

U.S. Economic Outlook: 2022

Growing Pains

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Chief U.S. Economist

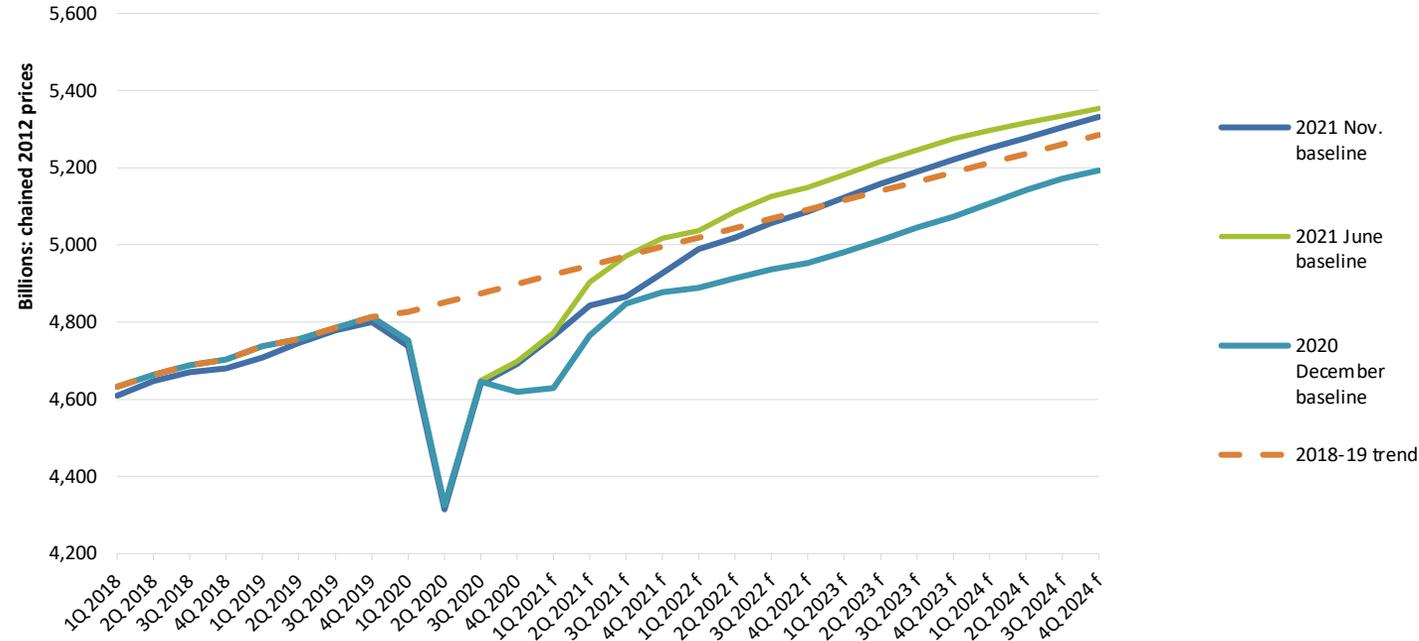
Jan. 13, 2022



U.S. Growth Slows on Supply Constraints

Evolution of Real U.S. GDP

US Real GDP



Source: BEA, Oxford Economics, S&P Global Economics Forecasts

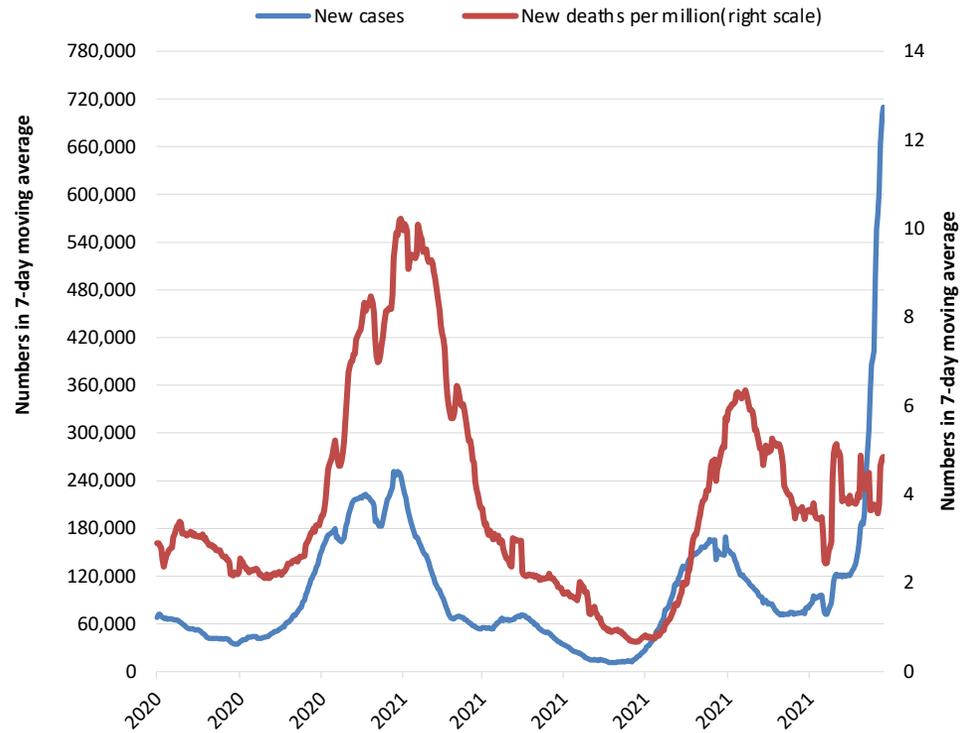
Note: f--Forecast

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- **Supply chain disruptions:** the largest stumbling block for the U.S. economy. GDP growth slows to 5.5% in 2021, still a 37-year high, and 3.9% in 2022 (was 5.7% and 4.1%). **Issue for productivity/growth** is decline in labor force participation, a 45-year low.
- Supply chains show signs to easing, but **price pressures to last into 2023**. Inflation to not reach the Fed target until 2023
- **The Fed** began sped up tapering in 2022 to reach zero in first-quarter 2022. Three hikes in 2022 with the first in May. Quantitative Tightening to start in early 2023.
- **Risk to forecast:** Tighter Fed, disorderly reflation, repricing risk. Distribution of COVID-19 vaccine, New variants, increasing trade tensions with China. Our downside risk is for slower growth.
- **Recession risk** still 10 to 15%

Omicron More Contagious, **Less** Lethal.

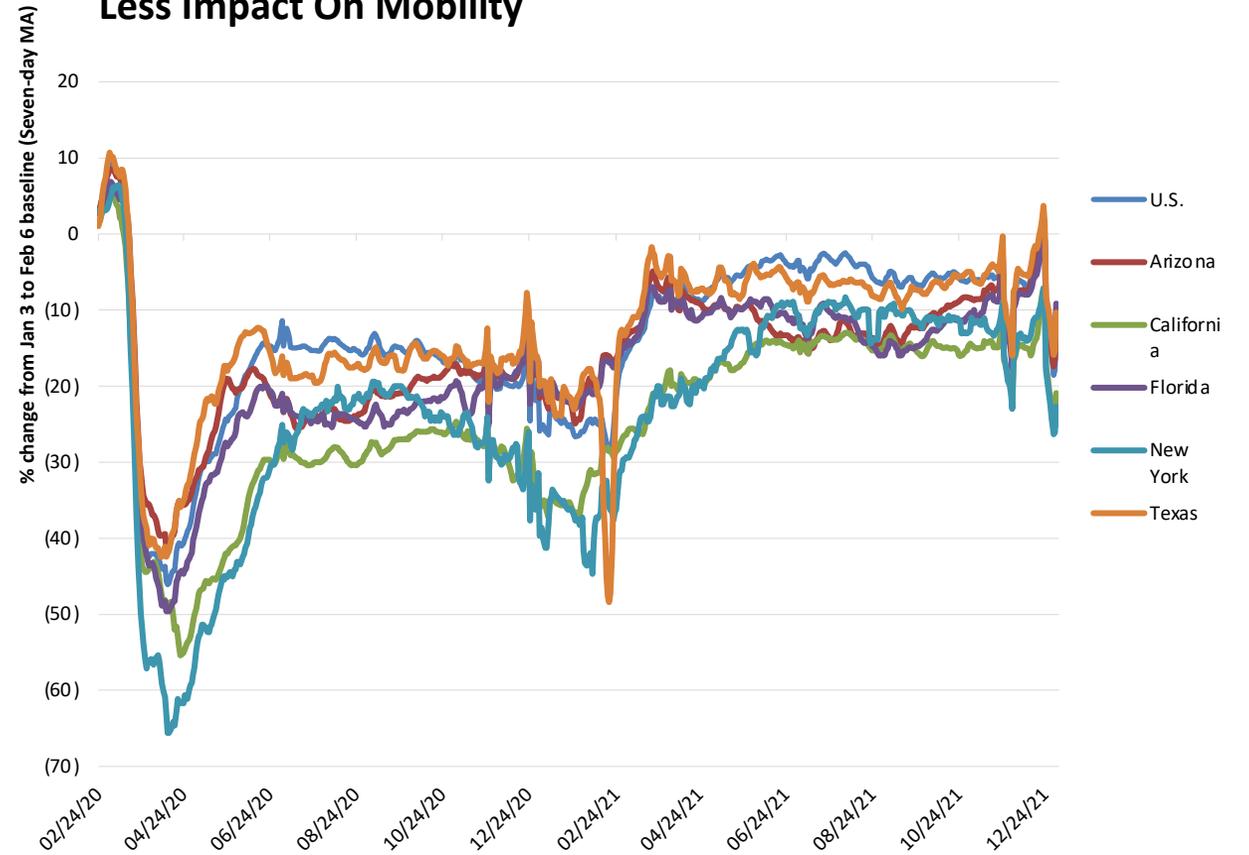
New Cases and Deaths



Source: Ourworldindata.org and S&P Global Economics
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Data as of 09 Jan 2022

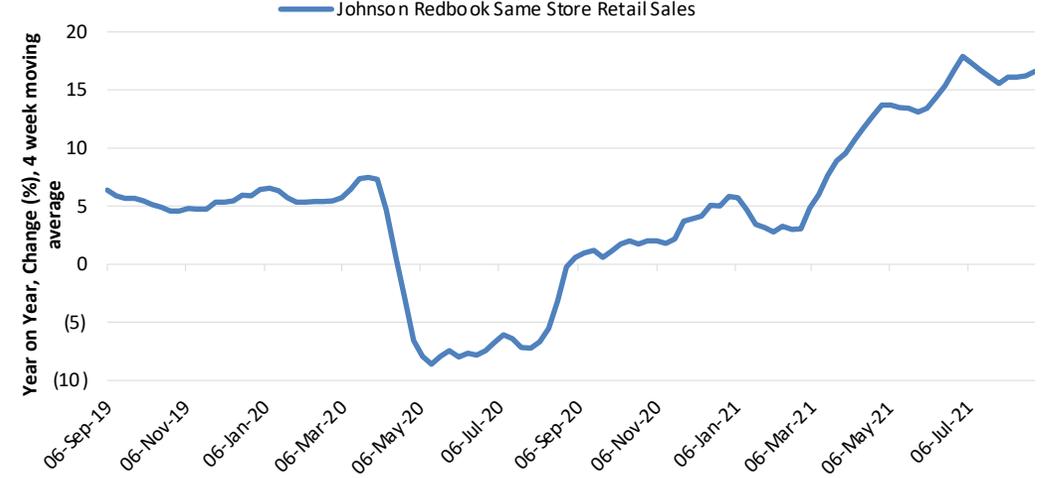
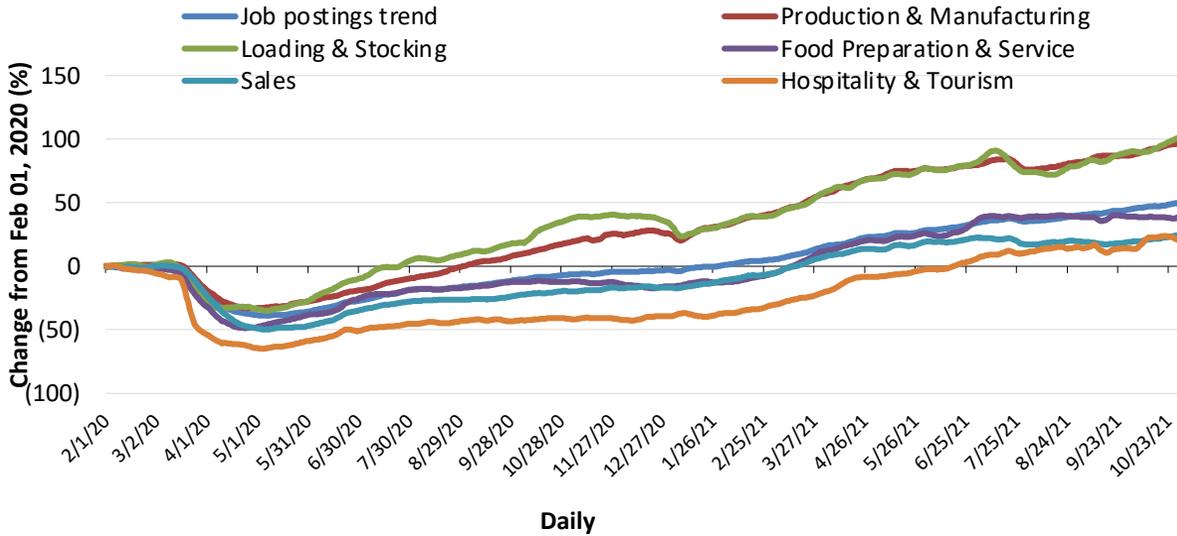
Less Impact On Mobility



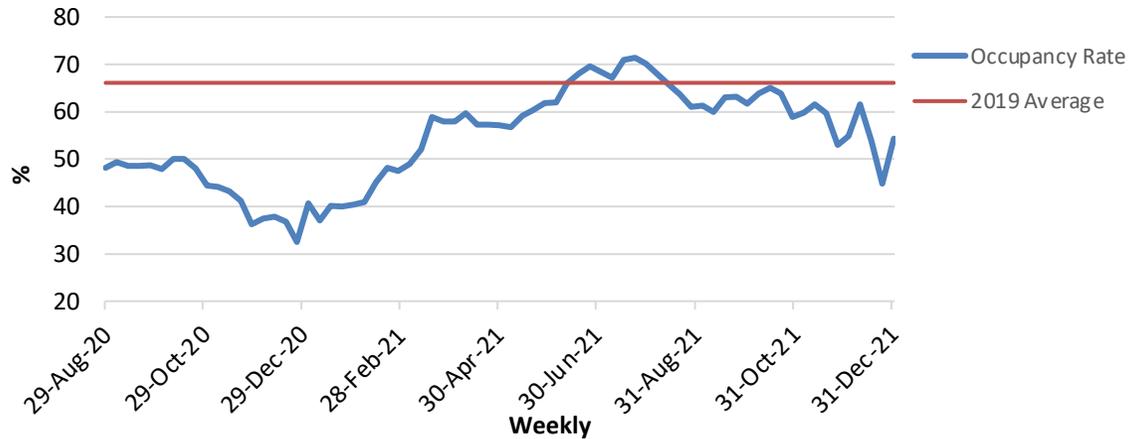
Source: Google Community Mobility Reports, S&P Global Economic Data as of 03 Jan 2022
Note: MA-- Moving Average.
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Most U.S. Economic Indicators Far Above Bottom

Job Postings All Above Pre-Crisis Trends

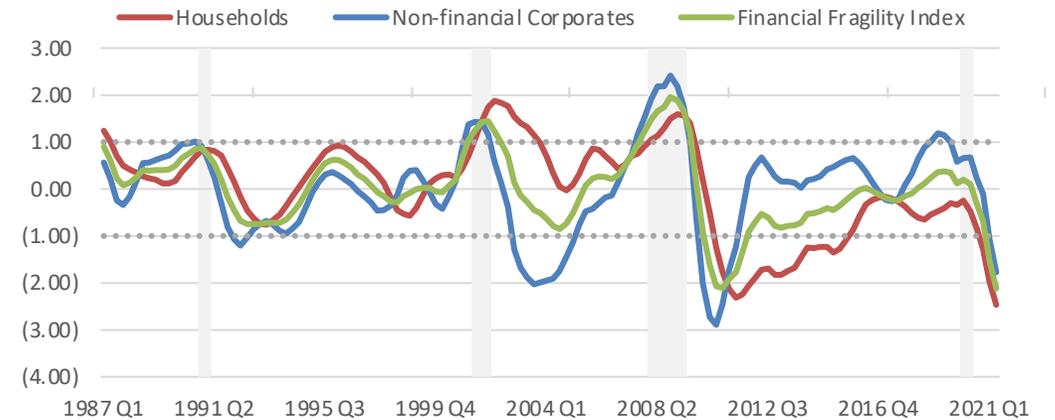


Leisure Activity Slow



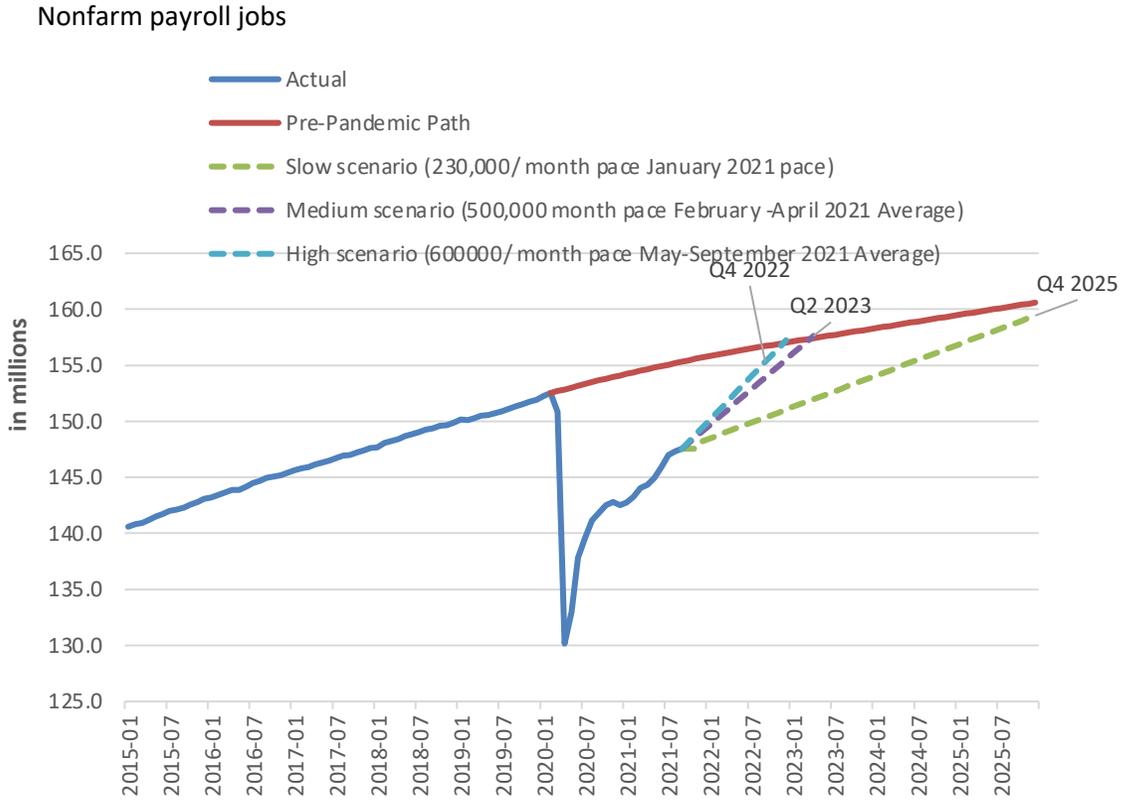
Data as of 01 Jan 2022

Private Sector Balance Sheets Healthy

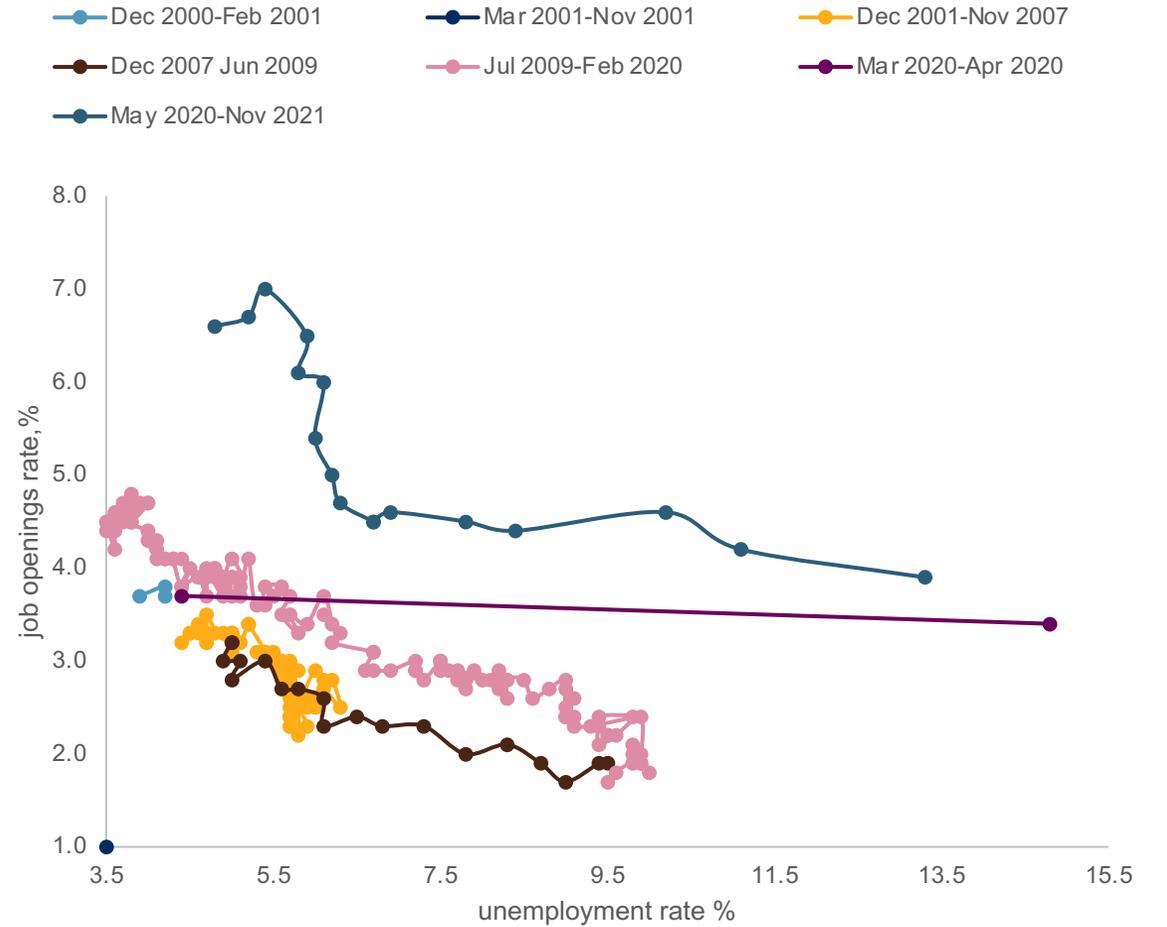


Extreme Labor Market Mismatch

Paths To Pre-Pandemic Full Employment

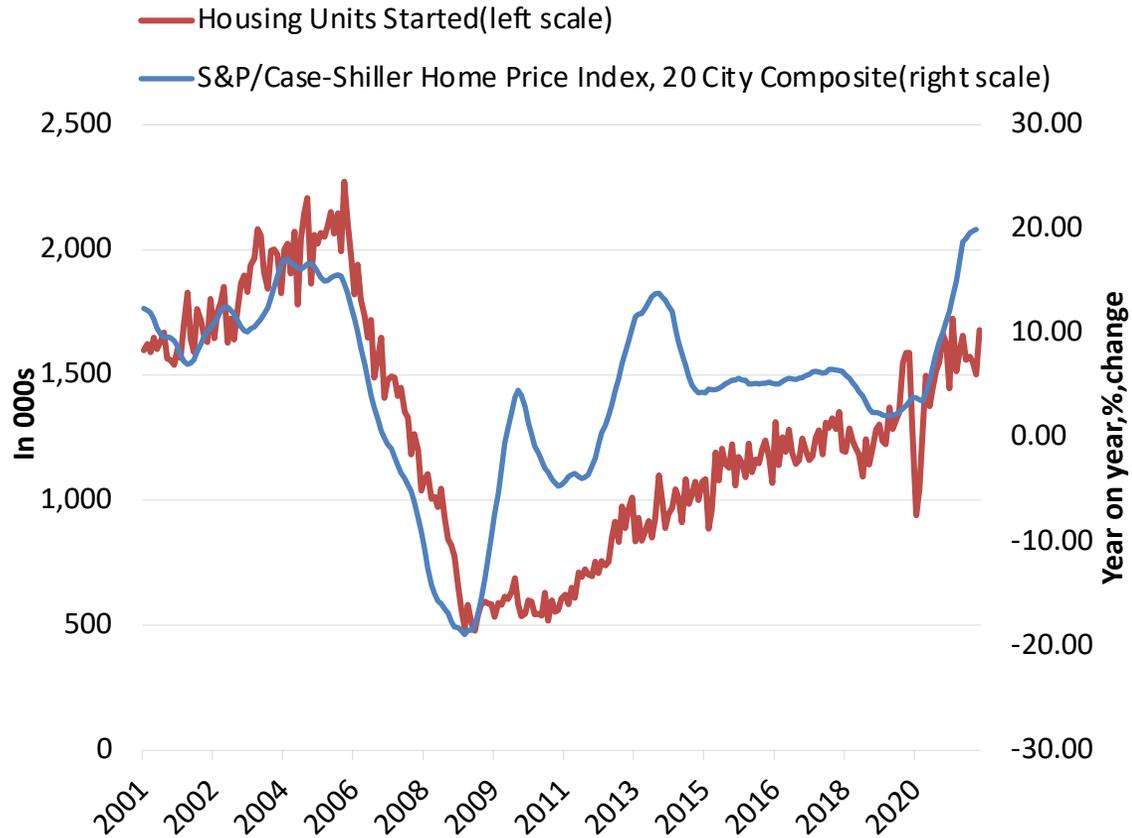


Fewer Workers In Jobs Market



V-Shaped **Recovery** In Housing. Affordability Challenges

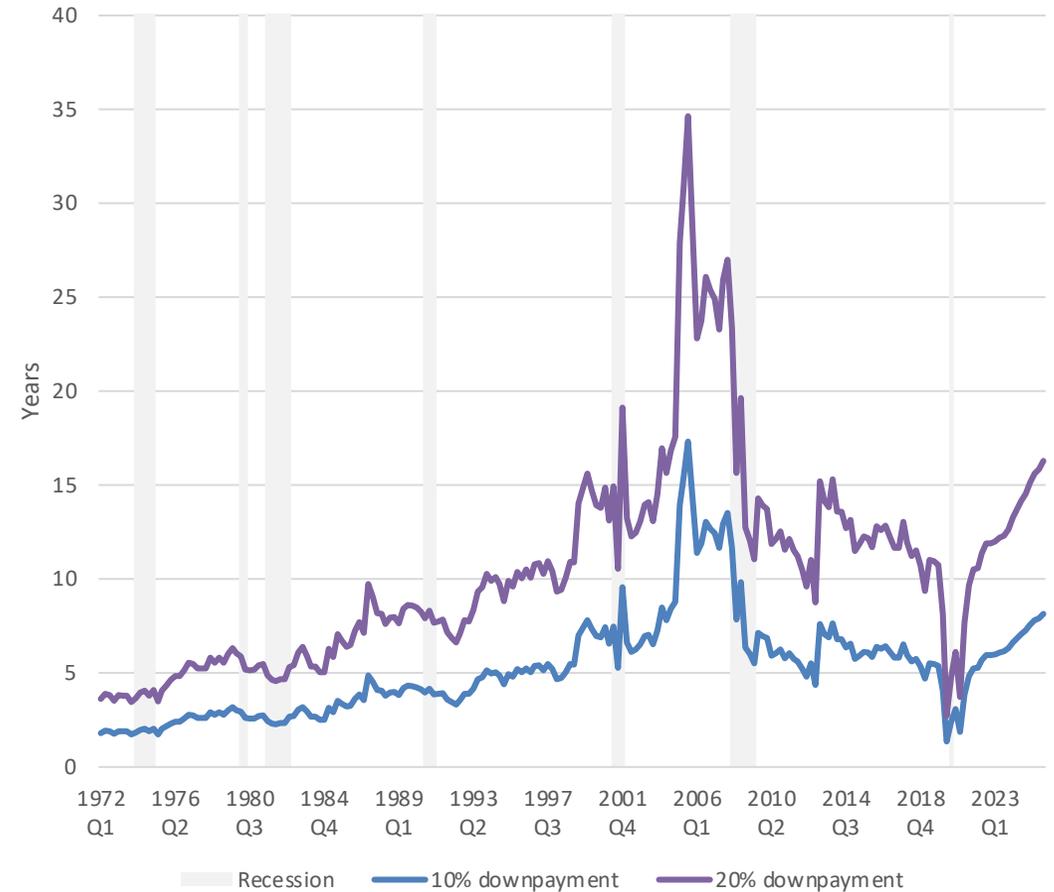
Housing Starts Slow on Higher Prices



Source: Source: U.S. Census Bureau, S&P Dow Jones Indices LLC and S&P Global Economics.

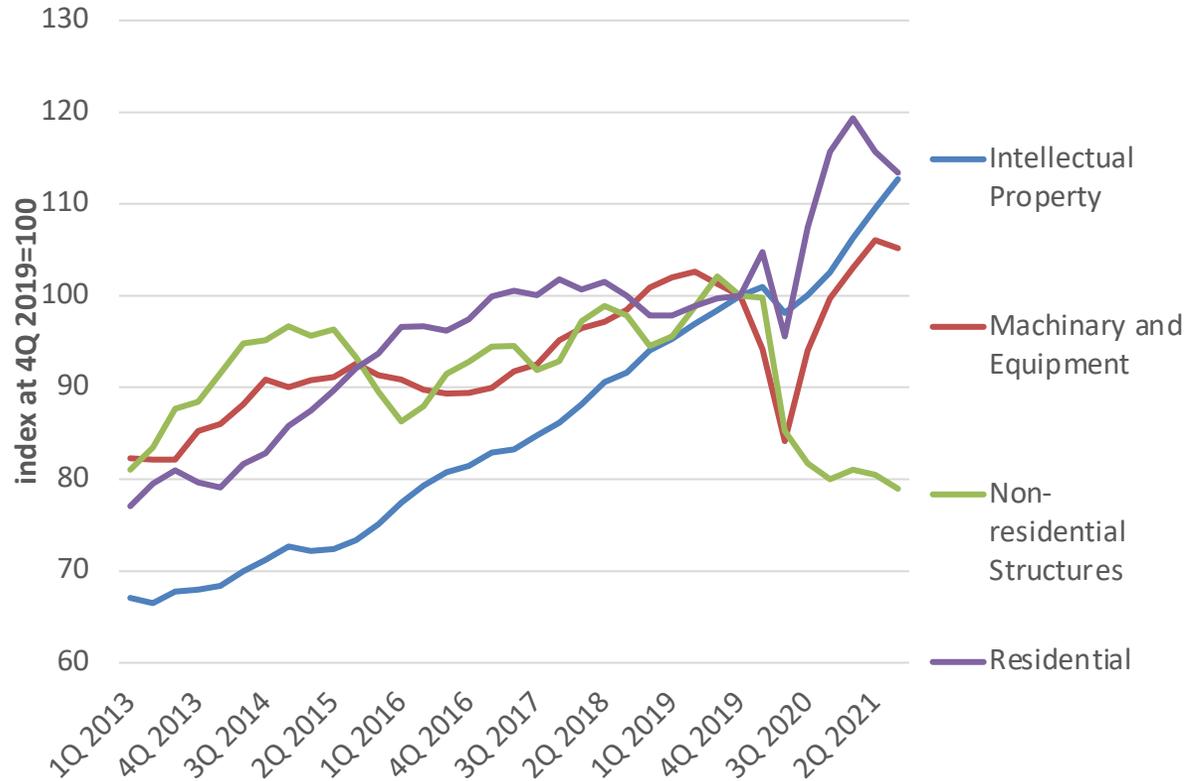
Data as of Nov 2021

Number of years to save for down payments

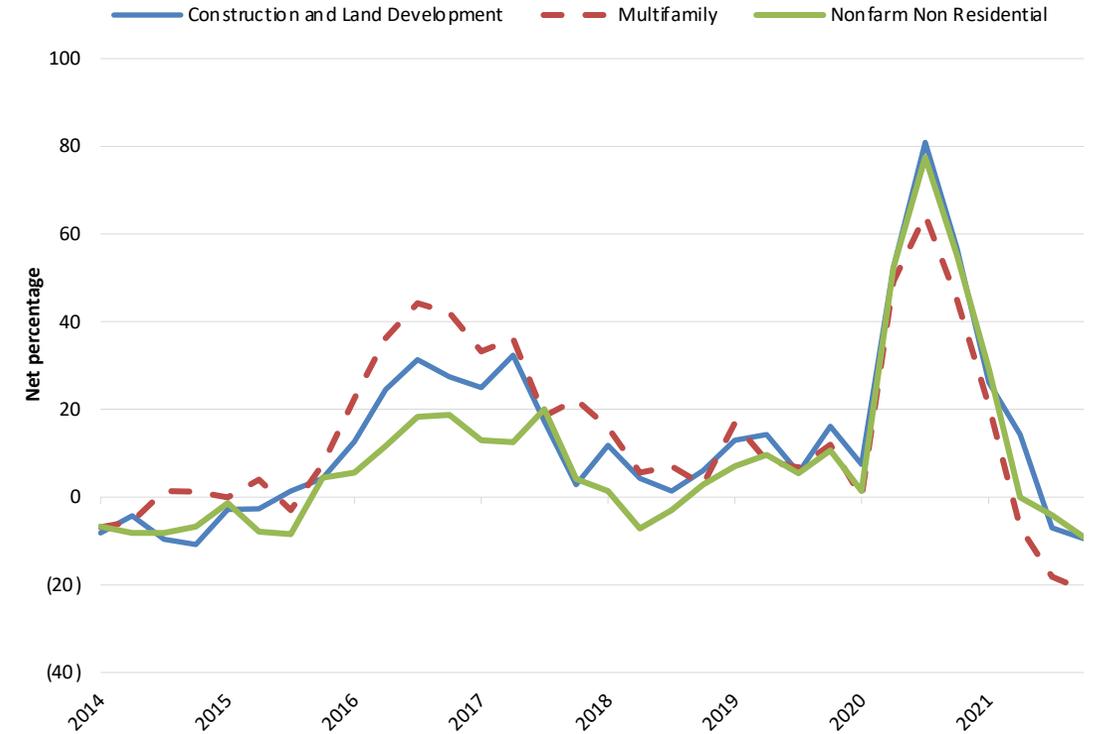


Business Investment **Selective**

Commercial Real Estate The Laggard



Standards Loosened for Commercial Real Estate Loans

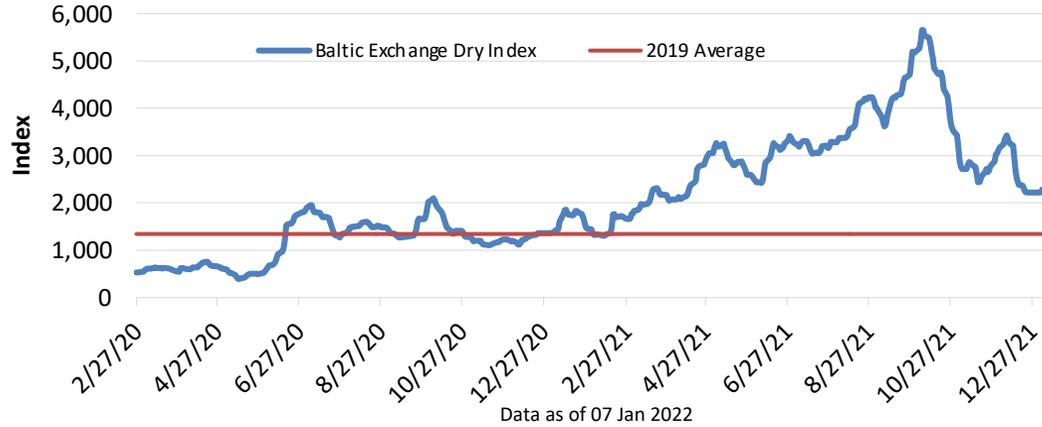


Source: S&P Global Economics, Federal Reserves Senior Officer Bank Lending Survey, .
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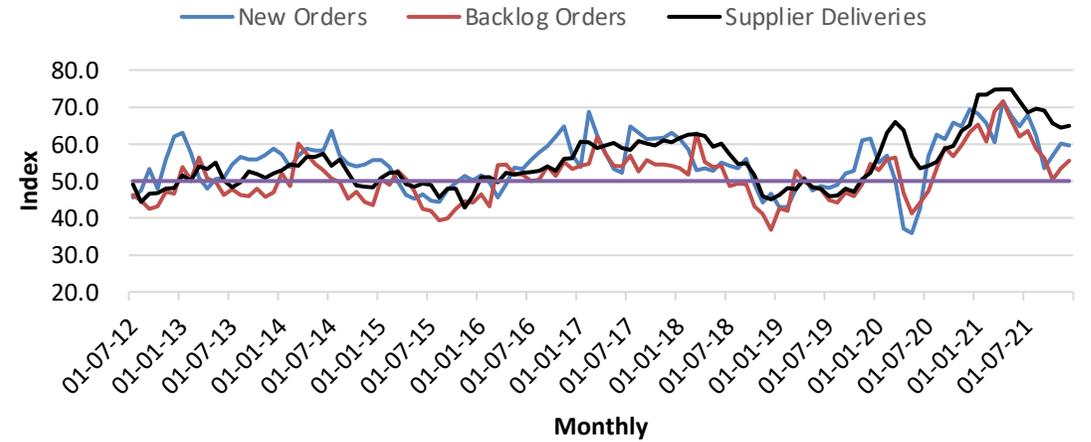
Data as of Q4 2021

U.S. Inflation: The 'Good' News (Sort of)

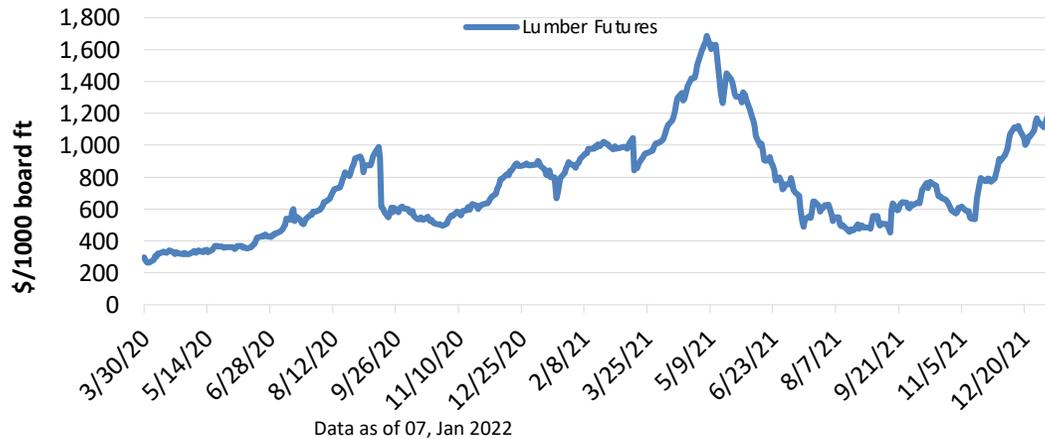
50% Drop Suggest Some Softening In Pricing Pressures



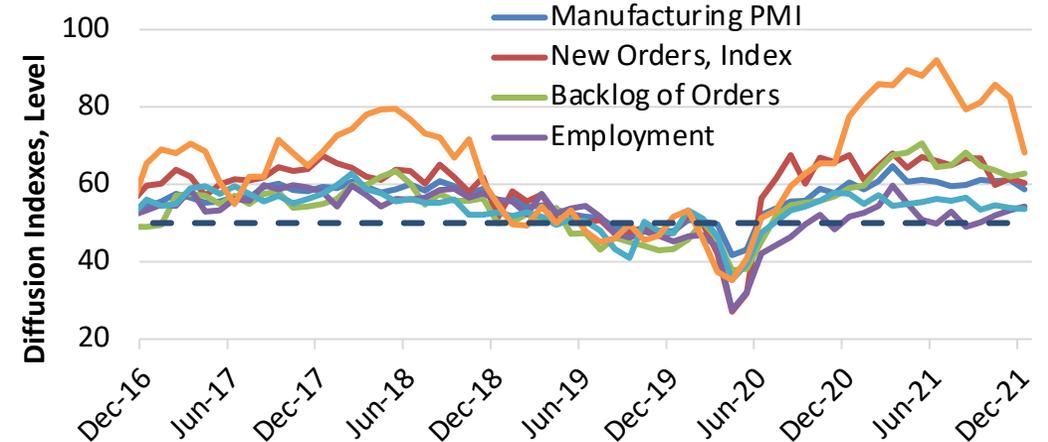
Taiwan Manufacturing PMI Backlog of Orders Moderates



Lumber Prices Off Reopening Highs But Climbing Higher



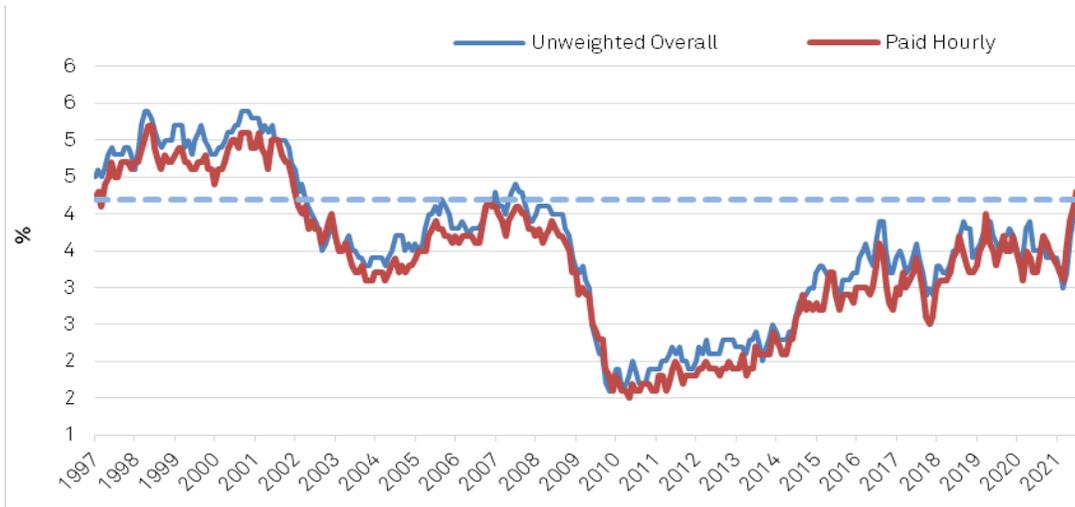
U.S. PMI Nears 50-point Neutral Rate



Source: 1. The Baltic Exchange and S&P Global Economics. . 2. National Development Council, S&P Global Economics. , 3. &P Global Economics, Nasdaq 4.. Institute for Supply Management (ISM), S&P Global Economics. Note, Prices, New Export Orders and Backlog of Orders are Non Seasonally Adjusted

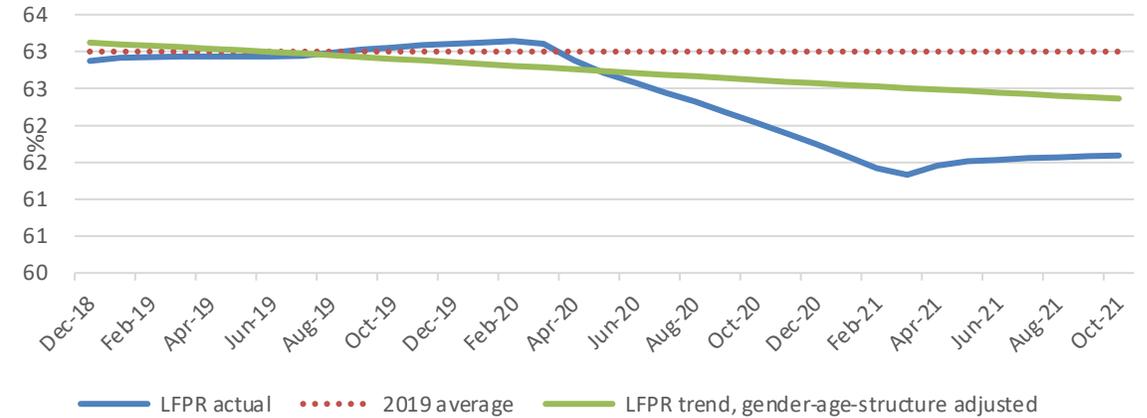
U.S. Inflation: The Bad News

Wages (Paid Hourly) At A 14-Year High

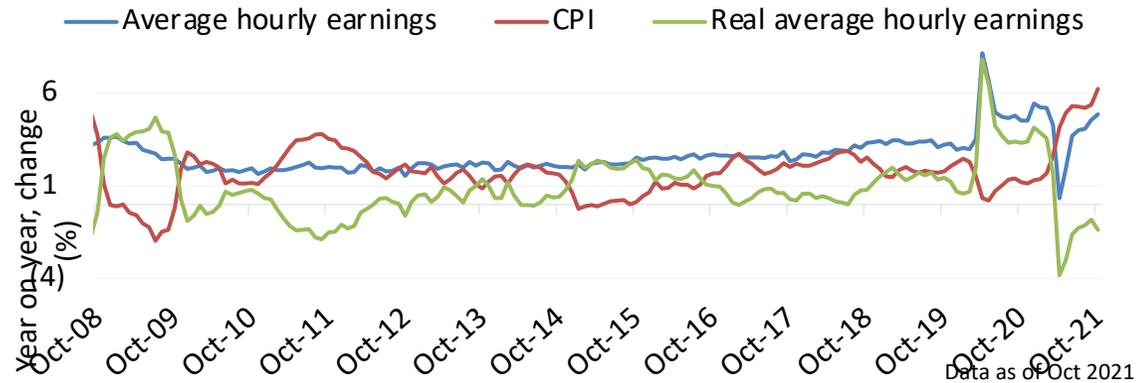


Reasons Behind The Drop In Labor Force Participation

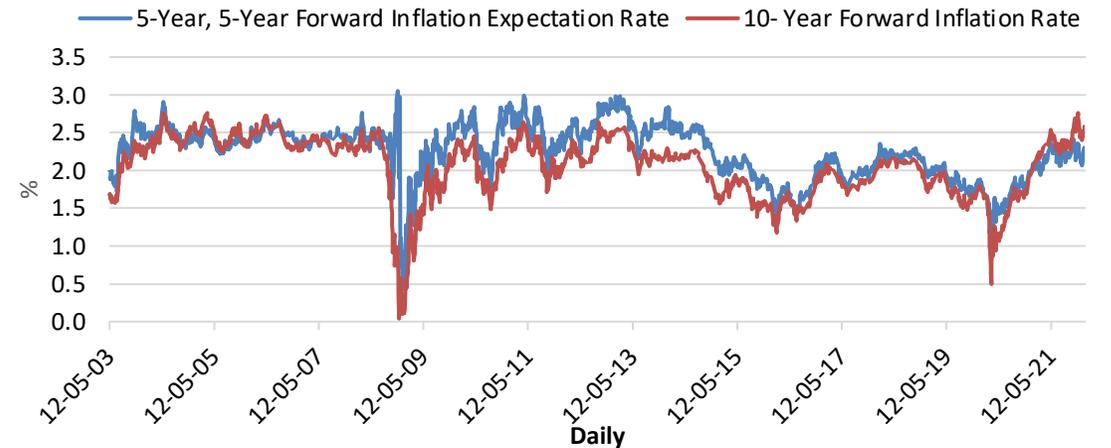
1/3 age-related, 2/3 temporary pandemic-related



Wages (Paid Hourly) At A 14-Year High



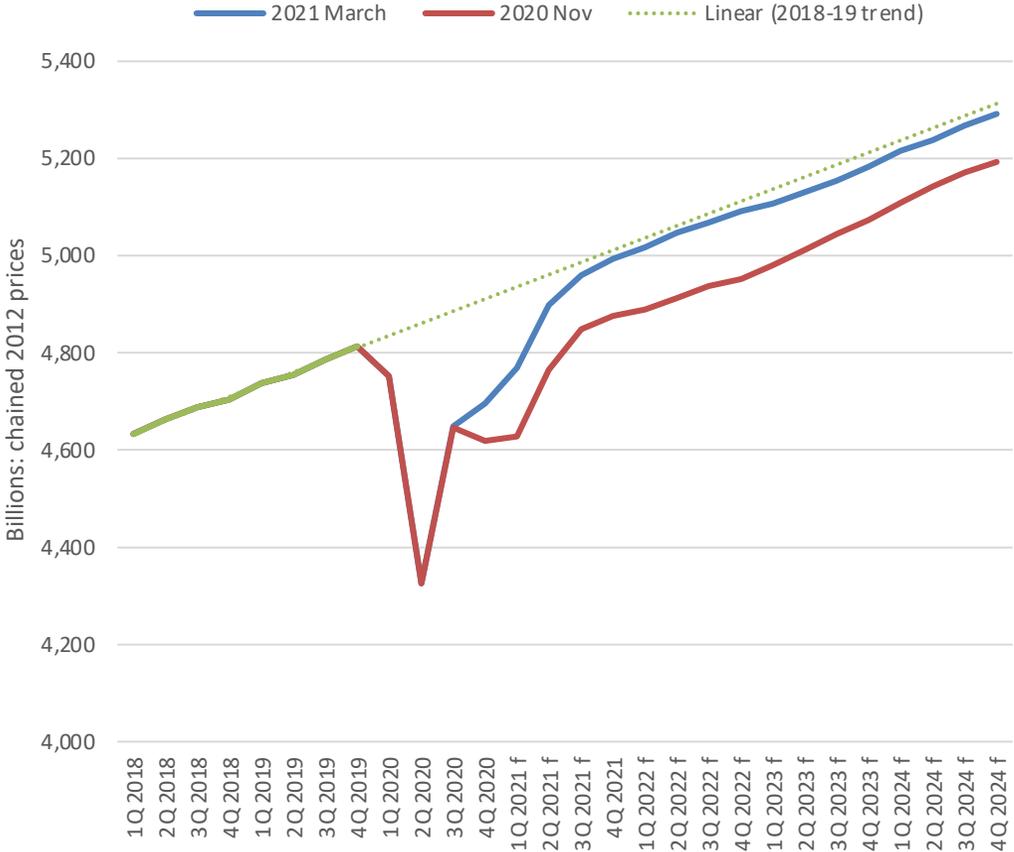
Forward Inflation Expectations At Multi-Year Highs



Taper bond purchases to finish Mar. 2022, three rate hikes in 2022, 5 more to follow through 2024.

Impacts of Fiscal Stimulus On The Path of GDP

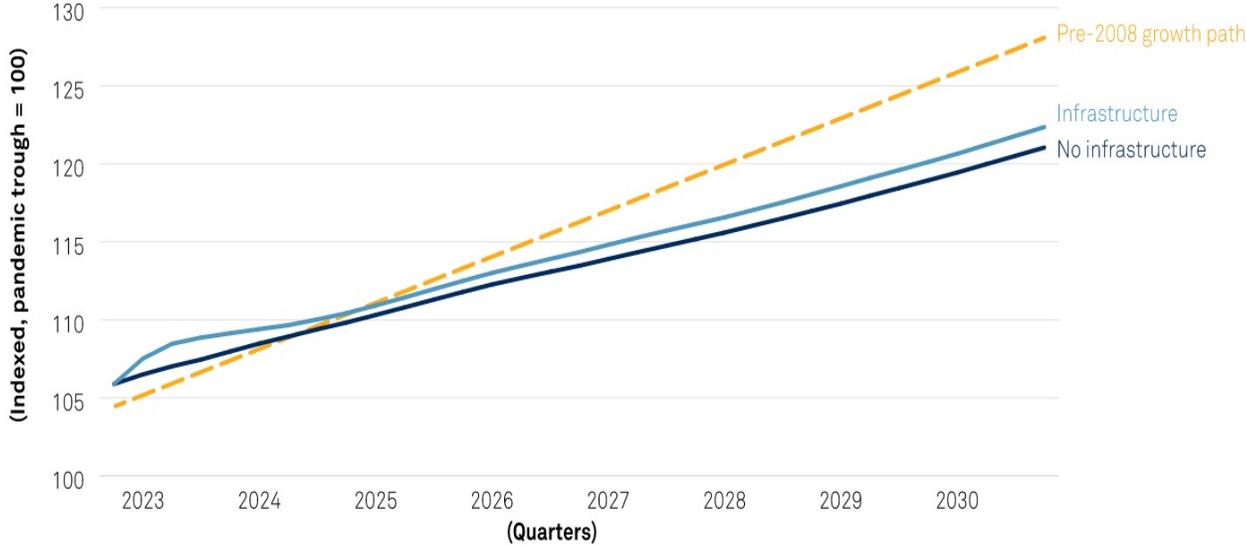
GDP Path with Demand-driven Stimulus “Bridge”



Source: BEA, S&P Global Economics December and March forecasts, S&P Global Economics calculations.

How To Steepen The Growth Path

The Path Of GDP With And Without Infrastructure





\$1.4 Tril.
more in U.S. economic activity



883,600
jobs added by 2030



\$1.7 Tril.
additional business investment by 2030

Note: Forecast begins Q1 2023. The trough of the pandemic recession was second quarter 2020 according to the National Bureau of Economic Research (NBER).
Source: Bureau of Economic Analysis, Oxford Economics, and S&P Global Economics' estimations.
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Thank You!

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Municipal Market Outlook 2022| Risk Unrewarding

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2022: Munis buoyed by credit tailwinds

- Entering 2022 there is an unusually high level of **uncertainty as US and global central banks** begin the difficult task of unwinding monetary stimulus to calm inflationary pressures, while maintaining acceptable levels of growth and employment
- **GDP to peak in mid-year at 4% in 2Q**, as the consumer lifts the service sector to pre-pandemic levels and business replenishes inventories. **Very strong inflation prints likely less transitory**, Dec unemployment 3.9%, yoy hourly wage growth of 4.7%
- Our economists note considerable uncertainty around the inflation outlook given the **unique conditions around the pandemic** and potential for a cold weather resurgence, along with concerns over growth in China and geopolitical risk in eastern Europe
- The sooner and faster pace reflected in the Fed meeting minutes and the tighter recent labor market data, will likely be the catalyst for **liftoff in March, and with 25bps hikes in June, September, and December 2022**
- **Our credit view for state and local government is overwhelmingly positive** given above consensus tax-receipts and federal aid, as well as expected continued strong reserves, pension contributions, and federal distributions through 2022

JPM US Economic Forecast 01/07/2022	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	2021 q4/q4	2022 q4/q4	2023 q4/q4
Real GDP (% , q/q, saar)	2.3	7.0	1.5	4.0	3.5	2.5	5.6	2.9	2.0
Real consumer spending (% , q/q, saar)	2.0	3.7	2.0	3.7	3.5	3.0	7.2	3.0	2.6
Core PCE prices (% , q/q, saar)	4.6	4.6	4.3	2.6	2.2	2.2	4.5	2.8	2.3
Unemployment rate (% , qtr avg)	5.1	4.2	3.8	3.6	3.4	3.3			
Fed funds rate (% , top of range)	0.25	0.25	0.50	0.75	1.00	1.25			

Source: J.P. Morgan

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JPM forecast 10yr UST rates rising by ~55bps in 2022, ending the year at 2.25%

- UST rates are expected to jump in 1Q, and rise gradually thereafter. By year-end the curve is projected to bear flatten with 2yr-5yr UST yields up by ~85-70bps to 1.70% and 2.20%, respectively, **with 10yr-30yr yields to increase by ~55-30bps to 2.30% and 2.50%, respectively**
- The muni AAA tax-exempt high grade curve is expected to shift higher with yields up by ~60-50bps in 2-5yr spots on the curve, to 1.00%-1.25%, respectively. **In 10-30yrs on the curve, we project rates will rise by ~70-55bps, to 1.85%-2.20%, respectively**
- We believe that muni investors will be best served to rein in curve and long dated credit exposure. **We recommend overweighting 5yrs and shorter bonds, and believe roll down, whether in long dated short-calls or lower rated 7-year and shorter bonds, will provide incremental total return by year-end**

		1mo ahead	1Q22	2Q22	3Q22	4Q22
Treasury	1/7/2022	Forecast	Forecast	Forecast	Forecast	Forecast
2yr	0.87	0.90	1.00	1.25	1.50	1.70
5yr	1.50	1.55	1.65	1.85	2.05	2.20
10yr	1.76	1.80	1.90	2.05	2.20	2.30
30yr	2.11	2.15	2.25	2.35	2.40	2.50
AAA Tax-exempt						
2yr	0.40	0.45	0.55	0.70	0.90	1.00
5yr	0.73	0.75	0.85	1.05	1.15	1.25
10yr	1.17	1.20	1.45	1.65	1.80	1.85
30yr	1.63	1.65	1.85	2.00	2.15	2.20
AAA / TSY Ratios						
2yr	46%	50%	55%	56%	60%	59%
5yr	49%	48%	52%	57%	56%	57%
10yr	66%	67%	76%	80%	82%	80%
30yr	77%	77%	82%	85%	90%	88%

Source: Refinitiv, J.P. Morgan As of 12pm on 01/07/2022

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Prior year supply forecast vs actual

While still not an exact science tax-exempt forecasting is less rate dependent post-TCJA

2021 Forecast vs Actual	Original 2021 Forecast (\$bns)	Actual (\$bns)	Diif from Actual (\$bns)	Diif from Actual (%)
Tax-exempt Issuance	335	345	-10	-3%
Net tax-supply	-50	-49	-1	2%
Taxable + Corp Cusip	191	136	55	40%
Gross supply	525	481	44	9%

2020 Forecast vs Actual	Original 2021 Forecast (\$bns)	Actual (\$bns)	Diif from Actual (\$bns)	Diif from Actual (%)
Tax-exempt Issuance	315	316	-1	0%
Net tax-supply	-20	-15	-5	33%
Taxable + Corp Cusip	115	181	-66	-36%
Gross supply	430	482	-52	-11%

Source: Bloomberg Finance LP., J.P. Morgan

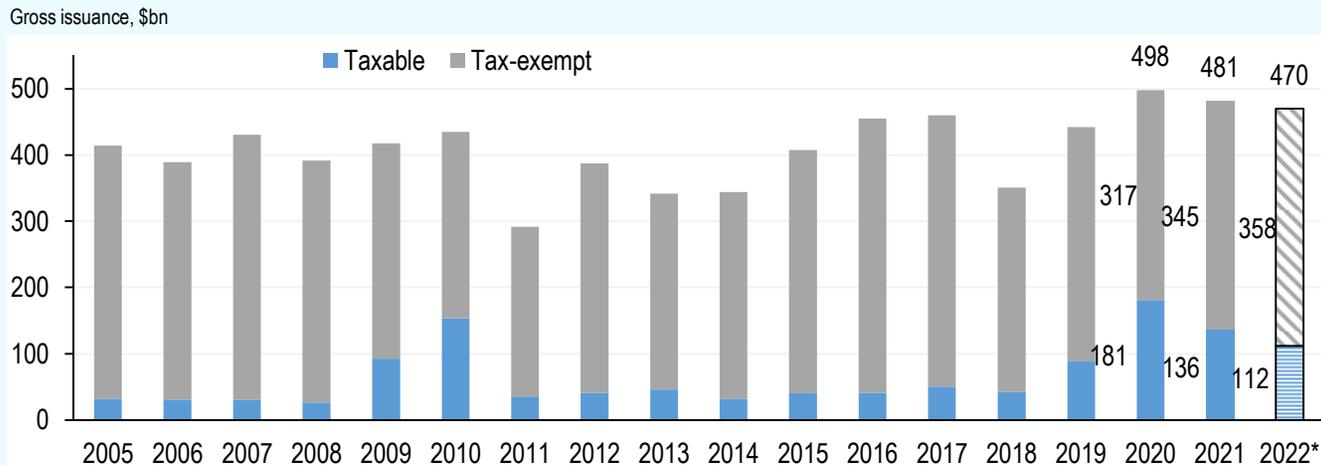
- The removal of tax-exempt advance refunding of tax-exempt debt has removed some of the rate sensitive component to tax-exempt issuance projections. There remain a multitude of considerations however, such as tax-exempt/taxable rate forecasts (net drag), refunding candidates (modest drag), shape of curve (drag for te), enacted/expected legislation (net add), inflation (net add), credit conditions (net add), election cycles (negative), etc.**

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We project relative elevated gross issuance of \$470bn or down 2% versus expected full-year 2021 (\$481bn), and +5% to 5yr avg (\$446bn)

- **We expect higher gross tax-exempt issuance of \$358bn**, ~4% above 2021 (\$345bn) and ~3% above trailing 5yr average (\$347bn) issuance
- **2022 taxable issuance of \$112bn**, would be 18% below the \$136bn in 2021, but 13% above the 5yr average of \$99bn



Source: Bloomberg Finance L.P., J.P. Morgan

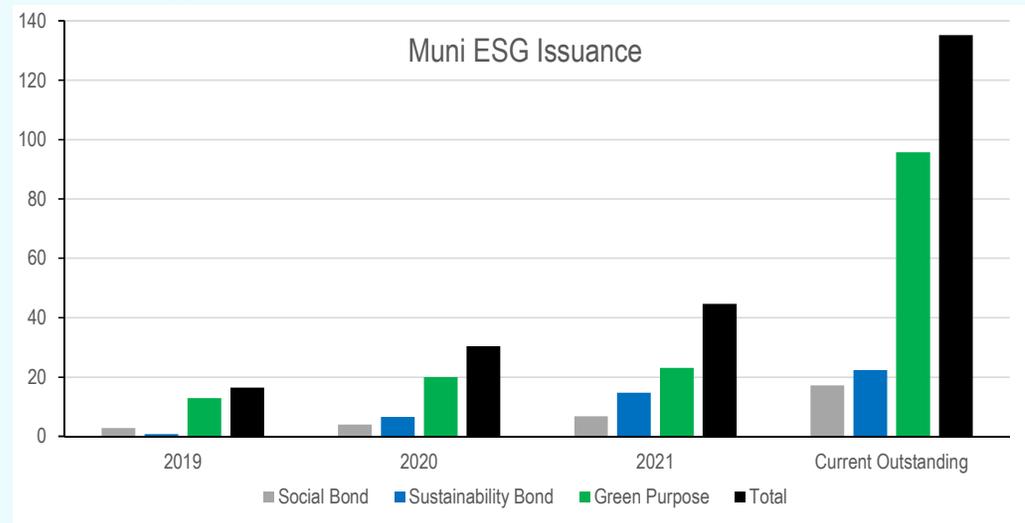
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Pro-infrastructure legislation is expected to lead to more municipal ESG supply

- Utility and housing issuers routinely issue ESG debt in the municipal bond market
- Classification of muni debt as ESG relevant has lagged given inconsistent cost of capital advantage for issuers, and an absence of standardization in evaluation and classification
- The \$46bn in YTD 2021 ESG issuance is already 47% above full-year 2020 ESG classified bonds (\$30bn).
- The passage of the “hard infrastructure” bill and potential for passage of the larger social infrastructure bill, should result in fresh municipal ESG bond origination

Muni ESG Issuance, \$bn



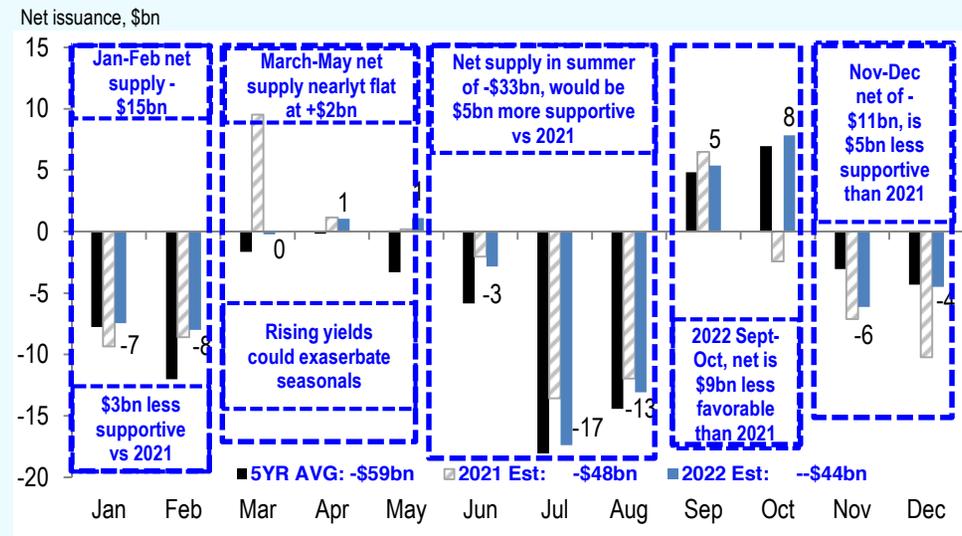
Source: Bloomberg Finance L.P., J.P. Morgan

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Net-supply of **-\$44bn**, vs. **-\$46bn** in 2021, and five-year average of **-\$59bn**

- Broadly supportive full-year 2022 net-supply of **-\$44bn** vs. **-46bn** in 2021 and a 5yr avg. of **-\$59bn**.
- After a strong Jan/Fed (**-\$15bn**), net supply in Mar/Apr/May (**\$0bn/\$1bn/\$1bn**), could be difficult given high valuations, low reinvestment, tax payments, and a 25bps rise in UST rates.
- Looking at market conditions over the year given our model scenario, we expect that net supply in January/February 2022 (**-\$7bn/-\$8bn**) will likely result in a highly supportive market environment.
- The June - Aug period is again the most supportive of the year, with **-\$33bn** in net supply.
- Sept-Oct net of **+\$13bn**, suggests a sell-off, as it has for seven consecutive years dating back to 2015.
- We caveat that technicals are easily overwhelmed by fund flows, and sizable flows drive the market narrative.



Source: Bloomberg Finance L.P., Refinitiv, S&P, J.P. Morgan Note: As of 12/06/2021

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2022 Municipal Market Outlook

Presentation for the Philadelphia Municipal Analyst Society

January 13, 2022

Tom Kozlik, Head of Municipal Research and Analytics

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And Just Like That ...The Pandemic is Not Over

- Comparing Dec 13th to Jan 10th
- Omicron, pandemic vs. endemic

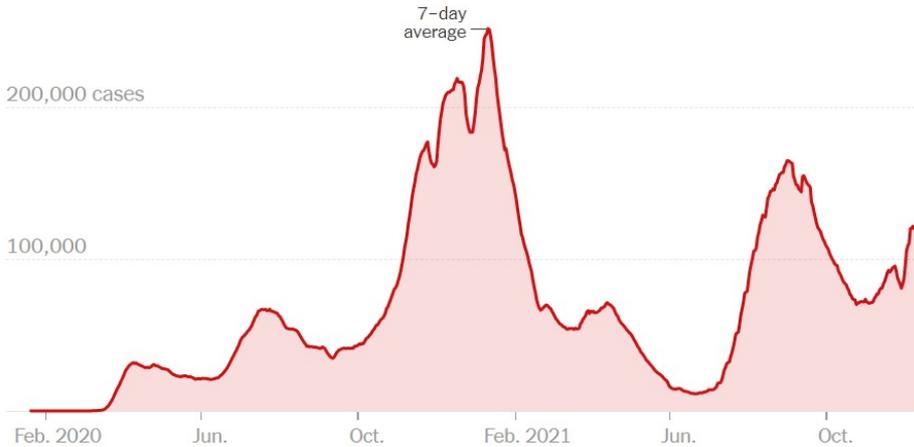
As of Dec. 13, 2021

	DAILY AVG. ON DEC. 13	14-DAY CHANGE	TOTAL REPORTED
Cases	120,056	+49%	50,083,493
Tests	1,388,061	+2%	—
Hospitalized	66,395	+22%	—
Deaths	1,276	+40%	797,208

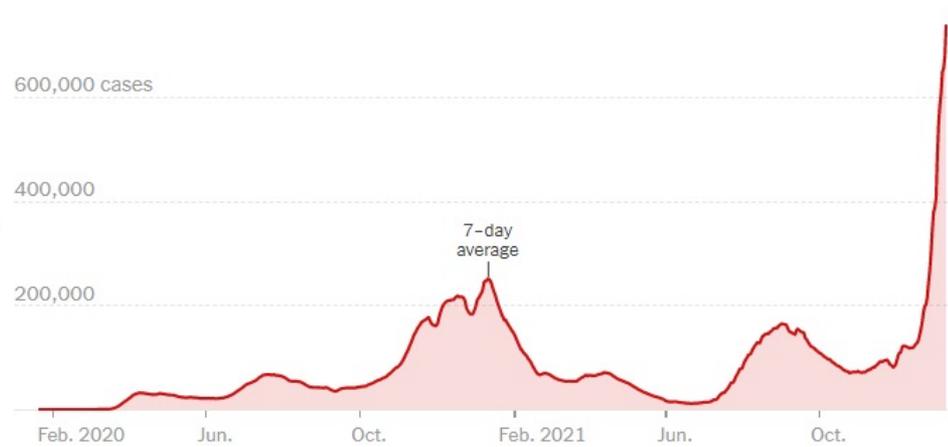
As of Jan. 10, 2022

	DAILY AVG. ON JAN. 10	14-DAY CHANGE	TOTAL REPORTED
Cases	737,415	+203%	61,584,415
Tests	1,992,421	+34%	—
Hospitalized	135,559	+83%	—
Deaths	1,653	+36%	837,911

New reported cases by day



New reported cases by day

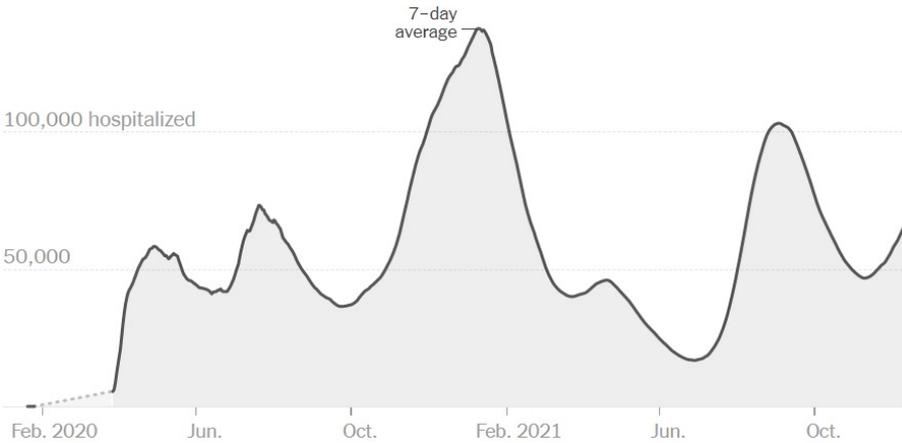


Source: New York Times as of Dec 13, 2021, Jan. 10, 2022 and HilltopSecurities.

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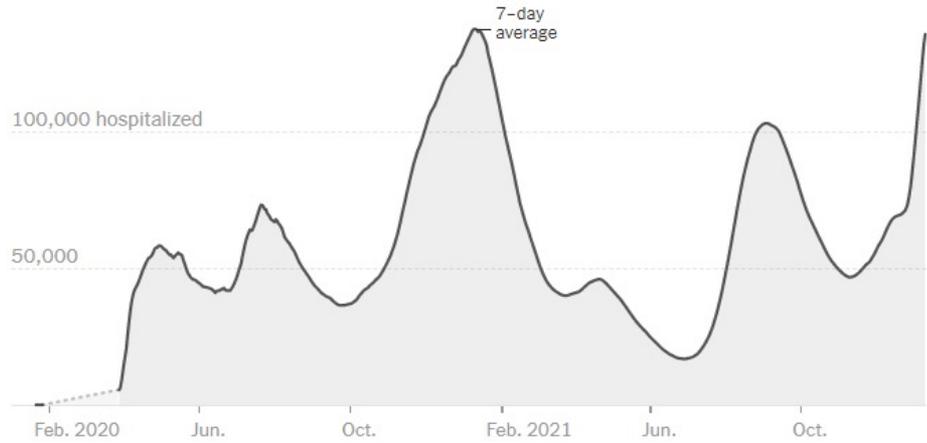
As of Dec. 13, 2021

Hospitalizations

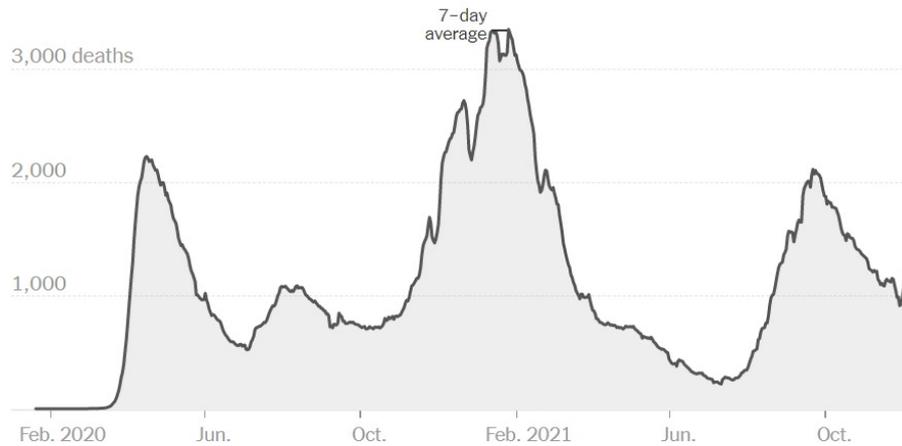


As of Jan. 10, 2022

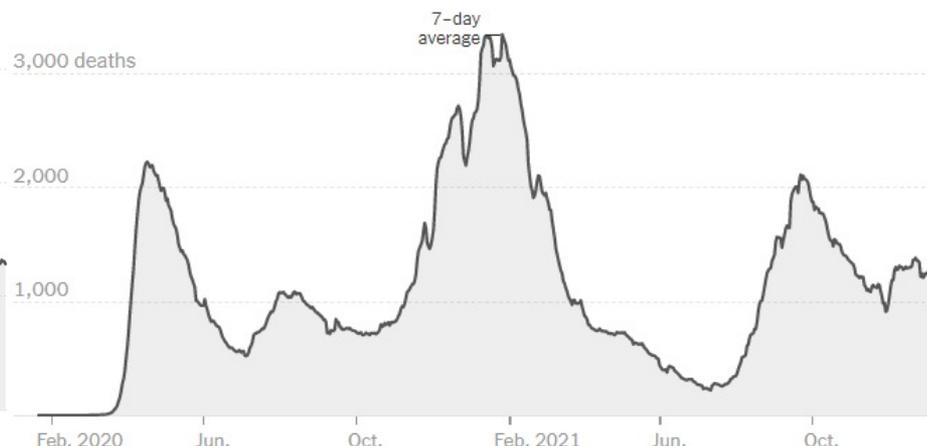
Hospitalizations



New reported deaths by day



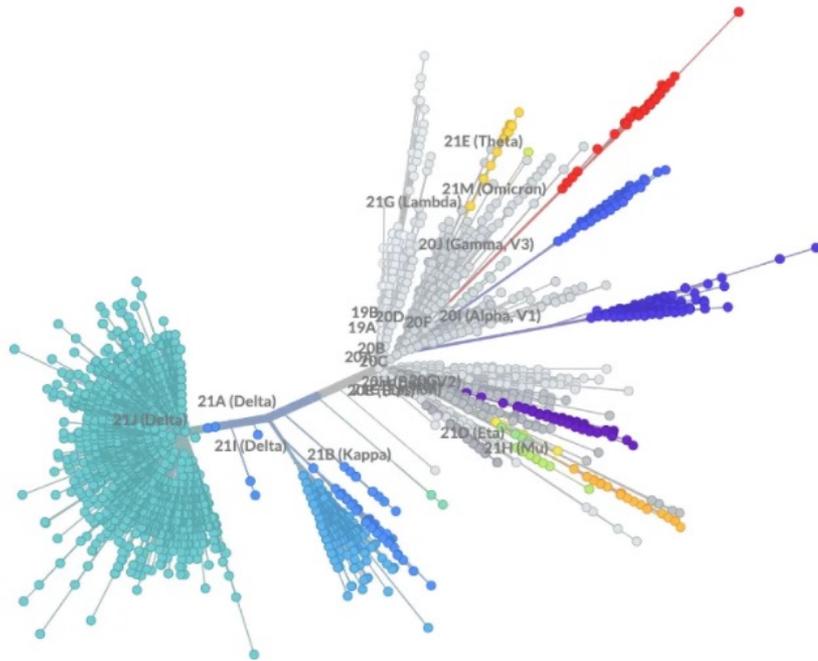
New reported deaths by day



Source: New York Times as of Dec 13, 2021, Jan. 10, 2022 and HilltopSecurities.

And Just Like That ...The Pandemic is Not Over

Genomic epidemiology of novel coronavirus

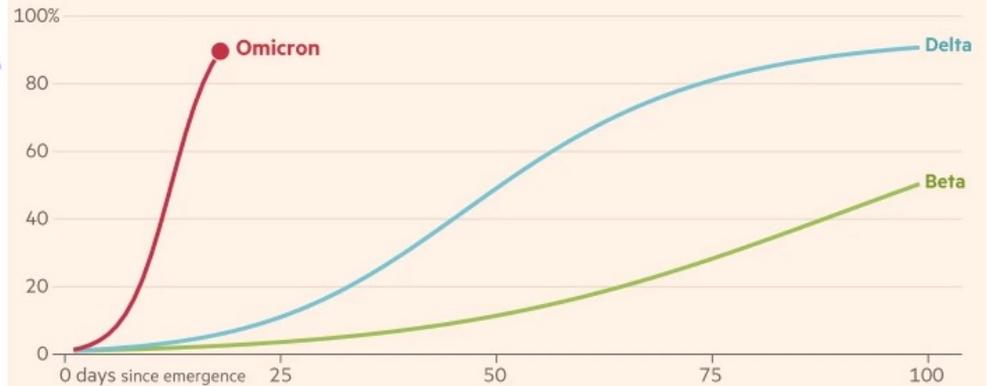


“This radial phylogenetic tree of SARS-CoV-2 depicts known sequences of variants (dots) and their relationships to each other. The length of the branches indicate how divergent a given variant is. Omicron, depicted in red, stands out for its uniqueness,” What Makes the omicron variant so strange and surprising, Vox.

Speed of Spread Matters

The Omicron variant is spreading rapidly in South Africa, and appears to be gaining dominance much faster than previous variants of concern did

Share of all sequenced cases* in South Africa accounted for by each variant, by number of days since it passed 1%



*Growth of B.1.1.529 is modelled from SGTF data rather than full genomic sequences
Source: FT analysis of data from Gisaïd and the South African National Health Laboratory Service

“There is no one reason why a more dangerous variant has not emerged, although experts agree that the global vaccination campaign has helped slow the mutations,” ‘The virus is always searching for its next move’; why science is alert to new variants, Financial Times.

Source: Financial Times, Vox and Nextstrain.com.

Status of Infrastructure, Social Spending Legislation

Outsized U.S. Fiscal Policy from 2020 and 2021 Will Continue to Support Municipal Credit in 2022

Phase	Became Law (Status)	Legislation	Details	Amount (billions)
Phase 1	March 6, 2020	Coronavirus Preparedness and Response Supplemental Appropriations Act	Research and development, health-care services and supplies	\$8.30
Phase 2	March 18, 2020	Families First Coronavirus Response Act	Testing funds, paid leave, food stamp funding	192.00
Phase 3	March 27, 2020	Coronavirus Aid, Relief, and Economic Security (CARES) Act	Expanded unemployment, FFP, Fed Reserve & industry loans, payroll tax credits, created MLF, other	2,700.00
Phase (3.5 or) 4	April 24, 2020	Paycheck Protection Program and Healthcare Enhancement Act	Expanded FFP, hospital & testing funding	733.00
Phase 5	Dec. 27, 2020	The \$1.4 trillion Consolidated Appropriations Act, 2020 was a federal govt. funding measure & included \$910 billion of COVID-19 relief provisions	Unemployed. relief, FFP, funds for education, transportation, health care, vaccine distribution, etc., but no direct unencumbered state and local govt. relief	910.00
Phase 6	March 11, 2021	American Rescue Plan Act of 2021	\$1,400 payments, \$350B state & local govt. aid, expanded unemployed relief	1,900.00
Infrastructure & Jobs	Nov. 15, 2021	Infrastructure Investment & Jobs Act of 2021 (bi-partisan)	Funding for roads, bridges, rail, mass transit, ports, airports, water, broadband, and more	1,200.00
Social Spending	Passed House, has not passed Senate	Build Back Better	Clean energy, climate invest, child care, pre-school, home care, housing, SALT cap repeal	1,950.00
			Total Passed into Law	\$7,643.30
			Total	\$9,593.30

Status of Infrastructure, Social Spending Legislation

Massive Fiscal Policy Support for Public Finance

- COVID-19 status when CARES Act passed
 - Total of 65,563 cases reported in the U.S., 908 deaths and 393 recoveries (March 24th, 2020)

- Coronavirus Aid, Relief, and Economic Stabilization Act (CARES Act), third phase of COVID-19 relief totaling \$2.7 trillion, largest single phase
 - Set up the \$150 billion Coronavirus Relief Fund, used for COVID-19 related spending
 - \$454 billion made available to purchase municipal securities, this funded the MLF
 - \$31 billion Education Stabilization Fund
 - \$25 billion transit providers
 - \$10 billion for Airport Improvement Program
 - Other provisions for housing, education, healthcare and Medicaid

- The \$1.9 trillion Rescue Plan Act of 2021 was the sixth phase of COVID relief
 - Included at least \$650 billion for public finance

- 2009 Recovery Act
 - Included about \$282 billion of assorted fiscal assistance for state & local govts (GAO 2011)

Direct Public Finance Sector Relief, Rescue Plan Act of 2021

Public Finance Sector-by-Sector Impact From the American Rescue Plan Act of 2021

Provision	Amount (\$ billions)	Sector(s) to Benefit Most	Credit Relevance
State and Local Govt. Aid	\$350.00	U.S. state, local, and tribal governments	Direct fiscal assistance to governments, in some cases totaling as much as 30% of operating revenue (not completely unencumbered, however)
K-12 School Aid	126.00	U.S. state and local govts.	Focused on primary and secondary education funding
Affordable Care Act (ACA) Tax Credits & COBRA Coverage	63.00	Healthcare	More generous tax credits will allow more people to obtain or maintain health insurance and reduce hospitals' uncompensated healthcare costs
Higher Education Relief Fund	39.60	Higher Education	Additional direct aid to universities and colleges; must use a percentage for emergency student financial aid
Additional Aid to Mass Transit Operators	30.50	Mass Transit	Provides financial assistance to sector hard hit by ridership and operating revenue declines
Incentives for non-expansion states under ACA to expand Medicaid	16.40	State gov't., Healthcare	If all 12 non-expansion states accept the incentives, each will net an estimated \$10 billion (nearly), after their new Medicaid costs
Coronavirus Capital Projects Fund	10.00	U.S. state, local, and tribal governments	Critical capital projects in response to the public health emergency (Sec 604)
Homeowner Assistance Fund	10.00	Housing	Assistance to homeowners for mortgage payments, utilities and insurance
Emergency housing vouchers	5.00	Housing	Incremental emergency housing vouchers that provide tenant-based rental assistance under Section-8
\$650.50			

Source: Moody's Investor Service, House Oversight Committee, Joint Committee on Taxation, Committee for a Responsible Federal Budget, and HilltopSecurities.

Golden Age of Public Finance

- This new-COVID-19 reality is a threat to the Golden Age

Still No Changes to Hilltop Securities Municipal Sector Credit Outlooks

Sector	Hilltop Credit Outlook	Recent Action (March 2021)	Key Sector Trends, Updated to Reflect pre-Omicron Variant Themes
State Government	Stable	Raised two notches	We do not see evident cracks in state credit at this time.
Local Government	Stable	Raised two notches	We do not see evident cracks in local govt credit at this time.
School Districts	Stable	Raised two notches	AV growth has been surprisingly strong through COVID, \$129 billion plus will flow directly to schools per the Rescue Plan Act.
Airports	Stable	Raised two notches	It will take years for enplanements to ramp up to pre-COVID levels.
Health Care	Negative	None	Health care could be the sector most negatively impacted by the a Omicron-wave.
Higher Education	Private: Negative Public: Cautious	Raised Pub Sect Outlook	College campuses are not as safe as we expected from virus spread, the sector will continue to be pressured in the near to medium term.
Housing	Positive	Raised	Strong relative value in this sector. State Housing Finance Agencies (HFA) were less impacted than other sectors.
Public Power (Elec.)	Stable	None	Recovery to 2019 usage ongoing but federal support has provided a base.
Tobacco	Negative	None	MSA numbers were slightly higher in 2020 YOY, we continue to expect more downside risk in this sector going forward.
Toll Facilities	Stable	Raised two notches	Vehicle miles traveled fell to 2004 levels, full recovery will take years.
Water and Sewer	Stable	None	Essentiality remains important driver, one of the approved uses of the Rescue Act funds is for water and sewer infrastructure. More funds approved in IJA too.

Source: Hilltop Securities

Infrastructure Legislation Signed Into Law

Bi-partisan Infrastructure Investment and Jobs Act of 2021

- Signed into law on Nov 15, 2021
- Includes a few very small municipal related items: Surface trans. PAB; rural broadband PAB, carbon capture PAB

IIJA Includes \$550 Billion in New Spending (*\$ in billions*)

Topic	Amount (\$)
Roads, Bridges and Major Projects	\$110.0
Passenger and Freight Rail	66.0
Public Transit	39.2
Safety & Research	10.5
Airports	25.0
Ports and Waterways	17.3
Broadband	65.0
Water Infrastructure	55.0
Power and Grid	73.0
Resiliency (cyber, waste management, climate)	46.0
Low-Carbon and Zero-Emission School Buses and Ferries	7.5
EV and EV Charging Network	7.5
Environmental and Superfund	21.0
Total	\$550.0

Source: Bipartisan Infrastructure Investment and Jobs Act Summary, U.S. Chamber of Commerce & HilltopSecurities.

Infrastructure Legislation Signed Into Law

Bi-partisan Infrastructure Investment and Jobs Act of 2021

BIIJA Static Budget cost (\$ in billions)

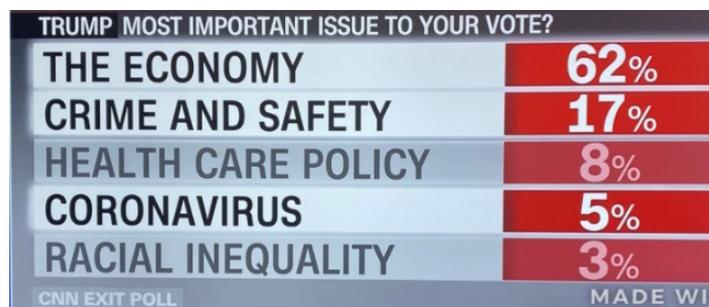
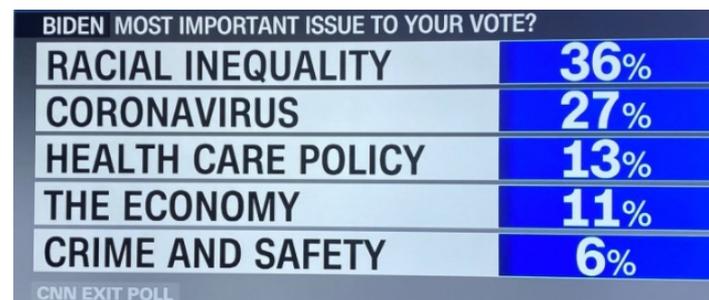
Topic	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2022-26	2022-31
Static Budget Deficit	-\$5.3	\$24.8	\$44.2	\$65.3	\$78.6	\$70.7	\$52.9	\$38.0	\$23.6	\$6.1	\$207.7	\$398.9
Total infrastructure spending	\$27.2	\$50.5	\$68.0	\$81.9	\$89.0	\$81.4	\$64.2	\$47.6	\$35.4	\$26.8	\$316.7	\$572.0
Transportation	8.2	17.8	27.0	36.1	45.6	47.4	42.1	34.2	26.5	20.4	134.6	305.2
Environmental remediation and other authorizations	13.9	18.0	19.1	20.5	19.4	15.3	10.1	6.1	4.1	3.0	90.9	129.6
Energy and water	3.6	9.1	12.9	14.1	13.6	11.8	9.1	6.4	4.5	3.1	53.4	88.4
Broadband	1.5	5.7	8.9	11.1	10.3	6.7	2.7	0.6	0.1	0.0	37.5	47.6
Bond provisions	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	1.2
Total pay-fors	-\$32.5	-\$25.7	-\$23.8	-\$16.6	-\$10.4	-\$10.7	-\$11.3	-\$9.6	-\$11.8	-\$20.7	-\$109.0	-\$173.1

Source: Moody's Analytics and HilltopSecurities.

President's Build Back Better Social Spending Package, Status

Political Landscape

- Results from 2020 elections
 - President launched progressive agenda
- Results from 2021 elections
- Likely before in 2022 mid-terms
 - BBB status
 - Very limited potential for fiscal policy after
 - Steps toward deficit reduction



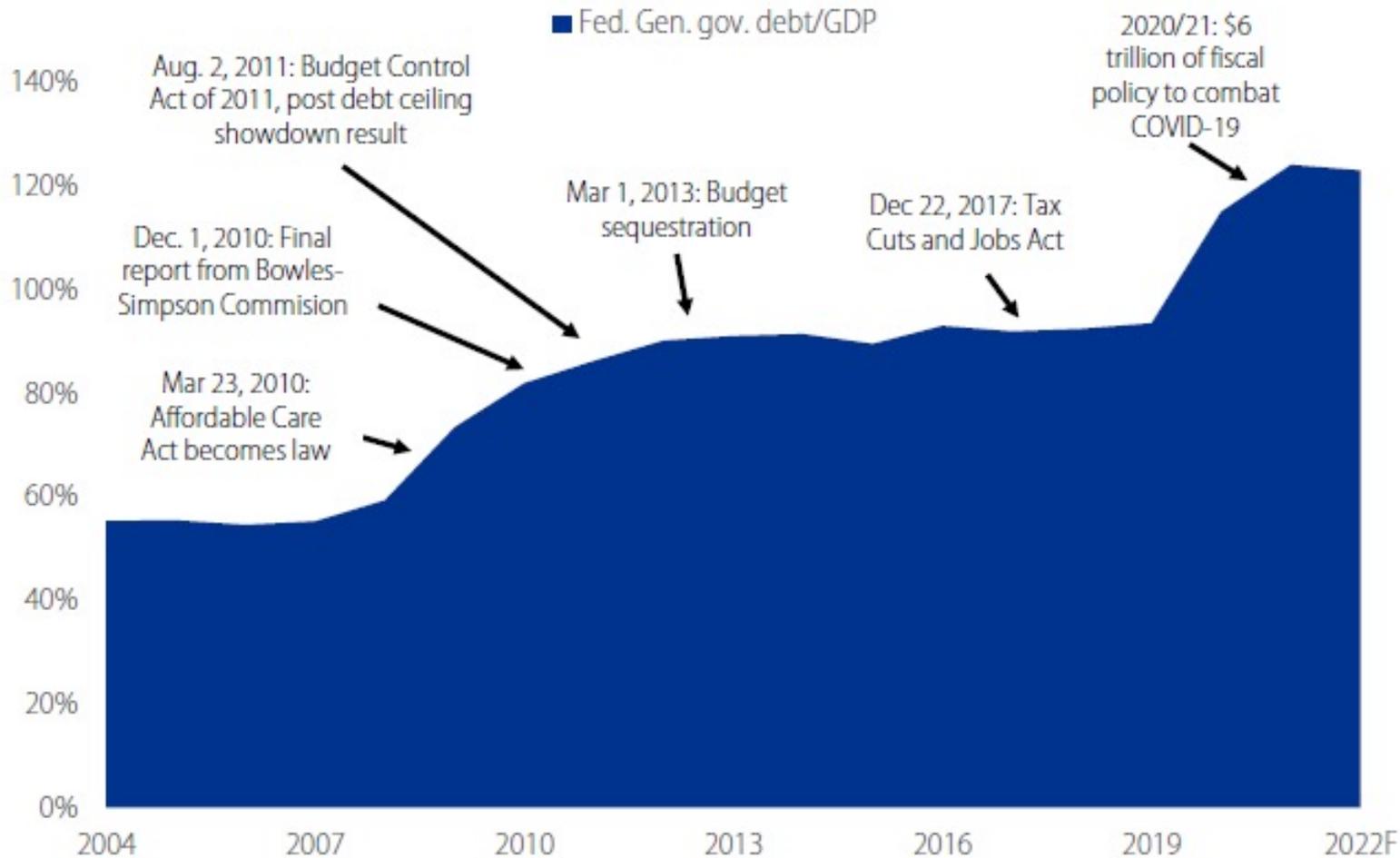
President Biden's Three-Part, Build Back Better Agenda

Plan	Name	Date / Status	Amount (\$ billions)
One	The American Rescue Plan	March 11, 2021 / Enacted into law	\$1,900
Two	The American Jobs Plan	March 31, 2021 / Introduced	2,650
Three	The American Families Plan	April 28, 2021 / Introduced	1,800
Total			\$6,350

Source: HilltopSecurities.

New Decade, Stronger Threat to the Tax-Exemption

Rising U.S. Federal Government Debt, % of U.S. GDP



Source: Moody's, US Treasury, Federal Reserve, and HilltopSecurities.

HilltopSecurities Research and Analytics

- **Tom Kozlik, Head of Municipal Research and Analytics:** With over two decades of experience in the fixed income industry, Kozlik is a nationally recognized strategist who brings unique insight and perspectives to his commentary and analysis of municipal market trends, opportunities, and challenges. From 2018 to 2021, Smith's Research and Gradings included him on the first team in the generalist category of its Municipal All-Star Team. He has been voted to the Institutional Investor's All-America Fixed Income Research Team and Greenwich Associates named him one of the Most Helpful Analysts in Municipal Bonds. In addition, Kozlik has taught graduate-level public finance courses at the University of Pennsylvania's Fels Institute of Government, where he earned a Masters of Government Administration.



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Municipal Commentary
December 2, 2021

U.S. Municipal Bond Market The Municipal Market in 2022

- The Golden Age of Public Finance will continue into 2022.
- Outsized fiscal policy that was already approved will continue to support public finance and municipal bond market credit quality.
- Federal lawmakers provided a meaningful amount of direct and indirect legislative support for public finance in 2021. We do not expect the same type of assistance in 2022, nor is it needed at this time.
- We also do not expect that the municipal bond friendly elements will be added back into the Build Back Better social spending plan when lawmakers reconsider it this or next year.
- The discovery of the Omicron variant provides yet another test to the resilience of public finance.
- Total municipal issuance in 2021 could come close to our 2021 forecast of \$460 billion. We expect \$495 billion of issuance in 2022.
- We expect public finance upgrades to continue to outpace downgrades in 2022, mostly because of the outsized fiscal policy support offered by the U.S. federal fiscal policy.

Positive & Negative Impact from Outsized U.S. Fiscal Policy to Endure in 2022

The impact from the outsized amount of U.S. fiscal policy that has become law since March 2020 will continue to positively support U.S. public finance and the municipal bond market in 2022. The \$7.6 trillion of federal relief already approved by Congress could be joined by another \$1.2 trillion of Build Back Better social spending, making the total amount of fiscal policy closer to \$10 trillion. New federal fiscal policy would not cause us to adjust our 2022 outlook in either direction.

The vast amount of federal relief significantly contrasts the amount offered up during and in the wake of the Great Recession 10 or so years ago. Therefore, we are not expecting public finance entities to recover as slowly as they did from 2011 to 2015. This time around, public finance entities will have more resources available to them so they can better manage through uncertainties COVID-19 and its variants are likely to offer. The Golden Age of U.S. Public Finance began this year, and we reiterated our Golden Age call in November after the House passed the bipartisan infrastructure bill, which President Biden signed into law.

Readers should keep in mind there are still underlying matters pressuring public finance organizations, and these issues will require ongoing attention and maintenance. The state and local government labor market, like the U.S., has its challenges. State and local government employment began to make a comeback in the spring and summer of 2021 but began to dip, and state and local government jobs have fallen in August, September, and October. Retirements may be mounting, and this could be challenging for public finance leaders to overcome in 2022.

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The impact from the outsized amount of U.S. fiscal policy that has become law since March 2020 will continue to positively support U.S. public finance and the municipal bond market in 2022.

Please see disclosure starting on page 8.

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