at the end of Q3.

Navigating the reopening 'whipsaw' – We expect recent tightness in the UK labour market to prove only transitory. For now, evidence concerning more permanent supply losses, such as net emigration or increased early retirement, seem to suggest less severe losses than initially feared. Instead, with 1.5 million furloughed in the middle of August and a further 600k having left the labour force by the three months to July, we think substantial slack remains. The issue here is reconfiguration. With income support still in place, this has restricted labour supply while labour demand in 'new' in demand areas of the economy has recovered. We expect capacity to rebound sharply as income support is wound down and workers are once again able to move. We expect unemployment to increase to 5.6% in Q1-22, before falling only slowly thereafter. Matching challenges, a capital intensive recovery and a higher effective tax rate on labour all imply a slower labour market recovery in the medium term. Underlying wage growth, we think, is likely to soften into 2022.

Is the BoE about to blink? – With economic reconfiguration weighing on supply, we had expected inflation to overshoot the Bank's 2% target in Q2. However, the scale of the overshoot has proven larger than expected. Imported goods price pressures are also continuing to build, while recent disruption to gas and electricity supplies also implies more inflationary momentum into 2022. We expect CPI inflation to peak at 4.4% in April 2022, before falling sharply thereafter. For now, domestically generated inflation remains weak. This, we think, should allow the BoE to delay lift off until May 2023 if unemployment does indeed increase. However, this is a close run thing. The MPC may tighten to reduce the risks to inflation expectations if these start to edge up even if the recovery proves underwhelming. This remains a notable risk for Q1-22. On the fiscal side, we think the scope for largesse is increasingly limited. We expect a further £15bn in public investment to be announced in the 27 October Budget. However, the reintroduction of the electoral fiscal rules imply limited further room for maneuver.

Prepared for Ariff Roduan

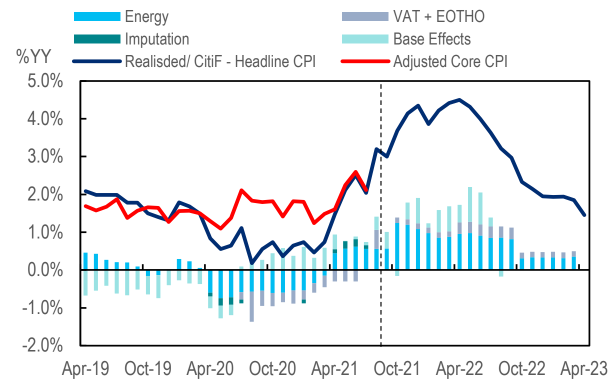
Figure 71. UK – Real GDP (£ 2018 bn), 2009-2024F



Note: The fan reflects the range of outcomes defined by the several Covid and household saving scenarios. Associated dispersion has been transposed to a normal distribution

Source: Citi Research, Bank of England, ONS

Figure 72. UK – CPI Inflation (%YY), 2019-2023



Adjustments for VAT and EOTHO are Citi figures. Adjusted Core CPI reflects core CPI adjusted for changes in indirect taxation and imputation.

Source: Citi Research, ONS

Figure 73. United Kingdom — Economic Forecasts, 2020-2023 1QF

		2020	2021F	2022F	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
Real GDP	YoY	-9.8	6.6	4.7	22.2	6.5	6.7	8.9	4.4	3.3	2.5	2.7
	SAAR	-	-	-	20.7	8.2	5.9	1.7	2.1	3.4	2.6	2.8
Domestic Demand (inc. inventories)	YoY	-12.0	5.9	7.6	23.2	7.6	5.0	13.2	8.0	5.5	4.2	3.9
	SAAR	-	-	-	26.3	15.0	8.3	4.3	4.8	4.8	3.0	3.0
Private Consumption	YoY	-10.9	4.5	7.2	20.3	4.6	7.9	13.7	7.3	4.8	3.7	3.4
	SAAR	-	-	-	32.4	15.6	6.1	2.8	4.9	5.3	2.0	1.6
Government Consumption	YoY	-6.5	14.0	-0.6	32.9	15.0	7.9	6.0	-1.6	-2.9	-3.6	-3.3
	SAAR	-	-	-	26.5	0.4	0.4	-1.2	-5.9	-4.7	-2.6	0.0
Investment	YoY	-8.6	7.5	9.9	21.9	7.2	7.5	11.0	13.4	9.2	6.5	6.8
	SAAR	-	-	-	-2.9	25.4	19.2	4.6	5.9	7.7	7.7	6.1
Exports	YoY	-13.1	0.8	8.0	9.4	5.2	1.2	9.6	7.6	7.1	7.8	8.3
	SAAR	-	-	-	15.4	10.7	6.0	6.7	7.2	8.5	8.8	8.8
Imports	YoY	-17.5	0.9	12.0	17.4	6.3	-2.7	16.7	12.5	10.3	9.0	8.0
	SAAR	-	-	-	28.4	17.9	11.4	10.1	10.7	9.0	6.4	6.0
Unemployment Rate	YoY	4.5	4.8	5.4	4.7	4.4	5.1	5.6	5.5	5.4	5.3	5.2
CPI	YoY	0.9	2.4	3.4	2.1	2.7	4.1	4.2	4.2	3.2	2.0	1.8
Merchandise Trade	£bn	-115.0	-144.5	-184.9	-	-	-	-	-	-	-	-
	% of GDP	-5.4	-6.4	-7.7								
Current Account	£bn	-73.9	-91.4	-158.5								
	% of GDP	-3.5	-4.1	-6.6								
PSNB	£bn FY	321.4	186.4	122.7								
	% of GDP	-15.3	-8.1	-5.1								
General Govt Balance	% of GDP	-15.7	-7.9	-4.0								
Government Primary Balance	% of GDP	-15.0	-7.5	-3.0								
Public Debt	% of GDP	100.9	104.2	104.7								
Gross Nonoil Trading Profits	YoY	-2.6	5.8	-4.3								

Note: F Citi forecast. SAAR Seasonally adjusted annual rate. YoY Year-on-year growth rate

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Switzerland

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- **Summary view** – The growth momentum was a bit weaker than expected over the summer and leading indicators have cooled off. We revise down our growth forecasts somewhat. The SNB took a dovish turn as the Franc appreciated.

Switzerland had one of the sharper waves of the pandemic in Europe over the summer, but it appears to be easing off and had only a small impact on mobility and thus activity. We currently do not factor in any new disruptive social distancing measures, given Swiss authorities have been relatively skeptical of them anyway and capacities in the health system are such that Switzerland can probably sustain a somewhat higher caseload than its neighbours.

Leading indicators remain buoyant but have come off the peak. Given Q2 GDP growth undershot our forecasts somewhat and momentum seems to have faded somewhat, we revise our GDP growth forecast in 2021 from 3.7% to 3.2%, reflecting the re-opening of the economy on one hand, but supply constraints which hamper manufacturing on the other. Overall, Switzerland's flexible labour market, diverse economy and deep integration with global export markets put it in a good position to recover swiftly from the pandemic hit. Its pricier exports, which include tourism, may even benefit especially from global pent-up demand sliding up the pricing scale once the pandemic is over and travel restrictions lifted.

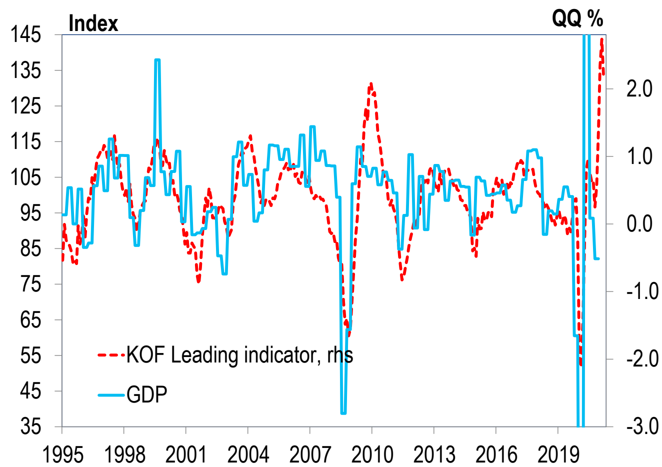
Swiss inflation is recovering. CPI inflation jumped to 0.9% YY in August (Consensus and Citi 0.7%). Core inflation returned to pre-pandemic levels of 0.4% YY. Electricity and gas prices will drive energy inflation sharply higher in 2022 in Switzerland as well, so we expect inflation to average at 0.9%, the highest since 2018. However, inflation looks set to remain well within the SNB's comfort zone of 0-2% YY.

At the last meeting in June, the SNB left policy settings unchanged as it continues to forecast very moderate inflation in the medium-term and sees spare capacity for some time despite surprising but slight upward revisions to the forecasts. With progress on controlling the pandemic and inflation in the "*price stability zone*" – ie positive but below 2% – there were some unexpected but ever-so-slightly hawkish twists: the SNB dropped a reference to generous liquidity provision for banks in their statement and spoke less about the euro depreciation than we might have expected. Whether related to the meeting or not, the Franc appreciated subsequently, triggering what looks like moderate FX interventions in early August and some dovish speeches ahead of the 23 September SNB meeting. This is a reminder that the SNB depends on other central banks, in particular the ECB, for its next moves. With political uncertainty in the euro area in the run-up to the French elections, we expect the SNB to maintain a dovish tone.

The key political event of the year so far was the Swiss government's termination of negotiations about the EU framework agreement. The alternatives to the deal are (1) falling back on the existing 120 agreements which ensure partial access to the EU's single market and hope that the EU will continue to update them and perhaps even expand them. (2) Reverting to a free trade agreement like the UK. (3) Joining the European Economic Area with Norway. Each option comes with risks and benefits: the status quo is politically acceptable in Switzerland, but if the EU does not update the agreements, Switzerland could progressively lose market access, while new access would be challenging. A free trade agreement would reduce access for most sectors, but could include agriculture which would be difficult politically for Switzerland. Finally, EEA membership could exclude some politically sensitive areas and widen access in others, but would bring Switzerland significantly closer to EU membership, which is politically challenging.

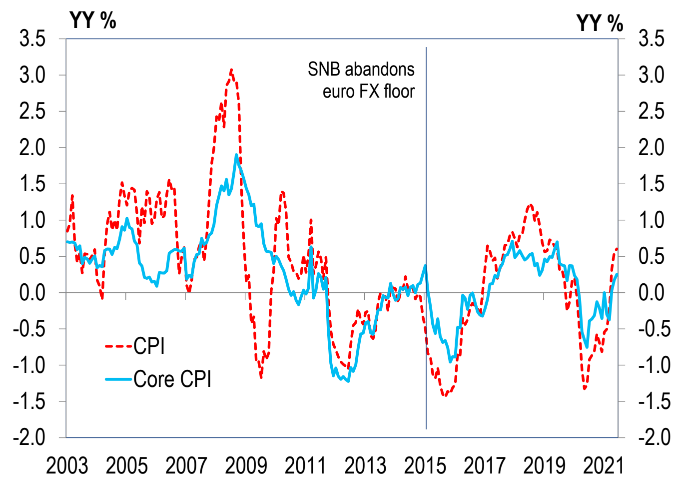
Prepared for Ariff Roduan

Figure 74. Switzerland – KOF Leading Indicator and Real GDP Growth (YY %)



Source: Citi Research, KOF, Seco

Figure 75. Switzerland – CPI Inflation (YY %)



Source: Citi Research, Swiss Statistics

Figure 76. Switzerland — Economic Forecasts, 2020-2023 1QF

		2020	2021F	2022F	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
Real GDP	YoY	-2.7	3.2	2.9	7.7	2.7	3.4	4.6	3.1	2.2	1.9	1.7
Final Domestic Demand	YoY	-2.8	3.8	3.5	9.1	3.1	4.1	6.5	3.5	2.2	2.1	1.9
Private Consumption	YoY	-4.4	2.6	4.2	8.4	1.6	4.1	8.4	4.5	2.4	1.9	1.5
Government Consumption	YoY	3.6	9.0	2.0	11.0	10.9	8.0	5.8	0.6	0.8	1.1	1.1
Fixed Investment	YoY	-2.2	3.8	2.9	9.8	2.5	2.3	3.4	2.9	2.5	2.8	2.9
Exports	YoY	-5.8	8.1	4.1	10.8	8.3	8.5	5.3	4.7	3.4	3.2	3.2
Imports	YoY	-5.5	3.5	4.0	4.5	1.9	5.6	1.9	6.1	4.1	4.1	4.1
HICP	YoY	-0.7	0.5	0.9	0.5	0.8	1.1	1.2	1.0	0.7	0.6	0.5
Unemployment Rate	YoY	3.1	3.0	2.4	3.2	2.9	2.7	2.5	2.4	2.3	2.3	2.3
Current Account Balance	CHF bn	26.8	49.7	44.9								
	% of GDP	3.8	6.8	5.9								
General Government Balance	CHF bn	-19.7	-25.7	-7.6								
	% of GDP	-2.8	-3.5	-1.0								
General Government Debt	CHF bn	216.4	258.9	262.3								
	% of GDP	30.8	35.2	34.4								

Note: F Citi forecast. YoY Year-on-year growth rate

Source: Citi Research, National sources

Prepared for Ariff Roduan

Scandies: Sweden and Norway

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The impact of the pandemic has been smaller in Sweden than elsewhere, and the economy is already back to pre-Covid levels. Labour market slack is shrinking fast, and wages are picking up, housing is overheating, domestic demand is strong. We believe it is only a matter of time before CPI inflation rises more substantially. The August CPI was above expectations (at 2.4% YY) and some underlying inflation gauges are already at 2%. Further normalization in hospitality/travel prices, a delayed impact of supply chain disruptions and the fading of the downward price pressures from the 2020 Krona appreciation will all contribute to lift CPI inflation in coming months.

We expect the Riksbank's reaction function to remain very slow to any improvement in the macro outlook as re-anchoring inflation expectations remains a priority. We still forecast a first rate hike in 4Q-2023, well past the time when the output gap has moved into positive territory and inflation returned at target.

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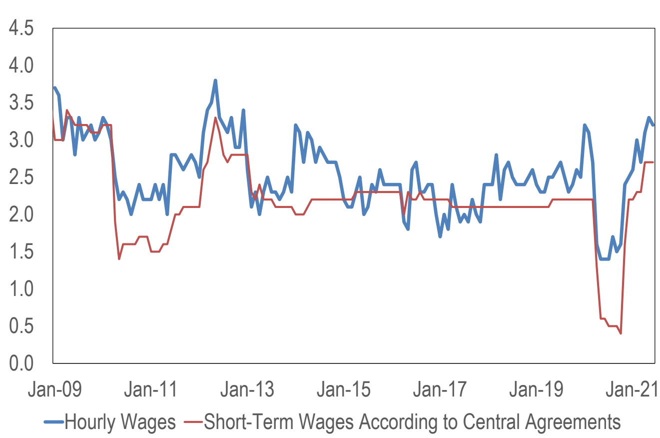
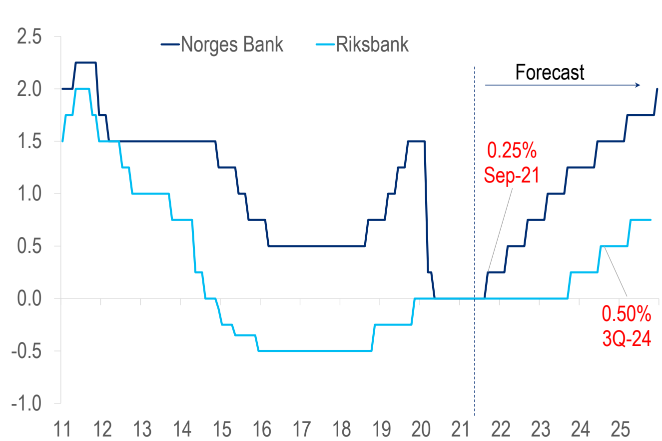
Activity is recovering steadily, and a gradual reopening of society as well as a tightening labour market should lead a return to more normal conditions. We lift our 2021 GDP forecast by 0.4pp to 3.7% and 2022 GDP by 0.3pp to 4.5%, and also increase the 2022 CPI forecast by 0.5pp to 2.5%. With real interest rates at very low levels, we look for some normalisation of the monetary policy stance. While we expect Norges Bank to hike its policy rate by 25bp on 23 Sep, we see risks of a slower pace of rate hikes than the central bank had envisaged in June given the still muted trajectory of core inflation and no clear financial stability concerns. Politically, the result of the legislative elections was in line with the polls. The likely shift to the left (with the Labour party likely to be the senior coalition partner) will probably result in an increase in spending on public services and investment in education and healthcare, and a commensurate increase in taxes but will avoid the rapid closure of the oil industry. We do not think that the election and the programme that will be implemented by the future coalition changes much for the path of interest rates.

Figure 77. Sweden: Wage Inflation (%, YY)



Source: Citi Research, Statistics Sweden

Figure 78. Norway and Sweden: Policy Rates (%), Jan 11-Dec 25



Source: Citi Research, Norges Bank, Riksbank

Prepared for Ariff Roduan

Figure 79. Sweden and Norway – Economic Forecasts, 2020-2022F

		Sweden			Norway		
		2020	2021F	2022F	2020	2021F	2022F
Real GDP	YoY	-2.9	4.2	3.5	-3.1	3.7	4.5
Final Domestic Demand	YoY	-2.7	4.0	3.2	-4.1	3.0	5.8
Private Consumption	YoY	-4.7	3.7	3.1	-7.3	3.1	7.9
Government Consumption	YoY	-1.0	3.1	2.0	1.7	3.6	2.6
Investment (ex stocks)	YoY	-0.6	5.3	4.9	-4.0	1.8	5.4
Exports	YoY	-4.8	8.1	3.6	-7.3	4.8	5.3
Imports	YoY	-6.0	7.6	3.5	-12.2	2.8	9.9
CPI	YoY	0.5	2.2	2.4	1.3	3.1	2.5
Unemployment Rate	YoY	8.3	8.6	7.0	4.6	4.3	3.1
Current Account Balance	% of GDP	5.5	7.0	6.9	2.0	6.0	4.6
General Government Balance	% of GDP	-3.3	-3.1	-0.4	-3.6	-2.8	-3.7
Structural Non-Oil Balance	% of GDP	-	-	-	11.8	8.8	8.6
General Government Debt	% of GDP	40.5	41.6	39.4	-	-	-

Note: F Citi forecast. YoY Year-on-year growth rate. For Sweden, we forecast CPIF inflation. Norway: Mainland economy (except for CPI and CA). Structural Non-Oil Budget Deficit as % of Trend Mainland GDP – excludes oil-related revenue and expenditure, GPFG income, as well as cyclical effects

Source: Citi Research, National sources

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- **Summary View –** Widespread vaccinations have allowed for gradual economic reopenings over the summer months, with services activity and employment rebounding strongly. However, GDP growth was surprisingly soft in Q2 and into the second half of the year due to supply shortages limiting goods production. Supply issues have also resulted in further increase in CPI inflation.

Activity restrictions began to be lifted over the summer months, with activity and employment in services sectors picking up. However, real GDP unexpectedly declined by 1.1% (QoQ SAAR) in Q2, partly on somewhat softer domestic demand (which rose a modest 0.7%) but also on weaker exports. Exports fell as production of many goods was limited by various supply issues. The auto sector has been particularly impacted, and limited auto production could start to weigh on consumption. Recently rising virus cases again with the spread of the Delta variant also present some modest risk to activity, although we do not expect new activity restrictions, at least in the near term.

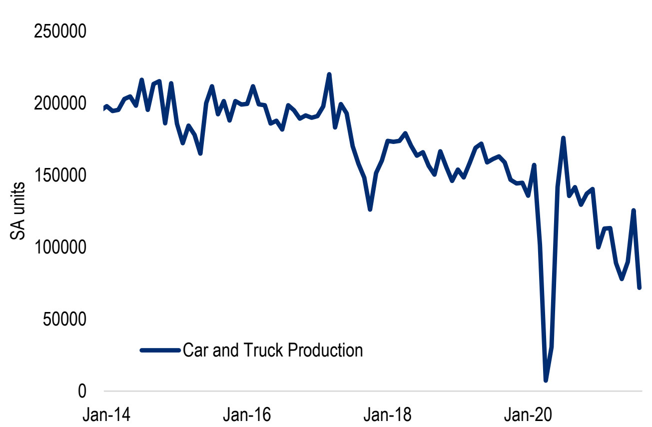
Employment data has been some of the most impacted by repeated business closures and reopenings and job growth through the summer months was strong as services activities resumed. Data from June, July, and August are the most reflective of reopening period job gains, with over 400k jobs added in those three months. The outlook for employment over the coming months however is more uncertain, with recent anecdotes suggesting employers are having greater issues finding workers. With the labor force participation rate already having risen much closer to pre-COVID levels and likely some more permanent labor force exists such as early retirements, difficulty finding workers could become increasingly apparent in hard employment data. We expect the BoC will be particularly watchful of whether labor shortages lead to greater wage gains over the coming months.

Base effects, higher energy prices, and supply shortages meeting strong demand have pushed headline CPI above the 1-3% target range, where it will likely remain in coming months. More important however is that core inflation measures have also trended higher over the last few months and now average 2.6%. Technical factors and various leading survey measures also imply even further increases in core inflation over the coming months. If labor shortages become more binding with stronger wage increases, we expect the BoC to become more concerned on inflation and still see hawkish risks into 2022. Our base case is that there will not be any substantial changes to the current 2% inflation target mandate at the upcoming conclusion of this year's inflation target review.

We expect another tapering of QE purchases to C$1 billion at the October BoC meeting and for the reinvestment phase to start by the end of the year or January 2022 at the latest. A recent speech by Governor Macklem outlined that the full reinvestment phase, keeping the size of government bond holdings constant, will continue through the time of the first rate hike. Our base case remains for the first hike in October 2022, although still with risks of an earlier hike. After the recent downside surprise to GDP, all of activity, employment and inflation data will be more important for assessing the possible path of policy rates next year. The BoC will likely judge the closing of the output gap primarily based on labor market conditions, but we see potential for a tight labor market with worker shortages to keep the BoC erring on the more hawkish side next year.

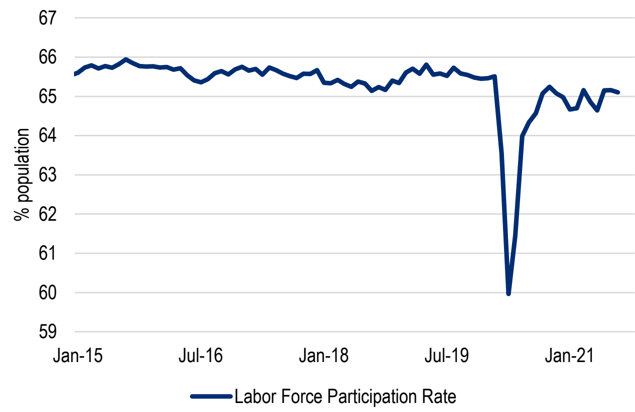
Prepared for Ariff Roduan

Figure 80. The auto sector has been particularly affected by various supply shortages



Source: Citi Research, Automotive News

Figure 81. Anecdotes of labor shortages could become more apparent in hard employment data



Source: Citi Research, Statistics Canada

Figure 82. Canada — Economic Forecast, 2020-2022F

		2020	2021F	2022F	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
Real GDP	YoY	-5.3	5.0	3.9	12.7	4.1	3.5	3.1	4.5	4.5	3.4	2.9
	SAAR				-1.1	3.2	6.6	4.0	4.0	3.3	2.2	2.2
Final Domestic Demand	YoY	-4.3	5.7	3.8	14.4	4.0	4.5	3.9	4.5	4.0	3.0	2.5
(ex inventories)	SAAR				0.7	4.6	6.4	4.1	3.1	2.4	2.4	2.4
Private Consumption	YoY	-5.9	4.6	5.2	14.1	2.8	4.8	5.6	6.5	5.3	3.6	2.8
	SAAR				0.3	7.3	9.4	5.5	3.8	2.5	2.5	2.5
Government Spending	YoY	0.4	5.8	1.9	9.8	5.2	4.1	2.7	2.1	1.5	1.5	1.5
	SAAR				3.8	4.0	1.5	1.5	1.5	1.5	1.5	1.5
Private Fixed Investment	YoY	-5.4	8.8	2.2	22.8	5.8	4.0	0.5	1.9	3.3	3.1	3.0
	SAAR				-2.2	-2.7	4.0	3.4	3.0	3.0	3.0	3.0
Exports	YoY	-10.0	1.3	2.1	12.0	-0.8	-0.8	-1.0	3.8	3.0	2.7	2.7
	SAAR				-15.0	6.0	4.0	2.7	2.7	2.7	2.7	2.7
Imports	YoY	-11.2	6.8	3.3	26.1	4.8	3.3	2.9	3.7	3.5	3.0	3.0
	SAAR				-0.1	4.0	5.0	3.0	3.0	3.0	3.0	3.0
CPI Ex Energy and Food	YoY	0.7	3.2	2.6	3.3	4.0	3.9	3.5	2.9	2.2	2.0	2.0
Unemployment Rate	%	9.6	7.5	6.3	8.0	6.9	6.7	6.5	6.4	6.2	5.9	5.7
Current Account	C$bn	-40.1	12.9	9.9	-68.3	-67.5	-71.5	-72.5	-77.9	-80.2	-82.2	-86.9
	% of GDP	-1.8	0.5	0.4	-2.8	-2.7	-2.8	-2.8	-3.0	-3.0	-3.1	-3.2
Net Exports (Pct. Contrib.)	ppt	0.4	-1.7	-0.4	-4.8	0.5	-0.4	-0.1	-0.1	-0.1	-0.1	-0.1
Inventories (Pct. Contrib.)	ppt	-1.7	0.8	0.3	0.0	-2.0	0.5	0.0	1.0	1.0	0.0	0.0
Budget Balance (Fiscal Year)	% of GDP	-15.1	-5.7	-1.9								
Federal Budget Debt	% of GDP	47.4	47.9	47.1								
General Gov't Debt	% of GDP	106.7	107.1	106.3								

F Citi forecast. YoY Year-to-year percent change. SAAR Seasonally adjusted annual rate.

Source: Citi Research, Statistics Canada

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- **Summary View** – The COVID outbreak has upended domestic activity in Australia, with the two most populous states, NSW and VIC, subjected to extended lockdowns across Q3. The greater transmissibility of the delta variant has ended Australia's stance of eliminating the virus, and instead, the path forward is reopening the economy when 80% of the population aged 16 and over is fully vaccinated. This means the RBA remains dovish, despite persisting with its tapering in September. Our risk scenario for the lowly vaccinated New Zealand has also materialised, where the delta-outbreak has finally leaked through the quarantine system, leading to lockdowns across New Zealand. That said, growth prior to the lockdown was on very strong and domestic inflationary pressures have risen, leading the RBNZ towards a hawkish policy path despite the near-term economic disruptions.

Australia

A significant reduction to growth is warranted in 2021. Together, the Greater Sydney and Melbourne areas account for around 45% of national economic activity. The current lockdowns are estimated to cost NSW at least $AU13bn for the quarter, and a further $AU5.5bn across VIC. Consequently, we expect that the fall in real GDP could be around 3% in Q3. Moreover, some form of restrictions are expected to persist in NSW until mid-October, when 70% of the population should be fully vaccinated. However, the reopening across NSW will likely be gradual in order to ease the burden on the health system from rising hospitalisations. Moreover, vaccinations in states outside NSW remains slow, and we are unlikely to see other states open up to NSW until they have reached herd-immunity themselves. Thus, the rebound in Q4—at 1.5%—is unlikely to be as large as last year, where the economy roared back when COVID-19 was no longer in the community. Thus, the year-average growth for 2021 is now 3.5%, significantly lower than the 5.7% prior to the outbreak.

The labour market is unlikely to be derailed. Headline labour force statistics will likely remain volatile in the near-term because of the drop in the participation rate. However, we expect the unemployment rate to peak at around 5.4% towards the year's end. Moreover, the risk is that the rehiring once the economy reopens could be slower because the business support measures this time around aren't as generous as 2020.

No near-term rate hike risks. We expect the RBA will finish its tapering by Q4 2022. The timing of the first rate hike remains unchanged in H2 2023, as domestic inflation risks remain muted but face upside risks next year.

New Zealand

Q3 GDP growth likely declined by 3½%. Quarantine-free travel was suspended with Australia on July 23 while Auckland was placed on Alert Level 4 on August 18. The New Zealand Government maintains a zero tolerance to new infections, so we expect the current lockdown to remain in force for the remainder of Q3, with restrictions possibly easing somewhat in October. So sectors that benefited from increased mobility and the travel bubble with Australia will likely retreat in Q3, such as retail trade and accommodation, transport and net-exports. We also expect weakness in manufacturing, construction, finance and insurance services, arts and recreation, professional, scientific, technical, administrative and support services. In summary, we pencil-in a GDP decline of 3½% followed by a 2½% bounce in Q4. In combination with the better starting point from the Q2 GDP result, these forecasts actually increases our year-average GDP forecast from 3.3% to 3.4% (+0.1pp) while the 2022 year-average GDP growth forecast remains at 2.9%.

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Implications for monetary policy. The Q2 GDP result of 2.8% was way ahead of the RBNZ's August SMP forecast of 0.7%, so will likely imply a larger positive output gap. And the RBNZ have already made clear that they do not view Q3 Delta induced weakness as an impediment to a near-term rate hike, citing more medium and long-term concerns with a possible inflation overshoot. Our forecast for growth over the remainder of 2021 still implies a positive output gap by the end of the year. We therefore hold on to the view of +25bps to the OCR in October but bring forward the +25bp Q1 2022 rate hike forecast to November 2021, leaving the OCR at 75bps by the end of the year. The risk is +50bps in October, given the hawkishness of RBNZ forward guidance.

Figure 83. Australia and New Zealand: Economic Forecast, 2020-2022F

		Australia			New Zealand		
		2020F	2021F	2022F	2020F	2021F	2022F
Real GDPa	YoY	-2.4	3.5	3.0	-3.0	5.4	2.9
Real GDP (4Q versus 4Q)		-0.9	0.9	4.6	-0.9	3.2	2.7
Private Consumption	YoY	-5.8	3.7	5.1	-1.8	5.0	2.5
Govt. Current & Capital Spendingb		7.1	3.3	2.6	5.8	3.7	1.9
Housing Investment		-5.3	11.9	2.1	-4.4	18.5	7.5
Business Investment		-5.3	4.8	3.2	-8.5	4.2	3.1
Exports of Goods & Services		-10.1	-2.5	2.3	-12.1	0.3	7.0
Imports of Goods & Services		-13.4	9.5	9.2	-16.3	5.9	4.2
CPI	YoY	0.8	2.6	2.3	1.7	2.8	2.1
CPI (4Q versus 4Q)		0.9	2.6	2.1	1.4	3.0	2.2
Unemployment	%	6.8	5.4	4.4	4.9	4.1	3.8
Merch. Trade, BOP (Local Currency, bn)	$bn	59.8	104.3	102.0	3.3	1.9	1.4
Current Account	$bn	52.4	75.5	48.0	-2.5	-11.7	-13.3
	% of GDP	2.7	3.5	2.1	-0.8	-3.4	-3.7
Budget Balanced	$bn	-84.7	-166.9	-112.8	-20.2	-19.3	-13.6
	% of GDP	-4.3	-7.8	-5.0	-6.3	-5.6	-3.8
General Govt. Debt (% of GDP)[e]	% of GDP	42.9	49.3	54.8	40.3	49.7	53.9
Gross Operating Surplus	YoY	12.0	1.6	11.3	-	-	-

Note: Balance of payments basis. CPI Consumer Price Index. F Citi forecast. NA Not available. aAverage-based GDP in Australia and New Zealand. bIn New Zealand excludes capital spending. cIn New Zealand includes government capital spending. dFiscal year ending June. Australia's underlying cash balance. Australia and New Zealand Budget definition and forecasts

Source: Citi Research

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- **Summary view** – We trim our annual growth forecast by a half percent and expect deep PPI-CPI inflation divergence to continue. While the capital outflow pressures have risen, the RMB exchange rate will likely remain supported.

We trim our annual growth forecast by a half percent. Major activity indicators disappointed in both July and August. The Delta outbreak has shown a material impact on consumer services. The public health risk is still lingering with the latest resurgence in Fujian, and we will monitor how it will shape travel policy in the upcoming National Day Golden Week. Putting aside the floods, we are now more concerned about the property sector that is quickly cooling off. The deep PPI-CPI inflation divergence is squeezing the profit margin of mid/downstream manufacturers, especially SMEs, and poses downside risks to their activity growth. In addition, the recent wave of regulatory actions could dent “animal spirits” and thereby weigh on private investment ahead. Together, we now expect China’s GDP growth to slow to 4.9%YoY (vs 6% anticipated previously) in Q3 and 4.5%YoY (vs 5.1%YoY) in Q4, cutting our full-year projection from 8.7%YoY to 8.2%YoY. Despite the slowdown, we expect the full-year growth target (6%) will still be easily achieved.

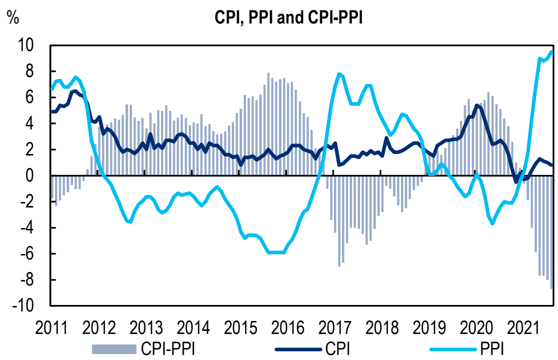
The deep PPI-CPI inflation divergence may continue. CPI came in lower than expected while PPI inflation picked up further in August, leaving the PPI-CPI gap at a record high. The NDRC’s price clampdown efforts failed to prevent PPI inflation from reaching a new high. Despite the Politburo meeting’s pledge to avoid “campaign-style” carbon reduction, entering into the winter season and to ensure blue skies for Beijing’s Winter Olympics, we expect the government will still need to cap the production of raw materials (especially steel) in northern China and order other measures to slash pollution. The disruptions to supply chains and logistics would keep industrial costs elevated ahead as well. Although investment demand may soften, the tight supply will likely uphold PPI. In the consumer space, in addition to COVID-19’s impact on services, the recent policy actions on after-school tutoring will likely reduce education-related expenses. The room for pork price declines has narrowed, but the price should remain low. These would help keep CPI inflation muted. As a result, the CPI-PPI divergence will likely endure, squeezing the profit margin of mid/downstream sectors, especially SMEs.

We maintain our view that the PBoC will keep a cautious and flexible approach to its policy exit. Against the growth pressures, there is a great expectation that monetary policy will need to ease more aggressively. The PBoC has reiterated it should shun the use of monetary flood to irrigate the economy. The financial market risk also risen sharply, led by the uncertain debt resolution of the second-largest property developer, which could potentially prompt the PBoC to cut RRR by another 50bps. However, we do not think that the PBoC will cut the MLF rate, given that onshore interest rates have started to decline, and its OMO tools should be sufficient to steer market rates down further.

While capital outflow pressures have risen, the RMB exchange rate will likely remain supported. While the regulatory clampdowns have impacted China’s equity market and overseas listed Chinese stocks were hit heavily, the capital inflow to the bond market has continued, attracted by China’s rising bond prices and because its interbank bond market will be fully included in the global indices by end-October. We also see visible signals of policy reassurance sent by regulators that China’s financial market opening and reform will continue. While such policy signals are helpful, it will take time for the foreign institutional investors to regain confidence on China. As a result, the downside risks to our positive RMB view have also risen, led by the rising regulatory uncertainty internally and the risk of faster than expected Fed policy normalization externally.

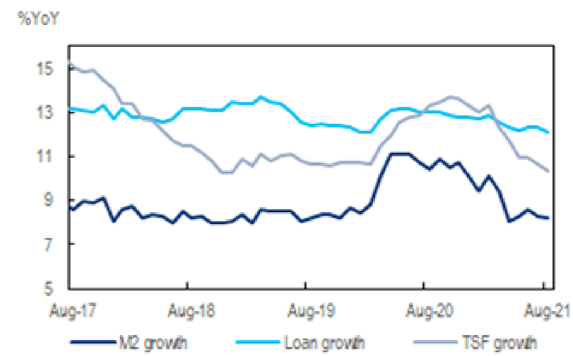
Prepared for Ariff Roduan

Figure 84. The deep PPI-CPI inflation divergence may continue



Source: CEIC Data Company Limited, Citi Research

Figure 85. New TSF soared on strong bond issuance in August



Source: CEIC Data Company Limited, Citi Research

Figure 86. China Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	10,445	10,961	11,234	12,310	13,894	14,277	14,723	17,784	19,949
Population, mn	1,367.8	1,374.6	1,382.7	1,390.1	1,395.4	1,400.1	1,407.1	1,410.6	1,414.1
Real GDP, yoy avg	7.4	7.0	6.8	6.9	6.7	6.0	2.3	8.2	5.5
Private consumption growth % yoy	6.7	5.0	6.2	6.9	5.9	5.6	0.5	13.5	5.8
Real investment growth % yoy	7.2	3.4	6.9	6.0	6.5	3.9	5.0	4.8	4.8
Net export contribution to growth	-0.1	0.6	-0.8	0.3	-0.5	0.8	0.6	0.5	-0.1
Unemployment, % of labour force	4.1	4.0	4.0	3.9	3.8	3.6	4.0	3.8	3.8
External (US$bn)									
Current account	236.0	304.2	202.2	160.0	55.6	142.8	279.7	426.8	239.4
% of GDP	2.3	2.8	1.8	1.3	0.4	1.0	1.9	2.4	1.2
Trade balance	383.1	593.9	509.7	419.6	350.9	421.1	535.4	528.4	518.9
FDI, net	145.0	68.1	-46.6	27.8	92.3	50.3	102.6	153.8	138.4
External debt	1,779.9	1,383.0	1,415.8	1,758.0	1,933.8	2,127.1	2,339.8	2,573.8	2,831.2
Short-term debt	1,298.2	920.6	866.0	1,145.2	1,204.7	1,325.2	1,457.7	1,603.5	1,763.8
International reserves	3,843.0	3,390.6	3,078.4	3,216.4	3,149.0	3,203.3	3,334.8	3,374.3	3,425.5
Public Finances, % of GDP									
Consolidated government balance	-2.1	-2.4	-3.0	-2.9	-2.6	-2.8	-3.6	-3.2	-2.8
Consolidated gov primary balance	-1.6	-1.9	-2.5	-2.4	-2.1	-2.3	-3.1	-2.7	-2.3
Public debt	52.8	57.7	62.5	42.6	44.7	48.1	90.0	93.5	93.7
External public debt	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Prices									
CPI, % yoy	1.5	1.6	2.1	1.8	2.2	4.3	0.1	2.4	2.1
CPI, % avg	2.0	1.4	2.0	1.6	2.1	2.9	2.5	1.2	2.2
CNY/US$, eop	6.21	6.49	6.95	6.51	6.88	6.96	6.53	6.37	5.99
CNY/US$, avg	6.16	6.28	6.64	6.76	6.62	6.91	6.90	6.45	6.18
Policy Interest Rate, % eop	2.75	1.50	2.75	3.25	3.40	3.25	2.95	2.95	2.95
10-Year Government Bond, %, eop	3.63	2.83	3.04	3.88	3.25	3.16	3.15	2.90	2.85
Nominal wages, % yoy	9.47	10.06	8.93	9.99	10.99	7.81	3.49	13.37	7.96

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	18.3	7.9	4.9	4.5	5.0	5.5	5.6	5.7	5.3
CPI, % yoy	0.0	1.1	1.3	2.4	2.1	2.4	2.3	2.1	2.0
CNY/US$, eop	6.55	6.46	6.42	6.37	6.33	6.27	6.13	5.99	5.85
Policy interest rate, %, eop	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95

Source: Citi Research Estimates, CEIC Data Company Ltd, Fitch, IFS, Moody's , Note: Public debt includes debt of central, local govt and Ministry of Railway; since 2015, more general government debt methodology (including the LGFV) is adopted. External debt is based on the residency of the holder of the debt (not by currency denomination). ** We refer to 1-year Medium-term Lending Facility Rate (MLF) as Policy Rate from Q1'16. 1y Deposit Rate was quoted before this date. Positive net FDI refers to inflow of investment into an economy

Prepared for Ariff Roduan

Hong Kong

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- **Summary view** — Real economy recovery is underway, near-term policy focus remains pandemic control to resume border reopening, and longer-term strategy for cross-border developments will likely be the focus of Policy Address. The two pilot Connect Schemes underscore HK's financial developmental potential.

Economic recovery even without border reopening is continuing. Local activities appear largely accustomed to the remaining COVID restrictions. Vaccination rate of at least one dose also reached 66% of the population. We have witnessed marked improvements in the services sector. While retail sales data remain weak (2.9%yoy in Jul), we expect overall private consumption (services included) in the upcoming 3Q GDP release to show continual recovery. In addition, the issuance of consumption e-coupons that started in Aug will help revive goods consumption in the coming months. The unemployment rate also improved by 2.5ppt from Feb's peak of 7.2% to latest 4.7% as of Aug. Barring another flare-up of infections, we expect labor activities will continue to improve in coming months, but the monthly decline in unemployment rate will likely slow as after all HK still needs to resume quarantine-free border travelling with the Mainland to genuinely recover. However, we do not believe China would allow for such an arrangement until after the Winter Olympics in Feb. It is therefore important that HK in the meantime align its COVID policy with the Mainland's such that HK can reopen as soon as China is ready.

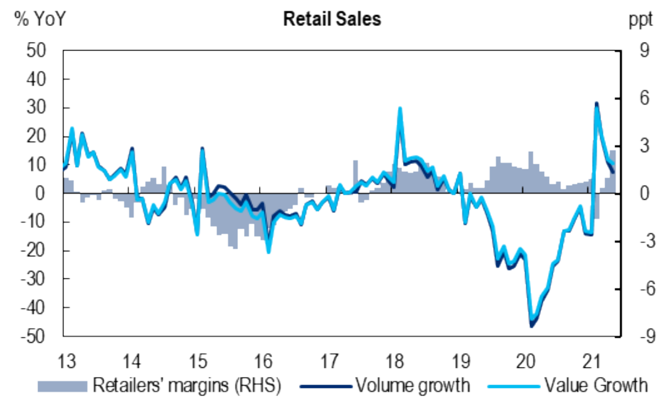
Long-awaited Wealth Management Connect and Southbound Bond Connect schemes launched in Sep, and both schemes will go live soon. Similar to other cross-border capital flow schemes, these two new pilot programs will likely expand their designated quotas and product suites over time. These both mark milestones for China's capital account liberalization and enrich HK's role as a cross-border funding center and asset management center. We expect the upcoming Policy Address on 6th Oct will discuss cross-border potentials, in terms of financial flows, people's mobility, innovation & technology developments as well as regulatory cooperation to help HK to capture long run opportunities that are in line with the new directives for Qinghai developments, GBA policies, overall dual circulation strategy and the common prosperity theme.

Local political focus will be on two upcoming elections: LegCo (19 Dec, 2021) and the Chief Executive election (27 Mar, 2022). 40 members of the newly formed Election Committee will take up seats in the enlarged 90-member LegCo. Another 30 LegCo members will be selected by functional constituencies and the remaining 20 members to be elected by direct elections under geographical constituencies. The market is looking for clues on the priorities under the next Chief Executive, in particular on addressing HK's land and housing supply, changes to the government structure (i.e. arrangements for the various policy bureau) and any policies to address widening income disparity gap. These will have direct implications on HK's fiscal outlook, especially amidst global tax changes.

Local liquidity remains flush but weaker HKD alongside equity market moves. HKD has weakened toward mid trading band, in line with the sharp correction in local stock market on concerns related to China growth slowdown and regulatory overhaul. We expect the HKD to stay near the mid-band as the market needs time to digest these overhang risks. Yet, banking system liquidity remains rather flush with 1M and 3M HIBOR at 6bps and 14bps, respectively. We reiterate our view that it is in the interest for HK to maintain the HKD peg status quo, even in the back drop of global central banks' policy exit, broadening cross border connectivity, US-China tensions and pandemic.

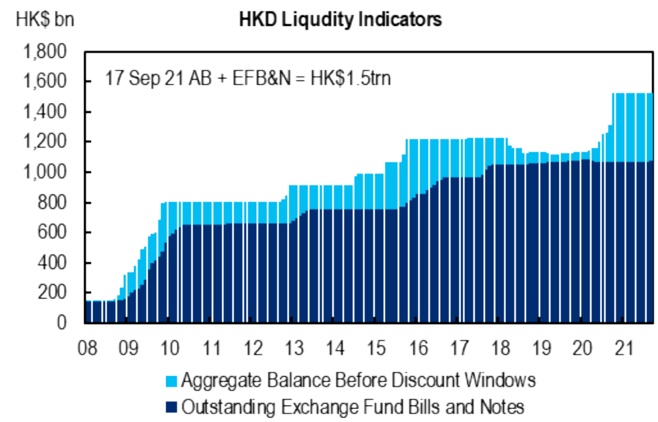
Prepared for Ariff Roduan

Figure 87. Retail sales still soft in May21



Source: CEIC, Citi Research

Figure 88. HKMA's latest move mops up liquidity from AB to EFBs



Source: CEIC, HKMA, Citi Research

Figure 89. Hong Kong Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	291	309	321	341	362	363	347	373	392
Population, mn	7.3	7.3	7.4	7.4	7.5	7.5	7.4	7.4	7.5
Real GDP, yoy avg	2.8	2.4	2.2	3.8	2.8	-1.2	-6.1	6.8	4.1
Private consumption growth % yoy	3.3	4.8	2.0	5.5	5.3	-1.1	-10.1	6.1	6.3
Real investment growth % yoy	1.5	-8.0	3.8	5.2	1.4	-14.9	-1.2	2.7	5.2
Real export growth, % yoy	1.0	-1.4	0.7	5.8	3.7	-5.6	-6.1	14.0	6.9
Real import growth, % yoy	1.0	-1.8	0.9	6.6	4.5	-6.8	-6.2	13.2	7.3
Net export contribution to growth	-0.1	0.7	-0.4	-1.3	-1.5	2.3	0.2	1.7	-0.5
Unemployment, % of labour force	3.3	3.3	3.4	3.1	2.8	2.9	5.8	5.6	3.7
External (US$bn)									
Current account	4.1	10.3	12.7	15.6	13.5	21.2	22.7	16.1	11.8
% of GDP	1.4	3.3	4.0	4.6	3.7	5.8	6.5	4.3	3.0
Trade balance	-70.4	-56.9	-54.1	-61.7	-71.9	-54.5	-44.1	-27.4	-35.3
FDI, net	13.9	14.8	16.0	15.1	16.8	17.3	13.4	15.0	15.0
International reserves	328.4	358.8	386.2	431.3	424.6	441.2	491.6	500.0	515.0
Public Finances, % of GDP									
Consolidated government balance	3.6	0.6	4.4	5.5	2.4	-0.6	-9.2	-4.2	-0.5
Consolidated gov primary balance	3.6	0.6	4.4	5.5	2.4	-0.6	-9.2	-4.2	-0.5
Public debt	2.6	1.5	1.2	1.1	0.9	1.3	4.1	1.5	1.3
External public debt	0.5	0.8	1.1	1.0	0.9	1.0	1.4	1.4	1.2
Prices									
CPI, % yoy	4.9	2.3	1.2	1.7	2.6	2.9	-0.6	2.9	2.5
CPI, % avg	4.4	3.0	2.4	1.5	2.4	2.9	0.3	1.9	2.4
HKD/US$, eop	7.75	7.75	7.75	7.81	7.83	7.79	7.75	7.78	7.77
HKD/US$, avg	7.75	7.75	7.76	7.79	7.84	7.84	7.76	7.77	7.78
Nominal wages, % yoy	4.21	4.34	3.73	3.74	4.01	3.49	1.35	1.00	2.50

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	8.0	7.6	5.9	5.9	4.0	2.6	3.8	5.7	3.6
CPI, % yoy	0.5	1.0	3.9	2.9	2.5	2.8	0.4	2.3	2.5
HKD/US$, eop	7.77	7.76	7.78	7.78	7.78	7.78	7.78	7.77	7.77

Source: CEIC Data Company Ltd, Fitch, IFS, Moody's and Citi Research estimates; * Note: Public debt is general government debt. Positive net FDI refers to inflow of investment into an economy

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- **Summary view** — We retain our FY22 real GDP growth forecast at 9.5%YY and expect FY23 growth at 9.0%YY. We revise down our FY22 headline inflation forecast to 5.3%YY but with risks tilted towards the upside. We estimate that Centre fiscal deficit in FY22 could be 6.1% of GDP, much lower than 6.8% budgeted. October MPC meet could be a curtain raiser towards a very gradual monetary policy normalization process.

Retain FY22E real GDP growth at 9.5%YY, revise FY23E to 9.0%YY: While the 1QFY22 GDP sequential decline was slightly more than expected, our monthly Broad Recovery Index was just about 2% below pre-Covid levels in July-21. Real GDP is likely to be very close to pre-Covid levels by 2QFY22 itself, with mainly contact-based services remaining behind the curve. We expect 2QFY22 real GDP growth at 8.1%YY and retain our FY22 forecast at 9.5%YY. Sequentially weak 1QFY22 would again distort the base for 1QFY23 and in turn for the full year. We expect 1QFY23 real growth at 19.3%YY (RBI exp: 17.2%) and this might take full-year FY23 growth closer to 9.0%YY. Driven by close to double-digit GDP deflation in 1Q and still-elevated WPI inflation, we have revised our FY22 nominal GDP growth forecast to 17.5%YY (vs 15.6% earlier).

Expect FY22 headline inflation at 5.3%YY: In the third consecutive month of positive surprises, headline CPI inflation fell to 5.30%YY in Aug-21. Subdued vegetable prices have been the overwhelming reason for inflation moderation since June. Sequential price momentum in core goods is also moderating due to some normalization of supply chains and easing of global commodity prices. Consequently, we have revised down our headline inflation forecast to 5.3%YY (vs 5.6% earlier). The risks to our view are tilted towards the upside and come mainly from vegetable prices (supply disruption-led price spike due to possible excess rainfall in late monsoon season).

Revise FY22 Centre fiscal deficit forecast downward to 6.1% of GDP: Gross tax collections in 4MFY22 continued to outpace rather modest budget assumptions. From the developing fiscal math, we estimate that Centre fiscal deficit in FY22 could be 6.1% of GDP, much lower than 6.8% budgeted. Risks to our fiscal deficit view are tilted towards the downside. Considering multiple factors that could influence borrowing for rest of the year, we conclude that 2HFY22 gross GSec issuance could be set between INR 5.0trn and INR 5.6trn (to be announced end-September). If the fiscal situation progresses in line with our expectations, RBI will have more freedom to lower its GSAP purchases in 2H.

Monetary policy normalization: Soft Aug CPI print will provide a comfortable backdrop for RBI to frame the October policy as a curtain raiser towards a very gradual policy normalization process. We present our granular view on monetary policy normalization sequencing here. Expansion of VRRR auctions to include long-tenor ones likely to be followed by a reverse repo hike in Dec and a change in policy stance to "Neutral" in April. First repo hike not expected before June but withdrawal of "durable liquidity" should be a parallel process to bring the operative rate closer to repo. We think that return to pre-Covid liquidity conditions looks difficult before end of FY23. Terminal repo rate of 5.0-5.25% expected to be achieved gradually as real policy rate is kept structurally lower.

We continue to expect FY22 current account deficit at 0.6% of GDP. USDINR is likely to remain range-bound at ~73-75 levels in FY22, driven more by RBI's multi-objective FX interventions rather than swings in external flows.

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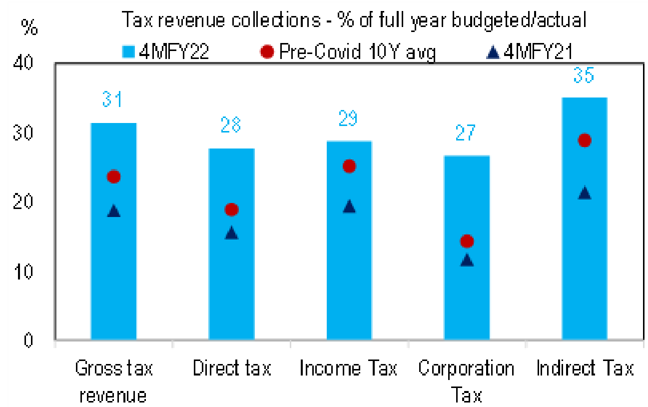
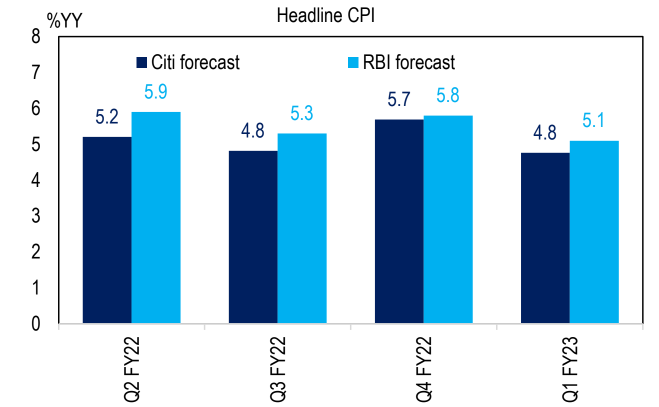
Figure 90. Resilient gross tax revenue collections



Source: Citi Research, CEIC, CGA

Figure 91. RBI likely to revise its forecast downwards at the Oct meet



Source: Citi Research, RBI, CEIC

Figure 92. India Economic Indicators

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22F	FY23F
Activity									
Nominal GDP, USD bn	2,027	2,112	2,294	2,650	2,701	2,870	2,667	3,129	3,505
Population, mn	1,267.0	1,283.0	1,299.0	1,314.0	1,327.0	1,341.0	1,355.8	1,370.7	1,385.7
Real GDP, yoy avg	7.4	8.0	8.3	6.8	6.5	4.0	-7.3	9.5	9.0
Private consumption growth % yoy	6.4	7.9	8.1	6.2	7.6	5.5	-9.1	9.0	10.4
Real investment growth % yoy	7.7	4.7	3.7	10.8	9.7	2.3	-10.1	14.8	9.5
Real export growth, % yoy	1.8	-5.6	5.0	4.6	12.3	-3.3	-4.7	19.0	2.8
Real import growth, % yoy	0.9	-5.9	4.4	17.4	8.6	-0.8	-13.6	22.3	4.4
Net export contribution to growth	0.2	0.1	0.1	-2.8	0.4	-0.5	2.2	-0.9	-0.4
External (US$bn)									
Current account	-26.9	-22.2	-14.4	-48.7	-57.3	-24.7	23.9	-19.0	-22.0
% of GDP	-1.3	-1.0	-0.6	-1.8	-2.1	-0.9	0.9	-0.6	-0.6
Trade balance	-144.9	-130.1	-112.4	-160.0	-180.3	-157.5	-102.2	-164.5	-169.3
FDI, net	31.3	36.0	35.6	30.3	30.7	43.0	44.0	41.0	44.0
External debt	474.7	485.1	471.3	529.3	543.1	558.4	570.0	592.0	617.0
Short-term debt	85.5	83.5	88.1	102.2	108.4	113.4	118.4	123.4	128.4
International reserves	341.4	355.6	370.0	424.4	411.9	475.6	579.3	613.7	656.0
Public Finances, % of GDP									
Consolidated government balance	-6.7	-6.9	-6.9	-5.8	-5.5	-7.6	-13.8	-9.4	-8.7
Public debt	66.6	68.5	68.8	69.8	70.3	73.8	91.6	86.5	85.2
External public debt	4.4	4.4	3.9	4.3	4.3	3.8	4.1	3.7	3.6
Prices									
CPI, % yoy	5.3	4.8	3.9	4.3	2.9	5.8	5.5	5.6	4.5
CPI, % avg	5.9	4.9	4.5	3.6	3.4	4.8	6.2	5.3	4.7
INR/US$, eop	63.04	66.21	67.95	63.84	69.57	71.36	73.05	74.01	75.22
INR/US$, avg	61.02	64.13	67.17	65.12	68.41	70.40	74.12	73.75	74.98
Policy Interest Rate, % eop	7.50	6.75	6.25	6.00	6.25	4.40	4.00	4.00	4.75
10-Year Gilt, %, eop	7.73	7.61	6.93	7.74	7.38	6.37	6.21	6.40	6.70

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	1.6	20.1	8.1	7.0	5.8	19.3	11.0	4.3	3.5
CPI, % yoy	5.5	6.3	4.7	5.6	5.6	4.4	4.9	4.3	4.5
INR/US$, eop	73.15	74.37	73.53	74.01	74.57	75.02	75.12	75.22	75.32
Policy interest rate, %, eop	4.00	4.00	4.00	4.00	4.00	4.25	4.25	4.50	4.75

Source: Citi Research, CEIC Data Company Ltd, Fitch, IFS, Moody's, Note: Public debt is general government debt and based on the residency of the holder of the debt (not by currency denomination). India Fiscal year runs from April-March. Positive net FDI refers to inflow of investment into an economy

Prepared for Ariff Roduan

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- **Summary view** — The economy is gradually reopening as the latest Covid wave rapidly subsides. The rebound of inflation is likely to be pushed back; and FX fundamentals seem favorable near-term. Policy rate hikes are not seen until 2H22, but quantitative accommodation could be rolled-back starting 1H22.

Mobility has returned to pre-June levels in many provinces as active cases recede. Active Covid cases have returned to <100K, from a peak of 575K in August. Visits to retail & recreation centers have nearly rebounded to pre-June levels as restrictions continue to be eased. Meanwhile, although the portion of the population that have received two doses of Covid vaccine is still less than 25%, large cities are way ahead and set to reach the tail-end of their respective vaccination targets by 4Q21. We think this will pave the way for a less disruptive recovery of Covid-impacted sectors, which are largely located in urban areas. However full normalcy is not in our base-case yet for 2022 as vaccinations in the small cities and rural areas will still have some way to go and it will be a tougher logistical challenge. We also expect that a third booster shot of Covid vaccine will eventually have to be administered for a large segment of the population in 2022 (See: Indonesia Economics: On the Fiscal Trajectory, Credit Ratings and Bank Liquidity).

Policy rates likely have bottomed; the exit from monetary accommodation will probably commence in 1H22 with instruments other than the 7D policy rate. As a result of the July-August lockdowns, recovery of domestic demand has stalled and CPI inflation remains suppressed. Amid low purchasing power in the grass-roots, the pass-through from global commodity price increases has been limited. However as the GDP growth recovery should come onto a more solid footing next year (which probably will coincide with an upward swing in private capex and credit growth) in 2022, we expect CPI inflation to tilt upwards into the lower end of BI's 2-4% target range. In the absence of severe FX market pressures, policy rate hikes may not be in the cards until 3Q22. However we think BI will probably begin to raise reserve requirements in 1H22. Indeed BI has entered into a new agreement with the government in late August to fund selected pandemic spending in both 2021 and 2022. Yet we do not think this move significantly weakens BI's ability to withdraw monetary stimulus when economic recovery broadens.

Domestic fundamentals will likely be supportive for IDR in the near term (3M), though less so on a 6-12M horizon. We expect that FX demand from onshore corporates will probably be kept at bay throughout September and October, as a lagged impact of the mobility restrictions imposed in July-Aug. (The lockdowns likely temper imports of raw materials.) Meanwhile exports of primary commodities will probably remain elevated as Indonesia's terms of trade continued improving into September. And with regard to FX supply from offshore, the dynamics of portfolio investment flows have improved in early Sep as concerns over a Fed taper tantrum scenario recede. Looking further ahead into 2022, however, we expect that the private sector capex cycle will see an upswing following the completion of vaccinations in the large cities in 4Q21. This will probably lead to a further recovery of imports of both raw materials and capital goods which will raise onshore dollar demand. Meanwhile on the export side, we think the upside to Indonesia's terms of trade in 2022 will be limited, given our expectation that commodity prices will likely begin to taper off.

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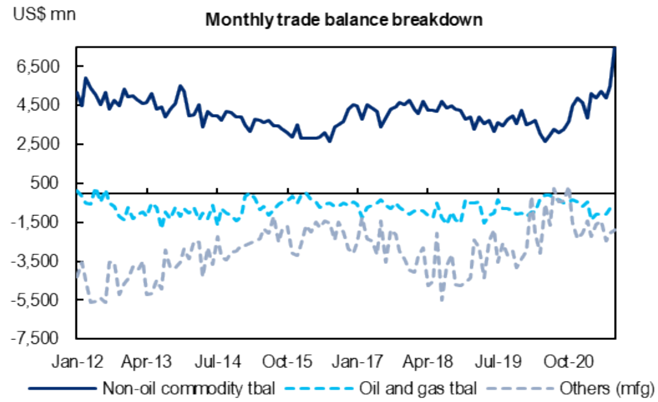
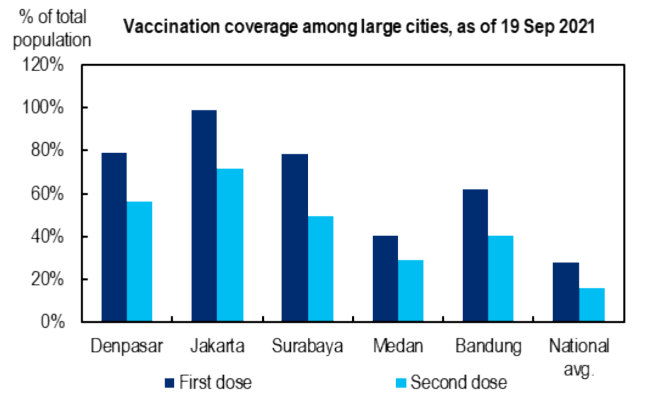
Figure 93. Exports of primary commodities have surged in Jul & Aug



Source: Citi Research Estimates, BPS

Figure 94. Large cities well ahead In vaccinations



Source: Citi Research Estimates, Ministry of Health

Figure 95. Indonesia Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	891	861	932	1,016	1,042	1,119	1,058	1,136	1,225
Population, mn	252.2	255.5	258.7	261.9	265.0	268.1	271.1	274.0	277.0
Real GDP, yoy avg	5.0	4.9	5.0	5.1	5.2	5.0	-2.1	3.4	4.7
Private consumption growth % yoy	5.3	4.8	5.0	5.0	5.1	5.2	-2.7	2.3	3.1
Real investment growth % yoy	5.7	3.0	5.0	5.7	8.5	2.4	-6.9	2.3	10.4
Real export growth, % yoy	1.1	-2.1	-1.7	8.9	6.5	-0.9	-7.7	21.1	5.5
Real import growth, % yoy	2.1	-6.2	-2.4	8.1	12.1	-7.4	-14.7	21.5	7.0
Net export contribution to growth	-0.2	0.9	0.1	0.3	-1.0	1.4	1.1	0.6	-0.1
Unemployment, % of labour force	5.9	6.2	5.6	5.5	5.3	5.2	7.1	6.0	5.5
External (US$bn)									
Current account	-27.5	-17.5	-17.0	-16.2	-30.6	-30.3	-4.5	-7.9	-21.3
% of GDP	-3.1	-2.0	-1.8	-1.6	-2.9	-2.7	-0.4	-0.7	-1.7
Trade balance	7.0	14.0	15.3	18.8	-0.2	3.5	28.2	28.9	17.7
FDI, net	14.7	10.7	16.1	18.5	12.5	20.5	13.9	19.1	18.2
External debt	293.3	310.7	320.0	352.5	375.4	403.6	416.4	422.8	441.4
Short-term debt	44.2	38.0	40.3	44.7	46.1	43.4	43.6	44.9	46.3
International reserves	111.9	105.9	116.4	130.2	120.7	129.2	135.9	148.7	153.6
Public Finances, % of GDP									
Consolidated government balance	-2.1	-2.6	-2.5	-2.5	-1.8	-2.2	-6.2	-5.6	-4.4
Consolidated gov primary balance	-0.9	-1.2	-1.0	-0.9	-0.1	-0.5	-4.1	-3.4	-2.1
Public debt	23.5	26.7	28.1	29.0	29.3	30.7	40.7	43.6	45.9
External public debt	6.1	6.3	12.0	12.0	12.0	11.7	13.7	11.2	8.7
Prices									
CPI, % yoy	8.4	3.4	3.0	3.6	3.2	2.6	1.7	1.8	3.0
CPI, % avg	6.4	6.4	3.5	3.8	3.3	2.8	2.0	1.5	2.4
IDR/US$, eop	12,385	13,788	13,473	13,568	14,380	13,883	14,050	14,239	14,610
IDR/US$, avg	11,866	13,392	13,302	13,383	14,233	14,141	14,540	14,335	14,612
Policy Interest Rate, % eop	5.75	5.50	4.75	4.25	6.00	5.00	3.75	3.50	4.00
Nominal wages, % yoy	15.87	10.61	14.81	8.25	8.64	6.91	8.50	2.00	3.00

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-0.7	7.1	2.9	4.4	4.4	5.7	4.0	4.7	4.4
CPI, % yoy	1.4	1.3	1.6	1.8	2.4	2.6	2.8	3.0	2.6
IDR/US$, eop	14,525	14,500	14,076	14,239	14,498	14,691	14,651	14,610	14,571
Policy interest rate, %, eop	3.50	3.50	3.50	3.50	3.50	3.50	3.75	4.00	4.00

Source: Citi Research, CEIC Data Company Ltd, Fitch, IFS, Moody's , Note: Public debt is central government debt and based on the residency of the holder of the debt (not by currency denomination). For Indonesia, we refer to7d reverse repo rate from Q3'16 onwards. We quote the FasBI rate before that. Positive net FDI refers to inflow of investment into an economy

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- **Summary view** — Incoming Jul hard data points to another QoQ SA contraction in 3Q21, corroborating BNM's baseline forecasts; 2022 fiscal deficit could be above 5% of GDP, amidst hints of a more gradual pace of fiscal consolidation; We continue to see monetary policy on an extended pause through 1H22.

MCO-related drags extended into 3Q, Jul activities still soft. BNM's downwardly revised baseline 2021 GDP forecast of 3-4% (Prev: 6-7.5%; Citi: 4.3%) anticipates recovery momentum regained only in 4Q21. Incoming Jul data likewise points to a 2nd straight quarter of QoQ SA decline (2Q: -2%), with (1) distributive trade edging up by just 1% MoM SA, following the 18% plunge in Jun, and (2) IP *falling* by 6.2% (Jun: +3.9%), with manpower restrictions and factory shutdowns exacerbating the global shortage of low-end chips required by automakers, for which Malaysia accounts for 13% of global supply. Other soft data reinforce the challenging prospects for 3Q, with Aug manufacturing PMI far below the 50-mark and latest Jun official leading index turning negative for the first time since 2Q20.

Partial reopening already started in early Jul, with rising vaccination rates paving the way for further relaxation for vaccinated individuals. As at time of writing, 14 out of 16 states/federal territories accounting for 87% of GDP have advanced to less strict Phases 2-4 of the National Recovery Plan (NRP), including Klang Valley (41% of GDP) since 10th Sep. Even within each phase, restrictions have been further relaxed for those fully vaccinated. As of 18th Sep, 56% (11%) of the population have completed 2 (1) dose(s), and around 80% of the population could be fully vaccinated by Oct (instead of Dec under BNM's baseline scenario).

Pre-Budget 2022 Statement (31st Aug) hints at a more gradual pace of fiscal consolidation than previously forecast. The Statement reiterated that fiscal support will be prioritized amidst reforms, and revenue-enhancing measures will focus mainly on improving tax compliance, with raising of consumption taxes (eg. reinstatement of GST or broadening of SST) already ruled out by the Finance Minister. The Medium-Term Fiscal Framework (MTFF) previously projected 2022 fiscal deficit falling by RM14bn. With 2021 fiscal deficit now closer to 6.7% of GDP (Original: 5.4%), a similar RM14bn reduction would imply 2022 fiscal deficit closer to 5.3% of GDP (vs. 4.3% earlier), after factoring in the expected rebound in 2022 real GDP growth (Citi: 6.3%). To accommodate additional COVID-19 related spending, the government plans to raise the COVID-19 Fund by RM45bn to RM110bn, and the statutory debt ceiling by 5%-pts to 65% of GDP in Oct.

There is a bipartisan deal between the government and ruling opposition bloc PH to extend the reprieve from political uncertainty of the last few months. The deal (see details here) alleviates earlier concerns associated with the new PM's razor-thin parliamentary majority and the fluid nature of Malaysia's political alliances. A proposed anti-party hopping bill would also reduce the likelihood of destabilizing changes in government without elections.

Our base case remains for monetary policy to stay on an accommodative, extended pause amidst uncertainties, as signaled by the MPC's expectations for 2022 core CPI to be "relatively subdued". Risks of further cuts have likely receded on reopening, with the current pace of vaccination likely closer to BNM's "faster recovery" scenario, and ongoing measures (including EPF withdrawals and 3-month interest exemption for some borrowers under loan moratoriums) continuing to aid the recovery through 2H21 and into 2022. With the MPC reiterating data-dependence, we tentatively see the first hike commencing in 3Q22 as the recovery broadens and labour market slack diminishes.

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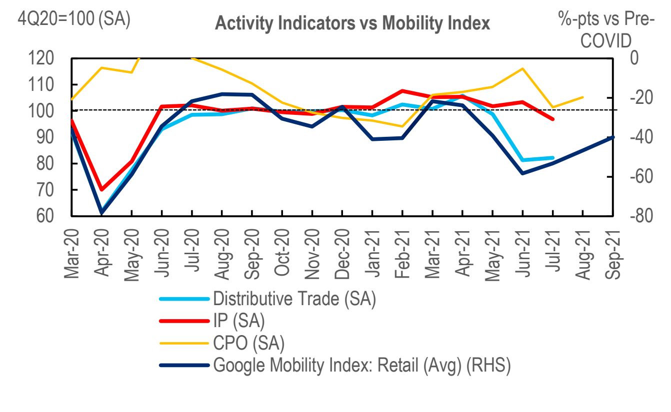
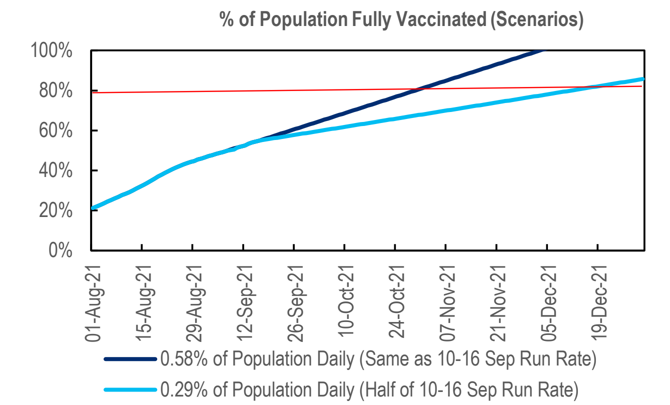
Figure 96. Jul activity indicators remained soft



Source: CEIC, Citi Research

Figure 97. 80% of the population could be fully vaccinated in Oct



Source: CEIC, Citi Research

Figure 98. Malaysia Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	343	301	302	319	359	365	337	386	424
Population, mn	30.7	31.2	31.6	32.0	32.4	32.5	32.8	33.0	33.2
Real GDP, yoy avg	6.0	5.0	4.4	5.8	4.8	4.4	-5.6	4.3	6.3
Private consumption growth % yoy	7.0	5.9	5.9	6.9	8.0	7.7	-4.3	3.1	6.4
Real investment growth % yoy	2.5	6.4	4.4	6.3	-1.6	-3.8	-12.0	6.2	8.4
Real export growth, % yoy	5.0	0.2	1.3	8.7	1.9	-1.0	-8.9	14.8	6.0
Real import growth, % yoy	4.0	0.8	1.4	10.2	1.5	-2.4	-8.4	15.2	5.9
Net export contribution to growth	1.1	-0.3	0.0	-0.3	0.4	0.7	-0.9	0.7	0.5
Unemployment, % of labour force	2.9	3.2	3.5	3.4	3.3	3.3	4.5	4.6	3.6
External (US$bn)									
Current account	14.8	9.0	7.2	8.9	8.0	12.8	14.3	13.3	17.9
% of GDP	4.3	3.0	2.4	2.8	2.2	3.5	4.2	3.4	4.2
Trade balance	34.6	28.0	24.6	27.2	28.4	30.1	33.0	37.0	39.3
FDI, net	-5.5	-0.5	3.3	3.8	2.5	1.6	0.7	2.0	2.0
External debt	215.1	195.6	205.2	217.1	221.4	228.5	236.3	248.0	260.0
Short-term debt	104.7	82.2	84.8	86.3	97.2	93.9	90.6	95.0	97.0
International reserves	115.9	95.3	94.5	102.4	101.4	103.6	107.6	118.0	123.0
Public Finances, % of GDP									
Consolidated government balance	-3.3	-3.2	-3.1	-2.9	-3.7	-3.4	-6.2	-6.7	-5.3
Consolidated gov primary balance	-1.3	-1.1	-1.0	-0.9	-1.6	-1.2	-3.8	-4.5	-3.1
Public debt	51.9	53.6	51.9	50.0	51.2	52.4	62.1	63.8	64.2
External public debt	1.5	1.8	1.7	1.5	1.5	1.9	2.0	2.0	2.0
Prices									
CPI, % yoy	2.7	2.7	1.7	3.5	0.2	1.0	-1.4	2.2	2.6
CPI, % avg	3.1	2.1	2.1	3.8	1.0	0.7	-1.1	2.3	1.9
MYR/US$, eop	3.50	4.29	4.49	4.05	4.13	4.09	4.02	4.15	4.03
MYR/US$, avg	3.27	3.91	4.14	4.30	4.04	4.14	4.20	4.14	4.12
Policy Interest Rate, % eop	3.25	3.25	3.00	3.00	3.25	3.00	1.75	1.75	2.00
5-year MGS, %, eop	3.84	3.47	3.70	3.56	3.78	3.18	2.12	2.80	3.00
Nominal wages, % yoy	4.66	2.33	10.00	6.13	4.95	6.43	0.00	3.00	4.00

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-0.5	16.1	-1.1	4.6	3.9	7.7	8.6	5.2	5.0
CPI, % yoy	1.7	3.4	2.3	2.2	1.2	1.6	2.2	2.6	2.3
MYR/US$, eop	4.15	4.15	4.14	4.15	4.17	4.16	4.10	4.03	3.97
Policy interest rate, %, eop	1.75	1.75	1.75	1.75	1.75	1.75	2.00	2.00	2.00

Source: Citi Research, CEIC Data Company Ltd, Fitch, IFS, Moody's, Note: Wage is based on Citi Research estimates of average manufacturing sector wage. Public debt is general government debt and based on the residency of the holder of the debt (not by currency denomination). Positive net FDI refers to inflow of investment into an economy

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- **Summary view** – Recent spread of COVID-19 variants still poses downside risks but an acceleration in vaccination and targeted lockdown measures should help soften the impact. We maintain GDP growth forecasts but revise down current account to a deficit for both 2021F and 2022F due to stronger import growth. We maintain inflation outlook and expect no policy rate change through Q3 2022.

We maintain GDP growth forecasts at 4.9% for 2021F and 6.8% for 2022F. Q2 GDP (11.8%YoY) was stronger than expected, led by investment, but household spending stayed weak. Unemployment rate fell to 6.9% in July vs. 7.7% in June, but employment and participation rate fell significantly, due to typhoon disruption and the spread of COVID-19 variants making workers more worried about going to work.

Metro Manila moved out of Modified Enhanced Community Quarantine (MECQ) on Sep 16th into General Community Quarantine (GCQ) with flexibility for localized lockdowns in some cities if needed. Under the new measures, areas of larger gathering such as meeting venues, cinemas, bars, and fitness gyms would remain closed. Outdoor dining is allowed at 30% capacity, and indoor dining is allowed at 10% capacity for those who are fully vaccinated. Businesses not on the prohibited list may now operate at full capacity instead of 50-75% under MECQ.

Vaccination improved somewhat to an average of 425k doses in 1-16 Sep compared to 287k in July. Nearly half of the target 10m adults in Manila have been fully vaccinated. The official target is to form "population protection" (lower infection and severe cases) by inoculating 70% of 77m adult population, or half of 109m population) in 2021 by scaling up daily vaccination to 1m and focusing on key cities and vulnerable populations. This seems optimistic, but we expect continued acceleration with a supply of more than 140m vaccines expected before year-end.

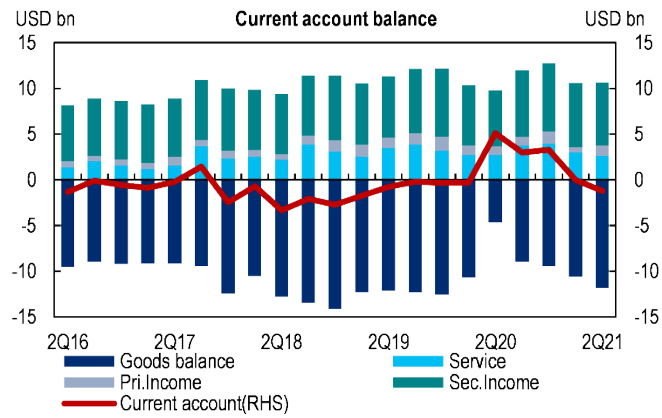
Customs trade deficit widened further in first seven months to -USD21.3bn (-USD13.5bn a year ago, but below pre-pandemic level). Custom-cleared exports expanded by 19.7%YoY YTD, but imports accelerated recently and recorded 30.2%YoY YTD growth. Further economic reopening likely will lead to some weakening of the current accounts in H2. In any case, income remittances grew 5.4%YoY YTD in 7M21, while we note a slight increase of services balance from USD5.4bn to USD5.6bn in 1H21. **We revise down our 2021F current account forecast to -0.3% of GDP from 0.5% earlier.** In 1H21, the current account recorded a -USD1.2bn deficit vs. a surplus a year ago. These contributed to a deficit of -USD1.9bn in the BOP in 1H21, vs. a USD4.2bn surplus a year ago. In any case, Q2 BOP recorded a USD0.9bn surplus, as net portfolio flows reversed from an outflow into a slight inflow, and net direct investment improved from 2020.

We raise our 2021F and 2022F inflation forecasts to 4.3% (from 4.2%) and 2.7% (from 2.5%), respectively. Inflation surged to 4.9% in August and will likely stay elevated before falling to below 4.0% in November. The higher-than-expected food inflation is partly due to the typhoon impact in early Q3, but the recent lockdowns are likely to keep near-term demand-pulled inflation pressures in the medium-term in check. The peso depreciation and higher commodity prices may still pose some upside risk that warrants monitoring.

The BSP is likely to stay on hold until Q3 2022, and normalization may begin in Q4 2022 at the earliest. The Monetary Board on 12 August reiterated that the monetary policy settings would continue to provide favorable credit conditions and the orderly functioning of the government securities market, to allow the momentum of economic recovery to gain more traction and to help boost market confidence.

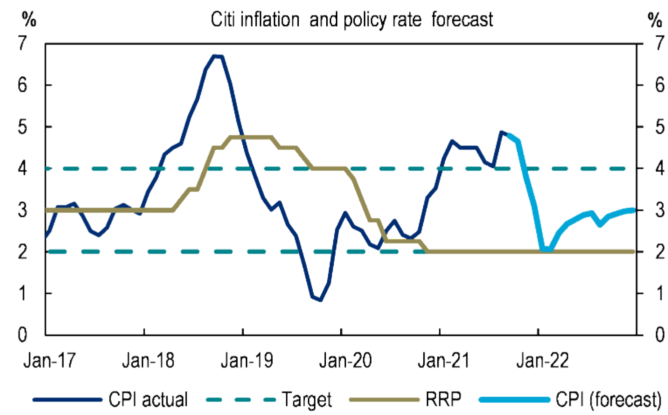
Prepared for Ariff Roduan

Figure 99. Current account balance falls from wider trade deficit



Source: Citi Research, CEIC Data Company Limited

Figure 100. Inflation expected to be back to target from November



Source: Citi Research, CEIC Data Company Limited

Figure 101. Philippines Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	297	306	318	328	347	377	373	396	423
Population, mn	99.9	101.6	103.2	104.9	106.6	108.3	109.9	111.7	113.4
Real GDP, yoy avg	6.3	6.3	7.1	6.9	6.3	6.1	-9.6	4.9	6.8
Private consumption growth % yoy	5.8	6.4	7.1	6.0	5.8	5.9	-7.9	1.0	5.0
Real investment growth % yoy	8.3	13.4	20.8	10.9	11.3	3.5	-34.4	29.5	12.3
Real export growth, % yoy	12.1	10.0	9.2	17.4	11.8	2.6	-16.3	9.5	11.3
Real import growth, % yoy	9.9	15.0	18.8	15.1	14.6	2.3	-21.6	13.2	9.4
Net export contribution to growth	0.0	-2.0	-3.8	-0.9	-2.3	-0.2	4.0	-2.0	-0.4
Unemployment, % of labour force	6.8	6.3	5.5	5.7	5.3	5.1	10.4	8.0	6.5
External (US$bn)									
Current account	10.8	7.3	-1.2	-2.1	-8.9	-3.0	11.1	-1.1	-3.0
% of GDP	3.6	2.4	-0.4	-0.7	-2.6	-0.8	3.0	-0.3	-0.7
Trade balance	-17.3	-23.3	-35.5	-40.2	-51.0	-49.3	-33.8	-46.8	-50.4
FDI, net	-1.0	0.1	5.9	7.0	5.8	5.3	3.1	4.0	4.8
External debt	77.7	77.5	74.8	73.1	79.0	83.6	98.5	101.5	103.0
Short-term debt	16.2	15.1	14.5	14.3	16.1	17.2	14.2	16.0	17.0
International reserves	79.5	80.7	80.7	81.6	79.2	87.8	110.1	109.6	111.6
Public Finances, % of GDP									
Consolidated government balance	-0.6	-0.9	-2.3	-2.1	-3.1	-3.4	-7.6	-7.7	-6.7
Consolidated gov primary balance	1.9	1.3	-0.3	-0.2	-1.1	-1.5	-5.5	-5.4	-4.5
Public debt	47.6	46.6	43.6	43.1	42.6	42.1	57.2	59.6	57.8
External public debt	16.8	17.0	16.1	15.0	15.4	14.5	18.4	17.1	16.6
Prices									
CPI, % yoy	1.9	0.7	2.2	2.9	5.1	2.5	3.5	3.1	3.0
CPI, % avg	3.6	0.7	1.3	2.9	5.2	2.5	2.6	4.3	2.7
PHP/US$, eop	44.79	46.93	49.60	50.01	52.50	50.66	48.02	50.04	50.84
PHP/US$, avg	44.40	45.53	47.50	50.40	52.67	51.78	49.61	49.32	50.49
Policy Interest Rate, % eop	4.00	4.00	3.00	3.00	4.75	4.00	2.00	2.00	2.25
5-Year T Bond, %, eop	3.27	3.80	3.98	4.53	7.00	4.23	2.53	3.00	3.20
Nominal wages, % yoy	0.00	3.22	2.08	4.28	4.88	0.00	0.00	0.00	3.00

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-3.9	11.8	5.5	6.5	8.7	8.0	7.4	3.7	4.3
CPI, % yoy	4.5	4.1	4.8	3.1	2.4	2.9	2.8	3.0	3.4
PHP/US$, eop	48.58	48.85	49.91	50.04	50.18	50.36	50.60	50.84	51.07
Policy interest rate, %, eop	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.25	2.50

Source: Citi Research, CEIC Data Company Ltd, Fitch, IFS, Moody's , Note: Public debt is central government debt. Positive net FDI refers to inflow of investment into an economy

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- **Summary view** — Despite record daily cases, hurdle for future lockdowns has been raised, as authorities stay on course for treating the virus as endemic. We see a rising risk of a pre-emptive Oct "slight" 50bps slope steepening (40% chance) as insurance against upside inflation risks.

Despite record daily cases, the lack of tighter restrictions so far suggests that strategy of treating COVID as endemic remains broadly on track despite delays, with a significantly higher hurdle for lockdowns. With >80% of the population fully vaccinated, authorities are placing a greater emphasis on severity of conditions, and will resort to lockdowns only as a last resort to keep the healthcare system from being overwhelmed, though incremental tweaks are possible before that. To date, border restrictions have been unilaterally eased to varying degrees for "safer economies" accounting for ~45% of arrivals in 2019, while "vaccinated travel lanes" have been launched with Germany & Brunei, with more restrictions likely to be eased from 4Q21; With marginal sequential declines in trade and tourism-related activities in Jul amidst a pickup in non-tradables sectors, our 2021 GDP growth forecast of 7% could see marginal downside risks (likely not below 6.5%).

Aggregate job market slack may be largely absorbed within the next 6-12 months... Job market slack fell in 2Q21, in tandem with lower unemployment rates, and was exacerbated by foreign worker shortages, which led to sharp jumps in job vacancy rates. Some transitory weakness is likely in 3Q21E on repeated Jul-Aug restrictions, but aggregate job market slack could still be largely absorbed within the next 6-12 months, should the government's (delayed) reopening plans pan out.

…and we look out for signs of wage inflation as the cyclical recovery interacts with policy changes for foreign workers and low-wage workers. Against a backdrop of structurally tighter foreign worker policies, supply constraints may broaden towards more sectors heavily dependent on foreign labour. Businesses could also see some upward pressure on labour cost, with around 100K lower-wage workers (or 3% of total employment) expected to benefit from policy moves to raise salaries over the next 2-3 years. Unless offset by stronger labour productivity growth, these constraints could possibly raise the spectre of higher wage inflation, similar to the 2011-2013 period.

Base case remains MAS to commence normalization in Apr 2022 (60% chance). Assuming MAS's baseline 2021 and 2022 core CPI forecasts are close to ours, and a GST announcement is made only during the Feb 2022 Budget, our base case is for normalization to start from Apr 2022, with a concurrent slope steepening and upward re-centering (of 100-150bps) increasingly plausible (See Singapore Economics - Considering Various MAS Normalization Scenarios.

Rising risk of pre-emptive Oct "slight" 50bps slope steepening (40% chance) as insurance against upside inflation risks. Although policy decisions have been historically anchored around baseline projections for core CPI, the weight placed on risks to baseline projections may be higher in the current episode. This applies especially to supply-side risks, where there is greater uncertainty compared to demand-side risks. A materialization of supply side risks could lead to greater persistence in core inflation momentum and a faster than expected convergence towards the 1.7% threshold in 2022. Policymakers may also pay greater attention to accelerating momentum in pipeline cost pressures, including the Domestic Supply Price Index (DSPI) and wages. Thus, a pre-emptive tightening in Oct (via a "slight" slope steepening of 50bps) could still be seriously considered as an option to purchase insurance against upside inflation risks, with an upward re-centering more likely only when there is clarity over the GST hike (See Singapore Economics - Latest MAS Thoughts – Hawkish Tilt on Supply Constraints?.

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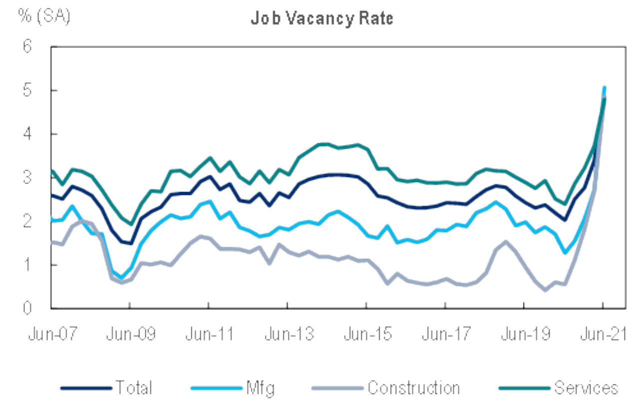
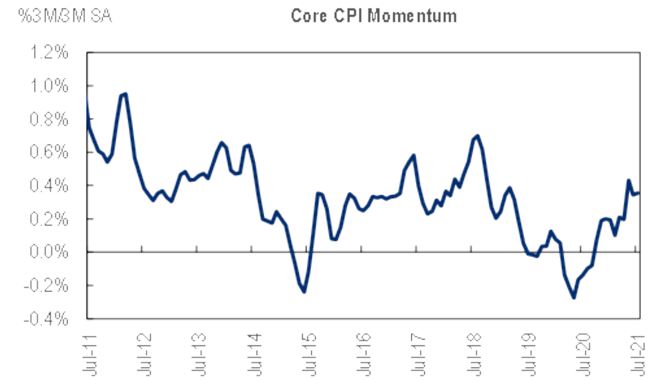
Figure 102. Job vacancy rates rose sharply in 2Q21



Source: CEIC, Citi Research

Figure 103. Core CPI momentum accelerated through 2021



Source: CEIC, Citi Research

Figure 104. Singapore Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	315	308	319	344	376	374	340	416	448
Population, mn	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.7	5.7
Real GDP, yoy avg	3.9	3.0	3.3	4.5	3.5	1.3	-5.4	7.0	4.1
Private consumption growth % yoy	3.6	5.2	3.3	3.1	4.0	3.3	-14.1	5.8	4.2
Real investment growth % yoy	0.8	-8.6	9.5	11.1	-3.0	-1.1	-14.9	9.2	3.7
Real export growth, % yoy	3.6	5.0	-0.1	7.1	7.7	0.1	-4.3	5.9	3.2
Real import growth, % yoy	2.8	3.4	0.1	7.8	7.5	0.2	-7.1	5.4	3.0
Net export contribution to growth	2.1	3.6	-0.3	0.9	2.4	-0.1	3.1	2.7	1.4
Unemployment, % of labour force	2.0	1.9	2.1	2.2	2.1	2.2	3.0	2.8	2.6
External (US$bn)									
Current account	56.5	57.6	56.0	59.3	57.9	53.4	59.8	69.2	77.8
% of GDP	18.0	18.7	17.6	17.3	15.4	14.3	17.6	16.6	17.3
Trade balance	86.7	92.6	90.0	101.1	101.6	96.9	93.7	91.9	98.1
FDI, net	16.2	24.6	29.8	35.9	61.1	69.9	55.1	45.0	45.0
International reserves	256.9	247.7	246.6	279.9	287.7	279.5	362.3	410.0	430.0
Public Finances, % of GDP									
Consolidated government balance	0.1	-0.8	1.5	2.1	0.4	-0.3	-13.9	-2.2	0.7
Consolidated gov primary balance	1.1	-0.6	-0.5	0.3	-1.6	-0.7	-6.3	-5.1	0.2
Public debt	97.1	99.5	105.2	105.9	107.8	125.5	150.2	140.0	130.0
Prices									
CPI, % yoy	-0.1	-0.6	0.2	0.4	0.5	0.8	0.0	1.8	2.5
CPI, % avg	1.0	-0.5	-0.5	0.6	0.4	0.6	-0.2	1.9	2.0
SGD/US$, eop	1.33	1.42	1.45	1.34	1.36	1.34	1.32	1.34	1.30
SGD/US$, avg	1.27	1.37	1.38	1.38	1.35	1.36	1.38	1.34	1.32
10-Year SGS, %, eop	2.28	2.60	2.47	2.00	2.04	1.74	0.84	1.50	1.70
Nominal wages, % yoy	2.27	3.50	3.70	3.05	3.47	2.56	1.44	2.00	3.00

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	1.5	14.7	7.0	5.6	3.0	5.7	4.7	2.9	3.9
CPI, % yoy	1.3	2.4	2.1	1.8	1.7	1.4	2.2	2.5	2.2
SGD/US$, eop	1.34	1.35	1.34	1.34	1.33	1.33	1.31	1.30	1.28

Source: Citi Research, CEIC Data Company Ltd, Fitch, IFS, Moody's, Public debt is central government debt. Singapore's government issues domestic debt securities primarily to develop the domestic debt market and to meet the investment needs of the Central Provident Fund (CPF), Singapore's national pension fund, rather than to finance the government's fiscal needs. Positive net FDI refers to inflow of investment into an economy

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- **Summary view** — We lower our 2021-22E GDP growth forecasts slightly by 0.1ppt each to 4.0% and 3.1%, but maintain our 2021-22E CPI inflation at 2.1% and 1.8%. We continue to expect BoK to hike the policy rate by 25bps to 1.00% in November MPB meeting, but bring forward our 3rd rate hike call to 1Q22.

We lower our 2021-22E GDP growth forecasts slightly by 0.1ppt to 4.0% and 3.1%, respectively, due to downside risks on export and manufacturing sectors. Although Korea's export has been robust, we see downside risks from [1] China, [2] chip and [3] auto. Citi's China economists recently cut China's 2021E GDP by 0.5ppt due to slowdown of major activity indicators in July-August. It could generate a negative 0.1ppt shock to Korea's 2021E GDP, according to our estimation based on Oxford Economics' Global Economic Model. China and Hong Kong account for 31% of Korea's export this year, although the majority (82%) of the items are intermediate goods. Moreover, Citi's semiconductor analysts expect weakness in the DRAM market in 4Q21-1Q22. Auto chip shortage appears to have persisted in late 3Q21 amid the pandemic-related supply disruption from Malaysia.

However, vaccine-driven recovery of contact consumption/service sector may lead economic growth in 4Q21-1Q22. Korea's 1st shot vaccination reached 70% of total population in mid-September, likely leading to full vaccination of most adults by October. Availability of critical patient beds has also improved since mid-August. Social distancing measures should gradually ease in 4Q21 with risks of further delay during the winter period. The relationship between social distancing measures and economic activities will likely weaken further due to learning effects, vaccination and pandemic fatigue.

We maintain our 2021-22E CPI inflation at 2.1% and 1.8%, respectively, while seeing more upside risks. On the supply-side, food inflation should moderate from October due to dissipation of seasonal effects. The peak of oil inflation may have passed but is unlikely to stabilize quickly partly due to deprecation of KRW. A surge in natural gas price could lead to a rise in electricity tariff and city gas price in 4Q21. Persistent demand-side inflationary pressure is highly likely on the back of contact service inflation, a rise in rental prices for housing, lower unemployment rate, higher wages & inflation expectations and limited cuts in administered prices. Both headline and Core CPI inflation are likely to stay above BoK's 2% inflation target in 4Q21-1Q22.

We continue to expect BoK to hike the policy rate by 25bps to 1.00% in November MPB meeting, but bring forward our 3rd rate hike call to 1Q22 (vs. previous: 2Q22). Despite downside risks on economic growth, continued concerns of financial imbalance risks along with high inflationary pressure bring forward our 3rd rate hike call to 1Q22. BoK may prefer a gradual rate hiking cycle as seen in the Aug MPB minutes. In our base case, policy rate path assumes four hikes from 0.50% to 1.50% including 2nd hike in November 2021, 3rd hike in February 2022 and 4th hike in 2H22. However, we believe the risk is tilted to a faster-than-expected hiking cycle during Governor Lee's term till March 2022. In our alternative case, policy rate path assumes 2nd hike in October 2021 and 3rd hike in January 2022. We keep our assigned probabilities on the timing of a second rate hike at 60% for November MPB meeting and 40% for October meeting.

USDKRW may trade at around 1165, with high volatility in 0-3 months before likely falling to 1140 in 6-12 months. It should take time to ease investors' concerns on China's economic slowdown, memory chip cycle, and regulations on big IT service firms as well as Fed's tapering announcement.

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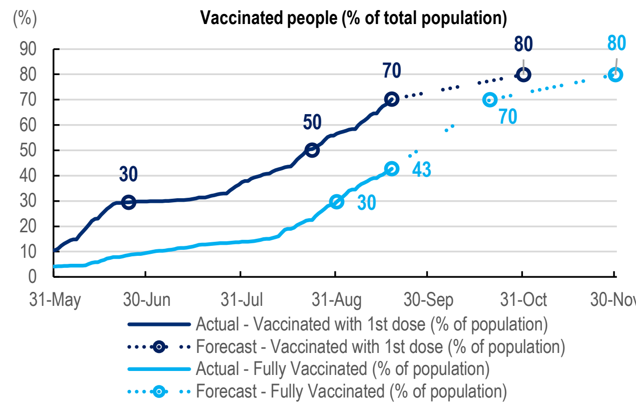
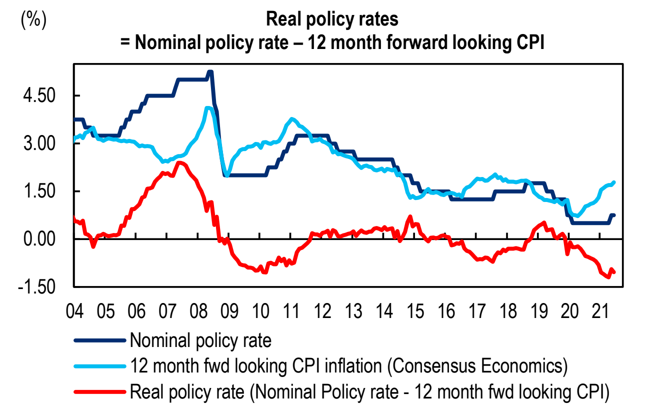
Figure 105. Citi's vaccination forecast



Source: CEIC, Citi Research

Figure 106. Real policy rate remains at historically low level



Source: CEIC, Consensus Economics, Citi Research

Figure 107. Korea Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	1,484	1,466	1,500	1,623	1,725	1,651	1,638	1,805	1,894
Population, mn	50.7	51.0	51.2	51.4	51.6	51.7	51.8	51.8	51.8
Real GDP, yoy avg	3.2	2.8	2.9	3.2	2.9	2.2	-0.9	4.0	3.1
Private consumption growth % yoy	2.0	2.2	2.6	2.8	3.2	2.1	-5.0	3.1	3.5
Real investment growth % yoy	3.6	6.5	6.3	10.9	-1.3	-1.9	0.5	1.8	4.1
Real export growth, % yoy	2.1	0.2	2.4	2.5	4.0	0.2	-1.8	8.9	3.2
Real import growth, % yoy	1.3	2.1	5.2	8.9	1.7	-1.9	-3.3	7.3	4.5
Net export contribution to growth	0.5	-0.8	-0.9	-2.0	1.0	0.8	0.5	0.9	-0.3
Unemployment, % of labour force	3.5	3.6	3.7	3.7	3.8	3.8	4.0	3.8	3.8
External (US$bn)									
Current account	83.0	105.1	97.9	75.2	77.5	59.7	75.3	87.5	72.5
% of GDP	5.6	7.2	6.5	4.6	4.5	3.6	4.6	4.8	3.8
Trade balance	47.2	90.3	89.2	95.2	69.7	38.9	44.9	37.0	41.4
FDI, net	-18.7	-19.6	-17.8	-16.2	-26.0	-25.6	-23.3	-21.8	-22.6
External debt	423.0	396.1	382.1	412.0	441.2	470.7	544.9	562.4	576.9
Short-term debt	114.7	104.3	104.8	116.0	125.6	135.5	159.3	162.1	167.0
International reserves	363.6	368.0	371.1	389.3	403.7	408.8	443.1	460.6	475.1
Public Finances, % of GDP									
Consolidated government balance	0.5	0.0	1.0	1.3	1.6	-0.6	-3.7	-3.9	-2.8
Consolidated gov primary balance	1.8	1.2	2.1	2.3	2.6	0.2	-2.8	-3.0	-1.9
Public debt	39.7	40.8	41.2	40.1	40.0	42.1	48.3	50.9	53.3
External public debt	4.7	4.6	4.7	4.7	5.0	5.6	6.8	6.4	6.3
Prices									
CPI, % yoy	0.8	1.1	1.3	1.4	1.3	0.7	0.5	2.6	1.4
CPI, % avg	1.3	0.7	1.0	1.9	1.5	0.4	0.5	2.1	1.8
KRW/US$, eop	1,094	1,176	1,207	1,067	1,114	1,155	1,086	1,156	1,127
KRW/US$, avg	1,053	1,132	1,161	1,131	1,101	1,166	1,179	1,145	1,136
Policy Interest Rate, % eop	2.00	1.50	1.25	1.50	1.75	1.25	0.50	1.00	1.50
10-Year Treasury, %, eop	2.60	2.08	2.07	2.47	1.95	1.66	1.60	2.10	2.15
Nominal wages, % yoy	2.55	3.41	3.81	2.71	5.10	3.30	0.69	3.38	2.18

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	1.9	6.0	3.9	4.4	3.6	3.4	3.2	2.4	2.4
CPI, % yoy	1.5	2.4	2.2	2.6	2.1	1.9	1.5	1.4	1.4
KRW/US$, eop	1,128	1,131	1,166	1,156	1,147	1,139	1,133	1,127	1,121
Policy interest rate, %, eop	0.50	0.50	0.75	1.00	1.25	1.25	1.50	1.50	1.50

Source: Citi Research, CEIC Data Company Ltd, Fitch, IFS, Moody's, Note: Public debt is central government debt and external debt is based on the residency of the debt holder (not by currency denomination). Positive net FDI refers to inflow of investment into an economy

Prepared for Ariff Roduan

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- **Summary view** — We are monitoring the pace of moderation in activities. While YoY comparison sees more difficult base in 4Q, we see several cushions – like non-tech exports, CAPEX and government stimulus – continuing to support Taiwan's economic resiliency. CBC likely stay status quo in its Sep meeting.

Some signs of moderation. Similar to global PMIs, Taiwan's PMI is also displaying a moderating trend – for instance, Markit PMI lowered to 58.5 in Aug (-1.2ppt). It is also widely expected that YoY data will decelerate as comparison base gets more difficult in 2H. For example, YoY growth of export orders peaked in April, exports peaked in May and IP peaked in June, and all three have seen slower YoY growth in recent months. Yet, actual readings continue to come in better than expected, in terms of (1) monthly YoY growth of IP, exports, and export orders all came in higher than consensus expectations in the July and August, and (2) exports in USD value continue to break record highs. Both suggest that the rate of deceleration is less dramatic than previously feared, making us more comfortable with Taiwan's economic resiliency in 3Q, despite the slowing YoY headline numbers.

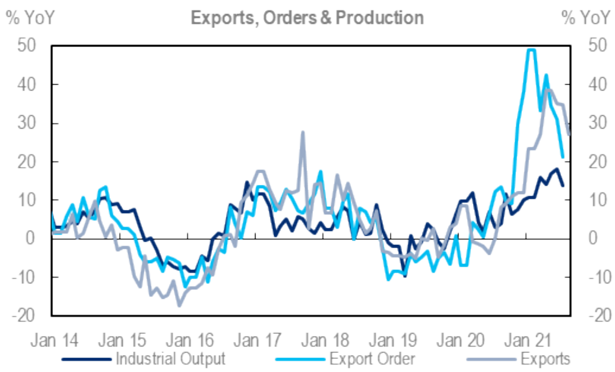
Counter-balancing support for tech declines is non-tech's resiliency. In Aug, according to our calculations, tech exports (which accounts for 57% of total exports) retreated to +20.1%yoy while non-tech exports (28% of total exports) are still posting very high growth of +46.7%yoy. Within tech exports, aside from continual moderation in information and communication products (PCs/notebooks) and optical and precision instruments (panels), even electronics (mainly semiconductors) exports are finally feeling the more difficult base in Aug. Meanwhile, exports of minerals, chemicals, basic metals and plastics all performed well, which is likely a reflection of elevated commodity prices. In addition, machineries exports also improved further in Aug in line with global CAPEX recovery.

Consumption vouchers, reopening and vaccinations to boost the economy in 2H. Local economic activities appear to be recovering after the COVID lockdown was lifted in at the end of July, while manufacturing and CAPEX (as suggested in the sharp rise in capital imports of both semiconductor related and traditional industries in Aug) have not been disturbed by COVID. Unemployment rate is gradually improving in Jul and Aug, probably on restart of service-related activities, erasing the COVID outbreak-caused 1ppt increase in jobless rate seen in May to Jun. The Government also issued another round of consumption vouchers (NT$5000 per citizens, total worth NT$160bn), which can be used in Oct and Nov. This is part of a bigger stimulus package worth of NT$840bn. Vaccination rate is also accelerating, with first dose-vaccinated ratio of the population approaching 50% soon. We expect Taiwan to have 70% of the population to get at least the first shot by 4Q this year, now that vaccine supply issues are resolved.

Accommodative monetary policy stance to prevail. Headline CPI jumped again to 2.4%yoy in Aug, above consensus of 1.9%yoy. But core inflation was in line with expectations at 1.3%yoy. The jump in headline print was driven by base effects, heavy rain causing a price spike in veggies, and the resumption of higher summer electricity tariff (which previously was waived for Jun and Jul due to COVID subsidy). Despite higher headline inflation, we continue to believe that CBC will not raise rate in its MPC meeting this month. CBC likely remain cautious in further incentivizing TWD appreciation, especially with lingering delta variant concerns. Continual CAPEX investment is also a strong reason why we remain constructive on Taiwan's economic resiliency and this also is reflected in our medium-term (6-12M) and long-term forecasts for USDTWD at 27.4 and 26.5, respectively.

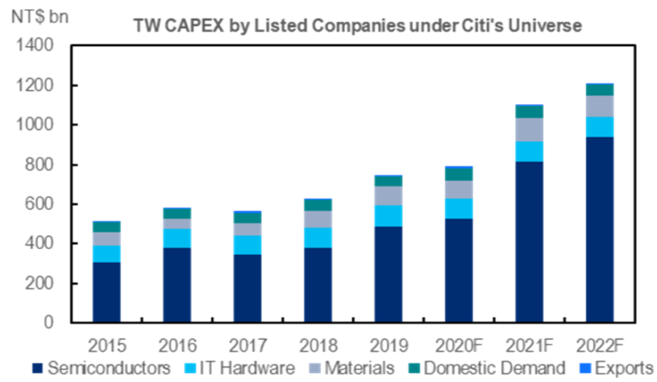
Prepared for Ariff Roduan

Figure 108. YoY deceleration on difficult comparison base



Source: MOF, CEIC, Citi Research

Figure 109. Announced Capex Plans by Listed Companies Indicate Continual Investment in 2021-22E



Source: CEIC, Citi Research

Figure 110. Taiwan Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	536	537	545	591	610	613	671	764	832
Population, mn	23.4	23.5	23.5	23.6	23.6	23.6	23.6	23.6	23.7
Real GDP, yoy avg	4.7	1.5	2.2	3.3	2.8	3.0	3.1	6.0	4.0
Private consumption growth % yoy	3.7	2.9	2.6	2.7	2.1	2.3	-2.4	1.1	2.5
Real investment growth % yoy	6.2	2.6	1.7	-0.8	6.9	6.2	5.5	8.6	2.7
Real export growth, % yoy	6.0	0.4	-0.9	4.5	0.2	1.3	1.6	14.2	5.5
Real import growth, % yoy	5.6	1.3	-1.0	1.6	0.8	1.1	-3.3	12.0	3.7
Net export contribution to growth	1.0	-0.5	-0.1	2.1	-0.3	0.3	2.7	3.3	1.9
Unemployment, % of labour force	4.0	3.8	3.9	3.8	3.7	3.7	3.9	3.9	3.2
External (US$bn)									
Current account	60.6	72.8	71.3	83.1	70.8	65.2	94.8	100.8	100.7
% of GDP	11.3	13.5	13.1	14.0	11.6	10.6	14.1	13.2	12.1
Trade balance	38.3	48.1	50.0	58.3	49.2	43.5	59.4	67.0	78.8
FDI, net	-9.9	-12.3	-8.3	-8.2	-10.9	-3.5	-5.4	-7.5	-10.0
External debt	177.9	159.0	172.2	181.9	191.2	184.7	189.9	194.9	199.9
Short-term debt	163.3	144.8	160.0	169.2	178.6	174.7	175.3	175.0	175.0
International reserves	423.9	430.7	439.0	456.7	466.8	483.2	535.0	555.1	565.1
Public Finances, % of GDP									
Consolidated government balance	-0.8	0.1	-0.3	-0.1	0.0	0.1	-1.0	-1.6	-1.0
Consolidated gov primary balance	-0.1	0.8	0.4	0.5	0.6	0.8	-0.4	-1.0	-0.5
Public debt	37.5	35.9	35.4	34.5	33.9	32.7	32.7	36.0	36.6
Prices									
CPI, % yoy	0.6	0.1	1.7	1.2	-0.1	1.1	0.0	2.2	2.1
CPI, % avg	1.2	-0.3	1.4	0.6	1.3	0.6	-0.2	1.8	1.9
TWD/US$, eop	31.64	32.84	32.45	29.67	30.58	29.91	28.09	27.47	27.00
TWD/US$, avg	30.31	31.76	32.24	30.43	30.15	30.90	29.45	27.85	27.24
Policy Interest Rate, % eop	1.88	1.63	1.38	1.38	1.38	1.38	1.13	1.13	1.38
10-Year Government Bond, %, eop	1.60	1.01	1.19	0.95	0.90	0.68	0.32	0.44	0.50
Nominal wages, % yoy	3.62	2.49	0.46	2.48	3.80	2.36	0.88	2.00	2.50

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	9.3	7.4	4.6	3.4	4.2	4.3	4.3	3.1	4.2
CPI, % yoy	1.2	1.8	2.2	2.2	2.4	1.8	1.8	2.1	2.0
TWD/US$, eop	28.46	27.92	27.55	27.47	27.43	27.36	27.18	27.00	26.82
Policy interest rate, %, eop	1.13	1.13	1.13	1.13	1.13	1.25	1.25	1.38	1.38

Source: Citi Research, CEIC Data Company Ltd, Fitch, IFS, Moody's, Note: Public debt is central government debt and external debt is based on the residency of the holder of the debt (not by currency denomination). Positive net FDI refers to inflow of investment into an economy

Prepared for Ariff Roduan

Thailand

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- **Summary view** — We had revised down GDP and current account forecasts for 2021F and 2022F due to Q3 lockdown, though more clarity on reopening plan and stabilizing infection trends do provide some positive outlook lately. We continue to expect the BoT to keep policy rate at 0.50% through early 2023.

In August, we revised down 2021F GDP forecasts further from 1.9% to 0.9%, and expect 2022F growth to be 3.6% vs. 3.8% earlier. We also expect lower tourist arrivals at 0.2 million in 2021F and 1.2 million in 2022F, and have lowered our current account forecast to -1.5% of GDP (from -0.3% earlier). Although Q2 GDP (7.5%YoY) was stronger than expected, the unexpected Q3 lockdown impacted domestic demand recovery despite additional compensation to businesses and workers affected by the lockdown in 29 provinces. We continue to expect GDP to return to pre-COVID level in Q1 2023.

Vaccination progress has improved tremendously with more supply recently and the use of cross-vaccination (Sinovac then AstraZeneca in 3-4 weeks) since end-August to help reduce the time period between the first and second dose. Thailand is also moving to use AstraZeneca x Pfizer vaccine in an attempt to increase the effectiveness of infection prevention. **The recent COVID-19 situation has stabilized but monitoring needed.** Daily new cases fell to 13-14k a day from peak of over 23k in August. Making rapid antigen tests widely available and allowing more patients to use home-isolation appeared to have helped reduce the spread of infection and eased some pressure on the healthcare system.

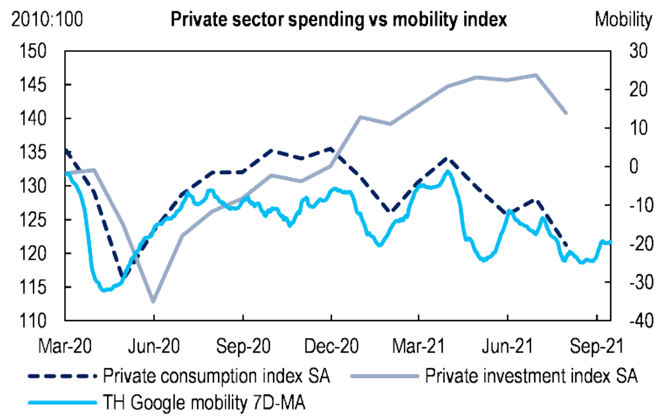
The first phase of easing began on 1 September for the 29 highest-risk provinces – many of which had been under strict lockdown since 12 July. Limited domestic flights and malls resumed operation, and indoor dining is allowed at 50% capacity, although high-risk areas such as some entertainment venues and fitness gyms remain suspended. While curfew from 9pm – 4am remains, the government is looking to ease curfews along with the next phase of easing.

Thailand Tourism Authority is looking to open more cities in four provinces to foreign tourists on 1 October (3 cities in Chonburi, Hua Hin, Cha-am, 4 cities in Chiang Mai). Bangkok is aiming for 15 October instead, when 70% of its population is expected to have received 2 doses (40.4% as of 19 Sep. 94.7% have at least 1 dose). These areas will apply measures used in Phuket Sandbox (and some other Southern islands), where vaccinated tourists will not be subject to quarantine if they test negative for COVID-19 upon arrival. Public opinion remains divided, with some calling for further delay to November. In any case, details of the new plan are still being finalized and more clarity is likely to emerge before October. Should Thailand manage to keep infections in check and gradually open more areas for foreign and domestic tourism, we do expect some benefit to the THB outlook in the coming months. Nevertheless, the near-term outlook for THB remains challenging with weaker current account persisting for quite some time and slower policy rate hike.

We expect the BoT to maintain its policy rate at 0.5% through early 2023. The 4th August MPC meeting outcome was a bit of surprise with two dissenters, and the BoT also revised down its 2021F GDP growth forecast from 1.8% to 0.7%. We think that the probability of a 25bp cut has now increased but maintain our base-case view of no change. The MPC minutes continued to comment that policy rate cuts likely yield limited benefit and other financial measures and fiscal stimulus are more suited to tackling downside risks to growth. Since 4 August, additional fiscal stimulus, more positive vaccination progress, and reopening plans likely eased MPC concerns on growth somewhat. **We keep inflation forecasts for 2021F at 1.1% and for 2022F at 1.2%.** The near-term downside risks to inflation stem from weak domestic demand and government's discounts to electricity and water fees.

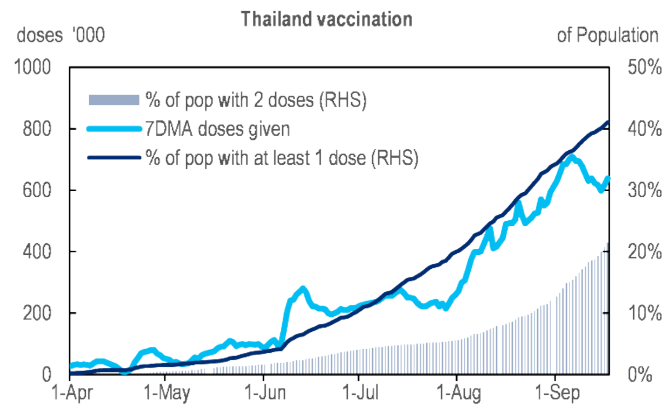
Prepared for Ariff Roduan

Figure 111. Domestic demand weakened noticeably from lockdown



Source: Citi Research, CEIC Data Company Limited, Haver Analytics

Figure 112. Vaccination pace picked up significantly in recent weeks



Source: Citi Research, CEIC Data Company Limited

Figure 113. Thailand Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	407	401	414	457	507	544	502	504	530
Population, mn	65.1	65.7	65.9	66.2	66.4	66.6	66.2	69.5	69.6
Real GDP, yoy avg	1.0	3.1	3.4	4.2	4.2	2.3	-6.1	0.9	3.6
Private consumption growth % yoy	0.5	2.6	2.9	3.1	4.6	4.0	-1.0	0.8	3.9
Real investment growth % yoy	-12.0	2.3	-7.2	20.5	12.5	-3.4	-3.1	8.7	2.6
Real export growth, % yoy	0.3	1.3	2.7	5.3	3.3	-3.0	-18.8	12.8	6.2
Real import growth, % yoy	-5.3	0.0	-1.0	6.3	8.3	-5.2	-13.1	18.5	3.8
Net export contribution to growth	4.2	1.0	2.7	-0.1	-3.0	1.4	-5.0	-3.1	1.6
Unemployment, % of labour force	0.8	0.9	1.0	1.2	1.1	1.0	1.7	2.0	1.5
External (US$bn)									
Current account	11.6	27.8	43.4	44.0	28.4	38.2	17.6	-7.3	2.9
% of GDP	2.9	6.9	10.5	9.6	5.6	7.0	3.5	-1.5	0.5
Trade balance	17.2	26.1	35.8	32.6	22.4	26.7	40.9	37.7	38.3
FDI, net	-0.8	3.9	-9.9	-5.9	-4.2	-5.3	-23.2	-5.0	-5.0
External debt	141.7	131.1	132.8	155.9	163.1	171.9	190.2	194.2	198.2
Short-term debt	56.9	52.6	54.5	68.7	63.4	59.8	74.3	73.8	75.3
International reserves	157.1	156.5	171.9	202.6	205.6	224.3	258.1	247.3	243.9
Public Finances, % of GDP									
Consolidated government balance	-2.9	-2.9	-2.8	-3.5	-3.0	-3.0	-5.1	-5.3	-4.6
Consolidated gov primary balance	-2.1	-2.1	-1.9	-2.7	-2.1	-2.1	-4.1	-4.6	-3.9
Public debt	43.0	42.6	41.7	41.8	42.0	41.0	49.4	57.0	60.0
External public debt	2.7	2.7	2.4	2.0	1.6	1.3	0.9	4.0	4.2
Prices									
CPI, % yoy	0.6	-0.9	1.1	0.8	0.4	0.9	-0.3	1.5	0.4
CPI, % avg	1.9	-0.9	0.2	0.7	1.1	0.7	-0.8	1.1	1.2
THB/US$, eop	32.91	36.03	35.85	32.56	32.34	29.77	30.05	32.64	32.27
THB/US$, avg	32.48	34.26	35.28	33.93	32.32	31.04	31.29	32.12	32.61
Policy Interest Rate, % eop	2.00	1.50	1.50	1.50	1.75	1.25	0.50	0.50	0.50
10-Year Government Bond, %, eop	2.87	2.61	2.80	2.58	2.59	1.56	1.33	1.70	1.90
Nominal wages, % yoy	9.74	1.77	1.70	-0.09	1.66	2.02	2.21	2.00	2.00

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-2.6	7.5	0.3	-0.7	3.2	2.9	4.9	3.5	3.1
CPI, % yoy	-0.1	1.2	1.2	1.5	2.1	1.7	0.9	0.4	0.9
THB/US$, eop	31.25	32.03	32.56	32.64	32.78	32.84	32.55	32.27	32.00
Policy interest rate, %, eop	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50

Source: Citi Research, CEIC Data Company Ltd, Fitch, IFS, Moody's, Note: Public debt is central government debt and external debt is based on the residency of the debt holder (not by currency denomination). Positive net FDI refers to inflow of investment into an economy

Prepared for Ariff Roduan

Frontier

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Mongolia

Economic drag from persistent COVID-19 disruption; we lowered our GDP forecast for 2021E to 6.3%yoy. Despite high double-doss vaccination rate of more than 66% of the population, there is no sign that the pandemic is subsiding. This resulted in a poor Q2 GDP print of -0.5%yoy as local businesses were severely affected by lockdowns. Even with the economy reopened before the elections, exports of coal were disrupted in Jun-Jul as China was cautious with border checks. Coal trade should improve in the coming months as the Gashuunsukhait-Gantsmod Port reopened on 31st Aug and the new coal terminal at the borders starts operation, this would allow the 9.6 million tons of coal stored at Tsagaankhad to be transported across the border with arrangements so that Mongolian and Chinese truck drivers don't interact while unloading and loading coal. Meanwhile, copper, iron ore, and oil exports are providing the much-needed cushion to overall exports and fiscal revenues, thanks to elevated commodity prices. While the new parliamentary session will approve the 2022 Budget, we don't expect more fiscal stimulus to be launched, and BoM to keep rates at current 6% well into next year.

Slow negotiations with Rio Tinto, likely drag on to 1H22. The Mongolia side continues to request supplementary info and explanations from Rio Tinto (RT) following the independent review report. According to the Government, RT offered to pay dividend to Mongolia in advance as COVID support but also stated that the Government owes US$22bn to Rio. It is also understood that Rio proposed to generate an additional US$350mn of additional revenue for Mongolia in the next three years and lower shareholder loans interest rate. It appears to us that both sides are still willing to negotiate on possible change to the 34% stake of Oyu Tolgoi that GoM owns. RT also stated that it wants to resolve outstanding regulatory, tax and budgetary issues and sign a long-term energy deal. Delegation from the Mongolian side likely will visit Canberra early next year. According to Turquoise Hill's Q2 report, the mine has sufficient funds (US$0.7bn) to operate into Q3 2022, granting time for negotiations, but likely will outpace FDI for OT2 construction. Both sides reiterated that mine operation will not be disrupted by ongoing negotiations.

Figure 114. Mongolia Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Summary Data									
Nominal GDP, US$ bn	12.2	11.6	11.2	11.5	13.2	14.0	13.1	14.8	17.0
GDP per capita, US$	4,081	3,800	3,575	3,613	4,069	4,245	3,913	4,416	5,010
Population, mn	3.0	3.1	3.1	3.2	3.2	3.3	3.4	3.4	3.4
Real GDP, % yoy	8.1	2.5	1.4	5.4	7.0	5.0	-5.4	6.3	7.5
CPI, % yoy	11.0	1.9	1.1	6.4	8.1	5.2	2.3	9.3	6.2
CPI, % avg	12.8	6.6	1.1	4.2	6.8	7.3	3.7	6.6	6.4
Policy interest rate, % eop	12.00	13.00	14.00	11.00	11.00	11.00	6.00	6.00	7.00
Long term yield, % eop	19.03	19.56	19.74	20.01	17.71	17.00	16.93	17.00	17.00
lc/US$, eop	1,888	1,993	2,488	2,426	2,640	2,735	2,848	2,854	2,797
lc/US$, avg	1,813	1,967	2,131	2,440	2,469	2,664	2,814	2,850	2,832
Current account (US$ bn)	-1.9	-0.9	-0.7	-1.2	-2.2	-2.2	-0.7	-0.9	-1.0
% of GDP	-15.8	-8.2	-6.3	-10.1	-16.7	-15.4	-5.1	-6.3	-5.8
Trade balance (US$ bn)	0.5	0.9	1.6	1.9	1.1	1.5	2.3	1.7	2.3
Exports (US$ bn)	5.8	4.7	4.9	6.2	7.0	7.6	7.6	8.9	10.7
Imports (US$ bn)	5.3	3.8	3.4	4.3	5.9	6.1	5.3	7.2	8.4
FDI, net (US$ bn)	0.2	0.1	-4.2	1.4	2.1	2.3	1.7	0.8	1.5
International reserves (US$ bn)	1.6	1.3	1.3	3.0	3.5	4.3	4.5	4.5	4.9
Consolidated government balance (% of GDP)	-13.1	-9.8	-15.3	-6.2	0.0	-2.0	-12.3	-8.5	-4.0
Public debt (% of GDP)	57.1	62.1	87.6	84.6	73.3	73.0	77.3	75.8	72.6
External debt (% of GDP)	178.7	195.5	220.8	239.5	217.9	219.4	246.3	222.3	198.7

Source: Citi Research, CEIC Data Company Limited, IFS, IMF, Haver Analytics, Moody's, Note: Consolidated government balance for Mongolia include off budget spending by DBM for 2012-2015. Positive net FDI refers to inflow of investment into an economy

Prepared for Ariff Roduan

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Pakistan

Real GDP growth was stronger than expected at 3.9% in FY21, aided some timely and targeted stimulus, a pragmatic approach of avoiding harsh lockdowns, and a market based exchange that acted as a shock absorber, robust remittances decent performance in the manufacturing sector. We upgrade our growth forecast in FY22 to reach the mid-point of their 4-5% forecast, but this hinges on Covid-19 remaining relatively contained. One risk factor is Pakistan's still relatively slow pace of vaccination rates that makes it susceptible to future outbreaks.

While getting a big US$2.8bn boost to reserves from SDR allocation, government does not seem to be making sufficient progress to get the IMF program back on track by Sep-Oct. While not a surprise, FY21 budget outturn missed the IMF performance criteria with a 1.4% of GDP primary deficit (vs a 0.5% surplus target), tax revenues and petroleum levies fell short. Flow of new circular debt has slowed sharply, but the outstanding amount of Rp2.28 trn (4.8% of GDP) in FY2021 still looks uncomfortably high. We think Pakistan's strategy on circular debt management is to restructure the debt service payments of the power projects, and manage costs, versus pursuing steeper tariff hikes – which may not sit well with the IMF. With official reserves at historically high levels, there is a risk that lack of dire need for funding versus desire to support growth could delay a conclusion of the combined 6th and 7th review with the Fund. We also watch signs of fiscal slippage risk.

SBP begins policy normalization with 25bps rate hike; we expect another 75-100bps hike in FY22. While market was looking for no change, this hike was in line with our view in the July monthly (p.55) that SBP would begin normalizing soon. The move was prompted by better than expected growth that has been transmitted to an import-driven widening of the CA deficit, prompting rupee weakness and risks to imported inflation. SBP characterizes the move as "preemptive" and a taper of their enormous monetary stimulus. As they still see policy as accommodative with expected real interest rates being negative, and inflation expectations remaining elevated with future risks from administered prices on fuel and electricity, we think SBP will adjust policy rate towards 7.75% to 8% by FY22.

Figure 115. Pakistan Economic Indicators

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22F
Summary Data									
Nominal GDP, US$ bn	243.9	270.2	278.0	304.6	313.1	276.9	261.7	299.0	331.8
GDP per capita, US$	1,310	1,423	1,436	1,544	1,558	1,353	1,256	1,411	1,538
Population, mn	186.2	189.9	193.6	197.3	201.0	204.7	208.3	211.9	215.7
Real GDP, % yoy	4.1	4.1	4.6	5.2	5.5	2.1	-0.5	3.9	4.5
CPI, % yoy	8.2	3.2	3.2	4.7	5.7	8.0	8.6	9.2	7.9
CPI, % avg	8.6	4.5	2.9	4.8	4.7	6.8	10.7	9.0	8.6
Policy interest rate, % eop	10.00	6.50	5.75	5.75	6.50	12.25	7.00	7.00	8.00
lc/US$, eop	100.8	104.9	104.4	110.7	139.8	155.0	160.4	157.5	170.0
lc/US$, avg	100.9	102.8	104.7	105.3	121.1	150.0	161.8	159.6	163.8
Current account (US$ bn)	-3.1	-2.8	-5.0	-12.3	-19.2	-13.4	-4.4	-1.8	-9.0
% of GDP	-1.3	-1.0	-1.8	-4.0	-6.1	-4.9	-1.7	-0.6	-2.7
Trade balance (US$ bn)	-16.6	-17.3	-19.1	-26.0	-30.9	-27.6	-21.1	-28.2	-36.3
Exports (US$ bn)	25.1	24.1	22.0	22.0	24.8	24.3	22.5	25.6	32.6
Imports (US$ bn)	41.7	41.4	41.1	48.0	55.7	51.9	43.6	53.8	68.9
FDI, net (US$ bn)	1.6	1.0	2.4	2.3	2.8	1.4	2.7	1.8	2.0
International reserves (US$ bn)	9.6	15.3	20.3	17.7	10.5	9.3	11.5	15.0	13.3
Consolidated government balance (% of GDP)	-5.5	-5.3	-4.6	-5.8	-6.5	-9.0	-8.1	-7.1	-6.3

Source: Citi Research, CEIC Data Company Limited, IFS, IMF, Haver Analytics, Moody's, Note: Pakistan Fiscal year runs from July-June. Positive net FDI refers to inflow of investment into an economy

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Sri Lanka

Finance Ministry comments on the upcoming 2022 November Budget. The Sunday Times cited Finance Ministry officials saying that import restrictions will continue for next year with the aim of improving local production with priority for private sector projects being among the highlights in the proposed 2022 budget. It also noted that with "production economy" as the theme of the November budget, the main focus is on agricultural, road development, irrigation and renewable energy sectors with large allocations for the respective ministries, the officials. There hasn't been mention of revenue raising measures, which is a key policy issue for the IMF, and we think the focus may be on expenditure cuts and growth to drive their fiscal consolidation efforts. **Remittances in August declined 33% YoY following a 27% YoY decline in June to July.** The shift towards the USDLKR official rate that is about 14% stronger than what was quoted prior to the window guidance could adversely impact remittance and other dollar conversions, alongside a disincentive for investments into the country. **CBSL's comments on debt repayments.** Over the weekend, CBSL Governor Cabraal gave a Bloomberg interview noting two things in his assessment of debt repayment abilities. First, he said that "*at the moment, we have reserves which are sufficient to take us through the foreseeable debt repayments, and we are comfortable doing that*", adding further that there is "*absolutely no risk*" that this won't be done. Second, Cabraal also emphasized non-debt creating inflows and "*G to G*" arrangements of carrying them through. On the non-debt creating inflows, he further elaborated citing underutilized assets being made available to investors, citing potential inflows of $350mn to $400mn (we think this may be related to assets under Selendiva holding company), the pharmaceutical zone, the new Port City Bill being implemented, the SEC bill being passed in parliament, and he indicates this will provide avenues for investments to come in. Cabraal also said G to G arrangements can bring in $1bn, without citing specifics on this, and he mentioned the $1.5bn equivalent PBOC swap line as a standby facility, even though Finance Minister Basil Rajapaksa had earlier mentioned this arrangement having technicalities that is preventing it from being utilized.

Figure 116. Sri Lanka Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Summary Data									
Nominal GDP, US$ bn	79.4	80.6	82.4	87.3	87.3	84.0	80.5	79.2	78.3
GDP per capita, US$	3,819	3,845	3,886	4,071	4,030	3,851	3,673	3,579	3,502
Population, mn	20.8	21.0	21.2	21.4	21.7	21.8	21.9	22.1	22.4
Real GDP, % yoy	5.0	5.0	4.5	3.6	3.3	2.3	-3.6	4.5	3.7
CPI, % yoy	2.1	2.8	4.1	7.1	2.8	4.8	4.2	6.6	6.5
CPI, % avg	3.3	0.9	3.7	6.6	4.3	4.3	4.6	5.4	6.6
Policy interest rate, % eop	8.00	7.50	8.50	8.75	9.00	8.00	5.50	6.50	7.50
Long term yield, % eop	8.00	10.41	12.55	10.15	11.87	10.07	7.55	9.75	10.00
lc/US$, eop	131.2	144.3	149.8	153.5	182.9	181.4	185.3	225.0	230.0
lc/US$, avg	130.6	135.9	146.1	152.5	162.2	178.7	185.4	205.8	227.5
Current account (US$ bn)	-2.0	-1.9	-1.7	-2.3	-2.8	-1.8	-1.1	-2.0	-2.2
% of GDP	-2.5	-2.3	-2.1	-2.6	-3.2	-2.2	-1.3	-2.5	-2.8
Trade balance (US$ bn)	-8.3	-8.4	-8.9	-9.6	-10.3	-8.0	-6.0	-7.4	-7.9
Exports (US$ bn)	11.1	10.5	10.3	11.4	11.9	11.9	10.0	12.7	14.2
Imports (US$ bn)	19.4	18.9	19.2	21.0	22.2	19.9	16.1	20.1	22.1
FDI, net (US$ bn)	0.8	0.6	0.7	1.3	1.5	0.7	0.4	0.6	0.7
International reserves (US$ bn)	8.2	7.3	6.0	8.0	6.9	7.6	5.7	2.8	2.0
Consolidated government balance (% of GDP)	-5.7	-7.6	-5.4	-5.5	-5.3	-9.6	-11.1	-11.7	-9.5
Public debt (% of GDP)	72.3	78.5	79.0	77.4	84.2	86.8	101.0	108.0	115.0
External debt (% of GDP)	54.1	55.6	56.3	59.1	60.0	65.3	61.1	62.5	64.5

Source: Citi Research, CEIC Data Company Limited, IFS, IMF, Haver Analytics, Moody's, Note: Positive net FDI refers to inflow of investment into an economy

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Vietnam

Lowering 2021 GDP forecast to 3.6% (prev: 5.7%). Jul-Aug activities declined sharply on stringent restrictions in Southern Vietnam (especially HCMC). In line with our earlier thoughts, production for textiles and especially footwear were amongst the worst affected, while electronics was comparatively less affected. Our latest forecast is premised upon 3Q21 GDP falling by 0.8% QoQ SA (larger than the 0.6% decline in 2Q20), before rebounding modestly by 2.6% (2H20 avg: 3.3%) – and broadly in line with the 3.5-4% forecast by the Ministry of Planning & Investment. We expect 2022E GDP to pick up to 8%, assuming activities normalize from 1Q22 and ongoing production shift away from Vietnam proves to be temporary. **Scope for more fiscal support to mitigate impact of restrictions.** Back in Apr-20, a broad-based VND62tn package (0.7% of GDP) was proposed by the central government to deal with 2-3 weeks of rigorous restrictions then (VNExpress). Given the far longer duration and more stringent nature of restrictions in this latest wave, the current set of fiscal measures by the central and HCMC government (VND43tn; 0.5% of GDP) appear relatively more modest. Recent surveys by VNExpress suggest that more policy support could be warranted for those affected, with just 3.5% of those unemployed receiving government support (VNExpress) and 40% of companies temporarily closed having enough cash to tide them over for just 1 month (VnExpress). A step-up in fiscal support would complement SBV measures, which include relaxation of credit growth caps, guiding banks to lower interest rates for affected businesses, and debt repayment schedule extension.

Greater FX flexibility likely amidst persistent US pressure. US Treasury and SBV released a joint statement on 19th Jul, with Vietnam reaffirming its commitment to (a) improve FX flexibility over time, and (b) provide necessary information for the Treasury's monitoring. We reiterate our longstanding view that further steps to increase dong volatility are likely (rather than one-off adjustments), with SBV's shift in intervention methods on 18th Aug (from buying 6M forwards at 22,975 weekly since early this year to buying spot at 22,750) effectively allowing the spot to decrease by VND100 vs. the prevailing rate then.

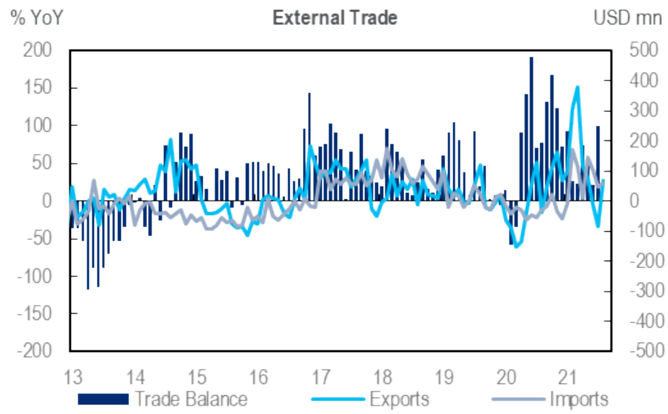
Figure 117. Vietnam Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Summary Data									
Nominal GDP, US$ bn	233.5	242.6	257.5	280.6	307.5	325.9	346.4	373.1	425.6
GDP per capita, US$	2,574	2,630	2,777	2,996	3,248	3,409	3,589	3,831	4,330
Population, mn	90.7	92.2	92.7	93.7	94.7	95.6	96.5	97.4	98.3
Real GDP, % yoy	6.0	6.7	6.2	6.8	7.1	7.0	2.9	3.6	8.0
CPI, % yoy	1.8	0.6	4.7	2.6	3.0	5.2	0.2	4.7	3.9
CPI, % avg	4.1	0.6	2.7	3.5	3.5	2.8	3.2	2.5	3.8
Policy interest rate, % eop	6.50	6.50	6.50	6.25	6.25	6.00	4.00	4.00	4.25
Long term yield, % eop	6.50	6.25	5.61	4.83	4.40	4.40	1.21	1.20	2.00
lc/US$, eop	21,388	22,485	22,771	22,710	23,195	23,173	23,080	22,700	22,300
lc/US$, avg	21,198	21,920	22,369	22,717	23,022	23,227	23,236	22,889	22,500
Current account (US$ bn)	9.4	-2.0	0.6	-1.6	5.9	13.1	12.7	8.5	15.3
% of GDP	4.0	-0.8	0.2	-0.6	1.9	4.0	3.7	2.3	3.6
Trade balance (US$ bn)	12.1	7.4	11.0	10.8	16.5	21.2	30.8	26.5	27.3
Exports (US$ bn)	150.2	162.0	176.6	215.1	243.7	264.2	282.7	286.0	294.6
Imports (US$ bn)	138.1	154.6	165.5	204.3	227.2	243.0	251.9	259.5	267.2
FDI, net (US$ bn)	8.1	10.7	11.6	13.6	14.9	15.7	14.8	16.0	17.0
International reserves (US$ bn)	34.2	28.3	36.5	49.1	55.5	78.3	96.0	106.0	110.0
Consolidated government balance (% of GDP)	-3.7	-3.4	-2.9	-2.2	-2.2	-2.8	-3.5	-4.0	-3.6
Public debt (% of GDP)	46.3	48.6	50.8	49.0	46.6	44.7	44.5	43.5	41.9
External debt (% of GDP)	31.0	32.1	33.3	37.1	35.2	36.8	37.5	37.5	35.2

Source: Citi Research, CEIC Data Company Limited, IFS, IMF, Haver Analytics, Moody's, Note: Positive net FDI refers to inflow of investment into an economy

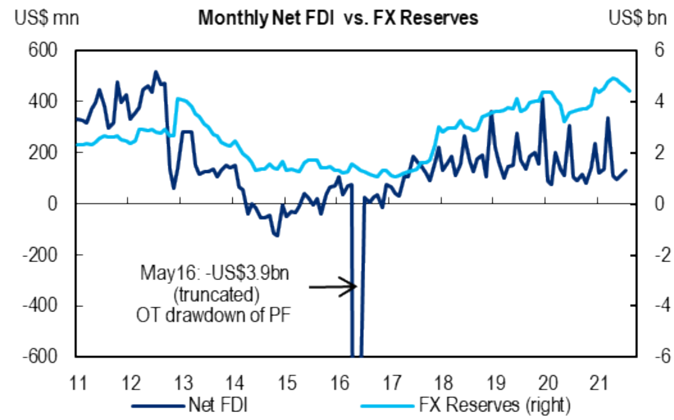
Prepared for Ariff Roduan

Figure 118. Mongolia - Trade surplus surged in Aug, supporting current account



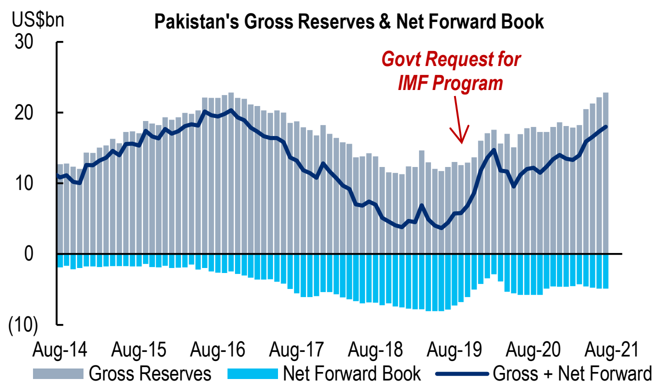
Source: MoF, Citi Research

Figure 119. Mongolia - FX Reserves likely to stay around $4.5bn by year end



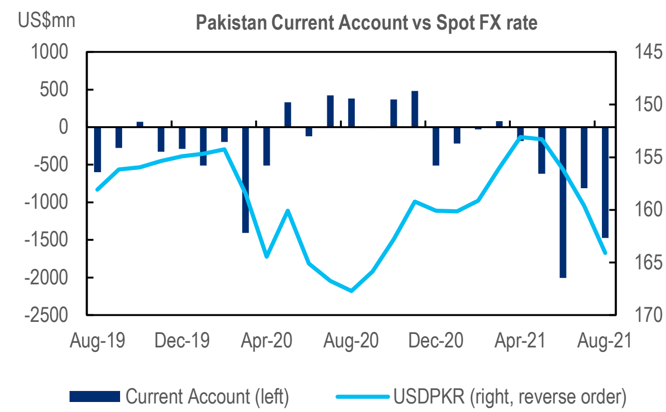
Source: CEIC, Citi Research

Figure 120. Pakistan - External liquidity position being comfortable could lead to IMF delay



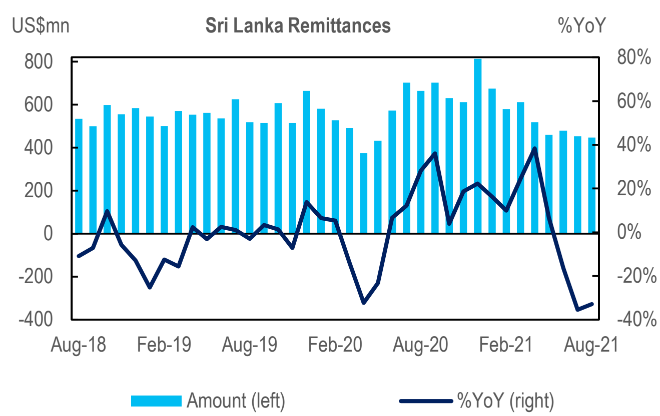
Source: SBP, CEIC, Citi Research

Figure 121. Pakistan - Current account deficit has widened alongside a weaker rupee



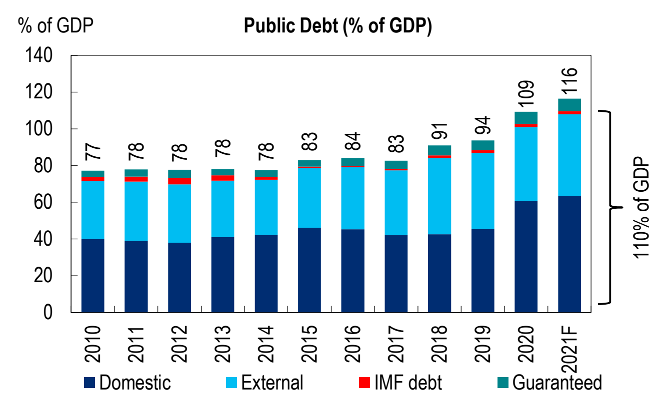
Source: CEIC, Citi Research

Figure 122. Sri Lanka - Remittance weakened significantly



Source: CBSL, Citi Research

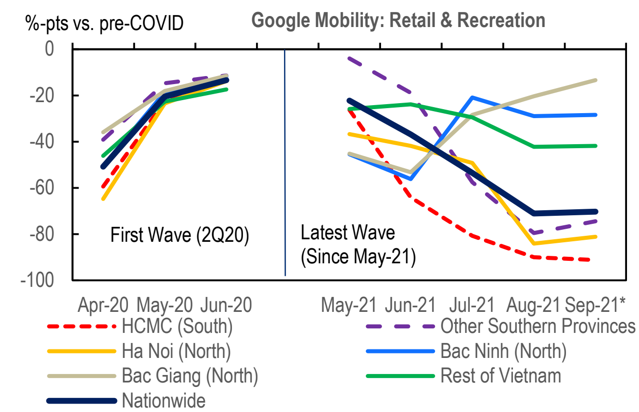
Figure 123. Sri Lanka - Public debt is at unsustainably high levels



Source: CBSL, MoF, CEIC, Citi Research

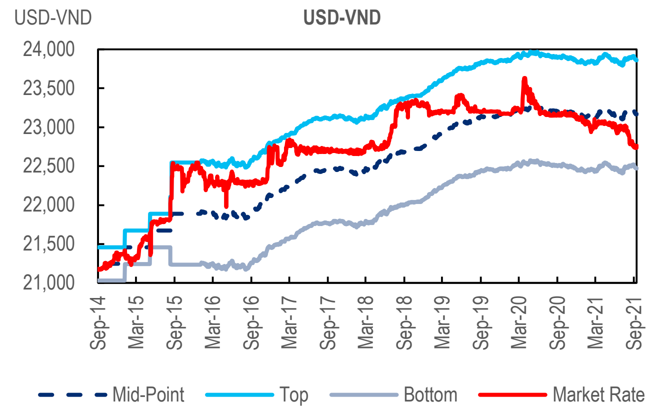
Prepared for Ariff Roduan

Figure 124. Vietnam - Retail mobility sharply lower, especially in HCMC and Hanoi



Source: CEIC, Citi Research. Note: *We refer to 1st 15 days of Sep

Figure 125. Vietnam - Dong volatility has increased since the start of 2021



Source: Bloomberg, Citi Research

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- **Summary view** — While we cut our H2-2021 GDP growth outlook, we keep our view of 100bp hike in the CNB´s policy rate to 1.75% by end of 2021 and we expect it as 2.25% by end of 2023 and at 2.5% in 2023. The early October general election could influence the CNB on 1-2year horizon, not now.

Better domestic demand partly offset the impact of a weaker industrial outlook on our forecast. We slightly downgraded our export outlook for H2-2021 reflecting more pronounced Chinese slowdown and ongoing supply issues in the car industry. However, as we assume the second factor being transitory, we envisage a relatively limited pass-through to the labour market as the labour supply remains scarce, car workers are usually still paid during shutdowns and recent data still suggests other industrial and domestic demand oriented sectors offsetting the car related weakness. Having said this we cut our H2-2021´s QoQ GDP growths by 0.2%pt to 1.8% and 1.3% respectively. This implies the GDP´s growth to reach 3%YoY in 2021 (instead of 3.2% initially), followed by 5.1% in 2022 (+0.1%pt) as we assume part of this downward revision being resumed during next year.

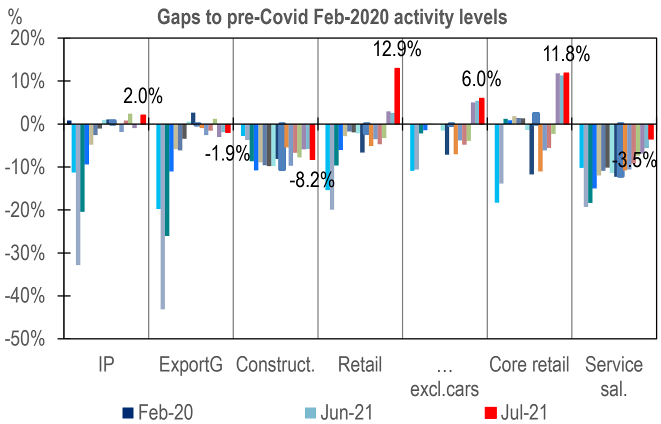
As we assume less devastating impact of Covid this autumn, we do not change our big picture for the economic recovery. The downward revision slightly postponed a return to the pre-Covid GDP level by one quarter to Q2-2022. The combination of large EU funds/grants inflow from the 2013-2020 EU budget and the RRF should support GDP in 2021-23. We model the 5.8% GDP 2020 recession to be followed by average 4.1% growth in 2021-2023. This would, however, keep the gap to pre-Covid trajectory at -3.3%pt for 2023. While we expect the Czech industry to continue to outperform Germany, the industrial headwinds (tight labour supply, green deal, missing car chips, EVs transition, Chinese slowdown) are likely to structurally keep the growth composition of the Czech economy like it was before Covid. This means less contribution from the industry, more from services.

We increased our CPI forecast by 0.4-0.5pp in 2021-2022 to 3.4% and 3.1% respectively. Unless we see an abrupt koruna appreciation (that is not our baseline), we expect the tradable core CPI to gradually return to zero monthly growth in 2022 once the supply disruptions diminish. We expect the non-tradable core CPI growth to gradually ease to 0.2%MoM growth in forthcoming months, back to pre-Covid average between 2015-2019. There may be an upside risk as the non-tradable part, excluding the imputed rents, grew by 0.3%MoM in 2018-2019. We also assume the imputed rents to ease their growth to pre-Covid 0.3%MoM average (as in 2015-2019) assuming higher policy rate to calm the real estate price growth. However, for H1-2022 we expect it to decelerate to 0.2%MoM as we expect the construction material price growth to fall, which could further ease the imputed rent growth next year. The energy utility prices represent an upside risk to our forecast as we assume rather gradual increase due to the hedging of prices and to a likely milder increase in the regulated part of the electricity and gas prices.

The economic policy mix is unlikely to change in the near-term. While we assume the CNB to tighten its monetary policy, the fiscal policy represents an upside risk to the interest rate outlook in the near-term via the pre-election promises ahead of the general election on 8-9 October. These could result into possible fiscal consolidation that could induce disinflationary pressures, influencing expectations for the CNB's terminal rate in the medium-term, particularly if associated with a stronger koruna. However, this is not our baseline scenario as opposition parties have lost the momentum in the recent voters´ preferences polls.

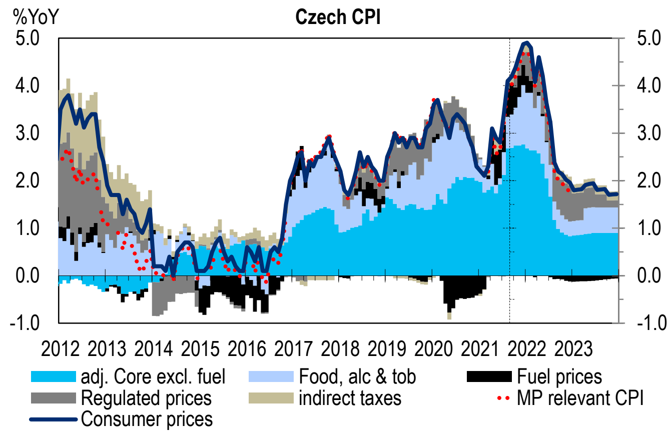
Prepared for Ariff Roduan

Figure 126. Supply disruptions changed channels of economic recovery



Source: Citi Research, CZSO

Figure 127. Regulated (mainly energy) prices represents an upside risk



Source: Citi Research, CZSO, CNB

Figure 128. Czech Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	209	188	196	219	249	252	245	265	314
Population, mn	10.5	10.5	10.6	10.6	10.6	10.7	10.7	10.7	10.7
Real GDP, yoy avg	2.3	5.4	2.5	5.2	3.2	3.0	-5.8	3.0	5.1
Private consumption growth % yoy	1.4	3.9	3.8	4.0	3.5	2.7	-6.8	4.1	9.9
Real investment growth % yoy	7.1	13.1	-4.0	6.5	7.7	4.5	-10.2	11.8	20.9
Real export growth, % yoy	8.7	6.0	4.3	7.2	3.7	1.5	-6.9	9.3	10.0
Real import growth, % yoy	10.0	6.8	2.8	6.3	5.8	1.5	-6.9	13.1	13.4
Net export contribution to growth	-0.3	-0.2	1.4	1.2	-1.3	0.0	-0.5	-2.3	-2.5
Unemployment, % of labour force	6.1	5.0	4.0	2.9	2.2	2.0	2.5	2.9	2.5
External (US$bn)									
Current account	0.5	0.8	3.5	3.0	1.3	0.9	8.8	4.3	2.9
% of GDP	0.2	0.4	1.8	1.4	0.5	0.4	3.6	1.6	0.9
Trade balance	10.7	7.6	10.6	10.9	9.4	10.5	12.5	13.7	14.4
FDI, net	4.0	-2.0	7.7	1.8	2.2	6.0	3.2	2.5	1.5
External debt	129.1	125.7	136.5	205.3	196.4	193.8	197.3	191.6	186.6
Short-term debt	52.8	57.1	66.9	117.2	115.9	111.3	107.4	104.3	101.6
International reserves	54.5	64.5	85.7	148.0	142.5	149.9	166.1	166.1	166.1
Public Finances, % of GDP									
Consolidated government balance	-2.1	-0.6	0.7	1.5	0.9	0.3	-6.1	-7.1	-4.5
Consolidated gov primary balance	-0.8	0.4	1.6	2.2	1.7	1.0	-5.3	-6.0	-3.2
Public debt	41.9	39.7	36.6	34.2	32.1	30.0	37.8	42.2	43.0
External public debt	8.6	6.6	5.7	5.0	3.9	4.0	4.1	3.7	3.4
Prices									
CPI, % yoy	0.1	0.0	2.0	2.4	2.0	3.2	2.3	4.9	1.5
CPI, % avg	0.3	0.3	0.7	2.5	2.1	2.8	3.2	3.4	3.1
CZK/EUR, eop	27.7	27.0	27.0	25.5	25.7	25.4	26.2	25.4	25.2
CZK/EUR, avg	27.5	27.3	27.0	26.3	25.6	25.7	26.5	25.6	25.3
Policy Interest Rate, % eop	0.05	0.05	0.05	0.50	1.75	2.00	0.25	1.75	2.25
Long-term yield, %, eop	0.76	0.53	0.49	1.39	2.08	1.57	1.31	2.29	2.29
Nominal wages, % yoy	2.9	3.2	4.4	6.7	8.2	7.9	3.2	4.2	4.3

Quarterly Economic Indicators	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-2.5	8.2	3.2	3.7	5.4	5.6	4.8	4.5	4.3
CPI, % yoy	2.3	2.8	4.3	4.9	4.0	3.5	1.9	1.5	2.0
CZK/EUR, eop	26.13	25.50	25.40	25.40	25.40	25.38	25.28	25.18	25.08
Policy interest rate, %, eop	0.25	0.50	1.25	1.75	2.00	2.00	2.25	2.25	2.25

Source: Citi Research, National Sources

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Egypt

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- **Summary view** — We expect growth to rebound in 2021-22, but the longer-term question will be the extent to which the government pushes ahead with structural reform, potentially driving it to levels closer to 7%.

The recovery in the economy in 2021 is clearly underway in Egypt. However, while the rollout of various vaccines makes recovery of the country's important tourism sector in 2H 2021 more likely, the situation is complicated by a new wave of COVID-19. But even with a weak recovery in the tourism sector, the ongoing recovery in domestic demand and infrastructure development continues to support growth. However, to drive it to higher levels we still need to see an intensification of structural economic reforms, which crowd in more private sector investment.

One short term problem with the balance of the recovery, is that it continues to suck in imports, which have increased sharply in 1H 2021. While there has also been a rise in exports, and remittances remain strong, the much slower recovery in the tourism sector and higher income payments now mean that we expect the current account deficit to rise from 3.4% of GDP in 2020 to nearly 4% of GDP in 2021. This also helps explain why foreign exchange reserves, while robust, have remained at just over US$40bn this year despite robust capital inflows, notably portfolio inflows.

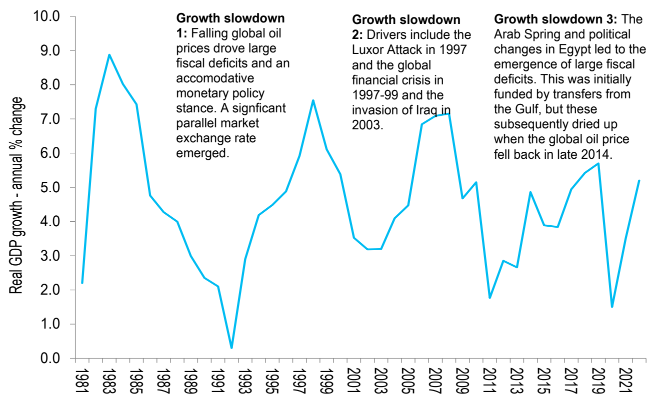
With the government continuing to push ahead with a slow but steady fiscal consolidation, most focus will be on monetary policy. In its final meeting of 2020, the Central Bank of Egypt (CBE) published its new inflation target of 7% (±2 percentage points) on average during Q4 2022. Our current forecasts indicate that it should be able to meet this target, even if inflation rises in mid-2022, but that it may not be able to make major cuts to the Overnight Deposit Rate (ODR) during this time. We also suspect that the CBE will be reluctant to make cuts in the ODR and allow domestic interest rates to fall, until current account dynamics are clearly improving.

Achieving this inflation target also has potentially important implications for exchange rate policy. Despite the nominal EGP stability we have seen in recent years, both the CBE and IMF are firmly of the view that EGP is not overvalued in real terms, a position supported by more popular indexes of real currency values. As such, we expect further EGP stability for the rest of this year, although it will be interesting to see if the CBE allows more volatility, although within a narrow band, in 2022. Beyond this, however, we think that as the CBE becomes more confident about the effectiveness of its new inflation-forecasting monetary policy regime meeting its new target, and with the current account slowly narrowing, it will become less concerned about the inflationary impact of very modest currency weakness going forward.

Egypt has been through three clear growth cycles since 1980, with growth peaking in 1983, 1998 and 2008. It is now in a fourth, and although growth slowed in 2020, we do not expect this to be prolonged and we still expect the current upswing to resume in 2021-22. However, it will be important to see the details of the second phase of the government's economic reform programme. Notably, there are plans to push ahead with privatisation and to encourage greater private sector investment in the manufacturing and information technology sectors. Moreover, a key element of this should also be export-led growth, which may require greater exchange rate flexibility going forward. This is particularly important, because if history is a guide to what could trigger a new down cycle, this is where the policy problem probably lies, although history need not repeat itself if the reform effort can be maintained.

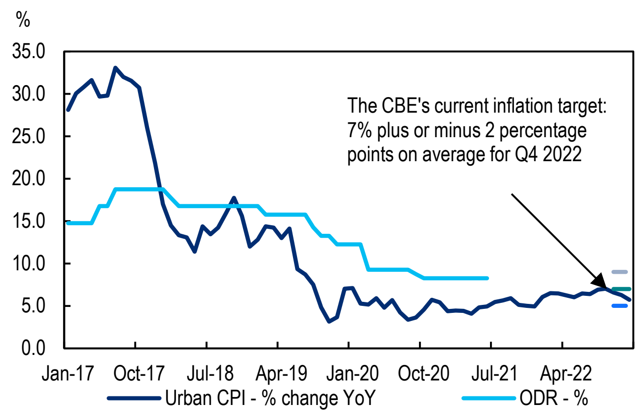
Prepared for Ariff Roduan

Figure 129. Egyptian growth cycles



Source: Citi Research, Haver Analytics

Figure 130. We expect the CBE to achieve its current inflation target



Source: Haver Analytics, Citi Research from July 2021

Figure 131. Egypt Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	301	317	269	227	306	373	422	461	513
Population, mn	90.4	92.4	94.4	96.4	98.4	100.4	102.3	104.3	106.3
Real GDP, yoy avg	4.9	3.9	3.8	4.9	5.4	5.7	1.5	3.5	5.2
Private consumption growth % yoy	6.1	3.2	4.2	3.3	0.5	3.1	9.6	-0.2	6.7
Real investment growth % yoy	3.3	11.6	16.5	10.3	14.1	7.7	-36.0	29.0	13.9
Real export growth, % yoy	-6.0	-13.8	10.1	96.8	6.2	-9.6	-33.0	22.4	9.2
Real import growth, % yoy	4.1	-4.8	16.7	50.7	-3.9	-11.6	-20.6	11.1	18.2
Net export contribution to growth	-1.7	-0.6	-2.3	-1.2	2.5	1.5	-0.5	0.4	-2.5
Unemployment, % of labour force	13.0	12.8	12.5	11.8	9.9	7.9	8.0	8.0	7.8
External (US$bn)									
Current account	-5.9	-17.2	-20.5	-7.9	-7.7	-10.2	-14.2	-18.2	-17.7
% of GDP	-2.0	-5.4	-7.6	-3.5	-2.5	-2.7	-3.4	-4.0	-3.5
Trade balance	-39.2	-38.6	-38.3	-36.5	-37.8	-37.5	-37.0	-43.6	-45.8
FDI, net	4.4	6.7	7.9	7.2	7.8	8.6	5.5	7.0	0.7
External debt	-	-	-	-	-	-	-	-	-
Short-term debt	-	-	-	-	-	-	-	-	-
International reserves	15.4	16.5	24.3	37.0	42.6	45.4	40.1	41.1	42.6
Public Finances, % of GDP									
Consolidated government balance	-11.3	-10.9	-12.5	-8.9	-7.7	-6.8	-6.9	-6.5	-6.2
Consolidated gov primary balance	-3.8	-3.6	-4.2	-1.9	-0.1	1.3	1.2	1.8	1.9
Public debt	-	-	-	-	-	-	-	-	-
External public debt	-	-	-	-	-	-	-	-	-
Prices									
CPI, % yoy	10.1	11.1	23.4	21.9	12.0	7.0	5.4	4.9	5.7
CPI, % avg	10.1	10.4	13.8	29.5	14.4	9.2	5.1	4.9	6.4
EGP/US$, eop	7.15	7.83	18.13	17.74	17.91	16.05	15.74	15.70	15.75
EGP/US$, avg	7.08	7.71	9.61	17.82	17.81	16.80	15.81	15.69	15.74
Policy Interest Rate, % eop	9.25	9.25	14.75	18.75	16.75	12.25	8.25	8.25	8.25
Long-term yield, %, eop	10.00	13.21	16.73	16.16	18.44	14.02	14.03	13.20	13.00
Nominal wages, % yoy	5.91	9.06	7.17	11.46	5.14	16.21	10.40	8.00	6.50

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	2.9	4.0	3.0	5.1	5.3	5.0	5.6	5.2	4.8
CPI, % yoy	4.4	4.9	5.9	4.9	6.4	6.5	7.0	5.7	6.3
EGP/US$, eop	15.72	15.70	15.70	15.70	15.73	15.76	15.77	15.75	15.80
Policy interest rate, %, eop	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.50

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Hungary

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- **Summary view** — While disruptions in the car industry add downside risks to the growth outlook in the short term, higher imported inflation and wage acceleration elevate the inflation outlook. Rate hikes may continue until Q1 2022 as inflation is likely to remain over the 4% upper band of the target until 2Q 2022.

Car production disruptions may hold back industrial growth in H2 while domestic growth momentum is unlikely to fade before elections. Strong beat in 2Q 2021 GDP with broad based contribution from all components raises our 2021 GDP forecast to 6.4% from 5.9% previously, as we expect investments and household consumption to offset weaker industrial growth related to temporary shut down due to semiconductors shortages. Based on the announced halt in car productions, we expect much weaker IP prints in Aug and Sep to pull down Q3 growth. Delay in Hungary's RRF plan approval is unlikely to have much negative growth impacts in the short term as Hungarian authorities bridge finance the RRF program until EU funds are unlocked. Besides the investment activity, tax allowance for families, tax cuts for young workers, minimum wage and pension hikes may also boost GDP growth next year, which we expect to remain over 5% also in 2022.

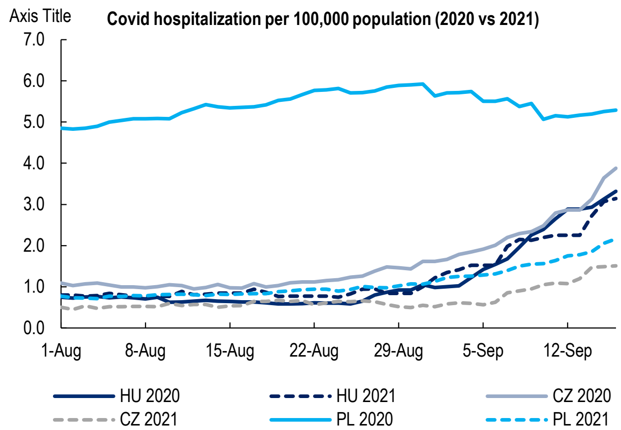
Political noises may gain more attention as Hungary prepares for general elections in April 2022. Joint candidates of the 6-party opposition alliance will be selected in primary elections late Sep/early October. Based on various opinion pools, support for the governing party and the sum of opposition parties run head-by-head. Given the high share of undecided voters and considering that this is the first time since 2010 when ruling Fidesz-KDNP is challenged by a coordinated opposition alliance, the outcome of the elections is highly uncertain. Base line expectations of the current administration's renewal for a 4th consecutive term suggest policy continuity, including fiscal tightening plan in 2023, as proposed by the 2021 convergence program. Policy changes under a coalition government of opposition parties may potentially include a more progressive tax system, increase in corporate taxes and improved cooperation with the EU, but a more split parliamentary coalition may challenge the adoption of major policy changes.

Positive beat in August CPI ends core price deceleration. While most of the headline inflation pick up to 4.9% in Aug has been related to non-core items, such as seasonal food and fuel prices, the NBH's core inflation indicators also accelerated slightly, reversing the softening trend from last month. Core price acceleration has been related to tradable goods, reflecting global supply chain disruptions and strong demand for household equipment, which has not been sufficiently muted by the recent appreciation of the HUF. Against the acceleration in tradable goods prices, service prices have remained stable in July-Aug, confirming that repricing related to the reopening of the economy has been mostly completed. The positive contribution of imported goods signals that the NBH needs to stabilize HUF at stronger levels compared to the average of the last quarters to mute inflationary impacts of FX pass through.

Inflation may rise again during the autumn months, peaking around 5.5%YoY in November. Headline inflation may remain over the 4% upper edge of the NBH's threshold until Q2 2022, which in our view points towards a longer rate hiking cycle, likely extending into Q1 2022. We expect the pace of hikes to slow and project monthly hikes to continue until Feb-2022 in 15bp steps until inflation remains over 4%, lifting the policy rate to 2.40% by Q1 2022. Risk in interest rate outlook still point to the upside if impacts of supply chain disruptions, tax cuts and 20% minimum wage hike in Jan 2022 add to permanent price pressures.

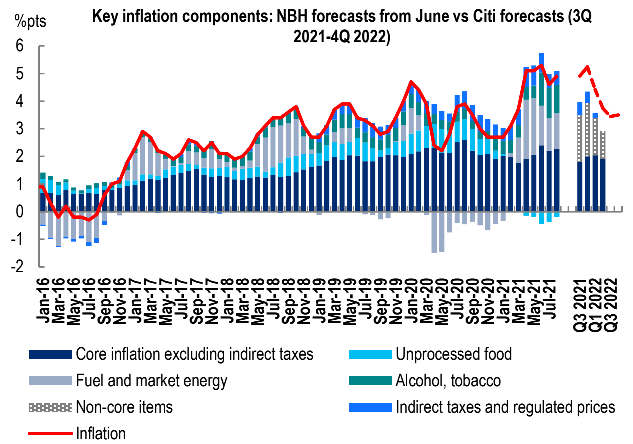
Prepared for Ariff Roduan

Figure 132. Covid hospitalization rise in line with Sep 2020



Source: Citi Research, OWID

Figure 133. Inflation outlook now higher, rate hikes may last into 2022



Source: Citi Research, National Bank of Hungary

Figure 134. Hungary Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	141	125	128	144	160	163	155	183	192
Population, mn	9.8	9.8	9.8	9.7	9.7	9.7	9.6	9.6	9.6
Real GDP, yoy avg	4.2	3.8	2.1	4.3	5.4	4.6	-5.0	6.4	5.2
Private consumption growth % yoy	2.4	3.8	4.7	5.0	5.1	5.1	-2.3	4.2	4.7
Real investment growth % yoy	12.9	-0.1	-4.1	10.8	16.2	11.3	-5.5	5.8	7.6
Real export growth, % yoy	9.2	7.4	3.8	6.5	5.0	5.8	-6.8	10.7	5.8
Real import growth, % yoy	11.0	6.0	3.4	8.5	7.0	8.2	-4.4	9.2	5.6
Net export contribution to growth	-0.6	1.6	0.6	-1.1	-1.3	-1.7	-2.3	1.5	0.3
Unemployment, % of labour force	7.9	6.3	4.5	4.0	4.0	3.5	4.2	3.8	3.4
External (US$bn)									
Current account	1.6	2.9	5.8	2.8	0.6	-0.6	0.0	1.2	0.5
% of GDP	1.2	2.3	4.5	2.0	0.3	-0.4	0.0	0.6	0.3
Trade balance	2.8	4.5	4.4	1.9	-2.0	-3.4	-1.0	-0.3	-0.7
FDI, net	4.0	3.0	3.0	2.3	3.9	0.2	0.6	3.6	1.7
External debt	-	-	-	-	-	-	-	-	-
Short-term debt	-	-	-	-	-	-	-	-	-
International reserves	41.0	32.8	25.4	27.2	29.1	28.8	32.0	31.7	31.4
Public Finances, % of GDP									
Consolidated government balance	-2.8	-2.0	-1.8	-2.4	-2.1	-1.8	-8.1	-7.5	-5.9
Consolidated gov primary balance	1.2	1.4	1.3	0.2	0.4	0.5	-5.7	-5.0	-3.4
Public debt	-	-	-	-	-	-	-	-	-
External public debt	-	-	-	-	-	-	-	-	-
Prices									
CPI, % yoy	-0.8	1.0	1.8	2.2	2.8	4.1	2.8	5.0	3.5
CPI, % avg	0.0	0.1	0.4	2.4	2.9	3.4	3.4	4.6	3.8
HUF/EUR, eop	317	316	309	311	321	331	363	348	353
HUF/EUR, avg	309	310	311	309	319	325	351	353	349
Policy Interest Rate, % eop	2.10	1.35	0.90	0.90	0.90	0.90	0.60	2.10	2.40
Long-term yield, %, eop	3.60	3.33	3.16	2.02	3.01	2.01	2.08	3.26	3.33
Nominal wages, % yoy	3.1	4.3	6.2	12.9	11.1	11.5	9.8	8.5	9.8

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-2.1	17.9	5.0	5.3	4.9	4.8	6.4	4.5	3.9
CPI, % yoy	3.6	5.3	5.2	5.0	4.0	3.6	3.6	3.5	3.3
HUF/EUR, eop	362	351	350	348	346	346	349	353	356
Policy interest rate, %, eop	0.60	0.90	1.65	2.10	2.40	2.40	2.40	2.40	2.40

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Israel

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- **Summary view** — We still see a later rate hike than what markets are pricing in, but this view faces risks from both data surprises and a change in inflation target by the BOI.

The revision of national accounts in Israel has led to an upward revision in the growth rate of Q2'21, as well that of previous years. There are several noteworthy implications. First, the increase in the size of the economy will lead to changes in indicators that are often shown as share of GDP, e.g. debt, fiscal balances or the current account. Second, the current output gap is lower than thought. The Bank of Israel estimates it currently to be -3%, up from -4.5%. This would suggest monetary policy could possibly tighten earlier. Third, potential growth will have to be revised higher as growth rates for almost all recent years have been revised up. This would allow for looser monetary policy, as at a given growth rate, output gaps would be more negative/less positive.

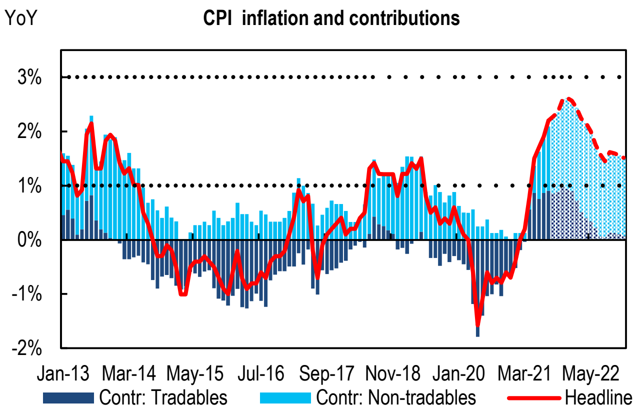
For the first time in over eight years, inflation is above the mid-point of the target range, coming in at 2.2%YoY in August. After tradable goods were the main driver in the earlier months of the year, the rebound in prices is now much more diversified across the CPI basket. Market-derived inflation expectations for all maturities are around the mid-point of the range, although most forecasters, including ourselves, see inflation over the next 12 months below the mid-point again. We see inflation reaching 2.6%YoY in the last months of 2021, but then gradually declining again. This view depends to some degree though on the trajectory of oil prices; our Commodity Strategy colleagues forecast a gradual decline from early 2022 onwards towards, eventually reaching the mid-$50s/bbl.

We pull our forecast for the first rate hike slightly forward to the October meeting of 2022. The Bank of Israel, we think, will first want to phase out its other programmes and evaluate the impact from this. The programme intended to encourage bank lending to small businesses has ended in July after reaching ILS40bn. As the programme had the effect of reducing demand for wholesale funding from banks, freeing up more resources for corporates, the BOI will have been satisfied to see that corporate bond spreads remained stable. Similarly, the BOI would most likely first want to end its asset purchase programme before considering an increase in the policy rate. However, by then inflation might be on a downward path again, mostly due to declining tradable inflation. We think the BOI will want to ensure non-tradable inflation is robust enough to maintain headline CPI within reach of the mid-point of the target range.

Risks to this view come from both surprises in the data as well as a change in the BOI's framework. The risk from data surprises is of course that activity and inflation data allow/force the BOI to act earlier. There is however also a scenario in which the BOI revises its inflation target, a possibility that Governor Yaron brought into play recently. If, in such a scenario, the inflation target were to be revised down (Governor Yaron mentioned that low inflation in recent years did not have adverse effects on activity and employment), this would, for a given rate of inflation, call for tighter policy.

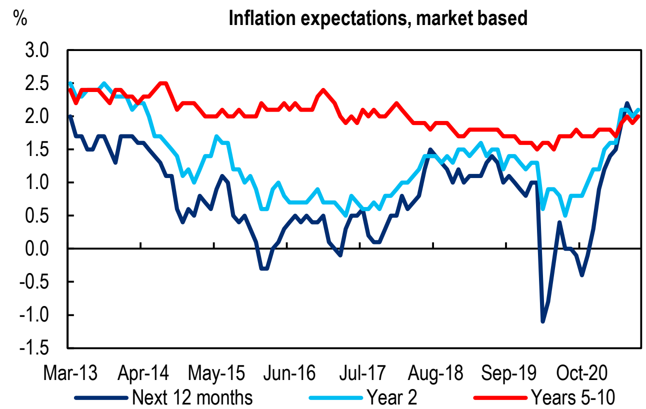
Prepared for Ariff Roduan

Figure 135. Inflation drivers have become more diversified…



Source: Citi Research, Haver Analytics

Figure 136. …and inflation expectations are all around mid-target range



Source: Citi Research, Haver Analytics

Figure 137. Israel Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	311	300	319	355	373	398	407	461	499
Population, mn	7.9	8.0	8.1	8.2	8.4	8.5	8.7	8.8	8.9
Real GDP, yoy avg	4.1	2.3	4.5	4.4	4.0	3.8	-2.2	6.0	4.0
Private consumption growth % yoy	4.4	3.6	6.2	3.6	3.5	3.9	-9.2	11.0	6.0
Real investment growth % yoy	0.8	-1.5	12.5	3.8	7.2	3.1	-4.0	9.0	5.9
Real export growth, % yoy	0.7	-2.2	2.0	5.3	5.1	3.9	-1.9	14.1	7.7
Real import growth, % yoy	2.3	-0.2	10.0	4.4	6.8	3.4	-9.5	19.4	8.7
Net export contribution to growth	-0.4	-0.6	-2.2	0.3	-0.5	0.2	2.3	-1.0	-0.2
Unemployment, % of labour force	5.9	5.3	4.8	4.2	4.0	3.8	4.3	6.0	4.5
External (US$bn)									
Current account	12.7	15.8	12.1	12.8	10.6	14.3	22.2	26.0	20.2
% of GDP	4.1	5.3	3.8	3.6	2.8	3.6	5.5	5.6	4.1
Trade balance	-8.2	-3.7	-8.2	-10.3	-16.9	-15.4	-11.6	-16.0	-17.8
FDI, net	1.5	0.4	-2.6	9.3	15.4	8.7	17.9	20.0	20.0
External debt	94.2	85.9	87.1	90.1	94.3	103.2	138.4	156.7	169.5
Short-term debt	39.8	35.0	34.9	36.2	38.9	43.3	46.0	48.0	50.0
International reserves	86.1	90.6	98.4	113.0	115.3	126.0	173.3	220.3	251.5
Public Finances, % of GDP									
Consolidated government balance	-2.3	-1.6	-1.9	-1.8	-2.8	-3.6	-11.4	-6.6	-3.6
Consolidated gov primary balance	1.1	1.6	1.1	1.0	-0.1	-1.0	-8.6	-4.1	-1.4
Public debt	66.0	63.8	61.8	59.6	59.9	59.1	71.4	73.3	72.7
External public debt	8.1	9.2	8.3	8.3	7.3	7.9	11.5	13.4	13.8
Prices									
CPI, % yoy	-0.2	-1.0	-0.2	0.4	0.8	0.6	-0.7	2.6	1.5
CPI, % avg	0.5	-0.6	-0.5	0.2	0.8	0.8	-0.6	1.5	1.9
ILS/US$, eop	3.90	3.89	3.86	3.48	3.74	3.45	3.21	3.18	3.17
ILS/US$, avg	3.58	3.88	3.84	3.60	3.59	3.56	3.44	3.24	3.17
Policy Interest Rate, % eop	0.25	0.10	0.10	0.10	0.25	0.25	0.10	0.10	0.25
Long-term yield, %, eop	2.31	2.09	2.07	1.64	2.29	0.84	0.77	1.30	1.50
Nominal wages, % yoy	1.6	2.2	2.2	3.0	3.5	0.0	0.0	1.5	1.0

Quarterly Economic Indicators	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-0.7	17.5	5.2	3.4	5.1	2.1	4.2	4.5	4.3
CPI, % yoy	0.2	1.7	2.3	2.6	2.2	1.8	1.6	1.5	1.4
ILS/US$, eop	3.34	3.26	3.19	3.18	3.18	3.18	3.17	3.17	3.16
Policy interest rate, %, eop	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.25	0.25

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Kazakhstan

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- **Summary view** — 2021 economic growth should recover to 3.5% from -2.5% in 2020 as higher oil prices are providing useful support. Fiscal policy is entering consolidation mode, while the central bank will need to be vigilant as inflation pressures remain persistent.

So far 2021 data has pointed to a decent economic recovery, with GDP growth forecast to expand at 3.5%. Kazakhstan fared better than many EM peers in 2020, chiefly because of the large fiscal support provided by the government. GDP growth fell by only 2.5%. In 2021 economic performance has been usefully supported by higher oil prices and the government's intention to continue providing fiscal stimulus. As a result, consumer spending and exports should be the key drivers of our forecast 3.5% GDP growth. Data so far has indeed pointed to recovering growth, with the short-term economic indicator expanding by 3.7%Ytd.

Economic performance will also be determined by Kazakhstan's participation in the OPEC+ agreement. Kazakhstan committed to cutting oil production under the OPEC+ agreement last year by almost 25% from 1.6mn bpd in Apr to 1.3mn bpd in Jul. Oil production indeed fell from 6.8bn tons (1.64mn bpd) in Apr to 5.4bn tons (1.32mn) in Jun/Jul. It has subsequently recovered to 1.47mn bpd already in Aug, before stabilizing at 1.5mn bpd at the end of 2020 and so far in 2021. Given the close link between economic performance and oil production, growth may also be supported by the intention to continue relaxing restrictions this year.

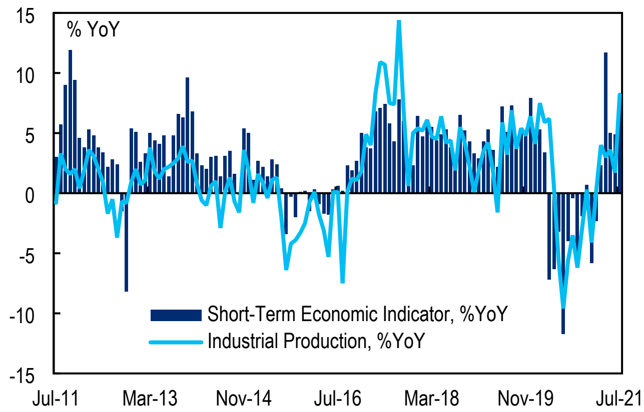
Fiscal policy will likely enter consolidation mode, but continue to provide countercyclical impulses. In 2020, the fiscal package related to the COVID-19 crisis was worth US$13.5bn (8% of GDP) and included a mixture of infrastructure maintenance projects with a view to keeping unemployment under control, tax relief for SMEs, and direct cash injections to individuals who have lost their jobs or experienced reduced income streams. The headline fiscal deficit thus deteriorated to an estimated 3.6% of GDP (-1.3% in 2019), but we see it moderating to 2.7% of GDP in 2021, which is slightly better than the government's own plan of 3.4%. Kazakhstan still has large buffers in its sovereign wealth fund (NFRK at 34% of GDP), although this is close to the 30% level, below which the fund cannot be tapped without legislative changes.

Inflation has likely peaked, but it will start moderating to the upper boundary of the targeted range only next year. Food inflation was rising by double digits early in the year driven by inertia and weaker currency. Prices of bread, bread products, fish and fruits were the key culprits. More recently, nonfood and services prices have also shown more robust growth. The CPI index, running at 7.4% for a number of months, inched down to 7.0%YOY in Mar and Apr, before increasing slightly to 7.3% YoY in May and further to 8.7% YoY in Aug. We expect inflation to gradually decline to the upper boundary of the targeted range for inflation (4-6%) only in mid-2022.

NBK will need to be vigilant as inflation pressures remain persistent. The central bank had a somewhat confused reaction to the global shock in 2020. In response to falling oil prices, the NBK hiked the key rate in Mar by 2.75pts to 12% and widened the interest rate band to +/- 1.5%. However, the NBK quickly reversed course in Apr'20, lowering the policy rate to 9.5% as economic risks became more prevalent. It cut once again to 9.00% in Jul'20 and kept the policy rate unchanged ever since. This year the NBK has reversed track, hiking twice by 25bpts to 9.50%, as inflation risks became more prevalent. Our baseline scenario envisages no more hikes this year, although the risks remain to the upside.

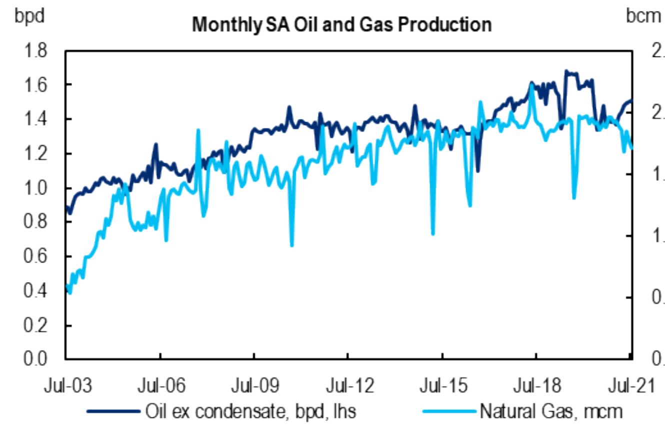
Prepared for Ariff Roduan

Figure 138. Economic data points to a resumption of growth



Source: Citi Research, Kazstat

Figure 139. Oil production has stabilized



Source: Citi Research, Kazstat

Figure 140. Kazakhstan Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	221	184	137	167	179	182	171	186	202
Population, mn	17.3	17.6	17.8	18.1	18.3	18.6	18.8	19.0	19.3
Real GDP, yoy avg	4.3	1.2	1.1	4.1	4.1	4.5	-2.5	3.5	3.0
Private consumption growth % yoy	2.1	1.8	1.3	1.5	4.7	6.6	-2.4	2.7	2.1
Real investment growth % yoy	8.6	5.5	2.5	3.1	2.9	12.2	-2.0	3.2	5.3
Real export growth, % yoy	-2.5	-4.1	-4.5	8.0	9.6	2.0	-12.1	4.9	2.0
Real import growth, % yoy	-4.0	-0.1	-2.0	1.0	6.6	14.9	-10.7	13.5	2.2
Net export contribution to growth	0.4	-1.0	-0.6	1.6	0.7	-3.0	-0.1	-2.1	-0.1
Unemployment, % of labour force	5.1	5.0	5.0	4.9	4.9	4.8	5.5	5.5	5.5
External (US$bn)									
Current account	6.1	-6.0	-8.1	-5.1	-0.1	-7.3	-6.3	-3.1	-2.4
% of GDP	2.8	-3.3	-5.9	-3.1	-0.1	-4.0	-3.7	-1.7	-1.2
Trade balance	36.6	11.6	9.3	16.7	25.6	18.1	10.5	22.9	24.8
FDI, net	4.7	3.3	13.7	3.8	4.7	5.5	5.9	5.9	5.9
External debt	-	-	-	-	-	-	-	-	-
Short-term debt	-	-	-	-	-	-	-	-	-
International reserves	28.7	27.4	29.0	30.0	30.2	28.2	27.4	29.8	32.9
Public Finances, % of GDP									
Consolidated government balance	-2.7	-2.2	-1.7	-3.1	-0.9	-1.3	-2.5	-1.3	-0.7
Consolidated gov primary balance	-2.1	-1.5	-0.6	-2.3	0.1	-0.3	-1.4	-0.2	0.2
Public debt	-	-	-	-	-	-	-	-	-
External public debt	-	-	-	-	-	-	-	-	-
Prices									
CPI, % yoy	7.4	13.6	8.5	7.1	5.3	5.4	7.5	7.2	5.0
CPI, % avg	6.7	6.6	14.7	7.4	6.0	5.2	6.8	7.8	5.4
KZT/US$, eop	183	341	334	333	384	383	421	420	420
KZT/US$, avg	179	213	342	326	344	383	413	425	424
Policy Interest Rate, % eop	5.50	16.00	12.00	10.25	9.25	9.25	9.00	9.50	8.50
Long-term yield, %, eop	-	-	-	-	-	-	-	-	-
Nominal wages, % yoy	10.7	4.8	9.0	6.6	8.5	14.7	11.8	6.2	5.4

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-1.4	5.8	5.5	3.9	5.0	3.2	2.3	1.8	1.7
CPI, % yoy	7.0	7.9	8.7	7.2	6.7	5.2	4.2	5.0	5.0
KZT/US$, eop	426	427	426	420	420	420	419	420	420
Policy interest rate, %, eop	9.00	9.00	9.50	9.50	9.00	8.50	8.50	8.50	8.50

Source: Citi Research, National Sources

Prepared for Ariff Roduan

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- **Summary view** — The delayed exchange rate adjustment since early 2020 means that any recovery in the economy looks set to be lacklustre in 2021-22, against the background of rising political tensions.

Despite the growth bounce in Q2 2021, we expect only a slow recovery in the Nigerian economy in 2021-22 after the COVID-19 induced slowdown in 2020. And while domestic economic activity has recovered well in 2021, we still think this will be constrained by the spread of a third wave of COVID-19 and the impact of the 2020 national lockdown on incomes and savings, coupled with the ongoing high inflation rate. Moreover, the fiscal policy options facing the government to boost growth are limited due to its small size of the government and limited fiscal space. Crucially, however, the main issue has been the lack of naira adjustment in response to the lower oil price in 1H 2020. This has once again resulted in significant foreign exchange shortages, which are negatively impacting on business operations.

We also think that as we head into 2022 political concerns will start to rise, which will constrain any significant recovery in investment. National elections are scheduled for early 2023 and given that the incumbent president cannot stand again having served two terms, there are already signs that campaigning is starting to gather momentum. Investor sentiment, certainly after the elections, could be improved significantly following the signing of the long delayed Petroleum Industry Bill (PIB) and the start of the Dangote oil refinery. However, additional structural reforms, notably to improve electricity supply, may also be required.

Faced with a slowing economy in 2020, the Central Bank of Nigeria (CBN) implemented a series of unconventional policy measures in 2020. This was led by cutting its Monetary Policy Rate (MPR), and maintaining it at 11.5% since September 2020, despite the current high rate of inflation. The main problem, however, has been with exchange rate policy. While the CBN has moved to partially unify its previous multiple exchange rate regime, notably eventually unifying the CBN and NAFEX exchange rates in June, it has only allowed a modest weakening of the NAFEX rate, while the parallel rate is still trading very wide of the NAFEX rate. It crossed over NGN500:US$1 recently.

However, there are tentative signs that monetary policy is changing. Most notably, the CBN has allowed borrowing rates, notably in longer-dated maturities, to rise in 2021, even if they are still negative in real terms and it has not yet moved the Monetary Policy Rate (MPR). In addition, coupled with rising oil prices, there are signs that this could potentially allow the CBN to re-build foreign exchange reserves and pay down the current foreign exchange backlog. The combination of this may then give the CBN the confidence to allow a further naira devaluation of the NAFEX exchange rate which will allow a degree of normality to return to the market and hopefully create a new equilibrium clearing exchange rate**.**

And this remains the crux facing the CBN given that the political pressure on the central bank not to change current exchange rate policy is easy to underestimate. It is also not clear whether an adjustment will be a steady naira depreciation, or a series of stepped moves, or a one-off devaluation. Historically the difficulty of finding a new equilibrium indicates the stepped approach is probably the most likely, with a series of stepped devaluations down to somewhere between the current NAFEX and parallel exchange rate levels.

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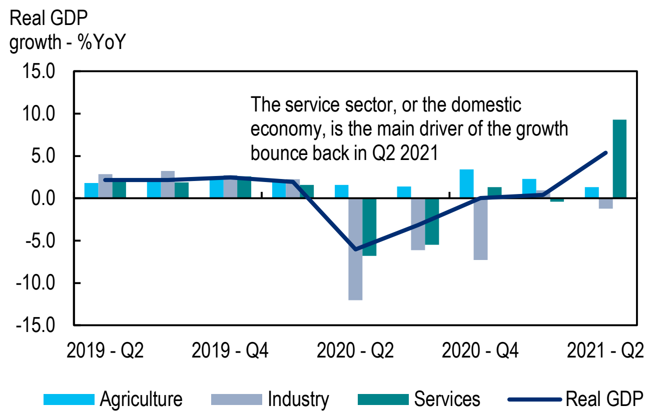
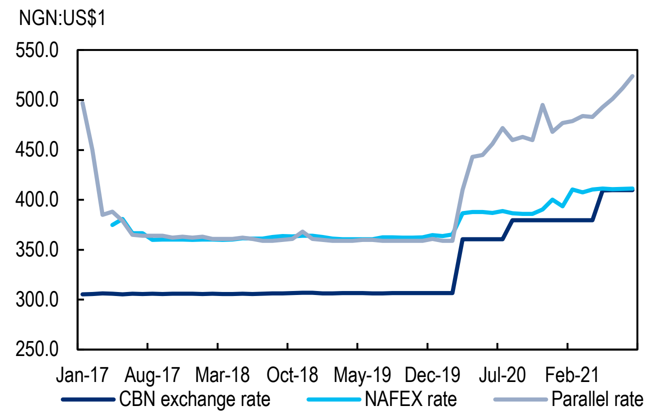
Figure 141. The domestic economy re-bounds in Q2 2021 from the negative impact of lockdown in Q2 2021...



Source: Citi Research, Haver Analytics

Figure 142. ...but exchange rate policy still needs to be resolved before things return to a normality



Source: Citi Research, Haver Analytics

Figure 143. Nigeria Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	568	492	405	376	422	448	429	445	461
Population, mn	176.4	181.1	186.0	190.8	195.9	201.0	206.2	211.5	216.9
Real GDP, yoy avg	6.3	2.7	-1.6	0.8	1.9	2.2	-1.8	2.4	1.8
Private consumption growth % yoy	0.6	1.5	-5.7	-0.4	4.6	-1.0	2.2	-	-
Real investment growth % yoy	13.0	-1.5	-4.7	-1.8	9.4	6.3	-7.0	-	-
Real export growth, % yoy	24.1	0.1	11.5	8.2	-0.9	15.0	-27.0	-	-
Real import growth, % yoy	6.0	-25.7	-10.4	4.8	49.2	27.3	-23.3	-	-
Net export contribution to growth	4.4	2.7	3.5	1.9	-3.8	1.3	-5.5	-	-
Unemployment, % of labour force	-	-	-	-	-	-	-	-	-
External (US$bn)									
Current account	1.3	-15.3	2.7	10.4	3.5	-17.0	-16.7	3.8	-2.5
% of GDP	0.2	-3.1	0.7	2.8	0.8	-3.8	-3.9	0.9	-0.5
Trade balance	21.0	-6.4	-0.5	13.1	20.5	2.9	-14.8	12.4	7.3
FDI, net	3.1	1.6	3.1	2.2	0.6	1.8	1.6	1.9	2.6
External debt	-	-	-	-	-	-	-	-	-
Short-term debt	-	-	-	-	-	-	-	-	-
International reserves	34.2	28.3	27.0	39.4	42.6	38.6	35.4	38.4	38.0
Public Finances, % of GDP									
Consolidated government balance	-1.7	-1.6	-2.6	-3.1	-2.8	-3.3	-4.2	-3.3	-3.2
Consolidated gov primary balance	-0.7	-0.5	-1.2	-1.6	-1.1	-1.6	-2.1	-1.3	-1.1
Public debt	-	-	-	-	-	-	-	-	-
External public debt	-	-	-	-	-	-	-	-	-
Prices									
CPI, % yoy	7.9	9.6	15.7	13.3	10.3	12.0	15.8	13.4	11.2
CPI, % avg	8.1	9.0	15.7	16.5	12.1	11.4	13.2	16.6	11.5
NGN/US$, eop	183	199	305	307	308	307	381	445	454
NGN/US$, avg	165	198	245	308	306	307	356	413	451
Policy Interest Rate, % eop	13.00	11.00	14.00	14.00	14.00	13.50	11.50	11.50	13.00
Long-term yield, %, eop	14.26	11.25	15.75	14.37	15.69	14.00	9.23	14.00	14.00
Nominal wages, % yoy	-	-	-	-	-	-	-	-	-

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	0.4	5.4	2.4	1.5	2.2	2.0	2.0	1.0	1.5
CPI, % yoy	18.2	17.8	16.3	13.4	11.4	11.4	11.1	11.2	10.6
NGN/US$, eop	381	412	411	445	451	451	451	454	450
Policy interest rate, %, eop	11.50	11.50	11.50	11.50	13.00	13.00	13.00	13.00	12.50

Source: Citi Research, National Sources

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- **Summary view –** Inflation rose to the highest level in two decades but the central bank remains dovish, emphasizing temporary nature of the CPI shock. We expect the first rate hikes in 1H 2022.

The post pandemic recovery continues but is likely to lose some of its momentum in the coming months. In 2Q GDP rose by 2.1% QoQ, mostly thanks to robust private consumption growth. Fixed investment disappointed (-10.8% QoQ) but this came after 16% jump in 1Q and therefore the downward surprise probably reflects only a "correction" after exceptionally strong investment activity in first month of the year. Monthly data for July suggest some weakening in economic activity and deterioration in net exports. While we expect GDP growth to stay close to 2% QoQ in 3Q, we think risks are to the downside. The rise in COVID infections could weigh on activity especially in 4Q, but in our view the overall impact on growth will be significantly smaller than during the first and second COVID wave.

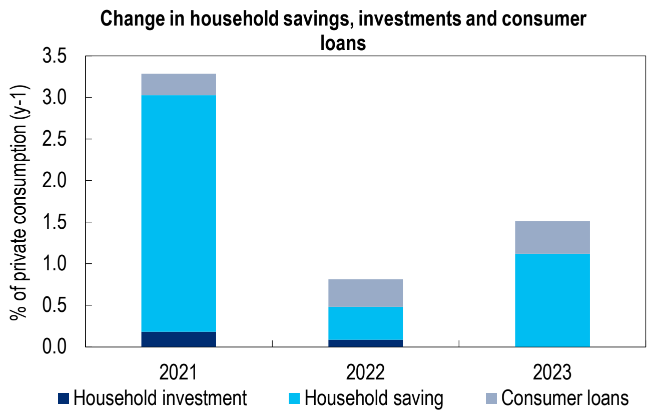
The dispute between European Commission (EC) and Polish government over rule of law issues is becoming an increasingly important factor. In September the EC asked the European Court of Justice to impose financial penalties on Poland for lack of compliance with earlier court rulings. The size of potential fines is not known at this stage but in our view they would likely be large enough to become an important burden on the budget. Also, the EC delayed approval of Poland's recovery plan, a document that would allow the country to start receiving EU funds from the EU's post pandemic facility. This means that funds will start flowing to Poland at least two months later than previously assumed and the delay can be extended. Taking this into account we revised our 2022 GDP forecast down by 0.4 pp to 5.3%. However, even after the revision the growth is likely to be robust, reflecting both an increase in capacity-boosting investment and consumer spending fueled by reduction in financial assets.

Over the summer inflation surprised to the upside, reaching 5.5% YoY in August. Price growth is driven by both temporary (pandemic related) as well as more permanent factors. Planned increases in electricity and gas prices will likely shift the overall inflation path significantly higher than previously expected. Our updated forecasts show the CPI peaking above 6% in1Q22. In the following quarters of 2022 statistical base effects (and expected decline in fuel prices) will probably help push inflation lower during 2022 but even despite this factor the CPI should stay above the upper limit of the central bank's inflation target (2.5%+/-1pp). Our estimates suggest the core inflation, excluding energy, fuels and food prices, will fluctuate close to 4% in 2022.

Despite surprisingly high inflation the NBP has stayed dovish and – unlike other CEE banks - refrained from policy tightening measures. As a result of this strategy the real policy rate in Poland fell towards -5.5%. While defending the dovish stance, NBP governor emphasized transitory nature of the inflation shock and pointed towards pandemic-related uncertainty as key factors against quick rate hikes. NBP officials suggested also on numerous occasions they would like to avoid currency appreciation. Taking into account these arguments and invariably dovish tone of the MPC, we stick to our long-held view that the central bank will try to postpone rate hikes until 2022. Although a rate hike in Nov or Dec 2021 is not impossible, we think the Council would need to become much more confident about growth and inflation outlook to act this year. Our base case is that the MPC will start hiking rates around March/April 2022 and the key policy rate will rise to 1% by the end of 2022 and 2% in 2023.

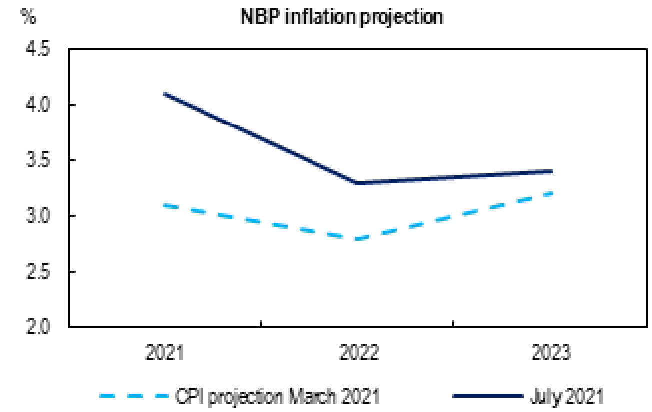
Prepared for Ariff Roduan

Figure 144. In summer inflation surprised to the upside



Source: Citi Research Estimates, CSO

Figure 145. Post pandemic recovery is likely to lose some momentum



Source: Citi Research, CSO

Figure 146. Poland Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	546	478	472	528	588	597	597	666	737
Population, mn	38.5	38.5	38.4	38.4	38.4	38.4	38.3	38.3	38.2
Real GDP, yoy avg	3.3	3.8	3.1	4.8	5.3	4.6	-2.8	5.2	5.3
Private consumption growth % yoy	2.6	3.0	3.9	4.8	4.3	4.0	-3.0	6.2	6.4
Real investment growth % yoy	12.8	4.9	-2.0	7.6	10.5	0.3	-12.9	14.5	8.0
Real export growth, % yoy	6.7	7.7	9.3	9.6	6.9	5.2	-0.2	13.8	10.0
Real import growth, % yoy	10.0	6.6	7.9	10.2	7.4	3.0	-1.9	17.8	11.8
Net export contribution to growth	-1.6	0.9	1.3	0.1	0.0	1.8	1.2	-1.7	-0.8
Unemployment, % of labour force	11.5	9.8	8.2	6.6	5.8	5.2	6.2	5.7	5.1
External (US$bn)									
Current account	-14.2	-4.4	-3.7	0.8	-7.7	2.9	21.0	15.4	7.2
% of GDP	-2.6	-0.9	-0.8	0.2	-1.3	0.5	3.5	2.3	1.0
Trade balance	-7.5	0.9	2.2	1.5	-6.1	1.3	13.1	10.3	9.0
FDI, net	13.1	10.2	4.7	7.7	15.2	9.6	5.4	9.0	9.0
External debt	356.7	331.1	340.1	383.0	359.9	354.0	372.9	359.0	363.0
Short-term debt	37.7	36.8	52.0	51.2	50.6	56.3	58.2	54.0	54.0
International reserves	100.4	94.9	114.4	113.3	117.0	128.4	154.2	169.2	181.2
Public Finances, % of GDP									
Consolidated government balance	-3.6	-2.6	-2.4	-1.5	-0.2	-0.7	-7.0	-5.0	-3.0
Consolidated gov primary balance	-1.7	-0.8	-0.7	0.1	1.2	0.7	-5.6	-3.6	-1.7
Public debt	48.1	48.7	51.9	48.3	46.4	43.3	47.8	44.8	42.0
External public debt	27.7	29.7	31.6	29.8	24.2	21.6	22.4	18.8	17.1
Prices									
CPI, % yoy	-1.0	-0.5	0.8	2.1	1.1	3.4	2.4	6.1	3.5
CPI, % avg	0.0	-0.9	-0.6	2.0	1.6	2.3	3.4	4.6	4.6
PLN/EUR, eop	4.29	4.26	4.40	4.18	4.29	4.25	4.56	4.56	4.42
PLN/EUR, avg	4.19	4.18	4.36	4.26	4.26	4.30	4.44	4.57	4.46
Policy Interest Rate, % eop	2.00	1.50	1.50	1.50	1.50	1.50	0.10	0.10	1.00
Long-term yield, %, eop	2.52	2.95	3.63	3.30	2.81	2.07	1.30	2.25	2.70
Nominal wages, % yoy	3.8	3.5	4.1	5.9	7.1	6.5	4.7	8.0	8.1

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-0.9	11.1	5.1	6.5	6.3	5.6	4.7	4.7	4.7
CPI, % yoy	3.2	4.4	5.5	6.1	5.4	4.8	3.7	3.5	2.7
PLN/EUR, eop	4.63	4.52	4.58	4.56	4.51	4.47	4.45	4.42	4.40
Policy interest rate, %, eop	0.10	0.10	0.10	0.10	0.10	0.25	0.75	1.00	1.50

Source: Citi Research, National Sources

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- **Summary view** — Recent developments including increased signs of an overheating economy, elevated and broad based inflation and rising risk premium strengthened the case for the NBR to hike before the end of the year.

The breakdown of the PNL-USR PLUS alliance raises political uncertainty, thereby increasing the country's risk premium. All eyes are now on whether there will be a no confidence vote, which could take place after the Constitutional Court's (CCR) ruling on the no-confidence motion on September 28. Regardless of the CCR's decision, we now think there are three likely scenarios: i) a new coalition government led by PNL; ii) a minority government led by PNL; and, iii) snap elections.

Formation of a new coalition government would likely be the most welcome outcome for investors. In this regard, we think any concrete development could, if any, take place after the party congresses of the PNL (Sep 25) and USR PLUS (Oct 5). We think that a minority government would not bode well with investor sentiment since it would keep political uncertainty elevated and undermine the implementation of fiscal consolidation and structural reforms. Finally, we think that snap elections is the least likely scenario as the current polls suggest that no parties involved would have a solid gain in new elections.

Recent high frequency indicators raise downside risks to the growth outlook. Retail trade, industrial production and sentiment indicators point to a slowdown in activity in 3Q. To be sure, the economy operates above its potential and we were expecting to see a drop in QoQ growth momentum to about 1%QoQ in 2H from 2.7% in 1H. Nevertheless, the recent sharp increase in Covid-19 cases, coupled with the reintroduction of some restrictions in Bucharest, suggest to us that the slowdown in the pace of growth could be steeper than we penciled in. This, in turn, raises the downside risks associated with our 2021 growth forecast of 7.5%YoY.

Recent developments revive concerns over the twin deficit problem. The 12-month current account deficit widened to EUR15.1bn in July—the widest since January 2009—corroborating our view about overheating economy as we now see current account deficit widening to about 6.5% of GDP this year. In the fiscal sphere, recent political developments, government's recently approved budget revision and upward pressures on expenditures led us to adjust our budget deficit forecast to 7.5% of GDP from 7.0% earlier.

Standing at 5.25%YoY in August, annual inflation continues to display a relatively steep upward trend since the beginning of the year. While recent sharp rise in annual inflation is mainly driven by fuel and electricity price hikes, we think it would be misleading to argue that there has not been any spillovers to other components. In fact, our analysis suggests that year-to-date inflation has been considerably above its average for every major component in the CPI basket. Our diffusion index confirms this as it hovers around the highest level since at least January 2012. Against this backdrop, we now see inflation further rising to about 6.0%YoY by the end of 2021, compared with the NBR's forecast of 5.6%YoY.

On the monetary policy front, we believe that the emerging picture corroborates our view that a more restrictive stance will be needed. Elevated and broad based inflationary pressures, record low real interest rates, above potential economic activity, widening twin deficits, regional central banks' tightening decisions–not to mention rising risk premium on the back of increased political uncertainty—will likely lead the NBR to start tightening before the end of the year. Against this backdrop, we maintain our view that the NBR will initiate a tightening cycle in November with a 25bp rate hike, bringing its policy rate to 1.50%.

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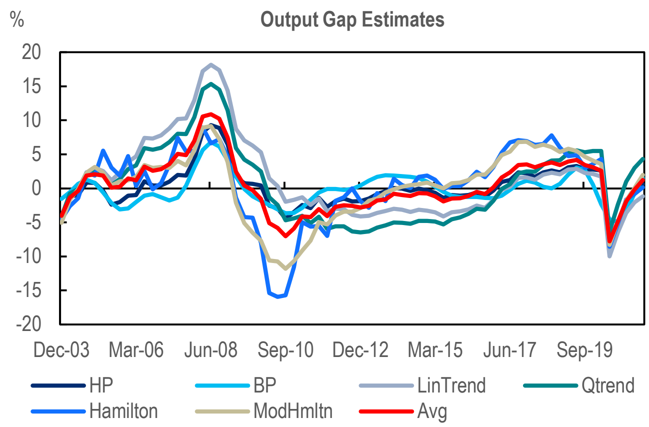
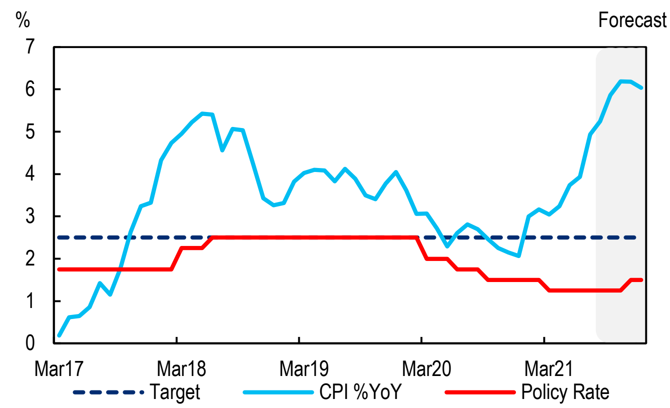
Figure 147. Increasing signs of an overheating economy…



Source: Citi Research, Haver Analytics

Figure 148. …and elevated inflation could lead the NBR to hike in Nov



Source: Citi Research, Haver Analytics

Figure 149. Romania Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	200	178	188	212	242	249	248	286	296
Population, mn	20.0	20.0	19.9	19.8	19.6	19.5	19.4	19.3	19.2
Real GDP, yoy avg	3.6	3.0	4.7	7.3	4.5	4.1	-3.9	7.5	4.1
Private consumption growth % yoy	3.9	5.8	8.4	10.7	7.6	4.0	-4.9	7.6	4.3
Real investment growth % yoy	3.8	6.7	0.1	3.4	-1.0	12.8	7.2	7.0	7.0
Real export growth, % yoy	8.6	4.7	16.4	7.9	5.3	4.0	-9.6	12.0	6.0
Real import growth, % yoy	8.6	8.7	16.5	11.5	8.7	7.1	-5.8	9.0	6.0
Net export contribution to growth	-2.6	-5.0	-5.8	-6.8	-5.9	-5.4	0.4	-2.8	-3.0
Unemployment, % of labour force	6.8	6.8	5.9	4.9	4.2	3.9	5.0	5.2	4.4
External (US$bn)									
Current account	-0.5	-1.4	-3.0	-6.6	-11.2	-12.2	-13.0	-18.2	-14.6
% of GDP	-0.3	-0.8	-1.6	-3.1	-4.6	-4.9	-5.3	-6.4	-4.9
Trade balance	-8.9	-9.0	-10.7	-14.5	-18.1	-20.0	-21.9	-28.4	-20.0
FDI, net	3.6	3.3	5.0	5.5	5.8	5.4	2.1	7.7	6.5
External debt	129.3	105.1	104.3	110.0	117.9	122.6	143.4	170.0	186.7
Short-term debt	25.9	25.3	25.8	34.5	36.0	36.1	41.4	41.8	42.9
International reserves	39.1	35.1	36.1	40.2	38.1	37.1	47.2	48.3	48.6
Public Finances, % of GDP									
Consolidated government balance	-1.9	-1.5	-2.4	-2.8	-2.9	-4.6	-9.7	-7.5	-5.7
Consolidated gov primary balance	-0.3	-0.1	-1.1	-1.6	-1.5	-3.4	-8.3	-5.8	-3.9
Public debt	39.8	38.0	37.4	35.1	34.7	35.3	47.3	50.5	53.2
External public debt	-	-	-	-	-	-	-	-	-
Prices									
CPI, % yoy	0.8	-0.9	-0.5	3.3	3.3	4.0	2.1	6.0	2.8
CPI, % avg	1.1	-0.6	-1.6	1.3	4.6	3.8	2.6	4.5	3.9
RON/EUR, eop	4.48	4.52	4.54	4.66	4.66	4.79	4.86	4.98	5.05
RON/EUR, avg	4.44	4.44	4.49	4.57	4.65	4.75	4.84	4.95	5.02
Policy Interest Rate, % eop	2.75	1.75	1.75	1.75	2.50	2.50	1.50	1.50	2.00
Long-term yield, %, eop	3.61	3.69	3.49	4.32	4.80	4.41	2.97	4.00	4.25
Nominal wages, % yoy	5.2	8.3	13.0	14.2	13.1	14.9	6.7	9.5	11.6

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-0.2	13.0	9.6	6.5	5.0	4.2	4.2	4.1	3.9
CPI, % yoy	3.0	3.9	5.9	6.0	5.1	4.3	2.9	2.8	2.8
RON/EUR, eop	4.92	4.93	4.96	4.98	5.00	5.02	5.04	5.05	5.06
Policy interest rate, %, eop	1.25	1.25	1.25	1.50	1.75	1.75	2.00	2.00	2.25

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Russia

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- **Summary view** — We estimate growth will pick up to 4.0% in 2021 from -3.0% in 2020 as higher oil prices provide useful support to economic activity. The economy already returned to its pre-crisis level of GDP in 2Q21. Macroeconomic policy is transitioning to a consolidation mode with higher policy rates and tighter fiscal policy.

The recovery is shaping up to be more robust than anticipated this year on top of the better-than-expected 2020 performance. Growth came in at -3.0%YoY last year and the better-than-expected performance was mainly driven by the relatively small share of services and small businesses in GDP, i.e. those sectors that were most affected during the COVID-19 crisis. The recovery this year has been very strong, with the GDP almost flat in 1Q21 and expanding by 10.5%YoY in 2Q21. Growth has been usefully propped up by higher energy prices and strong recovery of consumer spending, with additional support of net exports. We see a full-year GDP growth at 4.0%, although risks are slanted to the upside.

GDP reached its pre-crisis level in 2Q2021. It took about 6 quarters for Russia to reach its pre-crisis level of output. The 2020 crisis is reminiscent to the 1998/2008 crises in terms of the depth of the initial collapse, although the recovery is shaping up to be much faster. However, the conditions that ensured that the post-1998 recovery never lost steam, i.e. the large increase in oil prices and robust growth in global trade, will most likely be unavailable to support Russia's economic growth this time around in the medium term.

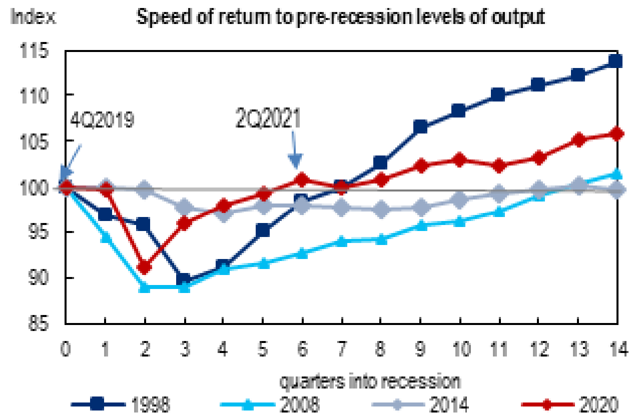
Inflation has been offering unpleasant surprises in recent months, forcing the CBR to hike policy rates by 250bpts this year. The CPI has almost tripled to 6.7% YoY in Aug from the trough posted in Feb'20. We see further upside risks to inflation in the coming months, with a more stable and persistent decline only starting from the fall. Consumer inflation expectations have also worsened significantly, reaching 12.5% in Aug. As a result, the CBR hiked by 25bpts in Mar, 50bpts in Apr and June, 100bpts in Jul and 25bpts in Sep, bringing the REPO to 6.75%. We see one more hike in the coming months and an end-year REPO at least at 7.00%. In our view, rates will then remain at this level for about 2 quarters, before the CBR starts cutting rates in 2Q2022.

The budgetary framework for 2021-2023 fits well into the Kremlin's desire to prioritize fiscal prudence, although some loosening of the fiscal purse was allowed around the Sep Duma elections. The fiscal envelope for 2021-2023 sees a quick return to tighter policy from the welcome loosening in 2020. Our preferred measure of the policy stance in Russia is the change of the non-oil fiscal balance as a share of GDP. We estimate that, following five years of tightening, policy-makers delivered a significant positive fiscal impulse of 4.7% of GDP in 2020. However, this should be quickly reversed over 2021-23 as the impulse should turn negative to the tune of 1% of GDP in each of these three years. Given our estimated break-even oil price of US$66bbl for this year, we estimate that the full-year fiscal outturn will be in small surplus, thus posting a better performance than the officially budgeted 2.4% of GDP fiscal deficit.

Geopolitical risk remains the key challenge for Russia. The new US administration under Biden may result in a unity of purpose with the legislative branch of the government, possibly leading to more geopolitical restrictions on Russia. Russia has, however, enough FX buffers to manage any related macroeconomic risks, in our view.

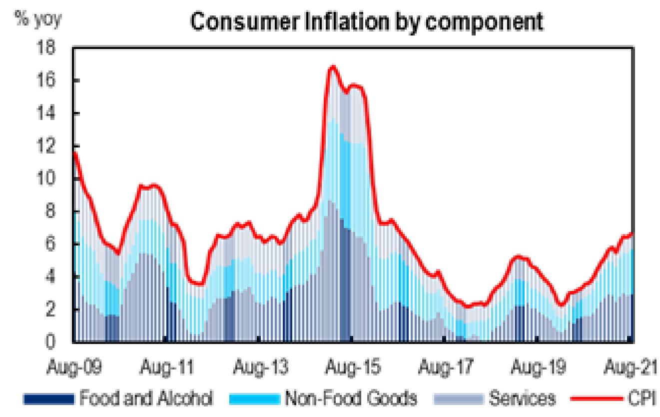
Prepared for Ariff Roduan

Figure 150. A V-shaped recovery with slower growth afterwards



Source: Citi Research, Rosstat

Figure 151. Inflation has been creeping up



Source: Citi Research, Rosstat

Figure 152. Russia Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	2,059	1,363	1,277	1,574	1,657	1,687	1,483	1,603	1,745
Population, mn	144.7	145.0	145.3	145.5	145.7	145.9	145.9	145.9	145.8
Real GDP, yoy avg	0.7	-2.0	0.2	1.8	2.8	2.0	-3.0	4.0	2.6
Private consumption growth % yoy	2.1	-9.4	-2.5	3.7	4.2	3.1	-8.5	4.3	3.2
Real investment growth % yoy	-6.4	-11.7	-0.6	6.4	-1.6	3.3	-2.0	3.9	4.6
Real export growth, % yoy	0.5	3.7	3.2	5.0	5.6	0.7	-4.3	4.6	2.6
Real import growth, % yoy	-7.3	-25.0	-3.7	17.3	2.7	3.4	-12.0	4.3	4.1
Net export contribution to growth	2.3	7.9	1.6	-2.3	0.8	-0.6	1.7	0.3	-0.2
Unemployment, % of labour force	5.2	5.6	5.5	5.2	4.8	4.6	6.5	4.5	4.5
External (US$bn)									
Current account	57.5	67.8	24.5	32.2	115.7	64.8	33.9	60.1	47.2
% of GDP	2.8	5.0	1.9	2.0	7.0	3.8	2.3	3.8	2.7
Trade balance	188.9	148.4	90.2	114.6	195.1	165.3	91.8	118.0	107.1
FDI, net	-35.1	-15.2	10.2	-8.2	-22.6	10.1	3.4	15.0	20.0
External debt	599.9	518.5	511.8	518.4	455.1	491.4	474.2	487.6	492.6
Short-term debt	63.0	48.6	51.1	56.0	54.2	68.4	74.2	80.1	83.8
International reserves	373.8	358.0	368.2	423.2	458.6	543.7	532.7	577.8	620.0
Public Finances, % of GDP									
Consolidated government balance	-0.4	-2.4	-3.5	-1.4	2.6	1.8	-3.8	-0.8	0.3
Consolidated gov primary balance	0.1	-1.7	-2.7	-0.7	3.4	2.6	-3.1	0.3	1.4
Public debt	8.9	8.9	13.5	16.6	17.2	17.8	20.5	21.3	22.0
External public debt	2.0	2.2	3.1	3.5	2.7	4.1	5.4	5.6	5.3
Prices									
CPI, % yoy	11.4	12.9	5.4	2.5	4.3	3.0	4.9	5.8	4.4
CPI, % avg	7.8	15.5	7.0	3.7	2.9	4.5	3.4	6.1	4.7
RUB/US$, eop	58.05	73.00	61.27	57.66	69.72	61.93	74.02	72.66	73.35
RUB/US$, avg	38.63	61.23	66.97	58.34	62.82	64.69	72.32	73.62	72.63
Policy Interest Rate, % eop	17.00	11.00	10.00	7.75	7.75	6.25	4.25	7.00	6.00
Long-term yield, %, eop	13.15	9.56	8.45	7.64	8.81	6.41	6.27	6.83	6.83
Nominal wages, % yoy	8.3	4.2	8.0	6.6	10.9	9.2	7.6	7.0	6.0

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-0.7	10.5	4.2	2.8	3.2	2.4	2.4	2.6	2.7
CPI, % yoy	5.8	6.5	6.8	5.8	5.2	4.4	4.2	4.4	4.0
RUB/US$, eop	75.65	73.15	73.01	72.66	72.29	72.14	72.74	73.35	73.94
Policy interest rate, %, eop	4.50	5.50	6.75	7.00	7.00	6.50	6.00	6.00	5.50

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Slovakia

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- **Summary view** — We lowered our 2021 GDP growth outlook by expecting average 1.3%QoQ GPD growth in H2-2021 due to several factors, including supply disruptions, Chinese slowdown, Covid and higher inflation. We expect the GDP growth to accelerate by 5.5%YoY in 2022 after likely 3.9% in 2021.

Return of private consumption to pre-Covid level reduces sources for the Covid-related recovery phase. Q2 GDP increased by 2%QoQ, slightly below our initial forecast of 2.5%. However, the downside risk to our outlook is reduced by the upward revision to previous data and by stronger domestic demand growth. Effective domestic demand actually surged in Q2 and contributed positively by 5.2pp to the QoQ GDP growth but was offset by the negative -2.3pp contribution of net exports, mainly due to exports falling by 5%QoQ. As private consumption returned to pre-Covid level, it is likely to ease its contribution to the post-Covid recovery as savings were not boosted during Covid. Hence, the recovery of fixed investment and employment ought to support GDP growth**.** The fixed investment on the demand side and industrial value added recorded a larger gap vs the pre-Covid levels than any other part of the GDP. Firms started to recover their profitability that remained below the pre-Covid level, however, the shrinking working-age population implying tighter labour market is likely to limit the recovery of the profit margin.

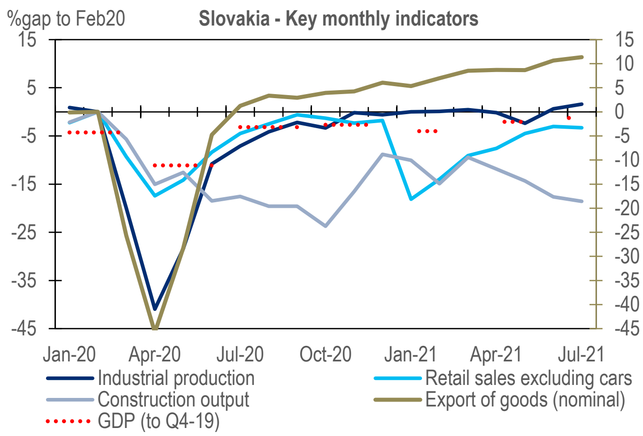
However, car sector disruption, Chinese slowdown, higher inflation and higher Covid cases lead us to reduce our GDP growth forecast. Q2 GDP data already represented a mild downside risk to our 4.2%YoY GDP growth estimate in 2021. Taking all this into account, we reduced our GDP growth forecast to 1.5% and 0.8%QoQ in Q3 and Q4 of this year. This ought to result in 3.9%YoY GDP growth in 2021, followed by 5.2% in 2022. This is less than the Slovak central bank predicts (4.5%, followed by 5.9%) and vs. the MinFin's outlook of 4.6% and 5%, respectively. So far the industrial production kept solid growth in Jun and July, but we assume the car supply disruptions and weaker Chinese economy to ease the industrial sector growth, already implied by weaker industrial sentiment. Moreover, higher Covid cases represent a risk for the service sector. While the economic sentiment eased, it remains consistent with around 4%YoY GDP growth.

While we assume solid growth to continue, there are also several downside risks. Beyond a post-vaccination recovery, we envisage larger EU funds/grants inflow from the 2013-2020 EU budget (data by end of 2020 shows Slovakia did not spend the EU funds around of 3% of annual GDP in 2021-2023) and the RRF (Slovakia asked €6.6bn in the RRF grants) and larger car industry investment to support GDP to deliver an average 5%YoY growth in 2022-24. This would still leave the 2023 GDP level 3% below its pre-Covid path compared with the -6.6% gap in 2021. However, the shortage of labour is returning, reflecting the recovery and sectoral mismatch due to the pandemic and a sharp drop in working-age population. Slovakia is likely to show an almost 7% fall in working-age population (15-64 years) next year compared to its top in 2010.

We estimate a slightly wider fiscal deficit at 7.1% of GDP this year vs. 2020. The state budget deficit reached €4bn year-to-date in August that is virtually unchanged compared to the same period of previous year. We envisage the 2021 deficit at €6.1bn in 2021 assuming the Covid not materially effecting the economy. The coalition tensions have remained in place due to interior and judicial issues. If the Covid intensifies them, the risk of early election could return. We assume the ECB's monetary policy to remain supportive for the Slovak bond market and some form of the QE support is likely to continue at least until mid-2023 via €40bn monthly APP purchases after the PEPP finishing in Mar-2022.

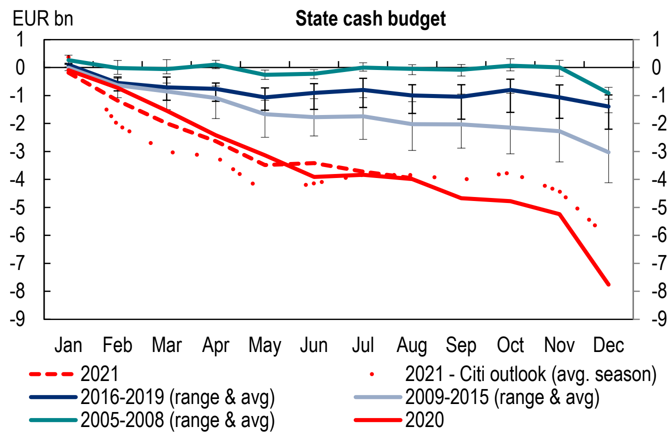
Prepared for Ariff Roduan

Figure 153. Car issues have not yet hit the export driven recovery



Source: Citi Research, Haver Analytics

Figure 154. 2021 budget deficit could be narrower unless Covid hits



Source: Citi Research, Haver Analytics

Figure 155. Slovakia Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	101	89	90	95	106	105	104	117	121
Population, mn	5.4	5.4	5.4	5.4	5.5	5.5	5.5	5.5	5.5
Real GDP, yoy avg	2.6	4.8	2.1	3.0	3.7	2.5	-4.8	3.9	5.2
Private consumption growth % yoy	1.9	2.8	3.9	4.6	4.1	2.7	-1.0	2.5	6.5
Real investment growth % yoy	7.0	16.7	-2.7	1.6	4.5	5.9	-21.3	17.5	15.4
Real export growth, % yoy	3.7	6.6	5.0	3.6	5.2	0.8	-7.5	11.6	6.7
Real import growth, % yoy	4.5	8.5	4.8	3.9	5.0	2.1	-8.3	13.6	9.1
Net export contribution to growth	-0.5	-1.3	0.3	-0.2	0.4	-1.2	0.6	-1.5	-2.3
Unemployment, % of labour force	12.8	11.5	9.5	7.1	5.4	5.0	6.8	7.7	7.1
External (US$bn)									
Current account	1.2	-1.9	-2.5	-1.8	-2.3	-2.9	-0.4	-0.6	-0.8
% of GDP	1.1	-2.1	-2.7	-1.9	-2.2	-2.7	-0.4	-0.5	-0.6
Trade balance	3.7	0.9	1.4	0.7	-0.3	-1.1	0.7	7.1	11.0
FDI, net	-0.6	0.1	0.7	2.7	1.4	2.3	-2.2	1.0	0.9
External debt	85.6	73.8	80.9	107.9	117.2	116.9	132.2	135.0	135.8
Short-term debt	37.0	33.4	43.6	80.5	97.5	92.8	112.1	65.1	63.7
International reserves	1.9	2.3	2.4	3.0	4.6	6.5	8.5	8.5	8.5
Public Finances, % of GDP									
Consolidated government balance	-3.1	-2.7	-2.6	-1.0	-1.0	-1.3	-6.1	-6.9	-4.6
Consolidated gov primary balance	-2.4	-2.1	-2.1	-0.8	-0.9	-1.2	-6.0	-6.8	-4.5
Public debt	53.6	51.9	52.4	51.6	49.7	48.2	60.3	61.4	61.7
External public debt	-	-	-	-	-	-	-	-	-
Prices									
CPI, % yoy	-0.1	-0.5	0.2	1.8	2.0	3.0	1.5	4.2	2.3
CPI, % avg	-0.1	-0.3	-0.5	1.3	2.5	2.7	1.9	2.8	3.2
EUR/US$, eop	1.21	1.09	1.05	1.20	1.15	1.12	1.22	1.19	1.16
EUR/US$, avg	1.33	1.11	1.11	1.13	1.18	1.12	1.14	1.18	1.16
Policy Interest Rate, % eop	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Long-term yield, %, avg	1.23	0.53	0.07	0.40	0.47	-0.25	-0.52	-0.24	-0.11
Nominal wages, % yoy	4.1	2.9	3.2	4.6	6.2	7.8	3.7	5.8	6.1

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	0.3	10.2	2.6	2.9	5.9	5.1	4.8	5.2	5.0
CPI, % yoy	1.4	2.9	4.3	4.2	4.0	3.1	2.6	2.3	2.1
EUR/US$, eop	1.17	1.19	1.19	1.19	1.17	1.16	1.16	1.16	1.15
Policy interest rate, %, eop	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: Citi Research, National Sources

Prepared for Ariff Roduan

South Africa

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- **Summary view** – The commodity-price impact in H2 2021 GDP, together with the GDP rebasing, allows an upgrade to our forecast. Rate normalization should start soon, and an inflation target change must be considered over the medium term.

There have been a lot of reasons for forecasts changes this year. Commodity price gains and strong base effects was always going to assist a rebound in 2021, but the GDP rebasing and to a degree, some fiscal stimulus, is a welcomed offset to the July social unrest. The upside surprise in Q2 GDP thanks to commodity prices, plus the GDP rebasing showing a bigger and more consumer-driven economy, allows us to take our 2021 GDP forecast to 4.7%. There are still risks however, such as the true impact of the social unrest when Q3 GDP is released, plus any potential fourth Covid-19 wave that may hit given only 20% of the adult population is currently vaccinated. Of course China demand as a link to commodity prices must be watched carefully. Although there are also many offsets here, such as the potential impact of the US infrastructure bill and the fact that prices of PGMs might hold out for longer than other commodities given the recovery in demand for autos in the next 6-12 months. Thereafter, GDP growth will naturally slow off weaker base effects, which is why reform measures will matter. The announcement to increase power production from smaller generation plants, so-called embedded generation may promise to solve some energy constraints, but more is necessary; spectrum, visa improvements and port liberalization urgently needs to improve in our view. What's more, South Africa needs to firm up its sovereign ESG objectives to attract future investment; COP26 in November 2021 will likely renew interest.

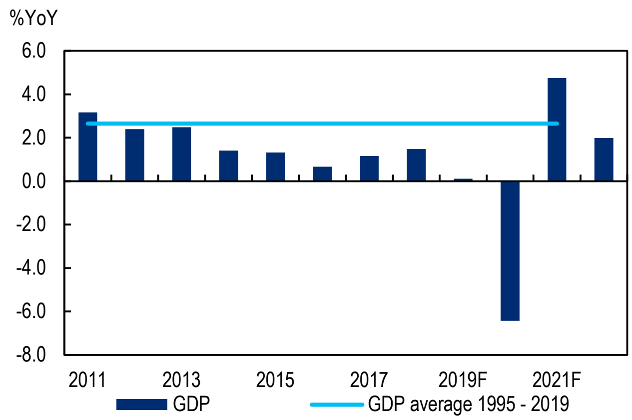
We still see little reason to be concerned about inflation, but a potential target change must be monitored. Headline CPI remains historically low, averaging 4.0% YTD, with core CPI at 3.0%. The near-term bumps up slightly but only due to headline features, yet dips again from Q2 2022. Our medium-term inflation profile takes bottom-up idiosyncratic inflation dynamics into account, which a top-down model is unable to capture. Key examples are rental inflation and reduced cost pass-through at the retail level. As such, our 2022-23 CPI view is for an average of 4.1%, whereas the SARB is currently on 4.5%. We therefore see justification for two hikes, starting in November, as this establishes a trend back to real rate territory. But the rate decisions thereafter get more difficult to justify. Unless of course, the inflation target is lowered from the current 4.5%. The SARB has openly discussed the potential for this change; we see it as a 2022 event.

Fiscal is the driving force for change. Though 2021 promised an even better revenue take up until now, large additional spending is now necessary due to social unrest, lockdown restrictions and the usual bail-outs (SOEs, student debt and provincial bills). The GDP rebasing allows public finance ratios to look very improved, but the deficit and debt trajectories are still worrying. Despite 2021 being a windfall year for tax revenue, the one-off nature of the commodity price cycle means that by 2022 the fiscal debate will be about a basic income grant, another public sector wage negotiation, and as always, inefficient SOEs – all against a limited tax base given high unemployment, skills constraints and emigration.

The local elections are critical, but tricky to work out. On 1 November the voting population will score political parties insofar as they believe the local municipalities they represent will be able to improve deteriorating service delivery. We expect voter turnout to drop, both due to voter apathy and Covid-19 fears. The final outcome – both nationally and for the province of Gauteng – will matter greatly to ANC President Ramaphosa who will be vying for a second term within the ANC party at end-2022.

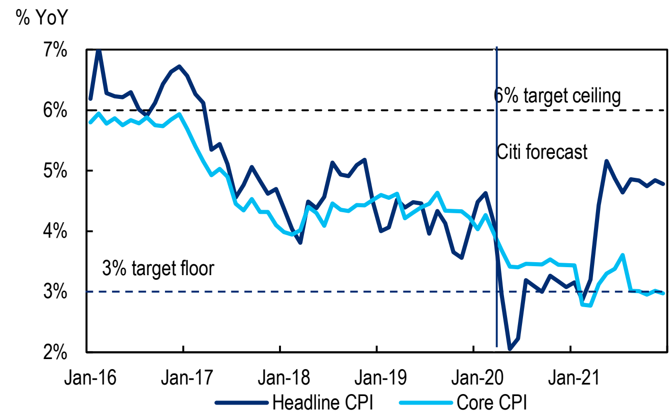
Prepared for Ariff Roduan

Figure 156. GDP to rebound, but a return to pre-Covid only from 2023



Source: Citi Research, StatsSA

Figure 157. CPI rising off base effects but reverts to mid-point by H2 22



Source: Citi Research, StatsSA

Figure 158. South Africa Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	381	346	324	382	404	388	336	426	436
Population, mn	54.5	55.4	56.2	57.0	57.8	58.6	59.3	60.1	60.9
Real GDP, yoy avg	1.4	1.3	0.7	1.2	1.5	0.1	-6.4	4.7	2.0
Private consumption growth % yoy	0.7	2.2	0.7	1.7	2.4	1.1	-6.5	6.5	-6.5
Real investment growth % yoy	-3.2	4.0	-8.4	3.0	-0.7	-0.4	-24.7	12.6	11.4
Real export growth, % yoy	3.6	3.1	0.4	-0.3	2.8	-3.4	-12.0	9.4	-12.0
Real import growth, % yoy	-0.7	5.0	-4.1	1.5	3.2	0.5	-17.4	10.9	-17.4
Net export contribution to growth	1.2	-0.6	1.3	-0.5	-0.1	-1.1	1.8	-0.4	-1.2
Unemployment, % of labour force	25.1	25.4	26.7	27.5	27.1	28.7	29.2	37.0	36.0
External (US$bn)									
Current account	-17.8	-14.6	-8.5	-8.9	-13.1	-10.6	6.6	15.3	0.2
% of GDP	-4.7	-4.2	-2.6	-2.3	-3.2	-2.7	2.0	3.6	0.0
Trade balance	-5.1	-3.7	2.1	4.9	1.8	2.7	17.3	26.9	10.4
FDI, net	-1.9	-4.0	-2.2	-5.4	1.4	2.0	5.1	5.8	3.6
External debt	116.5	100.7	116.8	146.3	144.3	153.9	165.4	178.4	190.7
Short-term debt	35.0	29.1	29.8	32.9	36.8	34.5	35.6	36.9	38.3
International reserves	44.3	41.5	42.7	45.5	45.5	44.7	45.5	45.3	45.3
Public Finances, % of GDP									
Consolidated government balance	-4.3	-4.1	-3.8	-4.4	-4.7	-6.7	-12.3	-7.6	-6.8
Consolidated gov primary balance	-1.4	-1.1	-0.6	-1.0	-1.1	-2.7	-6.9	-3.5	-2.4
Public debt	43.3	45.2	47.1	48.6	51.6	56.3	69.4	71.0	77.4
External public debt	3.9	4.8	4.6	4.4	5.4	5.8	7.1	7.5	7.6
Prices									
CPI, % yoy	5.3	5.2	7.1	4.5	4.4	4.0	3.1	4.8	4.0
CPI, % avg	6.1	4.5	6.6	5.2	4.5	4.1	3.2	4.4	4.1
ZAR/US$, eop	11.57	15.48	13.74	12.37	14.36	14.00	14.70	14.41	14.64
ZAR/US$, avg	10.85	12.78	14.69	13.31	13.25	14.45	16.46	14.42	14.67
Policy Interest Rate, % eop	5.75	6.25	7.00	6.75	6.75	6.50	3.50	3.75	4.25
Long-term yield, %, eop	7.80	9.77	8.93	8.61	8.89	8.26	8.74	9.20	9.20
Nominal wages, % yoy	6.7	7.0	5.8	6.4	4.9	4.1	1.0	4.7	4.5

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-2.6	19.3	2.6	1.8	1.6	1.4	2.6	2.3	0.8
CPI, % yoy	3.2	4.9	4.8	4.8	4.6	4.2	3.7	4.0	4.0
ZAR/US$, eop	14.78	14.28	14.20	14.41	14.60	14.74	14.69	14.64	14.59
Policy interest rate, %, eop	3.50	3.50	3.50	3.75	4.00	4.00	4.25	4.25	4.50

Source: Citi Research, National Sources

Prepared for Ariff Roduan

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- **Summary view** — The CBT's policy actions are likely to be one of the most significant determinants of asset prices in the near-term.

Turkey's second quarter GDP rose by 21.7%YoY, which turned out to be stronger than our projection and the consensus (both 21.0%YoY). On the demand side, according to our calculations, the contributions of private consumption, GFCF, public spending and NX to the 2Q GDP outturn (%YoY) were 13.1pp, 5.6pp, 0.7pp and 8.7pp, while inventory drawdown shaved around 6.3pp off growth. On the supply side, YoY growth rates in all sectors, except construction and finance & insurance, remained above their respective historical averages. Standing at 0.9%QoQ, the second quarter reading suggests that while sequential growth has remained relatively strong, the momentum of economic activity has softened when compared with 1Q (2.2%QoQ). On the back of a stronger-than-expected growth performance so far this year and the revision of the past data, we have revised our 2021 real GDP growth forecast to 7.5% from 5.6%. We stress that the noted projection for headline growth should be assessed in the context of a high carryover from 2020 (about 5.6pp).

Standing at 19.25%YoY, the August inflation print came in higher than the consensus forecast (18.75%YoY). Core and services inflation (SA, 3-month MA annualized) remain elevated at about 17.4% and 14.1%, respectively. The continued surge in PPI inflation (to 45.5%YoY from 44.9%YoY in July) reflects the elevated level of cost-push pressures. This, coupled with the possibility of administrative price adjustments and the likely adverse impact of a severe drought on food prices, further clouds the outlook. Despite strong favorable base effects in the remainder of the year, the noted challenging backdrop leads us to expect inflation to remain elevated above 19% until November before moving closer to about 17.5% in December, with risks tilted to the upside.

Our recent analysis not only challenges the case for monetary policy easing, but also demonstrates that a tighter stance would be more prudent. While we believe that the CBT is likely to refrain from easing during the remainder of the year, the Bank's recent emphasis on core inflation and supply shocks—along with our empirical findings regarding monetary policy reaction function—leads us to remain cognizant of the risk of a premature easing, particularly if the currency remains stable. A weaker international reserve position and a more challenging macroeconomic backdrop than before the pandemic suggest to us that the possible adverse consequences of a premature easing (or refraining from tightening if needed) are likely to be greater in the current juncture compared to similar episodes in the past.

The authorities released the Medium-term Program (MTP) for 2022-2024 on September 5. Compared with the previous program (2021-2023), the new MTP envisions a stronger growth performance, but looks for a less ambitious disinflation path and an external adjustment trajectory. The projected fiscal stance (IMF-defined primary balance) does not appear to be particularly tight in light of the envisaged cyclical position of the economy. In the fiscal sphere, a subdued trajectory for tax revenues and a relatively heavy reliance on public investment to keep spending in check (particularly in 2023 and 2024) are also worth highlighting. We believe that the country's ability to grow at a steady rate of 5.0-5.5% in the coming years cannot be taken for granted. In this regard, our simulation results suggest that reaching the official growth path going forward looks feasible only under a strong reform scenario. In our view, attaining the envisaged growth performance would require significant productivity and competitiveness gains, which may prove to be difficult to achieve in the absence of satisfactory progress on Turkey's longstanding structural challenges in labor markets, as well as the institutional and regulatory environment.

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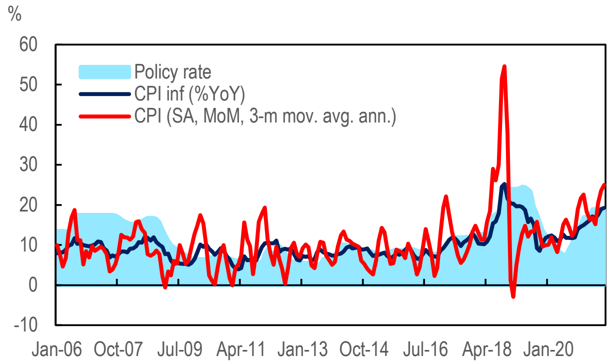
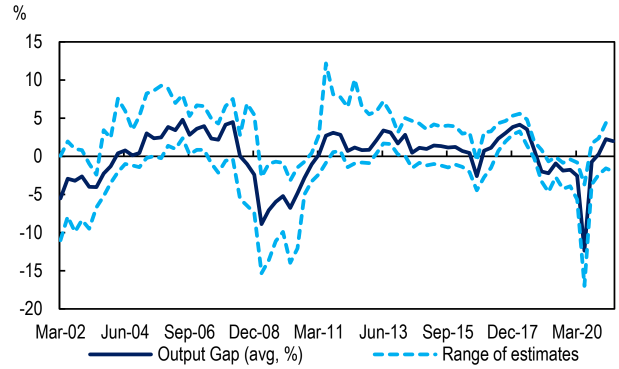
Figure 159. The case for a rate cut is further weakened by inflation …



Source: Citi Research, Haver Analytics

Figure 160. … and the cyclical position of the economy



Source: Citi Research, Haver Analytics, Bloomberg

Figure 161. Turkey Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	939	863	870	859	778	761	720	752	749
Population, mn	77.2	78.2	79.3	80.3	81.4	82.6	83.4	84.1	84.9
Real GDP, yoy avg	4.9	6.1	3.3	7.5	3.0	0.9	1.8	7.6	2.7
Private consumption growth % yoy	3.1	5.3	3.8	5.9	0.6	1.5	3.2	6.9	2.0
Real investment growth % yoy	4.9	9.3	2.2	8.3	-0.2	-12.4	7.2	7.2	1.3
Real export growth, % yoy	7.1	3.2	-1.7	12.4	8.8	4.6	-14.8	17.5	5.0
Real import growth, % yoy	0.3	0.7	3.0	10.6	-6.2	-5.4	7.6	-4.7	-1.1
Net export contribution to growth	1.6	0.6	-1.1	0.2	3.6	2.3	-5.3	4.8	1.4
Unemployment, % of labour force	9.9	10.3	10.9	10.9	10.9	13.8	13.2	12.5	12.6
External (US$bn)									
Current account	-38.9	-27.3	-27.0	-40.8	-21.7	6.8	-37.3	-17.2	-16.1
% of GDP	-4.1	-3.2	-3.1	-4.7	-2.8	0.9	-5.2	-2.3	-2.2
Trade balance	-84.6	-63.4	-56.1	-76.8	-55.1	-31.2	-48.9	-42.1	-49.7
FDI, net	6.3	14.2	10.7	8.3	9.2	6.3	4.6	5.8	6.5
External debt	407.1	399.3	408.4	454.4	443.4	435.1	450.1	448.6	461.5
Short-term debt	142.8	104.8	90.5	110.2	93.7	96.7	114.3	119.5	115.8
International reserves	127.3	110.5	106.1	107.7	93.0	105.7	93.3	118.4	122.3
Public Finances, % of GDP									
Consolidated government balance	-1.1	-1.0	-1.1	-1.5	-1.9	-2.9	-3.4	-3.6	-3.9
Consolidated gov primary balance	1.3	1.3	0.8	0.3	0.0	-0.6	-0.8	-0.8	-1.0
Public debt	28.5	27.4	28.0	28.0	30.2	32.7	39.8	42.1	44.8
External public debt	9.6	10.1	11.1	10.9	12.8	13.3	14.9	16.1	17.6
Prices									
CPI, % yoy	8.2	8.8	8.5	11.9	20.3	11.8	14.6	17.4	10.1
CPI, % avg	8.9	7.7	7.8	11.1	16.3	15.2	12.3	17.5	13.7
TRY/US$, eop	2.33	2.92	3.53	3.79	5.29	5.95	7.44	9.08	9.94
TRY/US$, avg	2.19	2.73	3.02	3.65	4.84	5.68	7.02	8.66	9.83
Policy Interest Rate, % eop	8.51	8.81	8.31	12.75	24.06	11.43	17.03	19.00	14.00
Long-term yield, %, eop	7.96	10.74	11.42	11.74	16.48	12.21	12.90	17.50	15.50
Nominal wages, % yoy	15.6	18.3	20.7	13.4	15.9	18.3	6.8	23.7	18.1

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	7.2	21.7	3.3	1.6	2.7	1.7	2.1	4.1	2.5
CPI, % yoy	16.2	17.5	19.4	17.4	17.0	14.0	11.1	10.1	9.6
TRY/US$, eop	8.25	8.71	8.60	9.08	9.54	9.90	9.92	9.94	9.96
Policy interest rate, %, eop	19.00	19.00	19.00	19.00	19.00	17.00	15.50	14.00	13.50

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Ukraine

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- **Summary view** — We estimate growth will recover to 3.5% in 2021 from -4.0% in 2020. In our baseline scenario, cooperation with the IMF will be resumed following months of institutional regress as the anti-corruption agenda has stalled. Monetary policy will need to remain vigilant even if inflation has likely peaked.

GDP is transitioning to moderate growth after a big contraction in 2020. The Ukrainian economy contracted by a better–than-originally thought of around 4.0% last year, mainly as a result of broadly supportive consumer spending. GDP growth had been gradually improving, with the -11.4%YoY fall in 2Q20 transitioning to an almost flat performance in 4Q20 at only -0.7%YoY. Growth so far in 2021 has been somewhat disappointing, with 1Q21 performance still showing contraction of 0.7%YoY and the 2Q2021 expansion of 5.4%YoY falling short of expectations. The key driver of growth continues to be consumer spending on the back of the 30% increase in the minimum wage this year from UAH5000 to UAH6500. Nevertheless, we see a drawn-out and slow recovery as we estimate that the pre-crisis level of economic output will be reached only in 4Q21.

The key unknown for this year is to what extent the authorities will be able to reverse the trend in institutional regress seen in 2020. We saw rising political economy risks already with the government shake-up that transpired in Mar'20. The resignation of the PM, who was widely considered to represent the new reform-oriented face of Ukrainian politicians, was followed by the resignation of another reform-oriented figure, that of the General Prosecutor. The summer months also saw change at the helm of the NBU. It is also in this context that one may need to put the decision of the Constitutional Court, which ruled that criminal liability for mistakes in e-declarations was unconstitutional. Despite speedy remedial action to reverse the CC's decision, a more consistent approach to implementing the reform agenda will be critical in securing a continuation of much-needed IMF support.

Our baseline calls for useful progress in that direction, including because of pressing fiscal needs. In our view, the relationship between the IMF and Ukraine goes to its usual ‘business cycle’, whereas the initial disbursement of money earlier in 2020 and the subsequent and accumulation of FX reserves reduced government incentives to press ahead with reforms. However, as fiscal pressures are mounting and reserves have now started to dip, there will likely be few palatable options safe for re-engaging the IMF. In particular, the planned 5.5% of GDP deficit for 2021 will continue to test government ability to finance it. There has been some recent progress with the asset-declaration law and the bills related to how exactly the head of the NABU and the members of the High Council of Justice will be chosen.

Nevertheless, there is a risk that the government may need to find recourse to other means of financing the deficit should IMF cooperation fails. As an alternative, the NBU may need to channel freshly printed money via commercial banks to buy MinFin bonds. Another unpleasant option would be a large reduction in planned expenditures and, as a result, lower economic growth. In our view, these options are less likely than a resumption of cooperation with foreign lenders.

Inflation has risen a lot, forcing the NBU to raise rates four times already this year. CPI was well contained during 2020 on the back of economic contraction and lower energy prices. It has, however, increased from 1.7%YoY in May'20 to 10.2%YoY in Aug'21. We see inflation peaking at around these levels, with end-2021 CPI moderating slightly to 9.2%YoY. The NBU has responded aggressively with four rate hikes this year, raising the policy rate from 6.00% to 8.50%. We see this as the peak policy rate.

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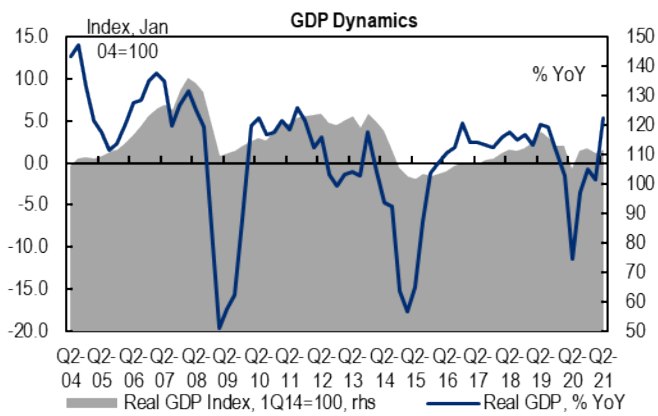
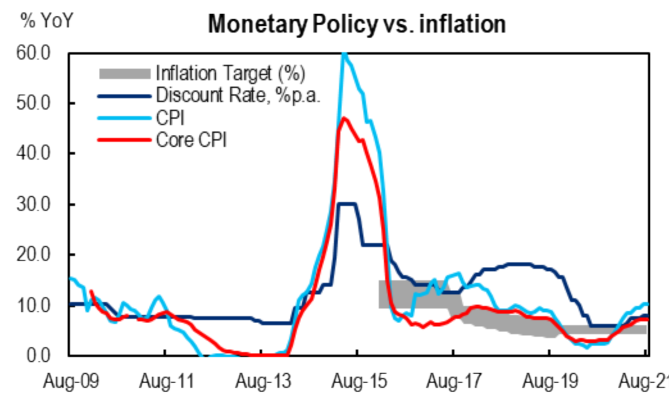
Figure 162. There are green shoots of economic recovery



Source: Citi Research, Ukrstat

Figure 163. Inflation is almost running at double-digits



Source: Citi Research, NBU

Figure 164. Ukraine Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	134	91	93	112	131	154	156	173	190
Population, mn	45.1	44.9	44.7	44.5	44.2	44.0	43.7	43.5	43.3
Real GDP, yoy avg	-6.6	-9.8	2.4	2.5	3.4	3.2	-4.0	3.5	3.5
Private consumption growth % yoy	-8.1	-19.6	2.7	9.3	9.3	11.9	0.5	4.0	4.8
Real investment growth % yoy	-34.7	13.8	43.1	2.6	-1.3	-18.2	-37.2	60.1	8.5
Real export growth, % yoy	-14.2	-13.2	-1.8	3.8	-1.3	6.7	-5.1	5.0	4.0
Real import growth, % yoy	-22.1	-16.7	9.3	12.6	3.0	6.3	-10.1	15.9	6.0
Net export contribution to growth	6.8	2.5	-5.8	-5.2	-2.5	-0.7	3.9	-7.0	-2.0
Unemployment, % of labour force	9.3	9.1	9.4	9.5	8.8	8.2	0.0	8.5	8.5
External (US$bn)									
Current account	-4.6	5.0	-1.9	-3.5	-6.4	-4.1	6.2	-1.4	-2.7
% of GDP	-3.4	5.5	-2.0	-3.1	-4.9	-2.7	4.0	-0.8	-1.4
Trade balance	-7.1	-3.5	-6.9	-9.7	-12.7	-14.3	-6.6	-11.7	-13.9
FDI, net	0.3	-0.4	3.8	3.7	4.5	5.2	-1.0	5.0	5.0
External debt	125.3	117.7	112.5	115.5	114.7	130.0	142.0	144.0	145.0
Short-term debt	20.3	15.7	16.0	17.1	15.0	18.8	20.0	20.0	20.0
International reserves	7.5	13.3	12.8	16.6	20.8	25.3	29.1	28.7	28.1
Public Finances, % of GDP									
Consolidated government balance	-4.6	-2.1	-2.9	-1.5	-1.6	-1.9	-5.1	-4.6	-3.0
Consolidated gov primary balance	-1.4	2.2	1.2	2.2	1.6	1.1	-2.2	-2.0	-0.6
Public debt	69.4	79.1	80.9	71.8	60.9	50.2	60.8	58.2	55.7
External public debt	38.6	52.4	52.0	46.1	39.2	29.1	36.2	33.2	31.2
Prices									
CPI, % yoy	24.9	43.3	12.4	13.7	9.8	4.1	5.0	9.0	5.6
CPI, % avg	12.1	48.7	13.9	14.4	10.9	7.9	2.7	9.1	6.0
UAH/US$, eop	15.82	24.03	27.10	28.16	27.71	23.70	28.34	27.06	27.66
UAH/US$, avg	11.63	21.62	25.54	26.59	27.16	25.75	26.91	27.34	27.39
Policy Interest Rate, % eop	14.00	22.00	14.00	14.50	18.00	13.50	6.00	8.50	7.50
Long-term yield, %, eop	-	-	-	-	-	-	-	-	-
Nominal wages, % yoy	6.0	21.2	23.3	37.0	24.8	15.0	115.0	9.0	7.5

Quarterly Economic Indicators	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-2.2	5.4	4.2	5.5	6.6	4.0	2.0	2.2	1.7
CPI, % yoy	8.5	9.5	10.3	9.0	6.7	5.2	5.7	5.6	5.8
UAH/US$, eop	27.85	27.28	26.91	27.06	27.21	27.36	27.51	27.66	27.81
Policy interest rate, %, eop	6.50	7.50	8.50	8.50	8.00	8.00	7.50	7.50	6.50

Source: Citi Research, National Sources

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Solid progress on vaccination, the decline in Covid cases and the strong rebound in oil prices support the near-term outlook for GCC economies. After shrinking by 5.8% in 2020, we expect oil GDP for the region to decline by 0.9% this year. The GCC's non-oil GDP is projected to rebound by 5.2% this year following a 4.2% contraction in 2020. The region's high exposure to global oil demand, the uncertainty associated with the path of the pandemic and geopolitical risks—in particular, the possible fallout from the crisis in Afghanistan and further delays on the revival of the Iran nuclear deal—are among the key risk factors clouding the outlook. With this backdrop in mind, we provide a brief assessment of the near-term economic prospects for the Gulf states below.

Saudi Arabia: After shrinking by 3%YoY in 1Q, GDP rose by 1.8%YoY in 2Q—an outcome shaped by a 6.9%YoY contraction and a 8.4%YoY rise in the oil and non-oil sectors. On the demand side, the contributions of private consumption, GFCF and the public sector stood at 7.2pp, 3.8pp, 0.7pp, while NX and change in stocks shaved 5.8pp and 4.1pp off GDP growth in 2Q. We expect crude oil production, which stood at about 9.6mbpd in August, to reach about 10mbpd by the end of the year. Softer than expected non-oil activity in 2Q (-0.5%QoQ) and the decline in PMI to about 55 (pa) in the July-August period from 56 (pa) in 2Q led us to adjust our non-oil GDP growth projection for 2021 to 5.8% from 6.7% in the previous forecast round. Following the noted revision, we see this year's growth at 3.3%, which remains more optimistic than the consensus forecast of 2.4%, after a 4.1% contraction in 2020. Higher oil prices and the recovery in economic activity have had a favorable impact on fiscal performance. The budget gap in 1H stood at SAR12.1bn, which represents a significant improvement compared with the same period of 2020 (a deficit of SAR143.3bn). The noted improvement in the budget performance in 1H is largely driven by a strong rise in revenues (about 39%YoY), which is underpinned by a noticeable increase in non-oil revenues thanks to the VAT rate increase in July 2020, amid a 0.9%YoY decline in spending during the same period under consideration. In light of the developments so far, we expect the budget deficit to narrow markedly to 2.5% of GDP this year from 11.2% in 2020. On the back of higher oil prices and the resulting increase in export revenues, the current account balance is likely to swing into a surplus of 4.2% of GDP this year from a deficit of 2.8% in 2020, which augurs well for SAMA's FX reserves, which, at US$454bn in August, remain at comfortable levels.

***United Arab Emirates*:** Supported by one of the fastest vaccination rollouts in the world and the rebound in oil prices, the economy is recovering following a 6.1% contraction in 2020. Standing at 52.4 (pa) in 2Q, the PMI index points to a pick-up in non-oil activity compared with 1Q (51.5, pa)—a conjecture also supported by the CBUAE's credit sentiment survey results. The PMI index for the July-August period (53.9, pa) also suggests that activity is likely to have gained further traction in 3Q. Dubai Expo 2020, which will run from October 1, 2021 until March 31, 2022, will provide additional boost to activity. According to the authorities' projections, a successful staging of World Expo could bring revenues of up to US$17.7bn as organizers expect 25 million visitors during the six-month period (Gulf News, September 15, 2021). Developments to date suggest to us that non-oil GDP is on track to increase by about 5% this year after shrinking by 6.2% in 2020. Turing to the hydrocarbon sector, oil production, which stood at 2.77mbpd in August, is forecast to reach 2.9mbpd by the end of the year. Against this backdrop, we expect this year's GDP growth to be around 2.5%. Regarding price developments, the deflationary trend—driven mainly by non-tradeable goods and services—have continued to keep the annual inflation rate in negative territory during the first five months of the year. The annual inflation rate should turn positive in 2H, bringing the average for the year to about 0.5% from -2.1% in 2020. On the external front, the

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recovery of global trade and travel, along with higher oil prices, bodes well for the UAE's external position as we expect the current account surplus to reach about 8% of GDP this year from 5.9% in 2020.

Qatar: Following a contraction of 3.6% in 2020, we are witnessing a pick-up in activity, which is supported by a relatively strong LNG demand in South and East Asia as well as a revival in domestic demand. After a 2.5%YoY decline in GDP in 1Q, the economy's year-on-year performance is expected to improve in 2Q due in part to a favorable base effect. Standing at 57.1 (pa) in the July-August period, the PMI index also points to a strong uptick in non-oil activity compared with 2Q (52.7, pa). In light of the developments so far, we expect hydrocarbon and non-hydrocarbon activity to rise by 0.3% and 4.7% this year. The noted projections amount to a GDP growth of 3% in 2021. Supported by the strong rebound in hydrocarbon prices and in non-oil activity, the budget balance printed a surplus of QAR4.0bn in 1H, which represents a significant improvement compared with the same period of 2020 (a deficit of QAR1.5bn). The noted favorable development on the fiscal front in 1H is driven by a 2.7% rise in revenues amid a 3.3% decline in spending. Turning to external developments, the strong recovery in exports and hydrocarbon prices suggest to us that the current account balance is on track to swing into a surplus of 5% of GDP this year from a deficit of 2.5% in 2020. Regarding price developments, there has been a visible upward trend in annual inflation since August 2020 due mainly to higher food and energy costs. We expect inflation to be around 1.8% (pa) in this year—vs. -2.7% (pa) in 2020—as the possible introduction of a VAT presents an upside risks to the near-term dynamics.

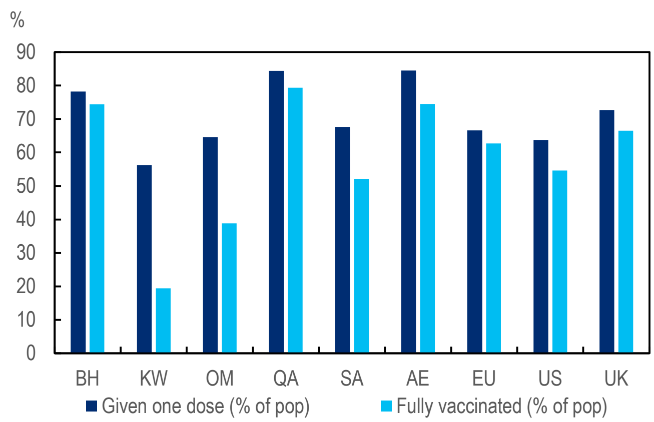
Kuwait: Following an 8.9% contraction in 2020, the economy is expected to rebound this year by 2.0%. Oil production, which stood at 2.45mbpd in August, is expected to reach about 2.6mbpd by the end of the year. This leads us to look for a flattish growth in oil GDP this year after an 8.9% decline in 2020. Developments to date suggest to us that non-oil GDP is on track to grow by 4.4% this year after shrinking by 8.8% in 2020. The envisaged economic recovery and higher oil prices are expected to narrow the budget deficit to about 14% of GDP this year from around 33% in 2020. In our view, long-running frictions between the executive and legislative branches—along with slower-than-desired progress in reforms aimed at bolstering fiscal sustainability and the role of private sector in the economy—continue to cloud the outlook.

Oman: Real GDP is projected to rise by 2.6% in 2021 following an estimated contraction of 3.1% last year. Crude oil production, which stood at 0.97mbpd in July, is projected to reach 0.99mbpd by the end of the year. This, coupled with the strong rise in natural gas production, is likely to increase hydrocarbon GDP by 1.7% this year after an estimated contraction of 1.8% in 2020. The introduction of the 5% VAT in April and the envisaged spending retrenchment (by about 14%) are expected to narrow the budget deficit to 4.9% of GDP this year from 15.9% in 2020. Given the country's elevated public debt and external vulnerabilities, we believe that steadfast implementation of the Medium-term Fiscal plan and structural reforms aimed at enhancing competitiveness in the private sector will be crucial for stability.

Bahrain: After shrinking by 5.1% in 2020, GDP growth is forecast to rebound by 3.3% in 2021 on the back of a 4% increase in non-oil activity, which contracted by 6.2% last year. We expect the budget deficit to narrow to 6.4% of GDP this year from 12.8% in 2020. As we discussed before, we believe the country needs a strong fiscal adjustment to buttress macroeconomic stability and the credibility of the peg.

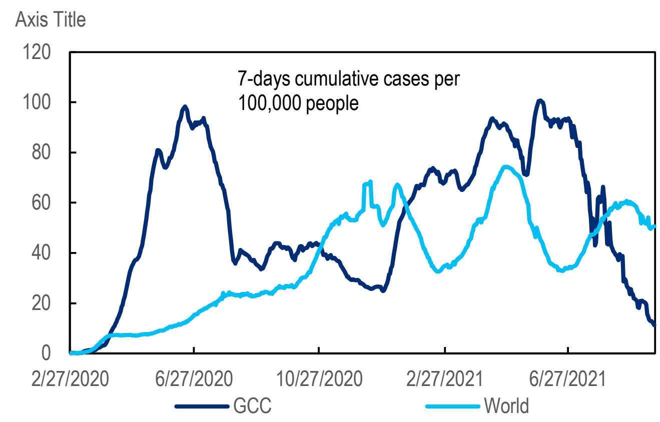
Prepared for Ariff Roduan

Figure 165. Encouraging progress on vaccination…



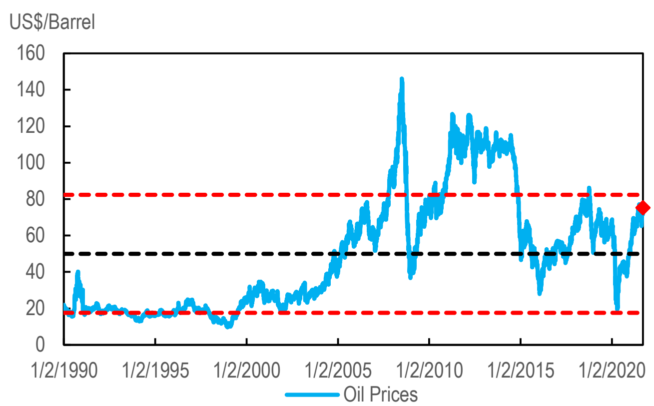
Source: Citi Research, National Sources

Figure 166. …, falling Covid cases and…



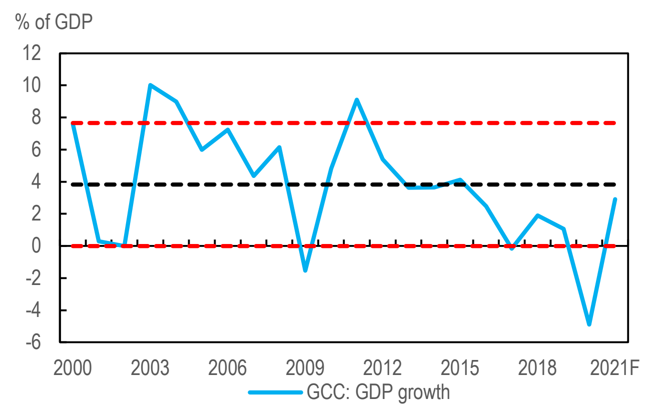
Source: Citi Research, National Sources

Figure 167. … the rebound in oil prices bode well for…



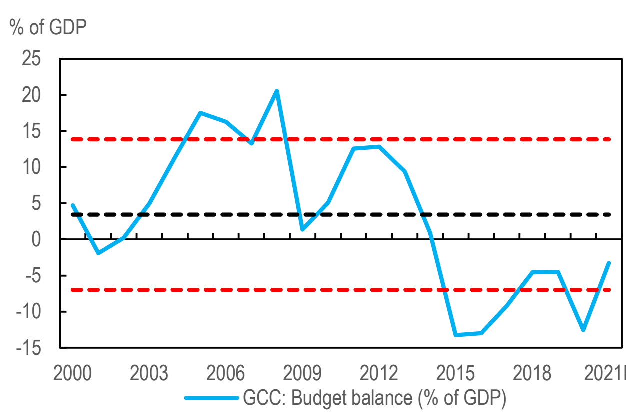
Source: Citi Research, Bloomberg

Figure 168. … the economic recovery, …



Source: Citi Research, Haver Analytics

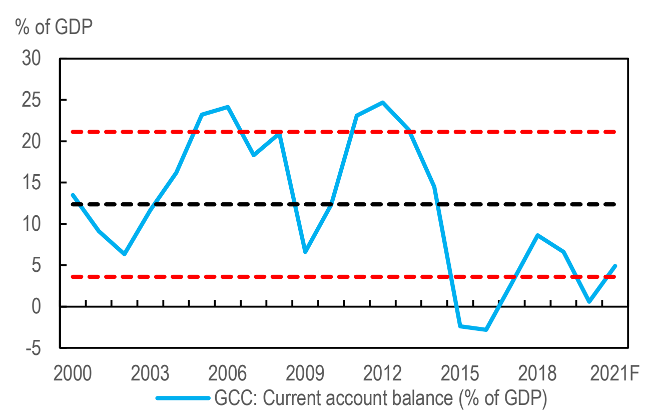
Figure 169. …fiscal performance* and...



*excluding the UAE

Source: Citi Research, Haver Analytics

Figure 170. … balance of payments dynamics.



Source: Citi Research, Haver Analytics

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Figure 171. Gulf Co-operation Countries Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
BAHRAIN									
Nominal GDP, USD bn	33.3	31.0	32.1	35.4	37.7	38.5	34.6	41.7	43.3
GDP per capita, USD	25,330	22,592	22,577	23,559	25,060	25,980	23,512	27,562	28,028
Real GDP, yoy avg	4.4	2.5	3.6	4.3	2.1	2.1	-5.1	3.3	3.1
CPI, % avg	2.6	1.8	2.8	1.4	2.1	1.0	-2.3	-0.5	2.2
BHD/US$, avg	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Current account	1.5	-0.7	-1.5	-1.4	-2.4	-0.8	-3.2	-1.6	-1.3
% of GDP	4.6	-2.4	-4.6	-4.1	-6.4	-2.1	-9.3	-3.8	-3.0
Consolidated government balance	-3.6	-13.0	-13.5	-10.0	-6.3	-4.7	-12.8	-6.4	-4.3
KUWAIT									
Nominal GDP, USD bn	162.7	114.6	109.4	120.7	138.2	136.2	106.0	143.6	150.0
GDP per capita, USD	39,759	27,036	24,801	26,817	29,905	28,513	21,853	29,216	30,168
Real GDP, yoy avg	0.5	0.6	2.9	-4.7	2.4	-0.6	-8.9	2.0	4.9
CPI, % avg	2.9	3.3	2.9	1.6	0.6	1.1	2.1	2.8	2.1
KWD/US$, avg	0.28	0.30	0.30	0.30	0.30	0.30	0.31	0.30	0.30
Current account	54.4	4.0	-5.1	9.6	19.9	33.3	22.4	12.4	15.8
% of GDP	33.4	3.5	-4.6	8.0	14.4	24.5	21.1	8.6	10.5
Consolidated government balance	7.6	-13.4	-13.9	-8.9	-3.1	-9.5	-33.2	-13.8	-10.3
OMAN									
Nominal GDP, USD bn	80.7	68.4	65.5	70.6	79.8	76.3	72.1	94.6	97.3
GDP per capita, USD	20,207	16,446	14,835	15,479	17,338	16,529	15,654	20,097	20,285
Real GDP, yoy avg	1.5	4.6	5.1	0.3	0.9	-0.8	-3.1	2.6	3.7
CPI, % avg	1.0	0.1	1.1	1.6	0.9	0.1	-0.9	1.5	2.3
OMR/US$, avg	0.39	0.39	0.39	0.39	0.39	0.38	0.38	0.38	0.38
Current account	4.2	-11.0	-12.5	-11.0	-4.3	-4.3	-8.7	-5.8	-6.0
% of GDP	5.2	-16.0	-19.1	-15.6	-5.4	-5.6	-12.0	-6.1	-6.1
Consolidated government balance	-3.4	-17.6	-21.1	-13.9	-8.6	-8.9	-15.9	-4.9	-4.2
QATAR									
Nominal GDP, USD bn	206.2	161.7	151.7	161.1	183.3	176.4	144.4	190.1	194.4
GDP per capita, USD	93,054	66,347	57,965	59,128	66,422	63,008	50,962	65,965	66,322
Real GDP, yoy avg	5.3	4.8	3.1	-1.5	1.2	0.7	-3.6	3.0	4.2
CPI, % avg	4.2	0.9	2.7	0.4	0.3	-0.7	-2.7	1.8	2.2
QAR/US$, avg	3.64	3.64	3.64	3.67	3.64	3.64	3.65	3.64	3.64
Current account	49.4	13.8	-8.3	6.4	16.7	4.2	-3.6	9.4	10.5
% of GDP	24.0	8.5	-5.5	4.0	9.1	2.4	-2.5	5.0	5.4
Consolidated government balance	14.5	-0.7	-9.2	-6.8	2.3	1.0	-2.1	2.6	4.5
SAUDI ARABIA									
Nominal GDP, USD bn	756.4	654.3	644.9	688.6	786.5	793.0	700.1	818.8	876.5
GDP per capita, USD	25,214	21,180	20,289	21,114	23,539	23,174	19,996	23,037	24,314
Real GDP, yoy avg	3.7	4.1	1.7	-0.7	2.4	0.3	-4.1	3.3	5.4
CPI, % avg	2.2	1.2	2.0	-0.8	2.5	-2.1	3.4	3.0	2.0
SAR/US$, avg	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
Current account	73.8	-56.7	-23.8	10.5	72.0	38.2	-19.6	34.7	35.4
% of GDP	9.8	-8.7	-3.7	1.5	9.2	4.8	-2.8	4.2	4.0
Consolidated government balance	-3.5	-15.8	-12.9	-9.2	-5.9	-4.5	-11.2	-2.5	-0.7
UNITED ARAB EMIRATES									
Nominal GDP, USD bn	403.1	358.1	357.0	385.6	422.2	417.6	359.1	423.1	437.3
GDP per capita, USD	45,815	40,059	39,139	41,438	45,069	43,937	38,687	45,121	46,218
Real GDP, yoy avg	4.4	5.1	3.0	2.4	1.2	3.4	-6.1	2.4	5.1
CPI, % avg	2.3	4.1	1.6	2.0	3.1	-1.9	-2.1	0.4	2.4
AED/US$, avg	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
Current account	54.5	17.6	13.2	27.5	40.5	37.4	21.0	34.8	39.5
% of GDP	13.5	4.9	3.7	7.1	9.6	8.9	5.9	8.2	9.0

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Levant

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Iraq

High oil prices have improved Iraq's economic indicators across the board. While real GDP growth might remain rather sluggish, mostly due to Iraq's improved compliance with OPEC+ quotas, we think nominal GDP will grow by around 45% in USD terms and around 77% in IQD terms. Although partly caused by spike in CPI inflation following devaluation – we assume around 9% - this mainly reflects the significant increase in revenues as we assume Brent to average $69/bbl in 2021, an increase of 70%. Accordingly, we project an improvement in the fiscal deficit from 23.2% to 7.8% of GDP and fall in public debt from over 80% of GDP to just over 50%. The picture on external indicators is similar: we see the current account at over 3% surplus, up from a deficit of almost 10%. Reserves at year-end would be around $62bn, up from $54 the end of 2020.

External debt servicing should therefore not be an issue – at least not for the bonds currently outstanding. As most of Iraq's external debt is either bilateral (and not serviced) or to multilateral institutions, the replenishment of reserves this and next year means that credit risk for liquidity reasons are extremely low, at least within the maturity of Iraq's tradable external debt.

However, Iraq's current business model remains unsustainable and the October election outcome will therefore matter for longer-term outcomes. Even at current oil prices, the fiscal deficit remains substantial and the current account should slip into deficit territory again if oil prices fall, as we expect, into the mid-$50s range again over the medium term. As a consequence, we see forecast debt to rise to 77% of GDP and reserves to shrink to $50bn by 2025. Either number could look decisively worse if oil prices were to fall stronger than we anticipate. Iraq therefore needs decisive action to bring its twin deficits back into sustainable territory, which would be more likely if the current reform-minded government were to obtain another mandate in the election on October 10th.

Fostering growth in the non-oil private sector remains key to achieving sustainable fiscal and external balances. As the income of around 20% of the population comes from the government in one way or another, simply slashing the expenditure would push many people into poverty, and might thus not be feasible from a political or security perspective. It is therefore very important for the government to create a business environment that would allow people to move from the government's balance sheet to the private sector's.

Jordan

Jordan's public debt has reached around 106% of GDP and is set to increase further, albeit more slowly. We forecast the government deficit around 6.6% of GDP in 2021, a slight improvement on 2020, and the overall public deficit is even wider. Debt is already around 106% of GDP (88% excluding debt held by the Social Security Investment Fund) and we see it increasing further to around 110%. Consolidation efforts as part of the country's IMF programme should lead to a stabilisation in the debt ratio from 2022 on, but whether the debt/GDP ratio will embark on a long-term decline will ultimately depend on growth.

The current account deficit will remain wide in 2021. The sequencing of a possible exit from pandemic economics does not favour Jordan; oil prices have been rising as the global economy recovers, but travel restrictions being lifted sufficiently for tourism revenue to return to pre-pandemic levels seems still a distant prospect. The current account will hence remain strongly in deficit this year, around 9-10% of GDP.

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However, we think reserves will remain stable and sufficient. The Kingdom agreed a $1.3 billion four-year loan with the IMF in March 2020, increased by another $200 million in March 2021, as well as additional emergency assistance. Total IMF disbursements over the 2020-24 period should thus amount to $1.95 billion. Moreover, Jordan benefits more generally from reliable donor funds and concessional lending. Markets appear to see it the same way; a $1.75 billion issuance in 2020 was 6.25 times oversubscribed.

The crucial question remains whether Jordan can improve its persistently low growth rate of GDP. Unemployment going into the pandemic was already close to 20%, and about 40% amongst young people. By the end of 2020, unemployment had increased to almost 25% according to the labour force survey. Whether the envisaged reforms to foster growth will be implemented and have the desired effect will determine the stability of public and external debt stocks, but also that of the political system. Recent riots serve as a reminder that the comparatively calm security situation might be more fragile than sometimes assumed.

Lebanon

The formation of a new government under Prime Minister Najib Mikati means that the first hurdle towards a resolution of the crisis has been taken. However, the next challenge for this government is to come up with a plan for economic stabilisation that could then be taken to the electorate in May next year. With the reform effort almost certainly involving an IMF programme at its core, restructuring and thus large write-offs on public debt and fx deposits, are unavoidable under any scenario. This, against the backdrop of fx reserves having run out and subsidies for imports having been repeatedly cut, will translate into a considerably weaker exchange rate than assumed during the talks in spring 2020.

We think a new exchange rate regime will be key to determining the size of haircuts to public debt and bank deposits. Specifically, given how dire the economic situation is in Lebanon, the sustainability of fx liabilities will be a function of the size of GDP (in USD terms) from which these liabilities would have to be serviced. To complicate matters further, the official rate of 1,507 for USDLBP is disconnected from the realities of the economy. Moreover, there is no consensus about the parallel rate.

Two simple metrics suggest USDLBP at 10,000 could close current account gaps and back up domestic money supply with sufficient reserves. By assuming that 70% of fx deposits would be redenominated into LBP and assuming reserves will be stocked up to $20bn, an exchange rate of 10,000 against the dollar would see reserves back up 25% of money supply. Moreover, this rate would correct the 50% overvaluation that the currency faces.

The weaker the exchange rate the more fx debt will need to be restructured to become sustainable. Our calculations suggest that a 70% haircut on government fx debt could bring debt levels within a few years to just over 90% of GDP. This is slightly lower than we suggested in previous publications, mostly because the value of local debt has been eroded significantly by inflation.

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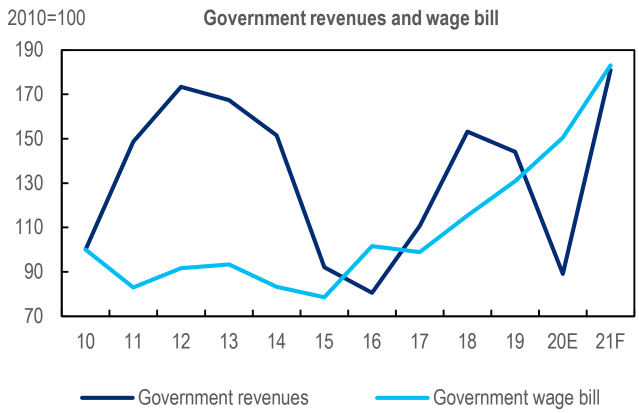
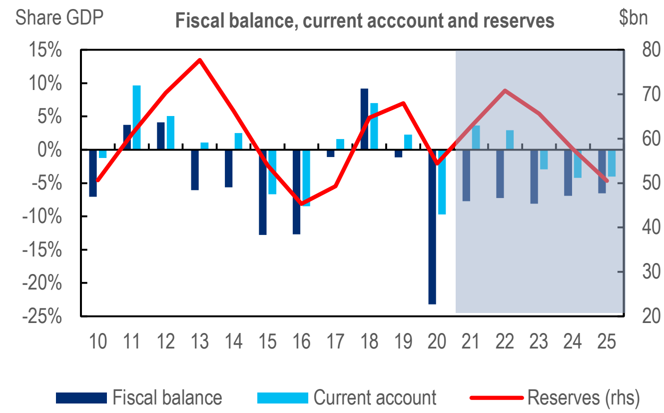
Figure 172. Iraq's business model of transforming oil revenues into public wages remains unsustainable…



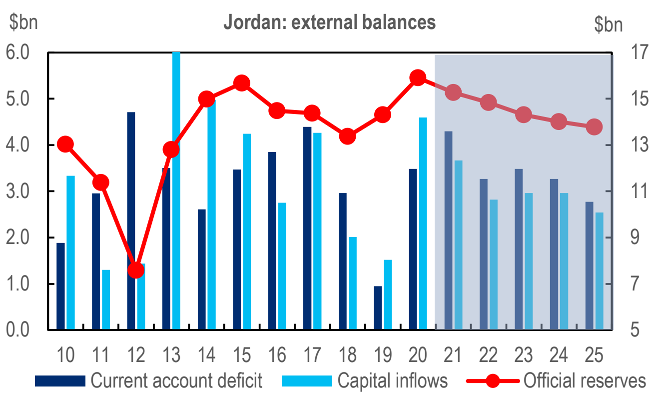
Source: Citi Research, Haver Analytics

Figure 173. …but the devaluation of the dinar and higher oil prices have probably extended this strategy's lifetime by a few years



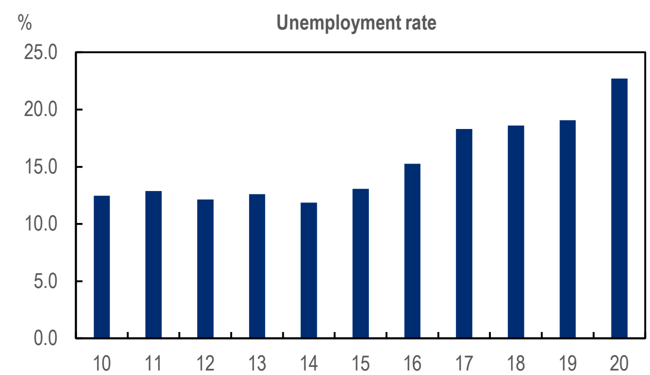
Source: Citi Research, Haver Analytics

Figure 174. External deficits in Jordan are sufficiently funded…



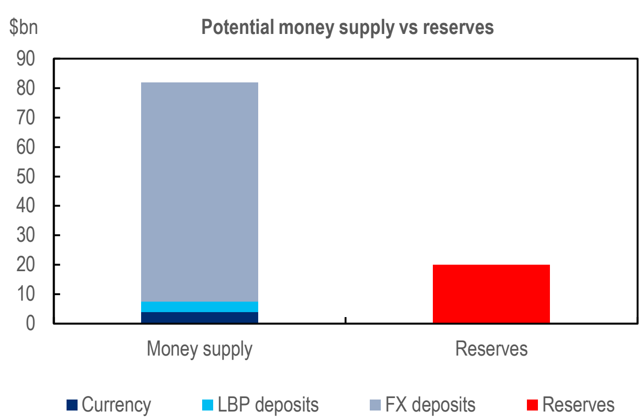
Source: Citi Research, Haver Analytics

Figure 175. but anaemic growth has led to increasing unemployment



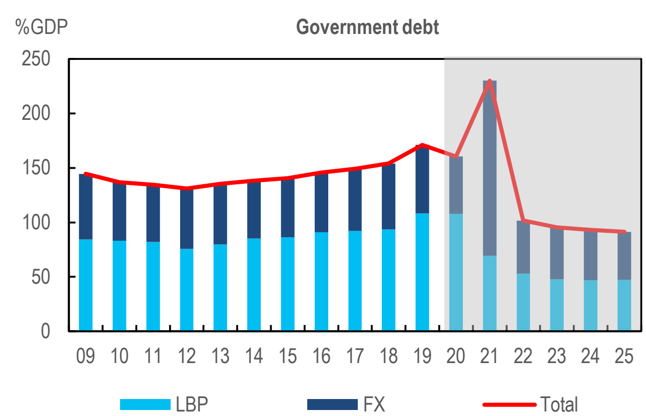
Source: Citi Research, Haver Analytics

Figure 176. A back-of-the-envelope calculation suggests that USDLBP of 10,000 could see money supply sufficiently backed by reserves



Source: Citi Research, Haver Analytics

Figure 177. A 70% haircut would see debt/GDP ratios sliding towards 90%, helped by high inflation eroding the value LBP debt



Note: we assume an exchange rate of 8,000 for 2021 for calculation of the LBP value of fx debt, although the official value is currently still based on a rate of 1,507. We assume haircuts to take place in 2022

Source: Citi Research, Haver Analytics

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Figure 178. Levant Economic Indicators

	2014	2015	2016	2017	2018	2019	2020F	2021F	2022F
IRAQ									
Nominal GDP, USD bn	234.7	177.6	167.7	192.3	216.9	222.4	172.1	245.2	267.9
GDP per capita, USD	6,819	4,994	4,581	5,122	5,645	5,658	4,279	5,954	6,354
Real GDP, yoy avg	0.7	2.5	15.2	-3.4	0.8	4.5	-10.9	2.1	9.1
CPI, % avg	2.2	1.4	0.4	0.2	0.4	-0.2	0.6	9.0	6.0
IQD/US$, avg	1,163	1,147	1,169	1,175	1,191	1,192	1,199	1,450	1,450
Current account, US$bn	5.9	-11.8	-14.3	3.1	15.2	5.0	-16.7	6.9	7.9
% of GDP	2.5	-6.7	-8.5	1.6	7.0	2.3	-9.7	2.8	3.0
Central government balance, % of GDP	-5.6	-12.8	-12.7	-1.1	9.2	-1.1	-23.2	-7.8	-7.1
Central government debt, % of GDP	32.9	56.9	67.0	59.1	50.0	47.7	81.2	52.7	54.0
International reserves	66.3	54.0	45.3	49.3	64.7	68.0	54.4	60.5	68.6
	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021F**	**2022F**
JORDAN									
Nominal GDP, USD bn	37.1	39.0	39.9	41.5	43.0	44.6	43.8	45.3	47.7
GDP per capita, USD	4,214	4,260	4,224	4,274	4,338	4,427	4,289	4,392	4,587
Real GDP, yoy avg	3.1	2.3	1.9	2.1	1.9	2.0	-1.6	2.4	2.6
CPI, % avg	2.9	-0.9	-0.8	3.3	4.5	0.8	0.3	1.9	2.0
JOD/US$, avg	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Current account	-2.6	-3.5	-3.9	-4.4	-3.0	-0.9	-3.5	-4.3	-3.3
% of GDP	-7.0	-8.9	-9.6	-10.6	-6.9	-2.1	-8.0	-9.5	-6.8
Central government balance, % of GDP	-2.2	-3.4	-3.1	-2.5	-2.4	-3.3	-7.0	-6.5	-5.4
Public debt, % of GDP	86.2	90.6	92.1	92.8	92.9	95.2	106.5	109.9	111.1
International reserves	15.0	15.7	14.5	14.4	13.4	14.3	15.9	16.5	16.5
	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021F**	**2022F**
LEBANON									
Nominal GDP, USD bn	48.1	50.1	51.4	53.3	55.3	53.6	24.1	20.9	28.9
GDP per capita, USD	7,688	7,664	7,654	7,820	8,058	7,812	3,509	3,048	4,212
Real GDP, yoy avg	2.5	0.6	1.6	0.8	-1.7	-7.2	-23.4	-4.8	5.0
CPI, % avg	1.1	-3.8	-0.8	4.5	6.1	2.9	84.9	117.9	60.0
LBP/US$, avg	1,510	1,508	1,509	1,509	1,512	1,511	1,512	1,508	10,000
Current account	-12.6	-8.5	-10.5	-12.1	-13.4	-11.5	-3.6	-3.2	-2.0
% of GDP	-26.2	-17.1	-20.4	-22.8	-24.2	-21.5	-15.1	-15.4	-7.1
Central government balance, % of GDP	-8.7	-9.0	-10.9	-8.6	-12.8	-11.9	-10.2	-8.2	-10.8
Central government debt, % of GDP	138.3	140.5	145.7	149.1	154.0	171.1	160.5	230.1	101.6
International reserves	32.4	30.6	34.0	35.8	32.5	29.6	20.1	14.0	17.1

Source: Citi Research, National Sources

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Other Africa

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Ghana

Indicators of economic activity picked up significantly in Q2 2021, and the question is now whether this will translate into higher government revenue in 2H 2021. This is important if there is to be even limited fiscal consolidation in 2021, with the medium term plan to reduce the deficit towards the governments' legally mandated fiscal deficit target of 5% of GDP by 2023-24. The problem for the government remains that if planned fiscal consolidation falls significantly behind this schedule, it could spill over into significant cedi weakness and rising inflation and make raising external finance increasingly problematic. There also seem to be some omissions in the headline budget data, such as the potential ongoing costs of the country's Independent Power Projects (IPP) to the government and additional borrowing demands, notably to fund the development of the oil sector.

In April inflation dropped to single digits which allowed the Bank of Ghana (BoG) to cut its Monetary Policy Rate (MPR) to a recent low of 13.5% to support the economic recovery. But it now looks as if inflation has bottomed and will pick up in Q4 2021. Moreover, given current and financial account dynamics, and recent pressure on the cedi, we think further cuts in the MPR are now unlikely this year and the next move may even be upwards in 2022.

Kenya

We expect the government to make slow progress with meeting their backend loaded fiscal consolidation policy goals under the current IMF programme. This is because fiscal consolidation in the 2021/22 fiscal year, notably revenue generating tax changes, are likely to be subject political constraints due to the approaching August 2022 elections. It will also depend partially on how quickly real growth rebounds in 2021 especially in light of the emerging third wave of COVID-19.

With a slow decline in the fiscal deficit and rising multilateral support, the Central Bank of Kenya (CBK) should be under less pressure to tighten monetary policy in the medium term. However, a combination of the rising oil and food prices, coupled with a quick re-bound in growth, has meant that inflation rose above 6% YoY in June. And although we expect it to fall back later in 2021, there is some significant uncertainty over its exact path. Meanwhile, rising oil prices means that the current account deficit looks set to rise back over 5% of GDP in 2020. And while foreign exchange reserves remain robust, this still means that the Kenyan shilling (KES) is likely to remain on the back foot in 2H 2021 although after the depreciation seen in 2020, further weakness looks set to be extremely limited.

Tanzania

Tanzania has now been through two major political events in less than 12 months. Following the death of the former president John Magufuli in March, following his re-election in October, his vice president, Samia Hassan, assumed office in line with the constitution. Although still early days, she seems to have reversed some of her predecessor's more controversial policies on COVID-19 and critically for investors, appointed Philip Mpango, the former finance minister, as her vice-president. Although she will need to continue to build wider political support in the ruling Chama Cha Mapinduzi (CCM), we still expect that she will be more inclined to implement market-friendly policies than has been the case in recent years. A major element of this could be a sustained effort to boost FDI in the next few years, led by the construction of the Uganda-Tanzania oil pipeline. But we only expect policy to evolve gradually, as seems to have been the indication outlined in the 2021/22 budget, presented in mid-June.

Prepared for Ariff Roduan

As one of the more closed economies in Africa, at 4.8%, Tanzanian growth was always likely to be amongst the highest in Africa and globally in 2020. This reflects both the large domestic agricultural and informal sectors and the minimal national lockdown imposed in response to the COVID-19 pandemic. Meanwhile inflation has been very low in recent years on the back of low food price inflation and a stable Tanzanian shilling. While we expect inflation to pick up in 2021-22, we still expect the rise will be modest, although it is possible that it will push the Bank of Tanzania into a very modest tightening of monetary policy.

Uganda

After the rise in government spending in the run-up to the January 2021 elections, the government is now committed to fiscal consolidation. This was clearly outlined in the 2021/22 budget presentation in mid-June and with the agreement of a new 3-year programme with the IMF. Another outcome of this is that the government will reduce domestic borrowing, increasingly substituting this with increased foreign funding on the back of the programme. One rationale for this is that even though the Bank of Uganda (BoU) cut the Central Bank Rate considerably in 2020-21, domestic borrowing rates remain high, especially compared to inflation which continues to remain low and stable.

This likely change in policy also limits the chance that high levels of domestic borrowing spill over into substantial Uganda shilling (UGX) weakness 2021, while allowing the BoU to maintain foreign exchange reserve levels. The IMF programme may also boost business confidence, which will have been impacted by the political uncertainty around the elections. While the 6% contraction in GDP in Q2 2020 was greater than we expected, largely due to weaker agricultural sector growth, growth was positive again in Q4 resulting in only a minor 0.9% contraction in real GDP in 2020. We expect the recovery to gain pace in 2021 led by rising agricultural production and domestic economic activity, even with the introduction of relatively tight new COVID-19 induced restrictions in the last month.

Zambia

The economic outlook for Zambia has changed materially given the outcome of the August 2021 elections. The large victory by the new president, Hakainde Hichilema, and his UPND party means that a fiscal policy is likely to be regularized and borrowing curtailed. This should pave the way for the country to move onto an IMF programme, but this may only be in Q1 2022 given the difficulty of agreeing a workable debt sustainability analysis, while moving ahead in parallel with negotiations on debt restructuring with creditors. The government is also likely to move ahead with revising the copper mining tax regime and reforming the Farmer Input Support Programme (FISP) and ZESCO's tariff structure under the IMF programme, all of which should substantially increase investor confidence.

Signs of confidence in the new government can be glimpsed from the recent kwacha appreciation. While we do not think this can be maintained, kwacha stability going forward, coupled with a good performance in the agricultural sector, means that we expect the inflation rate should fall sharply into 2022. Coupled with improved fiscal discipline, this should allow Bank of Zambia (BoZ) to normalize monetary policy in the coming six months, although it may wait until a new governor is substantively appointed. We think that it is likely to set its policy rate at a level appropriate to where it expects inflation to broadly stabilize in 2022, so at this point somewhere around the 10% level.

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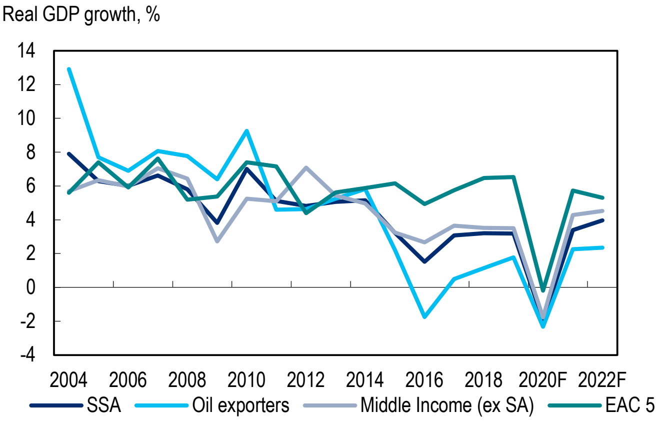
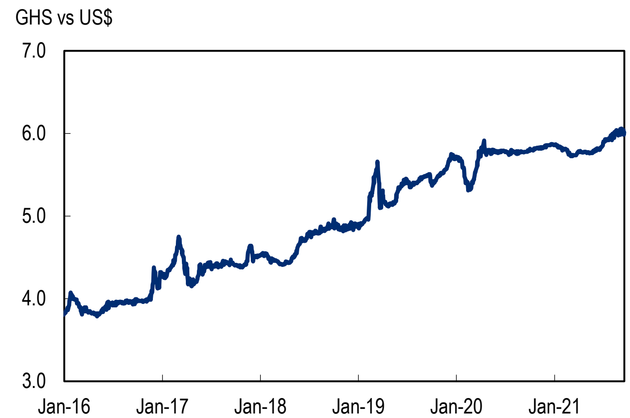
Figure 179. Q2 growth data from various countries confirms our view that SSA growth will rebound in 2021



Source: Citi Research, Haver Analytics

Figure 180. Despite the late June wobble, broad Ghana cedi stability in 2021 seems likely, but pressure could emerge beyond this

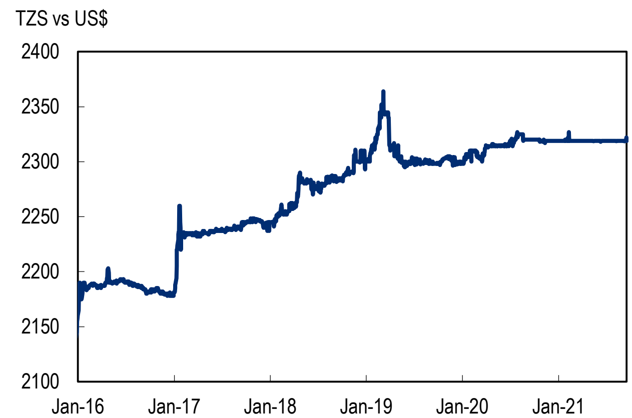


Source: Citi Research, Haver Analytics

Figure 181. The Kenyan shilling is likely to remain on the back foot for the rest of 2021, but any weakness is likely to be limited

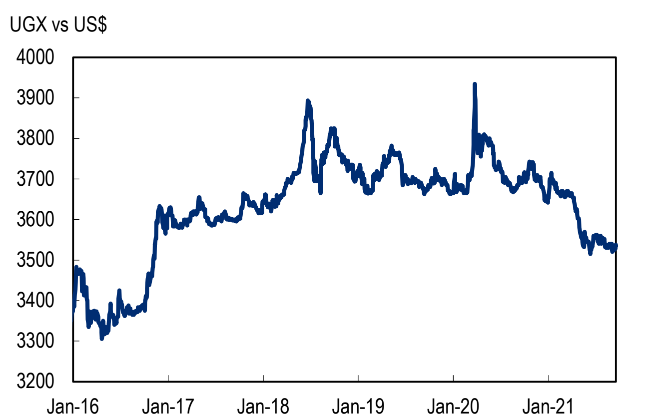
Source: Citi Research, Haver Analytics

Figure 182. Despite political changes, modest twin deficits mean that Tanzanian shilling stability should be maintained in 2021-22



Source: Citi Research, Haver Analytics

Figure 183. Lower domestic borrowing in Uganda under its IMF programme should help limit Uganda shilling depreciation



Source: Citi Research, Haver Analytics

Figure 184. The political change in the August elections has changed investor sentiment and may pave the way for Kwacha stability

Source: Citi Research, Haver Analytics

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Figure 185. Other Africa Economic Indicators

	2014	2015	2016	2017	2018	2019	2020F	2021F	2022F
GHANA									
Nominal GDP, USD bn	54.8	49.4	56.2	60.4	67.3	68.3	68.5	75.2	84.0
GDP per capita, USD	2,012	1,774	1,972	2,074	2,261	2,247	2,206	2,369	2,594
Real GDP, yoy avg	2.9	2.1	3.4	8.1	6.2	6.5	0.4	4.1	6.5
CPI, % avg	15.5	17.1	17.5	11.7	0.4	7.2	10.0	9.7	11.7
Policy Interest Rate, % eop	21.00	26.00	25.50	20.00	17.00	16.00	14.50	13.50	13.50
GHS/US$, avg	2.99	3.76	3.94	4.40	4.67	5.34	5.73	5.80	6.14
Current account	-3.7	-4.9	-2.8	-2.0	-2.0	-1.9	-2.1	-2.3	-2.8
% of GDP	-6.7	-9.9	-5.1	-3.3	-3.0	-2.7	-3.1	-3.1	-3.3
Consolidated government balance	-7.2	-5.2	-6.7	-4.7	-3.7	-4.3	-11.1	-9.6	-7.3
KENYA									
Nominal GDP, USD bn	61.4	64.0	69.2	79.0	87.8	95.5	96.1	102.9	112.9
GDP per capita, USD	1,316	1,337	1,411	1,572	1,708	1,817	1,787	1,872	2,008
Real GDP, yoy avg	5.4	5.7	5.9	4.8	6.3	5.4	-0.3	3.9	5.4
CPI, % avg	6.9	6.6	6.3	8.0	4.7	5.9	5.4	5.9	5.4
Policy Interest Rate, % eop	8.50	11.50	10.00	10.00	9.00	8.50	7.00	7.00	7.50
KES/US$, avg	87.9	97.8	101.5	103.4	101.3	102.0	106.4	109.2	110.3
Current account	-6.4	-4.4	-4.0	-5.7	-5.0	-5.6	-4.6	-5.4	-5.3
% of GDP	-10.4	-6.9	-5.8	-7.2	-5.8	-5.8	-4.8	-5.2	-4.7
Consolidated government balance	-7.4	-8.1	-8.5	-7.8	-7.4	-7.7	-8.4	-7.7	-6.1
TANZANIA									
Nominal GDP, USD bn	49.6	45.3	49.6	53.1	56.7	60.5	65.8	71.5	77.4
GDP per capita, USD	993	880	934	971	1,007	1,043	1,101	1,162	1,223
Real GDP, yoy avg	6.7	6.2	6.9	6.8	7.0	7.0	4.8	5.3	6.0
CPI, % avg	6.1	5.6	5.2	5.3	3.5	3.5	3.3	3.6	4.3
Policy Interest Rate, % eop	16.00	16.00	16.00	9.00	7.00	7.00	5.00	5.50	6.00
TZS/US$, avg	1,664	2,027	2,186	2,237	2,277	2,307	2,315	2,301	2,342
Current account	-5.1	-4.5	-2.7	-1.0	-2.2	-1.5	-1.0	-1.9	-2.8
% of GDP	-10.2	-9.9	-5.5	-1.9	-4.0	-2.5	-1.5	-2.7	-3.6
Consolidated government balance	-	-	-1.5	-1.9	-3.3	-1.4	-1.8	-1.9	-2.1
UGANDA									
Nominal GDP, USD bn	34.8	29.5	30.6	31.5	34.1	36.3	36.9	41.2	44.5
GDP per capita, USD	943	772	771	765	799	821	807	874	919
Real GDP, yoy avg	5.7	8.0	-0.2	7.1	5.7	6.2	-0.9	5.5	5.3
CPI, % avg	4.3	3.7	5.2	5.6	2.6	2.3	2.8	2.2	3.8
Policy Interest Rate, % eop	11.00	17.00	12.00	9.50	10.00	9.00	7.00	6.50	7.00
UGX/US$, avg	2,595	3,217	3,416	3,610	3,726	3,705	3,717	3,579	3,615
Current account	-2.2	-1.7	-0.8	-1.5	-1.9	-2.4	-3.7	-3.5	-3.4
% of GDP	-6.2	-5.7	-2.7	-4.8	-5.7	-6.7	-9.9	-8.6	-7.7
Consolidated government balance	-3.8	-3.9	-3.7	-3.6	-4.2	-5.8	-8.2	-7.1	-5.9
ZAMBIA									
Nominal GDP, USD bn	27.1	21.3	21.0	25.8	27.0	23.2	19.4	22.8	30.6
GDP per capita, USD	1,763	1,338	1,281	1,529	1,556	1,301	1,053	1,207	1,573
Real GDP, yoy avg	4.7	2.9	3.6	3.7	4.0	1.4	-3.0	4.0	1.5
CPI, % avg	7.8	10.1	17.9	6.6	7.5	9.2	15.7	22.6	10.0
Policy Interest Rate, % eop	12.50	15.50	15.50	10.25	9.75	11.50	8.00	10.00	10.00
ZMK/US$, avg	6	8	10	10	10	13	18.04	19.65	16.33
Current account	0.6	-0.6	-0.7	-0.4	-0.3	0.1	2.3	1.8	1.0
% of GDP	2.3	-2.7	-3.3	-1.7	-1.3	0.6	11.6	7.9	3.3
Consolidated government balance	-5.8	-9.5	-6.1	-7.6	-8.4	-9.8	-13.9	-8.0	-6.5

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GHS/US$, eop	5.79	5.89	5.75	5.85	5.90	5.90	6.00	6.30	6.42
KES/US$, eop	109.35	107.90	110.00	109.50	110.00	110.50	110.50	110.50	111.50
TZS/US$, eop	2,319	2,319	2,300	2,310	2,300	2,350	2,350	2,350	2,400
UGX/US$, eop	3,665	3,560	3,540	3,550	3,600	3,600	3,650	3,700	3,750
ZMK/US$, eop	22	23	16.00	16.00	16.25	16.00	16.50	16.50	17.00

Source: Citi Research, National Sources

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According to the preliminary release, real GDP rose by 6.4%YoY in 2Q following a 0.5%YoY fall in the first quarter. Activity, however, lost momentum as it rose by 0.6%QoQ (SWDA)—lower than our forecast of 1%QoQ—following a 2.5%QoQ increase in 1Q. A quick look at more recent data paints a mixed picture for the outlook. A number of high frequency growth indicators, including retail trade, loan growth, unemployment rate, point to continued strength in domestic demand in the third quarter. Nevertheless, relatively soft industrial production, the low rate of vaccination—which have recently led authorities to impose several restrictions—and political uncertainty ahead of the November 14 snap elections overshadow the recovery process. Against this backdrop, we revise down our 2021 growth forecast to 4.7% from 5.0% earlier.

Inflation rose sharply to 3.7%YoY in August from 3.0%YoY in July. The increase was mainly driven by high food inflation, which rose to 3.6%YoY in August from 1.8%YoY in July. Standing below 1.0%YoY, core inflation measures paint a more benign picture. Looking ahead, while we expect underlying inflationary pressures to remain broadly muted, we now see food inflation rising further to about 4.5%YoY in the coming months. Against this backdrop, we forecast inflation to rise to about 4.3% by the end of the year (compared with our earlier forecast of 3.7%YoY), mostly on the back of higher food and utilities inflation.

The current account balance registered a deficit of EUR44mn in the first seven months of the year compared with a EUR734mn surplus over the same period in 2020. The noted worsening was mainly driven by a deterioration in the goods (EUR746mn) and the income balances (EUR547mn) amid an improvement in services balance (EUR515mn). Nevertheless, developments to date suggest to us that the improvement in services balance is likely to be softer than what we penciled in as trade gap is set to further widen. Against this backdrop, we now see a mild deficit of about 0.3% of GDP this year, about the same as the revised 2020 deficit, compared with our earlier forecast of a moderate surplus. On the fiscal side, the budget balance printed a surplus of BGN0.7bn in the first seven months of 2021, compared with a surplus of BGN1.7bn over the same period in 2020, due mainly to an increase in government expenditures. This backdrop, coupled with the recent revised budget and our new growth projection, led us to tweak our budget gap forecast to 3.7% of GDP (from 3.5% earlier), which is broadly in line with government's new projection (3.6%) but wider than the gap in 2020 (3.4%).

Croatia

Real GDP rose by 16.1%YoY in 2Q following a 0.7%YoY drop in the first quarter of the year. The pick-up in activity was mainly led by household consumption (18.4%YoY) and services exports (56.3%YoY). Despite the rise in annual growth, seasonally adjusted data point to a significant loss of momentum in growth as real GDP fell by 0.2%QoQ in 2Q following a 5.4%QoQ increase in 1Q. Recent high frequency data paint a mixed picture for the near-term outlook. While tourist nights, retail trade and economic confidence index point to a pick-up in economic activity, continued drop in seasonally adjusted industrial production clouds the outlook. Recent rise in new Covid-19 cases, coupled with the drop in the pace of vaccination in recent weeks, raise downside risks with the growth outlook. Against this backdrop, we revise our 2021 growth forecast to 8.1%YoY (from 8.5% earlier) and 2022 growth forecast to 2.6% (from 2.7% earlier).

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Inflation rose to 3.1%YoY in August from 2.8%YoY in July mainly on the back of an increase in food and energy inflation. Inflation excluding food & energy prices also increased to 1.8%YoY in August from 1.6%YoY in July. Recent upside pressure on food prices led us to revise our inflation forecast as we now expect inflation to rise to about 4.2%YoY by year-end mainly due to elevated food inflation.

According to the preliminary data, the trade deficit widened to EUR5.3bn in the first seven months of the year from about EUR5bn over the same period in 2020. In parallel, tourist arrivals and nights continued to recover in the summer months as they stood at about 80% of the level observed in the same month of 2019, compared with about 45% in June. The noted backdrop led us to tweak our services balance projections as we now revise our current account deficit forecast to 0.3% of GDP (from 0.8% earlier). On the fiscal front, the general budget deficit stood at HRK9bn in 1H (national methodology), according to Finance Minister. Looking ahead, our new growth projections led us to tweak our ESA 2010 budget deficit forecast to 4% of GDP (from 3.8% earlier).

Serbia

Real GDP rose by 13.7%YoY in 2Q following a 1.7%YoY in the first quarter. In seasonally adjusted terms, real GDP rose by 1.3%QoQ in 2Q, lower than our forecast of 2.0%QoQ. Recent high frequency data point to a relatively subdued activity growth in early 3Q as both industrial production and retail trade fell in July (SA). Moreover, the marked rise in Covid-19 cases warrants concern. The noted backdrop points to a slowdown in the pace of growth in the rest of the year as we slightly revise down our 2021 growth forecast to 6.7% (from 6.9% earlier).

The fiscal deficit narrowed to RSD6mn in the first seven months of the year from RSD330mn over the same period in 2020. The noted improvement was mainly due to a 26%YoY rise in revenues as expenditures broadly remained unchanged. While we expect expenditures to rise in the rest of the year, strong revenue performance to date led us to tweak our budget deficit forecast to 5.7% of GDP this year (from 6% earlier), compared with the government’s deficit target of 6.9%. The current account balance registered a deficit of EUR0.8bn in the first seven months compared with a deficit of EUR1.4bn over the same period in 2020 as we now see current account gap 5.3% of GDP (from 6% earlier).

Inflation rose to 4.3%YoY in August from 3.3%YoY in July. The noted marked rise was driven by food inflation, which rose to 5.2%YoY in August from 1.2%YoY in the previous month. Underlying inflationary pressures remain muted in August as core inflation fell slightly to 1.8%YoY from 1.9%YoY. Looking ahead, we expect headline inflation to fluctuate around 4.5% in the rest of the year.

The NBS kept its policy rate on hold in September meeting drawing attention to the ongoing monetary accommodation in AEs. In a later announcement, however, the Bank decided to cease its 3-month repo operations highlighting the temporary nature of the rise in August inflation. The NBS also stated that if inflationary pressures build up, the Bank is ready to use its other tools. The noted backdrop suggests to us that the Bank’s near-term policy rate decisions will be determined by i) whether inflation stays within the tolerance band (i.e.,3±1.5), ii) core inflation developments; and, iii) actions by AE central banks. Accordingly, we now think that the NBS is unlikely to hike in October but a hike by 25bp before the end of the year is likely on the back of Fed and ECB’s tapering decisions.

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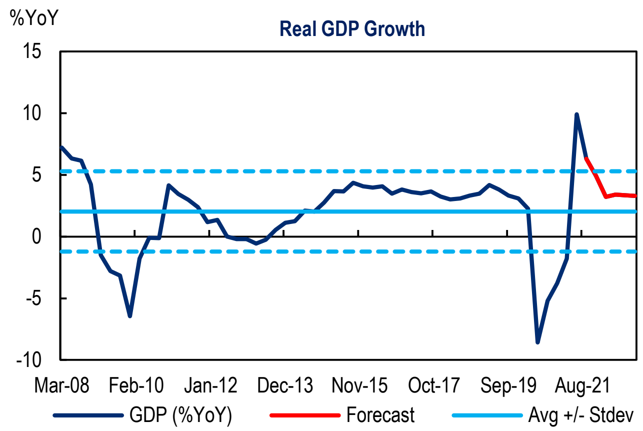
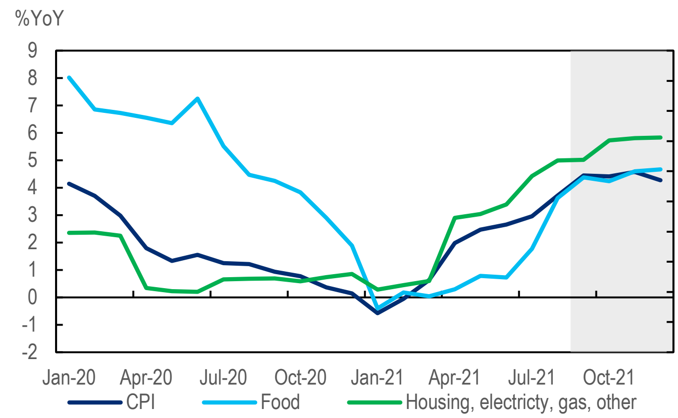
Figure 186. Bulgaria: Recent developments led us to revise down our growth forecast for 2021 to 4.7% from 5.0% earlier ...



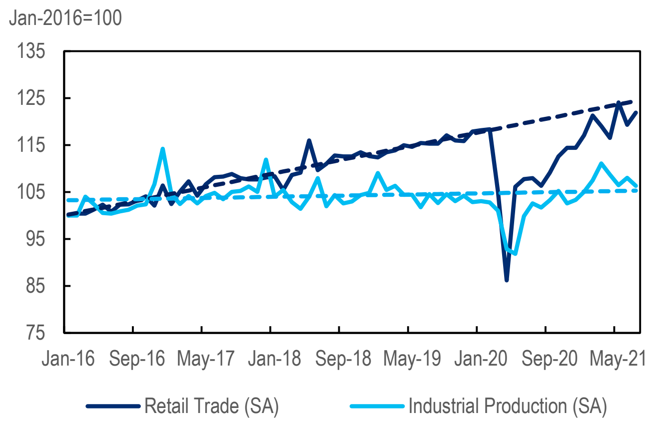
Source: Citi Research, Haver Analytics

Figure 187. ...as we see inflation rising to 4.3% due mainly to higher food and utilities inflation



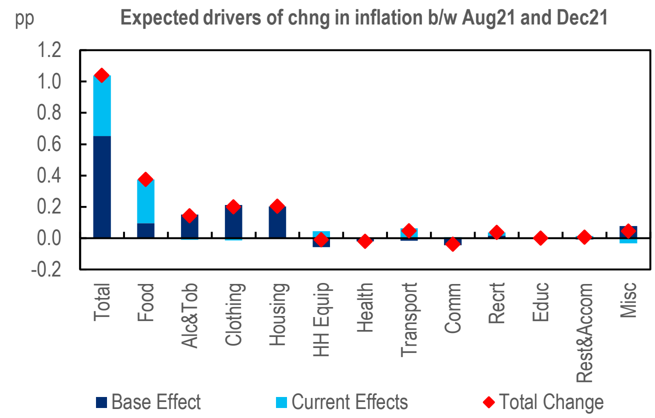
Source: Citi Research, Haver Analytics

Figure 188. Croatia: Following a loss of momentum in 2Q, recent data paint a mixed picture for the near-term outlook ...



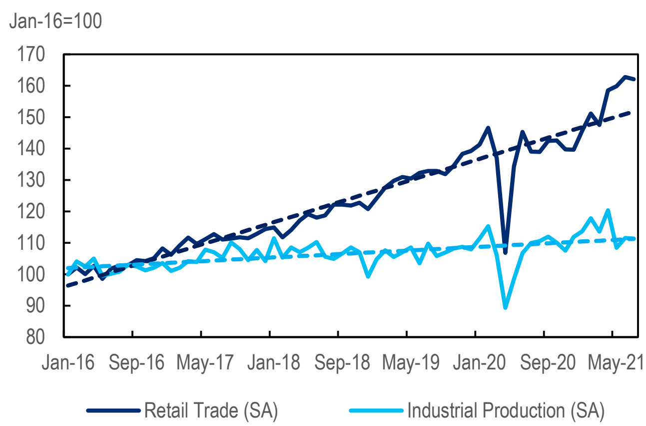
Source: Citi Research, Haver Analytics

Figure 189. ... as inflation is likely to rise to about 4.2% by end-year, driven mainly by food inflation effects.



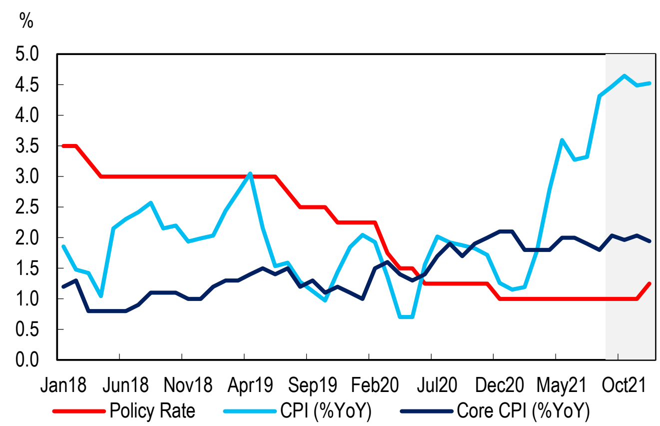
Source: Citi Research, Haver Analytics

Figure 190. Serbia: Recent slowdown in the pace of growth led us to tweak our growth forecast to 6.7% (from 6.9% earlier).



Source: Citi Research, Haver Analytics

Figure 191. The NBS is likely to postpone the rate hike as the Bank states that recent rise in inflation is driven by temporary factors



Source: Citi Research, Haver Analytics

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Figure 192. Other Europe Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
BULGARIA									
Nominal GDP, USD bn	57.0	50.3	53.7	59.1	66.0	68.5	68.3	76.8	79.4
GDP per capita, USD	7,914	7,032	7,560	8,380	9,426	9,849	9,871	11,167	11,614
Real GDP, yoy avg	1.9	4.0	3.8	3.5	3.1	3.7	-4.2	4.7	3.3
CPI, % yoy	-0.9	-0.4	0.1	2.8	2.7	3.8	0.1	4.3	2.1
CPI, % avg	-1.4	-0.1	-0.8	2.1	2.8	3.1	1.7	2.6	3.0
BGN/EUR, eop	1.95	1.96	1.95	1.96	1.96	1.96	1.96	1.96	1.96
BGN/EUR, avg	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
Current account, US$bn	0.7	0.0	1.6	2.0	0.6	1.3	-0.2	-0.2	2.0
Current account, % of GDP	1.2	0.0	3.1	3.3	0.9	1.9	-0.3	-0.3	2.5
Consolidated government balance (% of GDP)	-5.4	-1.7	0.2	1.2	2.0	2.1	-3.4	-3.7	-3.0
CROATIA									
Nominal GDP, USD bn	57.6	49.5	51.6	55.5	61.4	60.3	55.9	64.8	66.2
GDP per capita, USD	13,601	11,781	12,362	13,450	15,013	14,837	13,811	16,098	16,527
Real GDP, yoy avg	-0.3	2.4	3.5	3.4	2.8	2.9	-8.0	8.1	2.6
CPI, % yoy	-0.5	-0.6	0.2	1.2	0.9	1.4	-0.7	4.2	1.7
CPI, % avg	-0.2	-0.5	-1.1	1.1	1.5	0.8	0.2	2.3	2.4
Policy Interest Rate, % eop	7.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
HRK/EUR, eop	7.66	7.64	7.55	7.43	7.41	7.44	7.55	7.54	7.54
HRK/EUR, avg	7.63	7.61	7.53	7.46	7.42	7.42	7.54	7.53	7.54
Current account, % of GDP	0.3	3.3	2.2	3.5	1.8	3.0	-0.4	-0.3	1.2
Consolidated government balance (% of GDP)	-5.5	-3.5	-0.9	0.8	0.2	0.3	-7.4	-4.0	-3.0
SERBIA									
Nominal GDP, USD bn	47.1	39.7	40.7	44.2	50.4	51.2	52.8	60.8	63.2
GDP per capita, USD	6,599	5,596	5,796	6,318	7,241	7,375	7,641	8,833	9,218
Real GDP, yoy avg	-1.6	1.8	3.3	2.1	4.5	4.2	-0.9	6.7	3.8
CPI, % yoy	1.7	1.5	1.6	3.0	2.0	1.8	1.3	4.5	2.5
CPI, % avg	2.1	1.4	1.1	3.2	2.0	1.9	1.6	3.3	3.3
Policy Interest Rate, % eop	8.00	4.50	4.00	3.50	3.00	2.25	1.00	1.25	1.75
RSD/EUR, eop	121	122	123	118	118	118	118	118	119
RSD/EUR, avg	117	121	123	121	118	118	118	118	118
Current account, US$bn	-2.6	-1.4	-1.2	-2.3	-2.4	-3.5	-2.2	-3.2	-2.9
Current account, % of GDP	-5.6	-3.5	-2.9	-5.2	-4.8	-6.9	-4.2	-5.3	-4.7
Consolidated government balance (% of GDP)	-6.2	-3.5	-1.2	1.1	0.6	-0.2	-8.1	-5.7	-3.0

Source: Citi Research, National Sources

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- **Summary view** — The government suffered a big defeat in the midterm primaries. We expect this to trigger a more expansionary macroeconomic policy mix. We note that the current combination of higher money printing and increased pressure on international reserves is not consistent with the rate of depreciation of the ARS in the official FX market.

The government suffered a big defeat in the midterm primaries. At the national level, the incumbent *Frente de Todos* obtained just around 31% of the votes, compared to 40% for the main opposition coalition *Juntos por el Cambio*. Moreover, *Frente de Todos* was only able to come in first place in 7 out of the 24 provinces – back in 2019, it had won in 22 provinces. The widespread defeat means that that if these results repeat in the November midterm elections, the *Peronismo* could lose the majority in the Senate for the first time since the reinstatement of democracy in 1983. These results caused a political crisis inside the government coalition, with a public clash between President Alberto Fernández and Vice President Cristina Kirchner. The latter openly maneuvered to force Fernández into reshuffling his cabinet, despite Fernández initial resistance and wish to postpone any adjustments for after the elections. At the end, President Fernández ended up agreeing to a cabinet reshuffle, which included the resignation of his right hand Santiago Cafiero as chief of cabinet (and who will not serve as minister of foreign affairs). We think that these developments, especially given the final outcome, make very evident how highly influential Cristina Kirchner is.

We expect the macroeconomic policy mix to turn more expansionary. Cristina Kirchner complained publicly that fiscal policy is being too tight and argued this was one of the reasons behind the poor results in the primaries. Thus, we believe the government will ease fiscal policy ahead of the November elections, trying to recover some votes. Even though the economic team was not changed, it is clear a big part of the coalition (Cristina Kirchner's camp) is unhappy with the results. It is worth noting that even before the elections, the fiscal stance was starting to loosen, a trend that we expect to intensify in the months to come.

The more expansionary fiscal policy is boosting money printing. The BCRA transferred ARS580bn to the Treasury so far in the third quarter, compared to ARS330bn in the first half of the year. The acceleration in money printing should continue, as the exceptional revenues the government enjoyed in the first half of the year, such as higher export taxes and the one-off tax on wealthy individuals, will fade. This will coincide with a seasonal increase in spending, coupled with the election cycle (which will be exacerbated by the result in the primaries).

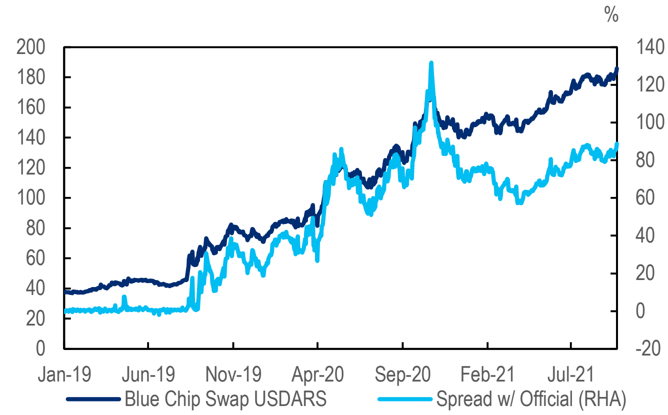
The government keeps appreciating the ARS in real terms to lower inflation. The speed of depreciation of the peso in the official FX market remains well below the rate of inflation. This strategy, coupled with very contained adjustments to regulated prices, has led to a deceleration in inflation. In July consumer prices increased 2.5% in July, standing below the 3% threshold for the first time since September 2020. Monthly inflation decelerated for the firth month in a row. Annual inflation came in at 51.4%, compared to 51.8% in July. Nonetheless, we think this strategy is unsustainable, as the pressure on the currency is rising. This is evidenced by the BCRA's interventions in the FX market, which are causing international reserves to start falling. The larger debt payments in the upcoming months will cause reserves to fall even further. The pressure on the external front is also evidenced by the recent weakening of the ARS in the parallel market, and the widening in the spread between the official and parallel exchange rates (see below).

Prepared for Ariff Roduan

Figure 193. The BCRA is starting to sell dollars

Source: BCRA and Citi Research

Figure 194. The spread between the parallel and official FX is very high



Source: Bloomberg and Citi Research

Figure 195. Argentina Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	566	644	557	643	543	455	389	448	466
Population, mn	42.7	43.1	43.6	44.1	44.5	45.0	45.4	45.9	46.4
Real GDP, yoy avg	-2.5	2.7	-2.1	2.8	-2.6	-2.0	-9.9	6.5	3.0
Private consumption growth % yoy	-4.4	3.7	-0.8	4.2	-2.2	-7.3	-13.8	7.7	3.8
Real investment growth % yoy	-6.2	4.6	-5.1	15.5	-9.8	-19.1	-0.2	18.0	3.5
Real export growth, % yoy	-7.0	-2.8	5.3	2.6	0.6	9.1	-17.3	7.7	4.7
Real import growth, % yoy	-11.5	4.7	5.8	15.6	-4.5	-19.0	-17.9	17.7	6.0
Net exports contribution to yoy growth	1.6	-1.7	-0.4	-3.6	1.5	7.4	0.3	-2.3	-0.4
External (US$bn)									
Current account	-9.2	-17.6	-15.1	-31.2	-27.1	-3.7	3.3	0.0	-0.5
% of GDP	-1.6	-2.7	-2.7	-4.8	-5.0	-0.8	0.9	0.0	-0.1
Trade balance	5.5	-0.8	4.4	-5.4	-0.7	18.2	14.6	13.0	11.7
FDI, net	5.1	11.8	3.3	11.5	11.9	6.7	4.1	5.1	4.9
External debt	158.7	167.4	181.4	234.5	277.9	278.5	272.1	271.7	270.2
International reserves	31.4	25.6	39.3	55.1	65.8	44.8	39.4	39.0	37.0
Public Finances, % of GDP									
Consolidated government balance	-4.1	-5.1	-5.8	-5.9	-4.9	-3.8	-8.5	-5.0	-5.2
Consolidated gov primary balance	-3.4	-4.0	-4.2	-3.8	-2.3	-0.4	-6.5	-3.5	-3.5
Public debt	39.2	37.4	49.4	49.9	62.1	72.2	87.7	80.0	79.0
Public debt share in fx	17.4	15.8	21.9	25.1	36.3	43.4	49.6	43.1	41.4
Prices									
CPI, % yoy	39.0	31.6	31.4	24.8	47.6	53.8	36.1	46.0	45.0
ARS/USD, eop	8.55	12.94	15.87	18.61	37.65	59.87	84.09	108.00	160.00
ARS/USD, avg	8.09	9.21	14.74	16.51	26.17	46.58	69.92	95.71	134.48
Policy Interest Rate, % eop	-	-	24.8	28.8	59.3	55.0	38.00	42.00	40.00
1 month inter-bank rate, %, eop	20.4	27.3	19.9	24.8	49.5	39.4	34.25	38.00	38.00
Nominal wages, % yoy	31.9	31.1	32.8	29.3	27.5	44.9	39.0	39.2	44.8

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	2.5	17.4	5.2	1.4	0.8	4.9	3.6	2.6	2.0
CPI, % yoy	42.6	50.2	50.9	46.0	42.6	41.6	43.3	45.0	43.5
ARS/USD, eop	91.99	95.71	95.50	108.00	119.15	131.45	145.03	160.00	171.26
Policy Interest Rate, % eop	38.00	40.00	42.00	42.00	40.00	40.00	40.00	40.00	40.00

Source: Citi Research, National Sources

Prepared for Ariff Roduan

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- **Summary view** – The inflation outlook continues deteriorating, triggering another upward revision to our forecast for this year, even under a higher interest rate. The tighter monetary policy motivated a cut to our 2022 growth forecast.

We increased our 2021 CPI inflation forecast to 8.3%, while still maintaining our 3.5% estimate for 2022 but warning that risks are biased to the upside. Regarding 2021, inflationary pressures are proving to be more widespread and persistent than expected. Moreover, power prices rose again due to the worsening of the power crisis, adding short-term inflationary pressures. Regarding 2022, we still believe that the BCB can and will bring inflation back to the midpoint of the target (3.5% YoY), assuming it continues accelerating the current hiking cycle. A potential normalization in inputs/energy shortages can also support a faster disinflationary process next year. However, we recognize that risks to our 2022 mid-point target inflation forecast are asymmetric on the upside. Among the most relevant risks, we highlight a monetary policy response that lacks the necessary strength, or a disappointing rain season between Nov-21 and Apr-22.

We now expect Copom to hike the Selic rate until 8.75%. On the Sep 22 meeting, Copom will likely have to increase markedly its 2021 inflation forecasts (to 8.0% from 6.5%), while the 2022 estimate can only remain stable around 3.5% under much higher Selic rate (at least 100bps higher) and a benign assumption for the power flag. Besides the higher monetary burden, medium term inflation expectations continue reaching new highs, evidencing how critical it is for Copom to reaffirm its commitment with the 2022 inflation target. We still believe that an acceleration of the Selic rate hikes on Sept 22 is the best strategy to reassure the inflation convergence next year. If the authorities end up choosing a slower hiking pace, the risks the terminal Selic rate has to go over 8.75% will increase in our view.

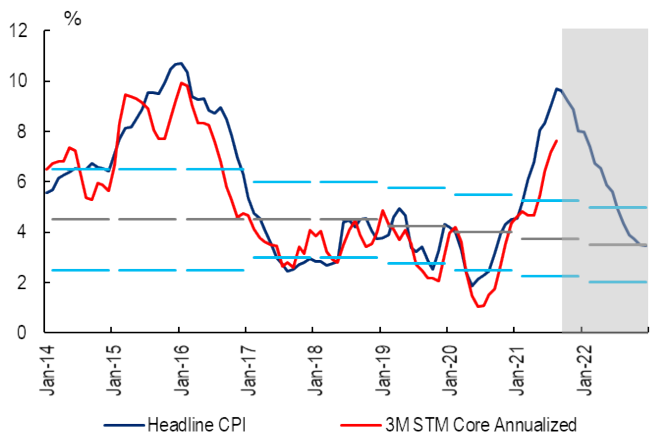
Stronger headwinds/softer tailwinds support a lower 2022 growth estimate of 1.5%. The slight decline in 2Q21 GDP was close to our estimate, leading us to keep our 2021 growth forecast at 5.1%. Looking ahead, the higher real interest rate, a still contractionary fiscal policy, and a less benign global environment (lower global growth and commodity prices) suggest no growth acceleration along next year on a quarterly basis. Thus, we reduce our 2022 growth forecast to 1.5% (from 1.8%), even after assuming some relief next year on the current adverse supply shocks linked to inputs and energy shortage.

We now expect gross public debt to decrease to 81.5% of GDP by yearend, resuming the upward trend in 2022 onwards. In the short-term, tax collection continues surprising to the upside, improving further our end-2021 primary fiscal (-0.9% of GDP) and gross public debt (81.5% of GDP) forecasts. In spite of that, we warn that medium/long-term fiscal risks are worsening, and fiscal accounts should resume the deterioration path in 2022. That is, political developments are rising the chances that the Spending Cap Constitutional Amendment (SCCA) might be eased at a certain point, allowing the government to boost social programs in 2022. If this risk materializes, our projections will have to deteriorate accordingly.

Worse global/domestic conditions suggest weaker BRL and a roughly balanced current account until yearend. The BRL depreciated slightly to around 5.20 (from 5.10), reflecting the increase in domestic political uncertainties. Looking ahead, the expected change in US monetary policy should support a USD strengthening, while the potential easing of the SCCA until yearend can exacerbate the BRL weakness. Overall, we see USD/BRL around 5.33 at yearend. Meanwhile, elevated commodities prices and a historical weak currency support a robust trade surplus in 2021 (USD59.3bn), driving the current account to a roughly equilibrium this year (-USD1.3bn, or -0.1% of GDP).

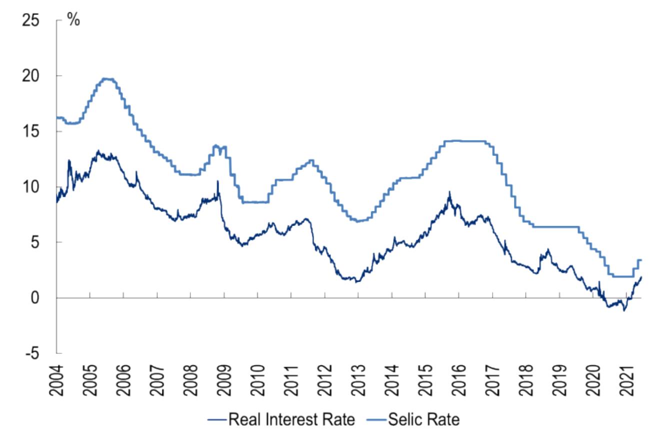
Prepared for Ariff Roduan

Figure 196. CPI inflation at two digits (10.1%) in Sep-21



Source: Citi Research, BCB and IBGE

Figure 197. We now expect the Selic rate to increase until 8.75%



Source: Citi Research and BCB

Figure 198. Brazil Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	2,449	1,770	1,818	2,056	1,904	1,875	1,421	1,661	1,764
Population, mn	201.6	203.3	205.0	206.7	208.4	210.0	211.6	213.2	214.6
Real GDP, yoy avg	0.5	-3.5	-3.3	1.3	1.8	1.4	-4.1	5.1	1.5
Private consumption growth % yoy	2.3	-3.2	-3.8	2.0	2.4	2.2	-5.5	3.3	2.4
Real investment growth % yoy	-5.8	-21.9	-12.4	1.2	5.9	3.8	-4.4	15.1	4.0
Real export growth, % yoy	-1.6	6.8	0.9	4.9	4.1	-2.4	-1.8	5.5	3.0
Real import growth, % yoy	-2.3	-14.2	-10.3	6.7	7.7	1.1	-10.0	9.8	5.0
Net export contribution to growth	0.2	3.4	1.7	-0.3	-0.5	-0.5	1.3	-0.7	-0.3
Unemployment, % of labour force	6.8	8.5	11.5	12.7	12.3	11.9	13.5	13.9	12.6
External (US$bn)									
Current account	-101.7	-54.8	-24.5	-22.0	-51.5	-65.0	-25.9	-1.3	-20.3
% of GDP	-4.2	-3.1	-1.3	-1.1	-2.7	-3.5	-1.8	-0.1	-1.2
Trade balance	-6.7	17.4	44.5	57.3	43.4	26.5	32.4	59.3	47.2
FDI, net	87.7	64.7	74.3	68.9	78.2	69.2	44.7	56.1	60.0
External debt	352.8	334.7	326.3	317.3	320.6	323.0	310.8	251.6	177.5
Short-term debt	57.8	51.1	-	-	-	-	-	-	-
International reserves	363.6	356.5	365.0	374.0	374.7	356.9	355.6	370.4	370.4
Public Finances, % of GDP									
Consolidated government balance	-6.0	-10.2	-9.0	-7.8	-7.1	-5.9	-13.7	-6.8	-7.3
Consolidated gov primary balance	-0.6	-1.9	-2.5	-1.7	-1.5	-0.8	-9.4	-0.9	-0.8
Public debt	56.3	65.5	69.8	73.7	75.3	74.3	88.8	81.5	83.5
External public debt	9.5	11.1	11.2	11.5	11.8	12.2	11.0	11.0	11.6
Prices									
CPI, % yoy	6.4	10.7	6.3	2.9	3.7	4.3	4.5	8.3	3.5
CPI, % avg	6.3	9.0	8.8	3.5	3.7	3.7	3.2	7.9	5.9
BRL/US$, eop	2.66	3.96	3.25	3.31	3.88	4.02	5.19	5.33	5.40
BRL/US$, avg	2.35	3.34	3.48	3.19	3.65	3.95	5.16	5.31	5.39
Policy Interest Rate, % eop	11.75	14.25	13.75	7.00	6.50	4.50	2.00	8.75	7.75
Long-term yield, %, eop	12.00	16.68	11.10	8.59	7.74	5.52	5.24	7.25	8.50
Nominal wages, % yoy	8.6	6.7	7.7	4.2	5.7	4.7	5.0	8.8	3.9

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	1.0	12.4	4.7	1.9	1.1	1.5	1.6	1.7	1.5
CPI, % yoy	6.1	8.3	10.1	8.3	7.0	5.9	3.8	3.5	3.4
BRL/US$, eop	5.63	4.97	5.31	5.33	5.37	5.40	5.40	5.40	5.40
Policy interest rate, %, eop	2.75	4.25	6.75	8.75	8.75	8.75	8.75	7.75	6.75

Source: Citi Research, National Sources

Prepared for Ariff Roduan

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- **Summary view** — Growth has shown momentum in late 2Q and into 3Q, while inflation has become more prominent. In the DR, the CB continues to keep rates on hold. President Bukele was met with protests in El Salvador. The IMF will undertake the first EFF review. Panama presented next year's budget proposal.

Growth has ramped up in 2Q and into 3Q across the region with better vaccination figures and COVID-19 case counts. Second quarter growth saw a boost tied to low base effects from last year, but has shown momentum into 3Q. All countries posted double-digit yearly growth rates in the quarter. Going forward, we continue to expect positive local dynamics on the back of to improve in the second half of the year, especially as vaccination schemes continue to move along. The Dominican Republic continues to have one of the best performing vaccination programs in the regions, though El Salvador and Panama have caught up. In general, the region has also seen an improvement in COVID-19 cases, which should spur the recovery on. One notable exception is Costa Rica. Cases had been coming down, have been on the rise since July, adding headwinds to Costa Rica's recovery. We upgraded some growth forecast based on observed results and ongoing momentum.

Inflation remains high across the board. Until recently, inflation had been affecting countries with local currencies and independent monetary policy, but rising inflation is now becoming apparent in dollarized countries too. Panama and El Salvador are now both showing rising prices similar to those observed in Guatemala and Honduras. The Dominican Republic has seen a dip in its yearly headline inflation data, but at 7.9% YoY it still remains among the highest in the region. Food and energy prices continue to be the main guiding factors behind these spikes.

In the Dominican Republic, the BCRD kept rates unchanged at 3.00% despite high inflation. The CB kept rates unchanged once again in August's policy meeting. They noted that headline inflation has been coming down from its high in May (at 10.5%) and to the current 7.9%, and that they continue to expect inflation to converge to the 3-5% inflation target band within the policy horizon. They highlight once again that recent spikes in prices are tied to recent international food and oil price pressures. That said, the CB increased their growth forecasts to around 10% for 2021 after initial 3Q data began trickling in. On the external front, they note a solid remittance inflow continues and travel flow are recovering. While they mention the Fed, they do so to say that stimulus measures are still in place but do not address eventual tapering. With nominal rates being relatively high compared to regional peers and the DOP having been strong this year, we expect the BCRD to keep rates unchanged through 2021.

In El Salvador, Bukele's recent actions led to protests on Independence Day. Individuals marching called out recent actions by the government and friendly congress that local see as consolidating power around the executive. These include changing judges at the highest court and setting an age of retirement at 60, an ongoing process for redrafting many articles in the constitution, an interpretation of the constitution opening the way for immediate reelection, and the President using a congressional majority for passing laws with little time for debates or analysis of their adequacy. The most prominent case is the adoption of Bitcoin as legal tender, which was rolled out less than three months after a swift approval in congress, and had an initial reception filled with reports of technical issues with the government's Chivo wallet app. Adopting Bitcoin is unwelcomed by a majority of Salvadorians according to recent polling. The marches show a segment of the population growing increasingly concerned with the current administration, although overall President Bukele remains popular with approval ratings that continue to polls in the 80s and 90s that, in part, has allowed him to push his agenda through quickly.

Prepared for Ariff Roduan

The IMF said Article IV talks and possibly a program are still underway. The IMF's Gerry Rice said recently that they are still holding talks with the government for the Article IV consultation, which should be ready "in coming months". He also spoke of "the potential" of an IMF program. Market participants have been doubting the possibility of a program given the aforementioned actions leading to power concentration on the executive. In addition, the introduction of Bitcoin could have AML implications and could be a shock for fiscal and external balances. While these events are taking place, there have not been signs of advancement in the IMF talks. This announcement keeps the door open for a program, but a resolution being "months" away signals the deal is likely not advancing and risks falling apart.

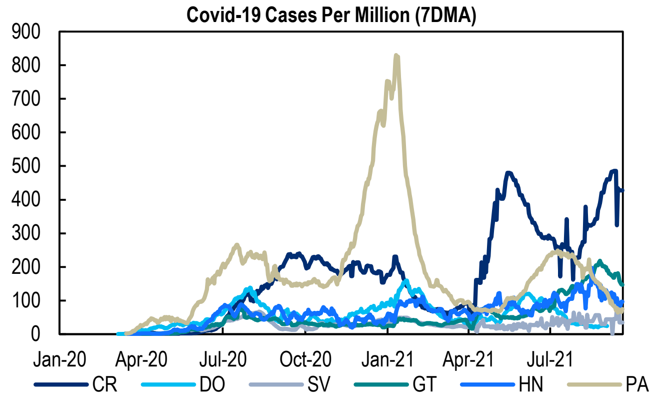
In Costa Rica, the government will review new fiscal adjustment estimate with the IMF after amendments. The government recently redrafted five pieces of legislative proposals that they originally introduced as part of the IMF adjustment package. The redraft aims to improve their chances of approval in congress. Bill topics include a global income tax scheme, lower tax exemptions, use of public company profits, a lottery tax, and a tax on luxury homes. Approval of these bills is important for the government to push on with their planned adjustment as agreed with the IMF for the recently passed EFF agreement. However, the government has yet to present estimates of how the new texts change adjustment amounts. MoF Villegas mentioned that these estimates are being reviewed directly with IMF staff. Original estimates placed the adjustment at around 1.2% of GDP per year.

The IMF will conduct its first review of the Costa Rican EFF between the end of September and in October. While the first disbursement under the EFF agreement was unconditional, a second disbursement relies on a successful review. In turn, the review will look at advances in fiscal adjustment, considering both observed figures but also progress in new fiscal legislation. The government will seek to move the bills described earlier faster through congress, as they are already somewhat behind schedule. Doing so could limit discussion on the bills and actually generate further pushback from congress. Furthermore, the constitutional court only recently officially notified congress that the Public Employment bill they were reviewing could move forward. This bill, which should be approved, has also faced strong delays.

In Panama, the Canal Authority will provide a boost in revenues next year. The MoF presented a proposal for the 2022 budget, showing expected increase in revenues of about USD15.1bn, which are close to 24% higher than in 2021. Both tax and non-tax revenues are estimated to increase strongly, and one main reason for both is better Canal performance. Dividend transfers from the Canal are budgeted at USD1.9bn (up by around USD580mn). In addition, increased tolls and taxes lead to a total payment from the Canal to the government to stand at USD2.5bn. Another potential source of new revenues that is still pending confirmation is taxation to Minera Panamá, whose tax treatment contract is currently under review. This improved revenues expected from the canal should limit the urgency for tax reform.

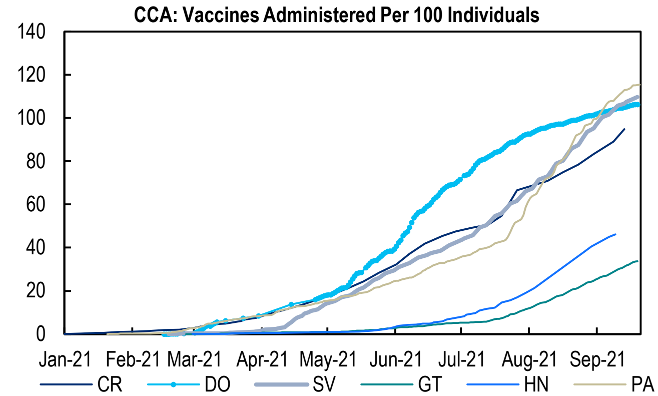
Prepared for Ariff Roduan

Figure 199. Costa Rica's COVID-19 spike returned after a slight pause..



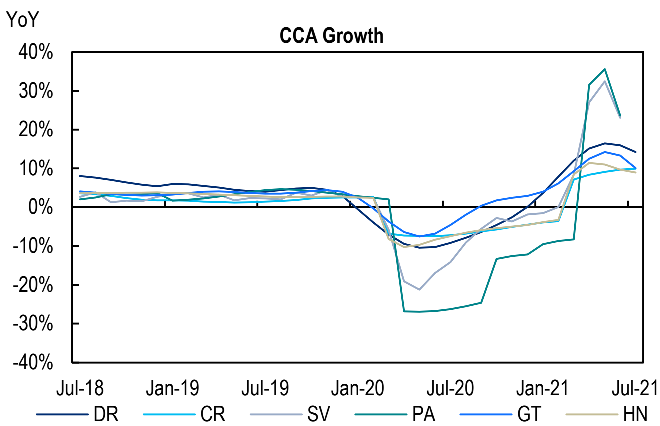
Source: Our World in Data

Figure 200. El Salvador and Panama have matched DR vaccinations.



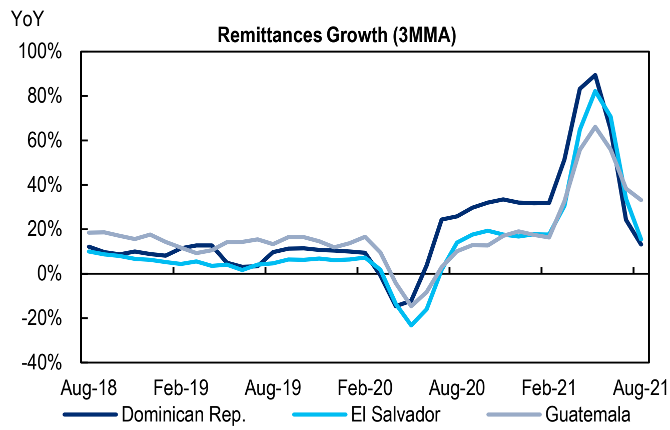
Source: Our World in Data

Figure 201. Base effects in 2Q for growth are fading...



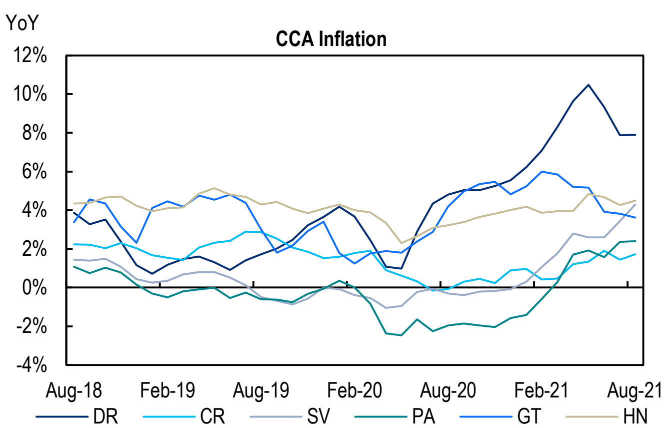
Source: Haver and Citi Research

Figure 202. …As well as for remittances.



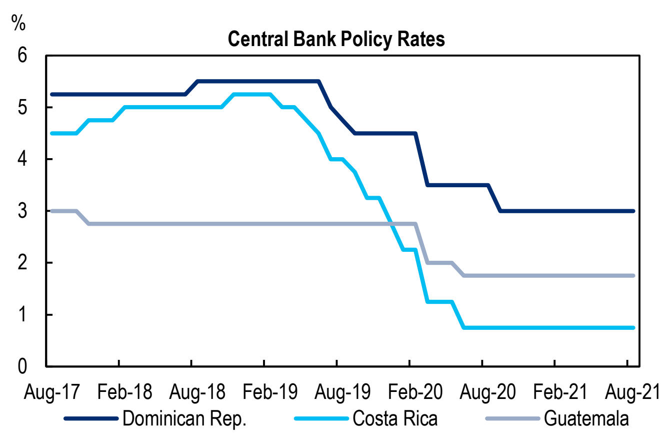
Source: Haver and Citi Research

Figure 203. Inflation is high across the region.



Source: Haver and Citi Research

Figure 204. Inflation and the Fed will pressure CBs.



Source: Haver and Citi Research

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Figure 205. CCA Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Costa Rica									
Nominal GDP, USD bn	50.6	54.7	56.9	57.6	59.4	60.9	59.3	59.3	62.9
GDP per capita, USD	10,597	11,323	11,612	11,750	11,877	12,186	11,854	11,619	12,101
Real GDP, yoy avg	3.5	3.6	4.2	4.2	2.6	2.3	-4.1	4.0	3.5
CPI, % yoy eop	5.1	-0.8	0.8	2.6	2.0	1.5	0.9	1.7	2.5
Policy Interest Rate, % eop	5.25	2.25	1.75	4.75	5.25	2.75	0.75	0.75	2.50
CRC/US$, avg	536.7	534.6	543.9	567.7	576.8	586.6	584.3	617.6	617.0
CRC/US$, eop	540.8	537.3	553.2	571.4	604.5	571.0	610.4	622.0	612.0
Current account	-2.5	-1.9	-1.5	-1.7	-1.9	-1.6	-1.3	-1.4	-1.5
% of GDP	-4.9	-3.5	-2.6	-3.0	-3.1	-2.6	-2.2	-2.3	-2.4
Consolidated government balance	-5.2	-5.7	-4.8	-5.4	-5.5	-6.4	-8.0	-7.2	-5.9

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Dominican Republic									
Nominal GDP, USD bn	66.2	68.9	72.4	76.1	80.9	83.5	73.2	85.2	92.1
GDP per capita, USD	6,698	6,901	7,172	7,465	7,852	8,110	7,036	8,188	8,768
Real GDP, yoy avg	7.6	7.0	6.6	4.6	7.0	5.1	-6.7	10.7	4.8
CPI, % yoy eop	1.6	2.3	1.7	4.2	1.2	3.7	5.6	5.5	4.2
Policy Interest Rate, % eop	6.25	5.00	5.50	5.25	5.50	4.50	3.00	3.00	4.50
DOP/US$, avg	43.48	44.98	45.93	47.31	49.62	51.25	56.40	58.15	58.91
DOP/US$, eop	44.29	45.53	46.35	47.80	50.28	52.96	58.17	57.70	59.72
Current account	-2.2	-1.3	-0.8	-0.2	-1.5	-1.4	-2.6	-1.9	-1.9
% of GDP	-3.3	-1.9	-1.1	-0.2	-1.8	-1.6	-3.6	-2.2	-2.1
Consolidated government balance	-5.0	-1.7	-4.2	-4.6	-3.8	-3.3	-9.2	-6.0	-5.6

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
El Salvador									
Nominal GDP, USD bn	25.1	26.1	26.8	27.8	28.8	29.5	27.1	29.3	30.4
GDP per capita, USD	4,103	0523 26	4,360	4,480	4,638	4,686	4,300	4,575	4,750
Real GDP, yoy avg	2.0	2.4	2.5	2.3	2.4	2.6	-7.9	7.4	2.9
CPI, % yoy eop	1.3	1.0	-0.9	2.0	0.4	0.0	-0.1	2.7	1.4
Policy Interest Rate, % eop	-	-	-	-	-	-	-	-	-
SVC/US$, avg	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SVC/US$, eop	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Current account	-1.2	-0.9	-0.5	-0.4	-1.4	-1.2	0.1	-0.6	-0.7
% of GDP	-4.8	-3.6	-2.0	-1.5	-4.8	-4.0	0.5	-2.1	-2.4
Consolidated government balance	-4.0	-3.7	-3.1	-2.3	-2.5	-2.9	-10.4	-6.3	-5.2

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Panama									
Nominal GDP, USD bn	49.9	54.3	57.8	61.8	64.6	66.5	53.7	60.4	65.3
GDP per capita, USD	13,492	14,294	15,216	16,273	13,450	11,458	9,260	10,244	11,070
Real GDP, yoy avg	6.1	5.8	5.0	5.6	3.6	3.0	-17.9	12.4	6.2
CPI, % yoy eop	1.0	0.3	1.5	0.5	0.2	-0.1	-1.6	1.8	1.7
Policy Interest Rate, % eop	-	-	-	-	-	-	-	-	-
PAB/US$, avg	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PAB/US$, eop	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Current account	-6.7	-4.3	-4.6	-4.9	-5.1	-3.3	1.2	-1.1	-1.6
% of GDP	-13.5	-7.9	-8.0	-8.0	-7.8	-4.9	2.3	-1.8	-2.5
Consolidated government balance	-3.2	-2.3	-1.8	-1.6	-2.9	-2.9	-10.1	-7.6	-4.5

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Chile

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- **Summary view** — We have increased our growth and inflation forecasts. We think that inflation risks have increased in recent months, and hence we expect a more aggressive hiking cycle by the BCCh, with the policy rate peaking at 4.00%.

The Central Bank of Chile (BCCh) revised its baseline scenario and accelerated the pace of monetary policy normalization. Both growth and inflation forecasts were raised significantly once in September's IPoM. Policy makers now expect the economy to grow 10.5%-11.5% this year, up by 2pp from June's forecasts of 8.5%-9.5%. The authorities emphasized that the economy's recovery has far exceeded expectations and the output gap has effectively closed. Inflation projections were also raised aggressively: the BCCh now sees headline inflation closing at 5.7% this year (vs. 4.4% in June), on the back of high consumption, the idiosyncratic depreciation of CLP, and other global factors. Similarly, annual core inflation was increased to 4.7%, from June's 3.9%.

The BCCh surprised the market with a 75bps hike. While the BCCh had only discussed staying on hold or hiking 25bps in its previous meeting, with the latter being the outcome, in September the authorities decided to raise the policy rate by 75bps to 1.50%. This was a surprise to the market, with the consensus expecting a 50bps hike, and several analysts and market participants still calling for 25bps. Regarding monetary policy guidance, the September IPoM showed the authorities now expect the policy rate to be similar to its neutral level towards the middle of first semester 2022. It is worth noting that the Board sees risks skewed towards higher price pressures, which could lead to a policy path closer to the upper bound of their policy rate corridor.

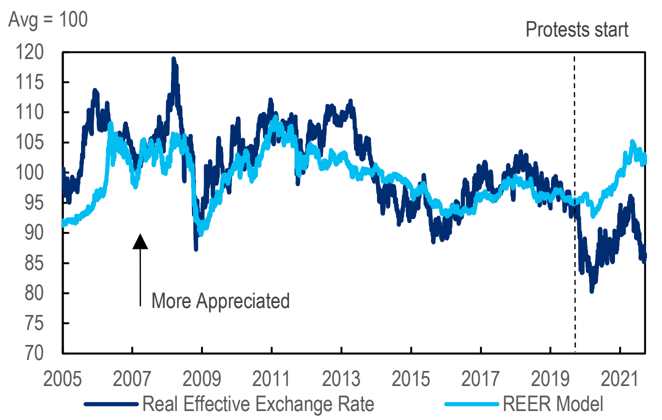
We have updated our path for the monetary policy rate. We now expect a much more aggressive hiking cycle, and we see the policy rate closing 2021 at 3.00%, and peaking at 4.00% by mid-2022. This implies that we see the BCCh going above its own estimate of the neutral rate. In our view, the underperformance of the CLP and what it seems to be a significant undervaluation of the currency relative to external fundamentals, points to increasing inflationary risks (see figures below). As a result, we expect the authorities to hike until that deviation is corrected, at least partially. For that to be the case, we think a strong normalization cycle may be necessary, as local political risk can remain elevated for a prolonged period of time. Our analysis is consistent with the BCCh's view that idiosyncratic FX shocks seem to have a larger pass-through to inflation.

Inflation update – August inflation came in above expectations at 0.4% m/m (consensus 0.3%), with core inflation also at 0.4% m/m. The print was driven by the housing and basic services and restaurant and hotel divisions, and more specifically, meat and liquid gas prices. Notably, non-tradable prices were responsible for the bulk of the increase, rising by 0.5% m/m and accelerating to 3.5% y/y (from 3.0% in July), while tradable prices rose by 0.2% m/m (5.9% y/y vs 5.8% y/y in July). This puts annual headline inflation at 4.8% y/y, well above the BCCh's inflation target, and up from 4.5% y/y in July. YTD inflation now stood at 3.2%.

Activity update – The BCCh reported that its monthly GDP proxy, the IMACEC, grew 18.1% YoY in July (while the month has one less working day than one year ago). In monthly seasonally-adjusted terms, the IMACEC grew 1.4% (after growing 1.8% in June and 3.2% in May), driven by services and to a lesser extent commerce. With this result, output surpassed by 4.3% the level from February 2020, before the pandemic, and by 3.7% the previous high reached in 2019 before the protests.

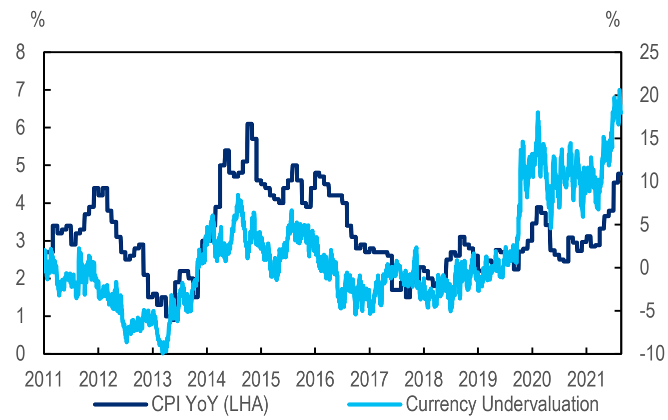
Prepared for Ariff Roduan

Figure 206. The underperformance of the CLP…



Source: Citi Research, Bloomberg *The model looks at the price of copper

Figure 207. … increases medium-term inflation risks



Source: Citi Research, INE *Undervaluation is defined relative to the REER model

Figure 208. Chile Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	261	244	251	277	298	280	254	317	325
Population, mn	17.7	17.8	18.0	18.2	18.4	18.5	18.7	18.9	19.1
Real GDP, yoy avg	1.8	2.3	1.7	1.2	3.7	0.9	-5.8	10.5	2.8
Private consumption growth % yoy	2.7	2.1	2.7	3.4	3.8	1.0	-7.5	15.7	3.6
Real investment growth % yoy	-10.2	2.4	-3.7	0.2	7.2	1.7	-17.1	21.3	5.2
Real export growth, % yoy	0.3	-1.7	0.5	-1.5	5.3	-2.6	-1.0	0.5	3.5
Real import growth, % yoy	-6.5	-1.1	0.9	4.6	8.1	-2.4	-12.7	19.1	4.1
Net export contribution to growth	2.2	-0.2	-0.1	-1.8	-0.9	0.0	3.5	-5.1	-0.3
Unemployment, % of labour force	6.5	6.3	6.7	7.0	7.4	7.2	10.8	9.4	7.7
External (US$bn)									
Current account	-5.2	-5.7	-5.0	-6.4	-11.6	-10.5	3.4	-8.3	-7.6
% of GDP	-2.0	-2.3	-2.0	-2.3	-3.9	-3.7	1.3	-2.6	-2.3
Trade balance	6.5	3.4	4.9	7.4	4.2	3.0	18.4	15.4	12.6
FDI, net	23.6	20.9	12.3	6.1	7.8	12.6	8.5	20.6	15.6
External debt	-	-	-	-	-	-	-	-	-
Short-term debt	-	-	-	-	-	-	-	-	-
International reserves	40.4	38.6	40.5	39.0	39.9	40.7	39.2	52.2	55.4
Public Finances, % of GDP									
Consolidated government balance	-1.6	-2.1	-2.7	-2.8	-1.7	-2.9	-7.3	-7.6	-5.0
Consolidated gov primary balance	-1.0	-1.5	-2.0	-1.9	-0.8	-1.9	-6.3	-6.7	-4.0
Public debt	-	-	-	-	-	-	-	-	-
External public debt	-	-	-	-	-	-	-	-	-
Prices									
CPI, % yoy	4.6	4.4	2.7	2.3	2.1	3.0	3.0	4.6	3.2
CPI, % avg	4.7	4.3	3.8	2.2	2.3	2.3	3.0	4.0	3.9
CLP/US$, eop	606.9	708.6	669.8	615.4	694.0	752.0	710.5	801.7	771.4
CLP/US$, avg	570.8	654.6	676.4	649.0	642.1	703.3	791.8	762.8	790.7
Policy Interest Rate, % eop	3.00	3.50	3.50	2.50	2.75	1.75	0.50	3.00	4.00
Long-term yield, %, eop	-	-	-	-	-	-	-	-	-
Nominal wages, % yoy	7.2	5.2	4.1	5.8	3.8	4.5	4.2	5.4	5.0

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	0.5	18.1	15.5	9.2	5.6	4.0	0.7	1.4	1.9
CPI, % yoy	2.9	3.8	4.9	4.6	4.5	4.4	3.3	3.2	3.0
CLP/US$, eop	720.5	732.3	796.1	801.7	803.6	801.6	786.5	771.4	756.6
Policy interest rate, %, eop	0.50	0.50	1.50	3.00	3.50	4.00	4.00	4.00	3.75

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Colombia

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- **Summary view** — Growth is showing some momentum into 3Q, leading us to improve our 2021 forecasts. We also increased our inflation forecast as transitory factors prove to be sticky. We thus expect Banrep to begin hiking rates this month. On the fiscal side, President Duque signed the fiscal bill into law.

Growth is improving in Q3, leading us to upgrade our forecasts for 2021. Second quarter data released in August confirmed a slowdown took place because of social unrest. However, most lockdowns ending by late June and COVID-19 cases and deaths declining since then to their current lows has improved the outlook for 3Q. Higher frequency indicator for July, including retail sales, manufacturing production, and the monthly ISE activity tracker all stood above market expectations. Imports, which correlate with domestic demand due to a broad import basket, have also continued to show strong recovery. We updated our growth forecast for 2021 to 7.9% on the back of this improved outlook and slightly better than expected 2Q results and particularly guided by better consumption and private investment growth.

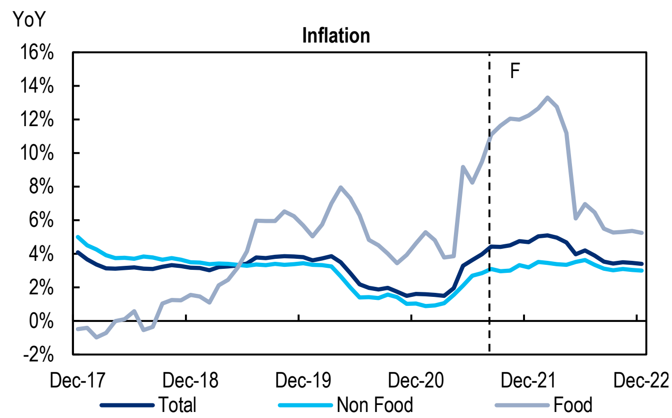
Inflation should stand above the target band this year. The latest inflation data has pushed the yearly headline figure further away from its target, standing at 4.44% in August. Inflation had not stood above the target band ceiling since 2017. While food prices have been pushing inflation up, core prices have also been creeping up through the year (though they remain near the midpoint target). We expect rising food prices to provide some relief next year, but it is unlikely they will provide some respite this year. As a result, we have increased our 2021 inflation forecast to 4.7%, with core inflation standing at 3.2%. We expect convergence to target to begin early next year, and for the headline figure to end 2022 at 3.40%. We do not foresee demand-driven pressures to be prominent as the output gap should remain open through the year.

Banrep should begin hiking this year, and proceed to raise rates gradually. Signaling from Governor Villar and other members of the board about the beginning of the tightening cycle being near have been consistent since the July meeting. That meeting ended with a split vote to hold rates, which was a signal for cuts and changing cutting amounts in the recent cutting cycle. Furthermore, Governor Villar and other members have noted that space for keeping monetary policy's currently expansive level is closing. This all points to the first hike taking place this month. However, both Mr. Villar and, for example, Board Member Taboada have said that they see a gradual approach as appropriate. We thus expect the CB to hike rates by 25bp and then continue increasing rates by 25bp in October and December. For next year we expect an additional 150bp in hikes.

President Duque signed tax reform into law. The senate and the house had approved the bill in simultaneous votes just a week earlier. The government expects the bill to allow the MoF to reach a primary surplus by 2025-2026, and then stabilize around 0.6% of GDP. With these results, debt levels could stabilize but would not curb down considerably. While the bill was a necessary step towards consolidation, a new tax reform is necessary in the next administration for debt convergence. Meanwhile, the current bill limits the next administration's fiscal space by setting transitory goals for the structural primary deficit in the coming years as part of the new fiscal rule, before the formula based approach linking deficit goals to debt levels kicks in. The immediate effect of the bill comes on the expenditure side this year in the form of extension to COVID-19 relief measures. New revenues start next year with 2023 tax prepayments from the financial institution tax surcharge, and ramp up in 2023 with the increased corporate income tax rate. When a new tax reform comes up, it is likely to address a shift from corporate to personal income taxation once again.

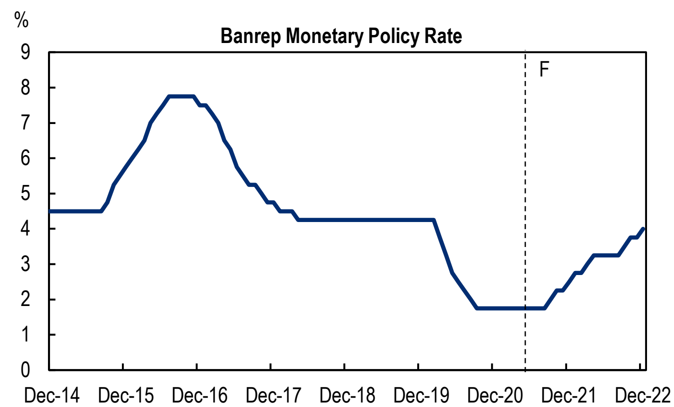
Prepared for Ariff Roduan

Figure 209. Inflation should stand above the target band ceiling in 2021.



Source: DANE, Citi Research

Figure 210. Banrep should begin hiking rates this month.



Source: Banrep, Citi Research

Figure 211. Colombia Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	381	295	284	312	334	323	272	305	322
Population, mn	47.7	48.2	48.5	49.3	49.8	50.4	50.9	51.5	52.0
Real GDP, yoy avg	4.5	3.0	2.1	1.4	2.6	3.3	-6.8	7.9	3.3
Private consumption growth % yoy	4.2	3.1	1.6	2.1	3.2	3.9	-5.6	10.5	3.3
Real investment growth % yoy	12.0	-1.2	-0.2	-3.2	1.5	3.8	-20.3	11.4	5.0
Real export growth, % yoy	-0.3	1.7	-0.2	2.6	0.6	3.1	-18.3	9.9	4.7
Real import growth, % yoy	7.8	-1.1	-3.5	1.0	5.8	7.3	-17.3	19.5	4.8
Net export contribution to growth	-1.8	0.5	0.8	0.2	-1.1	-1.2	1.2	-2.7	-0.5
Unemployment, % of labour force	9.9	9.8	10.0	10.6	10.8	11.2	18.4	15.6	13.1
External (US$bn)									
Current account	-19.8	-18.7	-12.6	-10.1	-14.2	-15.0	-9.9	-17.4	-17.2
% of GDP	-5.2	-6.3	-4.4	-3.2	-4.2	-4.6	-3.6	-5.7	-5.3
Trade balance	-4.6	-13.5	-9.2	-4.5	-6.5	-10.1	-9.0	-13.5	-12.0
FDI, net	12.3	7.4	9.3	10.0	6.2	10.8	5.9	5.0	5.1
External debt	101.9	111.9	120.4	124.6	131.9	148.5	184.6	221.9	249.0
Short-term debt	-	-	-	-	-	-	-	-	-
International reserves	47.3	46.7	46.7	47.6	48.4	53.2	59.0	58.9	58.9
Public Finances, % of GDP									
Consolidated government balance	-1.8	-3.4	-2.2	-2.4	-2.6	-1.2	-7.0	-8.3	-6.5
Consolidated gov primary balance	-0.2	-0.5	-1.1	-0.4	-0.3	0.4	-4.9	-5.3	-3.8
Public debt	38.0	42.4	43.7	44.7	48.0	50.3	64.8	67.4	67.1
External public debt	11.8	16.1	15.5	15.5	16.6	17.3	23.2	24.1	23.9
Prices									
CPI, % yoy	3.7	6.8	5.7	4.1	3.2	3.8	1.6	4.7	3.4
CPI, % avg	3.5	6.4	7.5	4.3	3.2	3.5	2.5	3.4	4.1
COP/US$, eop	2,389	3,175	3,002	2,985	3,248	3,287	3,422	3,804	3,715
COP/US$, avg	2,003	2,749	3,052	2,952	2,958	3,283	3,693	3,754	3,789
Policy Interest Rate, % eop	4.50	5.75	7.50	4.75	4.25	4.25	1.75	2.50	4.00
Long-term yield, %, eop	7.10	8.25	6.90	6.09	6.45	6.33	3.83	4.58	6.08
Nominal wages, % yoy	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.3

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	1.1	17.6	8.1	6.0	0.9	5.0	3.9	3.5	3.7
CPI, % yoy	1.5	3.6	4.4	4.7	5.0	4.2	3.4	3.4	3.3
COP/US$, eop	3,662	3,750	3,792	3,804	3,830	3,836	3,776	3,715	3,656
Policy interest rate, %, eop	1.75	1.75	2.00	2.50	3.00	3.25	3.50	4.00	4.50

Source: Citi Research, National Sources

Prepared for Ariff Roduan

Ecuador

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- **Summary view** — While activity is improving, we note that the recovery is being somewhat soft. This is consistent with our 3% growth forecast for this year. The government has reached an agreement with the IMF, but the next months will be key given the political negotiation that approving the reforms will require.

The government and the IMF announced a staff-level agreement. According to the statement published by the Fund, "IMF staff and the Ecuadorian authorities have reached a staff-level agreement on economic policies to conclude the combined second and third reviews of the 27-month EFF program. Upon completion of the reviews, Ecuador would have access to financing for about US$800 million, which the authorities would use for the budget." While the revised program has not been published an is waiting for the Board's approval, we expect it to show a more gradual fiscal adjustment than the one agreed in December last year between the IMF and the Lenin Moreno administration. The more gradual fiscal consolidation would be consistent with larger financing needs in the next few years. In this vein, finance minister Simón Cueva said that Ecuador eyes issuing international bonds in 2022. According to the local newspaper *Expreso*, Cueva said during an event organized by the Ecuadorian American Association (EAA), that the return of Ecuador to global bond markets will be in an "orderly and predictable" way. Cueva also noted that given the high multilateral disbursements expected for this year, Ecuador will not need to tap bond markets for the time being.

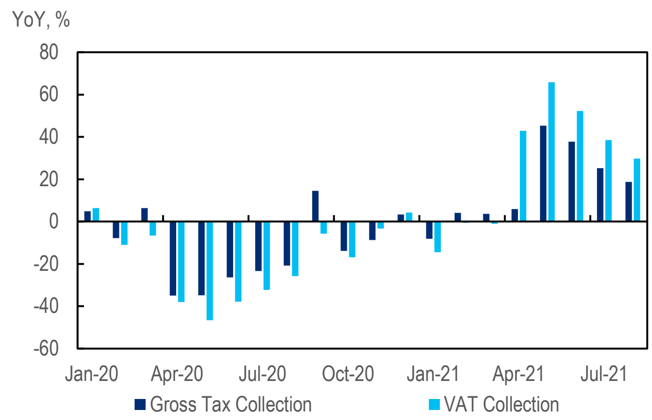
The government is getting ready to send an important economic law to Congress. The so-called *Ley de Oportunidades* will soon be sent, according to minister of government Alexandra Vela. The bill would have two parts, a tax and a labor reform, and would be presented as an economic urgent bill. This creates some risks, as in theory an economic urgent bill can only address one subject. The government is expected to seek to boost revenues by around $700mn, around 1/3 of the target previously agreed with the IMF. Given that the Lasso administration is well short of a majority in the *Asamblea Nacional*, the government has hinted it may call to a plebiscite if lawmakers block this bill.

On the economic front, the recovery seems stronger, but still partial. Tax collections has been increasing markedly relative to 2020. However, if we compare it with 2019, it is still below the level registered two years ago. For instance, VAT tax collection, which is highly correlated with activity, fell 5% on average in Jul-Aug relative to 2019, while in the first six months of the year it had shrank 9% on average.

Inflation continues to normalize. In August, consumer prices rose 0.1%. Monthly inflation has been positive in seven out of eight months this year, which implies an important difference with what happened in 2020 when monthly inflation was negative in nine out of the twelve months. Year-to-date consumer inflation came in at 1.3%, while annual inflation continued accelerating reaching 0.9% (up from a low of -1.5% in April. We believe that the normalization in inflation is good news because it is consistent with some level of recovery in output. Additionally, we believe that a positive rate of inflation will make the necessary fiscal adjustment somewhat easier (i.e., less costly in political terms) for authorities.

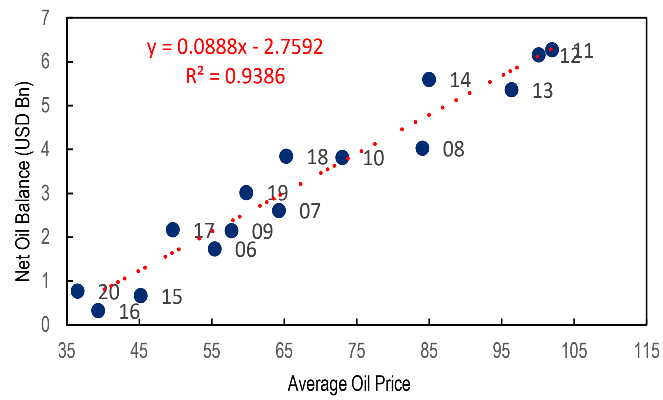
Prepared for Ariff Roduan

Figure 212. Tax collection has been recovering



Source: SRI, Citi Research

Figure 213. The rebound in the price of oil will help the fiscal



Source: Bloomberg, MEF and Citi Research

Figure 214. Ecuador Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	102	99	100	104	108	108	99	103	106
Population, mn	16.0	16.3	16.5	16.8	17.0	17.3	17.5	17.8	18.1
Real GDP, yoy avg	3.8	0.1	-1.2	2.4	1.3	0.0	-7.8	3.0	1.0
Private consumption growth % yoy	2.7	-0.1	-2.4	3.7	2.1	0.3	-7.0	4.5	1.4
Real investment growth % yoy	3.4	-9.2	-11.5	11.7	1.7	-3.2	-17.8	10.6	1.7
Real export growth, % yoy	6.2	-0.6	1.4	0.7	1.2	3.6	-2.1	3.2	1.8
Real import growth, % yoy	4.8	-8.2	-9.6	12.2	4.4	0.3	-7.9	9.8	3.1
Net export contribution to growth	-	-	-	-	-	-	-	-	-
Unemployment, % of labour force	3.8	4.8	5.2	4.6	3.7	3.8	4.9	4.5	4.5
External (US$bn)									
Current account	-0.6	-2.1	1.1	-0.2	-1.3	-0.1	2.5	1.8	0.5
% of GDP	-0.6	-2.1	1.1	-0.2	-1.2	-0.1	2.5	1.7	0.5
Trade balance	-0.1	-1.6	1.6	0.3	-0.2	1.0	3.3	2.8	1.6
FDI, net	1.1	0.3	0.8	0.6	1.4	1.0	1.0	1.0	1.5
External debt	43.7	49.1	57.5	63.0	67.7	74.7	80.9	79.1	79.6
Short-term debt	-	-	-	-	-	-	-	-	-
International reserves	3.9	2.5	4.3	2.5	2.7	3.4	7.2	6.0	7.0
Public Finances, % of GDP									
Consolidated government balance	-5.2	-6.0	-7.3	-4.5	-3.1	-3.2	-5.6	-3.4	-1.2
Consolidated gov primary balance	-4.2	-4.6	-5.8	-2.3	-0.7	-0.5	-2.8	-1.8	0.5
Public debt	29.6	33.0	38.2	44.6	46.0	53.0	63.9	63.3	64.2
External public debt	17.3	20.4	25.7	30.4	33.2	38.4	-	-	-
Prices									
CPI, % yoy	3.7	3.4	1.1	-0.2	0.3	-0.1	-0.9	1.7	1.0
CPI, % avg	3.8	3.4	1.2	-0.2	0.3	0.2	-1.2	1.6	1.0
1 month inter-bank rate, %, eop	4.28	4.54	4.06	3.50	4.07	4.66	4.51	-	-
Long-term yield, %, eop	-	-	-	-	-	-	-	-	-
Nominal wages, % yoy	6.9	4.1	3.4	2.5	2.9	2.1	1.5	1.2	1.0

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-5.6	7.9	6.7	3.8	0.8	1.6	0.9	0.5	0.7
CPI, % yoy	-0.8	-0.7	1.2	1.7	1.6	1.6	1.0	1.0	1.0
1 month inter-bank rate, %, eop	-	-	-	-	-	-	-	-	-

Source: Citi Research, National Sources

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- **Summary view** — We continue to see GDP growth at 5.9% in 2021. Inflationary pressures remain high, and we expect the Y/E headline rate at 6.1%. We project two additional 25bp hikes in 2021 for a Y/E o/n rate of 5.0%. Following the release of the 2022 Budget by Hacienda, we now anticipate primary deficits in 2021-22.

We estimate GDP growth at 5.9% and 2.7% for 2021 and 2022, respectively. While GDP accelerated in 2Q21 (1.5%QoQ growth from 1.1%QoQ in 1Q21), recent indicators point to a relatively widespread slowdown of activity since June. Going forward, we anticipate a slowdown of exports growth in light of more moderate prospects for U.S. industry and generalized supply chain issues. We expect Mexican exports to expand by 20.2% and 7.2% in 2021-22. Domestic demand should also decelerate, as weaknesses persist in the labor market and businesses confidence. We thus project private consumption and investment growth rates of 6.2% and 10.1% in 2021, respectively, and 1.9% and 2.2% in 2022. A faster normalization of sectors still hindered by the pandemic poses upward risks, although a slow vaccination campaign, continued supply disruptions and erratic policymaking are elements weighing to the downside.

We see annual headline inflation by Y/E at 6.1% in 2021 and 3.7% in 2022. Pressures on core prices remain elevated, especially on merchandise and food services. Non-core inflation has taken a breather due to government-mandated caps on LP gas prices. Still, we estimate supply shocks and business cost pressures should persist at least up to 1Q22. We thus estimate Y/E core inflation at 4.9%. For 2022 we project both headline and core inflation at 3.7% by Y/E.

We anticipate the policy rate at 5.0% by Y/E 2021 and no movements in 2022. After June's surprise hike (the first since 2018), Banxico rose again the policy rate in its August meeting by 25bp to 4.5%. The vote was again divided (3-2), and the main argument for hiking was that although inflationary pressures seem to be transitory and mainly related to global forces, the diversity, magnitude, and length of shocks may imply risks to the price formation process and to medium-term expectations. The appetite for hikes seems to be waning, at least as alluded to by the median voter according to the latest minutes, but we believe that persisting inflationary pressures should result in another two 25bp hikes in 2021 for an o/n rate of 5.0% at the end of the year. With Herrera taking Díaz de León's place at the Board next year, we see the rate stable at 5% throughout 2022, with slight upward risks.

We estimate a primary deficit of 0.5% of GDP for 2021 and of 0.4% of GDP in 2022. The 2022 Budget proposal considers a moderately optimistic macro outlook, as well as limited changes to the tax legislation, as anticipated. The focus of spending is still on flagship programs, emblematic infrastructure projects and support to SOEs. Intentions to increase spending, especially on investment and the health sector, are welcome, but insufficient. Hacienda projects not to meet its 0% of GDP primary balance target in 2021, and now estimates deficits of 0.4% and 0.3% of GDP in 2021-22, as well as a stable net debt to GDP ratio at 51.0%. We think that implicitly recognizes the limitations of revenue sources and rising spending pressures. In line with the additional spending estimated by MoF, we now anticipate primary deficits of 0.5% and 0.4%, respectively, this and next year (from 0.0% and -0.1% before).

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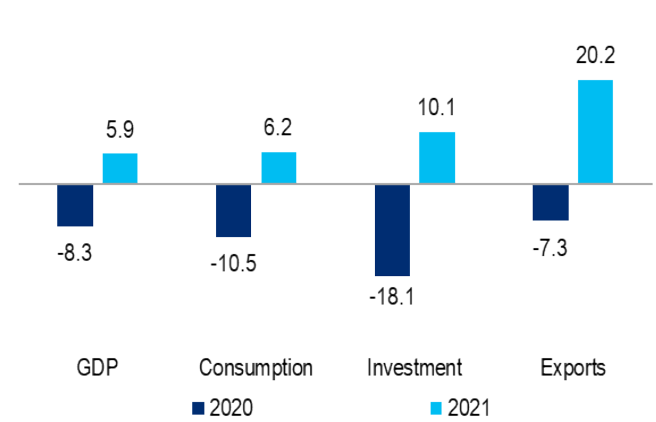
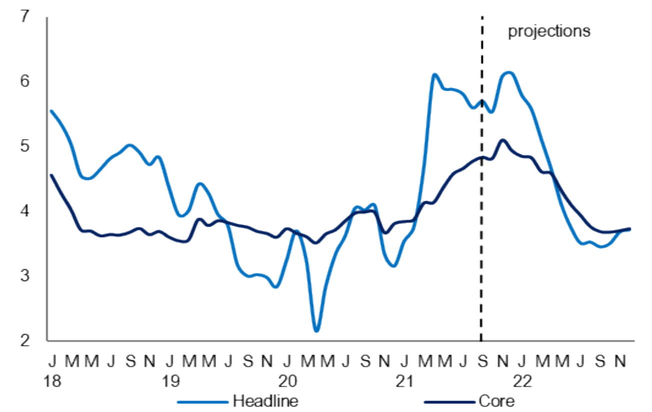
Figure 215. Aggregate Demand, real annual change



Source: Citibanamex with data from INEGI

Figure 216. Annual inflation, %



Source: Citibanamex with data from INEGI

Figure 217. Mexico Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	1,307	1,141	1,079	1,163	1,220	1,270	1,074	1,291	1,352
Population, mn	117.6	119.0	120.4	121.7	123.2	124.6	126.0	127.5	128.9
Real GDP, yoy avg	2.8	3.3	2.6	2.1	2.2	-0.2	-8.3	5.9	2.7
Private consumption growth % yoy	2.1	2.7	3.7	3.2	2.5	0.6	-10.4	6.2	1.9
Real investment growth % yoy	1.5	4.5	0.5	-1.2	0.5	-5.7	-18.0	10.1	2.2
Real export growth, % yoy	7.0	8.4	3.6	4.2	6.0	1.5	-7.3	20.2	7.2
Real import growth, % yoy	5.9	5.9	2.9	6.4	6.4	-0.7	-14.8	21.6	5.7
Net export contribution to growth	0.3	0.8	0.2	-0.8	-0.2	0.8	3.0	0.2	0.9
Unemployment, % of labour force	4.8	4.4	3.9	3.4	3.3	3.5	4.4	4.3	4.1
External (US$bn)									
Current account	-25.4	-31.1	-24.4	-20.4	-25.1	-3.9	26.1	4.5	0.3
% of GDP	-1.9	-2.7	-2.3	-1.8	-2.1	-0.3	2.4	0.3	0.0
Trade balance	-2.8	-14.6	-13.1	-11.0	-13.8	5.2	34.0	-2.6	-4.4
FDI, net	30.5	35.5	31.2	34.3	33.9	34.2	27.6	31.8	33.7
External debt	427.3	418.3	412.6	436.6	446.7	463.8	462.5	479.5	496.5
Short-term debt	94.1	73.1	56.1	55.7	64.4	66.2	53.4	55.4	57.3
International reserves	193.2	176.7	176.5	172.8	174.8	180.9	195.7	203.5	207.6
Public Finances, % of GDP									
Consolidated government balance	-4.5	-4.0	-2.8	-1.1	-2.2	-2.3	-3.9	-4.5	-4.0
Consolidated gov primary balance	-1.1	-1.2	-0.1	1.4	0.6	1.1	0.1	-0.5	-0.4
Public debt	48.9	51.1	54.7	51.9	51.3	51.0	58.6	57.5	56.6
External public debt	16.5	17.2	18.4	17.3	17.3	17.4	21.3	20.9	20.6
Prices									
CPI, % yoy	4.1	2.1	3.4	6.8	4.8	2.8	3.2	6.1	3.7
CPI, % avg	4.0	2.7	2.8	6.0	4.9	3.6	3.4	5.4	4.2
MXN/US$, eop	14.75	17.18	20.73	19.65	19.65	18.93	19.89	20.15	20.65
MXN/US$, avg	13.31	15.88	18.69	18.92	19.23	19.25	21.48	20.12	20.50
Policy Interest Rate, % eop	3.00	3.25	5.75	7.25	8.25	7.75	7.25	5.00	5.50
Long-term yield, %, eop	5.84	6.28	7.31	7.20	8.71	7.90	7.77	6.30	7.78
Nominal wages, % yoy	4.5	4.2	3.8	4.8	5.7	6.7	7.3	6.9	6.5

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-3.6	19.6	6.4	3.6	3.6	1.9	2.2	3.1	2.2
CPI, % yoy	4.7	5.9	5.7	6.1	5.1	3.8	3.4	3.7	3.5
MXN/US$, eop	20.44	19.95	19.97	20.15	20.32	20.47	20.56	20.65	20.74
Policy interest rate, %, eop	4.00	4.25	4.75	5.00	5.00	5.00	5.00	5.00	5.00

Source: Citi Research, National Sources

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Peru

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- hiking. Central bank appointments are due soon, while congress continues to be a check on Castillo's more extreme legislative plans.

We expect higher growth this year, but a slowdown in 2022. Second quarter growth jumped by close to 42%. While this is mostly the result of a very low base effect, it still shows signs of underlying growth. This momentum has continued into 3Q with activity growing 12.9% YoY in July. COVID-19 cases and deaths have fallen consistently since May and now stand at their lowest levels since the initial spike last year. This should bode well for growth this year, especially through improved consumer spending. We improved our growth forecasts to 11.7% from 10.3% before. We also reduced our 2022 forecast to 3.1%, mainly due to lower expected private investment, which we see slowing due to increased political uncertainty.

Inflation remains high. August's headline figure at 4.95% YoY is close to 2pp above the target band ceiling, which was breached three months ago. We now expect inflation at 5.2% this year, though it should wane next year.

The BCRP hiked 50bp, but signals there could be pauses along the hiking cycle. The communiqué noted that real rates remain at historically low levels but now excludes the line that said the board considers it appropriate to maintain an expansive stance while the pandemic's negative effects persists. We read this as a confirmation that the board will continue raising rates. That said, they also explicitly note that the decision does not "necessarily imply a cycle of successive hikes". Decisions will be highly data dependent, with the size of hikes responding to recent prints, the evolution of expectations, and the FX. It also likely implies pauses along the way (more likely next year) when inflation pressures wane and if activity weakens. Overall, we expect around 100bp in additional hikes this year.

Velarde has yet to confirm he is staying on board, while BCRP board nominations should come soon. The Castillo administration asked Central Bank Governor Velarde to stay at the helm of the Central Bank even before officials confirmed the election results. Both he and MoF Francke have said he is considering it, but a concrete response is still pending. Most recently, Velarde presented 'September's inflation report and during his appearance he said that he has been discussing BCRP Board (Directorio) appointments with Francke, noting that they concur new members should have "technical" profiles and should not be political appointments. There should be news on both his future and the names the administration and congress are considering for the board relatively soon.

The confidence vote result and subsequent congressional action suggests there should not be shocking political events for the time being. PM Guido Bellido and Castillo's left leaning cabinet survived their initial vote of confidence in late August. The vote had generated interest because not passing would have meant both a change in the cabinet and putting congress one step closer to being disbanded by the president. The fact that a majority of congress decided to grant confidence and at the same time stand in opposition shows that congress can indeed act together to avoid being disbanded, and can use this to limit the most extreme of Castillo's legislative initiatives. A few weeks after the vote, congress approved a law interpreting and regulating the use of the confidence vote. The law limits the use of the confidence vote only for government plan approvals and states that the outcome of a confidence vote must be explicitly communicated to the executive. This limits the executive's ability to use the confidence vote to pressure congress, and reduces the likelihood of Castillo's administration effectively pushing major overhauls. The law could nonetheless face constitutional challenges.

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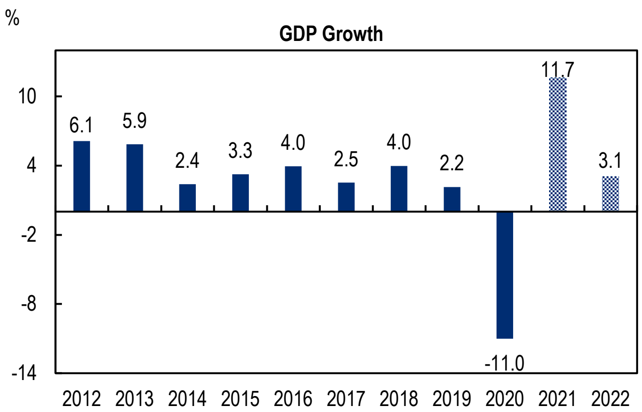
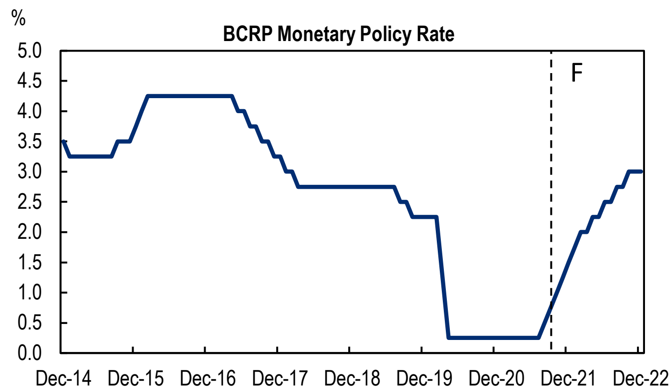
Figure 218. Growth this year is strong, but we reduced 2022 expectations.



Source: INEI, Citi Research

Figure 219. The BCRP should continue hiking rates this year.



Source: BCRP, Citi Research

Figure 220. Peru Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	202	191	195	214	225	231	205	234	238
Population, mn	31.1	31.4	31.7	32.0	32.3	32.7	33.0	33.3	33.6
Real GDP, yoy avg	2.4	3.3	4.0	2.5	4.0	2.2	-11.0	11.7	3.1
Private consumption growth % yoy	3.9	4.0	3.7	2.6	3.8	3.0	-8.7	10.2	3.3
Real investment growth % yoy	-3.1	-4.0	-5.3	-1.2	7.5	-0.7	-20.0	24.0	0.9
Real export growth, % yoy	-0.8	4.7	9.1	7.4	2.4	1.6	-20.8	15.4	4.0
Real import growth, % yoy	-1.3	2.2	-2.3	3.9	3.2	1.2	-15.6	20.6	2.8
Net export contribution to growth	0.1	0.6	2.9	1.0	-0.1	0.1	-1.9	-1.0	0.3
Unemployment, % of labour force	6.0	6.4	6.7	6.9	6.7	6.6	12.8	11.1	8.2
External (US$bn)									
Current account	-9.1	-9.5	-5.1	-2.8	-3.9	-2.2	1.6	-5.8	-1.5
% of GDP	-4.5	-5.0	-2.6	-1.3	-1.7	-0.9	0.8	-2.5	-0.7
Trade balance	-1.5	-2.9	2.0	6.7	7.2	7.1	8.2	9.4	10.1
FDI, net	2.8	8.1	5.6	6.4	6.9	6.8	0.9	8.2	9.9
External debt	62.5	66.8	64.9	62.3	62.2	60.2	65.1	71.9	72.7
Short-term debt	24.0	26.7	29.6	33.0	34.9	39.2	35.1	-	-
International reserves	62.4	61.5	61.7	63.7	60.3	68.4	74.9	76.3	77.2
Public Finances, % of GDP									
Consolidated government balance	-0.2	-1.9	-2.3	-3.0	-2.3	-1.6	-8.9	-4.2	-3.5
Consolidated gov primary balance	0.8	-0.9	-1.3	-1.8	-0.9	-0.2	-7.0	-2.7	-1.9
Public debt	19.3	22.4	23.7	25.0	25.2	26.5	35.1	34.7	34.6
External public debt	8.5	10.7	10.3	8.8	8.7	8.4	14.0	13.0	12.7
Prices									
CPI, % yoy	3.2	4.4	3.2	1.4	2.2	1.9	2.0	5.2	2.8
CPI, % avg	3.2	3.5	3.6	2.8	1.3	2.1	1.8	3.8	3.8
PEN/US$, eop	2.99	3.41	3.36	3.24	3.37	3.31	3.62	4.07	3.95
PEN/US$, avg	2.84	3.18	3.37	3.26	3.29	3.34	3.49	3.89	4.04
Policy Interest Rate, % eop	3.50	3.75	4.25	3.25	2.75	2.25	0.25	1.50	3.00
Long-term yield, %, eop	5.83	7.43	6.30	5.30	4.80	4.30	2.30	3.55	5.05
Nominal wages, % yoy	5.0	5.0	5.1	5.1	5.1	5.1	5.1	-	-

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	4.5	41.9	8.2	0.4	1.7	3.0	3.7	3.7	3.8
CPI, % yoy	2.6	3.3	5.1	5.2	4.6	4.4	2.9	2.8	2.2
PEN/US$, eop	3.74	3.85	4.10	4.07	4.08	4.09	4.01	3.95	3.93
Policy interest rate, %, eop	0.25	0.25	0.75	1.50	2.00	2.50	2.75	3.00	3.50

Source: Citi Research, National Sources

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- **Summary view** — Annual inflation accelerated in August. Meanwhile, different inflation expectations surveys show different pictures. The BCU started to normalize monetary policy in August, and we expect a new 50bps hike in the September 30 meeting.

Annual inflation accelerated in August. According to the National Statistics Institute (INE), consumer prices increased 0.85% in monthly terms in August. As a result, annual inflation accelerated 0.29pp relative to July's level to 7.59%, widening relative to the 3-7% central bank's target. Year-to-date consumer inflation stood at 6.19%.

Inflation survey expectations show different pictures. According to the central bank's analysts survey for August, inflation is expected to be 6.95% in the next twelve months and 6.35% in the following twelve months. Meanwhile, the INE's Business Expectations Survey released for August shows median expected inflation for 12 and 24 months at 8.0%.

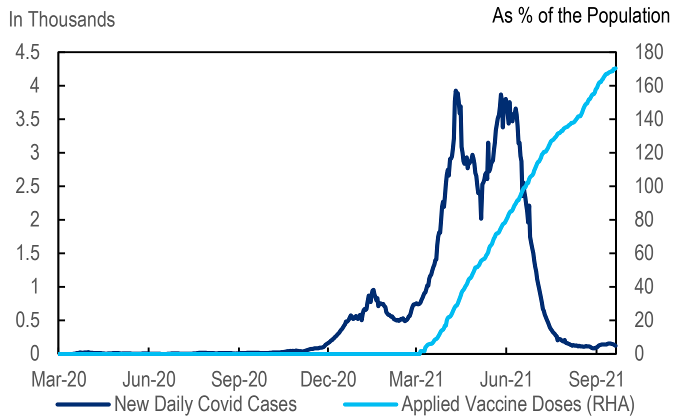
The Central Bank of Uruguay (BCU) started its normalization cycle. The policy rate was hiked by 50bps to 5.00%. The decision was in line with expectations, as the authorities had been signaling in previous statements that they would tighten monetary policy as the economy started to recover from the pandemic. In our view, the statement made clear that there are further hikes to come, and we keep our longstanding view that the policy rate would be increase to a terminal level of 7.50%. The minutes from the central bank's last policy meeting show split vote. President Diego Labat and vice-president Washington Rivero. Meanwhile, director Ignacio Berti voted against hiking, arguing that it is important to prioritize activity and employment given the current economic context.

According to the BCU's IPoM, growth will be 3.5% this year, and inflation's decelerating trend will strengthen after a few quarters. The authorities see next year's growth slightly below the figure expected for 2021. Regarding the evolution of consumer prices, the BCU sees annual inflation converging towards 5% at the end of the monetary policy horizon. According to the analysis in the IPoM, there is a 53% confidence that inflation will stand within the 3-6% target range towards the end of the policy horizon.

We expect the BCU to hike the policy rate by 50bps in the next meeting. We believe that the authorities could decide to accelerate the pace of normalization, as the economy keeps reopening while inflation expectations remain above the central bank's target range. Nonetheless, while we acknowledge a more aggressive hiking cycle is possible, our base case is for a 50bps given that the previous minutes showed a split vote. Moreover, we believe that the recent appreciation of the UYU should help easing short-term inflation concerns and therefore give room to the authorities to undertake a gradual normalization cycle.

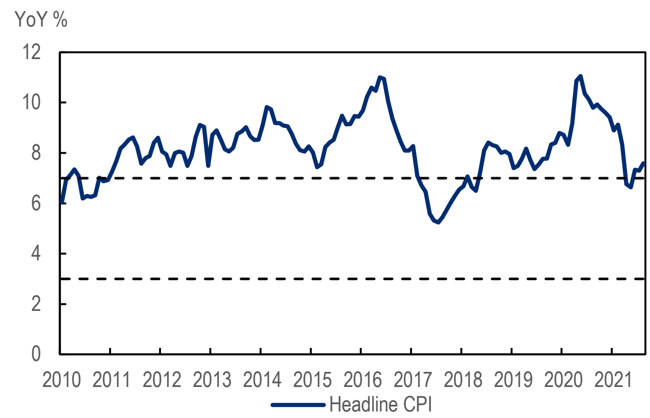
Prepared for Ariff Roduan

Figure 221. New COVID-19 cases have plummeted



Source: Bloomberg and Citi Research

Figure 222. Annual inflation bounced back outside the target range



Source: INE and Citi Research

Figure 223. Uruguay Economic Indicators

	2014	2015	2016	2017	2018	2019	2020	2021F	2022F
Activity									
Nominal GDP, USD bn	63	58	57	64	65	61	53	57	59
Population, mn	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Real GDP, yoy avg	3.2	0.4	1.7	1.6	0.5	0.4	-5.9	3.0	3.5
Private consumption growth % yoy	3.0	-0.5	0.1	3.6	2.1	0.5	-6.2	2.9	3.5
Real investment growth % yoy	0.0	-9.0	-3.9	-3.5	-4.8	-5.2	8.0	3.8	4.2
Real export growth, % yoy	3.5	-0.6	-0.2	4.9	-1.7	3.6	-16.2	6.5	4.2
Real import growth, % yoy	0.8	-7.3	-6.2	7.1	0.0	1.5	-10.8	8.0	3.1
Net export contribution to growth	-	-	-	-	-	-	-	-	-
Unemployment, % of labour force	6.5	7.4	7.7	6.9	8.4	8.5	10.5	9.4	8.8
External (US$bn)									
Current account	-1.8	-0.1	0.4	0.0	-0.3	0.8	-0.3	-0.3	-0.6
% of GDP	-2.9	-0.3	0.7	0.0	-0.5	1.3	-0.6	-0.6	-1.0
Trade balance	1.9	1.3	2.0	2.0	2.3	3.1	2.2	2.4	2.3
FDI, net	-2.2	-0.8	1.8	2.1	0.5	-1.2	-2.6	2.0	1.3
External debt	41.6	44.2	40.8	42.1	42.6	44.6	48.1	-	-
Short-term debt	-	-	-	-	-	-	-	-	-
International reserves	17.6	15.6	13.5	16.0	15.6	14.5	16.2	-	-
Public Finances, % of GDP									
Consolidated government balance	-3.2	-3.1	-3.4	-3.2	-2.7	-3.2	-5.3	-3.9	-3.3
Consolidated gov primary balance	-0.6	0.2	-0.3	-0.2	0.5	-0.6	-2.2	-1.2	-0.5
Public debt	53.9	54.1	58.3	60.4	59.4	60.7	75.0	67.9	67.0
External public debt	30.3	32.5	31.2	29.0	29.7	33.0	41.7	-	-
Prices									
CPI, % yoy	8.3	9.4	8.1	6.6	8.0	8.8	9.4	7.2	7.0
CPI, % avg	8.8	8.7	9.6	6.1	7.8	7.9	9.7	7.6	7.1
UYU/US$, eop	24.37	29.92	29.33	28.83	32.43	37.33	42.36	43.50	46.55
UYU/US$, avg	23.18	27.19	30.07	28.66	30.61	35.15	41.90	43.38	46.46
Policy Interest Rate, % eop	-	-	-	-	-	-	4.50	6.50	7.50
Long-term yield, %, eop	-	-	-	-	-	-	-	-	-
Nominal wages, % yoy	12.0	9.9	11.7	8.0	8.2	8.5	7.7	-	-

Quarterly Economic Indicators

	2021 Q1	2021 Q2	2021 Q3F	2021 Q4F	2022 Q1F	2022 Q2F	2022 Q3F	2022 Q4F	2023 Q1F
GDP, % yoy	-2.8	10.2	3.2	2.3	4.0	3.4	3.3	3.2	2.9
CPI, % yoy	8.3	7.3	7.6	7.2	8.0	7.5	7.2	7.0	6.8
UYU/US$, eop	44.38	43.49	43.00	43.50	44.11	44.73	45.36	46.00	46.61
Policy interest rate, %, eop	4.50	4.50	5.00	6.50	7.00	7.50	7.50	7.50	7.50

Source: Citi Research, National Sources

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J.P.Morgan

North America Fixed Income Strategy
10 September 2021

US Fixed Income Markets Weekly

Cross Sector *Alex Roever, Alix Floman*
September has brought renewed energy to the bond markets, along with new supply. But old concerns linger. Market focus remains on FOMC and its taper plans, on Congress and its spending plans, and the debt limit. Yields on bills may higher and coupon yields may move lower the longer the debt limit.

Governments *Jay Barry, Phoebe White, Mike Fu*
We project Treasury will exhaust extraordinary measures and cash by the end of October. The risks of a technical default remain very low, but we review the ramifications as the drop dead date approaches. The 3-year sector is cheap along the curve. Near-term inflation risks have increased, but TIPS remain somewhat rich .

Interest Rate Derivatives *Alex Roever, Veronica Mejia Bustamante*
We turn neutral on spreads, unwinding swap spread narrowers as seasonal narrowing has not materialized. We turn neutral on short gamma as the rebound in market depth helped drive implied volatility to the lower end of recent ranges. We initiate 10s/30s swap spread curve steepeners.

Short-Term Fixed Income *Teresa Ho, Alex Roever, Holly Cunningham*
Bank CP/CD outstandings have grown by $178bn YTD, driven likely by opportunistic funding and the attractiveness of the USD CP/CD markets. However, we don't anticipate supply to meaningfully grow from here. Corporates have shifted more of their cash investment portfolios into marketable securities versus deposits/MMFs.

MBS and CMBS *John Sim*
We remain neutral on mortgages versus rates. Under conservative CPY and our Flush and Extend scenario, we think 2012 vintage LCF AAAs can offer attractive spreads at expected WAL under 1yr.

ABS and CLOs *Amy Sze, Rishad Ahluwalia*
Strong technical momentum carries with tighter spreads this week as the primary ABS market fires up once again.

Investment-Grade Corporates *E. Beinstein, N. Rosenbaum, P. Talreja*
HG investors easily digested a very busy week of well telegraphed supply, as is typical for early September. HG technicals and fundamentals remain robust, in our view.

High Yield *Nelson Jantzen, Tony Linares*
Our new forecasts for FY21 institutional loan gross and non-refi/repricing issuance are $825bn (from $775bn) and $350bn (from $265bn). And our forecasts for 2021 HY bond gross and non-refinancing related issuance are $525bn (unchanged) and $175bn (+$15bn).

Municipals *Peter DeGroot, Ye Tian*
The municipal market struck an uneasy tone in the week's holiday shortened session, with light customer purchases against elevated selling in both tax-exempt and taxable municipal markets.

Emerging Markets *Luis Oganes, Trang Nguyen*
In EM fixed income, we are OW EM sovereign credit, OW EM corporates and MW EM local rates. EM bond flows were +$1.7bn (+0.30% of weekly AUM, up from +$997mn).

U.S. Fixed Income Strategy
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Contents

See page 130 for analyst certification and important disclosures.

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Summary of Views

SECTOR	CURRENT LEVEL Sep 10, 2021	YEAR-END TARGET Dec 31, 2021	COMMENT
Treasuries			
10-year yield (%)	1.34	1.75	Hold 10-year duration shorts and 3s/7s steepeners
5s/30s curve (bp)	112	135	
Technical Analysis			
10-year yield (%)	1.34	1.75	The bearish price pattern progression favors increased bearish pressure through 2H21
5s/30s curve (bp)	112	135	Late-2Q21 flattening looks overdone, we expect curve to steepen through the summer
TIPS			
5-year TIPS breakevens (bp)	240	245	Stay short Apr-26 TIPS versus notional-neutral long in Apr-22 TIPS
Interest Rate Derivatives			
2-year swap spread (bp)	9	7	We now recommend turning neutral on swap spreads and unwinding swap spread narrowers
5-year swap spread (bp)	9	7	
Agencies			
5Y Agy spd to Tsy (bp)	0	4	Remain underweight 5-year Agencies vs. Treasuries
Agency MBS			
FNMA 30yr 2.5% Front Tsy OAS (bp)	-10.4	0	We remain neutral on mortgages versus rates
RMBS Credit			
CRT M2	1ML + 165bp	1ML + 185bp	2.0 PTs offer OAS pickup to comparable CK. Faster speeds improve spread profile of new issue non-QM, particularly subs. We prefer seasoned CRT B1s with SSRA structure which are insulated from any changes to DQ trigger pass dates and modification losses.
RMBS 2.0 PT	1-05bk of CK	0-31bk of CK	
AAA RPL	N + 65bp	N + 70bp	
AAA Non-QM	N + 60bp	N + 55bp	
ABS			
3-year AAA credit cards fixed (bp)	2	4	Our top pick across senior high quality ABS is AAA/AA market place lending (MPL) ABS; in subordinates of riskier assets, we still prefer sticking to top tier sponsors
CMBS			
10yr new issue LCF AAA (bp)	68	60	We think there is still some room for conduit to tighten and for the credit curve to flatten further
Investment-grade corporates			
JULI spread to Treasuries (bp)	109	105	HG bond spreads have rebounded from the growth scare of two weeks ago and continue to trade well, in a narrow range near the YTD tightest level
High yield			
Domestic HY Index spread to worst (bp)	379	360	
Credit Derivatives			
High Grade (bp)	49	50	CDX.HY versus CDX.IG spreads have decompressed considerably in July. The spread ratio between the two indices has increased by 0.2x since the start of the month to 5.8x, around its highest level YTD
High Yield (bp)	$109.8/279	$110.5/270	
Short-term fixed income			
SOFR (%)	0.05	0.05	
3m T-bill (%)	0.04	0.05	
3m Libor (%)	0.11	0.20	
HG corp FRN (bp)	12.3	0	
CLOs			
US CLO Secondary AAA (bp)	103	90	CLO absolute returns are tempered by the near-complete spread recovery, low Libor, near-par pricing, and eventual call risks (34% exit reinvest 2021-2022)
Municipals			
10-year muni yield (%)	0.94	1.35	The fundamental underpinnings of the municipal market will continue to be supported by the reopening of the economy and sizable Federal assistance. The potential passage of infrastructure legislation inclusive of direct pay bonds could be accretive to taxable municipal bond issuance
30-year muni yield (%)	1.53	1.85	
Emerging Markets			
Hard currency: EMBIG Div ex Venezuela (bp)	342	310	OW EMBIGD
Hard currency: CEMBI Broad (bp)	251	225	OW CEMBI Br
Local currency: GBI-EM yield (%)	5.09%	5.06%	MW overall

Source: J.P. Morgan

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Cross Sector Overview

- September has brought renewed energy to the bond markets, along with new supply. But old concerns linger. Market focus remains on FOMC and its taper plans, on Congress and its spending plans, and the debt limit. Yields on bills may move higher and coupon yields may move lower the longer the debt limit remains unresolved.
- **Rates:** The Treasury market remains priced for sub-trend growth over the coming year. Ten-year Treasury yields are trading more than 25bp below their model-implied fair value. To be fair, yields tend to mean-revert with relatively low frequency, but this is one of the largest gaps we have observed in recent years.
- **Credit:** The traditional post-Labor Day supply surge is on. Through Thursday, High Grade (HG) markets saw over $72bn of new supply, bringing YTD gross supply to $1.055tn. However, net HG issuance (new issue less maturities, refinancing's, etc.) is expected to decrease about 47% from 2020's record level.
- **Technicals:** The reduction of overbought conditions and a lack of setup that would suggest an imminent technical flow to push all points of the curve to higher yield levels leave us looking for something else to drive a bearish pattern break and trend to higher yields.
- **Near-term catalysts:** COVID/vaccination/hospitalization (ongoing), PPI (9/10), CPI (9/14), FOMC (9/22).

With summer over, markets reawaken

September in the bond markets has a way of quickly making up for the slow summer days, often bringing a renewed sense of urgency that August usually doesn't reflect. This week's activity definitely points to busier markets. There is plenty of new supply for both Treasuries and corporates. Markets are focused on the FOMC and its September 22 meeting, as well as on the return of Congress and what it means for the infrastructure bills and the debt limit.

Must Read This Week

Back to school essentials: Downside risks to growth but stay with the reflation and recovery trade
Joyce Chang, et al, 9/7

US Credit Strategy Snapshot
Eric Beinstein, Nelson Jantzen, Rishad Ahluwalia, 9/9

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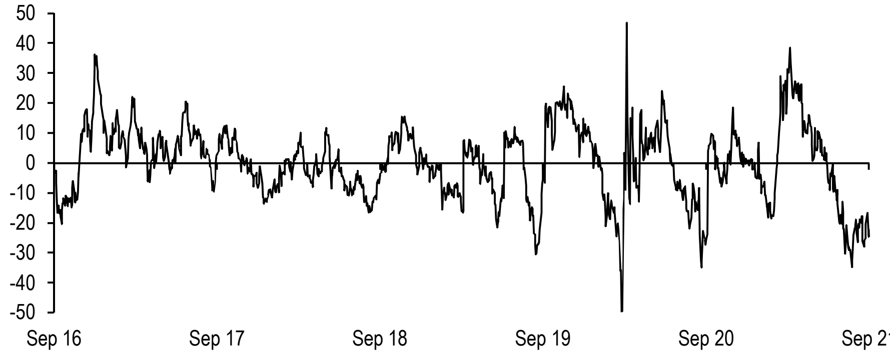
Exhibit 1: Intermediate yields remain more than 25bp below their model-implied fair value
Residual of J.P. Morgan 10-year Treasury Fair-Value model*; bp



* Regression of 10-year Treasury yields on 5Yx5Y seasonally-adjusted TIPS breakevens (%), 3m3m OIS rates (%), Fed policy guidance (months), J.P. Morgan US Forecast Revision Index (%), and CFTC spec positions in interest rate futures (3y z-score). Regression from 9/10/16-9/10/21. R-squared = 97.0%, SE = 12.0bp
Source: J.P. Morgan, CFTC

Since the beginning of September, intermediate Treasury yields have moved only modestly higher, while the front- and back-ends have done precious little. Month to date, 2-, 5- 10-, and 30-year Treasuries rose 1bp, 4bp, 3bp, and 0bp, respectively. Our Treasury strategists note that short covering and increased demand by foreign investors likely contributed to the strength of this past week's auctions. On top of this, the continued high level of COVID-19 infections and recent disappointments in economic data have weighed on yields. The Treasury market remains decidedly priced for sub-trend growth over the coming year. **Exhibit 1** shows that 10-year Treasury yields are trading more than 20bp below their model-implied fair value. To be fair, yields tend to mean-revert with relatively low frequency, but this is one of the largest gaps we have observed in recent years. Putting the pieces together, we continue to think that the spread of the Delta variant will have a more limited impact on US growth, and there are early indications that this fourth wave of infections is peaking. Moreover, with valuations still rich, we recommend maintaining shorts in 10-year Treasuries (see Treasuries).

While it's hard to say yields are close to breaking out of their recent ranges, we continue to think the ultimate direction of travel for the yield curve is higher and steeper — but the Treasury market has some issues to work through first. Most notably, these include the September FOMC meeting and the debt limit. The September FOMC could present an upside risk to yields. OIS forwards continue to imply Fed liftoff will occur in late 1Q23, but are afterwards pricing in only 2.5 additional 25bp hikes by the end of 2024. With the latest SEP already projecting the unemployment rate below 4% and inflation above 2% in 2023, it's likely the 2024 dots project a more aggressive path of tightening when they are introduced on September 21 (see *Economics*).

As for the debt limit, time and funding are running down, which is the way these affairs often tend to go before a resolution is found. Earlier this week, our Treasury strategists found that Treasury has used approximately $275bn in extraordinary measures in August and, on its current path, is likely to exhaust all available resources to continue borrowing normally under the debt limit by late October. While a pending limit isn't reassuring to markets or voters, rising fiscal anxiety can be a useful political lever in the halls of Congress. We know Congress has many balls in the air right now: the bipartisan infrastructure package has been passed by the Senate, but the House will not take this up for a vote until later this month. Moreover,

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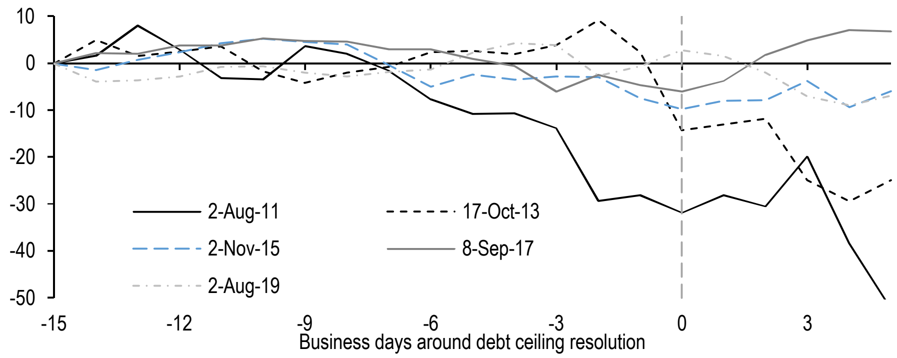
Congressional leadership continues to debate the size and scope of what will be included in the $3.5tn budget resolution passed by the House late last month. Finally, Congress needs to pass a new continuing resolution to authorize spending for FY22 by the end of the month, or else it risks a government shutdown. Amid all this, the debt ceiling has taken a back seat, which has concerned investors that negotiations will run into October. Indeed, the House isn't even back in session until September 20, which would seem to imply that several weeks of discussions could potentially precede a debt limit resolution.

For a more complete overview of the market dynamics of the debt limit, please see the discussion in this week's *Treasuries* section. But, the closer the drop dead date grows, the high level implications for yields are 1) the potential for a delayed payment tends to push bill yields higher for maturities around the expected date, and 2) in previous episodes, yields on coupons have moved lower as overall risk aversion increases as available funds approach zero **(Exhibit 2)**.

Exhibit 2: Treasury yields have tended to decline during contentious debt ceiling debates, particularly 2011, 2013, and 2015

Cumulative change in 10-year Treasury yields, adjusted for the Fed and inflation expectations*, in the business days around debt ceiling resolutions; bp



* 10-year yields regressed on 3m3m OIS rates and 5y5y TIPS breakevens over rolling 2-year period
Source: J.P. Morgan

Aside from the activity in the Treasury market, the end of summer often features a strong seasonal narrowing in swap spreads, which had been a factor in our recent tactical bias towards narrower swap spreads. But this year, just as in 2020, the expected seasonal narrowing in spreads has not materialized despite the fact that recent High Grade issuance has been quite strong. The window for this seasonal narrowing bias is thus likely now past. In addition, swap spreads are also likely to resist narrowing in the coming weeks due to the lack of an imminent resolution to the debt ceiling. And, as we just noted, Treasuries are likely to remain well bid in the coming weeks, at least until a debt limit resolution seems imminent. Only when a resolution is imminent have swap spreads tended to narrow in prior episodes. Therefore, we now recommend turning neutral on swap spreads and unwinding spread narrowers (see *Interest Rate Derivatives*).

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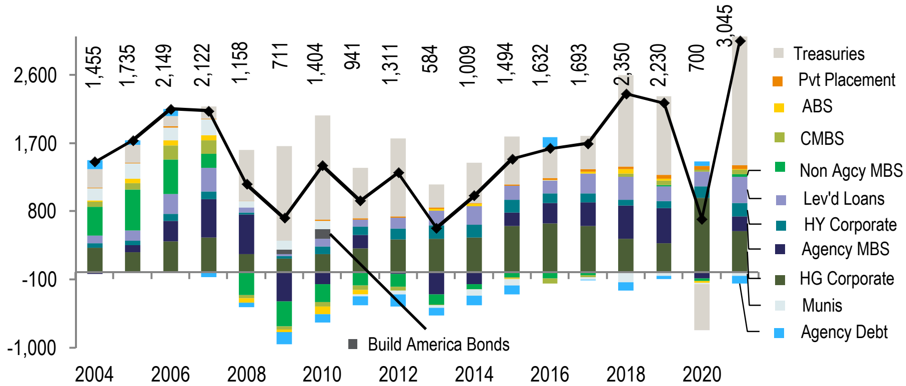
Corporate spreads unmoved by September supply surge

Exhibit 3: Seasonally, September tends to be the heaviest month of the year for duration supply, and we expect an uptick in spread product issuance next month

Gross duration supply in UST, MBS, HG Credit and Munis by month, 2016-2020 average; $bn of 10-year Treasury equivalents



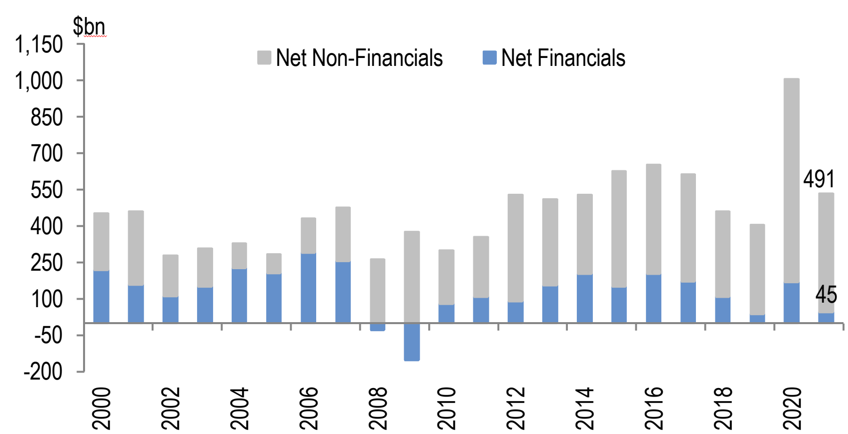
Source: J.P. Morgan, SIFMA, adjusted for changes in Federal Reserve balance sheet holdings

September is often a big supply month, especially for corporates. So far, this appears to be true for this year as well. But before we even start to talk about September, it's worth noting that 2021 has figured to be a big supply year for many asset classes. Exhibit 3 reflects our current gross duration supply forecasts full-year 2021 by sector. Still, it is notable that most of the net supply increase is in Treasuries, and that in aggregate, corporates are not likely to be out of step with years prior to 2020.

As for the credit markets, the traditional post-Labor Day supply surge is on. Through Thursday, High Grade (HG) markets saw over $72bn of new supply (~$65bn/$7bn fixed vs. FRN), bringing YTD gross supply to $1.055tn. However, net HG issuance (new issue less maturities, refinancing's, etc.) is expected to decrease about 47% from 2020's record level (Exhibit 4).

Exhibit 4: Net HG issuance is expected to decline 47% vs 2020's record level

HG Corporate net issuance by year, separated by issuer type. $bn.



Source: J.P. Morgan and Dealogic

Our strategists note that the September supply is coming so quickly and early in the month that investors may get comfortable with the notion that the heaviest supply

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period is behind them by mid-month. But neither the pace of supply nor recent volatility in equity markets is translating into wider spreads. At current tight valuations in many markets including HG credit, there is not much room for spreads to tighten, but we still believe the trend is modestly tighter to year-end. HG spreads (JULI at 112bp) are currently close to the middle of the 9bp trendless range (107-116bp) of the past 3 months. Over the past 3 months the US economy has been subject to yet another COVID-19 wave, modest shifts in Fed rhetoric, lower UST yields, and $278bn of HG supply, all of which have been insufficient to move spreads much in either direction. We don't foresee any near-term catalysts that would leave us inclined to have the view that this range is likely to break. But those readers looking to explore the current state of credit technicals and fundamentals will find a thorough discussion in this week's *Credit Markets Outlook and Strategy*.

The story in High Yield (HY) markets is very similar. Supply is having little discernable effect on spreads. HY bond yields and spreads decreased 6bp and 4bp on Thursday to 4.30% and 378bp. Yields had reached a record low of 4.22%, and spreads a multi-year low 369bp in early July. By rating, BB, B and CCC spreads are now 251bp (-2bp d/d), 420bp (-6bp d/d), and 672bp (-5bp d/d) which is 0.3%, 3.6%, and 9.9% above their year-to-date lows of 250bp, 405bp, and 611bp (see *High Yield*)

The surge in credit supply in HG and HY also extends to CLOs. Our CLO strategy team this week has raised its US CLO supply forecast to $145-155bn (from $130-140bn), and we raise our European CLO new supply forecast to €30bn (from €25bn, €23bn YTD). Globally, new CLO supply is expected to reach about $185bn in 2021, setting a record and surpassing the previous global high of $161bn in 2018. New US CLO supply remains on a record trajectory with $112bn YTD, and by year-end, CLO net supply growth is expected to be 20%. In 2021, CLO supply has averaged $13.6bn per month and there have been 6 months, and the new supply forecast implies about $9-10bn per month. While we are expecting there will be healthy demand, we also slightly adjust our US CLO AAA primary spread forecast from 100bp to 110bp (currently 119bp midpoint). Our revised spread target is only partly related to supply, but importantly, it is also a function of low yields relative to plain vanilla US Treasuries (see *CLO*).

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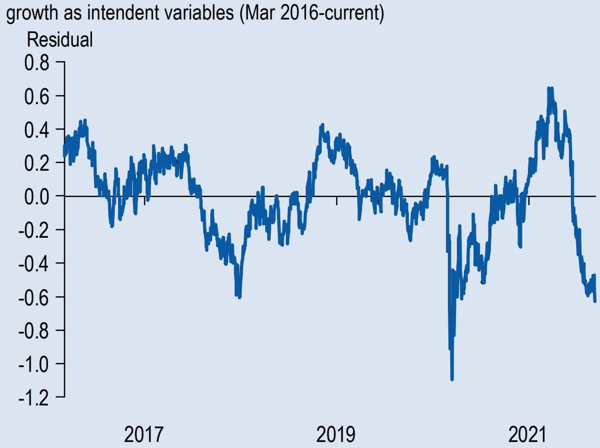
Technical analysis

Chart based technicals remain generally unchanged for Treasuries, as the market retains the same range parameters. For the 10-year note, yields look to be bearishly basing in front of key support parameters surrounding 1.40%. In our view, a move through support would shift medium-term trend momentum back to bearish for the first time since early-spring. Similar patterns are present in other cyclically sensitive markets, most notably WTI crude and the Energy sector in US equity markets, as well as commodity sensitive FX pairs. With technical conditions now neutral, we look to either improved economic surprise index trends to underpin any developing bearish trend momentum, or upside breakouts in commodity markets to suggest a broader array of market participants are looking past the current lull in the data.

The ratio of industrial to precious metals has a longstanding correlation to global bond yields. During the COVID-19 era, industrial metals 12-month performance appears to have a stronger relationship. The renewed strength in industrial metals this week adds some confidence to our view. The Aluminum rally accelerates after the break from a multi-month consolidation pattern, Copper moves back toward the upper end of its multi-month consolidation, and the Copper/Gold ratio also recovers back toward the May-Jul cycle highs. The regression models in **Exhibit 5** and **Exhibit 6** look at long duration yields and specifically the projected Fed Funds Terminal rate in the context of the commodity price action. Linear regressions since Mar 2016 and Mar 2020 both show longer duration yields too low and near the lower-end of their residual ranges, roughly 60bp and 30bp respectively. At minimum, we expect the market to retest the 1.79% 2018 50% retrace and Mar yield high into the fourth quarter. We also still see the prospects for that trend to extend to the next zone of support in the 1.90s in the months ahead.

Exhibit 5: The ratio of industrial to precious metals has a longstanding correlation to global bond yields. During the COVID-19 era, industrial metals 12-month performance appears to have a stronger relationship...

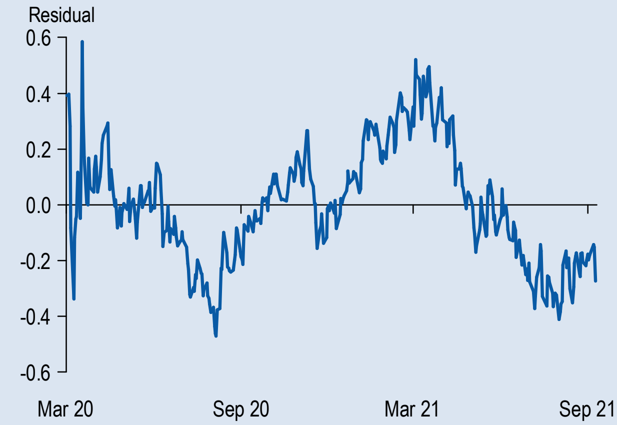
Residual of projected Fed Funds Terminal rate (Max 1m OIS rate in forwards over a ten year period) from a regression that uses the J.P. Morgan Industrial Metals/Precious Metals Index ratio and J.P. Morgan Industrial Metals Index YoY growth as intendent variables (Mar 2016-current)



Source: J.P. Morgan, CQG

Exhibit 6: ...With industrial commodities showing some signs of life recently, a multivariate analysis using both of those factors as independent variables shows long duration yields 30-60bp too low.

Residual of projected Fed Funds Terminal rate (Max 1m OIS rate in forwards over a ten year period) from a regression that uses the J.P. Morgan Industrial Metals/Precious Metals Index ratio and J.P. Morgan Industrial Metals Index YoY growth as intendent variables (Mar 2020-current)



Source: J.P. Morgan, CQG

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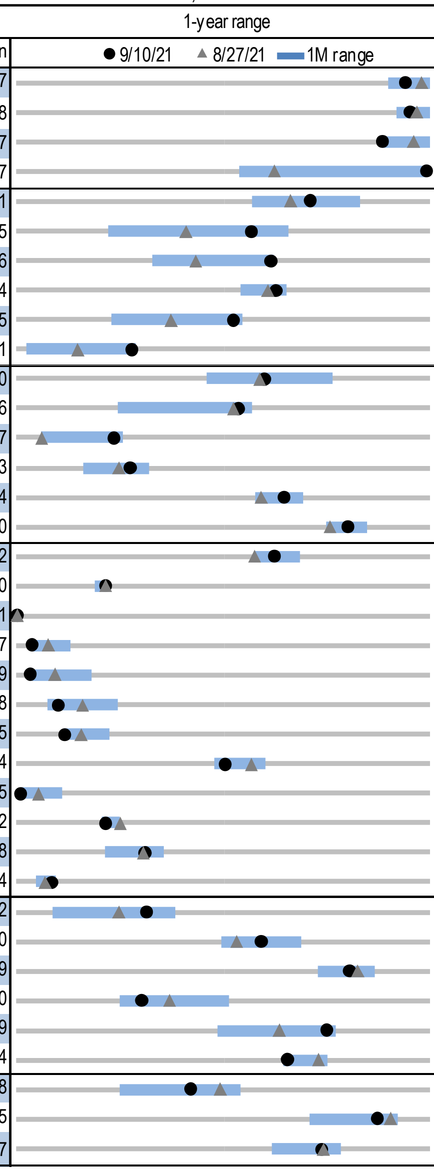
Cross-Sector Monitor

Exhibit 7: Since our last publication, the Treasury curve bear steepened; credit spreads tightened overall

Current level, change since 8/27/21, 1-year average, minimum, maximum, and current z-score for various market variables; units as indicated

		Current	Chg from 8/27	1Y avg	1Y min	1Y max	Z-score
Global equities (level)	S&P 500	4459	-1.1%	3948	3237	4537	1.4
	E-STOXX	4170	-0.5%	3760	2958	4232	1.2
	FTSE 100	7029	-1.7%	6679	5577	7220	0.8
	Nikkei 225	30382	9.9%	27543	22977	30468	1.3
Sovereign par rates (%)	2Y US Treasury	0.22	0.8	0.17	0.11	0.27	1.5
	2Y Germany	-0.75	2.7	-0.74	-0.85	-0.67	-0.1
	2Y JGB	-0.12	1.0	-0.13	-0.16	-0.10	0.9
	10Y US Treasury	1.35	2.5	1.25	0.64	1.78	0.3
	10Y Germany	-0.37	8.2	-0.42	-0.65	-0.10	0.3
	10Y JGB	0.06	2.1	0.06	0.01	0.17	-0.2
Funding spreads (bp)	2Y EUR par swap/gov't spd	29	0.2	25	20	34	1.3
	2Y USD par swap/gov't spd	10	0.1	9	6	13	0.7
	EUR FRA-OIS spd	-5	1.4	-5	-7	1	-0.1
	USD FRA-OIS spd	9	0.6	10	3	24	-0.2
	1Y EUR-USD xccy basis	-7	0.6	-8	-14	-4	0.4
	1Y USD-JPY xccy basis	-17	0.7	-20	-30	-13	0.9
Credit spreads (bp)	30Y FNCL 2.5% Front Tsy OAS*	-6	2.0	-8	-32	11	0.2
	10Y AAA new issue CMBS spd to swaps	68	0.0	71	60	97	-0.3
	3Y AAA card ABS spd to Libor	11	0.0	19	11	33	-1.2
	JULI portfolio spd to Tsy	110	-2.6	127	107	175	-0.9
	JPM US HY index spd to worst*	378	-15.5	445	369	628	-1.0
	EMBIG Div spd to worst	339	-6.7	360	328	439	-0.7
	CEMBI Broad spd to worst	248	-4.7	270	235	350	-0.7
	iBoxx Euro HG spd to govies*	61	-0.9	60	54	68	0.4
	US Financials spd to Tsy	76	-2.1	88	75	126	-1.0
	Euro Financials spd to govies	78	-1.0	79	72	99	-0.2
	10Y AAA muni spd to Tsy	-40	0.1	-34	-68	23	-0.2
	10Y AA taxable muni spd to Tsy*	49	1	65	44	106	-0.8
Currencies	EUR/USD	1.183	0.4%	1.195	1.162	1.230	-0.7
	USD/CHF	0.917	0.4%	0.909	0.880	0.943	0.5
	USD/JPY	109.84	-0.1%	107.28	102.79	111.54	1.0
	JPM Trade-weighted USD index	119.50	-0.4%	119.62	117.20	124.80	-0.1
	GBI-EM Global FX index	89.37	0.7%	88.74	85.19	90.77	0.5
	Bitcoin spot	45078	-7.9%	35815	10224	63410	0.6
Commod-ities	Gold futures ($/t oz)	1798	-1.1%	1826	1678	1962	-0.4
	Brent oil futures ($/bbl)*	71.45	-1.7%	60.32	37.65	76.49	0.9
	LME Copper 3M rolling forward ($/tonne)*	9388	-0.2%	8557	6387	10460	0.7



* 9/09/21 levels for 30Y FNCL, US HY, iBoxx Euro HG, AA taxable munis, brent oil, and copper; 9/10/21 level for all others

Source: J.P. Morgan, Bloomberg Finance L.P., ICE, IHS Markit

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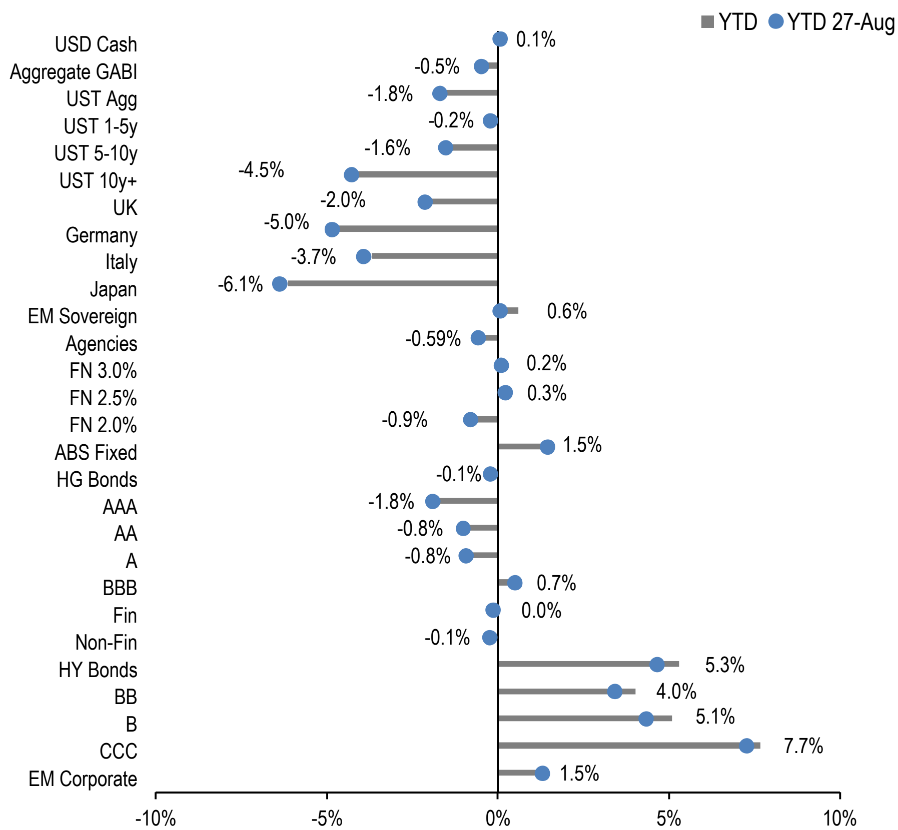
Exhibit 8: Total returns were mixed since we last published

Year-to-date returns on various fixed income indices current and as of last publication; %



Source: J.P. Morgan

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Economics

- **The labor market tightened as job openings jumped to an all-time high in July**
- **COVID-19 case growth has slowed recently and airline spending data show early signs of recovery**
- **PPI inflation was firm overall in August, though some PCE-related categories were soft**
- **We forecast the CPI rose 0.4% in August while nominal retail sales fell by 0.2%**

Job openings rose to new heights in July even as hires declined. This labor market tightening occurred as COVID-19 cases rose rapidly in July, suggesting that labor demand was relatively unaffected by the Delta variant even as pandemic-related factors further constrained labor supply. Such Delta-related headwinds to economic activity may subside soon, with case growth declining in recent weeks. Airline spending in the Chase card spending data is perhaps beginning to recover from its Delta-induced decline. PPI inflation prints were firm across the board in August, as expected, with the headline index up 0.7%m/m and the core index up 0.6%m/m. Prices for used vehicles declined in August while auto inventories fell further. Weaker-than-expected inventory data present some downside risk to our 7.0% saar GDP growth forecast for 3Q.

Next week we expect another firm CPI print, with the headline index up 0.4%m/m (5.4%oya) in August and the core index up 0.31%m/m (4.2%oya). While such rates of inflation are strong by pre-pandemic standards, they are softer than the rapid increases reported earlier this year. In part this cooling is expected now that pandemic-induced swings in prices for some sectors of the economy are normalizing. We also expect that nominal retail sales declined by 0.2%m/m in August, with some pullback associated with the spread of the Delta variant. The September reading from the University of Michigan Consumers Survey, which fell sharply in August, may provide clues to how persistent Delta concerns are in weighing down sentiment.

Tight labor markets and declining claims

Job openings continued to rise rapidly in July, jumping by 749,000 to 10.934mn, evincing sustained growth in labor demand despite the coincident rise in COVID-19 cases. The number of hires, by contrast, edged down in July. Thus, the ratio of openings to hires—which measures labor market tightness and the ease with which firms can find workers—moved up to 1.64, a historically high level. The rate of quits, which tends to co-move with tightness, was unchanged in July at 2.7%—remaining at a level higher than any attained prior to the pandemic (Figure 1).

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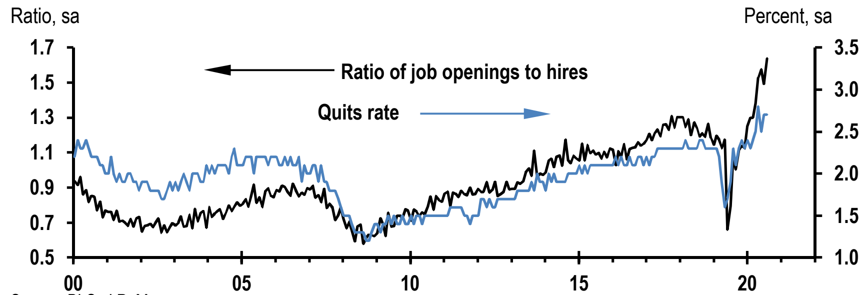
Figure 1: Labor market tightness and quits rate

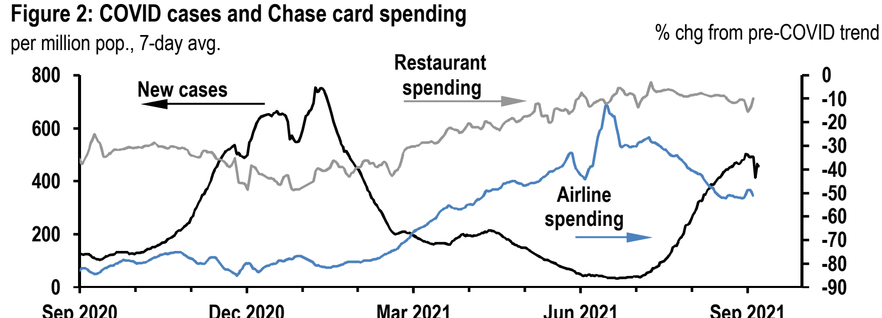


Source: BLS, J.P. Morgan

This additional tightening of the labor market in July after easing in June suggests that labor demand is continuing to outpace labor supply. Evidence from sectoral measures of labor market tightness suggest that much of the pickup in wage growth in recent months is attributable to elevated labor market tightness.

The loss of momentum in July hiring may be attributable to the resurgence of COVID-19 cases, which increased more than sixfold that month. Indeed, the Delta-variant-led rise in cases contributed to a decline in consumer spending in some entertainment and travel sectors in the latter half of July. The unexpected deceleration in employment growth in the August jobs report likewise appears attributable to Delta-related concerns weighing on activity. There are signs that the Delta headwinds are beginning to abate, with case growth declining and airline spending perhaps beginning to recover in recent weeks (Figure 2).

Figure 2: COVID cases and Chase card spending



Source: Our World in Data, J.P. Morgan

Underlying chase card data can be found here

Despite the loss of momentum in employment growth in August, continuing claims for unemployment insurance in both regular and pandemic-related programs fell consistently through the month (Figure 3). We expect the broader count of continuing claims to drop sharply now that the PUA and PEUC programs have ended at the federal level, although it will be another few weeks before we see the data on filings for the period following the federal expiration. In the latest data currently available, for the week ending August 21, there were over 5mn claims filings for PUA and almost 4mn claims filings for PEUC. Given that states that ended expanded benefits early had no faster job growth in July than the rest of the country, the end of federal benefits is unlikely to affect labor market conditions through September although we will be watching related issues closely.

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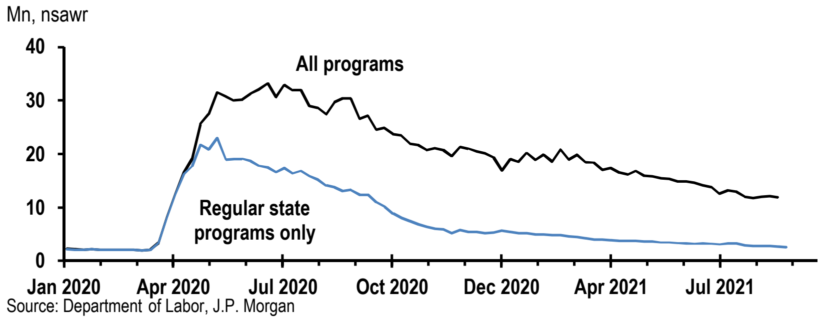
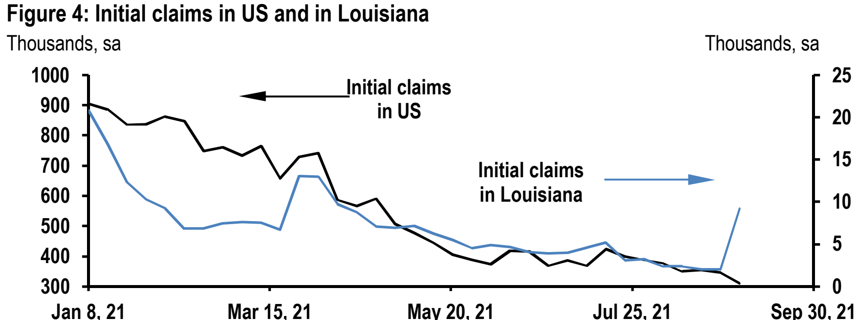
Figure 3: Continuing claims



Source: Department of Labor, J.P. Morgan

While Hurricane Ida brought devastation to parts of the country, so far there are few signs that it has had an impact on the aggregate economy. Initial claims in regular state programs in Louisiana spiked for the week ending September 4. By contrast, initial claims for the entire country actually beat expectations, falling to 310,000 from 345,000 in the prior week (Figure 4). The impact of the hurricane may become material in the aggregate over time as it is likely to add some strain to already-stressed supply chains. The academic literature has documented that such severe natural disasters tend to impose substantial losses among firms further along the supply chain.

Figure 4: Initial claims in US and in Louisiana



Source: DOL, J.P. Morgan

Firm PPI inflation across the board

PPI inflation was firm again in August, albeit with softness in some categories used to estimate PCE inflation. The headline producer price index (PPI) increased 0.7% in August while the core rose 0.6% away from food and energy. These gains matched our forecasts, but the headline was a tick above the consensus expectation.

Both the headline and the core index continued to increase at solid rates through August, although the August monthly changes were somewhat softer than a few of the other recent monthly gains. With the strong recent run of price increases, the headline PPI jumped 8.3%oya in August while the core increased 6.7% (Figure 5). Our tracking estimate of the core PCE price index points to a 0.15% gain in August (3.4%oya) with next week's CPI release providing additional important information to help refine this estimate.

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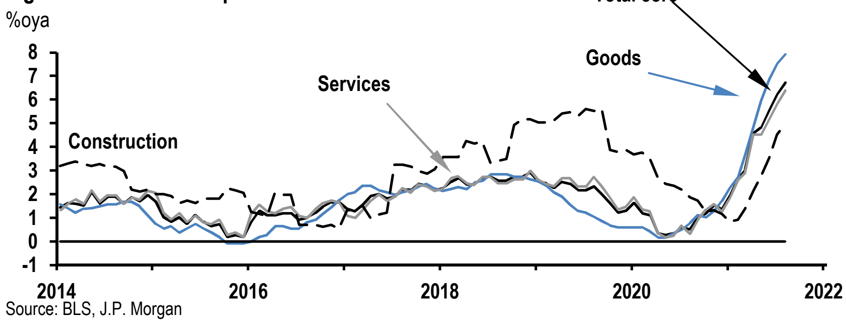
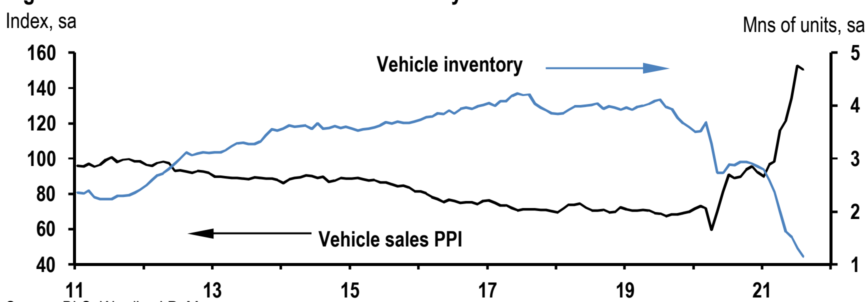
Figure 5: Core PPI components



Source: BLS, J.P. Morgan

In part, the softness in PCE-related components of the PPI report was due to prices for used vehicles declining somewhat in August after having surged in earlier months. This contributed to a decline in seasonally adjusted prices for vehicle sales overall despite another monthly increase in prices for new vehicles. Elsewhere, there remain signs of supply chain issues weighing on the auto sector. Auto inventories plunged further in August (Figure 6). Overall, the persistent weakness in inventories represents some downside risk to our 3Q GDP growth forecast of 7.0% saar.

Figure 6: Vehicle sales PPI and vehicle inventory



Source: BLS, Ward's, J.P. Morgan

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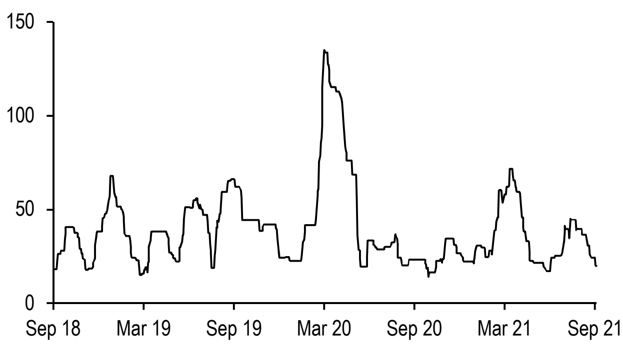
Treasuries

- **Treasuries remain firmly entrenched in the range they have held for the past two months, despite heavy Treasury and corporate supply this week. Though growth has decelerated somewhat, high-frequency data indicate the labor market continues to tighten. Moreover, with COVID cases peaking, the impact on growth should be relatively fleeting**
- **Meanwhile, the Treasury market remains priced for sub-trend growth over the next year. We recommend maintaining shorts in 10-year Treasuries. Near term, downside risks are likely to stem from domestic political debates around the debt ceiling, and upside risks from a potential hawkish outcome at the September FOMC meeting**
- **The House will not return from recess for another 10 days and Congress has a number of legislative balls in the air. Thus, it's unlikely new debt ceiling legislation is passed before late-September. The risks of a technical default remain very low, but the ramifications are far reaching, and there are early signs of stress in the T-bill market. As we approach the drop-dead date, we expect short-dated T-bills to underperform further, while risk aversion could lead long-end Treasury yields to decline**
- **The 3-year sector is cheap along the curve: initiate 146:25 weighted old 2s/old 3s/5s belly-richening butterflies**
- **Treasury released its MSPD for August, which showed P-STRIPS outstanding rose $3.1bn over the month**
- **We estimate Treasury has approximately $111bn in extraordinary measures available, which should last well into the second half of October. After extraordinary measures are exhausted, it could draw down on its cash balance in order to spend normally through the end of October**

Market views

Exhibit 1: Yields have been trading inside a narrow range

Rolling 40-day range volatility for 10-year Treasury yields; bp



Source: J.P. Morgan

Exhibit 2: All three mid-month auctions cleared through pre-auction levels amid above-average end-user demand

Statistics for this week's Treasury auctions; units as indicated

		3s	10s	30s
Auction tail (bp)	Sep	-0.3	-1.3	-2.0
	Aug	-0.1	-2.9	1.2
	Prev 3M avg	0.1	-1.4	1.6
End-user demand (%)	Sep	75.6	87.7	86.9
	Aug	73.8	90.4	81.7
	Prev 3M avg	72.6	85.2	80.5
Bid-to-cover ratio	Sep	2.45	2.59	2.49
	Aug	2.54	2.65	2.21
	Prev 3M avg	2.47	2.54	2.23

Source: US Treasury, J.P. Morgan

Yields have been notably range-bound this summer and the last two weeks were no exception. **Exhibit 1** shows how the range over the last 40 trading days, roughly

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20bps, is close to the lows we've seen over the last few years. This week's Treasury auctions all stopped rich relative to pre-auction levels, with 30-year bond attracting record-user demand (**Exhibit 2**). As we pointed out earlier this week (see *US Treasury Market Daily*, 9/08/21) our most recent Treasury Client Survey is flagging that positioning has turned more bearish once again: one a net basis, 28% of the clients we survey are short, the highest since June 14. Thus, we think the strength of end-user demand could reflect short covering. On top of that, recent allotment data shows that foreign investors have been responsible for the pick-up in end user demand and while we won't get the breakdown for this week's auctions for another two weeks, that bid has likely remained part of the story, further explaining the strong auction results. On balance, 2-year yields were relatively unchanged over the past two weeks, while, 5-, 10-, and 30-year yields rose 2bp, 3bp, and 2bp, respectively.

After the lackluster August nonfarm payrolls number which has been rightfully attributed to Delta concerns, next week's CPI and retail sales data for the month of August will provide important clues as to whether the recent deterioration in confidence metrics is translating to actual individual behavior changes. The blackout period ahead of the September FOMC meeting starts tomorrow, so we won't hear back from Federal Reserve officials until Chair Powell's press conference following the meeting on September 22.

As we look forward, our core views are relatively unchanged. The deceleration in payroll growth in August does suggest some downside risk to our recently downwardly revised 7.0% real GDP forecast for 3Q21 (see *Job growth hits the skids, but u-rate keeps on falling*, Michael Feroli, 9/3/21). However, we are encouraged that high-frequency data have not shown any further signs of deterioration: initial claims declined 35k to 310k in the week ending September 4, and are nearly 39k lower since the survey week for the August employment report, indicating the labor market continues to recovery (see *US: Regular jobless claims filings keep trending lower*, Daniel Silver). Moreover, there is burgeoning evidence that this wave of infections is cresting, as the 7-day average of new cases has declined from a peak of 167k on September 1 to 150k as of yesterday, and the effective reproduction number has declined back toward 1 from its peak of over 1.3 in early August (see *QED: Global COVID Tracker*, 9/10/21). **Thus, if these trends hold, any drag on activity should be short-lived, and we continue to forecast significantly above-trend growth into 2022.**

Meanwhile, the Treasury market remains decidedly priced for sub-trend growth over the coming year. **Exhibit 3** shows that 10-year Treasury yields are trading more than 20bp below their model-implied fair value. To be fair, yields tend to mean revert with relatively low frequency, but this is one of the largest gaps we have observed in recent years. Putting the pieces together, we continue to think that the spread of the Delta variant will have a more limited impact on US growth, and there are early indications that this fourth wave of infections is peaking. **Moreover, with valuations still rich we recommend maintaining shorts in 10-year Treasuries**.

The risks to this view mainly stem from political developments—as we discuss below, it does not appear Congress will fashion a debt ceiling solution over the near term, and it's likely this debate leaks into October, getting closer to the drop-dead date for a potential technical default. This could result in increased risk aversion, higher T-bill yields around the potential technical default date, and a flight-to-quality longer out the curve. However, on the flip side, we think the September FOMC meeting could present upside risks to yields. OIS forward continue to imply Fed

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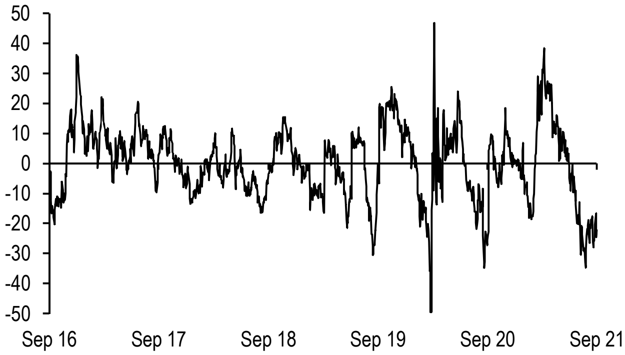
liftoff will occur late in 1Q23, but after that, are pricing in only 2.5 additional 25bp hikes by the end of 2024. With the latest SEP already projecting the unemployment rate below 4% and inflation above 2% in 2023, it's likely the 2024 dots project a more aggressive path of tightening when they are introduced on September 21.

Exhibit 3: Intermediate yields remain more than 20bp below their model-implied fair value

Residual of J.P. Morgan 10-year Treasury Fair-Value model*; bp

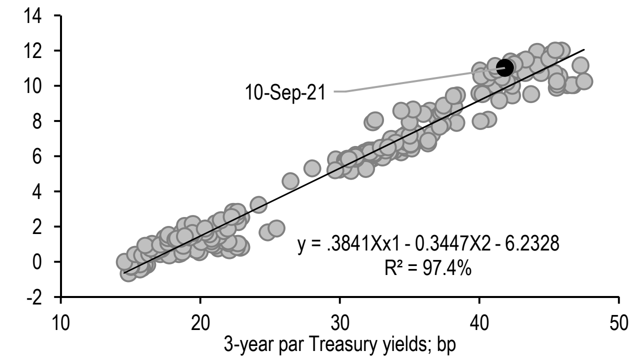


* Regression of 10-year Treasury yields on 5Yx5Y seasonally-adjusted TIPS breakevens (%), 3m3m OIS rates (%), Fed policy guidance (months), J.P. Morgan US Forecast Revision Index (%), and CFTC spec positions in interest rate futures (3y z-score). Regression from 9/10/16-9/10/21. R-squared = 97.0%, SE = 12.0bp

Source: J.P. Morgan, CFTC

Exhibit 4: The 3-year sector appears cheap along the curve, after adjusting for rate levels and curve slope

2s/3s/5s par Treasury butterfly regressed on 3-year par Treasury yields (bp) and 2s/5s par Treasury curve (bp), regression over the last 12 months; bp



Source: J.P. Morgan

Turning to relative value, we find value in the 3-year sector along the curve. Exhibit 4 shows the 2s/3s/5s butterfly appears nearly 2bp cheap after adjusting for the level of yields and the slope of the curve at the front end (**Exhibit 4**). **Thus, we recommend positioning for outperformance of the 3-year sector by initiating 146:25 weighted old 2s/old 3s/5s belly-richening butterflies (see Trade recommendations)**.

The debt limit is beginning to impact the Treasury market

The August MSPD released this week showed that since the debt issuance suspension period (DISP) was declared on August 2, Treasury has used $275bn in extraordinary measures with nearly all of this coming from the Thrift Savings Plan (**Exhibit 5**). Moreover, we estimate it has approximately $111bn in extraordinary measures available, assuming the DISP lasts through the end of October. **Based on our forecast, we project that these measures will last well into the second half of October (Exhibit 6). At that time, Treasury could draw down its cash balance, allowing spending to continue through the end of October.**

This topic has been on the mind of market participants this week, as it does not appear that Congress is anywhere close to passing new debt limit legislation. We know Congress has many balls in the air right now: the bipartisan infrastructure package has been passed by the Senate, but the House will not take this up for a vote until later this month. Moreover, Congressional leadership continues to debate the size and scope of what will be included in the $3.5tn budget resolution passed by the House late last month. Finally, Congress needs to pass a new continuing resolution to authorize spending for FY22 by the end of the month, or else it risks a government shutdown. Amid all this, the debt ceiling has taken a back seat, which has concerned investors that negotiations will run into October, drawing near to the drop dead date discussed above.

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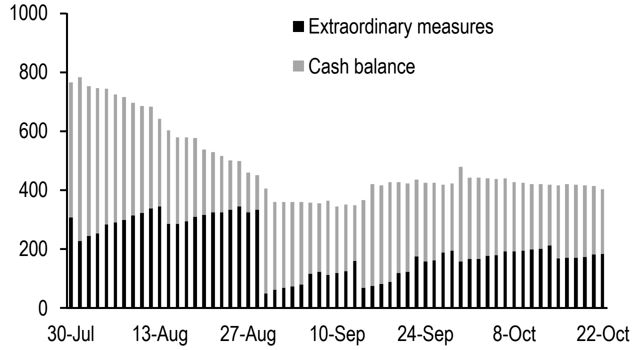
Exhibit 5: We think Treasury has approximately $111bn in extraordinary measures to draw on over the next two months…
Treasury borrowing capacity under extraordinary actions; August usage vs. Sep-Oct projections; $bn

	Outstanding Jul 2021	Outstanding Aug 2021	Borrowing Headroom	
			Aug '21 Used	2021 Projected
TSP	277	20	257	20
CSRDF/PSRHBF	946	928	18	63
Exchange Stabilization Fund	23	23	0	23
Federal Financing Bank	6	6	0	6
Total	1252	976	275	111

* Assumes Debt Issuance Suspension Period of 3 months: August 1 through October 31
Source: US Treasury, J.P. Morgan

Exhibit 6: …and those are likely to last well into the second half of October, after which time it could draw down on its cash balance
Projected estimates of Treasury's available resources; $bn



Source: US Treasury, J.P. Morgan

In an extreme scenario where Congress does not pass legislation to raise the debt limit before all of Treasury's available resources are depleted, this would result in a "technical default," where Treasury would miss a coupon or principal payment on an outstanding obligation, but where the delay is quite short-term (less than a few days) and is not viewed by the market as reflecting a real deterioration in the solvency of the US. Though such a default would be brief, the impact on financial markets and the economy could be lasting. **Given the experience of the debt ceiling debate in 2011, we think a technical default is extremely unlikely, but such an event could impact markets and the economy in a number of permanent ways**.

First, a technical default would likely negatively impact the sovereign ratings of the United States. Though S&P downgraded the US in 2011 to reflect concerns over policymaking, the other major ratings Agencies maintained their top rating, and any default, though brief, would likely result in a rating downgrade. Previous work has shown that there have been four other "grace period defaults" in recent history, and in each case, the default was accompanied by a ratings downgrade (see *The Domino Effect of a US Treasury Technical Default*, Terry Belton, et al, 4/29/11).

Second, a technical default would likely impair demand for Treasuries. Foreign ownership has declined from its peak earlier this decade, but **Exhibit 7** shows that international investors still own nearly one-third of the Treasury market. Even if a technical default is cured immediately, foreign demand for Treasuries would likely be adversely impacted. There is already historical precedent, as Fannie Mae and Freddie Mac's move into conservatorship in 2008 has led to permanently lower foreign sponsorship for GSE debt. As a result, a technical default would likely weaken foreign demand, resulting in higher Treasury yields.

Third, it would likely have adverse implications for financing markets. The repo market plays a pivotal role in maintaining liquidity in fixed income markets, particularly the Treasury market: it allows dealers to finance long positions and source securities for setting shorts in order to perform their function as market-makers. Repo secured by Treasury collateral amounts to $1.6tn and comprises almost 75% of the total repo market (**Exhibit 8**). A sharp repricing of Treasury collateral in response to a technical default would likely increase haircuts, potentially leading to significant margin calls, some forced deleveraging, and a decline in lending capacity.

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Exhibit 7: Foreign investors own nearly a third of the Treasury market, through that share has fallen from its peak a decade ago

Ownership of Treasury securities (excluding savings bonds) by investor type; %

Institution Type	2010	2015	2019	2021
Foreign Investors	50%	46.2%	39.2%	32.9%
Federal Reserve	12%	20.1%	14.9%	24.7%
Money market funds	4%	3.6%	6.1%	11.1%
Household	10%	6.4%	11.3%	7.2%
Money managers	5%	6.3%	7.7%	5.9%
Banking institutions	3%	4.0%	5.2%	5.9%
Pension funds	4%	3.6%	4.6%	2.3%
State and local govt	5%	4.5%	3.9%	4.9%
Others*	2%	1.4%	2.0%	1.5%
Insurance companies	3%	2.3%	2.2%	1.8%
ETFs	1%	0.6%	1.4%	1.3%
Broker dealers	1%	0.7%	1.3%	0.1%
Corporate	1%	0.3%	0.3%	0.4%

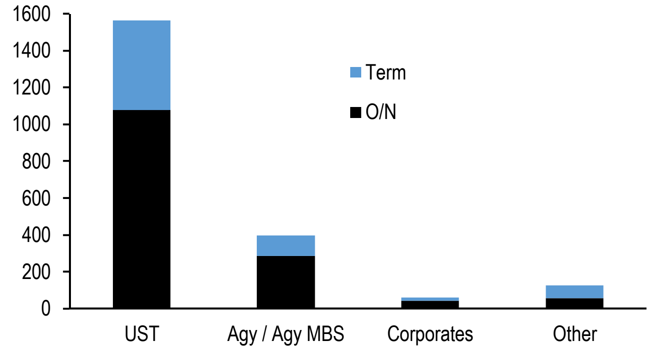
* through 6/30/2021

** Includes GSEs, issuers of ABS, and holding companies

Source: Federal Reserve Z.1

Exhibit 8: Almost 75% of all repo transactions are collateralized by US Treasury securities

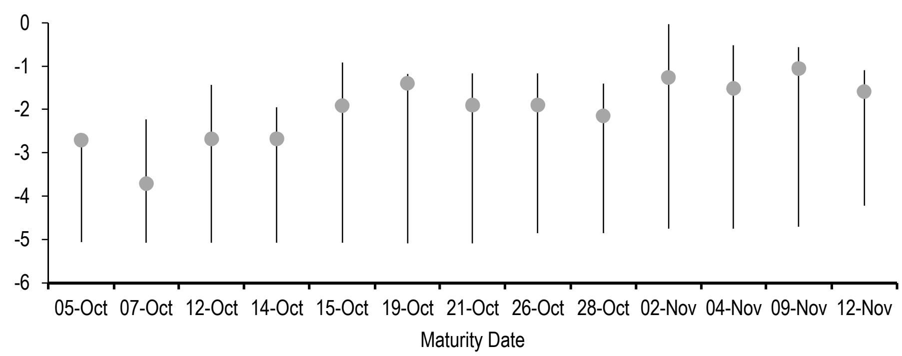
Collateral and maturity breakout of repo market; $bn



Source: Federal Reserve Bank of New York

Exhibit 9: T-bills maturing in mid- to late-October have cheapened relative to surrounding tenors, likely reflecting debt ceiling concerns

1-month range and current matched-maturity OIS spreads on Treasury bills maturing between early-October and mid-November; bp



Source: J.P. Morgan

With no clear path toward debt limit resolution over the near term, we are at the point where this could begin to impact financial conditions. Already, T-bills which mature in the second half of October, around the drop dead date for a potential technical default, have begun to underperform versus surrounding issues. **Exhibit 9** shows that T-bills have broadly cheapened relative to matched-maturity OIS over the last month, but that T-bills maturing in mid-to-late October trade at a discount relative to T-bills maturing before or after this period. This likely stems from end users shying away from these securities, as the risk of a technical default, while remote, would bring with it enormous ramifications, as discussed above. If form holds, there is room for these tenors to underperform further, given the experience of previous debt ceiling episodes (see *US Treasury Market Daily*, 5/14/21). However, given that T-bill net issuance has totaled approximately -$950bn YTD and that the supply of high-quality shorter-maturity assets remain scarce, we would expect the moves to be muted, especially compared to the 2011 and 2013 episodes.

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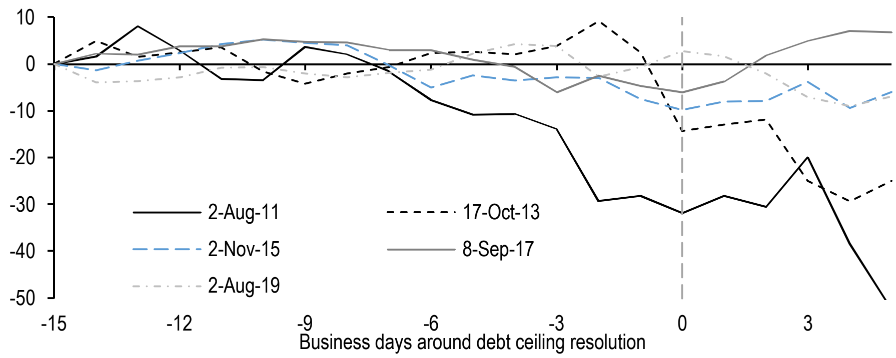
However, there is a risk this could impact long-term yields in coming weeks as well. **Exhibit 10** shows the cumulative change in 10-year Treasury yields, adjusting for the market's Fed policy and inflation expectations, in the weeks leading up to debt ceiling resolution, using the last 5 major episodes over the past decade. The market's reaction is not consistent—we can see that Treasury yields showed a muted reaction just before new debt ceiling legislation was passed in the summer of 2017 and 2019, and this makes sense, as Congress managed to pass new legislation at least a month prior to the prospective drop dead date in either of these episodes. However, we can see that in 2011, 2013 and 2015, when debt limit negotiations came down to the wire, and new legislation as passed only days before a potential technical default, that Treasury yields declined, net of the market's Fed and inflation expectations, with 2011 being the standout example. **Thus, knowing that the House is not back in session for another 10 days, and that Congress has numerous legislative balls in the air, it's likely that these negotiations leak into late September and perhaps beyond, running the risk that this lack of action leads Treasury yields to decline as risk aversion increases**.

Exhibit 10: Treasury yields have tended to decline around more contentious debt ceiling debates, particularly 2011, 2013, and 2015

Cumulative change in 10-year Treasury yields, adjusted for Fed and inflation expectations*, in the business days around debt ceiling resolutions; bp



* 10-year yields regressed on 3m3m OIS rates and 5y5y TIPS breakevens over rolling 2-year period
Source: J.P. Morgan

STRIPS update

The August MSPD also showed P-STRIPS outstanding rose $3.1bn over the month, a reversal from last month's decline and matching the pace recorded for June, though still a softer pace than we observed over the first five months of the year (Exhibit 11). Recall that pension funded ratios rose 15%-pts over 3Q20-1Q21 but have since declined as long-term yields declined decisively. Along the curve, stripping activity remained focused at the very long end, with the pace accelerating modestly from last month but remaining well below its 3-month average (**Exhibit 12**). **Specifically, $1.5bn of 2.00% Aug-51s were stripped over the month, and an additional $1.3bn of the 1.625% Nov-50s were also stripped, bringing the fraction of the bond held in stripped form to 24%.**

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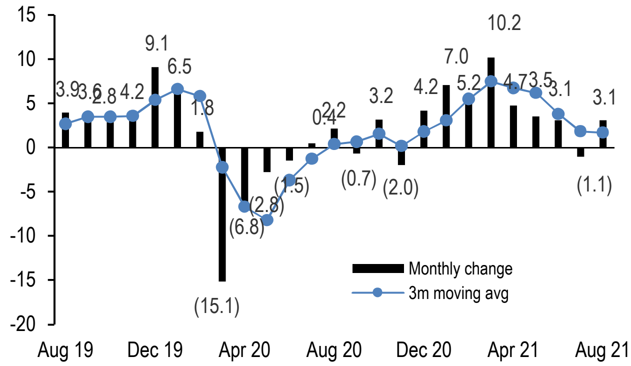
Exhibit 11: P-STRIPS outstanding rose $3.1bn in August, a reversal from last month's decline

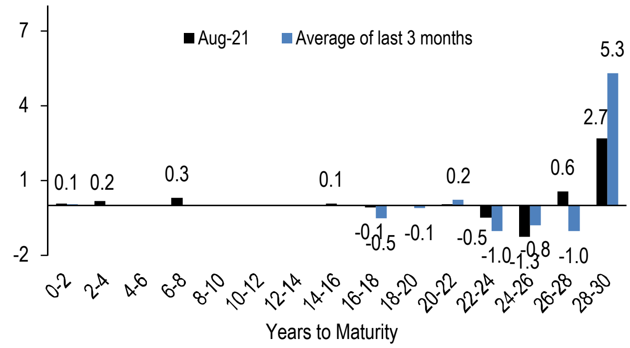
Monthly change in P-STRIPS outstanding with 3-month moving average; $bn



Source: US Treasury

Exhibit 12: Stripping activity remained concentrated in the 28- to 30-year sector, though the pace remained below its 3-month average

Monthly change in P-STRIPS outstanding by sector in August 2021 vs. prior 3-month average; $bn



Source: US Treasury, J.P. Morgan

Trade recommendations

- **Initiate 146:25 weighted old 2s/old 3s/5s belly richening butterfly**
  The 3-year sector appears cheap along the curve.
- – Sell 146% risk, or $195mn notional of T 0.125% Jul-23s (yield: 0.193%; bpv: $187/mn)
- – Buy 100% risk, or $86.4mn notional of T 0.375% Aug-24s (yield: 0.422%; bpv: $290/mn)
- – Sell 25% risk, or $12.9mn notional of T 0.75% Aug-26s (yield: 0.815%; bpv: $485/mn)
- – Weighted spread is -6.3bp. One-month weighted carry is -0.8bp and roll is -0.5bp

- **Maintain 100:85 weighted 2.875% May 25s/ 2.125% May 26s steepeners**
- – Stay long 100% risk, or $64mn notional of T 2.875% May-25s
- – Stay short 85% risk, or $43.9mn notional of T 2.125% May-26s
- – (*US Fixed Income Markets Weekly*, 8/20/21). P/L since inception: 0.6bp

- **Maintain 10-year duration shorts**
- – Stay short 100% risk, or $50mn notional of T 1.625% May-31s
- – (*US Fixed Income Markets Weekly*, 6/11/21). P/L since inception: -19.0bp

- **Maintain 99:100 weighted 2.75% Feb-28s/3.125% Nov-28s curve flatteners**
- – Stay short 99% risk, or $60mn notional of T 2.75% Feb-28s
- – Stay long 100% risk, or $54mn notional of T 3.125% Nov-28s
- – (*US Fixed Income Markets Weekly*, 6/11/21). P/L since inception: 2.4bp

- **Maintain 3s/7s steepeners**
- – Stay long 100% risk, or $175mn notional of T 0.25% Mar-24s
- – Stay short 100% risk, or $76.8mn notional of T 1.25% Mar-28s
- – (*US Fixed Income Markets Weekly*, 4/9/21). P/L since inception: -29.7bp

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Closed trades in last 12 months

P/L reported in bp of yield unless otherwise indicated

TRADE	ENTRY	EXIT	P/L
Duration			
2-year duration shorts	2/5/2021	2/25/2021	5.1
5-year duration longs	02/25/21	03/02/21	12.2
Curve			
5s/30s steepeners	05/15/20	09/18/20	19.5
7s/30s steepeners	10/30/20	11/04/20	-0.4
3s/10s steepener	11/20/21	01/13/21	25.9
3s/10s steepener	01/28/21	02/17/21	20.4
Relative value			
1.125% Feb-31s/ 2.25% May-41s/1.25% May-50s flies	05/21/21	08/20/21	-5.8
4.75 Feb-37s/2.75 Aug-42s steepener	07/31/20	08/28/20	3.9
7s/10s steepeners	10/02/20	10/21/20	2.1
3 May-42/3 Nov-44s flatteners	08/20/20	12/11/20	0.9
1.125% May-20s/ 3.125% Feb-43s steepeners	10/15/20	01/14/21	-5.3
0.125 Jan-24s/2.125 Jul-24s flatteners	03/26/21	05/07/21	2.3
10s20s30s belly-richening fly	01/22/21	05/07/21	-5.1
99.1/100 weighted 0.625% Aug-30s/1.125% Feb-31s steepeners	03/05/21	06/11/21	-1.0
Number of positive trades			9
Number of negative trades			5
Hit rate			64%
Aggregate P/L			74.7

Source: J.P. Morgan

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Technical Analysis

- **The 10-year note yield bearishly bases in front of support surrounding 1.40%. With technical conditions now neutral, we look to either improved economic data surprise index trends or trends in other cyclically sensitive market to help drive a bearish break and resumption of the longer-term bear market.**
- **The ratio of industrial to precious metals has a longstanding correlation to global bond yields. During the COVID-19 era, industrial metals 12-month performance appears to have a stronger relationship...**
- **…With industrial commodities showing some signs of life recently, a multivariate analysis using both of those factors as independent variables shows long duration yields 30-60bp too low.**
- **The 5s/30s curve continues to rebase at the 108-115bp support zone. We have been looking for the curve to reverse from that area and steepen in the months ahead. Short-term resistance rests at 116bp and then 123.5bp.**
- **10-year TIPS breakevens rebound from the 235bp 50-day MA and probes well-defined summertime range resistance near 242-245bp. Ultimately, we think breakevens can breakout through resistance and advance back toward 260bp in the months ahead. Range support sits at 220-224bp. We see a floor for the market at 200-211bp if an aggressive risk-off trend develops into the early-fall period.**

Yields pressure pattern support and other cyclically sensitive market action starts to bolster the bearish bond call

Little changes in chart based technicals for the Treasury market over the past two weeks, as the market retains the same range parameters and most indicators are near neutral. With the **10-year note** challenging key support parameters surrounding **1.40**% again, the yield pattern starts to look more like a bearish base pattern. Similar patterns are present in other cyclically sensitive markets, most notably WTI crude and the Energy sector in US equity markets, as well as commodity sensitive FX pairs. The bearish yield pattern unfolds after the **10-year note** rejected resistance at the **1.16%** Mar-May pattern objective and **1.14%** Aug 2020 50% retrace (**Exhibit 1**). Importantly, the 30-year bond rejected the 1.76% 2020 yield base pattern cheaps at that same time. The equivalent level for Tens sits at **0.95-1.00%**. In our view, a move through the **1.375%** Mar 38.2% retrace, **1.425%** Jul yield high, and **1.465%** Mar-May range yield low would shift medium-term trend momentum back to bearish for the first time since early-spring. With technical indicators no longer near the extremes realized in July, we look to either improved economic surprise index trends to underpin any developing bearish trend momentum, or upside breakouts in commodity markets to suggest a broader array of market participants are looking past the current lull in the data. At a minimum, we expect the market to retest the **1.79%** 2018 50% retrace and Mar yield high into the fourth quarter. We also still see the prospects for that trend to extend to the next zone of support in the **1.90s** in the months ahead.

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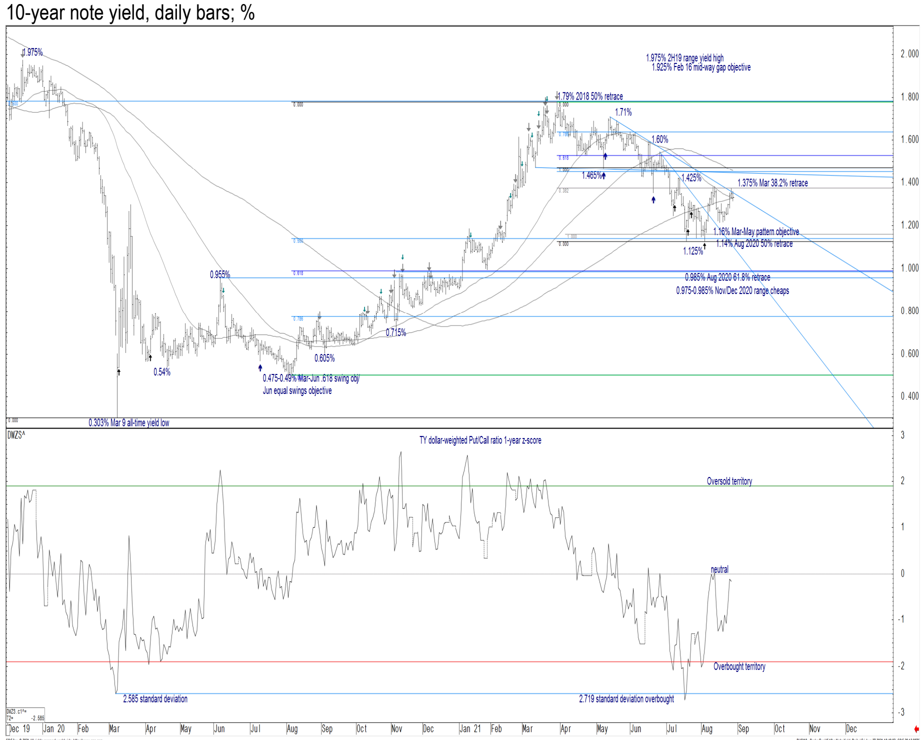
Exhibit 1: The 10-year note yield bearishly bases in front of support surrounding 1.40%. With technical conditions now neutral, we look to either improved economic data surprise index trends or trends in other cyclically sensitive market to help drive a bearish break and resumption of the longer-term bear market...

10-year note yield, daily bars; %



Source: J.P. Morgan, CME, CQG

The renewed strength in industrial metals this week adds some confidence to our view. The Aluminum rally accelerates after the break from a multi-month consolidation pattern, Copper moves back toward the upper end of its multi-month consolidation, and the Copper/Gold ratio also recovers back toward the May-Jul cycle highs. The regression models in **Exhibit 2** and **Exhibit 3** look at long duration yields and specifically the projected Fed Funds Terminal rate in the context of the commodity price action. We use the ratio of the J.P. Morgan Industrial Metals and Precious Metals Indexes as well as the Industrial Metals Index rolling 12-month performance as independent variables. Linear regressions since Mar 2016 and Mar 2020 both show longer duration yields too low and near the lower-end of their residual ranges, roughly 60bp and 30bp respectively. Interestingly, the industrial/precious metals ratio has the more durable statistical value over a long period of time. The year-over-year growth dominates the explanatory power during the Mar 2020-current period. In fact, the Mar 2020-Mar 2021 period shows roughly equal T-stat values. It is the Mar-Jul 2021 rates slide and decoupling from the industrial/precious metals index ratio that drives the sharp change in the statistics for **Exhibit 3**. As many investors have focused on the concept of peak growth as the core of their investment thesis, perhaps divergence from the more robust driver (index ratio) denotes the market putting too much attention on the difficult comparisons that started in spring 2021. Even if that attention remains on the more difficult year ago comparisons that stay in place through the first quarter of next year, yields still look too low by that standard and bearishly base in the lower end of that residual range (**Exhibit 3**).

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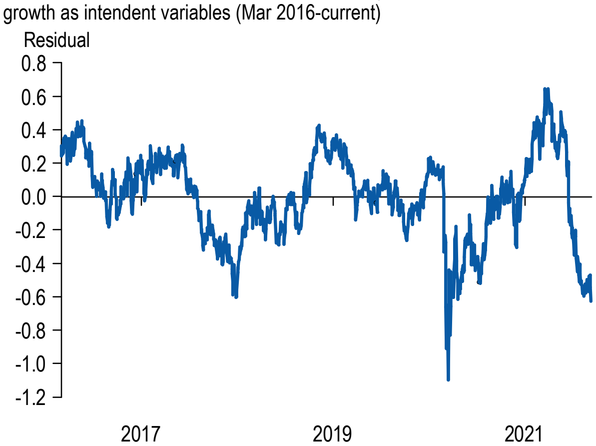
Exhibit 2: The ratio of industrial to precious metals has a longstanding correlation to global bond yields. During the COVID-19 era, industrial metals 12-month performance appears to have a stronger relationship...

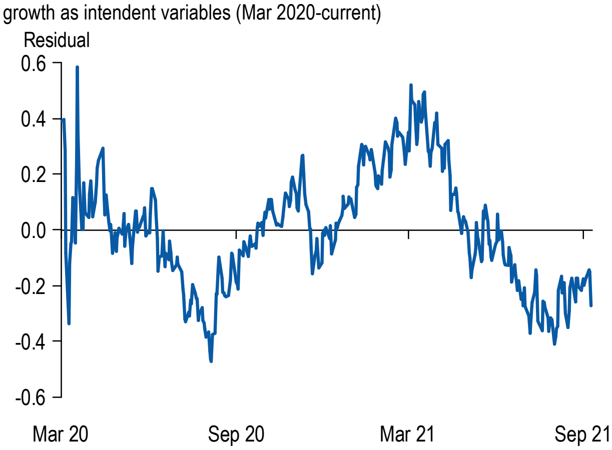
Residual of projected Fed Funds Terminal rate (Max 1m OIS rate in forwards over a ten year period) from a regression that uses the J.P. Morgan Industrial Metals/Precious Metals Index ratio and J.P. Morgan Industrial Metals Index YoY growth as intendent variables (Mar 2016-current)



Source: J.P. Morgan, CQG

Exhibit 3: ...With industrial commodities showing some signs of life recently, a multivariate analysis using both of those factors as independent variables shows long duration yields 30-60bp too low.

Residual of projected Fed Funds Terminal rate (Max 1m OIS rate in forwards over a ten year period) from a regression that uses the J.P. Morgan Industrial Metals/Precious Metals Index ratio and J.P. Morgan Industrial Metals Index YoY growth as intendent variables (Mar 2020-current)



Source: J.P. Morgan, CQG

The **5s/30s curve** continues to base at the **108-115bp** support zone. That includes the Feb-Jun range measured move objective, Aug 2019 50% retrace and Jul 2018 38.2% retrace (**Exhibit 4**). We have been looking for the curve to bottom in that area, and so far the price action remains consistent with that outlook. Tactical resistance rests at the **116bp** 50-day MA. We are still looking for the curve to steepen in a selloff. Our outlook would gain significant confidence with a break above the **123.5bp** Jun 21 pattern high. Key medium-term resistance sits at the **136-137.5bp** 200-day MA, Apr 2 low and Feb 50% retrace. On the downside, a move through **108bp** would leave the **95bp** Jul 2020 low and Aug 2019 61.8% retrace as the next meaningful support layer

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Exhibit 4: The 5s/30s curve continues to rebase at the 108-115bp support zone. We have been looking for the curve to reverse from that area and steepen in the months ahead. Short-term resistance rests at 116bp and then 123.5bp.

5s/30s curve; daily closes; bp

Source: J.P. Morgan, CQG

10-year TIPS breakevens bounce from the **235bp** 50-day MA and widen back to the upper end of the well-defined summertime range near pattern resistance at **242-243bp** earlier in the week (**Exhibit 5**). Despite multiple attempts, the market has failed to break out from the consolidation that has been unfolding since early-June. If we were to see another near-term failure at resistance, support is layered at the **227bp** Aug 20 close and the 200-day MA rising to **226bp**. Those levels are followed by the **224.5-225bp** Jun-Jul lows which mark support for the current range. As long as that area holds, we think there is a bias toward the upside into the fall, albeit one of limited amplitude. A successful break through **242-243bp** pattern resistance would seek next levels layered at the **249bp** Jun 1 close and the **250.5bp** May 17 78.6% retrace. Ultimately, we think breakevens can revisit the **257bp** cycle high. Note the Jun-Aug pattern measured move objective also falls in that area, followed by the Feb-May equal swings objective at **268bp**. To the downside, secondary support is clustered in the **220-222bp** area. Parameters there include the early-Mar breakout zone and Nov 2020 38.2% retrace. In an adverse scenario where we see breakevens narrow through those levels, we would expect the **200bp/211bp** early-Nov 50% and 61.8% retracement levels, **209bp** Jun-Jul downside breakout objective, and **205bp** 1Q21 consolidation pattern low to mark a floor for breakevens into the fall. In our view, such a move would represent a good opportunity to enter a widening trade.

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Exhibit 5: 10-year TIPS breakevens rebound from the 235bp 50-day MA and probes well-defined summertime range resistance near 242-245bp. Ultimately, we think breakevens can breakout through resistance and advance back toward 260bp in the months ahead. Range support sits at 220-224bp. We see a floor for the market at 200-211bp if an aggressive risk-off trend develops into the early-fall period.

10-year TIPS breakevens, daily closes; bp

Source: J.P. Morgan, CQG

Technical trade strategies

- **Hold 50% 5-year note short**
  – Hold 50% short from 0.81375% (roll adjusted avg). Use a stop through 0.60% for now.
- **Hold 25% 30-year bond short**
  – Hold 25% short from 0.035%. Use a stop through 1.72%.

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Trade	Entry Date(s)	Size	Exit Date(s)	Avg Entry Price/Yld	Avg Exit Price/Yld	realized bp+carry
10-year note short	6/2/2020	.50	6/8/2020	0.715	0.84	**6.0**
5s/30s curve steepener	7/24/2020	.50	8/27/2020	96	120	**12.0**
30-year bond short	9/3/2020	.50	10/15/2020	1.405	1.515	**5.0**
10-year Bund short	6/18/2020	.25	11/4/2020	-0.46	-0.65	**(5.0)**
5-year note long	10/30/2020	.50	11/9/2020	0.38	0.3475	**1.625**
10-year Gilt short	12/9/2020	.25	12/10/2020	0.23	0.17	**(1.5)**
10-year note short	11/30/2020	.25	12/10/2020	0.84	0.88	**1.0**
Australian 10-year bond short	11/13/2020	.25	12/23/2020	0.885	0.945	**1.5**
5-year note long	1/8/2021	.50	1/27/2021	0.475	0.405	**3.75**
10-year note short	1/27/2021	.25	2/8/2021	1.00	1.17	**4.0**
5-year note long	2/17/2021	.50	2/24/2021	0.55	0.63	**(4.0)**

Source: J.P. Morgan

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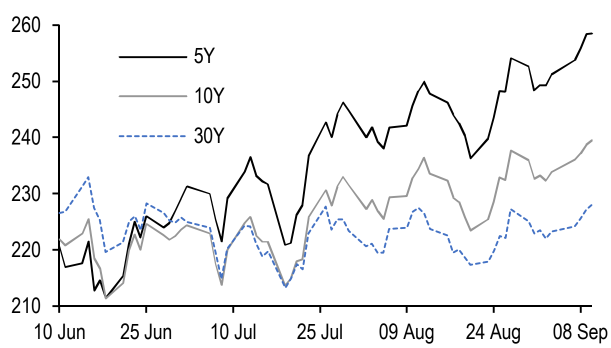
TIPS

- **TIPS at the very front end have outperformed along the curve in recent weeks, following Powell's marginally dovish Jackson Hole address, a weak August employment report, and more persistent production disruptions driven by the Delta wave**
- **Given continued labor supply constraints and bottleneck pressures, combined with evidence of lifting rent inflation, we project a relatively firm 0.31% increase in CPI-U NSA next week, above the current market fixing**
- **However, our medium-term inflation outlook has not changed, and forward breakevens out to the 5-year sector appear rich in our view, especially relative to nominal rates which imply a very benign Fed tightening path…**
- **…risks of a more hawkish September FOMC outcome and expectations for stronger job growth later this year suggest that front-end real yields should be biased higher. Thus, we stay short Apr-26 TIPS hedged with a notional-neutral long in Apr-22 TIPS**

Market views

Exhibit 1: While long-end breakevens have traded in a tight range over recent months, the front end has continued to widen…

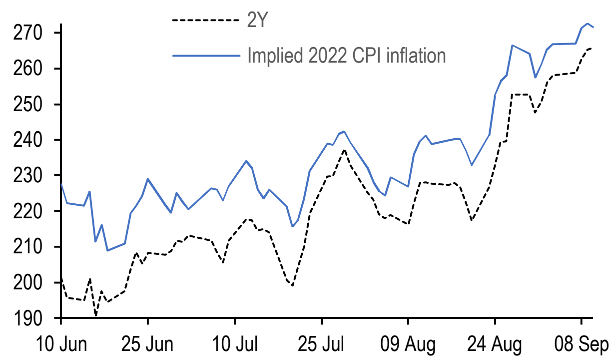
9/13/21-forward settle benchmark breakevens; bp



Source: J.P. Morgan

Exhibit 2: …more granularly, the widening over the last three weeks has been driven by a sharp repricing of inflation expectations through 2022

9/13/21-forward settle Apr-23 TIPS breakevens versus market-implied CPI inflation over 2022; bp



Source: J.P. Morgan

Since our last publication two weeks ago, TIPS breakevens continued modestly wider, with 5-, 10-, and 30-year breakevens widening 4bp, 2bp, and 1bp, respectively, after adjusting for carry over the period. With this move, on a carry-adjusted basis, 5-year breakevens have risen to new YTD highs, and 5-year real yields have fallen to new YTD lows. Meanwhile, the long end of the curve has remained tightly range-bound, with 30-year breakevens unchanged over the last three months (**Exhibit 1**). More granularly, the very front end of the curve has led the way higher over the last three weeks, with Apr-23 TIPS breakevens widening nearly 50bp net of carry, with the market-implied CPI inflation rate over 2022 rising by 40bp over the period to 2.72% (**Exhibit 2**). Certainly a number of factors have contributed to this repricing, and we acknowledge that inflation over the near term is likely to remain stronger than we previously expected, but these factors have not materially

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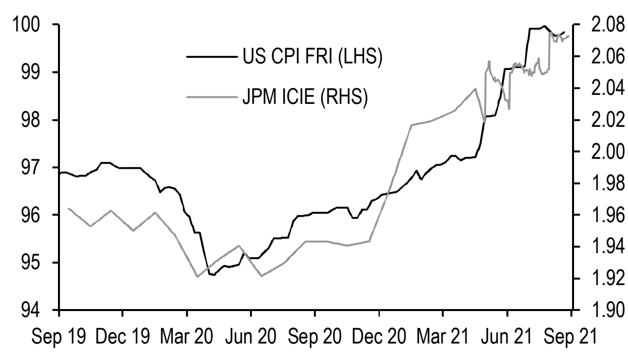
changed our medium-term outlook. Five-year breakevens continue to appear rich to us, especially against the backdrop of stubbornly low nominal yields, and we remain short 5-year TIPS hedged with a notional-neutral long in Apr-22 TIPS for a number of reasons.

First, Fed Chair Powell's Jackson Hole address likely contributed to the front-end outperformance observed recently—he reminded market participants that tapering is not tightening and that with the recent strength in inflation likely to prove transitory and much ground to cover to reach maximum employment, liftoff is likely still some ways off. However, the release of the September FOMC Summary of Economic Projections later this month may send a slightly different message, as it will capture the views of the broader Committee. Recall that at the June meeting, despite little change to the median unemployment and inflation forecasts, the median interest rate forecast dot for 2023 rose to reflect two hikes, with 7 out of 18 participants expecting a hike by the end of 2022, and front-end real yields rose sharply in the aftermath of the release. If the revision to the dots largely reflected a shift in participants' assessments of uncertainty and risks around their inflation projections as Powell suggested, then there is a decent risk that the median dots move higher again next month, particularly if the August CPI report shows signs of more persistent inflation. Notably, our CPI forecast revision index and estimate of the Fed's index of common inflation expectations have continued higher since the June FOMC meeting (**Exhibit 3**). Moreover, interest rate projections will also be introduced for 2024, which are likely to show expectations of further tightening. **Thus, we think the September FOMC meeting is likely to be a near-term headwind for TIPS, particularly around the 5-year sector**.

Exhibit 3: Our CPI revision index and index of common inflation expectations have both continued higher since the June FOMC meeting

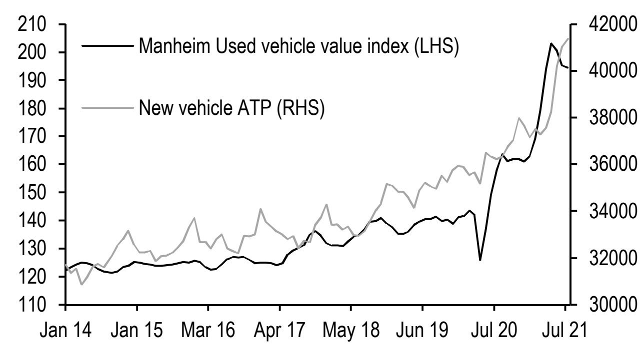
US CPI forecast revision index (LHS) versus J.P. Morgan Index of Common Inflation Expectations (%; RHS)



Source: J.P. Morgan

Exhibit 4: The decline in used vehicle prices appears to be stalling, while industry data show new vehicle prices rising at the fastest pace on record, as bottleneck pressures remain

Manheim used vehicle value index (LHS) versus new vehicle average transaction prices net of incentives (RHS, $)



Source: Manheim, ALG, J.D. Power, J.P. Morgan

Second, the August employment report showed a sharp deceleration in job growth, with details suggesting that Delta-related concerns weighed on activity and that labor supply constraints have continued to depress job creation—likely reducing the risk of a September taper announcement while increasing the risk of continued wage pressures (see *Job growth hits the skids, but u-rate keeps on falling*, Michael Feroli, 9/3/21). While we had expected these supply constraints to fade into the fall particularly as enhanced unemployment benefits expired, state-level data so far have shown little evidence that early ends to UI benefits have impacted employment growth (see *US: No effects of UI expiration in July labor market data*, P. McCrory & D. Silver, 8/26/21). **Ultimately, we still expect supply constraints will fade,**

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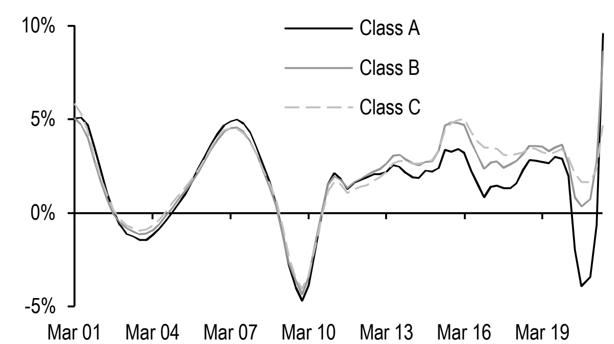
allowing wage growth to moderate, though the effects from UI expiration may be slower to take hold, especially if generous benefits have allowed households to build savings balances and remain out of the workforce for a bit longer.

Third, data have pointed to more persistent supply chain bottlenecks, as the Delta wave has generated additional production disruptions across Asia. Details of the global August manufacturing PMI showed extended delivery times, and our economists have also shown supply constraints broadening to food prices (see *Food inflation is a signal, not noise*, N. Szentivanyi & B. Kasman, 9/7/21). Within the US CPI basket, production disruptions have altered our near-term thoughts on vehicle pricing—the Manheim used vehicle value index, which tends to lead moves in the used car CPI, has declined by 4.2% from its May peak through August, and we had previously looked for continued declines into year-end as supply began to normalize. However, the recovery in semiconductor production is now likely to be pushed further into 2022. Relatedly, industry data show Average Transaction Prices (ATPs) of new vehicle sales rose a record 13.9% y/y in August to all-time highs, as inventory levels have fallen sharply, suggesting that even if used car prices fall modestly in the August CPI report, this is likely to be offset by continued gains in new vehicle prices (**Exhibit 4**). **Overall, while these dynamics push up near-term inflation risks, they simply delay the timing of when easing bottleneck pressures are likely to turn into a drag on goods inflation and should still prove transitory in our view**.

Exhibit 5: Through 2Q21, rent inflation has risen most sharply for high quality properties, but it has risen to near multi-decade highs for bottom-tier properties as well

National multifamily quarterly rolling year-over-year changes in effective rent by property quality; %



Source: Costar

Exhibit 6: Recent declines in the unemployment rate and rental vacancy rate as well as increases in multifamily rent growth suggest we could see OER inflation accelerate over the near term

OER (% oya) regressed on the 3-month lagged values of U-3 unemployment rate (3m mov. avg., %), rental vacancy rate (%), and class C multifamily effective rent inflation (% oya); monthly data from Mar 2010 - Jul 2021

Factor	Coeff.	T-stat	Last value (lagged)	Last available
U-3 unemp. rate, 3m ma; %	-0.14	-7.2	6.1	5.5
Rental vacancy rate; %	-0.21	-6.4	6.4	6.2
Class C rent growth; %	0.24	6.0	3.9	4.7
Intercept	4.42	13.0		
R-squared	85.1%			
Standard Error	0.29			

Source: BLS, Census Bureau, Costar, J.P. Morgan

Fourth, rent inflation appears to be accelerating, consistent with our expectations. As we pointed out in our *2021 Outlook*, trends in rents were bifurcated across geographical areas and across the price spectrum, as those with the ability to work remotely left high-cost cities. While rents declined most sharply at the top end of the price spectrum, trends in OER and primary rent CPI inflation better tracked the performance of lower-tier properties, with rent inflation decelerating even as prices continued higher. Recent data from Costar show rents rebounding over the first half of 2021—though unsurprisingly the sharpest increases have been for high-quality properties, class C property rent growth has also risen to near multi-decade highs (**Exhibit 5**). Overall, we present our simple model of OER inflation in **Exhibit 6**: given a declining sensitivity of the index to home price appreciation since the start of the pandemic, we replace this factor with class C rent growth from Costar. Over the past decade, OER inflation has increased when labor market slack declines, rental vacancy rates fall, and class C rent growth accelerates, albeit on a lagged basis.

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Given the trends in these factors, it appears that OER inflation is likely to lift toward its pre-pandemic pace over coming months. Our economists point out that some alt data on rents suggest we could get a larger jump in prices over the near term, but if that unfolds, we wouldn't expect those growth rates to persist. Notably, if COVID-19 prompts moves to areas with less constrained housing supply, longer-run rent inflation could be weaker (see *US: Rent inflation from the penthouse to the farmhouse*, Jesse Edgerton, 8/9/21).

Overall, we think that the August CPI report released next week is likely to be relatively firm. We project a 0.31% m/m increase in core CPI, and combined with a 0.5% and 1.6% increases in food and energy CPI, respectively, we forecast a 0.42% SA increase in headline, or a 0.31% increase in CPI-U NSA to 273.840 (see *US Weekly Prospects*, Michael Feroli, 9/10/21). Our forecast is firmer than the current market fixing at 273.770, which implies roughly a 0.2% m/m sa increase in core, suggesting that the very front-end of the curve is likely to outperform if our forecast is correct. Our CPI projection implies that carry on long TIPS and breakeven positions would moderate somewhat in October but remain positive (**Exhibit 7**).

Exhibit 7: If our CPI forecast is correct, carry on long breakeven positions should moderate in October

Projected carry on long TIPS and long breakeven positions in October based on August CPI-U forecast; bp of yield

Hot-run	Maturity	TIPS carry	BE carry
5-year	4/15/26	3.7	2.3
10-year	7/15/31	2.4	1.1
30-year	2/15/51	1.0	0.3

Source: J.P. Morgan

Certainly the factors discussed above imply that upcoming CPI prints beyond August are likely to remain relatively firm, supporting the recent strength in very front-end TIPS. However, stripping out near-term expectations, forward breakevens out to the 5-year sector remain rich versus fundamentals, given that bottleneck pressures are likely to prove transitory and longer-run inflation expectations remain well-anchored. Five-year TIPS appear particularly mispriced relative to an OIS curve that continues to project a very benign pace of tightening beyond 1Q23, and a relatively hawkish signal from the FOMC later this month as well as an eventual acceleration in job growth should act as catalysts for real yields to move higher in our view. **Thus, we stay short Apr-26 TIPS combined with a notional-neutral long in Apr-22 TIPS**.

Trade recommendations

- **Stay short Apr-26 TIPS versus a 14% long in Apr-22 TIPS**
  - Stay long 14% risk, or $50mn notional of TII 0.125% Apr-22s
  - Stay short 100% risk, or $50.1mn notional of TII 0.125% Apr-26s (*US Treasury Market Daily*, 8/19/21). P/L since inception: -5.6bp

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Trade performance over the past 12 months
P/L reported in bp of yield unless otherwise indicated

TRADE	ENTRY	EXIT	P/L
5Yx5Y inflation swap longs	7/8/2021	7/26/2021	11.0
5-year breakeven wideners	6/11/2021	6/25/2021	8.9
Short 5y TIPS versus 19% long in Apr-22s	5/21/2021	6/9/2021	6.4
Long 5y5y inflation swaps	1/29/2021	4/30/2021	4.0
Weighted Apr-23s/Apr24s BE curve steepeners	3/5/2021	3/26/2021	5.7
Weighted Apr-23s/Apr24s BE curve steepeners	1/22/2021	2/8/2021	6.0
10-year breakeven wideners	11/9/2020	12/18/2020	21.9
10-year breakeven wideners	10/30/2020	11/4/2020	-6.5
2% Jan-26s/0.5% Jan-28s BE curve steepeners	7/31/2020	10/2/2020	0.7
5s/10s breakeven curve flatteners	8/21/2020	9/11/2020	0.5
AGGREGATE:			
Number of trades	10		
Number of winners	9		
Hit ratio	90%		
Average P/L (bp of yield)	5.9		

Source: J.P. Morgan

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Interest Rate Derivatives

- **The expected seasonal narrowing in swap spreads that typically marks the end of summer has not materialized this year, despite strong issuance …**
- **… and with Congressional action on the debt ceiling appearing unlikely for several weeks, our expectation is that swap spreads should remain well supported as they typically have in periods of rising debt-ceiling pressures …**
- **… we now recommend turning neutral on swap spreads and unwinding swap spread narrowers**
- **The strength in the equity markets mitigates the interest rate risk in variable annuities, and relieves hedging pressures that have historically impacted long end spreads. Absent a sharp pullback in equities, long end spreads should be biased wider as longer term yields rise …**
- **… initiate 10s/30s swap spread curve steepeners**
- **The rebound in market depth has occurred sooner than in prior cycles, helping to drive short expiry implied volatility towards the lower end of the recent trading range …**
- **… we now turn neutral on short gamma positions and recommend unwinding short 3Mx10Y swaption straddles**
- **We review the recent set of Fed speak headlines and revisit our NLP-based index**

The beat goes on

In the two weeks since our previous publication, swap spreads are unchanged to modestly wider across the curve. Over this period, **maturity matched swap spreads are flat at the front end, 0.5bp wider in the intermediate maturity sector, and 1bp wider at the long end of the curve.**

The Labor Day holiday in the U.S. brings an unofficial end to summer and marks the transition of seasons. Typically, it has been accompanied by a strong seasonal narrowing in swap spreads, which had been a factor in our tactical bias towards narrower swap spreads. But this year, as in 2020, the expected seasonal narrowing in spreads has not materialized (**Exhibit 1**), despite the fact that High Grade issuance has been strong at about $60bn, which is more than half of typical issuance in September (see *Credit Market Outlook & Strategy*, E. Beinstein & N. Rosenbaum et al., 9/9/21). The window for this seasonal narrowing bias is thus likely now past. In addition, swap spreads are also likely to resist narrowing in the coming weeks because of the lack of an imminent resolution to the debt ceiling. With Congressional action appearing unlikely for several weeks, Treasuries will likely remain well bid (relative to other assets and swaps) in coming weeks as they typically have done in the lead up to previous debt ceiling critical dates. Only when resolution is imminent have swap spreads tended to narrow in prior episodes (**Exhibit 2**). Therefore, **we now recommend turning neutral on swap spreads and unwinding spread narrowers** (see Trade recommendations).

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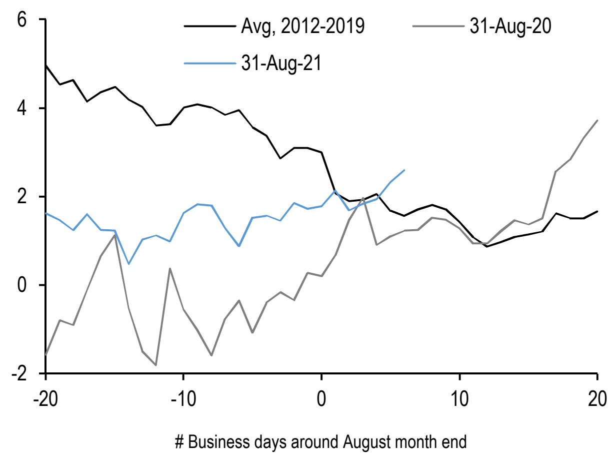
Exhibit 1: Seasonal spread narrowing coming into the August month end has not been as pronounced in the last two cycles as in prior years

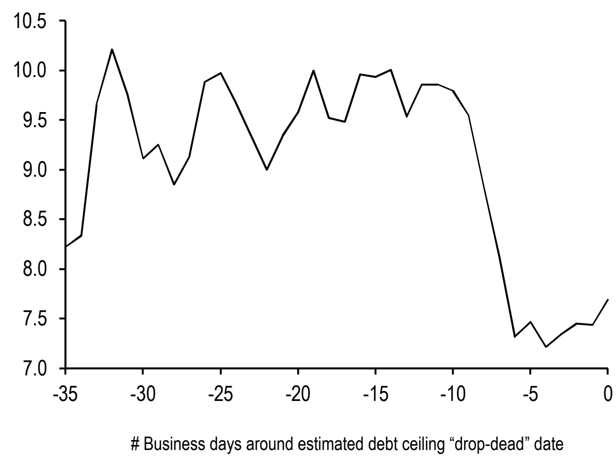
7-year matched maturity spreads around the last day of August in 2021, 2020, and averaged in the 2012-2019 cycles; bp



Source: J.P. Morgan

Exhibit 2: In the weeks leading up to critical dates* for the debt ceiling Treasuries have remained well bid relative to other assets and swaps

5-year matched maturity swap spread averaged around the estimated operative debt ceiling "drop dead" date in previous episodes; bp

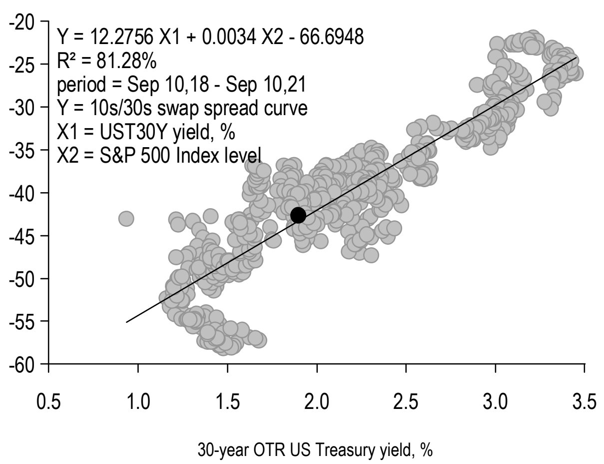


*Estimated operative "drop dead" deadlines for legislative action in previous episodes are 8/2/2011, 10/17/2013, 11/5/2015, 10/13/2017 and 10/3/2019

Source: J.P. Morgan

Exhibit 3: Adjusted for equities, the 10s/30s spread curve has been well correlated to long end yields, and should be biased steeper if yields rise as we expect

The 10s/30s maturity matched swap spread curve adjusted for the S&P500 index* (y-axis; bp), versus 30-year Treasury yields (x-axis, %)

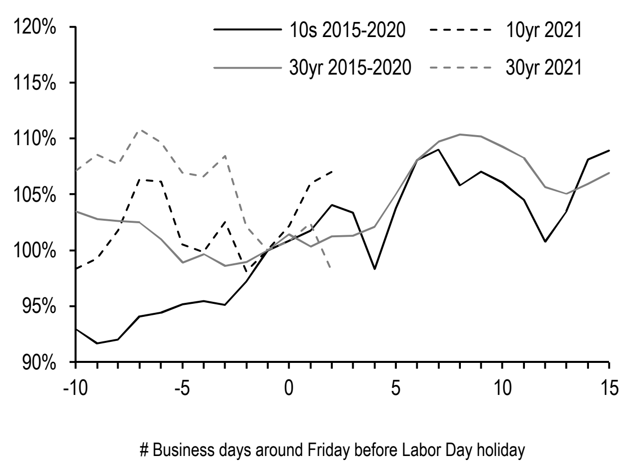


Calculated as 30-year swap spread minus 10-year swap spread, minus 0.0034 SPX.

Source: J.P. Morgan

Exhibit 4: Market depth for 10-year and 30-year Treasuries has been steadily increasing from summer lows, a recovery that is earlier than the pace we have seen over the last few years

Weekly moving average of total market depth in 10-year and 30-year hot-run Treasuries, over 2015-2020 and the current cycle, relative to the Friday before the Labor Day holiday in the US;%



Source: J.P. Morgan, BrokerTec

On the spread curve, we now recommend positioning for a steeper 10s/30s maturity matched swap spread curve. The strength in the equity markets mitigates the interest rate risk in variable annuities, and relieves the insurance company receiving pressures that have historically impacted long end spreads (**Exhibit 3**). In addition, the spread curve is positively correlated to long end yields. Although the spread curve appears fair adjusted for yields and equities, given our bias towards higher yields in the medium term end (see *US Government Bond Strategy*, J. Barry & P. White et al., 8/6/21) as well as our expectation of stable/strong equity markets (see

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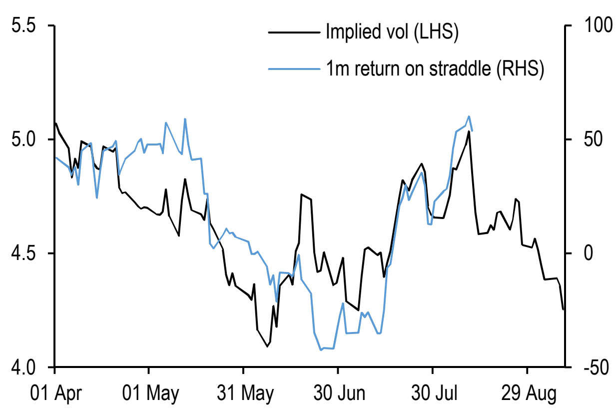
US Equity Strategy, D. Lakos-Bujas et al., 7/20/21), **we now recommend positioning for a widening in 30-year swap spreads relative to 10-year maturity matched swap spreads (see Trade recommendations).** Carry on this trade is net flat over a 3-month horizon.

In terms of overall liquidity in markets and volatility, the rebound in market depth has occurred sooner than in prior cycles. Typically, market depth reaches its trough right before Labor Day, and rebounds soon after. This year, the rebound began in the second half of August, and has likely now run its course (**Exhibit 4**). In part due to this seasonally unexpected strength in market liquidity, short gamma positions have performed well and short-expiry implied volatility has declined sharply. Over the past two weeks, 3-month expiry swaption implied volatility on 10- and 30-year tails has fallen 0.3bp/day. This decline has now caused short-expiry implieds to fall to near their six month lows. Moreover, the trailing 1M delta hedged return on short gamma positions has tended to be (unsurprisingly) strongly correlated to the implied vol at inception (**Exhibit 5**), and this relationship suggests that such short gamma positions are no longer attractive at current implied volatility levels. **Therefore, we turn neutral on the short expiry sector and recommend unwinding short 3Mx10Y swaption straddles (see Trade recommendations).**

Exhibit 5: Implied volatility for 3Mx10Y has fallen over the last two weeks, and is now at levels where short gamma positions are unlikely to prove attractive

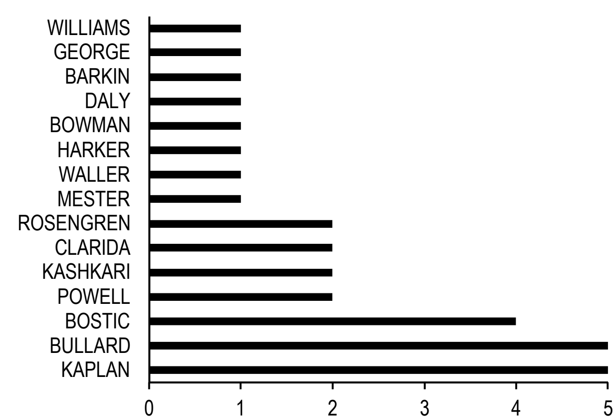
Implied volatility for 3Mx10Y (LHS, bp/day), and the forward-looking rolling 1m delta-hedged return* on a short 3Mx10Y straddle (RHS, bp of notional);



* Assumes short 3Mx10Y straddle initiated at each day's close, and delta hedged every day for the next month. Ignores transaction costs Source: J.P. Morgan

Exhibit 6: This month, numerous Fed speakers stepped up to the microphone, with 15 of 18 FOMC members having headlines captured by our model, and about half speaking on multiple dates

Number of dates in the last month when each speaker has at least one headline attributed to their name; unit



Source: J.P. Morgan, Bloomberg Finance L.L.P.

NLP-based Fed Speak update

Jackson Hole brought us a whole suite of new Fed headlines, making a revisit of our recently launched Fed Speak index timely (see *Also sprach the Fed*, V. Mejia Bustamante & J. Barry et al., 7/16/21). In fact, over the last month we have captured headlines by 15 of the 18 FOMC members, and about half of them have publically spoken on more than one date (**Exhibit 6**). In addition, since our last review of the index we have seen an update on the relative hawkish-dovish stand of the current FOMC members from our colleagues in economic research (see *U.S. Will Fed Heads Roll?* M. Feroli 7/21/21), so we incorporate the changes in speaker perception for this round of statements. From our earlier view in 1H 2021, only three speakers have changed perceived tendency, with Evans moving from neutral to dove, Rosengren moving from dove to neutral, and most notably, Bullard switching from dove to hawk (**Exhibit 7**).

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Exhibit 7: We update our FOMC speaker model labels from earlier in 2021 based on a new assessment by the economics research team

Change in dove to hawk relative rank for the current members of the FOMC

Speaker	2021 H1	2021 H2
Barkin	*Hawk*	*Hawk*
Bostic	*Hawk*	*Hawk*
Bowman	*Neutral*	*Neutral*
Brainard	*Dove*	*Dove*
Bullard	**Dove**	**Hawk**
Clarida	*Dove*	*Dove*
Daly	*Dove*	*Dove*
Evans	**Neutral**	**Dove**
George	*Hawk*	*Hawk*
Harker	*Hawk*	*Hawk*
Kaplan	*Hawk*	*Hawk*
Kashkari	*Dove*	*Dove*
Mester	*Neutral*	*Neutral*
Powell	*Neutral*	*Neutral*
Quarles	*Neutral*	*Neutral*
Rosengren	**Dove**	**Neutral**
Waller	*Dove*	*Dove*
Williams	*Neutral*	*Neutral*

Based on the ranks produced by J.P. Morgan Economics research for the latest assessment see *U.S. Will Fed Heads Roll?* M. Feroli 7/21/21 and the earlier distinction *The updated "hawk"-dove chart*, M. Feroli 1/14/21.

Source: J.P. Morgan

Exhibit 8: Over the last month of headlines the most recurring tokens include Taper, Economy, and Time, while the Delta covid19 variant has shown up in the conversation

Cluster of words that appear most often in the last month of speaker headlines; relative size indicates frequency

Source: J.P. Morgan, Bloomberg Finance L.L.P.

The composition of the last round of Fed Speak headlines has seen the tokens *taper*, *start*, and *2022* move up in frequency, with the staples *economy*, *inflation*, and *time* remaining relevant (**Exhibit 8**). In addition, the Delta COVID-19 variant came up in the conversation as well as a few more action-leaning tokens. As far as the recent statements associated with the largest yield moves in the following five minute window, we see August 27th as a big day for Fed Speak with statements by Clarida, Powell, Bullard, Williams, Mester, Kaplan, and Bostic having the largest absolute moves of the last month (**Exhibit 9**).

Our machine learning-based Fed Speak index leverages natural learning processing to understand how the headlines published while an FOMC member is speaking align to subsequent intra-day moves in Treasury cash markets (for details see *Also sprach the Fed*, V. Mejia Bustamante & J. Barry et al., 7/16/21). The model leverages a suite of relevant tokens as drivers, along with significant tags for the headline, namely whether the speaker is perceived as hawkish or dovish and if they are a voting member of the committee. Armed with these details, the NLP-model produces a decision for the headline on whether it will generate a positive, negative or neutral move in rates markets over the following time period, as well as the confidence on the class label. This allows us to get a sense of the aggregate sentiment of Fed Speak, and running the model out of sample can produce a prediction of how particular headlines may move the market, which we turn into a daily index.

Looking at the daily index, we see that so far this year, the trend continues to be more hawkish (**Exhibit 10**), showing that, in aggregate, the market perceived sentiment of Fed Speak is to higher yields. Specifically over the last month, the model estimated that the latest round of statements has had a net hawkish interpretation by the market.

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Exhibit 9: The statements on August 27th were associated with the largest absolute moves in yield in the last month, with the token *taper* appearing in three out of eight

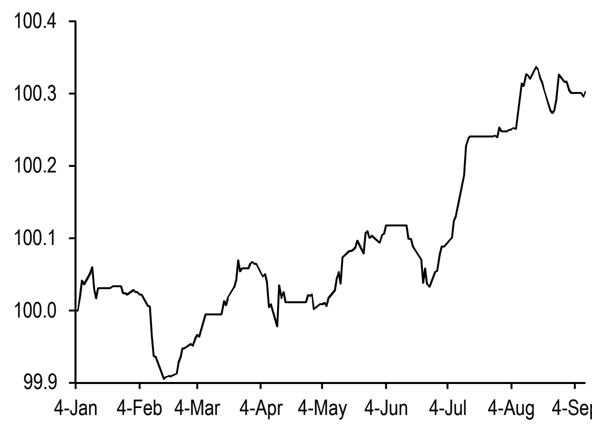
Headlines from speeches made by FOMC members in the last month that were associated with the largest move in 10-year Treasury yield five minutes after publication

	Date	Speaker	Headline
Yield Up	4-Aug	CLARIDA	ECONOMIC IMBALANCES LIKELY TO DISSIPATE OVER TIME
	27-Aug	BULLARD	REPEATS HE WANTS TAPER NOW, FIRST-QUARTER 2022 FINISH
	4-Aug	CLARIDA	COULD SEE MAKING TAPER ANNOUNCEMENT LATER THIS YEAR
	27-Aug	MESTER	SAYS 'BASICALLY THERE' WITH SUBSTANTIAL FURTHER PROGRESS
Yield Down	27-Aug	POWELL	SAYS COULD BE APPROPRIATE TO BEGIN TAPERING THIS YEAR
	8-Sep	WILLIAMS	LONG TERM INFLATION EXPECTATIONS CONSISTENT WITH GOAL
	27-Aug	KAPLAN	WANTS ASSET-PURCHASE ADJUSTMENTS STARTING SOON
	9-Aug	BOSTIC	NEED TO ENSURE BEYOND CRISIS BEFORE RATE HIKES

Source: J.P. Morgan, Bloomberg Finance L.L.P. , BrokerTec

Exhibit 10: Year to date the sentiment index produced by the model has been increasingly hawkish

Index, built from rolling 3-month difference of inferred probability that each headline moves the market up vs down; unitless



Source: J.P. Morgan

Trading recommendations

- **Position for a steeper 10s/30s maturity matched swap spread curve**
  Barring a hiccup in equities, the 10s/30s swap spread curve should steepen as long end yields rise over the medium term.
  – Sell $100mn of the 1.625% May 2031 (yield 1.320%, pvbp $919/bp per mn notional) and receive fixed in $99.2mn notional of a 5/15/2031 3mL swap (fixed coupon of 1.348%, pvbp $926.7/bp) at a maturity matched swap spread of 2.8bp; buy $41.5mn of the 1.875% Feb 51s (yield 1.940%, pvbp $2214/bp) and pay fixed in $37.8mn of a 15-feb-2051 swap (pvbp $2243/bp, coupon 1.680%) for an all in spread curve of -28.8bp.

- **Unwind short 3Mx10Y delta-neutral straddles**
  – Unwind short $100mn notional 3Mx10Y ATMF straddles (notification 11/19/21, maturity 11/23/31, ATMF strike @ 1.319%, premium 282c); this trade requires daily delta hedging (Fixed Income Markets Weekly 8/20/21, P/L since inception 9abp).

- **Unwind short 30s versus 20s on ASW**
  – Unwind $100mn 30-year hot run Treasuries (1 5/8% Nov-50) versus receiving $88mn fixed in maturity matched OIS, and buy $135mn 20-year hot-run Treasuries (1 3/8% Nov-40) versus paying fixed in $123mn maturity matched OIS, at a spread of 11.9bp (Fixed Income Markets Weekly 1/8/21, P/L since inception: -5.4bp).

- **Stay received 7-year matched maturity SOFR spreads**
  – Stay short $100m notional of 1% Jul 2028 vs receiving $98.3m notional 07/31/2028 swap @ a maturity matched SOFR spread of -22.5bp (Fixed Income Markets Weekly 8/20/21, P/L since inception -1.7bp).

- **Stay long 1Yx2Y 1s/3s basis**
  – Stay long $250k per bp of 1Yx2Y 1s/3s basis at @ 9.1 bp (Fixed Income Markets Weekly 8/20/21, P/L since inception -0.1bp).

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- **Stay short FFG2**
  – Stay short 10k contracts of FFG2 @ 99.915 (Fixed Income Markets Weekly 8/6/21, P/L since inception -0.5bp).
- **Stay short EDZ1**
  – Stay short 4000 contracts of EDZ1 at 99.81 (Fixed Income Markets Weekly 6/18/21, P/L since inception -2.0bp).
- **Stay received 6Mx1Y JPY/USD cross-currency basis**
  – Stay received $100k/bp of 6Mx1Y JPY/USD cross-currency basis (swap start 9/25/2021, swap end 9/26/2022) @ a spread of -30.3bp (Fixed Income Markets Weekly 3/26/21, P/L since inception -12.6bp).
- **Stay long 35Yx5Y vs 25Yx5Y swap curve steepeners**
  – Stay paid $312mn 35Yx5Y (swap start: 1/11/2056, swap end: 1/11/2061, coupon: 1.26%) versus receiving $250mn of 25Yx5Y (swap start: 1/11/2046, swap end: 1/11/2051, coupon: 1.80%) at a spread of 52.5bp. Carry and slide on this trade is 3.2bp over 1-year (Fixed Income Markets Weekly 1/8/21, P/L since inception: -4.3bp).
- **Stay long 2Yx3Y 6s/FF-OIS**
  – Stay long 100k/bp 2Yx3Y (swap start: 10/27/22, swap end: 10/27/25) 3s/6s basis vs 100k/bp 2Yx3Y FF/Libor basis, at +38.6bp (Fixed Income Markets Weekly 10/23/20, P/L since inception: -6.3bp).
- **Stay long 2Yx1Y 1s/3s basis**
  – Stay long $100k/bp 2Yx1Y 1s/3s basis at 10.75bp (swap start: 9/17/2021, swap end: 9/17/2022) (Fallback to earth 9/16/19). (Fixed Income Markets Weekly 9/16/19, P/L since inception: -6.5bp).

Closed trades over the past 12 months

P/L reported in bp of yield for swap spread, yield curve and misc. trades, and in annualized bp of volatility for option trades, unless otherwise specified

Trade	Entry	Exit	P/L
Spreads and basis			
Pay 2Yx1Y versus 10Yx10Y Libor/SOFR	06/24/20	09/25/20	8.4
Buy 10Y SOFR/FF basis	02/07/20	10/20/20	0.5
Buy 5Yx5Y 1s/3s basis	04/20/20	10/13/20	6.2
Receive maturity-matched 10-year swap spreads	03/27/20	11/6/20	-9.2
Sell 2s versus matched SOFR	04/24/20	11/6/20	-8.5
Receive 6M CHF/USD cross currency basis	08/28/20	11/24/20	6.6
Sell May-37/USZ0 Treasury futures basis	10/30/20	11/24/20	7
Buy 2Yx1Y vs 5Yx5Y 3s/6s tenor basis	05/01/20	12/01/20	1.6
Pay 10Yx10Y AUD/USD cross currency basis	01/24/20	12/18/20	-5.1
Received 1Yx1Y CAD vs USD IRS	9/25/2020	01/22/21	5.5
Sell current 2s versus double old 7s versus matched-maturity SOFR	01/08/21	02/18/21	2.2
Pay 5Y CAD/USD cross currency basis	01/20/21	02/26/21	6.4
Sell 2s versus matched Libor swaps	02/19/21	06/04/21	3.2
Stay long 20-year matched maturity swap spreads	4/23/21	7/30/21	-2.1

Source: J.P. Morgan

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Closed trades over the past 12 months (continued)

P/L reported in bp of yield for swap spread, yield curve and misc. trades, and in annualized bp of volatility for option trades, unless otherwise specified

Duration and curve	Entry	Exit	P/L
Sell EDZ0	11/10/20	12/18/20	-2.1
Short 30s versus 20s on ASW	1/8/21	9/10/21	-5.4
Options relative value	**Entry**	**Exit**	**P/L**
Sell 2Yx30Y vs 5Yx30Y ATMF vega-neutral straddles	6/5/20	3/5/21	3.0
Buy the outstrikes of a 3Mx5Y 1x2 receiver spread	3/26/21	6/30/21	-5.8
Stay long 10Yx10Y USD vs EUR ATMF vega-neutral straddles	6/4/21	8/6/21	1.4
Stay long 10Yx30Y vs 3Yx10Y ATMF vega-neutral straddles	6/4/21	8/6/21	1.7
Stay long USD vs AUD 1Yx5Y ATMF straddles	6/11/21	8/6/21	3.4
Short 3Mx10Y delta-neutral straddles	8/20/21	9/10/21	9
Total number of trades			**22**
Number of winners			**15**
Hit rate			**68%**

Source: J.P. Morgan

Note: new trades and unwinds reflect Friday COB levels unless otherwise stated and all others reflect Thursday COB levels

Recent Weeklies	
27-Aug-21	Weekly: Gauging the risks around year-end
20-Aug-21	Weekly: Summer will end soon enough
6-Aug-21	Weekly: Hedging the return of term premium
30-Jul-21	Weekly: Stand by me
16-Jul-21	Weekly: Pay no attention to that convexity behind the curtain
9-Jul-21	Weekly: This could be the start of something big…?
25-Jun-21	Weekly: Just keep swimming
18-Jun-21	Weekly: All good things
11-Jun-21	Weekly: Rolling lockdowns coastal fever
4-Jun-21	Weekly: Keep calm and stay long
21-May-21	Weekly:Load-bearing wall
14-May-21	Weekly: Arpeggi
7-May-21	Weekly: Look BSBY
30-Apr-21	Weekly: Canadian split
23-Apr-21	Weekly: Where is bank issuance-related receiving headed?
16-Apr-21	Weekly: Revisiting demographic duration demand
9-Apr-21	Weekly: The more the merrier
26-Mar-21	Weekly: An orderly process
19-Mar-21	Weekly: Ask again later
12-Mar-21	Weekly: Spread focus turns squarely to SLR
5-Mar-21	Weekly: Vol-au-vent
26-Feb-21	Weekly: ¯_(ツ)_/¯
19-Feb-21	Weekly: Troll 2s
05-Feb-21	Weekly: Buy in case of reflation
29-Jan-21	Weekly: Check for seasoning
22-Jan-21	Weekly: Maple syrup event
8-Jan-21	Weekly: A trek across the spread curve
18-Dec-20	Weekly: T-bill demand may be more elastic than you think

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11-Dec-20	Weekly: The once and future turn
13-Nov-20	Weekly: Looking ahead to year-end and the Z0/H1 futures roll
6-Nov-20	Weekly: The long view
30-Oct-20	Weekly: An Election Day survival guide
23-Oct-20	Weekly: Back to the fallbacks
16-Oct-20	Weekly: Somebody's got a case of the Mondays
2-Oct-20	Weekly:: Considering long-end spreads
25-Sep-20	Weekly: Canadian Bacon
18-Sep-20	Weekly: The Big Bang gets going
11-Sep-20	Weekly: Vega supply outlook and reviewing the U0/Z0 Treasury futures roll:
Annual Outlooks	
24-Nov-20	Interest Rate Derivatives 2021 Outlook: This is fine
Recent Special Topic Pieces	
13-Aug-21	US Treasury Futures Rollover Outlook: September 2021/December 2021
6-Aug-21	The medium-term outlook for Fed funds
5-Aug-21	Minimally invasive retail CBDCs
3-Aug-21	Combating the unique threat posed by ransomware
22-Jul-21	The financial stability risks of stablecoins
16-Jul-21	Also sprach the Fed
9-Jul-21	Many worlds: A Monte Carlo approach to benchmarking the long-run diversification benefits of bonds
8-Jul-21	The Bitcoinization of El Salvador
30-Jun-21	Incorporating ESG into automated fixed income portfolios
18-Jun-21	You tell me that it's evolution
11-Jun-21	Crypto capital rules arrive
11-Jun-21	The bitcoinization of El Salvador
28-May-21	Cross-margining and financial stability
24-May-21	Dissecting the crypto crash
18-May-21	US Treasury Futures Rollover Outlook: June 2021/September 2021
29-Apr-21	BoC tapering and CAD cross currency basis
27-Apr-21	Benchmarking duration demand from target-date funds
27-Apr-21	Why is ETH outperforming?
21-Apr-21	Tubthumping
16-Apr-21	End of the waterfall
16-Apr-21	Revisiting demographic duration demand in the long end
09-Apr-21	Why is the Bitcoin futures curve so steep?
09-Apr-21	How inelastic is bitcoin mining?
31-Mar-21	Can SOFR trade well through RRP?
24-Mar-21	The rising tide: balance sheet cost, foreign private demand, and the FX basis
15-Mar-21	What are the FX swap implications of SLR carve outs?
11-Mar-21	Still Waiting on SLR
02-Mar-21	Reflation: The cause of and solution to AUD basis problems
24-Feb-21	Where has thou been, then, Libor
23-Feb-21	Four o'clock tick tock
17-Feb-21	Taper Tantrum, Part Deux
16-Feb-21	US Treasury Futures Rollover Outlook
16-Feb-21	A mortgage extends in a forest
04-Feb-21	How important are bank-level SLR carve-outs to swap spreads?
29-Jan-21	Trust exercises
25-Jan-21	Only as strong as the foundation

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20-Jan-21	CAD/USD cross currency basis in 1H21
14-Jan-21	When you come to a fork in the road
08-Jan-21	Pricing more fiscal stimulus into swap spreads
04-Dec-20	3Q20 GSIB filings continue to show steady top-line pressure
01-Dec-20	Moving the goalposts: The implications of pushing back USD Libor cessation
24-Nov-20	Interest rate derivatives in the time of SOFR
17-Nov-20	When prophecy fails
13-Nov-20	US Treasury Futures Rollover Outlook: December 2020/March 2021
10-Nov-20	Beware the funding pressures of a post-Election rally
29-Oct-20	The Cannonball Run
23-Oct-20	What about the Senate?
20-Oct-20	Turn and face the strange: First thoughts on the Big Bang
8-Oct-20	Revisiting the risk of contested or delayed results as polls widen and event risk decays
23-Sep-20	Volatility risk and the U.S. Presidential election: Volfefe, revisited
21-Sep-20	2Q20 GSIB update: Flat toplines but durable pressure from size and STWF point to further increases into year-end
17-Sep-20	New restrictions on Shin Kong are bullish for USD vega
16-Sep-20	A volatile week for year-end turn pricing: Recent developments a narrower at the margin, but don't lose the forest for the trees
15-Sep-20	It all started with a Big Bang: Updating discounting risk estimates and reviewing mechanics

Source: J.P. Morgan

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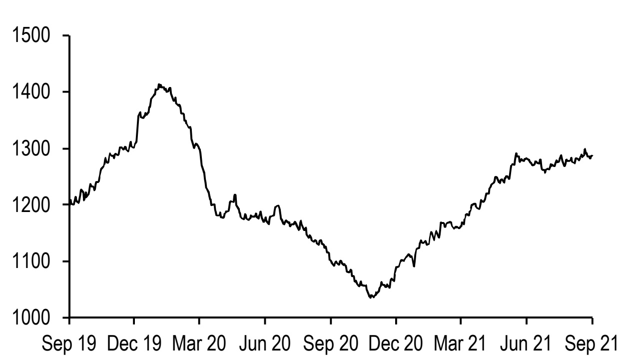
Short-Term Fixed Income

- **Bank CP/CD outstandings have grown by $178bn YTD. This is somewhat surprising in the context of a banking system that has been flush with liquidity**
- **We think the rise in outstandings might be driven by opportunistic funding and the attractiveness of the USD CP/CD markets relative to where some banks could get funded in their home currencies**
- **However, we do not anticipate supply to meaningfully grow the rest of this year. Loan growth remains anemic and the typical year-end funding pressures that usually drive supply higher in October/November should also be more muted**
- **Corporates have shifted more of their cash investment portfolios into marketable securities versus deposits/MMFs. As of 2Q21, the amount of marketable securities held by corporates registered 40%, an increase from 37% a year ago, even as their cash balances remained at roughly $2.2tn**
- **We believe money will continue to shift out the curve, particularly as banks look to shed deposits, MMFs struggle with lack of supply and low yields, and MMF reforms are impending**
- **If so, front-end spreads could remain tight for quite some time**

A look at bank CP/CD outstandings

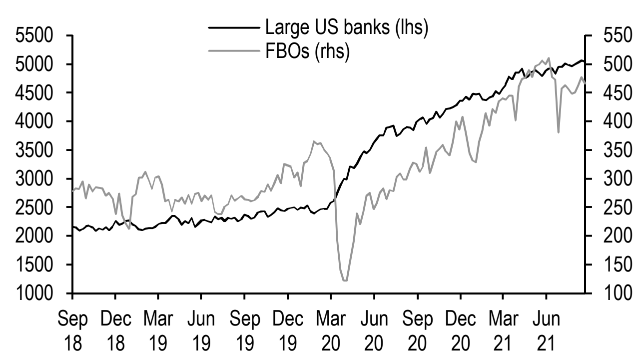
With rates in the money markets trading in a very narrow range, we turn to bank CP/CD outstandings this week. Based on DTCC data, we estimate that net CP/CD issuance across domestic and foreign banks has grown by $178bn YTD and $186bn YoY (**Exhibit 1**). This is somewhat surprising in the context of a banking system that has been flushed with liquidity. Indeed, excess deposits (total deposits minus loans) at large US banks and foreign-related institutions in the US—both of which are primary participants in the CP/CD markets—have increased quite substantially since the depths of the crisis in March 2020 (**Exhibit 2**).

Exhibit 1: Bank CP/CD outstandings have grown by $178bn YTD...
Bank CP/CD outstandings ($bn)



Source: DTCC, J.P. Morgan

Exhibit 2: ...even as excess deposits have grown substantially
Excess deposits of large US banks and FBOs ($bn)



Source: Federal Reserve

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More notably, the growth in outstandings has been fairly broad-based across jurisdictions. By domicile, European banks drove most of this growth, with Eurozone and other European banks contributing $83bn and $50bn, respectively to the change YTD (**Exhibit 3**). Outstandings of Japanese banks and Australian banks each grew $23bn YTD, followed by Canadian banks of $10bn.

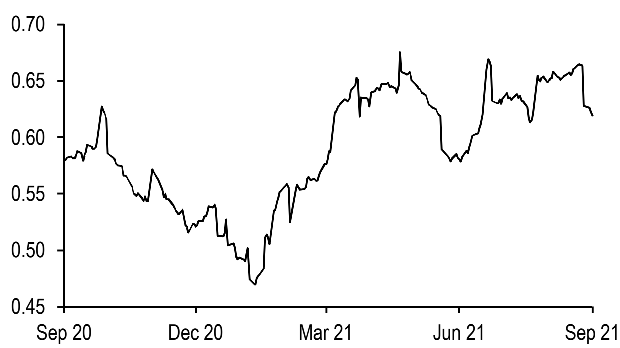
Exhibit 3: The rise in bank CP/CD outstandingd has been fairly broad-based across jurisdictions
Bank CP/CD outstandings by domicile

	Current ($bn)	YTD ($bn)	YOY ($bn)	YTD (%)	YOY (%)
Total Bank CP/CD Outs	**1287**	**178**	**186**	**16%**	**17%**
Eurozone	*269*	*83*	*71*	*45%*	*36%*
Other European	*275*	*50*	*12*	*22%*	*4%*
Japanese	*233*	*23*	*6*	*11%*	*3%*
Australian	*105*	*23*	*37*	*28%*	*54%*
Canadian	*281*	*10*	*60*	*4%*	*27%*
US	*43*	*-6*	*-5*	*-12%*	*-10%*
Other	*81*	*-6*	*5*	*-7%*	*6%*

Source: Bloomberg, J.P. Morgan

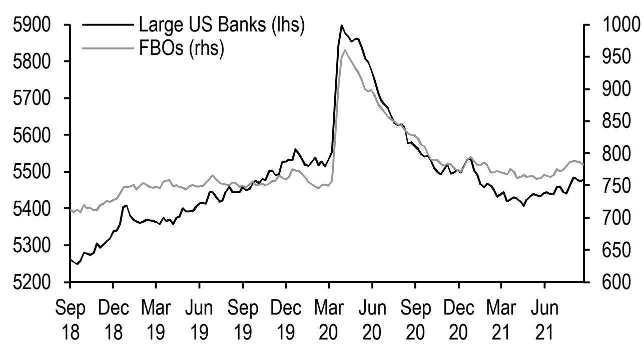
Naturally, this begs the question: why are CP/CD outstandings increasing when banks have more liquidity than they need? A closer look at issuance tenors over the past several months suggests that some of the growth could have been more opportunistic in nature. This is evident in the amount of overnight volumes that have been issued throughout this year: as a percentage of daily issuance, overnights currently make up 62% of total volumes, an increase from 47% earlier this year (**Exhibit 4**). By issuing overnights, not only are banks able to better match investors' preference for shorter maturities given the flatness of the yield curve, but they can also economically take advantage of the spread between overnight borrowing costs and IOER. On the margin, to the degree banks issue in USD and swap the proceeds raised in the money markets back to local currencies, the liquidity available in the USD CP/CD markets and the low yields available could also be relatively more attractive than borrowing in the home local markets.

Exhibit 4: The amount of overnight CP/CD volumes has grown markedly this year
Overnight volumes as a percentage of total bank CP/CD volumes (%)



Source: DTCC, J.P. Morgan

Exhibit 5: The traditional bank loan market continues to be quite anemic, limiting the need for CP/CD funding on a structural basis
Loans of large US banks and FBOs ($bn)



Source: Federal Reserve

Could we see more growth in bank CP/CD outstandings the remainder of this year? Perhaps, but we suspect it will not be by much. In fact, outstandings have somewhat stalled over the past few summer months. Historically, issuance tends to pick up around October/November as some banks take advantage of the relative value proposition available between the USD CP/CD markets and the cross currency basis markets due to year-end funding pressures (i.e., borrow in USD CP, lend USD in

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cross currency basis market). However, with so much excess liquidity available in the banking system, we suspect any dislocations around year-end will be somewhat contained, which might limit any opportunistic funding that has been raised in prior years. At the same time, the need for CP/CD funding on a more structural basis remains scant as the traditional bank loan market continues to be quite anemic (**Exhibit 5**). In particular, our US large bank equity analysts noted that banks' C&I lending has been cannibalized by markets and non-bank players, a trend that is likely going to continue (see *Disintermediation of Banks' C&I Loans To Continue - Increased Since Pandemic, CLOs Top $1 Trillion*, V. Juneja, 9/9/10). Overall, we don't expect the meaningful rise in bank CP/CD outstandings to continue the rest of this year.

How have corporates been managing their cash portfolios?

With the Fed pinning rates against the effective lower bound until higher inflation and lower unemployment justify the next rate hike, liquidity-focused investors inhabiting the cash money markets are in a fix. As always, they want yield, but need to adhere to their liquidity mandates, whether that is overnight or over a horizon of several months. Given the Fed's policy stance, and combining that with Treasury cutting T-bill supply, the current T-bill curve from 1m to 1y starts at 2bp and goes to 7bp. Most of the T-bill curve is trading below tri-party repo levels. Based on Crane Data, weighted average net yields on institutional government MMFs are now in the 2bp area, just a notch above deposits. In credit, net yields on institutional prime funds are better (6bp area), but not currently compelling for many deposit holders.

In late 2020, we posited that low deposit and MMF yields would encourage investors to shift further out the curve and into the short-term markets, most likely via Separately Managed Accounts (SMAs) which can have more bespoke investment policies and fee structures. In some cases, asset owners are either expanding or re-engaging in self-management (buying bills, discos, CP, etc. directly), either to increase yields, avoid management fees, or both. In both instances, corporates are venturing to hold more securities, as opposed to deposits and/or MMFs. While there are limited hard data on these flows, balance sheet data from S&P's non-financial corporates appear to support this behavior taking place over the past year. Indeed, based on what corporates reported for cash and cash equivalents and marketable securities in their 10-Qs, the amount of marketable securities held as a percentage of their aggregate cash portfolios increased to 40% as of 2Q21, from 37% a year ago, even as their cash balances remained at roughly $2.2tn (**Exhibit 6**). Furthermore, it appears that some corporations have been willing to forgo a little liquidity in exchange for yield as the amount of long-term marketable securities they hold has increased over the past year versus short-term marketable securities (**Exhibit 7**).

To be sure, this is not the first time that corporates have engaged in such yield-seeking behaviors. Similar shifts took place in 2014-2016. At that time, the money markets were not only confronting a low interest rate environment but also MMF reforms that dramatically altered the structure of prime MMFs. While aggregate cash balances were nearly $1tn smaller back then, the percentage of marketable securities reached as high as 55%, and the percentage of long-term marketable securities went as high as 26%. Overall, we would not be surprised if money continues to shift out the curve, particularly as banks are looking to shed deposits, MMFs are already struggling with lack of supply and low yields, and MMF reforms are impending. If this proves true, front-end spreads could remain tight for quite some time.

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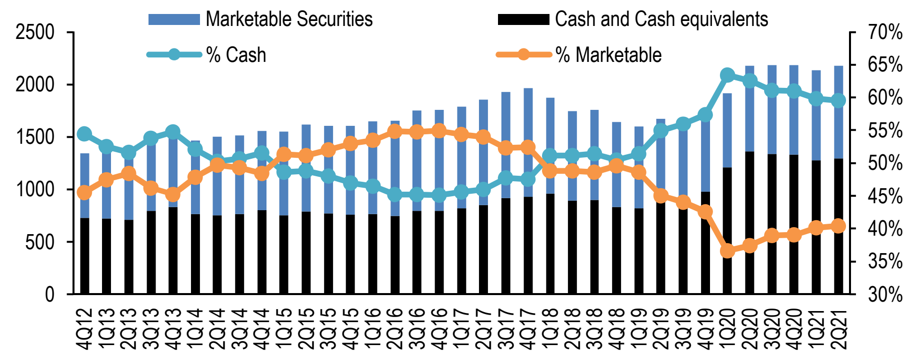
Exhibit 6: Corporates are holding more securities, as opposed to deposits and/or MMFs

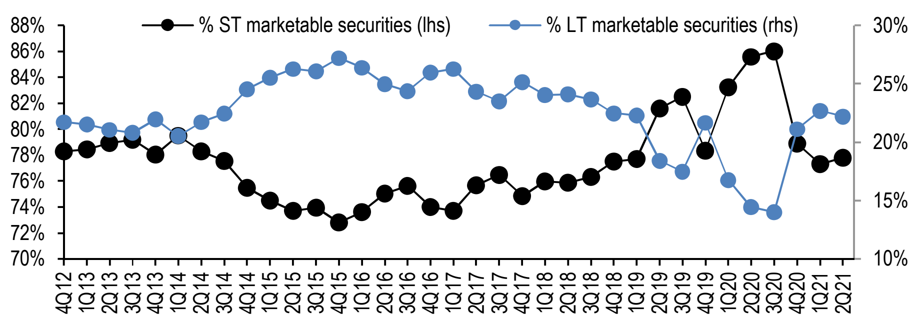
Cash and cash equivalents and marketable securities (lhs, $bn) vs % cash and % marketable securities (rhs, %), held by S&P non-financial firms



Source: Bloomberg, J.P. Morgan

Exhibit 7: Relative to short-term marketable securities, the amount of long-term marketable securities held by corporates has increased over the past year

Percentage of marketable securities that are long-term versus short-term, held by S&P non-financial firms (%)



Source: Bloomberg, J.P. Morgan

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Agency MBS

- **A range-bound rates market and limited policy news left mortgages on spread this week**
- **Although we approach taper and net issuance remains robust, banks have plenty of cash to put to work in securities; our equity strategists expect that disintermediation of bank C&I loans will continue**
- **The Fed's reinvestments and net purchases are both conducted on a mid-month to mid-month cycle. Since the November FOMC falls before the November purchase period, but the December FOMC occurs after the December purchase cycle has started, the difference in taper implementation could be two months**
- **We review the latest conventional delinquency stats with a focus on borrowers reaching the end of forbearance; the small group that reached that point in August saw a modest pickup in cures via payment deferral**
- **Net issuance is $600bn through August; HPA remains robust, purchase apps show no signs of tailing off more rapidly than the normal seasonal pace, and refi activity has picked up—we project $800bn by year end**
- **We will update our TBA definitions for 30yr 1.5s, 3s, and 3.5s, as well as 15yr 2.5s-3.5s, and these new definitions will first show up in the packet on the morning of Monday 9/13**

Views

- **We remain neutral on the production coupons, preferring to roll**
- **In specs, 2s offer the best spreads; we also broadly like NYs as their recent prepayments have been favorable**

A range-bound rates market and limited policy news left mortgages on spread this week. There wasn't a strong reaction to Friday morning's WSJ report that the Fed was considering tapering at the November meeting and wrapping up bond purchases by mid-2022. Market expectations had already coalesced around either a November or December announcement after the weak August jobs number, as the unreactive mortgage basis showed.

The valuation tradeoff in mortgage space remains the same; TBAs still are rolling special (though by less than they were a few months ago), but offer tighter spreads than most spec categories. The technical picture remains balanced in the near term. As we discuss in more detail below, net issuance continues to run hot on the back of remarkably strong HPA, and we're adjusting our full year forecast up to $800bn from $675bn. At the same time, the Fed's buying should still absorb a decent chunk of the net supply in the near term, and even in the early stages of the taper. And, as our colleagues in bank equity research recently noted, the disintermediation of bank C&I loans continues; the CLO machine and private equity are siphoning away traditional corporate loans from banks, leaving them to make lower yielding loans to non-bank financials. This also means they've still got plenty of cash to deploy into MBS if spreads were to widen or yields were to increase. So, while the Fed's taper approaches, there's latent demand that can support the sector and keep it from sharply widening.

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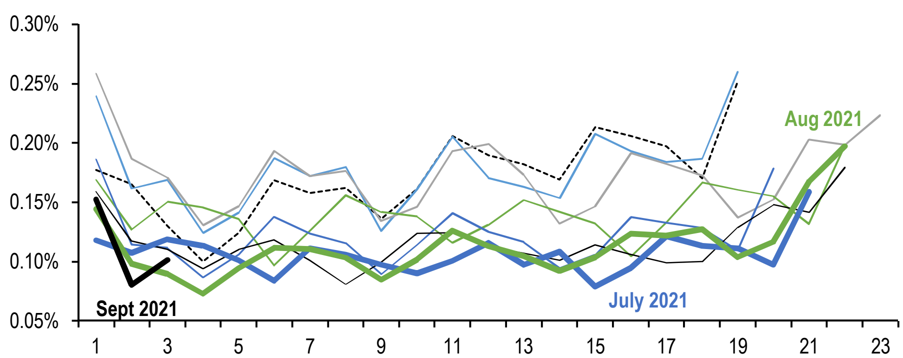
Tuesday's prepayment report brought both good and bad news. Investors in higher coupon seasoned collateral appreciated the muted prepay response up the stack, where speeds were close to flat though daycount was up by a day; on the other hand, speeds on 2s jumped sharply with cuspy borrowers responding to the dip in rates in late July/early August. We saw the first signs of what the end of forbearance might mean for borrowers, and discuss the available conventional data in more detail below. The modification information is lagged a month, but we did see an uptick in payment deferrals among borrowers rolling from 17 to 18 months delinquent (a proxy for the end of forbearance). On the Ginnie side, overall buyouts declined, but notably Freedom's tally continued to edge up (from $0.9bn in July to $1.5bn in August) and appears to be driven entirely by an uptick in modifications. At a high level, the Ginnie cure rate for borrowers rolling from 17 to 18 months delinquent didn't appear to significantly increase, but next month's data should be a cleaner gauge of the transition rates out of forbearance.

Black Knight: September started uneventfully

It's too early for us to make any strong inferences from the Black Knight data available for September, but with just three days of data in we're not far off from August's start—implying a down 5% month factoring in daycount **(Exhibit 1)**. 2s do appear to be faster m/m by around 5%, while 2.5s and above account for most of the decline, with higher coupons falling a bit more than 5%. We'll need to get another week of data before making a more detailed projection with our day pattern method.

Exhibit 1: The first three days of paydowns appear to be tracking for a -5% month
Daily prepayment rate on conventional 30yrs, %



Source: J.P. Morgan, Black Knight

Taper mechanics—November and December might be two months apart

Now that the market seems to have settled on a November or December FOMC taper announcement, we've fielded a number of questions regarding the precise timing of implementation. The Fed's purchases—both MBS and Treasuries—now all happen on a [mid-month to mid-month purchase cycle] designed to align net purchases and MBS paydown reinvestments, so it's probably simplest for the Fed to announce tapering for implementation in the upcoming purchase period.

However, their November 3rd meeting falls *before* the announcement for the 11/15 – 12/13 purchase period, while their December 15th meeting falls *after* the start of the 12/14 – 1/13 purchase period (**Exhibit 2**). So, a taper announcement at the November FOMC might effectively imply a taper start two months before an announcement at

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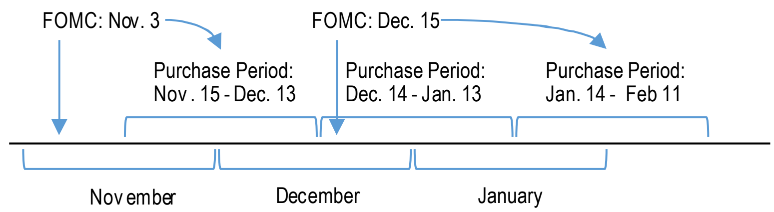
the December FOMC, unless the Fed chooses to make a mid-schedule adjustment. This difference won't matter much at the macro level, but for MBS investors it does mean that a November announcement could push the market toward spread normalization slightly faster than the announcement date gap might imply.

Exhibit 2: The timing of the Nov/Dec FOMC meetings could mean a two month taper difference



Source: J.P. Morgan

This is different from how the Fed operated back at the end of QE3. At that time, the Fed's buying pattern was more complicated. Their net purchase amounts were distributed over the trading days in a given calendar month (whatever fell in 8/1 – 8/31, for example), while their reinvestments were conducted over a mid-month to mid-month cycle (i.e., something like today's 8/13 – 9/14 window). So, regardless of when the FOMC meeting fell, they could always just decrease net purchases for the net calendar month.

Now, if the Fed does opt for a December announcement, it could conceivably alter the 12/14 – 1/13 purchases in the middle of the schedule. The MBS buying schedule is typically released every two weeks, making the change easier than for Treasuries (that schedule is announced for a full month). However, this would be somewhat akin to reverting to the old QE3 method, which complicated the accounting around net purchases. It'd be simpler to just stick to their current method, even though it would introduce a lag between announcement and implementation.

Update on conventional delinquencies

A few weeks ago, we wrote about the timeline for borrowers heading towards the 18 month maximum forbearance term, and since then we've received another month's worth of data. The September data only hinted slightly at what might happen as only a small block of borrowers rolled into their 18th month of missed payments. Below, we discuss the higher deferral usage among this group last month. Trial modification data is lagged by a month so it's possible that some borrowers who ran out of forbearance started mods that won't show up until next month.

There are a few points to mention with regards to the somewhat messy nature of the borrowers going from 17 to 18 months delinquent in this month's release. $1.8bn of loans were in this category and they first went delinquent in March 2020 (meaning they missed their March 1 payment), before the larger group that missed the April 1 payment. So, these borrowers could have a somewhat different profile than the majority of COVID-19 related delinquencies with a correspondingly different share of mod and deferral workouts. The other consideration is that the borrowers who went 18 months delinquent in August might not have had forbearance that first missed payment month (and so had an extra month on this end) given the late March implementation of the program.

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Moving onto the data, **Exhibits 3 and 4** show the delinquency transitions for borrowers based on prior month's number of payments missed. For example, a borrower 17 months delinquent in July either:

1) missed another payment, and became 18 months delinquent

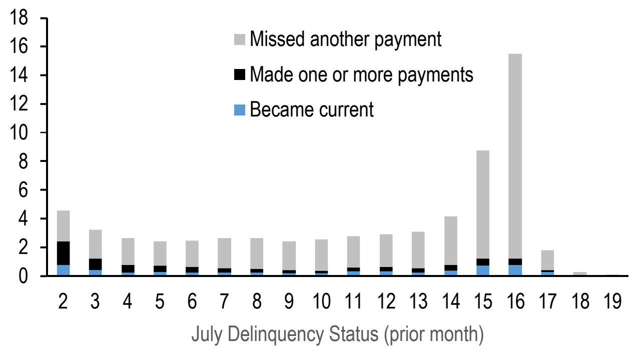
2) made one or more payments (typically one) but remained delinquent

3) became current (the vast majority through a payment deferral)

As the left-hand chart implies, the bulk of loans advanced their delinquency status, particularly those who had already missed 4 or more payments. For the borrowers who had missed 17 payments, there was a noticeable (but small) uptick in deferral usage (15%) relative to other groupings.

Exhibit 3: Most seriously delinquent borrowers missed another payment in August…

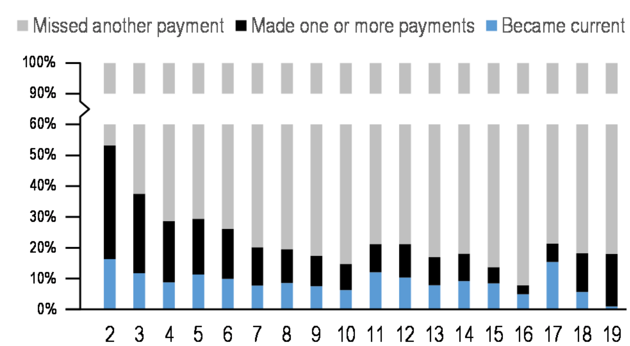
August payment status for conventional loans (issued in March 2020 or earlier) by number of months delinquent in July, $bn



Source: J.P. Morgan, Fannie Mae, Freddie Mac

Exhibit 4: …althought a slightly greater share of the previously 17 months delinquent group took a payment deferral

Share of loans by August payment status, based on July's number of months delinquent, %



Source: J.P. Morgan, Fannie Mae, Freddie Mac

On the other hand, the block of borrowers that went delinquent in April 2020 showed the smallest curing rate at only 5%, with most missing another payment. This group should show more activity next month as those able to cure via a payment deferral should look to exercise that option as forbearance runs out.

We also checked in on the performance of loans that have already received a deferral over the past year. Over 92% remain current or have missed only one payment, and we've seen that this group's speeds typically catch up to the current, non-deferred cohort after meeting the requirement of three consecutive payments before a refinance. **Exhibit 5** shows the status of the other $7.2bn (or $4.9bn, excluding those with one missed payment). These borrowers are eligible for another deferral (as long as they don't go over the 18 month cap on deferred payments)[1]. Still, the return to delinquent status probably makes it more likely that they will opt for a modification and buyout at the end of their forbearance plans.

[1] https://singlefamily.fanniemae.com/media/22936/display , page 7

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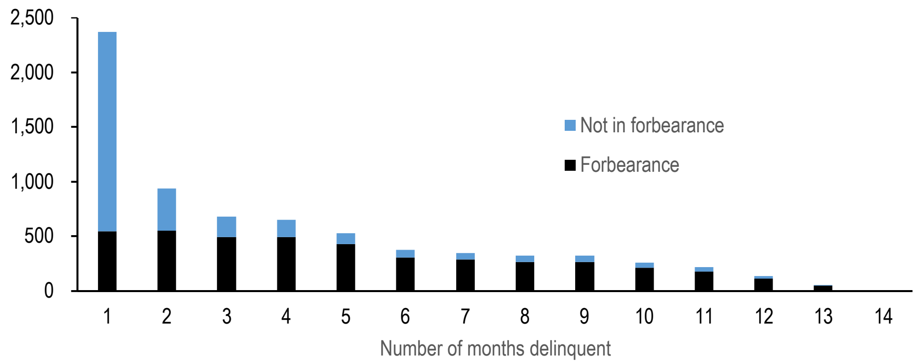
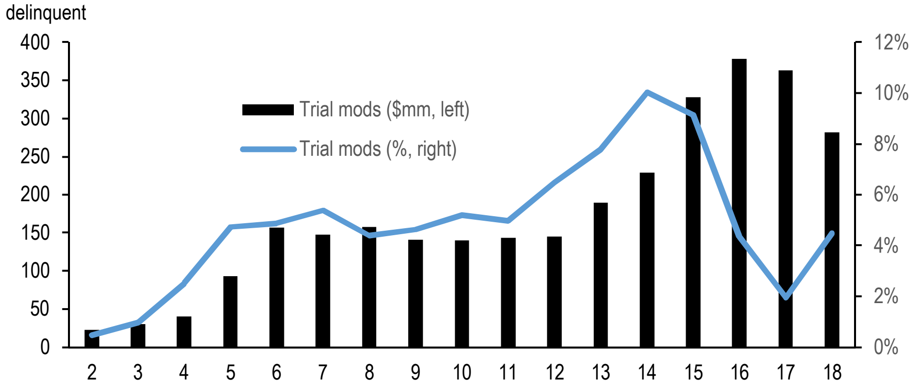
Exhibit 5: A smattering of loans that have already received deferrals went delinquent again
For loans that already have received a COVID-19 payment deferral, amount by number of months delinquent in August, $mm



Source: J.P. Morgan, Fannie Mae, Freddie Mac

Beyond delinquency status, the GSEs also give out a field called "borrower assistance plan" (BAP) that shows if a borrower has a trial modification or forbearance. Unfortunately this field is lagged by a month relative to other disclosures due to the timing of when servicer's report the borrower's status. In other words, the September 4th business day monthly data shows the delinquency status for August but the July "assistance plan". This means, among other things, that loans still appear to be in forbearance on the first month they show a deferral/a return to current. The other immediate issue is that we can't see any uptick in trial mods at this stage for borrowers who might have had to exit forbearance in August. **Exhibit 6** shows the current usage of trial modifications by number of months delinquent. The share has generally been in the 5-10% range, slightly higher for borrowers evaluating their options before extending forbearance again, and lower for the group approaching the 18 month maximum. We will wait for next month's release to see how many of the borrowers initially delinquent in March 2020 opted for a trial mod in August. It's tempting to say that it's the majority of borrowers that didn't become current (~85% of the borrowers who were 17m delinquent last month), but due to the forbearance confusion in March of 2020 that we discussed earlier, it's too early to know if that's really the case. Stay tuned.

Exhibit 6: The one month lagged borrower assistance plan data does not yet show any uptick in trial mod usage for borrowers reaching the end of forbearance
Amount and share of delinquent borrowers with a trial modification (one month lagged) by current number of months delinquent



Source: J.P. Morgan, Fannie Mae, Freddie Mac

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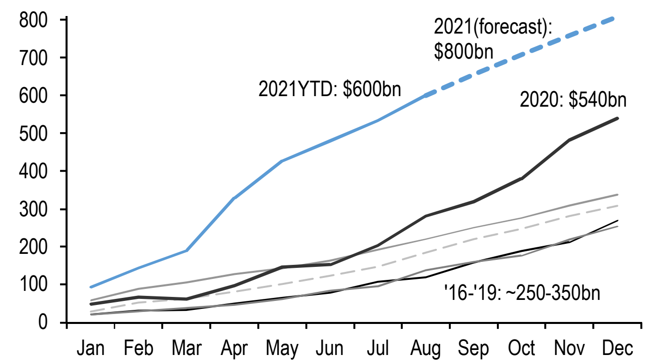
Net issuance $600bn through August: full year 2021 on pace to hit $800bn

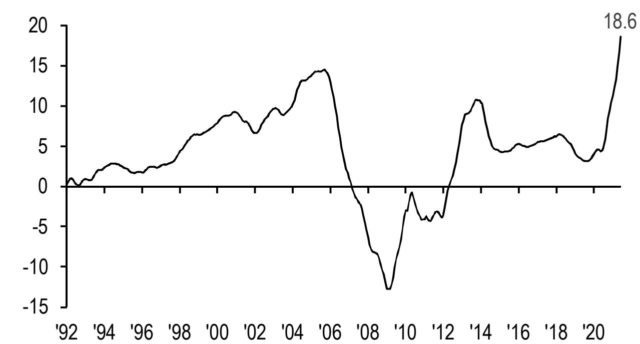
August net issuance came in at $67bn, partly boosted by a bump in gross issuance related to the removal of the Adverse Market Refinance Fee at the beginning of the month. **That brings the year-to-date total to just over $600bn, surpassing full year 2020's $540bn** (**Exhibit 7**). Though the pace is well off of the massive numbers seen in the first five months of the year, monthly net supply is still running much faster than the levels we were accustomed to before COVID. **By year end, we expect that we will hit $800bn, even factoring in the seasonal decline in purchase closes.**

Exhibit 7: Net supply remains robust—2021 could see $800bn
Cumulative fixed rate net issuance by year, $bn



Source: J.P. Morgan

Exhibit 8: The central driver is HPA
Case Shiller National YoY HPA, %



Source: J.P. Morgan, S&P CoreLogic

As we discussed in our midyear commentary, exceptionally strong home price appreciation (**Exhibits 9**) is fueling the net issuance surge. Each purchase loan issued matters a lot more for net issuance now, since HPA leads to restriking at much larger loan size between the old and new loans. HPA also generates raw fodder for equity extraction, leading to higher cash-out issuance.

What's more, while the purchase market has cooled since the beginning of the year, the application volume is now tracking 2019's levels (**Exhibit 10**). We'd thought that the volume might decline more rapidly than typical seasonal patterns, but instead it has followed the normal descent. That decline will drag the purchase loan contribution to net issuance lower, but only by so much (typically the purchase contribution bottoms in February/March).

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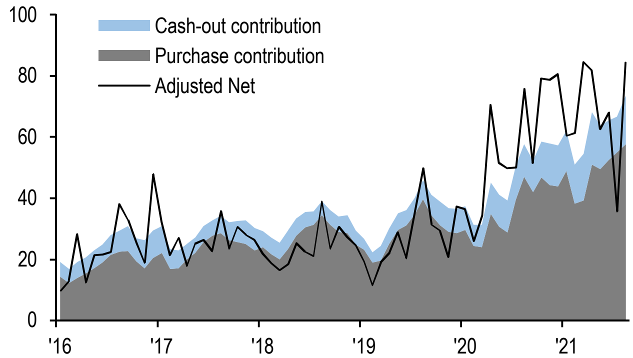
Exhibit 9: …which has fueled purchase and cash-out activity…

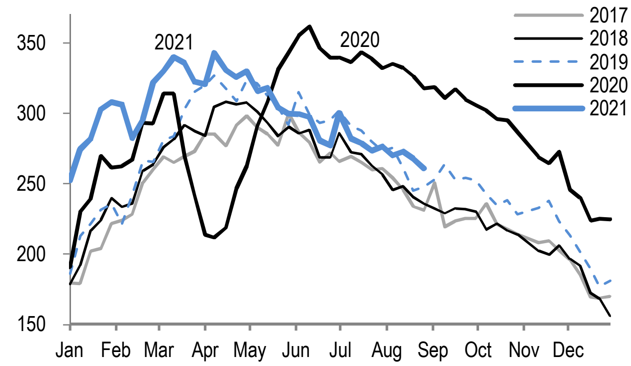
Estimated contribution to net supply by loan purpose, $bn



Source: J.P. Morgan

Exhibit 10: … and purchase apps haven't cratered

MBA Purchase Index, calendar year overlay with daycount adjustments



Source: J.P. Morgan, MBA

The recent uptick in prepayments will also help keep cash-out volumes afloat. Although HPA will boost cash-outs even at higher rates, borrowers looking for a rate/term refi have some propensity to take cash-out. Even recent vintages (some of the most responsive in the latest report) will have experienced strong HPA and could be in a position to take out cash. All in all, the end of the year is shaping up to remain robust for net issuance.

TBA Definition Update (Originally published 9/1)

Today (Friday 9/10), we will update our TBA definitions for UMBS 30yr 1.5s, 3s, and 3.5s, as well as UMBS 15yr 2.5s, 3s, and 3.5s. These definitions will better align with the observed deliverable and will all season month to month. See the tables in **Exhibits 11 and 12** for more details on the new definitions that will show up first in the daily packet on Monday 9/13. Note that the WALAs shown in the table applied to September settlement and that all of these definitions will season an additional month for October settlement.

Exhibit 11: 30yr conventional TBA definition updates and impacts…

Current and new TBA definitions. Valuation impacts on OAS and OADs are also shown (this represents the change in the level of these values resulting from the new definitions), as of the 8/30/2021 close, for September Class A settle

		Current					New					Tsy OAS		OAD		OAC		Life CPR		Impact			
Prod	Cpn	wala	wac	als(k)	fico	ltv	wala	wac	als(k)	fico	ltv	Curr	New	Curr	New	Curr	New	Curr	New	OAS	OAD	OAC	Life CPR
FNCL	1.5	2	2.50	355	770	70	4	2.54	345	770	70	-5	-2	6.5	6.3	-2.7	-2.8	8.8	9.4	3	-0.1	0.0	0.6
FNCL	3.0	19	3.86	335	755	76	14	3.86	315	735	77	-15	-10	0.8	0.8	-1.4	-1.5	31.6	30.7	5	0.0	-0.2	-0.9
FNCL	3.5	23	4.40	310	735	78	23	4.40	300	735	80	-15	-8	0.7	0.8	-0.5	-0.6	34.3	32.8	7	0.1	-0.1	-1.5

Source: J.P. Morgan

Exhibit 12: …and the same for conventional 15yrs

Current and new TBA definitions. Valuation impacts on OAS and OADs are also shown (this represents the change in the level of these values resulting from the new definitions), as of the 8/30/2021 close, for September Class B settle

		Current					New					Tsy OAS		OAD		OAC		Life CPR		Impact			
Prod	Cpn	wala	wac	als(k)	fico	ltv	wala	wac	als(k)	fico	ltv	Curr	New	Curr	New	Curr	New	Curr	New	OAS	OAD	OAC	Life CPR
FNCI	2.5	5	3.13	275	760	63	12	3.13	255	756	64	-44	-30	0.6	1.1	-0.7	-1.0	33.1	29.2	14	0.5	-0.3	-3.9
FNCI	3.0	30	3.87	260	758	67	26	3.62	210	748	67	-9	-2	1.3	1.3	-1.0	-0.9	29.1	27.6	7	0.1	0.1	-1.5
FNCI	3.5	26	4.05	269	745	68	57	4.12	100	746	66	-19	0	1.0	1.5	-0.7	-0.5	29.3	24.5	19	0.5	0.2	-4.8

Source: J.P. Morgan

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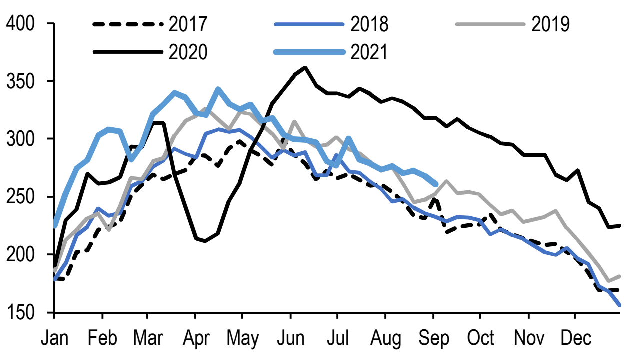
Week in review

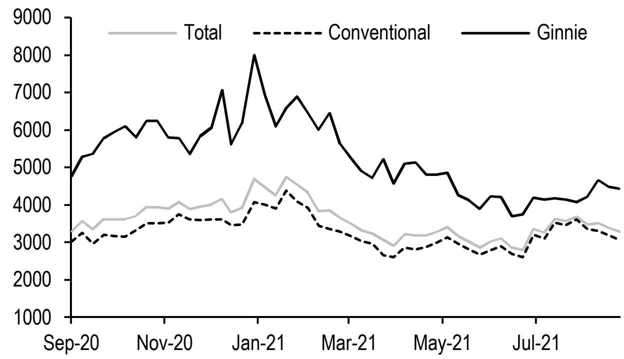
- **MBA Weekly Survey**: For the week ending September 3, the purchase application index fell 0.2% to 258.4, and the refinance index fell 2.8% to 3292.1 (seasonally adjusted) **(Exhibits 13 and 14)**.
- **Freddie Primary Survey:** For the Monday-Wednesday period prior to September 9, 2021, 30-year conventional conforming fixed-rate mortgages averaged 2.88%, up 1bp from the previous week **(Exhibit 15)**.
- **Primary dealer agency MBS passthrough positions** fell $2.4bn to $49.0bn as-of close of trading September 1. Other agency MBS holdings were $0.2bn lower at $17.4bn.
- **Fixed-rate agency gross and net issuances were $278.3bn and $67.2bn, respectively, in August (Exhibit 16).** September gross supply currently stands at $131.6bn.

Exhibit 13: MBA Purchase Index, calendar year overlay with daycount adjustments



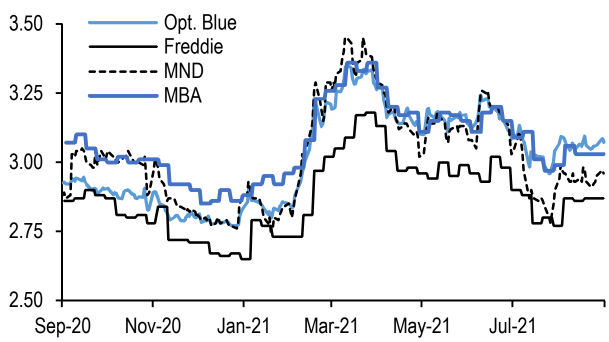
Source: J.P. Morgan, MBA

Exhibit 14: MBA Refi Indices, seasonally adjusted



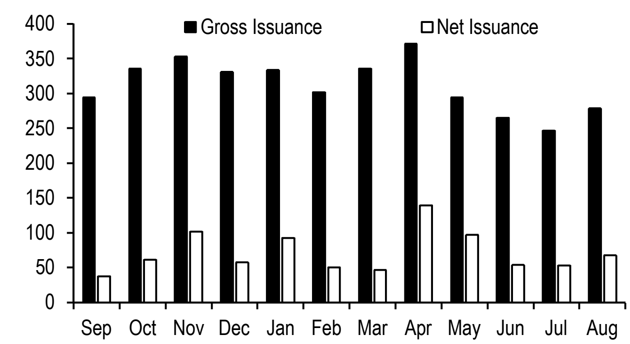
Source: J.P. Morgan, MBA

Exhibit 15: Primary mortgage rates, %



Source: J.P. Morgan, Optimal Blue, Freddie Mac, Mortgage News Daily, MBA

Exhibit 16: Gross and net fixed-rate MBS monthly issuance, $bn



Source: J.P. Morgan

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RMBS Credit Commentary

- **RMBS credit had a quiet holiday week with no new issue supply and spreads unchanged across sectors**
- **This week, Freddie announced the first ever tender offer for up to $650mn of original face of STACR notes**
- **The accompanying FAQ indicated that these bonds were selected as they did not provide any capital relief to Freddie Mac**
- **An additional consideration may have been the cost of credit protection in these pre-COVID issued deals**
- **The rise in DLQs and fast speeds have driven up the size of the subordinate stack relative to the pool and increased the implied g-fee**
- **Through this tender offer, Freddie is able to reduce the size of the subordinate stack by purchasing and retiring the current pay bonds**
- **In general, the current pay tranches are far more capital efficient for Freddie than the B tranches, making them more suitable for a tender offer**
- **If reducing the cost of credit protection is a consideration, this tender offer may prove to the be the first of many, as reducing the size of the subordinate stack could help improve the economics**
- **Of course, there are likely other factors driving this offer, including the capital rule, and it remains to be seen how Freddie utilizes this program**
- **We revise our issuance forecast higher to $206bn from $161bn previously**
- **Jumbo 2.0 and agency investor will continue to be the main drivers of supply in RMBS credit**

Market Commentary

RMBS credit had a quiet holiday week as no new issue was priced and spreads were unchanged across sectors. We expect the primary markets to meaningfully pick up in the coming weeks, and take this as an opportunity to revise our issuance forecasts. We now expect FY RMBS credit supply to reach $206bn, up from $161bn in the prior forecast. The new issue supply will likely continue to be driven by jumbo and investor securitizations. Separately, on Tuesday, Freddie announced the first ever tender offer for up to $650mn of STACR notes. We discuss the tender offer in more detail below.

Exhibit 1: RMBS Credit issuance to date ($mn)

Issuance $mn	2019 FY	2020 YTD	2021 YTD
Jumbo 2.0	14,788	11,409	32,680
Agency Investor	3,315	2,267	8,733
CRT	21,279	12,820	11,866
Rental	4,367	4,466	11,125
RPL	47,976	13,219	21,152
NPL	16,210	6,455	14,290
Non-QM	28,922	16,709	15,751
Seasoned CRT	6,753	3,438	2,228
Other	7,664	6,126	13,331
Total	151,274	76,909	131,157

Source: J.P. Morgan

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Exhibit 2: Returns

Monthly and total (year-to-date, unannualized) returns, %p

	Aug Return	2021 YTD Return Total	Price	Factor	Principal	Coupon
Prime Fixed	-0.04%	-1.3%	-1.7%	-19.5%	18.6%	4.8%
Prime Hybrid	0.00%	3.4%	-1.8%	-18.0%	24.4%	2.7%
Alt-A Fixed	0.49%	4.2%	-5.3%	-6.7%	11.9%	5.2%
Alt-A Hybrid	0.46%	3.9%	-1.5%	-11.7%	16.1%	2.7%
Alt-A Floater	0.91%	-1.6%	0.2%	-16.2%	16.3%	0.5%
Option ARM	0.42%	8.2%	-0.2%	-10.8%	20.5%	0.5%
Subprime LCF	0.29%	6.4%	4.8%	-3.3%	4.6%	0.4%
Prime.13H1	-1.7%	-1.7%	-1.2%	-41.1%	60.5%	1.9%
Prime.14	0.4%	-5.0%	-1.5%	-45.3%	65.7%	2.4%
Prime.15	-2.5%	-12.8%	-1.5%	-50.8%	67.9%	1.9%
Prime.16	-0.7%	-8.8%	-0.9%	-46.5%	62.2%	1.9%
Prime.17	0.2%	0.5%	-1.0%	-49.0%	84.6%	2.3%
Prime.18	-0.3%	-7.0%	-2.1%	-61.5%	118.5%	2.6%
Prime.19.3.5	0.2%	-0.4%	-1.1%	-48.8%	83.0%	1.9%
Prime.19.4.0	-0.7%	-0.8%	-1.5%	-61.0%	128.1%	2.6%
Prime.20.2.5	0.2%	-0.1%	-1.1%	-44.0%	70.4%	1.7%
Prime.20.3.0	0.2%	-0.2%	-1.1%	-47.8%	80.1%	2.0%
CRT.19.LLTV.M2	0.1%	2.3%	1.4%	-35.1%	34.6%	1.3%
CRT.19.LLTV.B1	0.3%	4.6%	2.0%	0.0%	0.0%	2.6%
CRT.19.HLTV.M2	0.2%	2.2%	1.1%	-33.2%	33.0%	1.3%
CRT.19.HLTV.B1	0.3%	5.3%	2.6%	0.0%	0.0%	2.7%
CRT.20.LLTV.M2	0.1%	1.9%	0.6%	-30.8%	30.6%	1.6%
CRT.20.LLTV.B1	0.2%	4.7%	2.0%	0.0%	0.0%	2.7%
CRT.20.HLTV.M2	0.2%	2.1%	0.6%	-27.3%	27.0%	1.7%
CRT.20.HLTV.B1	0.1%	5.0%	2.2%	0.0%	0.0%	2.8%
RPL.19.AAA	-0.1%	0.8%	0.0%	-23.8%	29.2%	2.4%
RPL.19.AA	-0.2%	2.2%	0.9%	-16.4%	18.2%	2.4%
RPL.19.A	0.0%	2.3%	0.2%	-6.4%	6.4%	2.5%
RPL.20.AAA	0.0%	0.6%	-0.1%	-17.5%	20.0%	1.6%
RPL.20.AA	-0.1%	1.0%	-0.5%	-4.8%	4.5%	2.0%
RPL.20.A	-0.1%	2.1%	0.4%	-9.8%	10.4%	2.1%
Non-QM.19.AAA	0.8%	-0.3%	-1.5%	-78.3%	347.1%	2.1%
Non-QM.19.AA	0.30%	-1.3%	-2.1%	-74.6%	281.4%	2.2%
Non-QM.19.A	0.31%	-0.2%	-1.5%	-74.6%	282.7%	2.3%
Non-QM.19.BBB	0.31%	-7.9%	-1.6%	-64.1%	151.7%	2.5%
Non-QM.19.BB	0.41%	2.1%	-0.5%	-67.7%	204.2%	3.1%
Non-QM.20.AAA	0.04%	0.5%	-0.3%	-40.2%	66.1%	1.2%
Non-QM.20.AA	0.12%	1.0%	-0.4%	-17.6%	20.9%	1.7%
Non-QM.20.A	0.16%	1.1%	-0.5%	-17.6%	20.8%	2.0%
Non-QM.20.BBB	0.12%	3.0%	0.6%	0.0%	0.0%	2.4%
Non-QM.20.BB	0.19%	4.1%	1.0%	0.0%	0.0%	3.0%
SFR.17.AAA	0.0%	0.7%	-0.4%	-47.2%	47.2%	1.1%
SFR.17.AA	0.20%	0.7%	-0.6%	-33.1%	33.1%	1.4%
SFR.17.A	0.16%	0.8%	-0.7%	-33.1%	33.1%	1.5%
SFR.17.BBB+	0.10%	0.9%	-0.8%	-33.1%	33.1%	1.7%
SFR.17.BBB-	0.11%	0.9%	-1.2%	-32.9%	33.0%	2.1%
SFR.17.BB/NR	0.22%	1.3%	-1.4%	-32.9%	32.9%	2.7%
SFR.18.AAA	0.10%	1.1%	0.4%	-2.9%	2.9%	0.7%
SFR.18.AA/AA+	0.13%	1.2%	0.4%	0.0%	0.0%	0.8%
SFR.18.A/A+	0.15%	1.3%	0.4%	0.0%	0.0%	1.0%
SFR.18.BBB+	-0.01%	1.4%	0.3%	-80.2%	80.3%	1.1%
SFR.18.NR	0.17%	1.3%	0.3%	-61.7%	61.6%	1.1%

Source: J.P. Morgan

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Freddie tender offer: Improving the economics

This week, Freddie announced the first ever tender offer for up to $650mn of original face of STACR notes. The tender offer period will begin on September 7, 2021 and end on October 4, 2021. The securities and tender offers are listed in **Exhibit 3**. Across all bonds, the tender offer prices are 0.5pt to 1pt higher than recent TRACE prints.

Exhibit 3: This week, Freddie announced the first ever tender offer for up to $650mn of original face of STACR notes

STACR bonds on Freddie's tender offer

Deal name	CUSIP	Tender offer price	TRACE date	TRACE price	TRACE size ($)
STACR 2017-HQA1 M2	3137G0NE5	$103.96	9/1/2021	$103.00	1,246,540
STACR 2017-HQA3 M2	3137G0RL5	$102.62	8/17/2021	$101.81	250,282
STACR 2016-HQA3 M3	3137G0LA5	$103.61	9/3/2021	$102.97	808,000
STACR 2016-HQA4 M3	3137G0LU1	$104.05	7/20/2021	$103.31	5,000,000
STACR 2014-HQ2 M3	3137G0CH0	$104.09	8/26/2021	$103.19	636,193
STACR 2015-HQA2 M3	3137G0HJ1	$103.66	8/12/2021	$102.94	1,379,075
STACR 2015-HQA1 M3	3137G0GJ2	$103.24	9/3/2021	$102.59	386,295
STACR 2017-DNA1 M2	3137G0MD8	$103.30	8/25/2021	$102.84	1,179,002

Note: TRACE prices are from the most recently recorded transactions for each deal.
Source: J.P. Morgan, Freddie Mac

As part of this tender offer, Freddie also released a FAQ that provides more insight into their thought process.[2] The FAQ clarified that this offer does not reflect a change in Freddie's issuance plans. It also said that these bonds were selected as they did not provide any capital relief to Freddie Mac. This suggests that the capital rule was one of the drivers behind the tender offer.

An additional consideration may have been the cost of credit protection in these pre-COVID issued deals. These deals were structured so that the subordinate stack and retained AH tranches would amortize at a similar rate. This way, while the weighted average coupon of the subordinate stack would increase as the cheaper M1, M2s pay down, the subordinate stack wouldn't become a bigger part of the overall pool. In normal times, therefore, such a waterfall would keep the implied g-fee of the CRT deal in check.

The COVID crisis changed the waterfall. As delinquencies rose, the DLQ trigger was hit and the subordinate tranches were locked out. At the same time, fast prepayments resulted in rapid amortization of the retained AH tranche. This increased the size of the subordinate stack relative to the pool and drove up the implied g-fee of the deals.

Through this tender offer, Freddie is able to reduce the size of the subordinate stack by purchasing the current pay bonds. Indeed, the eight bonds in the tender offer are some of the thicker outstanding M2 / M3 tranches, and have marginally higher spreads relative to other deals (**Exhibit 4**). In general, the current pay tranches are far more capital efficient for Freddie than the B tranches that have a 1250% RWA. This makes the current pays more suitable for a tender offer.

[2] https://crt.freddiemac.com/news-insights/reference-materials/stacr-repurchase-faq

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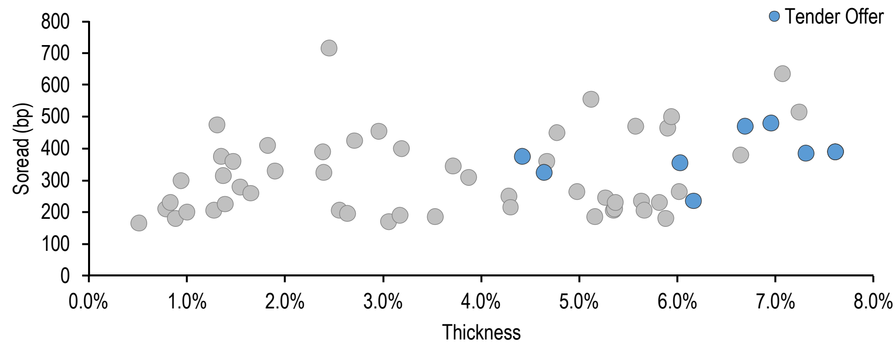
Exhibit 4: The eight bonds in the tender offer are some of the thickest outstanding M2 / M3 tranches, and have marginally higher spreads

Spread (bp) vs tranche thickness on outstanding STACR M2 / M3 classes

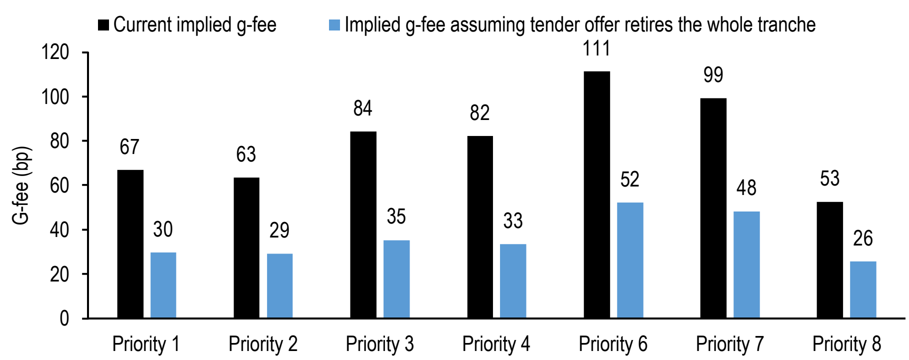


Source: J.P. Morgan

In **Exhibit 5**, we calculate an implied g-fee for the CRT deals that are part of the tender offer using current outstanding tranche thickness, DMs and model WALs. We also calculate this same implied g-fee assuming that the bonds in the tender offer are fully purchased by Freddie, resulting in the purchased tranche getting retired and having no coupon payment.

Exhibit 5: Reducing the size of these thick tranches helps bring in the cost of the CRT

Current implied g-fee vs g-fee assuming tender offer retires the whole tranche (bp)



Note: Implied g-fee only includes the cost of the credit tranches and not the Treasury allocation and other costs. The calculation assumes that the entire current pay tranche that is part of the tender offer is retired. STACR 2014-HQ2 M3 not included as the coupon for the B3H tranche is not available. Source: J.P. Morgan, Bloomberg Finance L.P.

Note that due to the size of the tender offer and the limitations of the process, Freddie likely won't be able to purchase all of these tranches, but this calculation is purely for illustrative purposes. We don't include STACR 2014-HQ2 M3 in the Exhibit as the coupon for the BH tranche is unavailable. The implied g-fees in the Exhibit do not include the Treasury allocation and other admin costs.

The Exhibit highlights the impact that retiring these notes could have on the implied g-fee, which would drop by 27 - 59bp, depending on deal. Again, note that we assume that the entire tranche in the tender offer will be retired, which is unlikely to be the case.

Interestingly, the g-fees line up well with the priority schedule embedded in the tender offer. This priority schedule determines the tranches that Freddie will purchase if investor interest exceeds the tender offer cap. Our analysis suggests that the deals with the highest priority will also have the lowest g-fee after the tranche is retired. For example, the priority 1 and 2 deals have a post-retirement g-fee of 30bp and 29bp versus 52bp and 48bp for the priority 6 and 7 deals.

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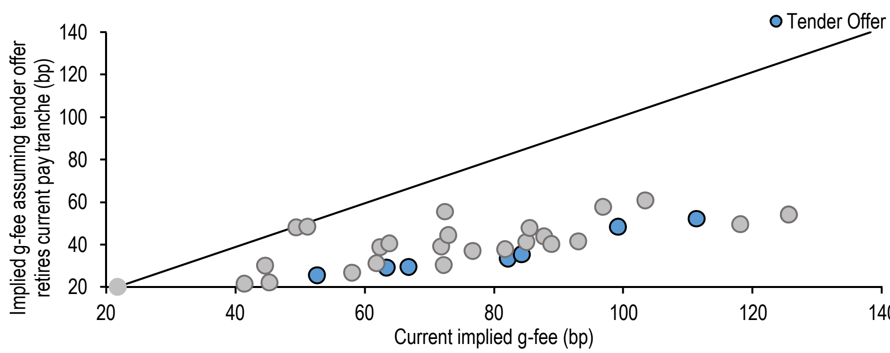
The one deal that goes against this trend is the priority 8 deal. Despite being lowest in priority, this transaction has the lowest post-retirement g-fee of 26bp. The reason this deal may not be higher up on the priority list is because its current implied g-fee of 53bp is much lower than the rest of the deals.

If reducing the cost of credit protection is a consideration, this tender offer may prove to be the first of many. In **Exhibit 6**, we plot the current implied g-fee for all pre-2020 issued STACR actual loss deals against the implied g-fee assuming that a similar tender offer retires the entire current pay tranche. The chart shows that such a strategy would result in drops in implied g-fees across many transactions.

Exhibit 6: Conducting a similar tender offer across outstanding STACR deals will help the economics of CRT deals

Implied g-fee assuming tender offer retires the entire current pay tranche (bp) vs current implied g-fee on all pre-2020 issued STACR actual loss deals. Each dot represents a pre-2020 issued STACR actual loss transaction



Note: Implied g-fee only includes the cost of the credit tranches and not the Treasury allocation and other costs. The calculation assumes that the entire current pay tranche that is part of the tender offer is retired. STACR 2014-HQ2 M3 not included as the coupon for the B3H tranche is not available.
Source: J.P. Morgan, Bloomberg Finance L.P.

Of course, there could be many other factors driving this offer, likely including the capital rule. It remains to be seen how successful this offer is, and how Freddie uses this program.

2021 issuance forecast: $206bn with more 2.0 supply

Non-agency RMBS issuance year-to-date has already outpaced 2020 levels and is well on track to exceed the post-crisis record of 2019 (**Exhibit 7**). Compared to 2019 though, the composition of non-agency supply has materially changed. RMBS 2.0, which has historically been a $10 - $20bn / year sector, has seen the largest growth with YTD issuance at $41bn. Meanwhile, YTD non-QM, RPL and CRT issuance is down compared to the same period in 2019. Given these changes, we revise our gross and net issuance forecasts. We now expect the gross issuance to reach $206bn, up from $161bn in the prior forecast (**Exhibit 8**).

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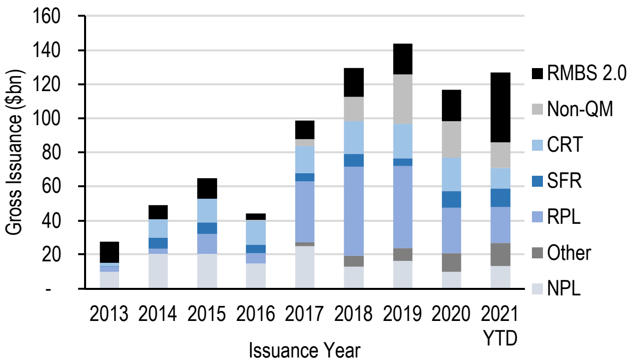
Exhibit 7: Non-agency RMBS issuance is well on track to exceed the post-crisis record of 2019

Gross issuance ($bn) by sector



Source: J.P. Morgan, Bloomberg Finance L.P.

Exhibit 8: We now expect gross issuance to reach $206bn, up from $161bn in the prior forecast

$bn

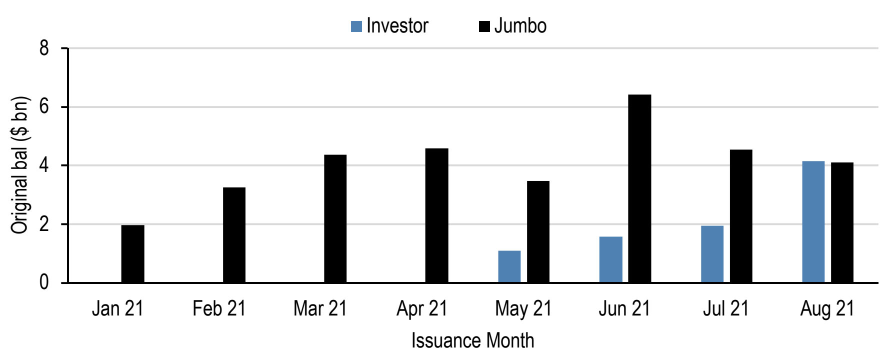
	2019 FY		2020 FY		2021 YTD		2021 Forecast	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Legacy		(56)	-	(43)	-	(31)	-	(36)
Jumbo 2.0	18	8	19	(8)	41	15	70	45
Non-QM	29	23	21	7	16	(4)	25	(2)
CRT	21	17	21	2	12	3	21	3
SFR	4	2	10	7	11	8	20	12
RPL	48	37	29	6	21	(3)	30	(2)
NPL	16	1	9	3	14	3	20	7
Other	8	NA	11	NA	13	NA	20	NA
Total	**144**	**30**	**120**	**(26)**	**129**	**(9)**	**206**	**28**

Source: J.P. Morgan

We expect jumbo 2.0 and investor securitizations to continue to be the main drivers of non-agency supply, and look for FY gross issuance to reach $70bn. The agency investor collateral started to make its way into PLS as the GSEs implemented the 7% cap on investor / 2nd homes, as mandated by the revised PSPA. In May, we saw the first securitization of this collateral this year and since then, many of the biggest agency originators have issued investor deals in the PLS space (**Exhibit 9**). We expect issuance to be evenly split between jumbo and agency investor for the rest of the year.

Exhibit 9: We expect jumbo 2.0 and investor securitizations to continue to be the main drivers of non-agency supply

Jumbo and investor gross issuance ($bn) by issuance month



Source: J.P. Morgan, Bloomberg Finance L.P.

The securitization of new origination non-QM loans has seen some signs of recovery post-March 2020 (**Exhibit 10**). Refinancing transactions have also provided a meaningful supply boost to the sector. Issuers have been efficient at refinancing the transactions soon after the passage of the call date. Currently, the callable universe is roughly $1.4bn and will increase to $3.5bn by year-end. We revise FY non-QM issuance higher to $25bn, assuming that a little over $1bn of new originated loans will end up in securitizations each month and all of callable deals will be refinanced.

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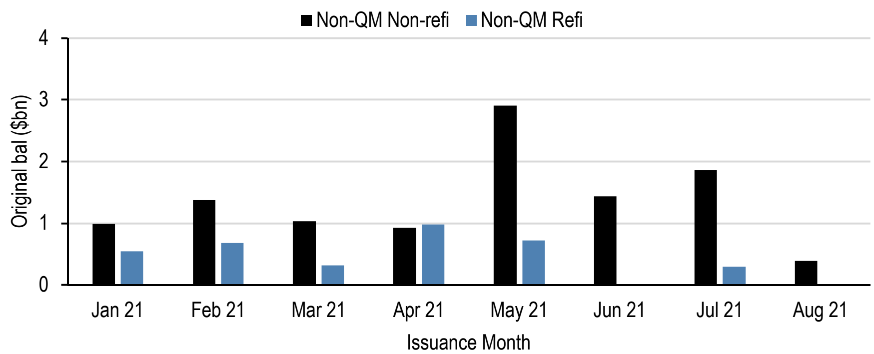
Exhibit 10: The securitization of new origination non-QM loans has seen some sign of recovery post-March 2020

Non-QM refi vs new origination gross issuance ($bn) by issuance month



Source: J.P. Morgan, Bloomberg Finance L.P.

SFR is set to have its biggest issuance year in 2021. Similar to non-QM, this has been driven by a combination of refinancings and securitizations of new acquisitions. By year-end, roughly $5bn of SFR will have passed the yield maintenance period. We revise our SFR forecast higher to $20bn. We keep forecasts for CRT and RPL unchanged and revise NPL forecast marginally higher.

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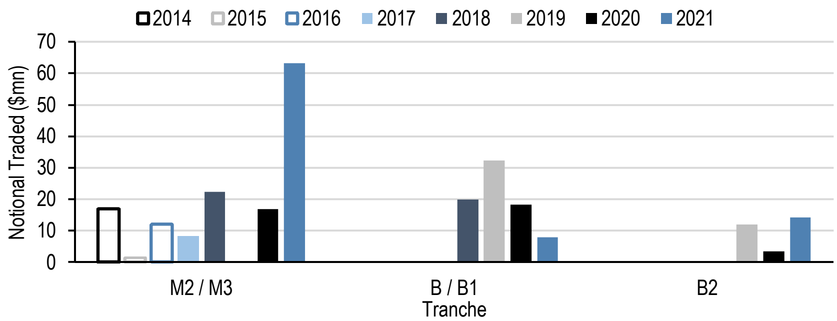
CRT TRACE tracker

Exhibit A1: Secondary trading activity by tranche, time and vintage

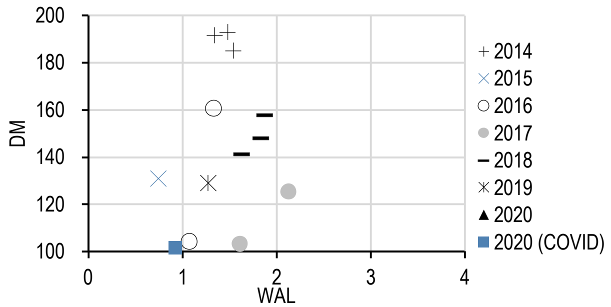
CRT notional traded from 9/3 to 9/9 by tranche and vintage



Source: J.P. Morgan, TRACE

Exhibit A2: M2 model WAL vs. DM for bonds that traded this week

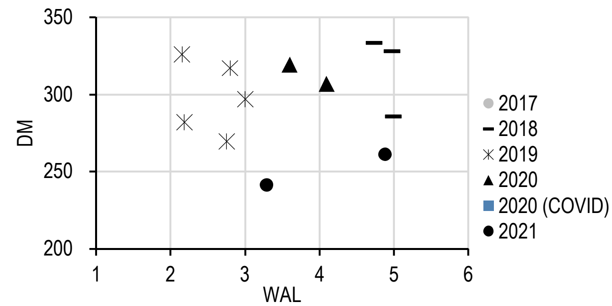
CRT M2 / M3 model DM vs WAL by deal vintage



Note: 2020 (COV) are post-March 2020 issued STACR deals.
Source: J.P. Morgan, TRACE

Exhibit A3: B1 model WAL vs. DM for bonds that traded this week

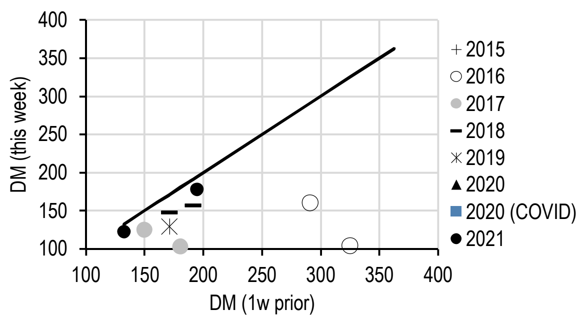
CRT B1 / B model DM vs WAL by deal vintage



Note: 2020 (COV) are post-March 2020 issued STACR deals.
Source: J.P. Morgan, TRACE

Exhibit A4: M2 spreads week-over-week

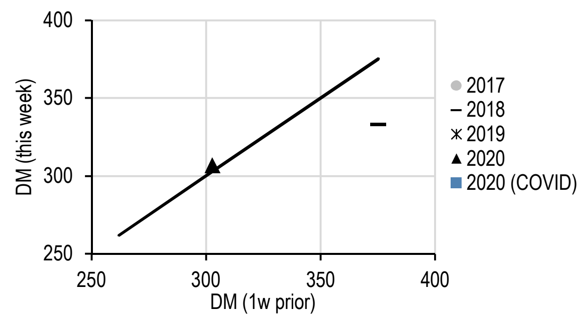
CRT M2 / M3 this vs prior week's DM@10CPR



Note: Prior week is defined as 7 - 14 days prior to today. Includes only bonds that have traded during both periods. 2020 (COV) are post-March 2020 issued STACR deals.
Source: J.P. Morgan, TRACE

Exhibit A5: B1 spreads week-over-week

CRT B1 / B this vs prior week's DM@10CPR



Note: Prior week is defined as 7 - 14 days prior to today. Includes only bonds that have traded during both periods. 2020 (COV) are post-March 2020 issued STACR deals.
Source: J.P. Morgan, TRACE

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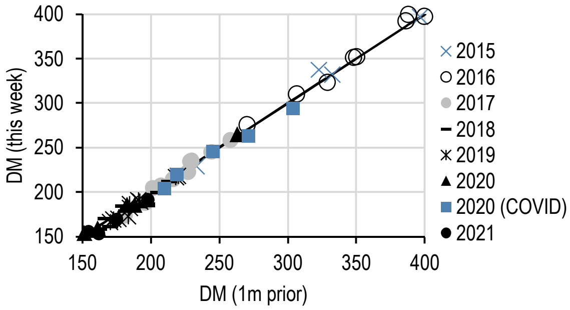
Exhibit A6: M2 spreads month-over-month

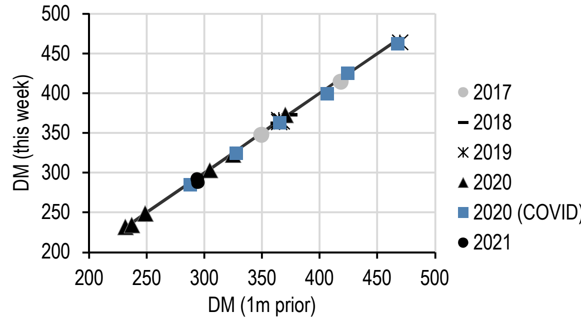
CRT M2 / M3 this week's DM@10CPR vs prior month's



Note: Prior month is defined as 30 - 45 days prior to today. Includes only bonds that have traded during both periods. 2020 (COV) are post-March 2020 issued STACR deals.
Source: J.P. Morgan, TRACE

Exhibit A7: B1 spreads month-over-month

CRT B1 / B this week's DM@10CPR vs prior month's



Note: Prior month is defined as 30 - 45 days prior to today. Includes only bonds that have traded during both periods. 2020 (COV) are post-March 2020 issued STACR deals.
Source: J.P. Morgan, TRACE

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CMBS

- **CMBS spreads widened this past week with on-the-run BBB-s underperforming 10yr LCF AAAs. BBB-s were 10bp wider on the week to S+305 while LCF AAAs widened by just 1bp to S+68. Comparatively, corporates outperformed CMBS with 7-10yr single-A corporates about flat on the week and domestic HY 8bp tighter. With Delta cases seemingly having peaked in the US, we think CMBS BBB-s can play catch up to HY, leading to spread curve flattening. Synthetic BBB-s, on the other hand, have been leading cash, taking cues from the HY market**
- **CMBS issuance activity is expected to be heavy this month and likely in Q4 as well. On the HG corporate side, the Labor Day break was met with a flurry of issuance but our High Grade corporate strategists note that this supply has been well absorbed with spreads barely budging. If this is any indication of broad investor demand for bonds, CMBS spreads may not move materially wider on heavy supply after all. Regardless, we see any meaningful spread weakness in the near-term as an opportunity to add**
- **We continue to see value in seasoned LCF AAAs. The most seasoned bonds carry negative convexity risks as loans near their open periods. We see voluntary prepayments in the open period (CPY) as the primary risk and liquidation recovery prepayments as a secondary risk given typically long liquidation timelines for troubled loans. Under conservative CPY and our Flush and Extend scenario, we think 2012 vintage bonds can broadly offer attractive spreads at expected WAL under 1yr**

Exhibit 1: CMBS spread summary

	This Week	Change 1 WK	Change 1 MTH	Change YTD
New Issue CMBS (Swap)				
5yr Super-Senior AAA	44	1	-1	-14
10yr Super-Senior AAA	68	1	0	-1
AS	88	1	0	1
AA	107	4	4	-13
A	145	5	5	-30
Pre-COVID BBB-	305	10	15	-90
On-the-run BBB-	305	10	15	-80
XA	108	3	-2	-57
Agency CMBS				
Freddie K A1 (10yr coll.)	7	-4	-4	-19
Freddie K A2 (10yr coll.)	18	2	1	-10
Freddie K B (10yr coll.)	130	0	5	-55
Freddie K C (10yr coll.)	155	0	5	-80
Freddie K X1	65	0	-10	-75
Freddie K X3	260	-5	-10	-95
FRESB A5H	5	0	0	-17
FRESB A10F	22	0	0	-12
FNMA DUS 10/9.5 TBA	26	-2	-1	-10
GNMA Project Loan (3.5yr)	60	0	-5	-15

Source: J.P. Morgan

Exhibit 2: Summary of CMBS issuance and dealer holdings

YTD Issuance ($bn)	2021	2020	% Diff.
Conduit	18.5	22.4	-17%
SASB	38.3	14.9	157%
CRE CLO	27.3	6.2	339%
Other	0.4	0.9	-51%
Total Private Label	**84.5**	**44.4**	**90%**
Freddie K	44.3	33.3	33%
FRESB	3.4	3.7	-9%
Fannie MBS	41.6	43.1	-3%
GNR PL	32.0	20.1	59%
Freddie Other	2.2	0.3	566%
Agency CMBS	**123.5**	**100.5**	**23%**
Total CMBS	**208.0**	**144.9**	**44%**
YTD Issuance ($bn)	**2021**	**2020**	**% Diff.**
Private Label Fixed	24.9	31.0	-20%
Private Label Floating	59.6	13.4	343%
Agency Fixed	93.8	86.4	9%
Agency Floating	29.6	14.0	111%
Dealer Holdings ($bn)	**9/1/21**	**8/25/21**	**8/4/21**
Private Label	5.40	5.34	5.15
Agency CMBS	4.44	4.44	4.17

Source: J.P. Morgan, Commercial Mortgage Alert, Federal Reserve Bank of New York, Fannie DUS Disclose
Note: Dealer holdings reported with a 1-week lag.

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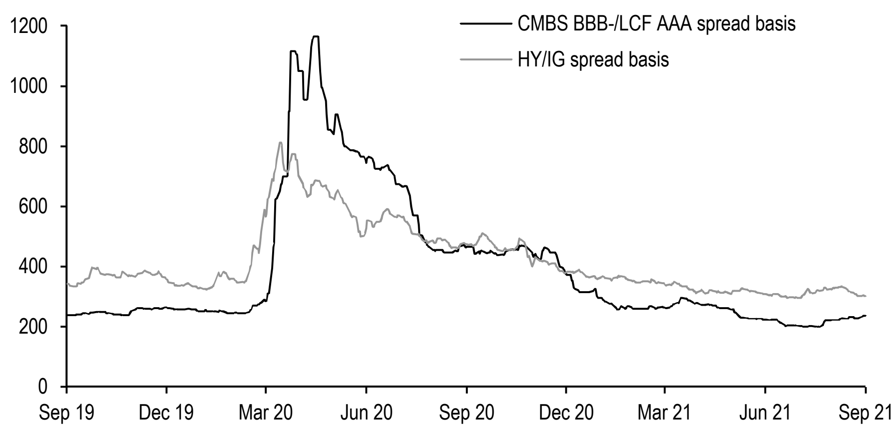
Weekly market snapshot

Market commentary – take a chance on seasoned LCF AAAs

CMBS spreads widened this past week with on-the-run BBB-s underperforming 10yr LCF AAAs. BBB-s were 10bp wider on the week to S+305, while LCF AAAs widened by just 1bp to S+68. Comparatively, corporates outperformed CMBS with 7-10yr single-A corporates about flat on the week and domestic HY 8bp tighter. The continued bearish spread curve steepening we've seen in CMBS since early summer is in contrast to the experience in the corporate market where the HY/IG spread basis has compressed in recent weeks (**Exhibit 3**). This divergence can be explained by the fact that CMBS has been more sensitive to pandemic concerns than the corporate market. The spike in Delta cases seems to have impacted CMBS credit more negatively than HY. That said, with Delta cases seemingly having peaked in the US, we think CMBS BBB-s can play catch up to HY, leading to spread curve flattening. Synthetic BBB-s, on the other hand, have been leading cash, taking cues from the HY market (**Exhibit 4**).

Exhibit 3: The CMBS spread curve has continued to steepen while the corporate spread curve has flattened

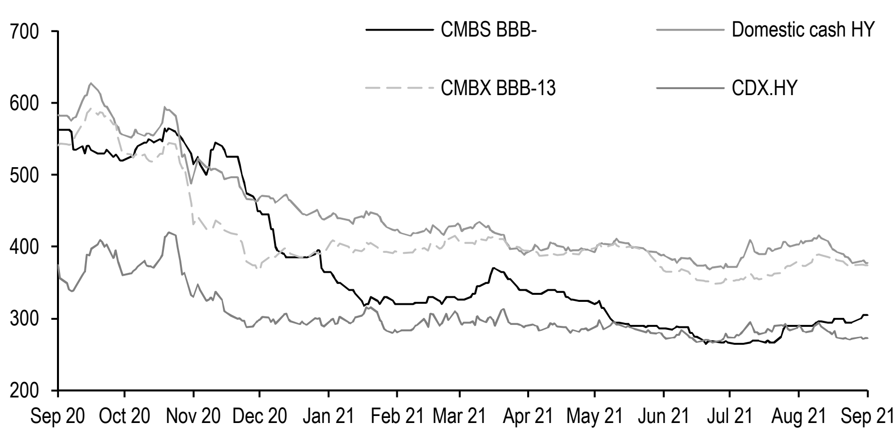
Conduit CMBS BBB-/LCF AAA spread basis versus cash HY/IG corporate spread basis (bp)



Source: J.P. Morgan

Exhibit 4: Meanwhile, CMBX BBB-s have led cash CMBS BBB-s, taking cues from HY

Spreads (bp)



Source: J.P. Morgan, IHS Markit

As we noted in our last weekly (see here), issuance activity is expected to be heavy this month and likely in Q4 as well. But CMBS isn't alone here with other spread

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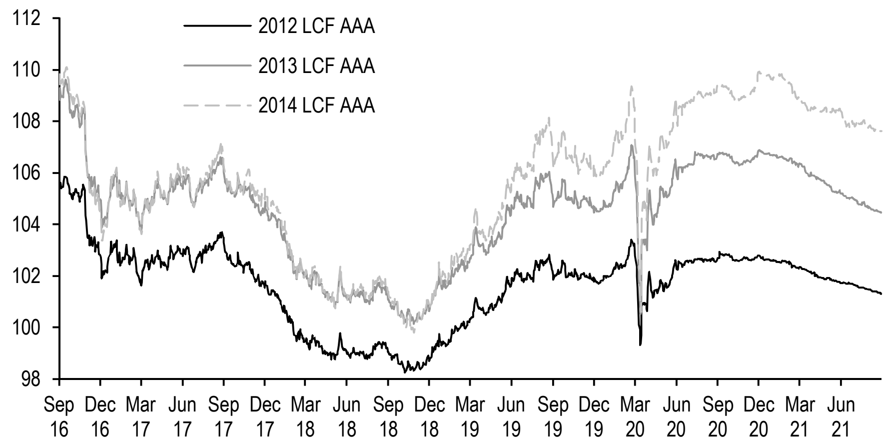
markets also expecting a lot of supply. On the HG corporate side, the Labor Day break was met with a flurry of issuance ($60bn in the two days following Labor Day) but our High Grade corporate strategists note that this supply has been well absorbed with spreads barely budging (see here). If this is any indication of broad investor demand for bonds, CMBS spreads may not move materially wider on heavy supply after all. Regardless, we see any meaningful spread weakness in the near-term as an opportunity to add.

We also continue to see opportunities in seasoned vintages. We had previously also highlighted relative values in 2014-15 vintage LCF AAAs (see here) and seasoned 10yr front-pay AAAs, particularly 2013-15 vintages (see here) under our simple delinquency flush and extension scenarios. This week, we turn to some of the earliest LCF AAA cohorts in 2.0 CMBS that are starting to see loans enter the maturity window. For example, the 2012 vintage LCF AAAs are less than 1yr expected WAL bonds that are trading at modest dollar price premiums (**Exhibit 5**). As the underlying loans near maturity, these bonds face negative convexity risks, primarily due to voluntary prepayments in the open period (typically the last 4-6 months) but also liquidation recoveries, which we largely view as a secondary risk. Broadly speaking, the foreclosure/REO liquidation process can take a while, particularly for large assets like regional malls. For loans that move to special servicing due to maturity default risks and become liquidation candidates, the actual liquidation sale could take over a year after special servicing transfer and are unlikely to resolve at scheduled maturity.

Exhibit 5: At premium dollar prices, seasoned LCF AAAs face negative convexity risks

Weighted average prices ($)



Source: J.P. Morgan, Pricing Direct

CPY measures the prepayment rate during a loan's open period. At issuance, conduit P&I bonds price to a 0 CPR/CPY assumption. When the cashflows are so long, the CPY assumption used bears little impact on valuations but with cashflows that are now so short, CPY assumptions matter greatly on the expected spread investors can earn for bonds trading to premium dollar prices. Naturally, the CPY calculation like CPR is an annualized number and as such, small changes in CPY assumptions can lead to fairly sizable changes in actual prepayment balance or SMM (**Exhibit 6**). For example, at 95% CPY, the SMM is 22.1% but at 99.5% CPY, the SMM is 35.7%.

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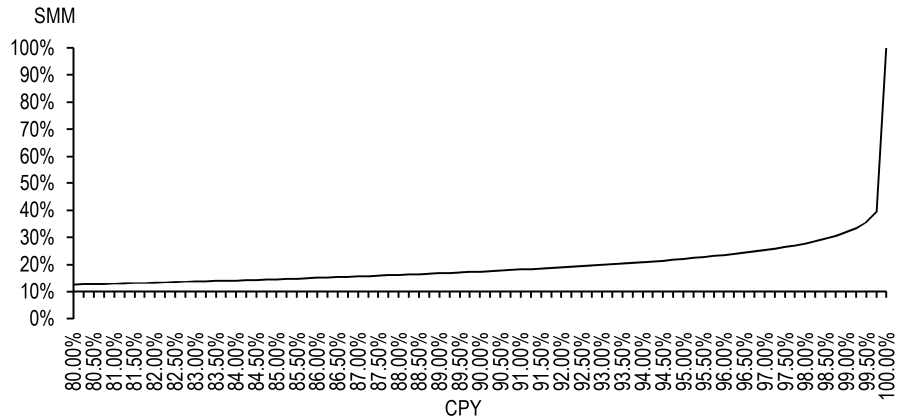
Exhibit 6: The actual prepayment balance during the open period is quite sensitive to small changes in CPY assumptions

Single month mortality (SMM) by CPY



Source: J.P. Morgan

CPY is usually the highest in the first month of the open period and gradually tapers off (**Exhibit 7**). As such, using a high flat CPY may be too conservative. Overall, we find that the first month CPYs have been quite high in the earliest 2.0 cohorts (99.4-99.6% across 2010-12 vintages) but subsequent month CPYs fall off significantly. We also note that deals almost never pay at 100 CPY (100% of UPB paying off at the first open period) and think that running 100 CPY is far too harsh.

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Exhibit 7: CPY tends to spike in the first month of open period but slows down in subsequent open periods

Conduit CMBS CPY in the first four months of the open period by vintage

Vintage	1st Month	2nd Month	3rd Month	4th Month
2005	98.1%	88.4%	77.2%	40.9%
2006	98.6%	85.4%	70.6%	31.1%
2007	96.9%	75.6%	69.7%	26.9%
2008	98.4%	70.8%	79.0%	14.5%
2010	99.6%	83.5%	88.0%	0.0%
2011	99.4%	69.7%	57.7%	48.9%
2012	99.5%	81.4%	91.7%	78.2%
2013	97.7%	76.3%	81.6%	44.3%
2014	96.0%	80.1%	87.7%	66.7%
2005-2008 average	97.9%	83.0%	72.4%	31.9%
2012-2014 average	98.1%	79.3%	87.2%	62.9%

Source: J.P. Morgan, Trepp

Applying various CPY assumptions[3] to our Flush and Extension framework[4], we see that except for the extreme 100 CPY scenario which we deem unlikely, 2012-14 vintage LCF AAAs can offer attractive spreads with a short average WAL of 0.6yr to 2.5yr (**Exhibit 8**). 2012 vintage LCF AAAs appear to be the most sensitive to CPY assumptions given that over 70% of these LCF AAAs are current pays. Nevertheless, even under 99.5 CPY, these 0.6yr average WAL LCF bonds can offer spreads north of 50bp after flushing seriously delinquent loans and extending forborne loans. In reality, 2012 vintages have been prepaying with 99.5 CPY only in the first open month. Under a more realistic CPY ramp assumption[5], 2012 LCF AAAs can offer an average spread of 56bp. That said, value in seasoned cohorts are always profile dependent.

[3] We run defeased loans with 100 CPY under all scenarios.

[4] In our simple 'Flush and Extend' scenario, we immediately liquidate all 90-day+ delinquent loans including FC/REO loans at a 50% loss severity with an 18-month liquidation lag. Next, we extend all forborne loans by 24 months. Finally, we extend all non-multifamily loans with current NOI debt yield less than 10% and all multifamily loans with current NOI debt yield less than 8% by 24 months.

[5] Our CPY ramp assumption applies 99.5%, 81.4%, 91.7%, and 78.2% CPY in the first four open months (realized CPY for 2012 vintages).

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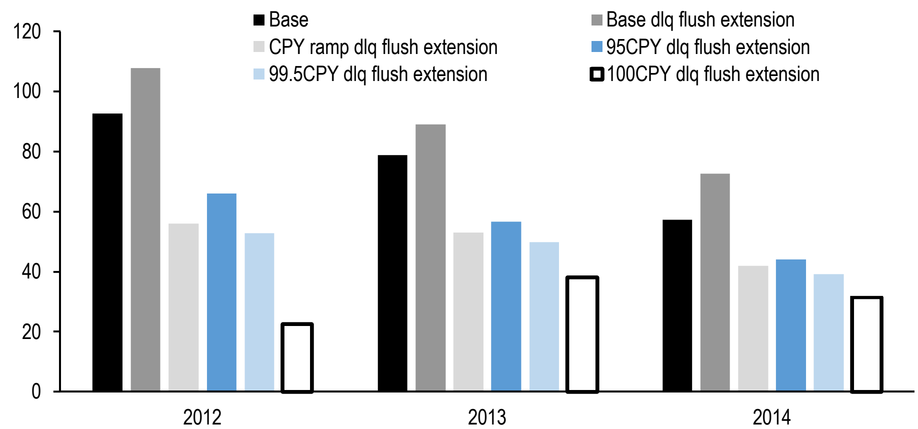
Exhibit 8: 2012 vintage LCF AAAs can offer over 50bp average spread with 0.6yr average WAL even under conservative CPY scenarios

2012-14 vintage Conduit CMBS LCF AAA average spreads under various scenarios

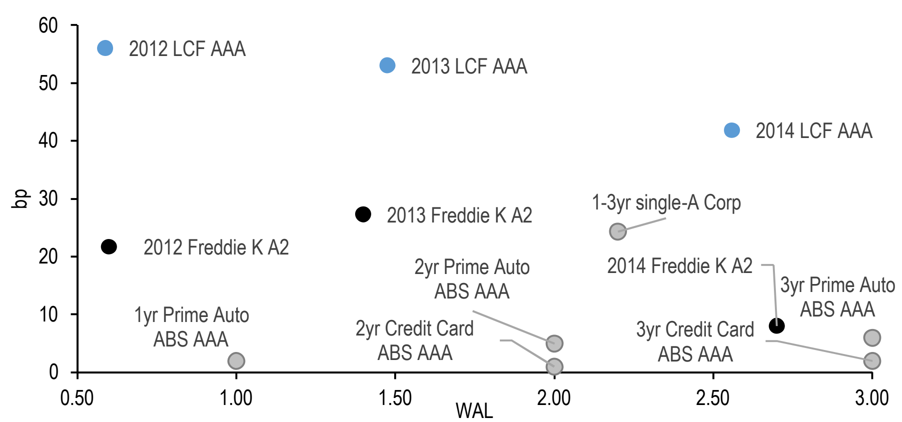


Note: In our simple 'Flush and Extend' scenario, we immediately liquidate all 90-day+ delinquent loans including FC/REO loans at a 50% loss severity with an 18-month liquidation lag. Next, we extend all forborne loans by 24 months. Finally, we extend all non-multifamily loans with current NOI debt yield less than 10% and all multifamily loans with current NOI debt yield less than 8% by 24 months.
Our CPY ramp assumption applies 99.5%, 81.4%, 91.7%, and 78.2% CPY in the first four open months (realized CPY for 2012 vintages).
Source: J.P. Morgan, Intex, Pricing Direct

In addition, these shorter seasoned LCF AAAs offer decent spread pickup versus other short duration securitized products and corporates (**Exhibit 9**). Compared to seasoned Freddie K A2 bonds of the same vintage, 2012 and 2014 LFC AAAs can offer a generous 34bp spread pickup under the CPY ramp Flush and Extension scenario. These seasoned LCF AAAs look even more attractive versus credit card and prime auto AAAs where spreads remain in the mid to low single digits.

Exhibit 9: 2012-14 vintage LCF AAAs look attractive versus other short WAL securitized products and corporates

Cross sector spreads to swap (bp) versus WAL (yr)



Note: Conduit LCF AAA spreads reflect the CPY ramp Flush and Extension scenario.
Source: J.P. Morgan, Intex, Pricing Direct

In the news…

- Our Gaming & Lodging equity research colleagues published their latest *Lodging Weekly Trends* report, summarizing STR reported data on hotel RevPAR, ADR, and occupancy data for the week ended 9/4/2021 (see here). The data continued to show improvement in national RevPAR, increasing by 62% year-over-year. RevPAR for the week was 10% above the level during the

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comparable period in 2019 driven by ADR 10% above the 2019 level. Group RevPAR remained at 70% of the 2019 level.

Rating tracker

Over the past two week, 59 bonds (including IOs, exchangeable classes and rake bonds) across 14 deals saw rating actions. 55 bonds across conduit and one large loan CMBS saw rating downgrades. **CD 2016-CD2** (CMBX S10) saw the most number of bonds downgraded in its capital structure, up to its D class, which was downgraded from B- to CCC by Fitch. The downgrades reflect the higher certainty of loss mainly driven by the *229 West 43rd Street Retail Condo* loan (8.4% of collateral). The loan, securitized by a retail condo in New York's Time Square with most tenants in the entertainment and tourism industries, "had already seen declines prior to the pandemic". Fitch projects 78% losses on the loan. Additionally, Fitch's loans of concern include "*8 Times Square & 1460 Broadway* (11.2%) due to co-working exposure, *Prudential Plaza* (8.2%) due to the loss of a large tenant and *Birch Run Premium Outlets* (5.1%) due to upcoming rollover concerns". Fitch expects 9.7% base case loss for the deal. Four SASB bonds were upgraded.

Exhibit 10: Summary of deals with rating actions over the past week

Summary of CMBS deals with ratings actions (upgrades and downgrades), August 27 to September 9, 2021

Deal Name	Deal Type	CMBX	Upgrade (+) / Downgrade (-)	# of Bonds w/ Ratings Changes	Senior Most Bond w/ Ratings Changes	Notches	Rating Agency
CD 2016-CD2	Conduit	10	-	7	B-	2-3	Fitch
COMM 2012-CR1	Conduit	6	-	6	AA+	2-5	KBRA
GSMS 2015-GS1	Conduit	9	-	6	A-	2-3	KBRA
MSBAM 2013-C7	Conduit	N/A	-	6	Baa1	1-2	Moody's
UBSBB 2013-C6	Conduit	N/A	-	6	AA-	2-3	Fitch
CGCMT 2012-GC8	Conduit	6	-	5	Aa3	1-5	Moody's
UBSBM 2012-WRM	Other	N/A	-	5	A	3-6	Fitch
GSMS 2014-GC24	Conduit	N/A	-	4	BBB-	2-5	KBRA
GSMS 2012-GCJ9	Conduit	6	-	3	Baa3	1	Moody's
JPMCC 2011-C5	Conduit	N/A	-	3	B	3-8	DBRS Morningstar
MSJP 2015-HAUL	SASB	N/A	+	3	AA-	3-4	Fitch
JPMCC 2015-JP1	Conduit	N/A	-	2	BB	2-3	Fitch
MSC 2011-C2	Conduit	N/A	-	2	B1	2	Moody's
AHT1 2018-KEYS	SASB	N/A	+	1	CCC	2	DBRS Morningstar

Source: J.P. Morgan, Bloomberg Finance L.P., INTEX

Primary market

Since our last publication, three private label CMBS deals were priced including two SASB and a CRE CLO. **BWAY 2021-1450** ($215mn), securitized by the office tower at 1450 Broadway, placed its AAA (DBRS) class at L+125 and its BBB- (DBRS) class at L+285 before Labor Day weekend. This week, BPR 2021-TY ($425mn) placed its AAA (S&P/DBRS) class at L+105 and its BBB- (S&P) class at L+235. The deal is backed by Brookfield's refinancing of a super-regional mall, *Tysons Galleria* in McLean, VA. Trailing 12 month comparable in-line sales as of June 2021 stood at $1416 PSF, up from $1201 PSF in 2019. Also priced this week is a $2.25bn managed CRE CLO, **MF1 2021-FL7**, the largest CRE CLO deal on record. The deal priced its AAA (Moody's/DBRS) class at L+108 and its BBB- (DBRS) class at L+280.

In agency issuance, pricing spreads tightened across the two deals priced. **FREMF 2021-KF120** ($806mn) placed its AS class at SOFR+20. **FREMF 2021-K131** ($1.3bn) places its A1, A2, and AM classes at S+7, S+18, and S+26, respectively.

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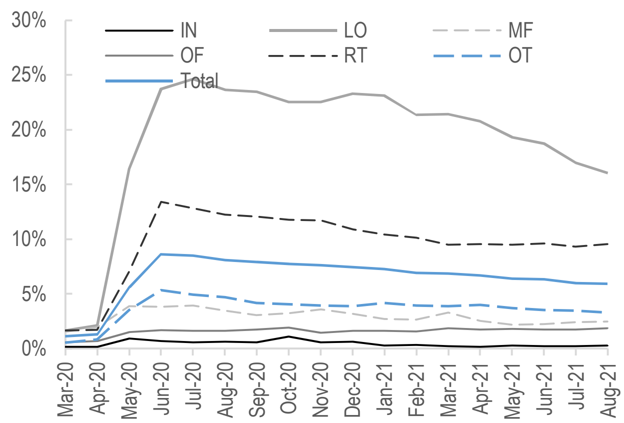
Weekly Tracker

Exhibit T1: Delinquency rate

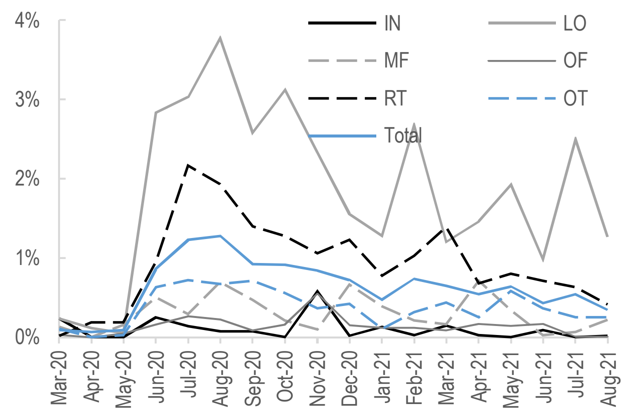
Conduit CMBS 30-day+ delinquency rate including FC/REO and NP matured (%)



Source: J.P. Morgan, Trepp

Exhibit T2: Delinquency cure rates

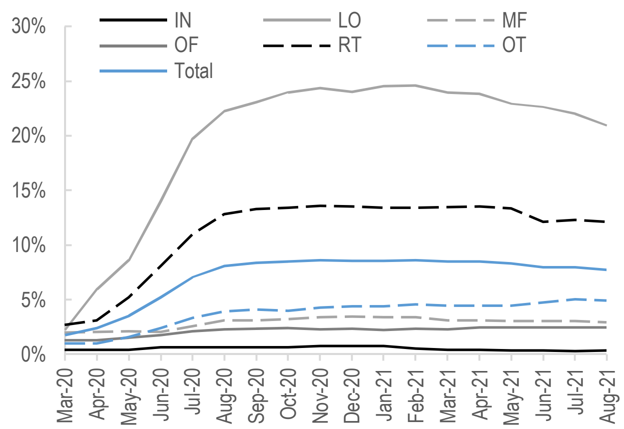
Conduit CMBS 30-day+ delinquency to performing transition rates (%)



Source: J.P. Morgan, Trepp

Exhibit T3: Specially serviced rate

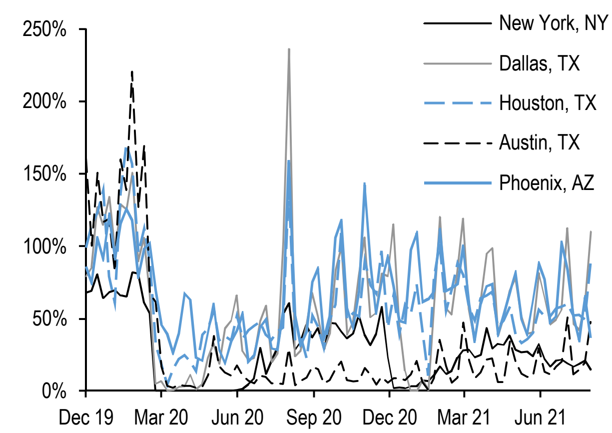
Conduit CMBS percentage of loans in special servicing (%)



Source: J.P. Morgan, Trepp

Exhibit T4: Eviction filings tracker

Weekly % eviction filings versus 2016-18 average for top 5 cities by GSE ACMBS outstanding



Source: J.P. Morgan, Trepp, DUS Disclose, Peter Hepburn, Renee Louis, and Matthew Desmond. Eviction Tracking System: Version 1.0. Princeton: Princeton University, 2020, www.evictionlab.org

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CMBX Series 6 Mall Loan Tracker

Deal Name	Loan	Curr. Loan Bal. ($mn)	Defeased	Current DLQ	Prior DLQ	WL	In SS	Loan Mod	Appraisal Date	Appraisal Chg. since U/W	As of Date
WFRBS 2012-C10	Animas Valley Mall	43	-	C	C	Y	-	Forbearance	Sep-12	0%	Aug-21
UBSBB 2012-C3	Apache Mall	-	-	PP/OPEN	PP/OPEN	-	-	-	Jul-12	0%	Aug-21
JPMCC 2012-C6	Arbor Place Mall	103	-	C	C	-	Y	-	Mar-12	0%	Aug-21
JPMCC 2012-C8	Battlefield Mall	111	-	C	C	-	-	-	Aug-12	0%	Aug-21
GSMS 2012-GCJ7	Bellis Fair Mall	78	-	C	C	Y	-	-	Nov-11	0%	Aug-21
MSC 2012-C4	Capital City Mall	55	Y	C	C	-	-	-	Jan-12	0%	Aug-21
WFRBS 2012-C9	Chesterfield Towne Center	95	-	C	C	-	-	-	Aug-12	0%	Aug-21
COMM 2012-CR2	Chicago Ridge Mall	80	-	C	C	Y	-	-	Apr-12	0%	Aug-21
WFRBS 2012-C10	Concord Mills	110	-	C	C	-	-	-	Sep-12	0%	Aug-21
COMM 2012-CR1	Crossgates Mall	102	-	C	C	Y	-	Forbearance	Jul-20	-40%	Aug-21
COMM 2012-CR2	Crossgates Mall - A-1A1 note	44	-	C	C	Y	-	Forbearance	Jul-20	-40%	Aug-21
COMM 2012-CR2	Crossgates Mall - A-1B1 note	17	-	C	C	-	-	Forbearance	Jul-20	-40%	Aug-21
COMM 2012-CR3	Crossgates Mall - Note A-1A2	66	-	C	C	Y	-	Forbearance	Jul-20	-40%	Aug-21
COMM 2012-CR3	Crossgates Mall - Note A-1B2	25	-	C	C	-	-	Forbearance	Jul-20	-40%	Aug-21
UBSBB 2012-C2	Crystal Mall	83	-	FC/REO	FC/REO	-	Y	-	Nov-20	-88%	Aug-21
MSBAM 2012-C6	Cumberland Mall	40	-	C	C	Y	-	Other	Jul-12	0%	Aug-21
WFRBS 2012-C10	Dayton Mall	77	-	30	C	-	Y	-	Dec-12	0%	Aug-21
COMM 2012-CR4	Eastview Mall and Commons	120	-	C	C	-	-	-	Jul-12	0%	Aug-21
COMM 2012-CR5	Eastview Mall and Commons	90	-	C	C	-	-	-	Jul-12	0%	Aug-21
COMM 2012-CR3	Emerald Square Mall	63	-	90+	FC/REO	-	Y	-	Oct-20	-57%	Aug-21
COMM 2012-CR4	Emerald Square Mall	33	-	90+	FC/REO	-	Y	-	Oct-20	-57%	Aug-21
COMM 2012-CR4	Fashion Outlets of Las Vegas	-	-	LIQ	LIQ	-	-	-	Jun-12	0%	Aug-21
WFRBS 2012-C7	Fashion Square	32	-	FC/REO	FC/REO	-	Y	-	Dec-20	-72%	Aug-21
WFRBS 2012-C7	Florence Mall	89	-	FC/REO	FC/REO	-	Y	-	Jul-20	-63%	Aug-21
MSBAM 2012-C6	Greenwood Mall	58	-	C	C	Y	-	-	Nov-20	-56%	Aug-21
COMM 2012-CR5	Holiday Village Mall	-	-	RET	RET	-	-	-	Oct-12	0%	Aug-21
JPMCC 2012-CBX	Jefferson Mall	60	-	C	C	-	Y	Other	Feb-21	-66%	Aug-21
UBSBB 2012-C2	Louis Joliet Mall	42	-	FC/REO	FC/REO	-	Y	-	Sep-20	-58%	Aug-21
UBSBB 2012-C2	Louis Joliet Mall	42	-	FC/REO	FC/REO	-	Y	-	Sep-20	-58%	Aug-21
COMM 2012-CR3	Midland Park Mall	71	-	C	C	-	-	-	Jul-12	0%	Aug-21
UBSBB 2012-C4	Newgate Mall	58	-	FC/REO	FC/REO	-	Y	-	Nov-20	-76%	Aug-21
WFRBS 2012-C7	Northridge Fashion Center	131	-	C	C	Y	-	Forbearance	Jan-12	0%	Aug-21
WFRBS 2012-C8	Northridge Fashion Center	74	-	C	C	Y	-	Forbearance	Jan-12	0%	Aug-21
JPMCC 2012-C6	Northwoods Mall	61	-	C	C	-	Y	-	Mar-12	0%	Aug-21
UBSBB 2012-C2	Pierre Bossier Mall	41	-	FC/REO	FC/REO	-	Y	-	Jun-21	-85%	Aug-21
UBSCM 2012-C1	Poughkeepsie Galleria	75	-	90+	90+	-	Y	-	Nov-20	-71%	Aug-21
COMM 2012-CR1	RiverTown Crossings Mall	47	-	NP	NP	-	Y	-	Nov-11	0%	Aug-21
WFRBS 2012-C10	Rogue Valley Mall	49	-	C	C	-	Y	-	Aug-12	0%	Aug-21
JPMCC 2012-LC9	Salem Center	29	-	FC/REO	FC/REO	-	Y	-	Oct-20	-76%	Aug-21
COMM 2012-CR3	Solano Mall	105	-	90+	FC/REO	-	Y	-	Jul-20	-42%	Aug-21
UBSBB 2012-C2	Southland Center Mall	67	-	C	C	-	-	-	Apr-12	0%	Aug-21
JPMCC 2012-CBX	Southpark Mall	56	-	C	C	-	Y	Forbearance	Feb-21	-61%	Aug-21
MSC 2012-C4	The Shoppes at Buckland Hills	109	-	30	C	-	Y	-	Feb-12	0%	Aug-21
WFRBS 2012-C7	Town Center at Cobb	112	-	FC/REO	FC/REO	-	Y	-	Aug-20	-60%	Aug-21
WFRBS 2012-C8	Town Center at Cobb	61	-	FC/REO	FC/REO	-	Y	-	Aug-20	-60%	Aug-21
WFRBS 2012-C10	Towne Mall	20	-	C	C	Y	-	-	Sep-12	0%	Aug-21
UBSBB 2012-C4	Visalia Mall	74	-	P	P	-	Y	Maturity Date Extension	Jun-21	-22%	Aug-21
JPMCC 2012-LC9	West County Center	115	-	C	C	-	Y	-	Nov-12	0%	Aug-21
UBSBB 2012-C2	Westgate Mall	31	-	C	C	Y	-	-	May-12	0%	Aug-21
WFCM 2012-LC5	Westside Pavilion	129	Y	C	C	-	-	-	Aug-12	0%	Aug-21

Source: J.P. Morgan, Trepp

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Cross-sector spreads

		Current	Changes			5yr Trailing		Percentile Rank		
Product	**Tranche / Bucket**	**9/9/21**	**-1w**	**-1m**	**-1y**	**Min**	**Max**	**3yr**	**5yr**	**7yr**
Conduit CMBS	3yr AAA	20	0	-2	-43	16	450	15.5%	20.6%	9.6%
Swap Spread (bp)	5yr AAA	44	1	-1	-51	34	450	10.2%	25.3%	16.7%
	10yr LCF AAA	68	1	0	-29	60	350	20.8%	15.5%	10.7%
	10yr AS	88	1	0	-54	77	450	15.8%	13.7%	8.3%
	10yr AA	107	4	4	-50	94	575	19.5%	16.5%	11.4%
	10yr A	145	5	5	-118	127	750	14.6%	12.8%	8.5%
	10yr BBB-	305	10	15	-235	225	1300	49.2%	37.8%	27.1%
	XA (UST)	108	3	-2	-112	75	535	15.5%	29.4%	21.8%
Freddie K	7yr A2	11	-1	-2	-21	6	100	11.6%	7.0%	5.0%
Swap Spread (bp)	10yr A2	18	2	1	-17	10	110	17.4%	10.5%	7.5%
	10yr B	130	0	5	-115	118	600	10.3%	8.6%	6.7%
	10yr C	155	0	5	-140	140	700	12.8%	7.4%	5.3%
	X1 (UST)	65	0	-10	-125	50	400	8.4%	5.1%	3.4%
	X3 (UST)	260	-5	-10	-165	220	695	36.1%	25.0%	20.9%
	SOFR Floater (DM)	20	-1	-1	N/A	20	25	18.2%	3.0%	18.2%
FRESB	A5H (5yr Hybrid ARM)	5	0	0	-48	2	112	6.5%	7.2%	7.2%
Swap Spread (bp)	A10F (10yr Fixed Rate)	22	0	0	-32	16	120	14.8%	12.2%	12.2%
Fannie DUS	7/6.5 TBA	14	0	-1	-20	7	110	16.8%	9.8%	7.6%
Swap Spread (bp)	10/9.5 TBA	26	-2	-1	-14	14	135	18.7%	11.3%	8.1%
	SOFR SARM (DM)	25	0	0	N/A	23	42	31.4%	35.3%	31.4%
Fannie ACES	7yr A2	13	-1	-2	-21	7	102	11.7%	7.1%	5.1%
Swap Spread (bp)	10yr A2	20	2	1	-19	12	120	18.7%	11.3%	7.9%
GNR PL	3.5yr	60	0	-5	-15	60	100	0.6%	0.4%	0.3%
Swap Spread (bp)	7.5yr	75	0	0	-20	75	125	18.1%	12.5%	8.9%
	12yr	80	0	0	-30	80	140	5.2%	3.5%	2.5%
Current Coupon	FNMA 30yr (OAS)	-1	-3	1	-26	-19	129	19.4%	11.6%	8.3%
Spec Pool	FNMA 30yr 2.0 HLB (OAS)	8	-2	0	-22	-10	46	42.4%	42.4%	42.4%
Agency CMO SEQ	5yr	66	0	5	-6	50	190	0.7%	20.3%	15.7%
Swap Spread (bp)	10yr	77	0	9	-13	65	200	12.1%	16.5%	12.4%
Agency CMO PAC	5yr	68	0	5	-7	54	165	4.3%	43.2%	36.6%
Swap Spread (bp)	10yr	77	0	9	-18	65	175	12.1%	30.5%	25.4%
Agency CMO Floater	Pre-HARP	18	0	-1	-2	12	70	17.7%	10.9%	7.8%
6.5% Cap (DM)	New Issue	17	0	0	-6	15	80	5.7%	3.9%	3.9%
ABS	3yr AAA Credit Card	2	0	0	-13	2	200	2.8%	1.7%	1.2%
Swap Spread (bp)	3yr AAA Prime Auto	4	-2	-2	-21	4	200	0.1%	0.1%	0.1%
	3yr BBB Subprime Auto	65	-2	-2	-95	63	550	4.8%	2.9%	2.1%
CLO	AAA	112	0	0	-25	84	408	5.3%	23.9%	17.1%
Discount Margin	BBB	342	0	2	-112	257	972	17.2%	32.9%	23.5%
	BB	699	0	1	-233	510	1,756	28.3%	54.5%	50.1%
JULI (ex-EM)	3-5yr	54	-1	-3	-39	49	396	4.2%	2.8%	2.0%
Swap Spread (bp)	5-7yr	75	-1	-2	-42	67	372	5.0%	3.0%	2.1%
	7-10yr	94	0	-2	-46	88	378	5.3%	3.3%	2.4%
	7-10yr REITs	103	-1	1	-76	99	346	3.9%	2.3%	1.7%
High Yield	Domestic HY	378	-4	-27	-206	355	1,139	1.9%	4.3%	3.0%
Spread to Worst (bp)	Energy	462	-11	-44	-493	399	2,395	3.5%	18.3%	13.1%
Swap Spreads	3yr	11	-1	1	3	-6	31	75.9%	0.0%	0.0%
(bp)	5yr	9	0	1	2	-8	16	85.1%	0.0%	0.0%
	10yr	3	1	2	2	-17	10	80.9%	0.0%	0.0%

		Current	Average Basis			5yr Trailing		Percentile Rank		
	Spread Comparison	**9/9/21**	**2y**	**1y**	**3m**	**Min**	**Max**	**3yr**	**5yr**	**7yr**
Private Label	Conduit 3yr AAA vs. 3yr AAA Credit Card	18	32	16	18	0	250	66.1%	79.2%	78.6%
	Conduit 3yr AAA vs. 3yr AAA Prime Auto	16	24	12	15	-4	250	73.2%	84.5%	80.3%
	Conduit 5yr AAA vs. JULI 3-5yr	-10	-17	-14	-10	-94	54	85.8%	91.5%	93.6%
	Conduit 10yr LCF AAA vs. JULI 7-10yr	-26	-43	-35	-28	-127	-24	98.7%	99.2%	99.5%
	Conduit 10yr LCF AAA vs. Freddie K 10yr A2	50	51	48	50	15	165	68.9%	80.2%	78.5%
	Conduit 10yr BBB- vs. Domestic HY	-73	-81	-79	-109	-552	448	72.3%	61.6%	62.7%
	Conduit 10yr BBB- vs. CLO BBB	-37	24	-9	-60	-222	630	51.0%	32.2%	29.5%
	Conduit 10yr BBB- vs. CLO BB	-394	-415	-396	-420	-1,006	-121	57.2%	34.2%	24.9%
	Conduit CMBS XA vs. Freddie K X1	43	24	26	36	-45	200	84.1%	90.9%	90.7%
Agency CMBS	FNA DUS 10/9.5 TBA vs. Freddie K 10yr A2	8	6	6	7	0	25	70.3%	80.1%	68.2%
	FNA DUS 10/9.5 TBA vs. FNMA 30yr CC LOAS	27	26	30	25	5	83	39.4%	27.7%	19.8%
	Freddie K 10yr A2 vs. JULI 7-10yr	-76	-95	-83	-78	-267	-51	71.0%	46.9%	60.9%
	FRESB A10F vs. Freddie K 7yr A2	11	16	10	11	6	41	25.8%	23.3%	24.4%
	FRESB A10F vs. Freddie K 10yr A2	4	10	5	7	-2	25	12.3%	9.4%	10.6%
	Freddie K SOFR Floater vs. Agency CMO Floater	3	4	4	3	1	13	25.0%	9.4%	25.0%

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Cross-sector spreads (continued)

Product	Tranche / Bucket	Current 9/9/21	Changes -1w	-1m	-1y	5yr Trailing Min	Max	Percentile Rank 3yr	5yr	7yr
CMBX (bp)	14.AAA	49	0	0	N/A	45	52	63.8%	63.8%	63.8%
	13.AAA	47	0	1	-12	42	167	36.2%	36.2%	36.2%
	12.AAA	41	0	1	-8	37	162	26.6%	26.6%	26.6%
	11.AAA	36	0	1	-3	32	146	29.2%	23.2%	23.2%
	10.AAA	32	0	1	-1	26	141	29.8%	18.5%	18.5%
	9.AAA	26	0	0	-2	21	127	22.4%	13.4%	11.4%
	8.AAA	20	0	1	-4	18	117	17.3%	10.3%	7.5%
	7.AAA	18	0	0	-2	15	107	24.5%	14.7%	10.5%
	6.AAA	18	1	2	-1	11	103	49.0%	29.4%	21.0%
	14.BBB-	343	1	1	N/A	320	373	40.6%	40.6%	40.6%
	13.BBB-	374	0	1	-167	339	1,151	17.6%	17.6%	17.6%
	12.BBB-	378	0	-2	-239	309	1,083	21.9%	21.9%	21.9%
	11.BBB-	384	1	-2	-259	302	1,109	37.0%	30.3%	30.3%
	10.BBB-	489	-4	-9	-248	297	1,052	46.9%	67.0%	67.0%
	9.BBB-	510	-2	-8	-352	301	1,162	50.3%	66.7%	56.8%
	8.BBB-	777	-1	1	-288	345	1,454	49.7%	69.9%	78.2%
	7.BBB-	1,254	10	31	20	281	1,402	89.4%	93.7%	95.5%
	6.BBB-	3,644	101	387	1,214	391	3,644	100.0%	100.0%	100.0%
	14.BB	582	-1	1	N/A	568	639	27.5%	27.5%	27.5%
	13.BB	651	-2	3	-370	609	1,782	24.7%	24.7%	24.7%
	12.BB	669	0	-1	-443	578	1,893	23.4%	23.4%	23.4%
	11.BB	671	0	1	-548	572	1,991	25.8%	21.2%	21.2%
	10.BB	1,073	2	-12	-536	602	2,194	48.5%	68.1%	68.1%
	9.BB	1,112	-2	-4	-650	574	2,292	48.3%	69.1%	73.5%
	8.BB	1,998	8	12	-389	756	3,561	70.5%	82.3%	87.2%
	7.BB	2,571	16	25	72	613	3,005	91.6%	95.0%	96.4%
	6.BB	6,361	104	456	2,140	773	6,361	100.0%	100.0%	100.0%
CDX (bp)	5yr IG	47	1	-1	4	13	114	62.9%	77.7%	76.5%
	5yr HY	272	1	-9	-136	263	905	2.7%	1.6%	1.4%

Source: J.P. Morgan, IHS Markit

Note: Conduit 10yr BBB- reflects pre-COVID 10yr BBB-

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Recent Publications

Publication Date	Publication title	
	CMBS Weekly	
27-Aug	CMBS Weekly: Agency CMBS bank holdings	
20-Aug	CMBS Weekly: FHFA 2022-24 Housing Goal	
6-Aug	CMBS Weekly: Q2 2021 CRE fundamentals update	
30-Jul	CMBS Weekly: Remit update – recovery continues but slowing	
16-Jul	CMBS Weekly: Pick value in seasoned 10yr front-pay AAAs	
9-Jul	CMBS Weekly: Asset manager demand expands	
25-Jun	CMBS Weekly: CMBS Midyear Outlook	
18-Jun	CMBS Weekly: Assessing CRE CLO manager reinvestment efficacy	
11-Jun	CMBS Weekly: CMBX continues to offer better relative value	
4-Jun	CMBS Weekly: FHFA Agency CMBS risk management guidelines - what premium risk?	
21-May	CMBS Weekly: Time to go long CMBX BBB-10?	
14-May	CMBS Weekly: Q1 2021 CRE fundamentals update	
7-May	CMBS Weekly: CMBS BWIC review – a passing of the torch?	
30-Apr	CMBS Weekly: Ratings actions post pandemic: steady as she goes	
23-Apr	CMBS Weekly: 2021 issuance forecast update	
16-Apr	CMBS Weekly: 1Q 2021 CMBS investor demand	
9-Apr	CMBS Weekly: 1Q 2021 CMBS underwriting trend	
26-Mar	CMBS Weekly: Does the potential extension of the CDC moratorium matter for CMBS?	
19-Mar	CMBS Weekly: Performance post-forbearance surprises to the upside	
12-Mar	CMBS Weekly: Conduit CMBS loan cashflows - retail held up better than expected	
5-Mar	CMBS Weekly: Watchlist loans - do they even matter?	
26-Feb	CMBS Weekly: Loan modifications - it's different this time or is it?	
19-Feb	CMBS Weekly: Rising rates impact on CRE/CMBS and CRE fundamentals update	
5-Feb	CMBS Weekly: FRESB X1s and an ESG update	
29-Jan	CMBS Weekly: CRE CLO update and levered CMBX vs. CMBS returns	
22-Jan	CMBS Weekly: Re-defaults and interest shortfalls	
8-Jan	CMBS Weekly: Blue Wave implications and 2020 indices	
18-Dec	CMBS Weekly: Strong finish to a tough year	
11-Dec	CMBS Weekly: Time to short CMBX BBB-9?	
13-Nov	CMBS Weekly: It's going to get worse before it gets better	
6-Nov	CMBS Weekly: Issuance forecast for 2021 private label CMBS	
30-Oct	CMBS Weekly: Will office loans just roll over?	
23-Oct	CMBS Weekly: What are the latest remits telling us?	
	Other periodicals	**Frequency**
10-Sep	CMBX Daily Analytics	Daily
7-Sep	CMBS Weekly Datasheet	Weekly
8-Sep	CMBX Trade Analytics	Weekly
2-Sep	Conduit CMBS and CMBX Credit Monthly	Monthly
7-Sep	Agency CMBS Databook	Monthly
26-Aug	CRE Observer Chartbook	Quarterly
4-Feb	CMBS Relative Value	Monthly
10-Sep	Agency CMBS Bulletin	Monthly
11-Oct	CMBS Comp Sheet	Quarterly
3-Jul	What's Out There	Quarterly
	Ad-hoc publications of note	
8-Sep	Introducing the Freddie Mac When-Issued (WI) K-Deal®	
15-Jan	CMBX Series 14: Thoughts on the preliminary list	
4-Jan	2020 NAIC breakpoint update	
24-Nov	CMBS 2021 Outlook: A vaccine doesn't make loan payments	
17-Sep	That's why they call BBB- the fulcrum bond	
30-Jul	You break it, you own it	
14-May	The $600 question: Why are rent collections so high?	
9-Apr	TALF 2.0: CMBS, CLO expansion pack and update on funding terms	
12-Feb	CMBS Foundations: Freddie Mac Multi PC	
17-Jan	Flashnote:... Thoughts from CREFC	

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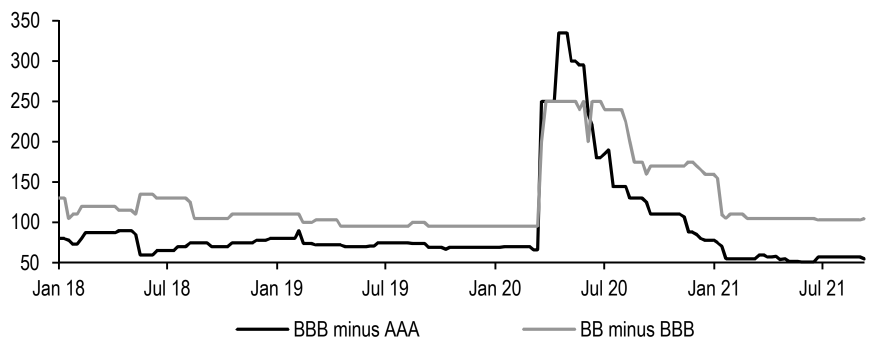
Asset-Backed Securities

- **Strong technical momentum carries with tighter spreads this week as the primary ABS market fires up once again**
- **Marketplace lending (MPL) ABS has a short and limited history, but a very positive credit story as evident in the upward rating migrations**
- **We believe the MPL ABS sector offers attractive spread pickup over comparable consumer ABS**

ABS spreads tighten on the week as the quarter-end issuance calendar fills up

The floodgates have opened on September ABS issuance this week. Although only two deals made it to the finishing line and priced this week, a slew of transactions are on deck and the order books seem to be filling up rapidly as well towards oversubscription. Across ABS asset classes, sponsors continue to find lowest cost of funding as well as often tightest spreads, on their ABS offerings throughout this year. In secondary, flows started out slow this week, but the pickup in primary market activity should spill over and generate more interest. ABS spreads tightened this week on signs of favorable technical momentum. The issuance pace will likely remain brisk through autumn until the winter holiday season. We expect investor demand should be robust enough to absorb the upcoming supply. We also continue to see strong investor demand for spread pickup in higher yielding ABS. Credit curves remain quite flat. For example, BBB 3-year subprime auto loan ABS spreads tightened by 2bp this week to swaps +65bp, a pickup of 55bp on the AAA2-year level. This differential was roughly 70bp in February 2020 (**Exhibit 1**). The BB to BBB spread differential in subprime auto loan ABS stands at 105bp versus as tight as 95bp pre-pandemic. In addition, we have also seen strong demand and pricing for new/off-the-run sponsors, assets, and structures.

Exhibit 1: Subprime auto loan ABS credit curve quite flat
ABS spread differential (bp)



Source: J.P. Morgan

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MPL ABS offering rating upgrade potential and spread pickup

We review the short, but very positive, credit rating history of MPL ABS. Aside from the unprecedented COVID-19 pandemic, the MPL ABS sector has not been through a "normal" economic recession as the major fintechs only lunched ABS programs in 2016. Since then, the sector has seen $36bn in total issuance, including $3.6bn year-to-date, $4.0bn in 2020 and $8.5bn in 2019. Despite significant concerns last year due to the pandemic lockdowns, the rating transition over this period has been overwhelmingly positive with many upgrades and just one downgrade. The positive rating patterns found in MPL ABS is similar to those seen in the auto loan ABS sector. Both sectors have seen regular rating upgrades from rating agencies with extremely limited cases of downgrades as the sequential pay structures with non-declining credit enhancement protect ABS bondholders.

First on MPL ABS ratings, we note that KBRA is the dominant rating agency in the sector, having rated almost 90% of all rated offerings by dollar amount and was sole rating agency on about half of the total. DBRS is a distance second with roughly one-third market share, while S&P, Moody's and Fitch trails in rated volumes. However, the lone downgrade in the sector came from Moody's on FREED 2020-FP1 class C in September 2020 when the bond was lowered to B1 from the original Ba3 given the pandemic uncertainty and risk of higher losses after the initial COVID-19 deferral period. KBRA placed its BB rating on the FREED bond on watch for downgrade in April 2020 and affirmed its BB rating in September 2020. FREED was part of a bigger review KBRA conducted on the MPL ABS sector due to COVID-19.

In April 2020 on unsecured consumer ABS, KBRA put 149 securities totaling $8.7bn on Watch Downgrade and 20 securities totaling $1.4bn on Watch Developing due to the pandemic. None of the bonds ended up being downgraded by KBRA as government stimulus and relief programs supported consumers, keeping delinquencies and losses mostly in line, and credit enhancement built up continued as MPL ABS bonds de-levered. MPL ABS may include net loss triggers, which typically uses excess spread to increase required overcollateralization/turbo payment to bondholders if losses go above pre-set thresholds. MPL ABS structures, like auto ABS ones, can tolerate higher loses than expected with still positive rating migrations, as long as the bonds are paying off, the transaction de-levering (helped by fast prepays) and credit enhancement building faster than losses are eating up the pool.

By our estimates, KBRA has upgraded 185 unique MPL ABS tranches since 2016, roughly 60% by rated tranche count (or roughly 70% of initial rated dollar amount). Likewise, the other rating agencies have also upgraded most of their rated securities. DBRS and S&P both with roughly 60% upgraded and Moody's and Fitch at about 55%. With KBRA, the most active rating agency in MPL ABS, 44 bonds were upgraded to AAA (**Exhibit 2**). In addition, 37 bonds with original ratings in the BB and B categories were upgraded, including 26 to investment grade ratings (i.e., BBB- and higher). For the most part, more recent vintages from MPL ABS issuers have seen a bit faster upgrade timeline from KBRA as well. For example, CLUB bonds from the 2020 vintage on average was first upgraded by KBRA in 13 months versus CLUB 2019 and 2018 vintage bonds upgraded in 15 months and 19 months, respectively (**Exhibit 3**). Bonds with higher initial ratings also took relatively less time to get upgraded than subordinates (**Exhibit 4**).

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Exhibit 2: KBRA MPL ABS rating actions from 2016 thru Sept 3, 2021
Count of unique bonds

Original Rating	New Rating AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	Total
AA+	8													8
AA	11	3												14
AA-	1													1
A+	2	3		4										9
A	10	11	5	4	1									31
A-	2	4	7	4	4	4								25
BBB+	1													1
BBB	7	7	5	2	8	4	2	1						35
BBB-	1	1	3	1	2	6	3	1	5					23
BB	1	1	2		1	2	1	2	2	3	2			17
BB+						1								1
BB-				1	1		1	1	3	3	1	4		15
B+													2	2
B-											1		1	2
Total	44	30	22	16	17	17	7	5	10	6	4	4	3	185

Source: J.P. Morgan, KBRA

Exhibit 3: Average number of months to first rating upgrade from KBRA on MPL ABS by issuer and vintage

Issuer	Vintage 2016	2017	2018	2019	2020
ARCT		22			
AVNT	17	13	14	14	
CHAI	20				
CLUB		17	19	15	13
CSABS			19		
FREED				15	13
LCIT	15				
LDPT				13	
LLEND				21	
MFT	18	18	19	21	
PMIT		16	13	11	
SCLP	12	16	13		
THRM					12
UPGR			16	20	
UPST		19	24	21	15

Source: J.P. Morgan, KBRA

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Exhibit 4: Average number of months to first rating upgrade from KBRA on MPL ABS by issuer and original rating

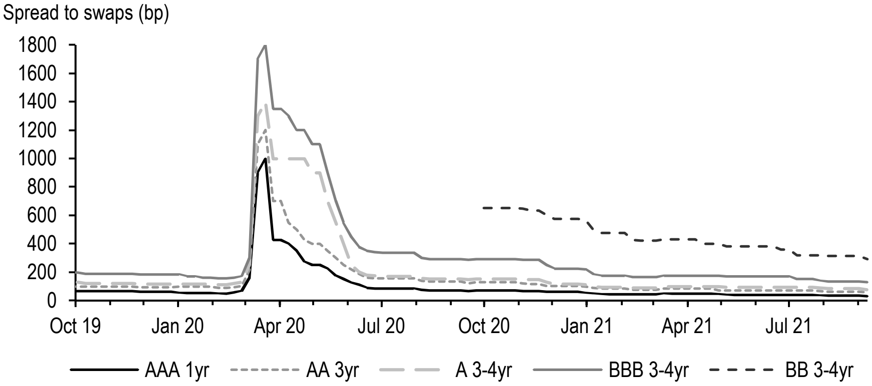
	Original Rating				
	AA	A	BBB	B	B
ARCT			18	25	
AVNT		11	13	20	
CHAI		15	15	28	
CLUB		15	17	21	
CSABS			19	19	
FREED	12	12	15		
LCIT			12	18	
LDPT		12	14		
LLEND			21	21	
MFT	17	18	21	25	
PMIT		10	15	15	21
SCLP	16	13	15		
THRM		12	12		
UPGR		12	16	22	
UPST		16	16	26	39

Source: J.P. Morgan, KBRA

The positive rating actions supports the spread outperformance seen in MPL ABS this year. MPL ABS spread across the capital structure are at their all-time tights, tighter than pre-pandemic (**Exhibit 5**). For example, our indicative AAA 1-year MPL ABS spreads stands at 30bp, compared to 50bp in early February 2020. At the other end of the credit spectrum, our indicative BB 3-4 year MPL ABS spreads stands at 290bp, having tightened 360bp since the data series inception just about one year ago. Furthermore, the MPL ABS sector continues to offer spread pickup on comparable subprime auto loan ABS (**Exhibit 6**). On BB's, MPL ABS is 120bp cheaper than comparable subprime auto ABS, the smallest differential ever. BBB MPL ABS currently offers 65bp pickup on subprime auto ABS, versus the narrowest point of 40bp back in April 2018. On the more senior tranches, the AAA, AA and A spread pickup in MPL over subprime auto stand at 22bp, 25bp and 30bp.

Exhibit 5: MPL ABS spreads at all-time tights across the capital structure

Spread to swaps (bp)



Source: J.P. Morgan

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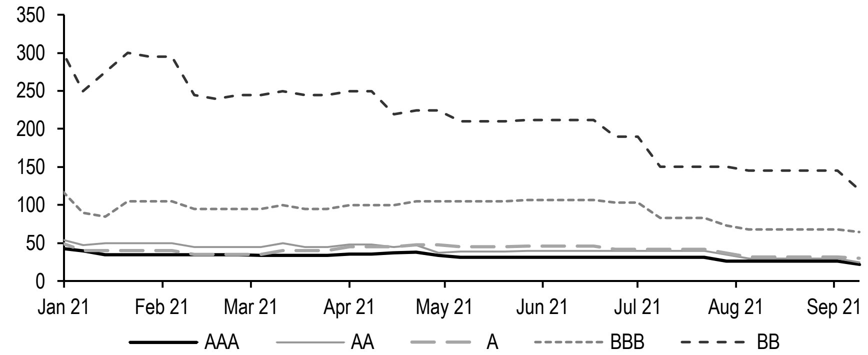
Exhibit 6: MPL ABS offer spread pickup on comparable subprime auto ABS

Spread differential in MPL ABS over comparable rated/WAL subprime auto ABS (bp)



Source: J.P. Morgan

We recognized that the MPL ABS sector has limited track record versus subprime auto loan ABS and lower liquidity/less outstandings, However, the structural protections are sound and the rating/credit outlook remains favorable. MPL ABS pools are backed by predominately prime consumers. While consumer credit delinquencies and losses are expected to rise as stimulus impact fades, household balance sheets have been fortified with pandemic savings/debt pay down. Sustained economic recovery and labor market recovery ahead, absent exogenous derailment (e.g., due to Delta or other variant surge, tapering angst, or other shocks), bode well for continued positive rating migration and spread performance for MPL ABS over the rest of this year and into next.

Week in review

One $1.25bn auto lease ABS, with spread execution well inside of initial guidance levels, priced this week along with a small $198mn FFELP ABS. This brings year-to-date ABS supply to $174bn versus $121 and $164bn over the same period in 2020 and 2019, respectively. Over fifteen ABS transaction are already in the pipeline of the next two weeks. ABS spreads tightened this week with indications of strong demand from investors eagerly anticipating the new issues. On the week, consumer ABS spreads are tighter by about 1-5bp on AAAs and 2-5bp tighter on various subordinates across credit cards, autos, private credit student loans and MPL.

On September 1st, Stellantis, the global OEM for Fiat Chrysler and Peugeot, announced a definitive agreement to acquire First Investor in an all cash deal of approximate $285mn from an investor group led by Gallatin Point. The acquisition will provide Stellantis with a US captive to provide financing options to its customer, including loan, lease and floorplan. Stellantis existing contract with Santander Consumer USA expires on April 30, 2023. The two companies will continue their partnership until that time and explore prospects beyond.

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Data appendix

Exhibit 1: ABS supply

$bn

	2018	2019	2020	2019 YTD	2020 YTD	2021 YTD
Credit Cards	36	24	4	20.1	2.5	8.2
Bank/Charge	*32*	*21*	*4*	*16.8*	*2.3*	*7.7*
Retail	*4*	*3*	*0*	*3.3*	*0.1*	*0.5*
Autos	104	111	98	84.6	67.6	92.1
Prime Loan	*46*	*49*	*46*	*36.8*	*34.6*	*31.0*
Subprime Loan	*32*	*30*	*27*	*22.9*	*17.7*	*29.9*
Lease	*15*	*21*	*19*	*16.0*	*11.1*	*20.2*
Fleet	*10*	*10*	*5*	*8.5*	*3.7*	*9.8*
Motorcycle/Truck	-	*1*	*1*	*0.5*	*0.5*	*1.2*
Student Loans	18	14	17	10.0	12.7	17.1
FFELP	*9*	*7*	*5*	*3.6*	*2.7*	*5.5*
Private Credit	*9*	*7*	*12*	*6.3*	*10.0*	*11.6*
Equipment	14	19	13	12.0	10.3	14.1
Floorplan	10	9	4	*5.4*	*1.4*	*0.5*
Unsecured Consumer	12	15	9	*9.3*	*5.8*	*9.8*
Miscellaneous	35	37	32	22.4	21.1	31.8
Total ABS	*229*	*229*	*175*	*163.9*	*121.4*	*173.6*
% 144A	54%	55%	56%	53%	56%	62%
% Floating-rate	15%	9%	4%	9%	4%	5%

Source: J.P. Morgan

Exhibit 2: ABS spread performance

bp

	Bench mark	Current 9/10/21	1-week Change	10-week Avg	Min	Max
Credit Card - Fixed Rate						
2-yr AAA	Swaps	1	0	1	1	1
3-yr AAA	Swaps	2	0	2	2	4
5-yr AAA	Swaps	16	-1	17	16	17
10-yr AAA	Swaps	43	-1	44	43	44
B-Piece (5-yr)	Swaps	41	2	39	39	41
C-Piece (5-yr)	Swaps	57	2	55	55	57
Credit Card - Floating Rate						
2-yr AAA	Libor	8	0	8	8	8
3-yr AAA	Libor	11	0	11	11	13
5-yr AAA	Libor	28	0	28	28	28
10-yr AAA	Libor	50	-3	53	50	53
B-Piece (5-yr)	Libor	43	0	43	43	43
C-Piece (5-yr)	Libor	68	0	68	68	68
Auto - Prime						
1-yr AAA	EDSF	2	0	2	2	2
2-yr AAA	Swaps	4	-1	5	4	5
3-yr AAA	Swaps	4	-2	6	4	6
3-yr AA	Swaps	25	0	25	25	25
Student Loans (FFELP)						
3-yr AAA	Libor	37	0	37	37	37
7-yr AAA	Libor	60	0	60	60	60
Private Credit Student Loan						
3-yr AAA	Libor	50	-2	52	50	54
Unsecured Consumer MPL						
1-yr AAA	EDSF	30	-5	36	30	40
3-yr AA	Swaps	55	-5	63	55	70
3-4yr A	Swaps	75	-5	80	75	90
3-4yr BBB	Swaps	130	-5	140	130	150
3-4yr BB	Swaps	290	-25	315	290	320
Auto - Subprime						
1-yr AAA	EDSF	8	-1	9	8	9
2-yr AAA	Swaps	10	0	10	10	10
3-yr AA	Swaps	30	0	30	30	30
3-yr A	Swaps	45	-3	48	45	48
3-yr BBB	Swaps	65	-2	67	65	67

Note: Tier 1 names represented by above.
Source: J.P. Morgan

Exhibit 3: Other ABS supply

$bn

	2017	2018	2019	2020	2021 YTD
Franchise/Whole Bus.	7.4	6.1	9.1	4.8	9.6
Aircraft	5.4	7.4	9.2	2.6	4.5
Device Payment	4.0	2.8	3.8	4.4	1.7
Timeshare	2.4	3.0	3.5	1.9	1.2
Solar	1.4	2.1	1.9	2.7	1.9
Railcar	0.6	0.7	1.9	0.5	2.8
SBL	0.6	0.2	1.6	0.4	0.4
Insurance	1.2	1.9	0.8	2.2	1.1
Containers	2.8	2.4	0.7	7.3	5.2
Taxes	0.1	0.4	0.3	-	0.5
Healthcare			0.3	0.4	
Stranded Ast		0.6	0.2	-	0.1
Trade Rec.	0.5	0.6	0.2	-	0.3
Infrastructure		0.1		-	
Royalties				-	
Miscellaneous	3.1	7.4	3.2	4.5	2.4
Total Other ABS	29.5	35.4	36.6	31.7	31.8

Source: J.P. Morgan

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Exhibit 4: Fixed-rate AAA ABS (3-year) spreads to swaps

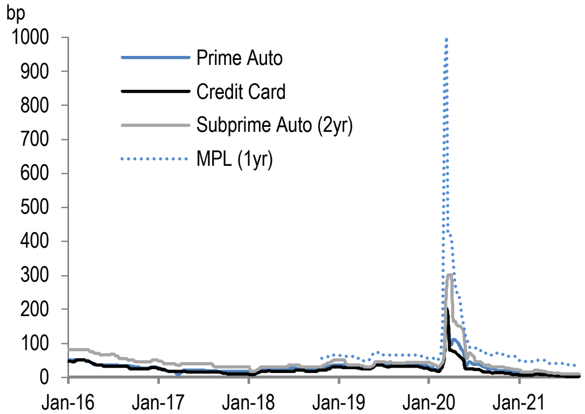


Exhibit 5: Floating-rate AAA ABS (3-year) spreads to Libor

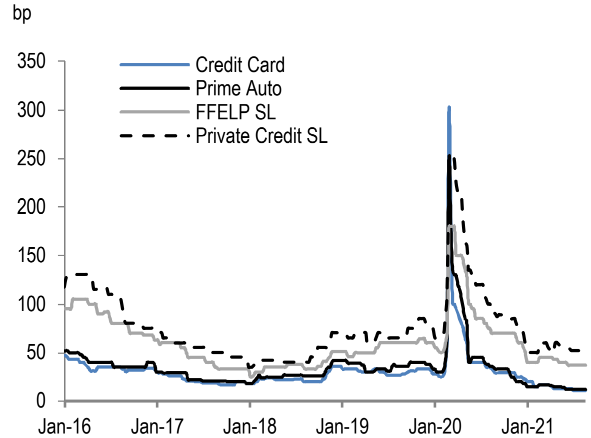


Exhibit 6: AAA cross sector spreads (3-year)

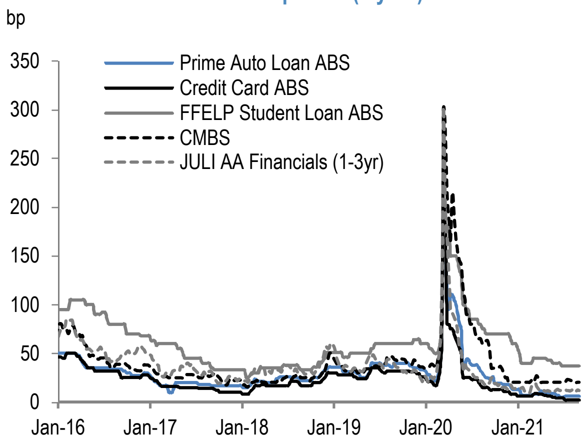
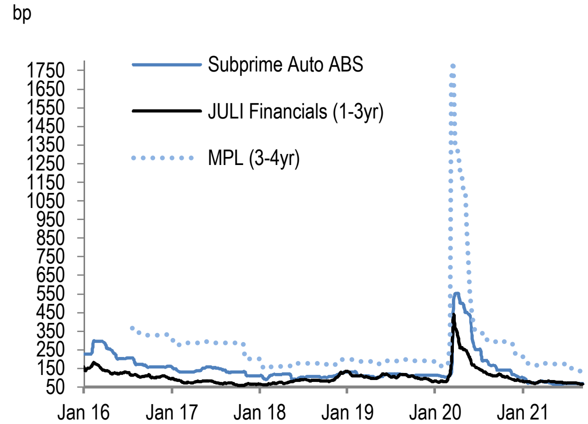
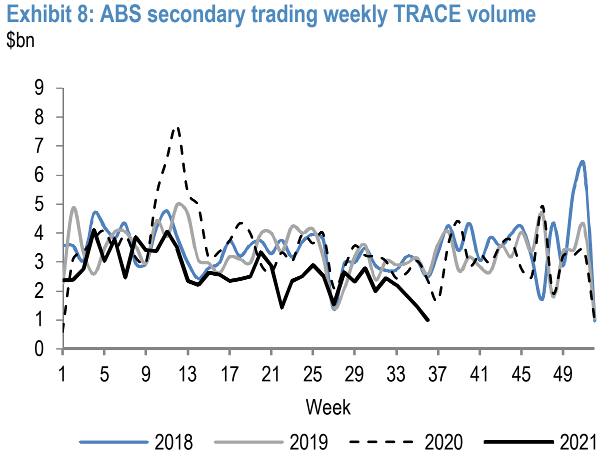


Exhibit 7: BBB subprime auto ABS (3-year) vs. BBB financials



Source: J.P. Morgan

Exhibit 8: ABS secondary trading weekly TRACE volume



Note: TRACE ABS data cut off one day prior to publication
Source: J.P. Morgan, TRACE, Bloomberg

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Corporates

- **Over $60bn of bonds were issued in the two days post Labor Day, and this issuance was well absorbed. Spreads widened just 1bp, and dealer net buying of bonds was modest.**
- **While the pace of issuance was heavier than expected in week 1 post Labor Day, the market reaction seemed logical given light dealer and investor positions coming into the month. Fed data show dealers reduced net positions meaningfully in August, and fund flow data show continued solid demand for HG bonds. Over the past three days, about half of the full month's supply average has come, which should be supportive for spreads going forward.**
- **Looking forward, we continue to expect modestly tighter spreads and also higher yields on HG bonds. Strong market technicals and the positive economic and corporate earnings trends are powerful drivers, even as we believe valuation already reflects much of the good news.**
- **The direction of UST yields should drive the near-term spread trends, but with COVID peaking and potentially more fiscal stimulus in Washington later in Sept and then 3Q earnings reports in October, there are potential catalysts for higher yields and lower spreads near term as supply slows.**

The first days of Sept supply have been well absorbed

Supply over the first two days of September was near $60bn, with more coming on Thursday. Dealers net bought just $1.2bn over these two days, according to TRACE data. This is likely to leave their inventories near the middle of the recent range given the light positioning with which they came into Sept. Investors were supportive of the supply, with spreads wider by just 1bp on Tuesday. As such, spreads are now only 1bp wider after $57bn of supply in 48 hours.

There was an interesting dichotomy of news on the day. On the positive side, the JOLTS report showed a record number of job openings and a record ratio of openings/unemployed at 1.26x (10.9m vs 8.7m). This makes sense in light of rising wages and ongoing labor shortages. While this should raise inflationary concerns, weaker growth in some delta-impacted sectors in the Fed beige book contributed to economic jitters and lower UST yields on the day. Also on the negative side, our research colleagues in Asia expect their default trends to get worse quickly, raising their expectations for Asia HY defaults to 9.0% for the year ($34bn). As just 2.6% ($9bn) has defaulted YTD, this amounts to a rapid default cycle expected over a short time period (see here); China property stress is the driver of this expectation. Concerns about Chinese growth and policy changes have not really impacted markets outside of Asia and the specific companies affected, but they are something to watch going forward.

In our view, what is notable is the September supply is coming so quickly early in the month such that investors may get comfortable with the notion that the heaviest supply period is behind them by mid-month. Also, the trend of COVID cases in the US has peaked (though it has not come down much yet), implying negatively impacted economic data over the past two months should revert in the coming

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months (absent a resurgence again, potentially driven by school openings). At current tight valuations in many markets, including HG credit, there is not much room for spreads to tighten, but we still believe the trend is modestly tighter to year-end.

Back to school – A recap of our views post Labor Day

HG spreads (JULI at 112bp) are currently close to the middle of the 9bp trendless range (107-116bp) of the past 3 months. Over the past 3 months the US economy has been subject to yet another COVID wave, modest shifts in Fed rhetoric, lower UST yields and $278bn of HG supply, all of which have been insufficient to move spreads much in either direction. We don't foresee any near-term catalysts that would leave us inclined to have a high conviction view that this range is likely to break but think it is worth examining some of the factors that will be at play as we proceed into the fall:

A) Credit technicals: Supply wave or supply tsunami? We believe the pending September supply will be readily absorbed. An increase in supply in Sept is widely expected. September was the busiest month of the year in both 2019 and 2018, and the 4-year average pre-COVID (2016-19) was $130bn. As we noted previously, the direction of spread moves in Sept has been the opposite of August for the past 5 years, regardless of supply, so if this pattern holds we should be on pace for very modest spread tightening in September (JULI was 2bp wider in August). In our view, the risk on the supply front is that recent publically disclosed regulatory roadblocks to large M&A deals push out the timeline to fund some of these deals. If true, there is likely to be less of the type of supply that might have wider new issue concessions than non-M&A issuance. August supply was modestly below the typical pattern, and more so adjusted for the growth in the market y/y.

B) Credit valuations: Spreads do not look attractive at current levels, and therefore it is mostly yield buyers driving the incremental tightening in our market, in our view. The 10d rolling correlation between spread changes and UST 10yr changes has averaged -64% over the past 3 months, above the YTD average of -49%, i.e. spreads have been more sensitive to UST yields recently than over the full year. With the heavy supply expected over the next few weeks the direction of UST yields is likely to be particularly important in the strength of demand. It is difficult to predict this near term (the big miss in NFP on Friday was met with higher, not lower yields, as an example of this difficulty), but JPM rates strategists continue to believe the direction on UST yields is higher.

C) Credit fundamentals: Is peak stimulus behind us or ahead of us? Corporate earnings have been buoyed this year by the extensive fiscal stimulus passed in 2020 and earlier this year, some of which will begin to taper off in September (federal unemployment benefits, eviction moratorium, etc.). It is possible that alongside the ongoing COVID Delta wave, those growth prospects will cool from here as consumer spending normalizes (as evidenced by a number of recent economic data points), with implication for the pace of corporate deleveraging. On the other hand, it is also quite possible that yet another stimulus bill(s) ends up passing this fall, which could be in the range of $1tr to $4.5tr in total. While current proposals do not envisage as much direct and rapid 'direct to consumer' payments as the prior bills, and the implementation periods are significantly longer (infrastructure), further stimulus should still boost corporate earnings. The key risk factor is the extent to which corporate taxes also go up as part of any bill, which could dent some of the positive implications. We expect discussions in D.C. around these bills to pick up in

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September. We also expect the tailwind of strong growth (JPM expects 8.5% in 3Q) will support very strong earnings once again.

In sum, we believe the number and magnitude of cross-currents facing spreads will pick up in September relative to August, but it seems somewhat unlikely at this juncture that any of them will lead to a significant move wider or tighter for spreads. Our bias remains constructive in anticipation of yields rising into year-end, and our YE spread forecast remains at 105bp, 6bp tighter versus current levels.

Day 1 of the September supply surge – a review of the day 20 issuers came to market

On Sept 7th $32bn of HG bonds were issued across 20 different issuers. This was the 7th largest issuance day ever. There were three days last year with supply between $37-40bn, and the record day was $52bn in Sept 2013. In terms of the number of deals, this past Tuesday was a record, with 20 different issuers in the market (the prior record was 15 deals on 26th March 2020). YTD before Sept 7th, there had been $942bn of supply across 166 business days, so an average of $5.7bn/day. However, in the two weeks before Labor Day just $5bn was issued, so clearly issuers were waiting for post Labor Day to come to market. On the day HG bond spreads were flat, as the supply was highly anticipated, even if the single-day total surprised to the high side. It was certainly helpful that UST 10yr yields were 8bp higher from last Thursday, attracting yield-based buyers to the market (and perhaps encouraging front-loaded supply from issuers worried about even higher UST yields). Dealers net bought just under $1bn of bonds on Tuesday, which is a low percentage figure for a heavy supply day. As we noted last week, in the weeks before Labor Day, dealers had reduced net positions substantially, per TRACE. The weighted average maturity of the bonds issued on Tuesday was 10.2 years. This is lower than the 10.8yr average YTD (which is down from 12.6 last year and 11.8 years in 2019). So supply was heavy, but the average duration was shorter than usual. While the one day supply figure is not so relevant, several days of very heavy supply can weigh on the market. September has averaged $140bn over the past 4 years, and we expect a figure in this range this year as well. If this month ends up at $140bn, then 23% of this supply has already been issued, so the very heavy supply pace to start the month may bring an earlier slowdown in the pace of supply as well.

Weaker fund flows are likely holiday driven

Flows in HG bond funds weakened this week with the asset class reporting $3.5bn of inflows, down 40% WoW. The reporting week was 4 days long, as it included the Labor Day holiday. In the prior two years, fund inflows also declined sharply in the week that included Labor Day compared to the prior week, so we would not read any message into the decline in inflows reported yesterday. For the week ending Sept 1, dealer inventories declined by $1.2bn to $3.5bn as trading desks prepared for heavy expected supply in September. This preparation was matched by investors who also came into the week prepared for the supply, as evidenced by the fact that HG bond spreads are just 1bp wider despite $70bn of supply on the week.

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Table A: Fund flows by asset class

Asset Class	Fund Flow ($mm)	WoW	Trend	4-week avg ($mm)	YTD ($mm)	YTD (% of AUM)	ETF ($mm)	Mutual Fund ($mm)	ETF Trend
IG	+3,499	-2,351		+5,182	+279,328	7.47%	+2,156	+1,342	
HY	+187	-1,407		+810	-3,474	-0.74%	-592	+779	
Lev Loans	+636	-136		+574	+32,260	35.82%	+341	+295	
Munis	+780	+238		+1,055	+78,509	7.93%	+234	+546	
Money Markets	-1,467	+8,776		-159	+202,953	3.88%	-	-	
Equities	+3,607	-10,069		+9,840	+266,794	2.12%	+3,728	-122	

*Note: IG = Corp + Agg + Total Return (bolded lines from Table B)
Source: J.P. Morgan, EPFR

Table B: High grade fund flows by fund type

HG Fund Category	Fund Flow ($mm)	WoW	Trend	4-week avg ($mm)	YTD ($mm)	YTD (% of AUM)	ETF ($mm)	Mutual Fund ($mm)	ETF Trend
Corp-only	**+244**	**-385**		**+706**	**+15,071**	**2.94%**			
Short	-194	-492		+132	+32,167	16.20%	-83	-111	
Intermediate	+9	-527		+512	+28,772	14.03%	-75	+85	
Long	+429	+634		+62	-20,394	-18.61%	+446	-18	
Agg	**+3,066**	**-232**		**+3,302**	**+214,342**	**8.62%**			
Short	+1,123	+1,203		+1,389	+58,857	8.30%	+860	+264	
Intermediate	+1,802	-1,547		+1,752	+138,395	8.01%	+756	+1,046	
Long	+141	+112		+160	+10,904	21.78%	+136	+5	
Total Return	**+188**	**-1,734**		**+1,174**	**+49,916**	**6.75%**	+116	+72	
JPM Estimated All HG Corps	**+1,112**	**-909**		**+1,899**	**+73,587**	**6.26%**			

Source: J.P. Morgan, EPFR

Table C: Net Primary Dealer Holdings

	01 Sep	Δ1w	Δ1m	6m range	% 6m in range
IG Corp >13m	3.5	-1.2	-2.0	0.3 / 7.9	41%
>13m and <5yrs	3.6	0.1	-1.0	0.8 / 4.9	67%
>5yrs and <10yrs	-1.6	-1.3	-2.0	-1.6 / 3.2	0%
>10yrs	1.5	0.0	1.0	-0.2 / 2.2	71%
IG Corp <13m	1.4	0.6	0.2	0.7 / 2.2	45%
Non-IG Corp	1.9	-0.6	-1.5	0.0 / 4.6	41%

Note: All figures in $bn
For IG Corp>13m and all related sub categories
Source: J.P. Morgan, Bloomberg Finance L.P

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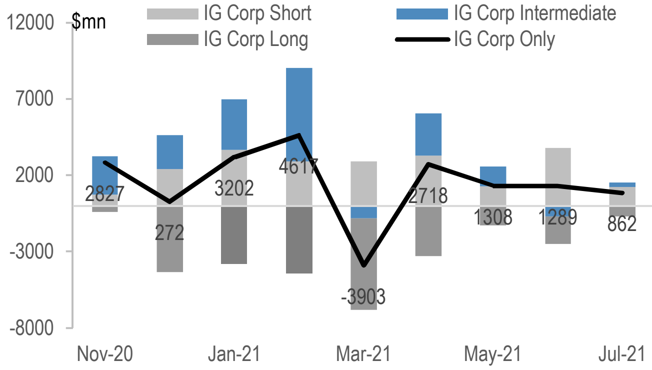
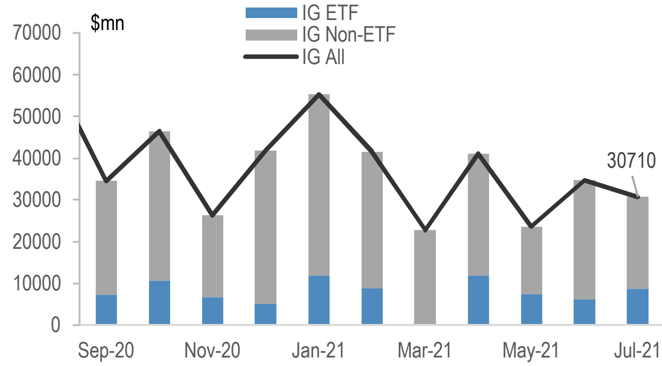
IG Corp-only fund flows by maturity



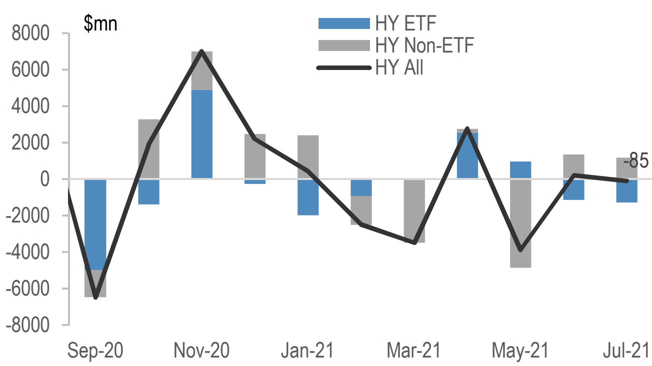
Source: J.P. Morgan, EPFR.

Overall IG fund flows



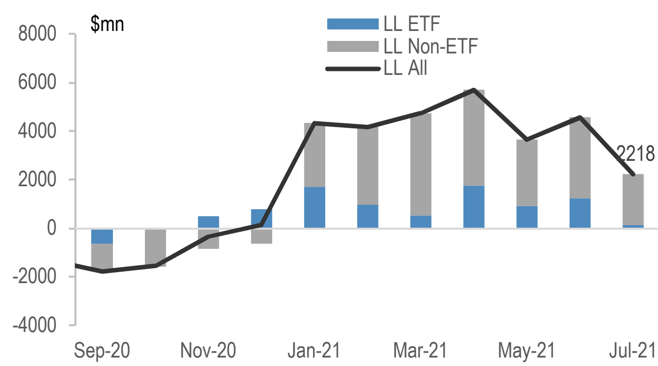
Source: J.P. Morgan, EPFR.

Overall HY fund flows



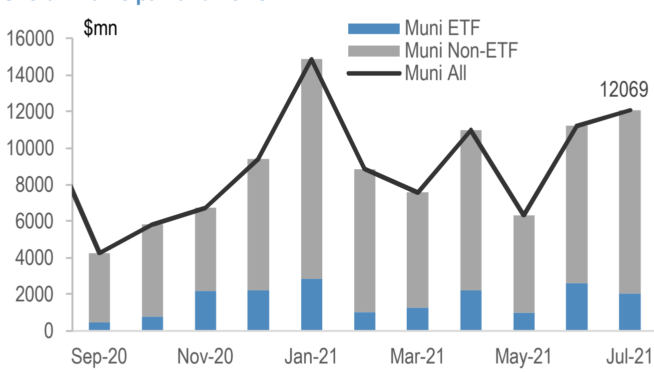
Source: J.P. Morgan, EPFR.

Overall Loan fund flows



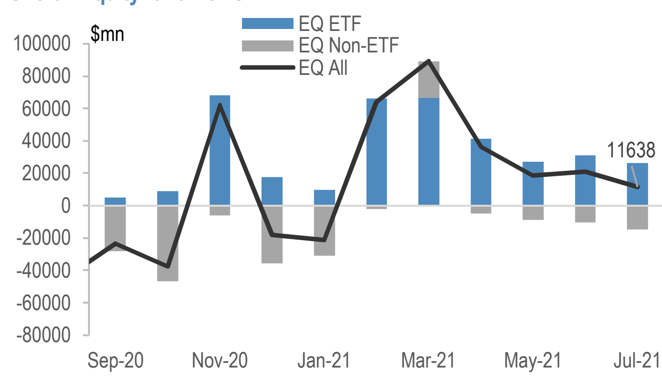
Source: J.P. Morgan, EPFR.

Overall Municipal fund flows



Source: J.P. Morgan, EPFR.

Overall Equity fund flows



Source: J.P. Morgan, EPFR.

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High Yield

- **The steady 3 week decline in high-yield bond yields extended, albeit at a more moderate pace this week as investors debate whether the delta variant, fading stimulus, legislative policies, growth downgrades, and a heavy M&A calendar in leveraged credit will impact valuations. High-yield bond yields and spreads decreased 4bp apiece over the past week to 4.30% and 378bp, which compare to as high as 4.72% and 416bp on August 19th. Yields had reached a record low of 4.22% and spreads a multi-year low 369bp in early July. The HY bond index has provided a 1.38% gain since August 19th amid little supply, the largest retail inflows since April, and as concerns around the delta variant and Fed tapering eased. Excepted to rise in the weeks ahead, capital market activity is off to a slow start ($3.4bn MTD) and totals $367.8bn YTD or $126.2bn ex-refi.**

- **Leveraged loan prices rose a modest $0.07 over the past week despite equity losses amid a pickup in retail inflows, steady CLO demand, and as investors brace for a sizeable but well telegraphed M&A calendar. Loan yields (3yr) and spreads (3yr) decreased 2bp and 3bp over the past week to 4.75% and 423bp. Meanwhile, the Leveraged loan index is providing a +0.23% gain in September following a +0.50% gain in August with the percentage of the market trading above Par (19.3%) rising to a high since late July. Light exiting the holiday, loan issuance totaling $601.3bn YTD or $246.5bn net of refi/re-pricing is up 115% and 150% yoy.**

- **There was only one default in August impacting a $565mn loan which follows one default impacting $290mn of loans in July. Notably, this year's default volume ($9.3bn) is on pace to be the lightest in a calendar year since $4.5bn defaulted in FY2007. Further, the $9.3bn is the lightest 8-month stretch since $8.3bn defaulted in the period ended March 2014. Including distressed exchanges, the US high-yield bond and loan default rates decreased 3bp and 6bp m/m to 1.14% and 1.07%, respectively, and are down 562bp and 320bp YTD. Recall, our 2021 and 2022 HY bond and loan default rate forecasts are 0.65% and 1.25%, respectively. Notably, 2021's forecast would be the lowest default rate for high-yield bonds and loans since 2007 and 2011, respectively.**

- **Our forecasts for 2021 HY bond gross and non-refinancing related issuance are $525bn (unchanged) and $175bn (+$15bn), which imply an additional $157bn gross and $49bn net volume over the balance of the year. We continue to see a record $350bn of HY bonds refinanced in 2021. For context, these forecasts compare to the full-year peaks for HY bond gross, net, and refi volume of $450bn (2020), $175bn (2013), and $297bn (2020). Note the HY market has grown 25% since 2013's high for net volume. Our new forecasts for 2021 institutional loan gross and non-refi/repricing issuance are $825bn (from $775bn) and $350bn (from $265bn), which imply an additional $224bn gross and $104bn net volume over the balance of the year. For context, these forecasts compare to the full-year peaks for gross, net, and refi volume of $974bn (2017), $316bn (2007), and $275bn (2017). Notably the loan market size has more than tripled since 2007's high for net issuance. On a leveraged credit basis, our 2021 forecasts would exceed the decade highs on a gross ($1.35trn vs $1.30trn 2017) and net ($525bn vs 2014's $410bn) basis and shatter the previous record high for refinancing ($625bn vs 2017's $483bn).**

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Credit Strategy Weekly Update

The steady three-week decline in high-yield bond yields extended, albeit at a more moderate pace this week as investors debate whether the delta variant, fading stimulus, legislative policies, growth downgrades, and a heavy M&A calendar in leveraged credit will impact valuations. The S&P 500 had posted four consecutive mild losses before Friday's bounce. **High-yield bond yields and spreads decreased 4bp apiece over the past week to 4.30% and 378bp, which compare to as high as 4.72% and 416bp on August 19th.** Yields had reached a record low of 4.22% and spreads a multi-year low 369bp in early July. By rating, BB, B, and CCC yields are now 3.11% (-2bp w/w), 4.67% (-6bp w/w), and 7.16% (+4bp w/w) versus 2021's record lows of 3.11%, 4.51% and 6.56%. Meanwhile, BB, B and CCC spreads are now 251bp (-3bp w/w), 420bp (-7bp w/w), and 672bp (+3bp w/w) which is 0.3%, 3.6%, and 9.9% above their year-to-date lows of 250bp, 405bp, and 611bp. **The HY bond index is providing a 0.35% gain in September following a +0.50% gain in August with Single B bonds (+0.42%) outperforming BB bonds by 8bp (+0.34%) and CCC bonds by 29bp (+0.14%).** Since August 19th, the top performing industries are Energy (+2.92%), Broadcasting (+2.46%), and Utility (+1.62%). Meanwhile, HY/IG spreads of 288bp compare to 322bp on 8/19, 280bp on 7/1/21, the YTD avg. of 311bp, and a decade low of 246bp in October 2018. Similarly, BB/BBB spreads are an YTD low 140bp apart which compare to 169bp on 8/19, 144bp on 7/1/21 and YTD avg. of 161bp. The HY bond index is providing a +5.36% gain year-to-date with CCCs (+7.91%) outperforming Single B bonds (+5.12%) and BB bonds (+4.03%). Energy is an outperformer in 2021 with gains totaling +12.27%, which is followed by Transportation (+10.92%) and Retail (+6.98%). With the US forward M&A calendar for leveraged credit at an elevated ~$100bn (~$30bn bonds), historically, September is the second most active month for issuance averaging $35.5bn since 2010. Excepted to ramp higher in the upcoming weeks, capital market activity is off to a slow start with $3.4bn pricing between Tuesday and Thursday. High-yield issuance totals $367.8bn year-to-date or $126.2bn ex-refi, which compare to $310.7bn (+18.4%) and $112.0bn (+12.7%) YTD20.

Table 1: High-yield bond spreads are 38bp tighter since August 19th

	HY	IG	BBB	BB	B	CCC	HY – IG	BB-BBB	B – BB	CCC – B
9-Sep-21	378bp	90bp	111bp	251bp	420bp	672bp	288bp	140bp	169bp	252bp
2021 High	451bp	105bp	129bp	313bp	486bp	758bp	348bp	186bp	186bp	277bp
2021 Low	369bp	87bp	108bp	250bp	405bp	611bp	280bp	140bp	150bp	206bp
Decade low	355bp	87bp	108bp	212bp	352bp	611bp	246bp	86bp	124bp	206bp
All-time low	266bp	75bp	99bp	162bp	247bp	469bp	179bp	28bp	50bp	206bp
20 Yr Median (Monthly)	543bp	135bp	171bp	361bp	545bp	1011bp	403bp	178bp	183bp	476bp
% Above 2021 low	2.4%	3.4%	2.9%	0.3%	3.6%	9.9%	2.6%	0.2%	12.7%	22.3%
% above decade low	**6.4%**	**3.4%**	**2.9%**	**18.2%**	**19.2%**	**9.9%**	**16.7%**	**62.9%**	**36.1%**	**22.3%**

Source: J.P. Morgan.

Leveraged loan prices were resilient over the past week despite equity losses amid a pickup in retail inflows, steady CLO demand, and as investors brace for a sizeable but well telegraphed M&A calendar. Leveraged loan prices increased $0.07 over the past week to $98.57 with the average price for BB loans increasing $0.08 to $99.36, Single B loans increasing $0.06 to $99.29, and Split B/CCC loans increased $0.11 to $91.08. **Prices for the index are now only $0.08 below the YTD high in mid-June ($98.65), while the $95-$97.99, $98-100, and >$100 buckets for Loans now reside at 6.90%, 68.62%, and 19.33% of the market. Meanwhile, loan yields (3yr) and spreads (3yr) decreased 2bp and 3bp over the past week to 4.75% and 423bp**. Retail loan funds are experiencing their largest inflows since June with the shortened weeks' inflows totaling $717mn. Meanwhile, September's

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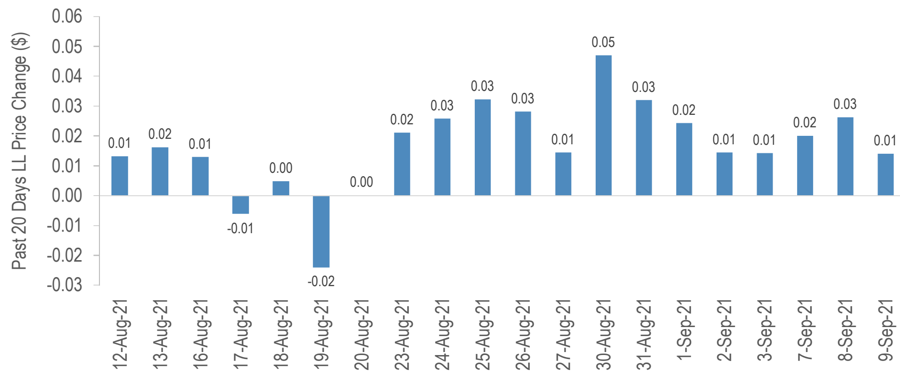
CLO volume ex-refi/resets total $3.6bn month-to-date following a record $18.5bn in August. With 3 of the 4 most active months on record, 2021's net CLO issuance (ex-refi/reprice/re-issue) now totals $112.4bn (+125.0% y/y) which is 18% ahead of 2018's record trajectory (2018YTD $95.6bn, 2018FY $130.6bn). **The Leveraged loan index is providing a +0.23% gain in September following a +0.50% gain in August with Split B/CCC loans (+0.41%) outperforming B loans (+0.22%) and BB loans (+0.21%).** The loan yield-to-3yr takeout is now 45bp above yields for the HY index, which is down from as high as 50bp above on July 7th. As well, yields for the HY bond index (4.30%) are 16bp above yields for loan issuers with bonds outstanding (4.14%), comparable to 44bp on 8/19, only 8bp below on July 7th and an average 47bp gap year-to-date. The Loan index is providing a +4.20% gain year-to-date with Split B/CCC loans (+11.69%) outperforming B loans (+3.97%) and BB loans (+2.16%). Top performing industries year-to-date are Metals/Mining (+13.33%), Energy (+7.70%) and Retail (+6.79%). Meanwhile, leveraged loan issuance month-to-date totals $0.2bn or $0.2bn net of refi/re-pricing. Loan issuance totaling $601.3bn YTD or $246.5bn net of refi/re-pricing is up 115% and 150% yoy.

Figure 1: Leveraged loan prices rose steadily over the past week



Source: J.P. Morgan.

An Update on 2021 High-Yield Bond and Leveraged Loan Issuance Forecasts

Last updated at the beginning of May, we are revisiting our 2021 high-yield bond and leveraged loan new-issuance forecasts in light of the ~$100bn M&A calendar. For context, the first 8 months of 2021 produced 5 record calendar months of HY issuance and yields are within an earshot of a record low. Meanwhile, CLO origination has accelerated to a record pace and retail inflows reveal no signs of abating. First, we are making nearly no changes to our 2021 high-yield bond issuance forecasts. High-yield issuance totals $367.8bn year-to-date or $126.2bn ex-refi, which compare to $310.7bn (+18.4%) and $126.2bn (+12.7%) YTD20. **We maintain our $525bn FY21 HY bond gross issuance forecast and raise expected non-refinancing related issuance by $15bn to $175bn.** This implies an additional $157bn gross and $49bn net volume over the balance of the year. **It continues to imply a record $350bn of HY bonds will be refinanced in 2021.** For context, these forecasts compare to the full-year peaks for high-yield bond gross, net, and refi volume of $450bn (2020), $175bn (2013), and $297bn (2020). Of course, forecasted net HY issuance numbers which are approach 2013's record occur in the context of a market size which has expanded by 25% since. Meanwhile, loan issuance totaling $601.3bn YTD or $246.5bn net of refi/re-pricing is up 115% and 150% yoy. **Our new forecast for FY21 institutional loan gross and non-refi/repricing issuance are $825bn and $350bn,** which is up from $775bn and $265bn prior and implies an

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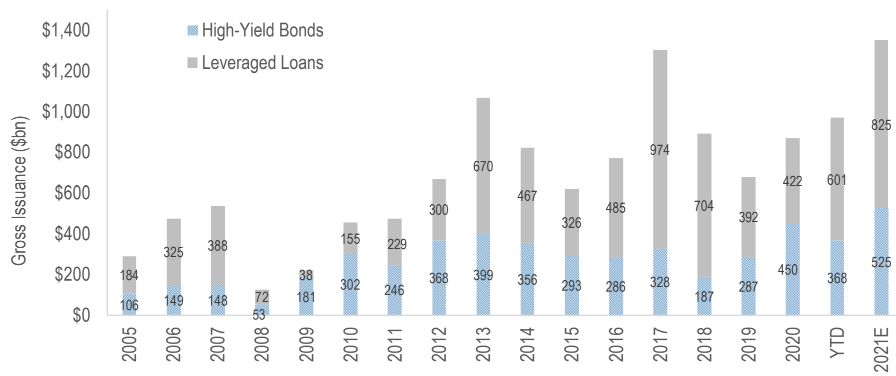
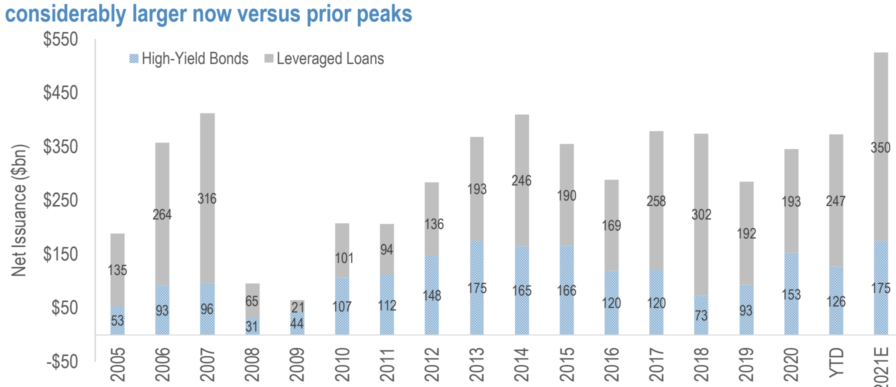
additional $224bn gross and $103bn net volume over the balance of the year. For context, these forecasts compare to the full-year peaks for gross, net, and refi volume of $974bn (2017), $316bn (2007), and $275bn (2017). Importantly, record forecasted net loan issuance occurs in the context of a market size which has more than tripled since 2007. **On a leveraged credit basis, our 2021 forecasts would exceed the decade highs on a gross ($1.35trn vs $1.3trn 2017) and net ($525bn vs 2014's $410bn) basis and shatter the previous record high for refinancing ($625bn vs 2017's $483bn).**

Figure 2: Our 2021 forecast for $1.35trn of issuance across bonds and loans exceeds the prior high in 2017



Source: J.P. Morgan.

Figure 3: While we are forecasting record net issuance across bonds and loans, both markets are considerably larger now versus prior peaks



Source: J.P. Morgan.

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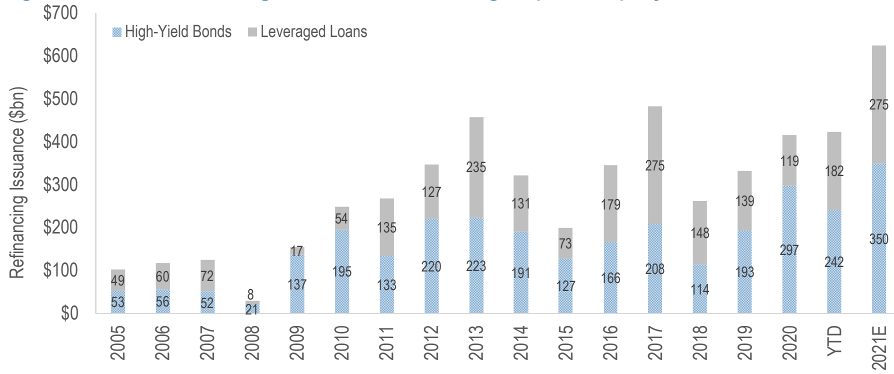
Figure 4: Record refinancing conditions are boosting corporate liqidity



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CLO

- ***Thanks to those who joined our webinar on September 9th as part of the Credit Strategy Snapshot. For those unable to join, the replay is available here.***
- **We raise our FY21 net new US CLO supply forecast to $145-155bn (from $130-140bn) and our Euro forecast to €30bn (from €25bn), implying global CLO formation of about $185bn which if realized would surpass the prior $161bn record in 2018.**
- **US CLO formation is on a record pace with $112.7bn YTD, which is also impacting leveraged capital markets by providing liquidity to loans. Our $150bn baseline US CLO forecast is reasonable as it requires $9-10bn monthly in Q4 (YTD, supply has averaged $13.6bn monthly). Our colleagues also recently raised net supply forecasts for HY and Loans to $175bn and $350bn.**
- **On balance, we adjust our US CLO AAA primary spread forecast from 100bp to 110bp (currently 119bp midpoint). This is partly related to higher supply and competing yields in US Treasuries. We expect CLO Mezz to trade mostly sideways to yearend as valuations seem about fairly-valued relative to US growth expectations, with risks around Delta.**
- **Bank demand for CLOs should remain solid especially given the continued cannibalization of bank C&I lending by markets and non-bank players. Our equity research colleagues observe increased exposure to CLOs in 1H21 (here). We expect insurance demand, noting the NAIC has proposed a change in capital requirements creating a steeper slope across the CLO risk spectrum.**

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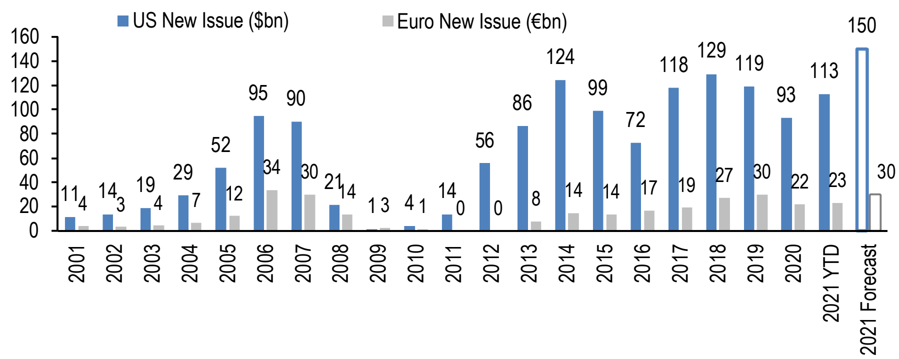
Raising the Global CLO New Issue Forecast to $185bn

We raise our FY21 net new US CLO supply forecast to $145-155bn (from $130-140bn) and our European CLO forecast to €30bn (from €25bn, €23.3bn YTD), implying global CLO formation of about $185bn in 2021 which if realized would surpass the prior $161bn record in 2018. New US CLO supply remains on a record trajectory, with $112.7bn YTD, and expect FY net supply growth[6] of +20%, similar to Loans (+22%), and compares to +7% and +11% in HG and HY. In 2021, US CLO supply has averaged $13.6bn per month, with 6 months ranking in the top 15 all-time, including the highest all-time of $18.5bn in August. Our $150bn forecast implies c. $9-10bn per month in Q4, which seems reasonable considering the highest historical October was $13.8bn, November was $13.7bn, and December was $10.7bn. Our colleagues also recently raised their net supply forecasts for HY and Loans to $175bn and $350bn (see here).

Exhibit 1: Historical Annual US and European CLO New Issue Supply and 2021 Forecasts



Source: J.P. Morgan. $150bn based on our $145-155bn US CLO supply forecast. Excludes refi/resets. As of September 10, 2021.

On balance, we adjust our US CLO AAA primary spread forecast from 100bp to 110bp (currently 119bp midpoint). This is partly related to higher supply, given a limited relationship (Exhibit 2), but also other themes including competing yields in US Treasuries. We expect CLO Mezz spreads to trade mostly sideways to yearend, as valuations seem about fairly-valued relative to growth expectations (Exhibit 3). Bank demand for CLOs should remain solid especially given the continued cannibalization of bank C&I lending by markets and non-bank players and our equity research colleagues observe increased exposure to CLOs in 1H21 (see here). On the insurance side, we expect continued demand, noting the NAIC has proposed a change in capital requirements creating a steeper slope across the CLO risk spectrum, which are currently constant for AAA, AA, Single-A tranches. The changes are minor in AA through BBB but of note there are proposed decreases in capital requirements on AAA and BB ratings.

[6] 2021 Net supply forecast (gross minus refinancings/repricing/reset) divided by market size as of YE2020.

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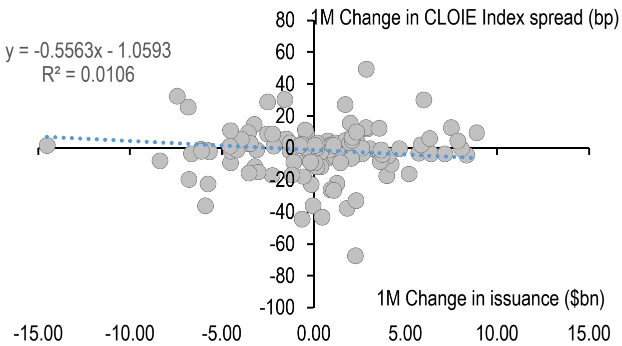
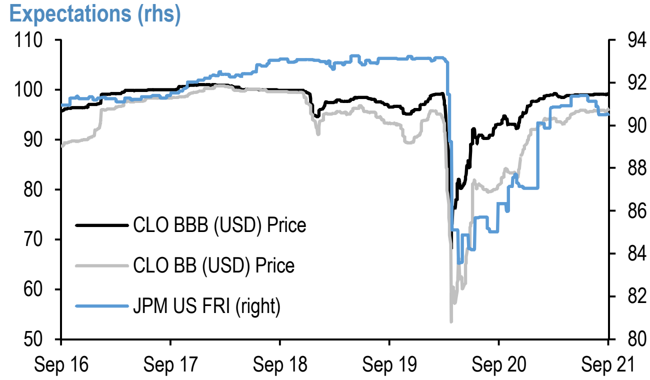
Exhibit 2: 1 Month change in CLO spreads versus 1 Month change in CLO new supply



Source: J.P. Morgan. Based on CLOIE Composite Index DM. Issuance data excludes refinanced, reset, re-issued and repriced CLOs. As of September 10, 2021.

Exhibit 3: CLO Mezzanine Price ($) versus US GDP Growth Expectations (rhs)



Source: J.P. Morgan. Based on CLOIE index price and the J.P. Morgan Forecast Revision Index. As of September 1, 2021.

Exhibit 4: Current versus March 2021 Proposed Base Factors

Moody's Rating	Current Base Factors	Proposed (March 2021)
Aaa	0.39%	0.29%
Aa1	0.39%	0.42%
Aa2	0.39%	0.55%
Aa3	0.39%	0.70%
A1	0.39%	0.84%
A2	0.39%	1.02%
A3	0.39%	1.19%
Baa1	1.26%	1.37%
Baa2	1.26%	1.63%
Baa3	1.26%	1.94%
Ba1	4.46%	3.65%
Ba2	4.46%	4.66%
Ba3	4.46%	5.97%
B1	9.70%	6.15%
B2	9.70%	8.32%
B3	9.70%	11.48%
Caa1	22.31%	16.83%
Caa2	22.31%	22.80%
Caa3	22.31%	33.86%

Source: J.P. Morgan, NAIC. Presents pretax C1 base factors under the current formula and the 2021 Academy-proposed base factors, see here for details.

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Credit Derivatives

- **We discuss our latest CDX.IG roll estimates following the publication of the Provisional List of constituents. There are two name changes in the index. We expect the new index to trade 6.2bp wider than the current index series**
- **We also discuss our expectations regarding composition changes and roll valuations for the CDX.HY S37 index. We expect 2 name changes in the index. We expect the new index to trade 16bp wider/7 cents higher than the current index series**
- **We discuss the transition of iBoxx TRS away from Libor to new RFRs by the YE**
- **We discuss a Payer Ladder that takes advantage of elevated levels of CDX option skew to hedge against a modest selloff**
- **We discuss a credit-equity trade for Boeing**

Back to School

The quiet summer months are now in the rear view mirror, and broadly speaking panned out as we had hoped and expected. Now that markets are returning to life, and focus again is turning towards the timing and nature of tapering in the coming months and with the rolls only a couple of weeks away, we think now is the time to begin taking some chips off the table as investors look to consolidate the years returns as we move into Q4. We still believe that the next few months are likely to be relatively low volatility, with broadly speaking spreads moving sideways, but we think it is prudent to position now for any potential weakness.

In *Market Themes* we update our latest roll expectations, as more details are confirmed as they move firmly into view, and we also take a look at Standardised TRS as details about the transition away from Libor at the end of the year are finalised.

In the *Trade Ideas* section we again look to the option market for exposure to a modest widening of spreads from here, adding a payer structure on iTraxx Main to our bearish seagull on CDX.IG that we added last time. We also highlight Boeing for a credit-equity trade, and close out three other credit equity trades taking our total closed trades in this space to 13 over the last year for almost €5mm of P&L.

Our *CD Player Total Return Portfolio* is up €1.455mm since the last update on July 14. We open two new trades: iTraxx Main Payer Ladder and a Boeing Credit Equity trade. We also clean our locker at the start of the new term, closing a number of trades (Buy S34/35 XO Roll; 10y France v QW5A; Long Snr Mezz vs Jnr Mezz in Main; Long XO Snr Mezz v IBOXXMJA; Total, CSTM and TKAGR Credit-Equity Trades), and reduce market exposure to match our thesis for the upcoming weeks.

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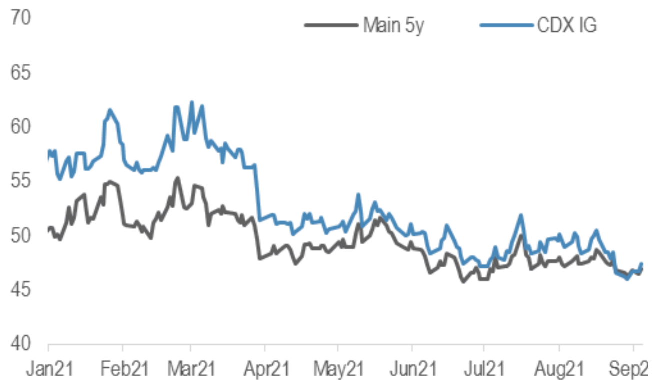
Figure: Recent IG Index Time Series

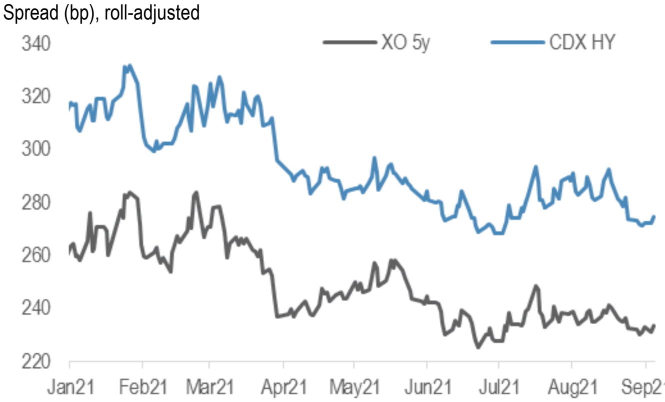
Spread (bp), roll adjusted



Source: J.P. Morgan.

Figure: Recent HY Index Time Series

Spread (bp), roll-adjusted



Source: J.P. Morgan.

Market Themes

CDX.IG Roll Update

On Tuesday IHS Markit published the Provisional List of changes for the upcoming CDX.IG Series 37 roll.

The Final Composition for the index will be published on or before Friday, 17 September EOD. The new Series 37 Roll rules are available here.

Composition changes: There are two name changes in the provisional list published by Markit, in line with our expectations. **TransCanada Pipelines Limited** and **Cigna Corporation** are expected to leave the index, as they are the least liquid index names. On the other hand, **M.D.C. Holdings, Inc.** and **Advanced Micro Devices, Inc.** are expected to enter the index due to the rising star inclusion criteria.

Valuations: From a fair value perspective, the new index series should trade 6.2bp wider than the current index series. The 6 month extension in maturity should result in the new index series trading 5.8bp wider while the name changes should result in the new index trading 0.4bp wider.

Table: Provisional composition changes in CDX.IG for the S37 roll

	ENTRANTS				LEAVERS			
#	Name	Sector	Spread	Reason	Name	Sector	Spread	Reason
1	M.D.C. Holdings, Inc.	Cons Goods	82	Rising star	Cigna Corporation	Healthcare	33	Liquidity
2	Advanced Micro Devices, Inc.	Technology	60	Rising star	TransCanada Pipelines Limited	Utilities	55	Liquidity

Source: J.P. Morgan. Data as of 8 September 2021.

Domtar is currently in CDX.IG, but is at risk of a downgrade to HY due to the possibility that Domtar's credit profile will weaken post an acquisition. The acquisition is expected to be completed by YE21, but potential LBO financing prior to the index roll could result in the name being downgraded near term. We expect the removal of Domtar to result in the new index series trading only 4.3bp wider than the current index versus our current expectations of 6.2bp.

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Table: Historical Roll Cost

Series	Roll Date	Traded Roll	Theo Roll	Roll Cost at roll	Roll Cost 1w after	Roll Cost 1m after
S26-27	Sep-16	6.0	8.9	-3.0	-2.7	-1.6
S27-28	Mar-17	6.5	9.1	-2.5	-1.5	-1.0
S28-29	Sep-17	2.7	2.6	0.2	0.1	1.2
S29-30	Mar-18	7.8	7.7	0.1	-0.4	0.2
S30-31	Sep-18	5.2	4.8	0.4	0.1	-0.5
S31-32	Mar-19	7.3	7.8	-0.5	-0.3	0.5
S32-33	Sep-19	7.2	7.6	-0.4	-0.7	-0.3
S33-34	Mar-20	6.6	12.4	-5.7	-0.2	-0.8
S34-35	Sep-20	-23.5	-23.5	0.0	1.0	0.3
S35-36	Mar-21	6.0	5.9	0.2	-0.2	-0.4
	Avg	3.2	4.3	-1.1	-0.5	-0.2

Source: J.P. Morgan.

Figure 5: Investor net positioning in the CDX.IG index is around the higher end of its historical range

Source: J.P. Morgan, DTCC

CDX.HY Roll Preview

CDX.HY Series 37 will start trading on Monday, September 27th with a December 20, 2026 maturity for the five-year contract.

We expect two name changes in the new CDX.HY series. Note that this is our expectation based on current publically available information and not the official list published by Markit. Markit is expected to publish the provisional list on or before Wednesday, 15th September EOD.

Composition changes: We expect **M.D.C. Holdings, Inc.** to leave the index due a rating upgrade to HG. We expect **Norbord Inc.** to leave the index as there is no debt outstanding for the issuer. On the other hand, we expect **Nordstrom Inc.** to enter the index as it is a part of the top 50 liquid single name CDS in the HY liquidity list. We expect **EQT Corporation** to enter the index due to additional CDS liquidity inclusion.

Valuations: From a fair value perspective, the new index series should trade **16bp wider/7 cents higher** than the current index series. The 6 month extension in maturity should result in the new index series trading 13bp wider/22 cents lower, while the name changes should result in the new index trading 3bp wider/14 cents lower.

Note that the impact of the maturity extension is based on current single name curve pricing and our estimate of where these curves will trade post-roll. This is what matters for the CDX.HY index roll as it takes place after all the single names have rolled, contrary to the other CDX/iTraxx indices.

Table: Expected composition changes in CDX.HY for the S37 roll

	ENTRANTS				LEAVERS			
#	Name	Sector	Spread	Reason	Name	Sector	Spread	Reason
1	Nordstrom, Inc.	Cons Services	234	Top 50 liquid CDS	M.D.C. Holdings, Inc.	Consumer Goods	82	Rising star
2	EQT Corporation	Energy	200	Addl CDS liquidity	Norbord Inc.	Basic Materials	53	No debt outstanding

Source: J.P. Morgan. Data as of 8 September 2021.

Libor Transition – Standardised Total Return Swaps

- As the transition away from Libor continues, the latest credit product to adopt the new Risk Free Rates (RFR) will be the Standardised Total Return Swaps.

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- From 20 December 2021, the convention for the funding leg of the trade for Standardised TRS in USD and GBP will become compounded-in-arrears SOFR and SONIA, respectively. EUR denominated trades will continue to use 3M Euribor.
- The new convention only impacts new trades entered into from 20 December and is a trading convention; trades entered into prior to this date will remain on their current 3M Libor standard unless they are rolled into the new convention.

The transition away from Libor continues apace, with Credit TRS the latest product to adapt RFR conventions. We have previously written about the move to RFR in the clearing space (*Benchmark Reform for CDS*, 8 June) and expect changes to CDSW in the coming months.

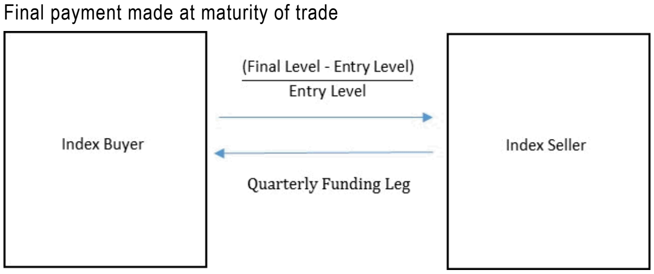
Standardised TRS in the credit market are traded on a variety of underlying indices. These indices are total return indices in the sense that they reflect the total return, including all coupon returns, an investor would earn from holding all the bonds underlying the reference index in the relevant amount.

The basic structure of the TRS is such that TRS buyer pays the quarterly funding or floating leg in exchange for the percentage return of the reference index from Trade Date to Maturity Date.

Historically, the floating leg of the Standardised TRS has been 3M Libor (USD and GBP) or Euribor (EUR) with a full first coupon. This means that, at each of the quarterly coupon payment dates (20 Mar, Jun, Sep, Dec), the floating leg coupon is paid and the rate for the next period is set. A long risk trade midway through a coupon period would receive the linearly accrued coupon from the start of the coupon period until Trade Date as the first coupon is paid in full on the next coupon date.

Figure: Typical Total Return Structure

Final payment made at maturity of trade



Source: J.P. Morgan

Table: Current and Future Trade Convention

Quarterly floating leg

Currency	Prior to 20th Dec 2021	From 20th Dec 2021 onward
EUR	3M Euribor	3M Euribor
GBP	3M GBP Libor	SONIA compounded-in-arrears
USD	3M USD Libor	SOFR compounded-in-arrears

Source: J.P. Morgan, HIS Markit

From 20 December 2021, the rate paid on the floating leg of trades denominated in USD and GBP will be RFRs, SOFR and SONIA, respectively. For EUR denominated trades, since EURIBOR is not terminating in the near future, there is no convention change for EUR contracts .

As the new RFRs are not known in advance the simple linear accrual of coupons used previously needs to change. The new convention will be daily compounding of the RFR from the Last Coupon Date to Trade Date. Since the full first coupon convention will remain, this will ensure that the TRS buyer is compensated for the coupon accrued before they traded.

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To calculate the coupon and accrual, the RFR daily accrual index calculated by either the Federal Reserve or the Bank of England will be used. The calculation of the coupon payments will now be given by Equation 1. A trade entered into during a coupon period will be given by Equation 2.

Equation 1: Coupon Amount

$$\text{Coupon Amount} = \text{Notional} * \left(\frac{\text{RFR Index}_{\text{IMM Period End Date}-2\text{bd}}}{\text{RFR Index}_{\text{IMM Period Start Date}-2\text{bd}}} - 1\right)$$

Equation 2: Accrued Amount

$$\text{Accrued Amount} = \text{Notional} * \left(\frac{\text{RFR Index}_{\text{Trade Date}-1\text{bd}}}{\text{RFR Index}_{\text{IMM Period Start Date}-2\text{bd}}} - 1\right)$$

The SOFR Index methodology and the historical data can be accessed via the Federal Reserve website. The SONIA Compounded Index methodology and the historical data can be accessed via the Bank of England website.

The two-day delay on the RFR used is to ensure that the rate is available at the time the trade is entered into. Both SOFR and SONIA are expected to be published in the morning of the following business day. It is worth noting that the current convention in USD and EUR coupons is to use the Libor rate from 2 days prior to the date the coupon is set.

Table: Standardised TRS Indices

iBoxx Index	Ticker	Currency
iBoxx EUR Contingent Convertible Liquid Developed Market AT1	IBXXC2D1	EUR
iBoxx EUR Corporates	QW5A	EUR
iBoxx EUR Liquid High Yield	IBOXXMJA	EUR
iBoxx USD Contingent Convertible Liquid Developed Market AT1	IBXXC1D1	USD
iBoxx USD Liquid High Yield	IBOXHY	USD
iBoxx USD Liquid Investment Grade	IBOXIG	USD
iBoxx USD Liquid Leveraged Loans	IBXXLLTR	USD
iBoxx USD Liquid High Yield Oil & Gas (5/25/50 Issuer Cap)	IBXXLOG1	USD
iBoxx USD Liquid Investment Grade 10+ Index	IBXXLIG1	USD
iBoxx USD Emerging Markets Sovereigns & Sub-Sovereigns Capped	IBXXEM11	USD
iBoxx USD Liquid Investment Grade BBB 0+	IBXXUQ0T	USD
iBoxx GBP Corporates	IYDU	GBP

Source: J.P. Morgan

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Municipals

- **This week, UST yields rose by 1-3-2bps in 2-5-10yr spots and fell by 1bp in the 30yr spot. Benchmark municipal yields were unchanged in 2-5yrs and rose by 1-1bp in 10-30yrs on the curve, outperforming Treasuries by 1-3-1bps in 2-5-10yr spots, while underperforming by 2bps in 30yrs**
- **Over the holiday shortened week, the municipal market struck an uneasy tone, with light customer buying as tax-exempt customer buys fell 27% from the 5-day average for Thursdays, and taxable buys were lower by 25%. At the same time, selling was elevated as tax-exempt customer sells were up 11% and taxable selling surged by 55%**
- **Amid relatively few data releases, August headline and core PPI rose, while initial claims hit a new post-pandemic low of 310k. Tight labor markets in recent months have contributed to somewhat-faster-than-usual earnings growth**
- **After rounding, our tracking estimate of 2Q real GDP growth was unchanged at 6.6% saar following the latest quarterly services survey (QSS), which looked very similar to earlier figures used in the BEA's 2Q GDP growth estimate**
- **Next week we anticipate $12.3bn in supply, or 119% of the 5yr equiv week avg ($10.3bn). Tax-exempt volume is expected to be $9.4bn (110% of 5yr week avg), and taxable/corp cusip supply is expected at $2.9bn (1.77x the avg)**
- **Lipper reported combined weekly and monthly inflows of $2.7bn for the period ending September 8th, increasing YTD inflows to $85.3bn. Municipal bond funds have seen inflows in 68 of the past 69 weeks, totaling a record $146.8bn. After 36 weeks, the pace of combined weekly/monthly fund inflows remains the fastest on record, and the current YTD inflow of $85.3bn would be the 2nd highest among full-year calendar inflows, since the inception of the data in 1992**
- **From a dollar value perspective, there is only ~$700mn or 0.9% of ETFs held by muni mutual funds. As such, in our view, this capital does not represent a significant vulnerability of these ETFs**
- **We analyze the relationship between bidwanteds and MSRB trade data by curve. The correlation of bidwanteds to trade volume, is stronger in shorter dated maturity buckets and get progressively weaker as we move out on the curve. The correlation between the change in tax-exempt bidwanted volume and trade volume in 0-5yrs on the curve was 83%, versus just 42% in 20-30yrs on the curve**
- **We also note some selling pressure in 10-20yr part of the curve in the past days as the trend of bidwanteds continued move higher (141%), while the transaction volume declined (only 112%)**
- **YTD 2021 state tax receipts as of July, for the 47 states who report the data, show an avg increase of just 18.6% vs. 2020, with a weighted avg increase of 22%. Compared to the same period in 2019 (pre-pandemic), the avg increase was 13.4% (17.4% weighted avg)**

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- **The 33 states that have published July PIT receipts reported avg 2021 YTD revenue growth of 18.0% vs the same period in 2020, and 17.1% vs 2019. While unemployment remains above pre-pandemic levels in the U.S. overall, rates have improved significantly (5.2% as of July 2021), boosting PIT collections**
- **Avg YTD sales tax revenue collections are higher by 15.7% for YTD 2021 vs 2020, and 12.7% higher vs 2019. Certain tourism-dependent states (NV +28.4%, FL +23.7%) saw improvement in sales tax revenue in 2021, as widespread vaccination and relaxed restrictions in the spring, combined with pent up consumer demand, supported economic recovery**

The holiday shortened week saw relative slight market participation ahead of higher supply next week and less favorable seasonals

Over the holiday shortened week, the municipal market struck an uneasy tone, with light customer buying as tax-exempt customer buys fell 27% from the 5-day average for Thursdays, and taxable buys were lower by 25%. **At the same time, selling was elevated as tax-exempt customer sells were up 11% and taxable selling surged by 55%. Bidwanteds remained relatively stable on Thursday ($545mn/+6%).**

While fund flows were positive for the week, Tuesday and Wednesday saw consecutive days of muni HY and ETF outflows. These outflows were likely the result of a handful of asset allocation shifts versus a broad based migration of capital from the sector, as both muni HY and ETF investors tend to move capital more freely than traditional muni mutual fund investors. **We continue to believe that the next outflow cycle will be triggered by a pronounced/abrupt increase in UST yields or some existential capital markets event.**

There were relatively few economic data releases this week given the holiday. The release of the August producer price index (PPI) showed building inflationary pressures as the headline rose 0.7%, while the core (excl. food and energy) rose 0.6%. The headline PPI jumped 8.3% oya, while the core increased 6.7% oya. Despite solid the August increases in the main PPI aggregates, the details that are used to estimate PCE inflation looked soft on net. **Our tracking estimate of the core PCE price index points to a 0.15% gain in August (3.4% oya), as we look to next week's CPI release to help refine this estimate (US: PPI increases 0.7% in August, Silver).**

Initial jobless claims in regular state programs fell from 345,000 to 310,000 during the week ending September 4, beating expectations and marking a new post-pandemic low (US: Regular jobless claims filings keep trending lower, Silver). In July 2021, ratios of job openings to hires in most sectors were more than 30% higher than in January 2020. Tight labor markets have contributed to somewhat-faster-than-usual earnings growth, with total private monthly earnings growth averaging 0.48%m/m since April 2021, of which elevated labor market tightness alone would predict 0.41%m/m growth on average. **The implied elasticity of wage growth to elevated labor market tightness is relatively low, indicating that earnings growth will not spike as sharply as tightness has, though tight labor markets will likely support a modest pickup in earnings growth in months to come (Focus: Tight labor markets have led to higher wages, McCrory).**

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Data from the latest quarterly services survey (QSS) looked very similar to earlier figures that the BEA used to estimate 2Q GDP growth. **After rounding, our tracking estimate of 2Q real GDP growth was unchanged at 6.6% saar following the QSS (US: Little impact from QSS on 2Q GDP tracking, Silver).**

This week House Committees also began the process of marking up potential Democratic priorities that may be included in an eventual reconciliation package. The mark up and negotiations surrounding the package will continue throughout September. **We are mindful that gaps in policy objectives among moderate and progressive Democrats, and thin margins in the House and no room for dissent in the Senate, are obstacles to passage of an expansive reconciliation bill.**

Resolving differences among factions in the party is complicated by the relative short legislative session between now and year-end. **This is a exacerbated as the reconciliation package will be considered alongside the Senate approved bipartisan infrastructure bill, while also needing to address government funding (expiring at the end of the month) and reach a deal to raise the debt ceiling.**

This week, UST yields rose by 1-3-2bps in 2-5-10yr spots and fell by 1bp in the 30yr spot. Benchmark municipal yields were unchanged in 2-5yrs and rose by 1-1bp in 10-30yrs on the curve, outperforming Treasuries by 1-3-1bps in 2-5-10yr spots, while underperforming by 2bps in 30yrs (Exhibit 1).

Exhibit 1: Benchmark municipal yields were unchanged in 2-5yrs and rose by 1-1bp in 10-30yrs on the curve, outperforming Treasuries by 1-3-1bps in 2-5-10yr spots, while underperforming by 2bps in 30yrs

	HG Municipal Yields		Treasury Yields		Relative	HG Muni/Tsy Ratio	
Sector	Current (%)	1wk chg (bps)	Current (%)	1wk chg (bps)	Change	Ratio (%)	change (% pts)
2yr	0.11	0	0.22	1	1	51	-2
5yr	0.41	0	0.81	3	3	50	-2
10yr	0.94	1	1.34	2	1	70	0
30yr	1.53	1	1.93	-1	-2	79	1

Source: Refinitiv, J.P. Morgan

Over the holiday shortened week, the municipal market struck an uneasy tone, with light customer buying as tax-exempt customer buys fell 27% from the 5-day average for Thursdays, and taxable buys were lower by 25%. **At the same time, selling was elevated as tax-exempt customer sells were up 11% and taxable selling surged by 55%. Bidwanteds remained relatively stable on Thursday ($545mn/+6%).**

While fund flows were positive for the week, Tuesday and Wednesday saw consecutive days of muni HY and ETF outflows. These outflows were likely the result of a handful of asset allocation shifts versus a broad based migration of capital from the sector, as both muni HY and ETF investors tend to move capital more freely than traditional muni mutual fund investors. **We continue to believe that the next outflow cycle will be triggered by a pronounced/abrupt increase in UST yields or some existential capital markets event.**

That said, we believe that it is prudent to consider reigning in credit overweighs that have provided sizable outperformance over the past 18-months. As we wrote in 7/9/2021 publication, it is hard to ignore the pace and magnitude of the current inflows streak, and we expect that we are in the very late innings. **The next outflow period will likely be foreshadowed by rising longer dated tax-exempt yields.**

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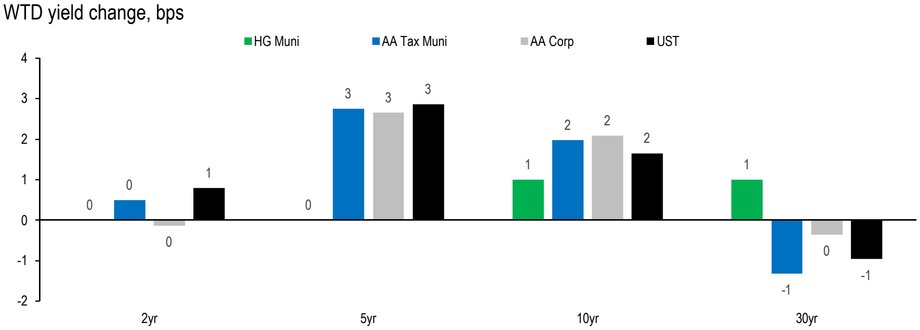
Each passing week of inflows, and continued low base HG rates and near record tight spreads, adds further tension to the spring.

While it is impossible to predict the timing of the next outflow cycle, we believe that it is possible to identify securities with a high degree of exposure. Holding data of the largest HY muni ETFs are very similarly concentrated. **We expect that the eventual outflow cycle would trigger immediate selling of the more concentrated and liquid securities in these funds (JPM Muni Weekly August 27, 2021).**

This week, tax-exempts outperformed taxables through 10yrs on the curve, while lagging by 2bps in the 30yr spot, as HG muni yields were unchanged in 2-5yrs and higher by 1bp in 10-30yr spots. UST yields were up 1-3-2bps in 2-5-10yrs, and lower by 1bp in 30yrs on the curve.

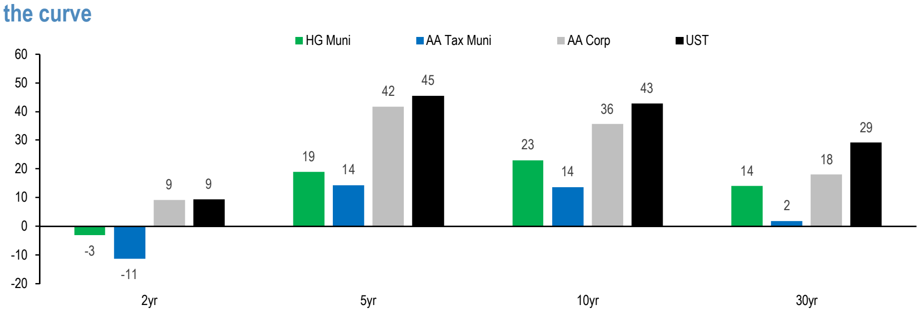
Exhibit 2: For the week, tax-exempts outperformed taxables through 10yrs on the curve, while lagging by 2bps in the 30yr spot
WTD yield change, bps



Source: Refinitiv, J.P. Morgan

YTD tax-exempts have outperformed UST by 12-26-20-15bps in 2-5-10-30yrs on the curve. **Taxable municipals have outperformed tax-exempts, corporates, and UST across the curve.**

Exhibit 3: YTD, taxable municipals have outperformed tax-exempts, corporates, and UST across the curve



Source: ICE, Refinitiv, J.P. Morgan

This week's total issuance of $7.8bn included $6.1bn tax-exempt supply. Next week we anticipate $12.3bn in supply, or 119% of the 5yr equiv week avg ($10.3bn). **Tax-exempt issuance is expected to be $9.4bn (110% of 5yr equiv week avg), and taxable/corp cusip supply is expected at $2.9bn (1.77x the 5yr equiv week avg).**

The largest deal next week is State of California, with $2.1bn of tax-exempt bonds. The second largest deal, Black Belt Energy Gas District (Project No. 6) backed by Goldman Sachs, is expected to bring $805mn of tax-exempt bonds. The

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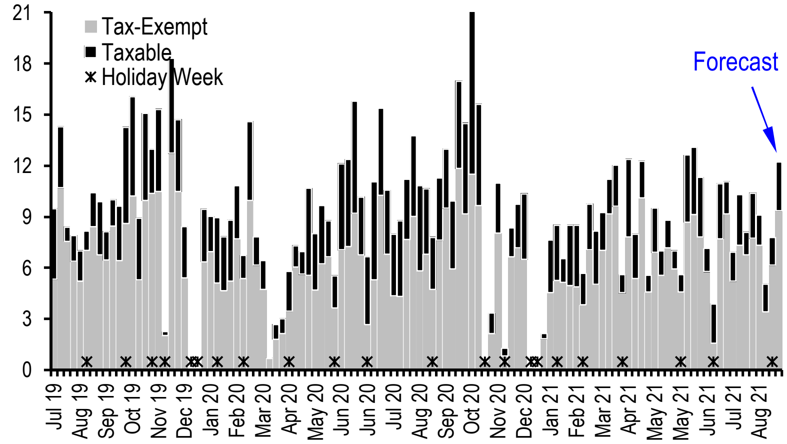
third largest issue is Providence St. Joseph Health Obligated Group with $775mn of taxable bonds.

Exhibit 4: Tax-exempt issuance is expected to be $9.4bn (110% of 5yr equiv week avg), and taxable/corp cusip supply is expected at $2.9bn (1.77x the 5yr equiv week avg)

Weekly Issuance, $bn's



Source: IPREO, Bloomberg Finance L.P., J.P. Morgan

For the period ending 09/08/2021, Lipper's combined weekly and monthly reporting funds indicated inflows of $2.7bn

Lipper reported combined weekly and monthly inflows of $2.7bn for the period ending September 8th, increasing YTD inflows to $85.3bn. High Yield funds recorded $199mn of inflows, Intermediate funds saw $677mn of inflows, and Long Term funds saw $994mn of inflows. Municipal ETF's registered $202mn of inflows.

Weekly reporting funds were responsible for $1.1bn of inflows. Long Term funds reported $691mn of inflows, High Yield funds received $145mn of inflows, and Intermediate funds received $138mn of inflows.

California municipal bond funds experienced $131mn of inflows, while New York municipal funds indicated $2mn of outflows.

For the period, Tax-exempt money market funds reported outflows of $307mn, and Taxable money market funds reported net outflows of $3.7bn.

Taxable Fixed Income funds reported inflows of $14.0bn, while Equity funds (US & Global) saw outflows of $5.3bn.

Excluding ETFs, all term muni funds reported $2.5bn of inflows.

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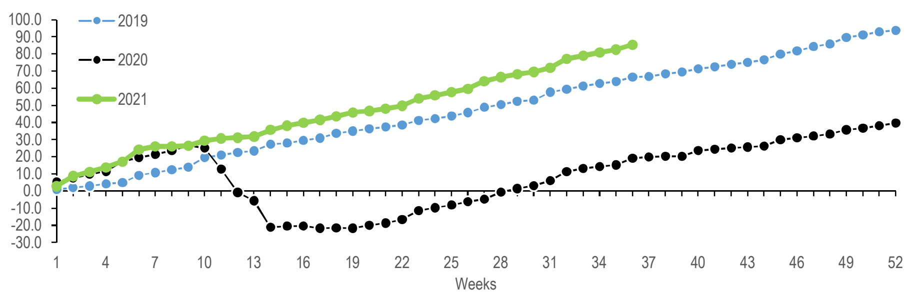
Exhibit 5: Municipal bond funds indicated combined monthly and weekly inflows of $2.7bn for the period ending 09/08/2021

Fund flows and fund assets, $mn's

	Fund flows			Fund Assets	
Type of funds	Actual	YTD Total	4-wk. avg.	Actual	4-wk. avg.
All term muni funds	2,737	85,269	2,031	1,037,396	1,034,614
New York	-2	199	0	35,107	35,129
California	131	3,260	83	92,581	92,556
National funds	2,538	80,077	1,903	831,851	829,024
High Yield	199	18,979	378	154,521	154,085
Intermediate	677	16,254	408	241,658	241,041
Long Term	994	49,808	1,040	601,346	600,283
Tax-exempt money market	-307	-15,180	-97	90,911	91,114
Taxable money market	-3,711	194,605	-2,926	4,363,925	4,374,573
Taxable Fixed Income	13,976	412,967	9,033	6,899,559	6,868,988
Equity	-5,281	259,793	8,972	18,878,455	18,648,950

Cumulative fund flows, $bn

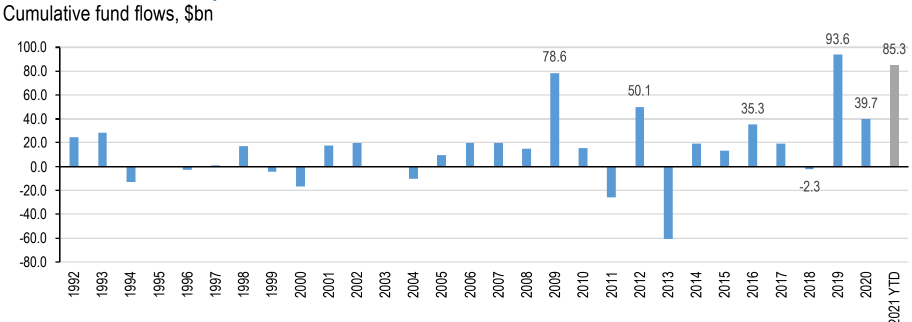


Source: Refinitiv Lipper US Flow, J.P. Morgan. Note: Combined weekly and Monthly flows

Municipal bond funds have seen inflows in 68 of the past 69 weeks, totaling a record $146.8bn. **After 36 weeks, the pace of combined weekly/monthly fund inflows remains the fastest on record, and the current YTD inflow of $85.3bn would be the 2nd highest among full-year calendar inflows, since the inception of the data in 1992.**

Exhibit 6: The current YTD inflow of $85.3bn would be the 2nd highest among full-year calendar inflows, since the inception of the data in 1992

Cumulative fund flows, $bn



Source: Refinitiv Lipper US Flow, J.P. Morgan. Note: Combined weekly and Monthly flows

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Muni mutual funds invest about 0.9% of AUM in ETFs

In our 8/27/2021 publication, we talked about rapid growth in muni ETFs and their top holdings. Since the publication investors have been asking about possible double counting of inflows, as some mutual funds invest in their fund complex's ETF's.

To quantify the extent of the practice, we analyzed the percentage of ETF holdings among the 5 largest municipal ETFs. As illustrated in Exhibit 7 the AUM of top 5 muni ETFs are about 68% of all muni ETFs. The second column shows the % of AUM held by all mutual funds or ETFs. These fixed-income mutual funds may simply buy muni ETFs to gain diversified and immediate exposure to the asset class. **The highlighted column indicates the proportion of AUM held by municipal funds. This is the portion that could be considered as double counting of inflows, as the capital would show up in both the mutual funds and the ETF.**

From a dollar value perspective, there is only ~$700mn or 0.9% of ETFs held by muni mutual funds. As such, in our view, this capital does not represent a significant vulnerability of these ETFs.

Exhibit 7: There are only ~$700mn or 0.9% of the ETF are held by other muni funds. As such, in our view, this capital does not represent a significant vulnerability of these ETFs

	Total Assets ($bn)	% held by Mutual Fund or ETF	% held by Muni only Mutual Fund or ETF	AUM held by Muni funds ($bn)
ETF 1	23.5	1.86%	1.75%	0.4
ETF 2	13.9	0.49%	0.00%	0.0
ETF 3	6.0	2.31%	2.30%	0.1
ETF 4	4.9	0.01%	0.00%	0.0
ETF 5	3.9	5.87%	3.69%	0.1
Total of All Muni ETF	76.7			0.7

Source: Refinitiv Lipper fund flow, Bloomberg Finance L.P., J.P. Morgan

Bidwanteds and trading data are highly correlated in the short end of the curve but increasingly disconnected further out on the curve

In the following, we analyze bidwanted and MSRB trade data by curve, to explore any potential relationship between the two. In our analysis we use trade and bidwanted data from 8/2/2021 to 9/9/2021. **As shown in Exhibit 8, in aggregate, BW and trading volume data for tax-exempt bonds appear to trend together for both upward and downward changes.**

When we parse the data into maturity buckets, we find that the correlation of bidwanteds to trade volume is stronger in shorter dated maturity buckets, and get progressively weaker as we move out on the curve. For example, since the beginning of August, the correlation between the change in tax-exempt bidwanted volume and trade volume, in 0-5yrs on the curve was 83%, versus just 42% in 20-30yrs on the curve (Exhibit 8).

This is likely explained by a greater number of small dollar value (avg par traded of $93k) retail trades performed via bidwanted in the shorter dated bonds.

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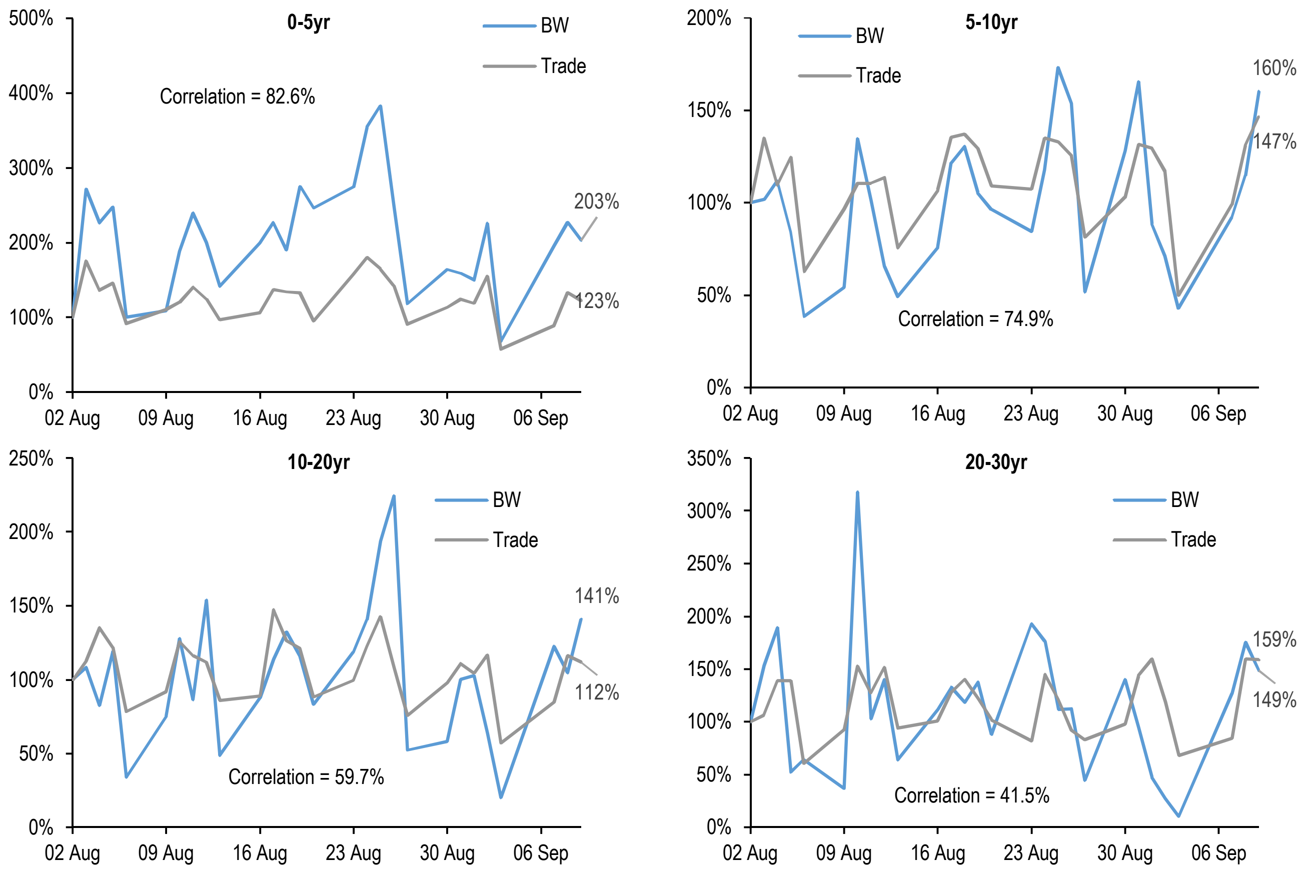
Transactions in longer dated bonds, are usually in larger block size and via voice trades as opposed to over bidwanted platforms.

We also note some selling pressure in 10-20yr part of the curve in the past days as the trend of bidwanteds continued move higher (141%), while the transaction volume declined (only 112%).

Exhibit 8: In shorter end of the curve BW and trades are better correlated than longer dated. We also note some selling pressure in 10-20yr part of the curve in the past days as the trend of bidwanteds continued move higher (141%), while the transaction volume declined (only 112%)

Ratio of secondary trading volume and bidwanted par value to benchmark of 8/2, %



Source: Bloomberg Finance L.P., MSRB, J.P. Morgan

YTD state tax receipts through July, for the 47 states who report the data, show an average increase of 18.6% compared to 2020 and 13.6% compared to 2019 (pre-pandemic)

Below we present our analysis of available state reported tax receipts thus far in 2021. **Across the U.S., 47 states report their tax receipts on a monthly basis, with only a few (Oregon, Wyoming, and Alaska) who do not provide regular updates. As of 9/9/2021, 38 states provide tax data through July, while 9 states reported their data through May or June.**

We view the improvement in YTD aggregate tax collections, as well as major tax sources, compared to both prior year and pre-pandemic levels as a positive sign for

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the economic recovery of U.S. states. However, as noted in the past, the conclusions drawn from the analysis, are based current data, and are not indicative of future revenue results, particularly given economic, pandemic, and legislative unknowns. While we do not anticipate the same large scale economic shutdowns we saw last year, with the rise of the delta variant and the potential for future variants and other challenges, the trajectory of state revenue collections may vary from its current path.

Based on all available tax data, YTD tax receipts are up an average of 18.6% across the 47 states, who report monthly revenue data

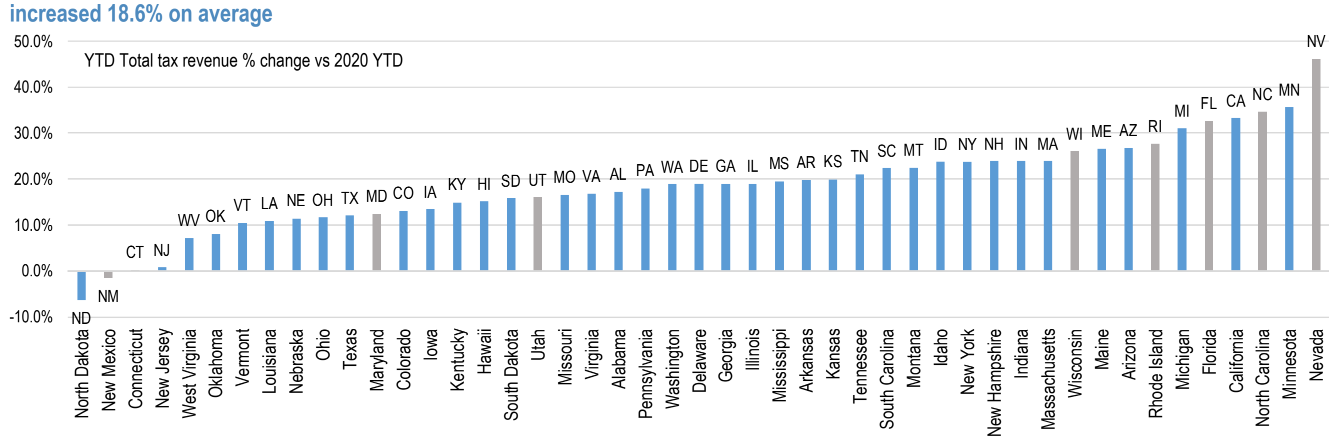
Across our sample size of 47 states, we find an aggregate average increase of 18.6%, with a relatively low variance between most states, but a significant range between the worst and strongest performances. The weighted average yoy increase for the same period was 22%. As compared to comparable months in the 2019 (pre-pandemic) period, the 47 states are up by 13.4% (17.4% weighted avg).

When we normalize and exclude states which have not yet reported July data, we find that 38 states reported an average increase of 17.9%. As compared to comparable months in the 2019 (pre-pandemic) period, these 38 states are up by 16.4%. While the majority of states see a calendar YTD tax revenue increase versus 2020, just two states saw YoY declines (North Dakota -6.2%, New Mexico -1.4%) (Exhibit 9).

Focusing on some individual states, Nevada has seen the greatest increase yoy (+46.1%) in YTD 2021 (versus YTD 2020) (Exhibit 10). We note that the data for Nevada is through May 2021, as more current revenues are not available. The year over year comparison for the state, which relies heavily on tourism, was likely boosted by the 2020 COVID-19 related slowdown. The current period of spiking cases may hurt the state's collections in the coming months. We also note that the rise in Nevada's YTD collections is partially driven by temporary changes to distribution methods for certain tax proceeds.

Nevada's Jan-May 2021 period returns look robust even as compare to the pre-pandemic Jan-May 2019 period, showing a 16.3% increase in revenue.

Exhibit 9: YTD total tax receipts % change vs 2020 YTD Across our sample size of 47 states, we find that on average, YTD tax revenue increased 18.6% on average



Source: Individual state monthly tax reports, J.P. Morgan. Note: Oregon, Wyoming, and Alaska do not provide monthly tax data. Bars in gray indicate July data is not yet available

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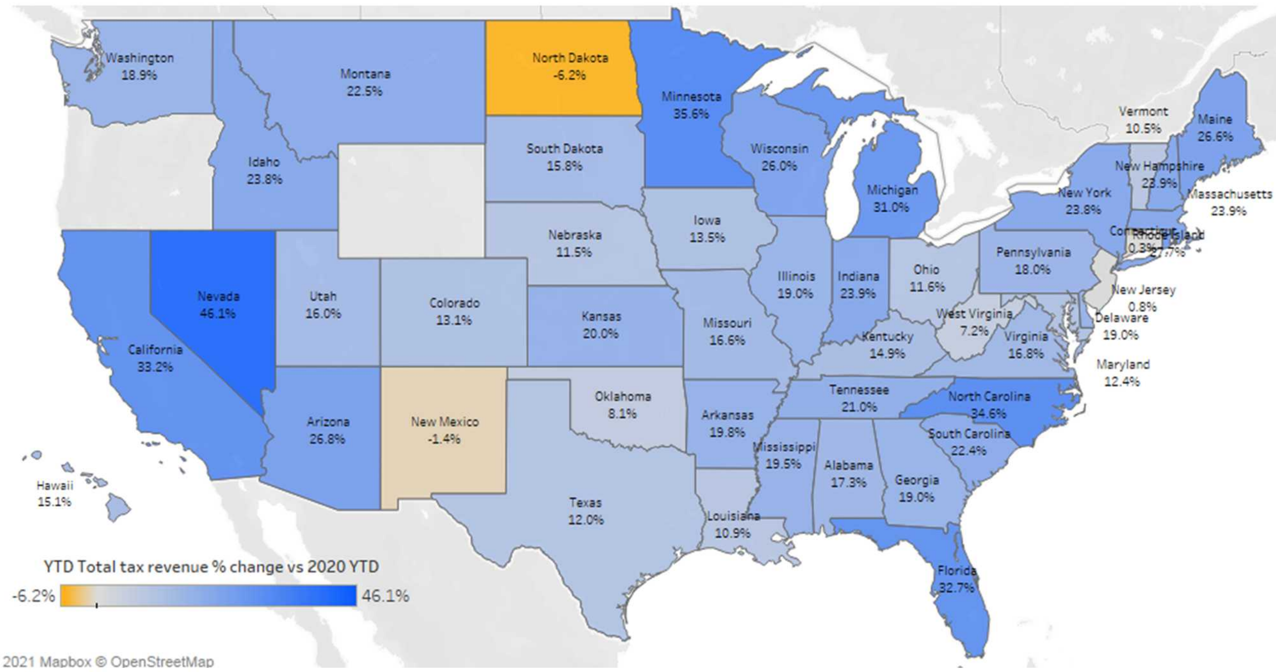
Exhibit 10: The State of Nevada has seen the greatest increase yoy (+46.1%) in YTD 2021 versus YTD 2020

YTD total tax receipts % change vs 2020 YTD



Source: Individual state monthly tax reports, J.P. Morgan. Note: Oregon, Wyoming, and Alaska do not provide monthly tax data. Asterisk (*) denotes states where July data is not yet available

Further, analyzing the dataset by month, we see that 2021 tax revenue data (in aggregate across 47 states) has outperformed 2020 in every month except July (Exhibit 11). **The relative drop in July 2021 and spike in April, are somewhat misleading as the spike reflects a shifting of the personal income tax deadline in 2020, from April to July.** Additionally, July 2020 tax receipts reflect the bounce in activity associated with the early months of the reopening.

The consistent rebound in the early years of 2021was a reflection of improved infection rates and widespread vaccinations which led to a more consistent economic rebound in early 2021. April 2021 tax receipts leapt 57%, despite the extension of the filing deadline to May, leading to an 88% increase in May, and 60% in June. Naturally, the relative increase in April was offset by the 49% decrease in July tax receipts.

Exhibit 11 also includes a monthly comparison to 2019 tax collections, illustrating the performance of 2021 monthly collections versus pre-pandemic levels. Thus far in 2021, total tax collections have generally outperformed or been in line with 2019 levels, with the exception of April. This is likely the result of the extension of the federal tax filing deadline from April to May in 2021, evidenced by the spike in collections in May and June.

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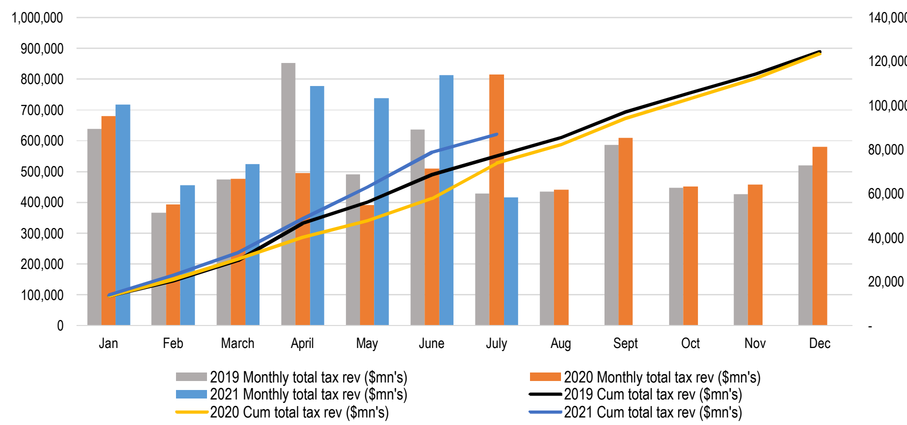
Exhibit 11: On a monthly basis, 2021 tax revenue data (in aggregate across 47 states) has outperformed 2020 in every month except July
Cumulative total tax revenue, $mn's (left axis)
Monthly tax revenue, $mn's (right axis)



Source: Individual state monthly tax reports, J.P. Morgan. Note: Oregon, Wyoming, and Alaska do not provide monthly tax data

The improving tax collection picture corroborates reports from recent months which highlight recovery milestones after early pandemic losses. **A report by Pew Trusts in May found that 29 states had taken in as much or more revenue in the 12 months since the pandemic began as they did in the 12 months before the pandemic, as of February 2021, according to preliminary monthly data from the Urban Institute.**

With early August data from a handful of states, we have also seen the trend of recovering tax collections continue. **Illinois, for example, saw monthly collections rise 17% in August from a year prior, and 16% from August of 2019. Texas experienced an even steeper increase of 30% from August 2020, and 10% versus August of 2019.**

When we look at YTD total tax revenue % change from pre-pandemic levels and the change in 10yr spreads over the same period, we find that, generally, states which saw greater improvement in tax collections also saw more compression in spreads (Exhibit 12).

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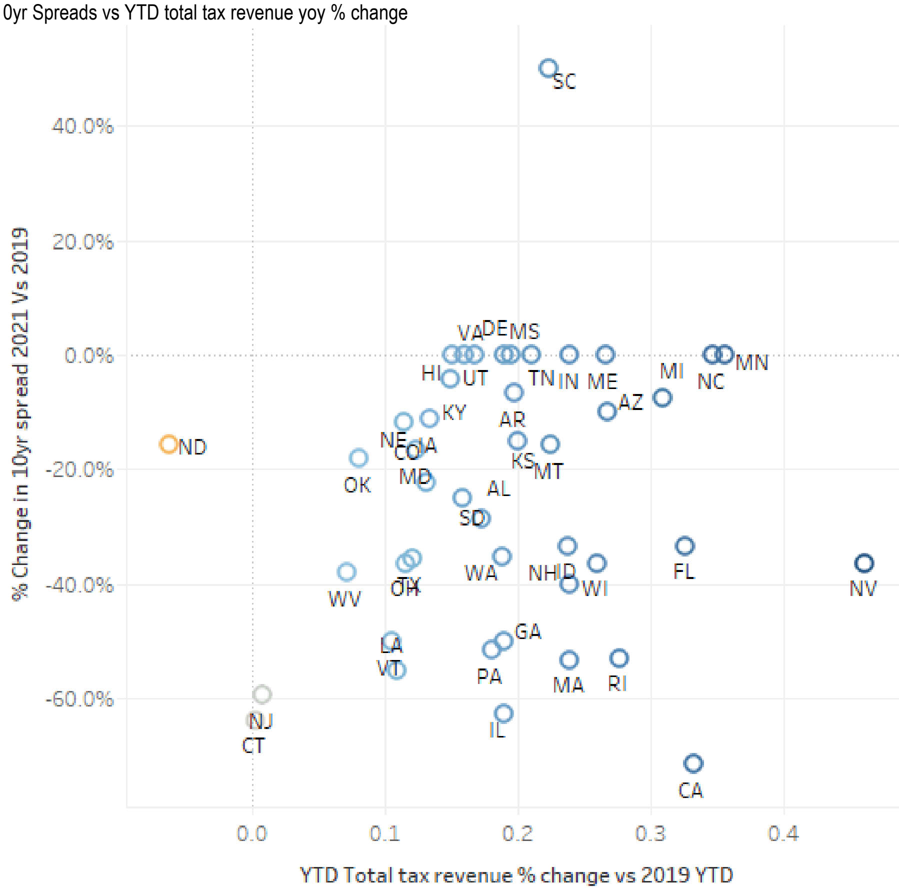
Exhibit 12: Generally, states which saw greater improvement in tax collections YTD in 2021 compared to the pre-pandemic period, also saw more compression in spreads

10yr Spreads vs YTD total tax revenue yoy % change



Source: Refinitiv TM3, Individual state monthly tax reports, J.P. Morgan. Note: % change in spreads calculated from 9/9/2019 to 9/7/2021. New York, New Mexico, and Missouri excluded from the dataset as outliers.

Income tax collections show similar trend, with PIT collections up an average of 20.6% in YTD 2021 versus same period 2020

We further evaluate 40 states which report personal income tax collections on a monthly basis. YTD PIT collections increased an average of 20.6% over the prior year, and 15.8% over the similar period in 2019. As with total tax collections, the majority of states saw growth in PIT collections in 2021, as just three states have reported revenue declines (New Jersey, New Mexico, and North Dakota). When compared to 2019, six states showed a decline in revenues (New Jersey, Maryland, Connecticut, New Mexico, West Virginia, and North Dakota). New Jersey, New Mexico, and North Dakota saw declines over both periods, which could indicate more persistent factors are impacting state PIT revenues.

Normalizing the data to look at the 33 states that have reported July PIT receipts, average 2021 YTD revenue growth versus the same period in 2020, was slightly lower at 18.0%. When compared to 2019, the increase in revenues was 17.1%.

In 2020, we saw spiking unemployment rates at the start of the pandemic with elevated rates lingering for months, dampening monthly withholding and PIT

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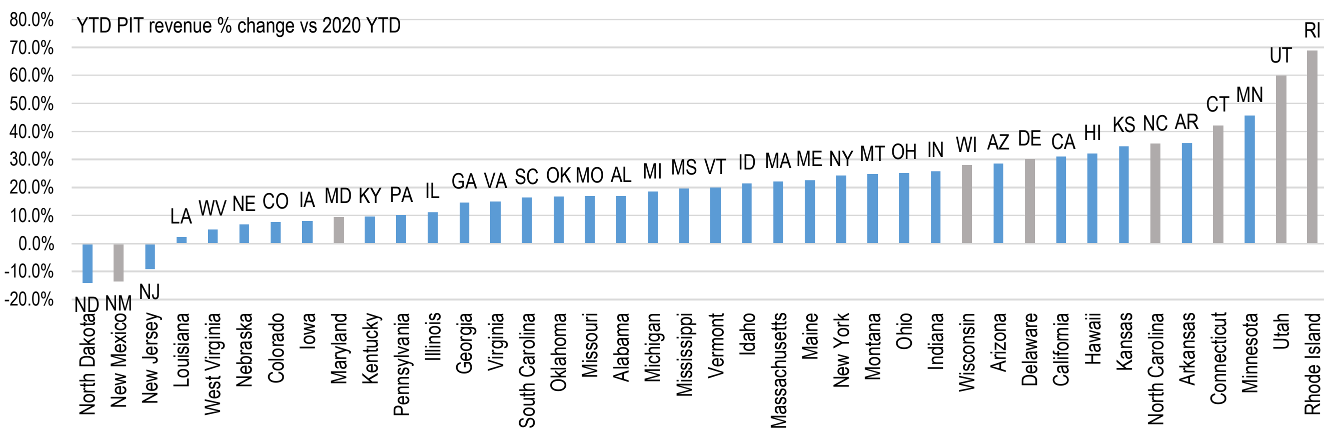
revenue. **While unemployment remains above pre-pandemic levels in the U.S. overall, rates have improved significantly (5.2% as of July 2021), boosting PIT collections.**

Of the six states with the greatest revenue growth (Rhode Island +68.7%, Utah +59.8%, Minnesota +45.5%, Connecticut +42.0%, Arkansas +35.8%, North Carolina +35.5%), four have not reported July 2021 figures (RI, UT, CT, NC) (Exhibit 13). We note that it is likely that yoy increases will moderate somewhat for these states, given the July 2020 PIT surge which is not captured in the figures for these states. Again, due to extension of the federal tax filing deadline was to July in 2021, with most states following suit, which resulted in delayed of PIT collections.

Versus the pre-pandemic period in 2019, Idaho (+38.8%), Arkansas (+35.3%), Delaware (+32.8%), Maine (+30.7%), and Rhode Island (+30.4%) saw the greatest increases in PIT revenues.

Exhibit 13: YTD PIT collections increased an average of 20.6% over the prior year
YTD income tax receipts % change vs 2020 YTD



YTD income tax receipts % change vs 2020 YTD

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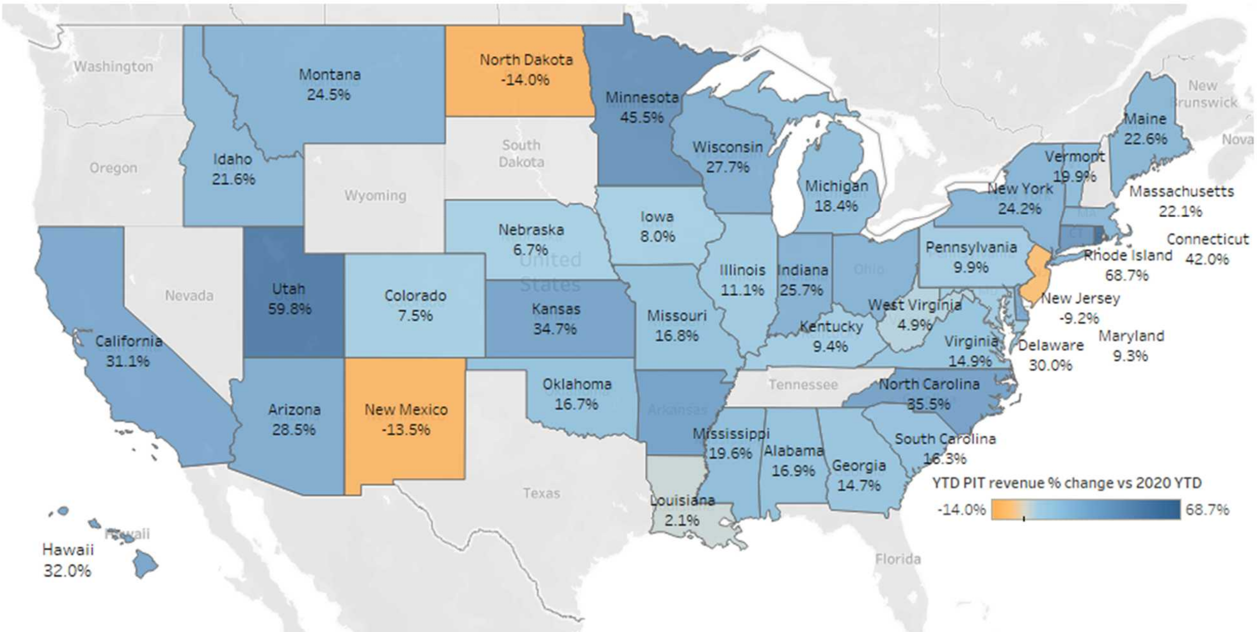

Source: Individual state monthly tax reports, J.P. Morgan. Note: Oregon, Wyoming, and Alaska do not provide monthly tax data. Texas, Florida, Washington, Tennessee, Nevada, New Hampshire, and South Dakota do not report monthly PIT revenues. Bars in gray indicate July data is not yet available

Aggregate state income tax receipts as a proportion of total state income increased slightly to 49.5% for YTD 2021, an increase of 0.7 percentage-points vs 2020. **This outcome results from some larger weighted states seeing stronger growth in income tax collections, such as California (28.4% weight, +31.1% YoY PIT), New York (14.2% weight, +24.2% YoY PIT), and Massachusetts (4.3% weight, +22.1% YoY PIT) (Exhibit 14). Using a weighted average, PIT collections increased 23.4% in YTD 2021 compared to 2020 (vs 20.6% simple avg).** Given that income tax makes up a significant portion of total tax revenues for many states, this signals stabilization in tax revenue, particularly as the labor market has seen a relatively steady recovery trajectory thus far in 2021.

Versus the pre-pandemic period, the proportion of total tax collections from PIT revenues increased by 1.4 percentage-points in 2021. **Using a weighted average, PIT collections increased 20.0% in YTD 2021 compared to the 2019 period (vs 15.8% simple avg).**

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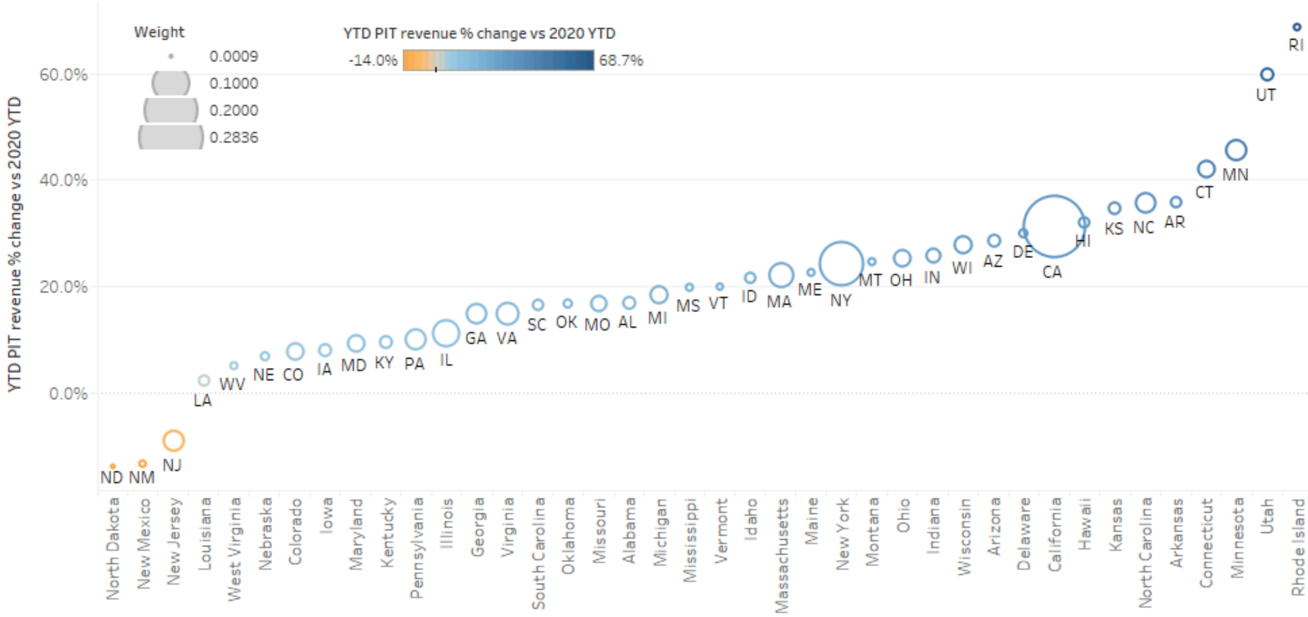
Exhibit 14: Certain larger weighted states saw stronger growth in income tax collections (CA, NY, MA, etc.). Using a weighted average, PIT collections increased 23.4% in YTD 2021 compared to 2020 (vs 20.6% simple avg)

YTD 2021 personal income tax receipts % change vs YTD 2020



Source: Individual state monthly tax reports, J.P. Morgan. Note: Size of circles based on proportionate contribution of states' PIT revenue to total 40 state aggregate PIT revenue

Sales tax collections show improvement as well, albeit somewhat less accelerated than aggregate collections and PIT collections

For sales tax collections, average YTD revenue collections are higher by 15.7% for YTD 2021 vs 2020, and 12.7% vs the same period in 2019. **Here, we witness an even wider variance between states from 2020 to 2021, with states such as Kansas and Mississippi reporting YTD yoy declines of 16.1% and 15.5%, respectively, while the top gaining states of Delaware and Michigan report YTD yoy gains of 52.4% and 36.9%, respectively (Exhibit 15).**

Normalizing the data, for the 38 states that have reported July sales tax receipts, average 2021 YTD revenue growth versus the same period in 2020 was 17.1%. When compared to 2019, the increase in revenues was 13.9%.

Certain tourism-dependent states (Nevada +28.4%, Florida +23.7%) saw significant improvement in sales tax revenue in 2021, as widespread vaccination and relaxed restrictions in the spring of 2021, combined with pent up consumer demand, supported economic recovery in these areas.

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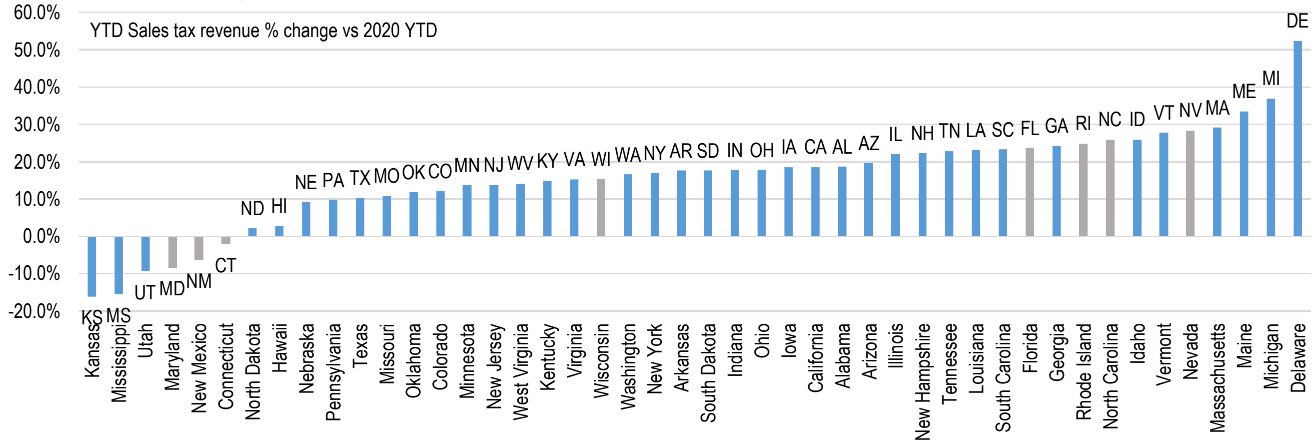
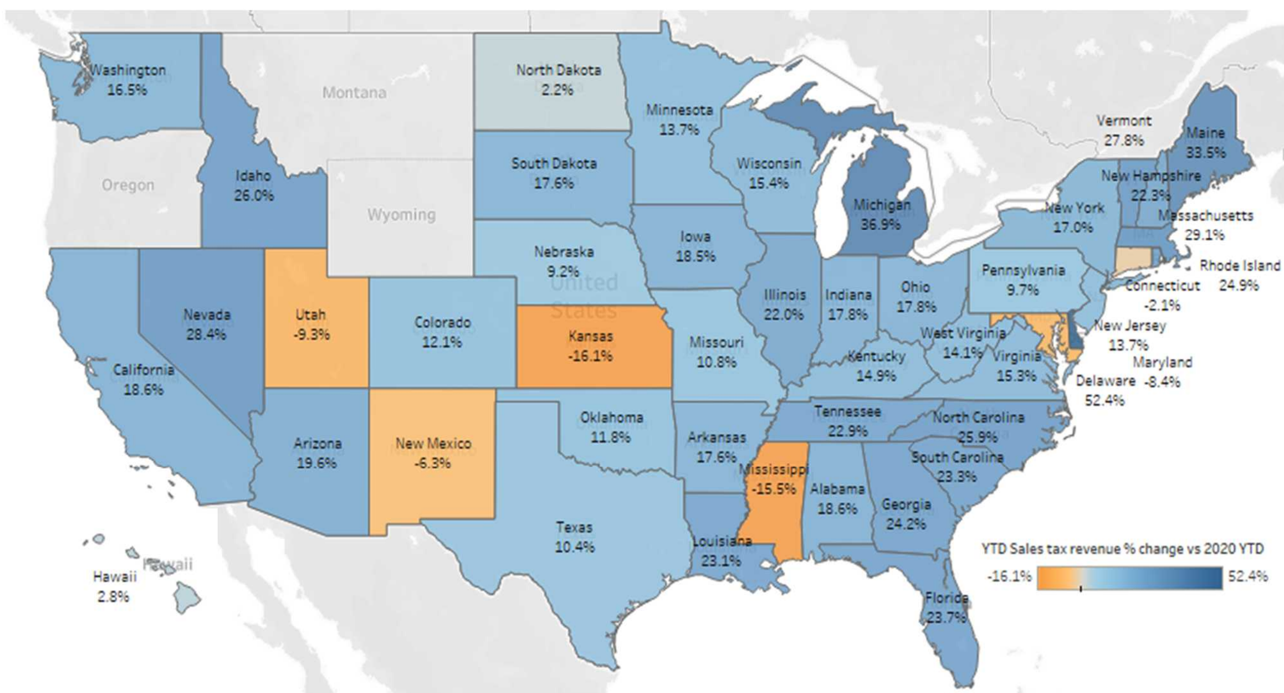
Exhibit 15: For sales tax collections, average YTD revenue collections are higher by 15.7% for YTD 2021 vs 2020

YTD sales tax receipts % change vs 2020 YTD



YTD sales tax receipts % change vs 2020 YTD



Source: Individual state monthly tax reports, J.P. Morgan. Note: Bars in gray indicate July data is not yet available

Using a weighted average, sales tax collections increased 14.3% in YTD 2021 compared to 2020, as compared to 15.7% when using a simple average. In contrast to the trend in PIT taxes, a number of more heavily weighted states saw more moderate growth in sales tax collections YTD in 2021 vs 2020, resulting in weaker average growth overall, such as Pennsylvania (weight 2.9%, +9.7% yoy change), Texas (weight 6.8%, +10.4% yoy change), and New Jersey (weight 10.8%, +13.7% yoy change) (Exhibit 16). **Versus the pre-pandemic period, sales tax collections increased 10.9% for YTD 2021 compared to the 2019 period using a weighted average, versus the 12.7% simple average.**

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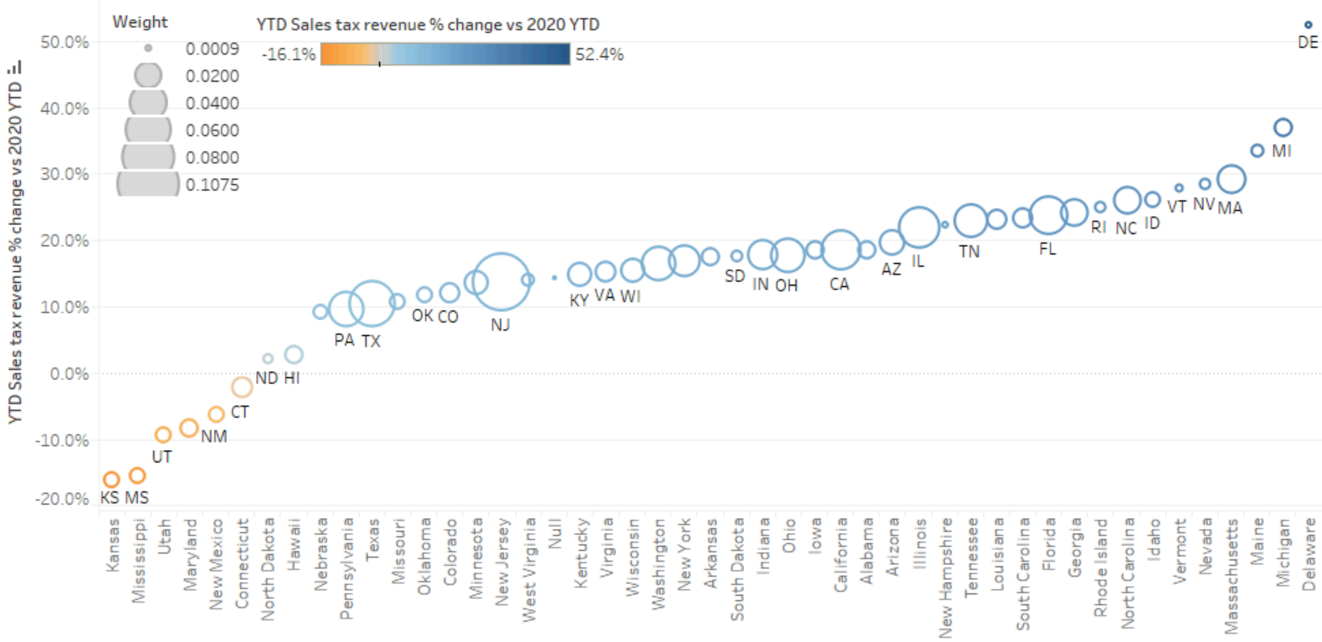
Exhibit 16: Using a weighted average, sales tax collections increased 14.3% in YTD 2021 compared to 2020, as compared to 15.7% when using a simple average

YTD sales tax receipts % change vs 2020 YTD



Source: Individual state monthly tax reports, J.P. Morgan

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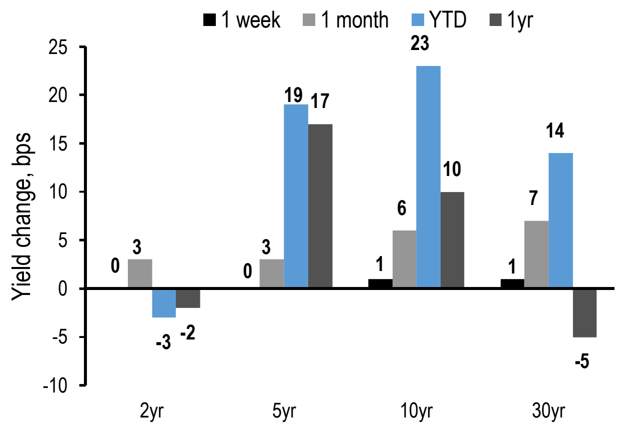
Markets at a glance

YTD, yields across the HG curve have decreased by 3bps in the 2yr spot and increased by 19-23-14bps in 5-10-30yr spots



Source: Refinitiv, J.P. Morgan

We expect 10yr municipal high-grade yields to reach 1.35% by 4Q21

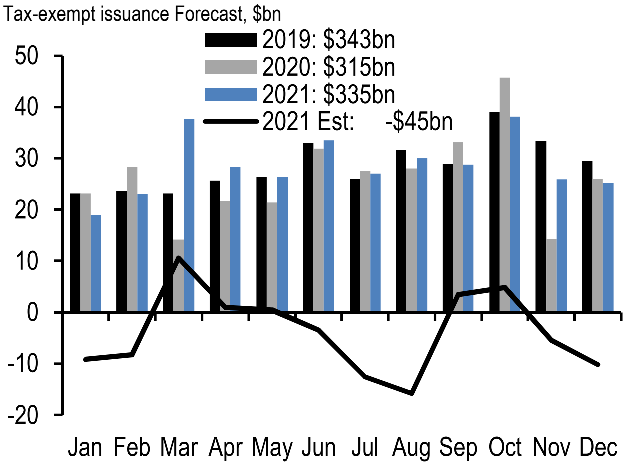
Yields, %

Treasury	9/10/2021	1mo ahead	4Q21 Forecast	1Q22 Forecast	2Q22 Forecast	3Q22 Forecast
2yr	0.22	0.25	0.30	0.40	0.45	0.50
5yr	0.81	0.90	1.05	1.10	1.35	1.45
10yr	1.34	1.45	1.75	1.85	2.00	2.10
30yr	1.93	2.10	2.40	2.50	2.65	2.70
AAA Tax-exempt						
2yr	0.11	0.15	0.15	0.25	0.30	0.35
5yr	0.41	0.45	0.55	0.75	0.95	1.00
10yr	0.94	1.10	1.35	1.45	1.60	1.65
30yr	1.53	1.70	1.85	2.00	2.15	2.20
AAA / TSY Ratios						
2yr	51%	60%	50%	63%	67%	70%
5yr	50%	50%	52%	68%	70%	69%
10yr	70%	76%	77%	78%	80%	79%
30yr	79%	81%	77%	80%	81%	81%

Source: Bloomberg Finance L.P., Refinitiv, J.P. Morgan

We project 2021 tax-exempt gross supply of $335bn with net supply of -$45bn

Tax-exempt issuance Forecast, $bn



Source: Bloomberg Finance L.P., Refinitiv, J.P. Morgan

Benchmark municipals look fair value vs Corporates

AAA tax-exempt yield / Treasury yield (%)	Last	Min	Max	Mean	St. Dev.	Z-score 3yr	Z-score 5yr
2yr	51.1	24.9	77.3	47.9	12.5	-0.5	-0.6
5yr	52.2	45.4	59.4	52.0	3.4	-0.6	-0.7
10yr	72.3	56.8	72.3	66.8	3.4	-0.5	-0.6
30yr	80.6	63.5	80.6	73.3	4.7	-0.7	-0.9

AA corporate yield - AA tax-exempt yield (bp)	Last	Min	Max	Mean	St. Dev.	Z-score 3yr	Z-score 5yr
3-5yr	65	52	74	63	5	-0.4	-0.6
5-7yr	71	66	86	75	4	-0.5	-0.7
7-10yr	80	75	101	85	5	-0.5	-0.6
25yr	106	106	145	122	10	0.2	0.5

values over last 3 months displayed, as of , Z-Score +/- 1.5 Rich / Cheap

yy indicates rich   yy indicates cheap

Source: TRACE, Refinitiv, J.P. Morgan

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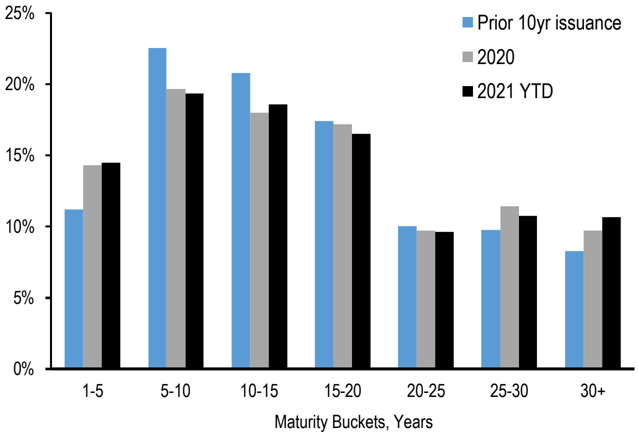
YTD Issuance and Trading Trends

30yr+ maturities are about 11% of YTD issuance

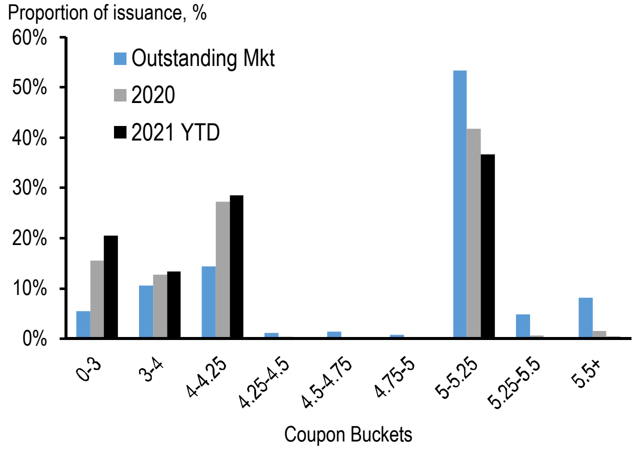
Proportion of issuance, %



Note: Long term, fixed coupon, tax-exempt bonds only
Source: ICE, J.P. Morgan

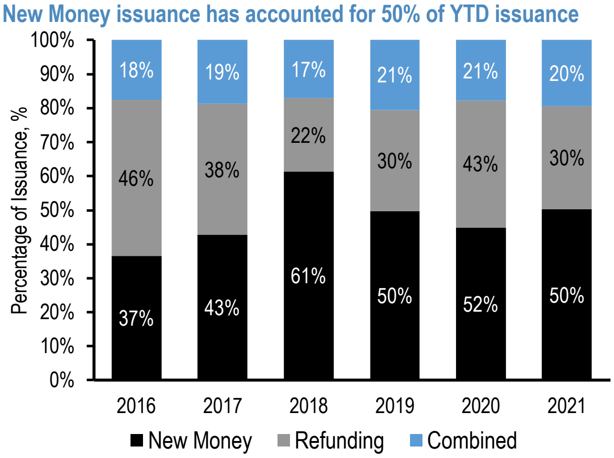
42% of YTD issuance has been in 3-4.25% coupon bonds

Proportion of issuance, %



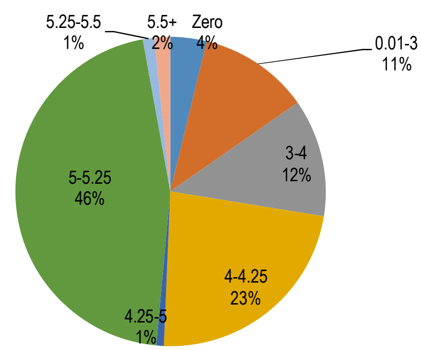
Note: Long term, fixed coupon, tax-exempt bonds only
Source: ICE, J.P. Morgan

New Money issuance has accounted for 50% of YTD issuance



Note: Long term bonds only
Source: Bloomberg Finance L.P., J.P. Morgan

3% to 4% coupon bonds have accounted for 12% of YTD trading volume



Note: Long term, fixed coupon, tax-exempt bonds only
Source: MSRB, ICE, J.P. Morgan.

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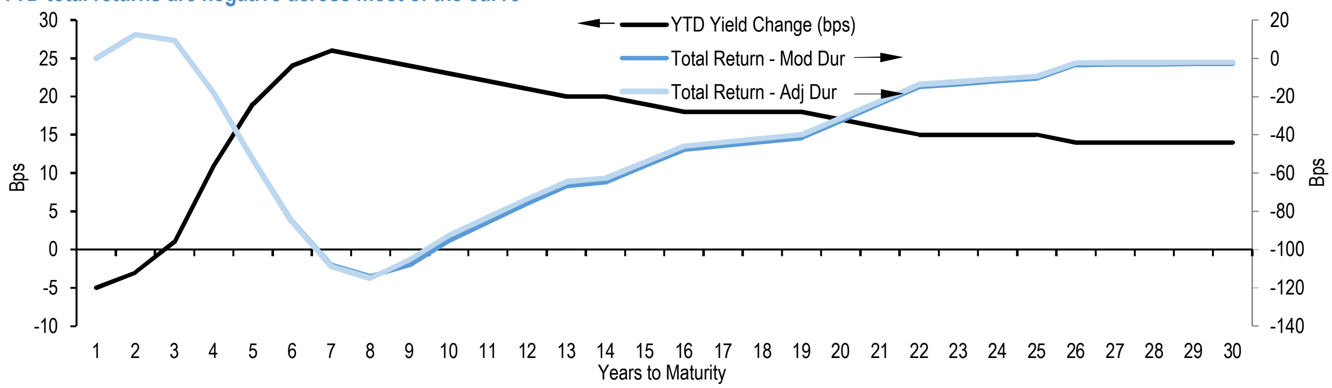
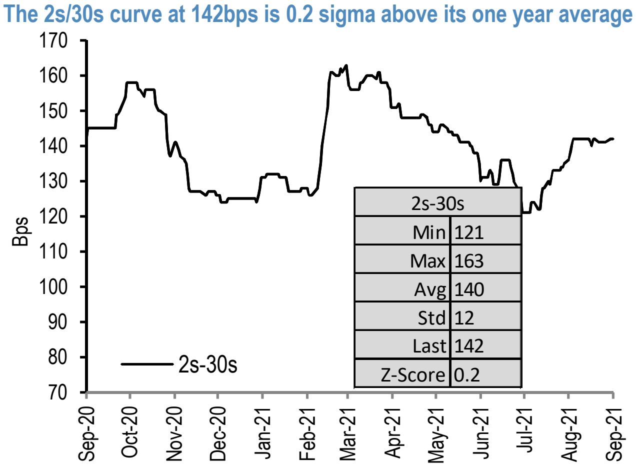
YTD Total return and Curve Spreads

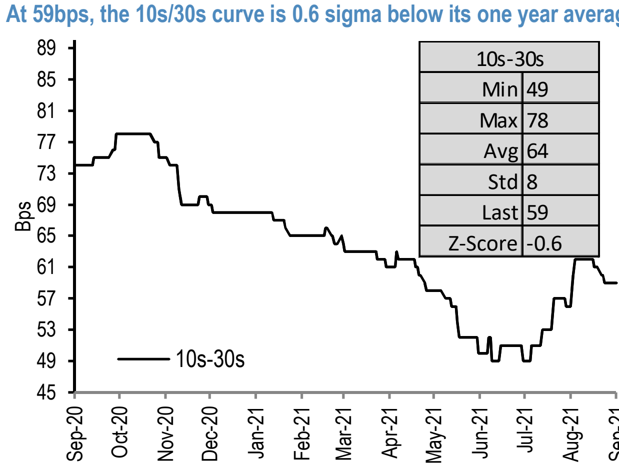
YTD total returns are negative across most of the curve



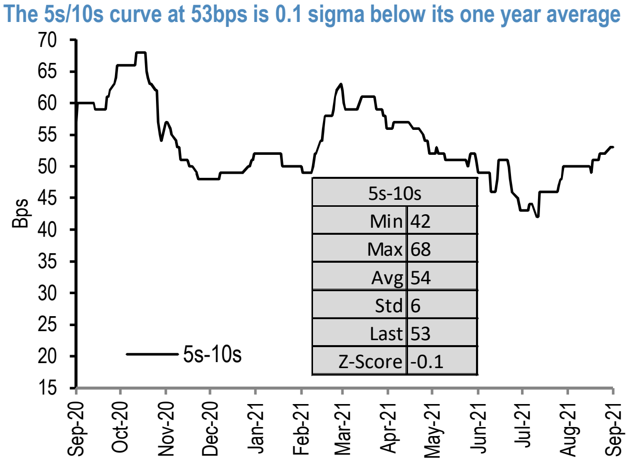
The 2s/30s curve at 142bps is 0.2 sigma above its one year average



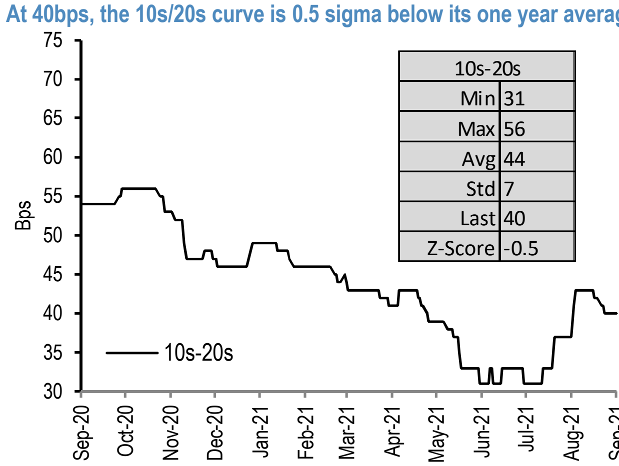
At 59bps, the 10s/30s curve is 0.6 sigma below its one year average



The 5s/10s curve at 53bps is 0.1 sigma below its one year average



At 40bps, the 10s/20s curve is 0.5 sigma below its one year average



Source: Thomson Reuters, Bloomberg Finance L.P., J.P. Morgan. Note: As of 9/10/2021

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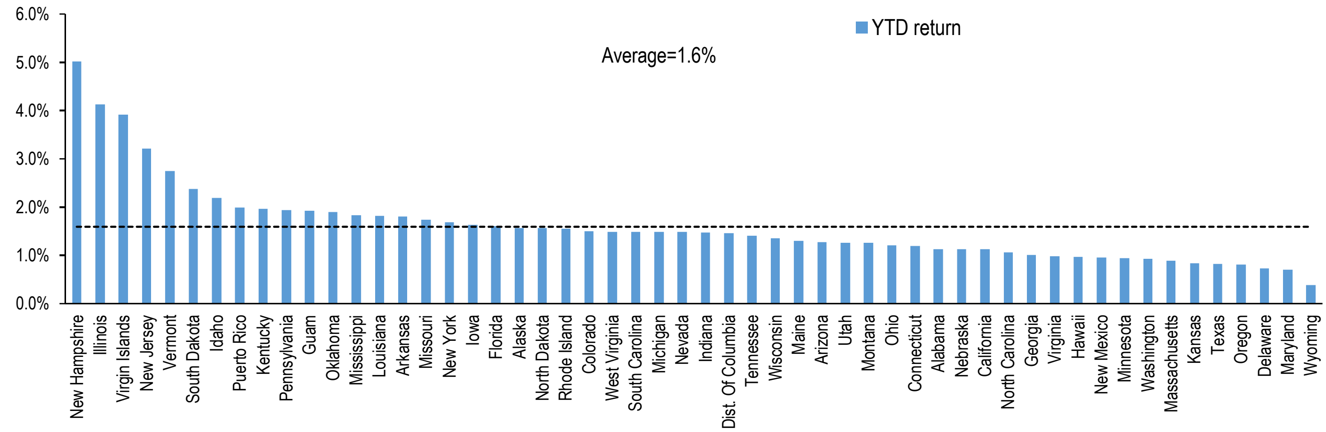
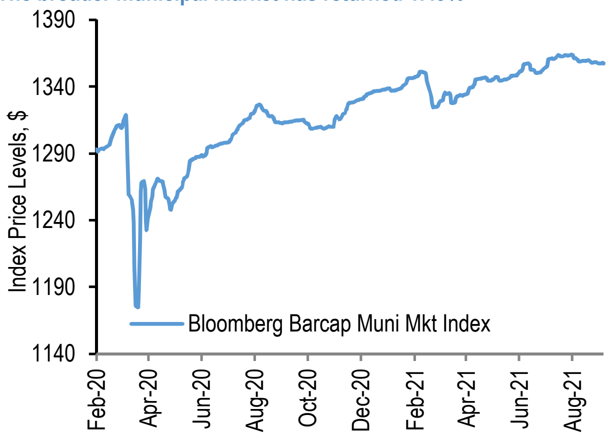
Total return by State and Sector

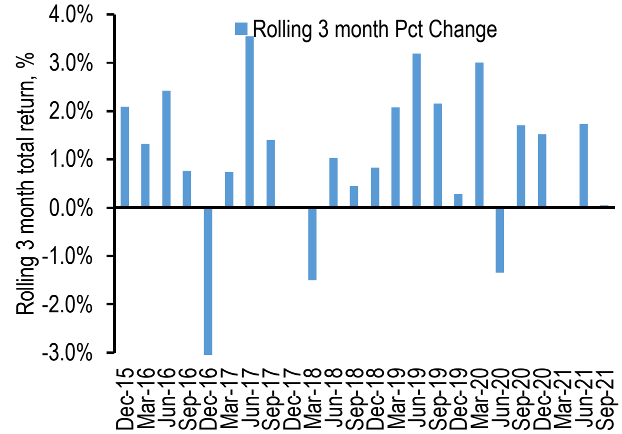
The average YTD total return for Bloomberg municipal bond indices by state is 1.6%



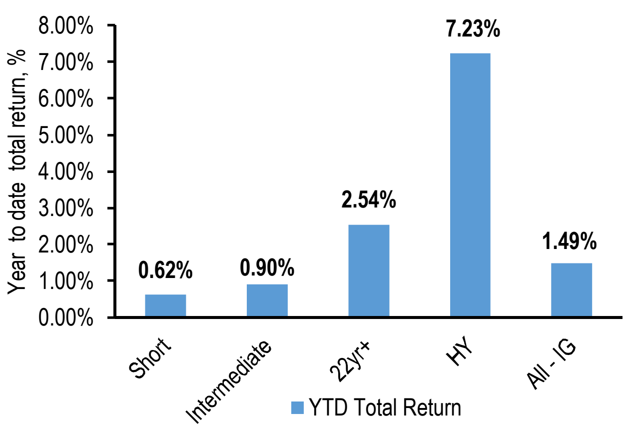
The broader municipal market has returned 1.49%



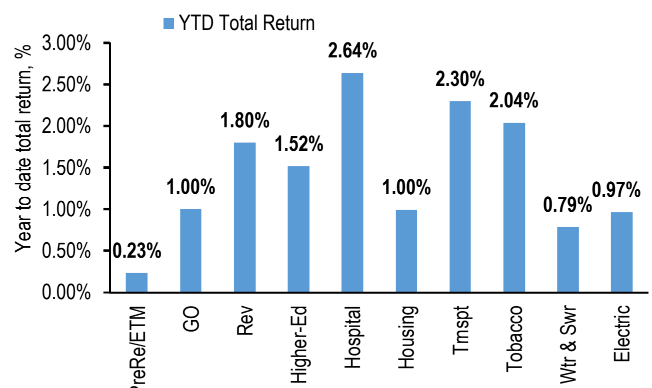
The Bloomberg Muni index has increased 0.05% in the three months between 6/10/2021 and 9/10/2021



The HY index has the highest YTD returns, of 7.23%



The Hospital sector exhibits the best YTD return of 2.64%



Source: Bloomberg Finance L.P., J.P. Morgan, as of 9/10/2021. Note: Total return calculated as the percentage change in index levels. Bloomberg Municipal bond total return indices used

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Glossary of Publication Topics

Sector Overviews

- Airports: 03/11/2016, 05/20/2016, 11/18/2016, 12/08/2017, 04/13/2018, 04/20/2018, 09/06/2019, 05/15/2020, 06/11/2021
- Bond Insurance: 03/18/2016, 6/23/2017, 10/27/2017
- Double-Barreled Bonds: 05/13/2016, 6/24/2016
- Energy: 01/22/2016, 01/29/2016, 02/05/2016, 02/19/2016, 04/23/2021
- Environmental, Social, Governance (ESG)/Green Bonds: 04/10/2015, 06/01/2018
- Housing: 04/17/2015, 1/20/2017, 10/20/2017, 07/26/2019, 08/02/2019
- Healthcare: 04/29/2016, 1/27/2017, 3/03/2017, 1/19/2018, 1/28/2019, 2/1/2019, 01/24/2020, 10/16/2020, 01/22/2021
- Higher-Education: 12/18/2015, 01/08/2016, 3/03/2017, 5/19/2017, 9/14/2018, 07/24/2020,
- High/Enhanced Yield: 9/8/2017, 9/15/2017, 7/27/2018, 8/03/2018, 05/08/2020, 05/15/2020, 06/05/2020, 06/12/2020, 08/28/2020
- Local Government Credit: 11/23/2016, 4/07/2017, 11/10/2017, 06/18/2021
- Low beta/defensive: 08/25/2017
- Pensions: 10/14/2016, 11/23/2016, 10/20/2017, 10/27/2017, 11/03/2017, 10/12/2018, 10/19/2018, 10/26/2018, 04/05/2019, 04/17/2019, 08/16/2019, 08/23/2019, 10/18/2019
- Pre-paid Gas: 3/10/2017, 06/07/2019
- Pre-refunded bonds: 1/29/2018
- Primary and secondary (K-12) education: 11/02/2018
- Public Power/Electric: 05/06/2016, 6/02/2017, 2/09/2018, 02/19/2021
- U.S. Ports: 04/15/2016, 05/20/2016, 11/18/2016, 04/06/2018
- Secured Credits: 08/07/2015, 09/18/2015, 09/25/2015,
- Special Tax Bonds: 05/01/2015, 07/31/2015, 09/25/2015, 01/29/2016, 5/5/2017, 09/29/2017, 5/18/2018, 04/26/2019, 05/03/2019, 01/31/2020
- States: 06/26/2015, 02/26/2016, 6/24/2016, 8/5/2016, 11/23/2016, 11/03/2017
- SIFMA/Floating Rate notes: 03/15/2016, 08/26/2016, 3/31/2017, 4/28/2017, 04/13/2018, 9/14/2018, 02/20/2019, 04/26/2019
- Taxable bonds: 02/23/2018, 5/11/2018, 12/14/2018, 03/29/2019, 05/31/2019, 09/27/2019, 04/03/2020, 07/10/2020, 07/24/2020, 08/14/2020, 08/21/2020, 10/16/2020, 10/23/2020
- Toll Roads: 02/20/2015, 9/16/2016, 5/12/2017, 09/15/2017, 07/10/2020
- Tobacco: 11/20/2015, 12/15/2017, 7/27/2018, 03/29/2019, 05/07/2021
- Water & Sewer: 05/06/2016, 6/24/2016, 02/02/2018

Specific Credits

- Assured Guaranty: 03/18/2016, 6/23/2017, 10/27/2017
- National Public Finance Guarantee Corporation: 6/23/2017, 10/27/2017
- Chicago & related credits: 09/25/2015, 10/30/2015, 9/23/2016, 2/10/2017, 04/13/2018, 10/25/2019, 02/07/2020, 06/12/2020, 10/23/2020, 02/19/2021
- Detroit: 05/14/2021
- Dallas/Fort Worth & related credits: 02/19/2016, 12/16/2016, 3/10/2017, 6/02/2017, 08/04/2017, 04/13/2018
- Houston & related credits: 02/19/2016, 6/02/2017, 08/04/2017, 09/01/2017
- New York City & related credits: 03/31/2015, 6/17/2016, 9/9/2016, 8/17/2018, 08/23/2019, 06/12/2020, 05/21/2021
- Puerto Rico: 07/08/2016, 07/29/2016, 8/19/2016, 1/27/2017, 3/17/2017, 5/5/2017, 5/12/2017, 6/02/2017, 09/22/2017, 5/04/2018, 9/7/2018, 02/22/2019, 04/26/2019, 05/10/2019, 05/17/2019, 02/21/2020, 03/05/2021, 04/30/2021
- Philadelphia & related credits: 12/12/2014, 07/20/2015
- Santee Cooper / MEAG / Westinghouse Bankruptcy: 3/17/2017, 3/24/2017, 3/31/2017, 9/21/2018, 9/28/2018
- Seattle: 9/23/2016
- State of Arizona: 05/15/2015, 11/18/2016
- State of Alaska: 07/28/2017, 06/15/2018
- State of California & locals: 04/24/2015, 04/08/2016, 8/19/2016, 9/30/2016, 11/4/2016, 03/02/2018, 03/09/2018, 06/08/2018, 02/05/2021
- State of Connecticut & locals: 08/18/2017, 5/18/2018, 10/04/2019, 05/01/2020
- State of Florida & locals: 03/06/2015, 09/25/2015
- State of Illinois & related credits: 6/09/2017, 6/16/2017, 7/07/2017, 9/29/2017, 7/13/2018, 1/11/2019, 03/01/2019, 05/31/2019, 07/26/2019, 02/28/2020, 05/01/2020, 02/19/2021
- State of New York: 5/16/2014, 09/29/2017, 2/8/2019
- State of New Jersey & locals: 6/17/2016, 8/05/2016, 3/24/2017, 3/31/2017, 4/27/2018, 5/04/2018, 03/15/2019, 05/01/2020, 05/21/2021, 06/04/2021
- State of Pennsylvania: 7/15/2016
- State of Texas & locals: 10/2/2015, 02/05/2016, 07/28/2017, 08/04/2017, 08/16/2019, 03/12/2021, 03/19/2021
- State of Wisconsin & locals: 03/15/2015, 9/30/2016
- U.S. Virgin Islands & Guam: 07/15/2016, 07/29/2016, 2/24/2017

Defaults/Distressed Munis

- Chapter 9/Distressed locals: 10/31/2014, 11/21/2014, 06/30/2015, 07/08/2016, 04/26/2019, 01/31/2020, 02/07/2020
- Defaults: 04/15/201606/17/2016, 07/08/2016, 08/26/2016, 04/23/2020, 07/24/2020
- GO Security/Statutory Lien: 10/2/2015, 11/4/2016

Tax Policy

- AMT: 05/20/2016, 11/18/2016, 03/16/2018, 5/18/2018, 10/19/2018, 06/14/2019
- Deminimis: 5/31/2013, 1/3/2014, 12/9/2016, 03/02/2018, 06/14/2019
- State and local tax (SALT) deduction cap: 1/26/2018, 7/6/2018, 4/16/2021
- Tax-exemption: 3/1/2013, 3/15/2013, 05/20/2016
- Tax swapping: 1/24/2014, 10/28/2016, 2/09/2018, 10/12/2018, 11/15/2019
- Tax reform: 2/28/2014, 12/16/2016, 4/28/2017, 5/05/2017, 6/16/2017, 09/29/2017, 10/272017, 11/03/2017, 11/10/2017, 1/26/2018

Other Federal Public Policy

- COVID-19: 03/06/2020, 03/13/2020, 03/20/2020, 03/27/2020, 04/03/2020, 04/17/2020, 06/26/2020, 07/31/2020, 01/08/2021, 02/26/2021,
- CARES Act: 04/03/2020
- American Rescue Plan: 03/26/2021, 04/09/2021, 05/21/2021
- Infrastructure spending: 04/09/2021, 05/14/2021
- Fed facilities/Municipal Liquidity Facility: 8/11/2020
- Regulatory reform/High-Quality Liquid Assets: 04/01/2016, 07/14/2017, 03/09/2018, 8/24/2018
- Health-care reform/Medicaid funding: 3/10/2017, 3/17/2017, 3/24/2017, 6/23/2017, 07/28/2017, 11/22/2017
- Trade war and tariffs: 04/06/2018, 06/07/2019

Periodic Updates

- Coupon performance: 5/9/2014, 10/17/2015, 04/08/2016, 9/21/2018, 03/15/2019, 06/14/2019, 06/28/2019, 10/18/2019
- Default rates: 10/17/2015, 11/20/2015, 06/24/2016, 8/24/2018
- Federal Reserve Flow of Funds: 12/07/2018, 03/08/2019, 06/14/2019, 09/27/2019, 01/10/2020, 03/27/2020, 06/26/2020, 09/25/2020, 12/11/2020, 06/18/2021
- State and Local revenues: 6/16/2017, 9/29/2017, 01/05/2018, 04/13/2018, 9/21/2018, 1/11/2019, 05/17/2019, 06/21/2019, 09/20/2019, 01/10/2020, 04/17/2020, 09/11/2020, 09/18/2020, 11/13/2020, 01/29/2921, 06/18/2021
- Make-Whole Call: 04/22/2016, 07/12/2019
- Short call bonds: 03/04/2016, 3/3/2017, 3/10/2017, 08/04/2017, 03/26/2021
- Taxable advance refunding: 09/06/2019, 09/13/2019, 10/25/2019, 10/16/2020
- Total Return & Performance: 05/13/2016, 06/10/2016, 5/19/2017, 07/07/2017, 11/10/2017, 02/23/2018, 1/4/2019
- Sovereign Government Relative Value: 09/09/2016, 01/19/2018, 8/17/2018
- Appropriation debt: 8/19/2016

Municipal Market Outlook

- 2021 Outlook: 11/24/2020
- 2H21 Outlook: 06/25/2021

Weekly Updates

- Economic and policy updates
- Next week's supply, Fund flows
- Comparisons versus Corporates, Treasuries, and Global Sovereigns
- Full year gross and net-supply estimates
- Interest rate forecast

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Emerging Markets

- **In EM fixed income, we are OW EM sovereign credit, OW EM corporates and MW EM local rates**
- **EM bond flows were +$1.7bn (+0.30% of weekly AUM, up from +$997mn)**

Weekly Summary

EM spreads were more rangebound this week after trend tightening in the prior 2 weeks. EMBIGD STW widened 1bp to 342bp, while CEMBI Broad STW remained relatively unchanged and GBI-EM rose by 6bp. EM bond funds increased to the highest level in 10 weeks as a moderate decline in hard currency bond fund inflows (+$926mn vs. our model estimate of +$924mn) was more than offset by the largest inflow in 10 weeks into local currency bond funds (+$785mn vs. our model estimate of +$197mn). Inflows were mainly into ETFs (+$1bn) although also observed in non-ETFs (+$689mn). Within local currency bond funds, inflows were pretty much all into China-related bond funds (+$768mn) which had their largest inflow in six weeks, as EM ex-China bond fund flows were flat (+$17mn).

Emerging Markets Outlook and Strategy: EM growth downgrades tarnish an otherwise improving risk backdrop

After an uncertainty-ridden summer, markets seem to be digesting the delta variant and Fed stance better, although China's policy-induced slowdown still weighs on the outlook. EM fixed income assets have rallied over the last month as concerns around the impact of the COVID-19 delta variant have morphed into an acceptance of an endemic virus. US data have softened as virus cases have increased, leading to less fear the Fed will unwind current policy supports faster. EM spreads have tightened 13bp for EM sovereigns over the past month and 18bp for EM corporates, helped also by China's support for systemically important credits. EM FX has rallied 1% from recent lows, while local rates moved 10bp higher given continuing EM central bank tightening. China's growth outlook remains a dampening force on an otherwise marginally improving EM environment which sees growth pick-up into 3Q and the DM outlook move more towards a slower near-term recovery pace. Last month we moved back to OW in EM sovereign credit, which should benefit in this environment and given spreads were around the year's wides, while staying OW EM corporates. We now take profits on our UW in EM rates, moving back to MW. For EM FX we stay MW, as it is difficult to get too optimistic on trend appreciation given an environment where global growth forecasts—particularly in China—are being marked down. Corporate bond QE program extended, but this is unlikely to offset the slowdown in weekly sovereign QE purchases unless the pace of corporate bond buying increases.

Within this context, stay OW on EM Sovereigns. We moved OW EMBIGD at the start of August with the view that valuations had cheapened and tail-risks abated enough to add incremental risk. With no hawkish surprises on taper timing from Jackson Hole, EMBIGD spreads have started to tighten. However we still remain 31bp above our end-2021 target of 310bp. The revision lower from our US rates colleagues for 10y UST year-end yields to 1.75% now equates to a better +1.3% full-

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year total return forecast, with +0.5% to year-end. Technicals are somewhat balanced with expectations of strong supply over the coming months offset both by a marginal return of fund inflows as well as the external liquidity benefits from the SDR allocations. Meanwhile frontier special situations are returning to the forefront, although default concerns are limited in our view.

Specifically, we sustain a long commodity and mid-yielding Africa bias. We maintain a long oil exposure with OW Ghana, Qatar, and Colombia. Elsewhere in Africa, we stay OW Cote d'Ivoire, Mozambique, and Egypt, as well as UW Kenya. In EM Asia IG, we hold OW PHILIP versus UW MALAYS, similarly expressed in long-end bonds, and OW PLNIJ as a high beta expression of a positive Indonesia view. We are also OW MONGOL as an attractive yielding short-dated frontier credit. In Latin America, we are OW Colombia and Panama, versus UW in Peru. We maintain our IG UWs in both Poland and Kuwait. In outright and RV trades, we stay long Ukraine GDP warrants, long IRAQ 2023, and long PKSTAN 2024. In RV trades, we hold our existing curve trades and EUR versus USD RV trades in Romania and Mexico.

Technicals are somewhat balanced as supply pressures are offset by returning inflows and SDR allocations. We expect EM sovereign supply to remain strong over the coming months as nearly $73.6bn (37% of 2021F) of forecast supply still remains to come, with nearly 40% of that from the MEA region. Since 2011, nearly 30% of the annual issuance has been issued between September and November, and we expect this year to be no different. This large supply pressure may somewhat be offset by EM hard currency bond fund inflows which reverted back to weekly inflows after three consecutive weeks of outflows over August. Recent inflows however have been concentrated into EM Asia-focused hard currency bond funds and as such may not benefit EM sovereigns more broadly. While still at early stages, recent SDR allocations may also help ease financing pressures, similar to what occurred recently in Colombia (*Colombia: Three's company: IMF SDRs facilitate a BanRep deal with the Treasury*, B. Ramsey, 30 Aug 2021).

EM corporates outperformed in August amid the overall tightening in credit spreads, supported by the recovery in China credits. CEMBI Broad has delivered a +1.0% return since end-July, which is in line with other EM fixed income but beat US credit. China remained the driver of CEMBI performance during August as the recovery there supported the overall index after being a major drag in July. The rebound in Huarong contributed to the outperformance of China IG, as it tightened by -704bp to 454bp with a +34.4% return since end-July. This alleviated the drag on performance and followed the redemptions of recent maturities/calls and better clarity on the outlook following news of SOE-led capital injection. While China is still lagging quite meaningfully YTD at +49bp spread and -1.0% return vs ex- China at -25bp and +2.4%, China IG (-9bp, +0.3%) is actually tighter YTD with a marginally positive return, narrowing the gap versus IG ex-China (-25bp, +1.1%). The rest of Asia IG looks to have been separated from the uncertainty in China quasi-sovereigns triggered by Huarong, as CEMBI Broad Asia IG ex-China (-24bp, +1.4%) is outperforming the other EM IG regions YTD.

The main uncertainty stems from China HY and the Evergrande situation continues to indicate rising risks. We maintain OW CEMBI as we have been focusing on HY ex-China while the drag on performance should be contained. Evergrande has weakened further in recent weeks, with the average price falling below $30, but Asia HY ex-China (-56bp, +4.2%) has actually outperformed the other regional HY segments, suggesting there has not really been contagion to the

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rest of the Asia HY space. The weight of Evergrande itself has shrunk to 0.15% in CEMBI Broad and only 0.04% in the Diversified version of the index, limiting further drag on performance.

The risk is that a debt restructuring of Evergrande leads to pressure on other China real estate companies as well as the broader HY market. We are not too concerned about contagion to Asia ex-China HY or the other regional HY segments, as we find that the investor base and drivers are different. In addition, while China real estate HY is still sizable at 4.1% weight in the CEMBI Broad, it is meaningfully smaller at 1.1% in the Diversified version of the index to which most dedicated funds are benchmarked. As a result, we think the drag on the overall index should not be as prominent, especially given that the average spread of the sector is close to 1,200bp with a few of the riskier issuers already trading at stressed levels.

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Forecasts & Analytics

Interest Rate Forecast

Rates	10 Sep 21	10-Oct-21 1m ahead Forecast	31-Dec-21 4Q21 Forecast	31-Mar-22 1Q22 Forecast	30-Jun-22 2Q22 Forecast	30-Sep-22 3Q22 Forecast
Effective funds rate	0.080	0.100	0.100	0.100	0.100	0.100
SOFR	0.050	0.050	0.050	0.050	0.050	0.050
3-month Libor	.114	0.150	0.175	0.150	0.150	0.150
2-year T-note	0.22	0.25	0.30	0.40	0.45	0.50
3-year T-note	0.45	0.45	0.50	0.70	0.80	0.85
5-year T-note	0.82	0.90	1.05	1.10	1.35	1.45
7-year T-note	1.12	1.20	1.50	1.60	1.85	1.95
10-year T-note	1.34	1.45	1.75	1.85	2.00	2.10
20-year Treasury	1.86	2.00	2.30	2.40	2.55	2.60
30-year T-bond	1.93	2.10	2.40	2.50	2.65	2.70
Curves						
2s/5s	60	65	75	70	90	95
2s/10s	112	120	145	145	155	160
5s/10s	53	55	70	75	65	65
5s/30s	112	120	135	140	130	125
10s/30s	59	65	65	65	65	60

* EFFR and SOFR forecasts reflect trailing 1m moving average as of the indicated date

Source: J.P. Morgan

Swap spread forecast*

	Sep 10, 2021
2-year swap spread	7
5-year swap spread	7

*Forecast uses matched maturity spreads

Source: J.P. Morgan

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Economic forecast

%ch q/q, saar, unless otherwise noted

	20Q2	20Q3	20Q4	21Q1	21Q2	21Q3	21Q4	2019*	2020*	2021*
Gross Domestic Product										
Real GDP	-31.2	33.8	4.5	6.3	6.6	7.0	3.0	2.6	-2.3	5.7
Final Sales	-27.6	25.9	3.4	9.1	7.9	2.6	2.2	2.9	-2.6	5.4
Domestic Final Sales	-27.3	29.9	5.0	10.4	7.9	2.4	4.2	2.5	-1.3	6.2
Business Investment	-30.3	18.7	12.5	12.9	9.3	5.0	6.6	3.1	-3.8	8.4
Net Trade (% contribution to GDP)	1.5	-3.3	-1.7	-1.6	-0.2	0.0	-2.1	0.4	-1.3	-0.8
Inventories (% contribution to GDP)	-4.0	6.8	1.1	-2.6	-1.3	4.4	0.8	-0.4	0.4	0.3
Prices and Labor Cost										
Consumer Price Index	-3.1	4.7	2.4	3.7	8.4	6.9	3.4	2.0	1.2	5.6
Core	-1.1	4.0	1.8	1.2	8.1	6.0	3.1	2.3	1.6	4.6
Employment Cost Index	2.3	2.0	2.9	3.7	2.8	2.2	2.1	2.7	2.5	2.7
Unemployment Rate (%, sa)	13.1	8.8	6.8	6.2	5.9	5.2	5.0	-	-	-

Source: J.P. Morgan

Financial markets forecast

Credit Spread	Current	YE 2021
5Y swap spread*	9	5
FNMA 30yr 2.0% Front Tsy OAS	-10.7	0
10Y AAA 30% New Issue CMBS**	68	85
3Y AAA Credit Cards fixed**	2	7
JULI portfolio spread*†	112	110
High Yield Index*†	395	375
Emerging Market Index†	346	325
Corporate Emerging Market Index (Broad)*†	251	225

	Current	YE 2021
S&P 500 (level)**	4509	4400
Brent* ($/oz)	73	73
Gold* ($/oz)	1818	1500
EUR/USD	1.18	1.16
USD/JPY	110	112

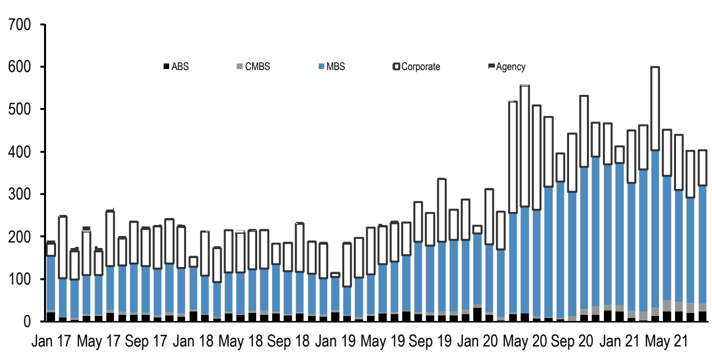
* spread to Treasuries

** spread to swaps

† Year-end forecasts only

Source: J.P. Morgan

Gross fixed-rate product supply*



*amount in $ billions

Source: J.P. Morgan

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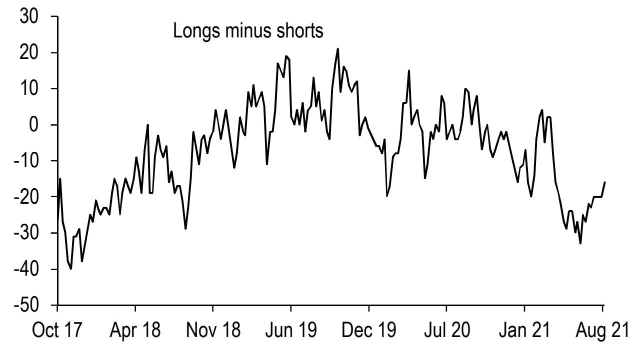
Treasury Client Survey

Duration

	Long	Neutral	Short	Changes
Sep 6, 2021	7	58	35	13
Aug 29, 2021	11	58	31	16
3-month average	10	40	50	10

Source: J.P. Morgan



Source: J.P. Morgan

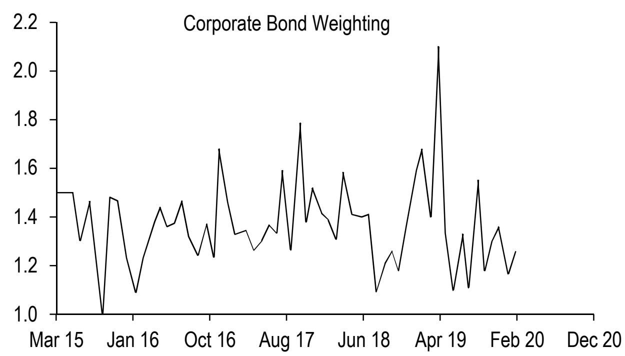
Credit Client Survey

Credit

	Corporate Bond Weighting	Cash Position	Spread Outlook
Feb 4, 2020	1.26	0.77	1.57
Jan 8, 2020	1.17	1.03	0.83
3-month average	1.26	0.86	1.28

*Corporate bond weighting index is the ratio of the sum of overweights and neutral positions to the sum of underweights and neutral positions; the cash position index is the ratio of the sum of high and medium cash positions to the sum of low and medium positions; the spread outlook index is the ratio of the sum of positive and neutral outlooks to the sum of negative and neutral outlooks.

Source: J.P. Morgan



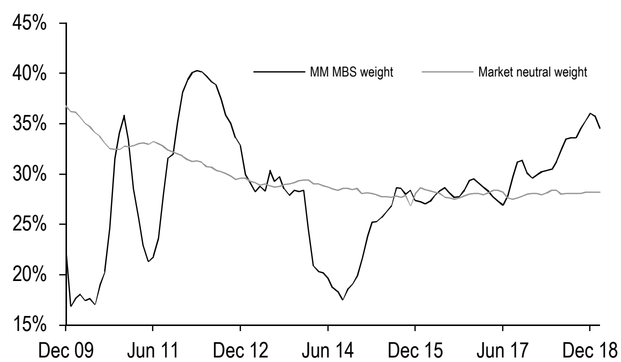
Source: J.P. Morgan

MBS Investor Survey

MBS

	MM MBS weight	Market weight
February 2019	34.54%	28.20%
January 2019	35.76%	28.20%
3-month average	35.45%	28.20%

Source: J.P. Morgan



Source: J.P. Morgan

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Market Movers Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
13 Sep **Federal budget** (2:00pm) Aug	**14 Sep** **NFIB survey** (6:00am) Aug **CPI** (8:30am) Aug 0.4% Core 0.31%	**15 Sep** **Empire State survey** (8:30am) Sep 17.0 **Import prices** (8:30am) Aug 0.0% **Industrial production** (9:15am) Aug 0.5% Manufacturing 0.4% Capacity utilization 76.5%	**16 Sep** **Initial claims** (8:30am) w/e Sep 11 350,000 **Retail sales** (8:30am) Aug -0.2% Ex. autos 0.7% **Philadelphia Fed manufacturing** (8:30am) Sep 22.0 **Business leaders survey** (8:30am) Sep **Business inventories** (10:00am) Jul 0.5% **TIC data** (4:00pm) Jul Announce 10-year TIPS (r) $14bn Announce 20-year bond (r) $24bn Announce 2-year FRN (r) $26bn	**17 Sep** **Consumer sentiment** (10:00am) Sep prelim 72.0
20 Sep **NAHB survey** (10:00am) Sep	**21 Sep** **Housing starts** (8:30am) Aug **Current account** (8:30am) 2Q **Philadelphia Fed nonmanufacturing** (8:30am) Sep Auction 20-year bond (r) $24bn **FOMC meeting**	**22 Sep** **Existing home sales** (10:00am) Aug Auction 2-year FRN (r) $26bn **FOMC statement and projections (2:00pm) and press conference (2:30pm)**	**23 Sep** **Initial claims** (8:30am) w/e Sep 18 **Manufacturing PMI** (9:45am) Sep flash **Services PMI** (9:45am) Sep flash **Leading indicators** (10:00am) Aug **KC Fed survey** (11:00am) Sep Announce 2-year note $60bn Announce 5-year note $61bn Announce 7-year note $62bn Auction 10-year TIPS (r) $14bn	**24 Sep** **New home sales** (10:00am) Aug Cleveland Fed President Mester speaks (8:45am)
27 Sep **Durable goods** (8:30am) Aug **Dallas Fed manufacturing** (10:30am) Sep Auction 2-year note $60bn Auction 5-year note $61bn Chicago Fed President Evans speaks (8:00am) Fed Governor Brainard speaks (12:15pm)	**28 Sep** **Advance economic indicators** (8:30am) Aug **FHFA HPI** (9:00am) Jul **S&P/Case-Shiller HPI** (9:00am) Jul **Consumer confidence** (10:00am) Sep **Richmond Fed survey** (10:00am) Sep **Dallas Fed services** (10:30am) Sep Auction 7-year note $62bn	**29 Sep** **Pending home sales** (10:00am) Aug	**30 Sep** **Initial claims** (8:30am) w/e Sep 25 **Real GDP** (8:30am) 2Q final **Chicago PMI** (9:45am) Sep	**1 Oct** **Personal income** (8:30am) Sep **Manufacturing PMI** (9:45am) Sep final **ISM manufacturing** (10:00am) Sep **Construction spending** (10:00am) Aug **Consumer sentiment** (10:00am) Sep final **Light vehicle sales** Sep

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IB clients**	64%	64%	65%

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