J.P.Morgan

Asia Economic Research

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Global and Korea economic outlook

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See the end pages of this presentation for important disclosures.

Global GDP growth

Global GDP should rebound strongly from 2Q21; vaccine deployment should ultimately break the link between mobility and contagion

		%y/y			%q/q saar				
	Avg 00-19	2020	2021	2022	4Q20	1Q21	2Q21	3Q21	4Q21
Developed markets	**1.7**	**-5.0**	**5.8**	**4.3**	**3.6**	**2.0**	**8.2**	**10.5**	**4.0**
US	2.1	-3.5	6.7	4.1	4.3	6.4	10.0	8.2	3.0
Euro	1.4	-6.7	4.9	5.1	-2.7	-2.5	6.5	14.5	5.5
Japan	0.9	-4.9	3.9	2.6	11.7	-1.0	2.0	9.0	3.0
Emerging markets	**5.5**	**-1.5**	**7.6**	**4.9**	**13.3**	**5.2**	**2.6**	**6.8**	**5.4**
EM Asia	7.1	-0.2	8.7	5.5	13.9	6.8	3.2	7.7	5.9
China	9.0	2.3	9.3	5.7	14.1	4.3	6.8	5.5	5.7
Korea	4.1	-1.0	4.6	4.1	5.0	6.6	3.0	7.0	5.0
Latin America	2.5	-6.6	5.1	3.0	16.9	0.5	-1.1	3.8	4.1
EMEA EM	3.7	-2.7	4.5	4.1	6.6	1.9	2.8	5.2	4.0
Global (JPMorgan universe)	2.9	-3.6	6.5	4.5	7.4	3.3	6.0	9.0	4.6

Source: J.P. Morgan estimates.

In 2Q, strong US growth vs. slower EM with divergence in vaccine and resurgence impacts

Global level of GDP

Degree of recovery varies across economies

Table: Global real GDP

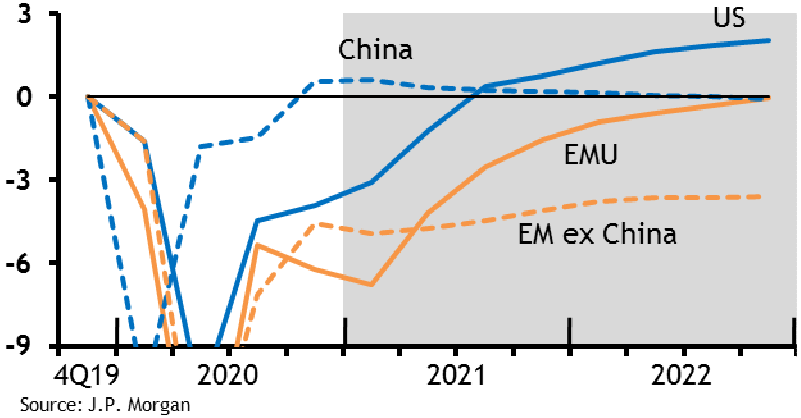
%-pt deviation from pre-pandemic potential path(2019 potential path)

	2Q20	4Q20	4Q21	4Q22
Global	**-11.1**	**-3.7**	**-1.0**	**-0.2**
DM	**-12.6**	**-4.6**	**-0.4**	**0.8**
US	-10.8	-3.8	0.8	2.1
Euro area	-15.4	-6.1	-1.8	-0.3
UK	-21.8	-8.8	-1.8	-0.8
Japan	-9.2	-2.1	0.2	0.6
EM	**-8.7**	**-2.3**	**-1.8**	**-1.6**
EM ex China	**-14.7**	**-5.0**	**-4.1**	**-3.7**
China	-1.6	0.9	0.9	0.9
India	-25.9	-7.5	-6.5	-8.2
Brazil	-11.4	-2.0	-2.2	-1.4
Mexico	-18.6	-6.5	-5.5	-4.4
Russia	-9.1	-4.2	-1.7	-0.9
South Africa	-17.5	-5.4	-4.4	-3.3

Source: J.P. Morgan

Real GDP

% deviation from potential path



Source: J.P. Morgan

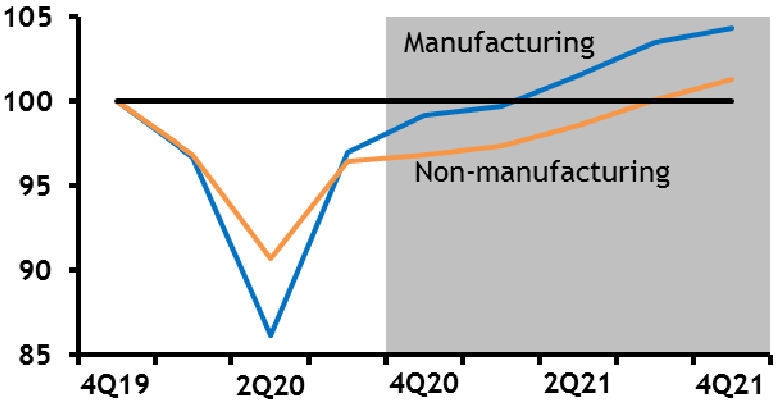
Now, we expect a US leadership in recovery in the medium term

Global: COVID-19 and sector divergence

Rebound led by goods sector; services to lag with lingering COVID-19

Global real GDP, decomposed

Index, 4Q19=100

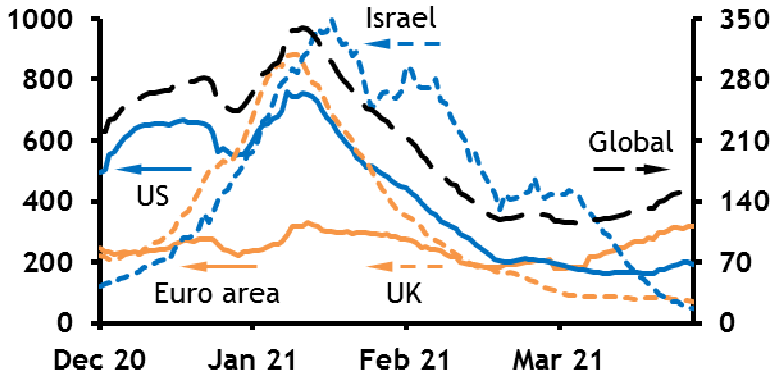


Source: J.P. Morgan

Manufacturing sector should continue to lead the recovery; services recovery is delayed by mobility restrictions

New COVID-19 cases per million

7-day moving average, both axes



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

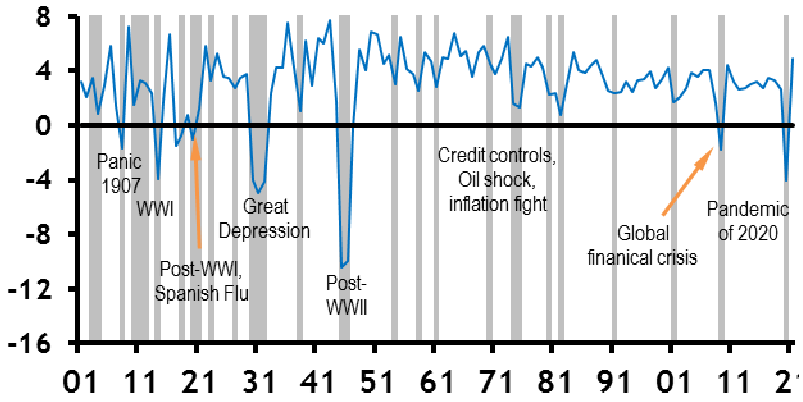
Cautiously waiting for mass vaccinations to break the link between mobility and contagion

Global: Output gap outlook

Bouncing to malaise: Global negative output gap remains

Global recession since 1900

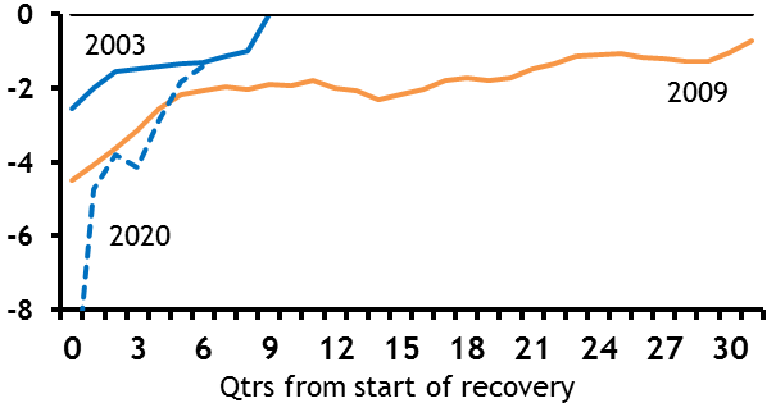
%yoy, US recession bars shown in grey (2020-21 forecast)



Source: J.P. Morgan; Angus Maddison data

Global output gap

%, GDP relative to potential, year of trough shown



Source: J.P. Morgan

Record plunge followed by record bounce

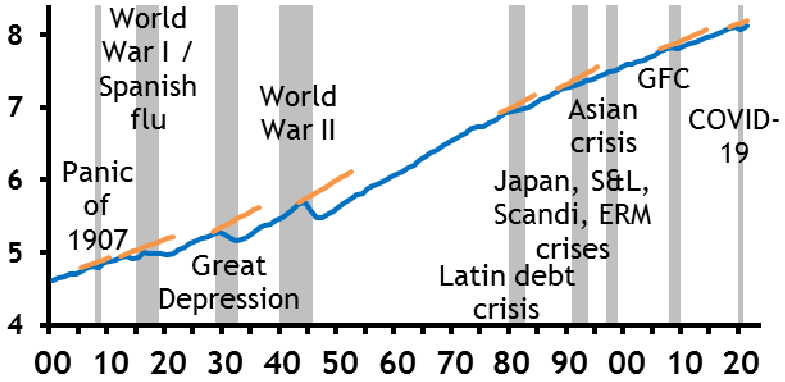
Now we expect the output gap to be narrower than the similar phase in 2009 recession

Global: Lasting harm on potential growth

Output gap may be closed sooner than expected, yet by falling potential GDP

Real global GDP

Ln(index); Orange lines show ext. of trailing 8yr trend

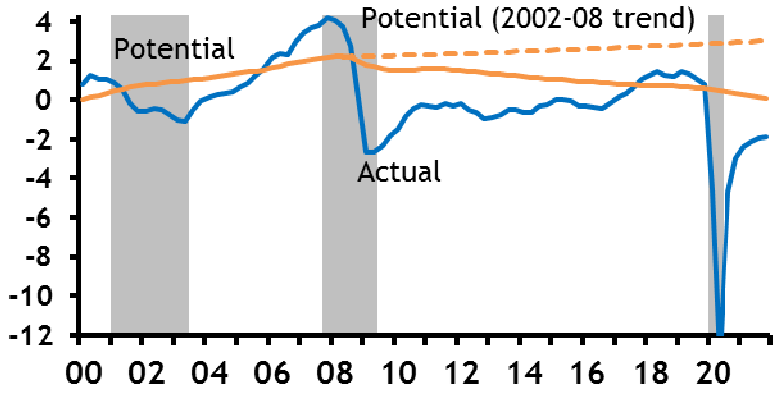


Source: J.P. Morgan

Lasting impact of recessions: Real GDP has never recaptured the pre-recession trend

Global real GDP, detrended

Index, detrended by actual growth 1Q00-4Q19 (=2.7%ar)



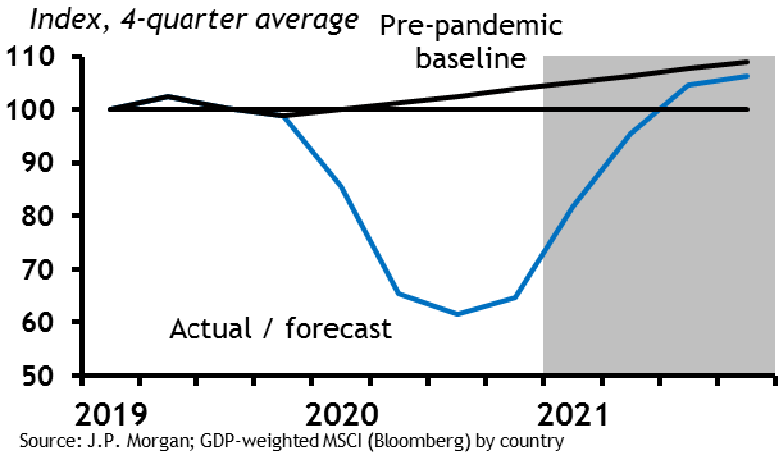
Source: J.P. Morgan; Dev Mkt recession bars

Output gap to be closed, yet with diminished capacity (potential GDP)

Global: Lasting harm from the pandemic

Legacy of incomplete recovery: Lackluster profits

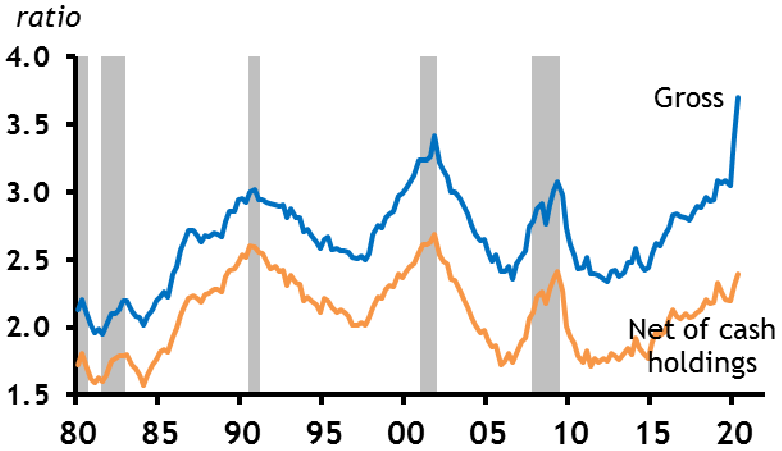
Global corporate profits, level



Source: J.P. Morgan; GDP-weighted MSCI (Bloomberg) by country

Business profits are expected to be below pre-pandemic trend at end-2021; and accumulated profit loss resulted in higher debt

US nonfin corporate debt-to-EBITDA ratio



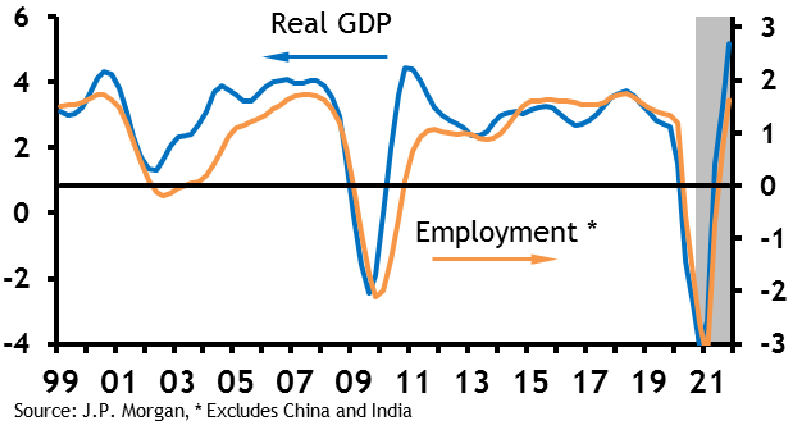
Source: BEA, Federal Reserve, J.P. Morgan

US debt as a share of earnings has soared higher than the GFC. Impaired corporate b/s may limit capex growth in the long term

Global: Lasting harm from the pandemic

Legacy of incomplete recovery: Labor markets scarred

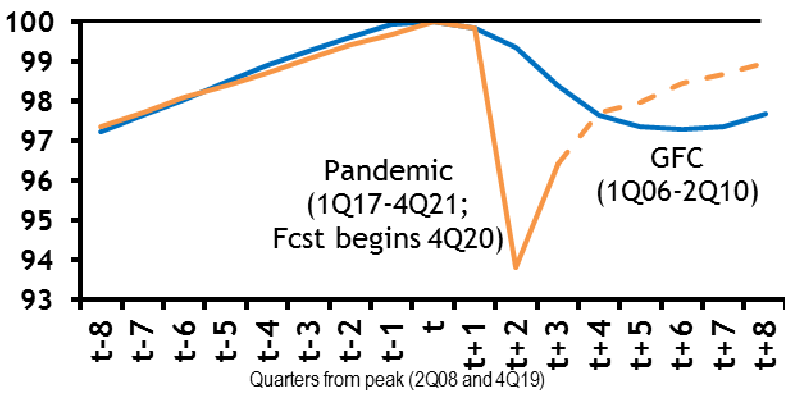
Global GDP and employment



Source: J.P. Morgan, * Excludes China and India

Global employment contraction was in line with GDP contraction

Global* Employment

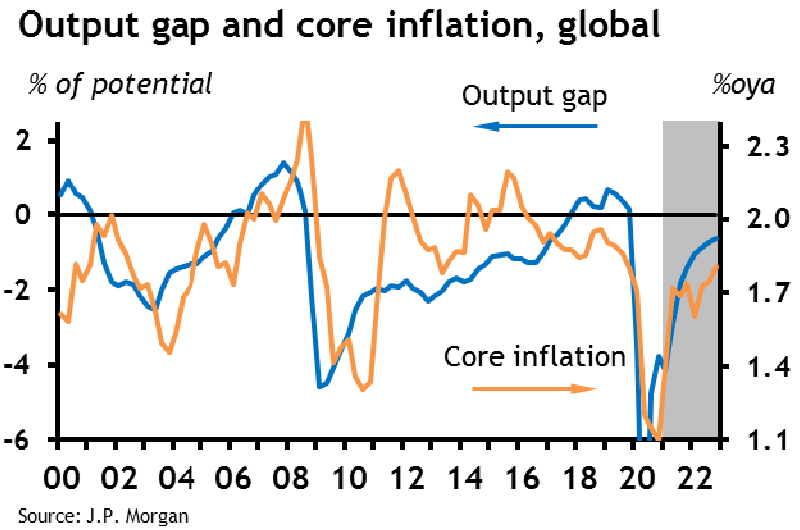


Source: J.P. Morgan, * Excludes China and India

Faster recovery of employment this time (natural disaster shock) yet not complete recovery. Possibly lasting impact on productivity and labor participation

Global: Inflation outlook

Noisy rise in inflation is expected in 1H; modest global reflation to follow



Through the noises, case builds for global reflation

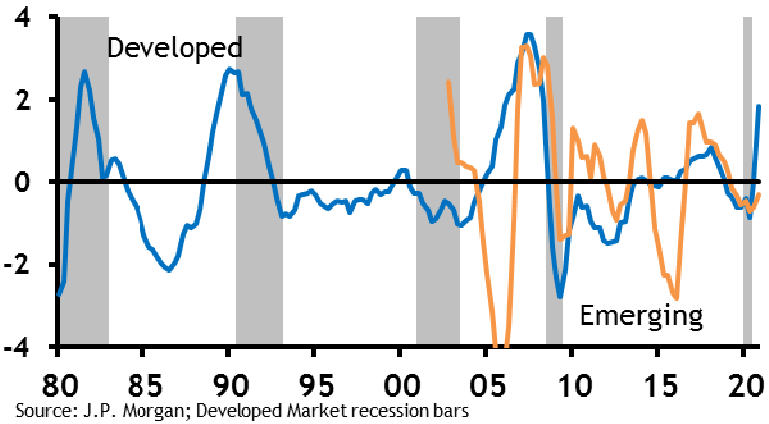
- Global inflation should strongly rebound in 2Q to above 3%, which is largely noise (base effect)
- Yet stronger growth and rapidly diminishing slack skew inflation risk to the upside
- Medium-term reflation gets boost from commitments to ease policy beyond this year
- However, labor slack and sticky services prices are tempering forces
- Another risk: supply side bottlenecks

Global: Housing market

Acceleration in DM house prices; risk is yet modest in our view

House prices, deviation from trend

% deviation from HP filter

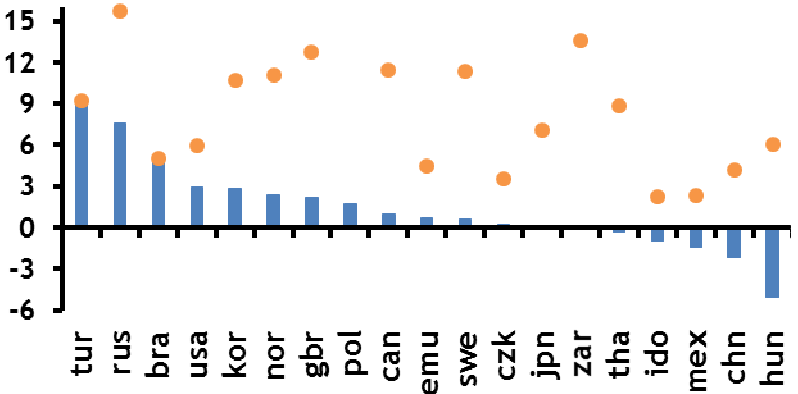


Source: J.P. Morgan; Developed Market recession bars

Sharp acceleration of housing prices in DM after the pandemic, yet still contained compared to previous episodes

House prices, deviation from trend

% deviation from HP filter (bar: 4Q20; dot: max)



Source: J.P. Morgan

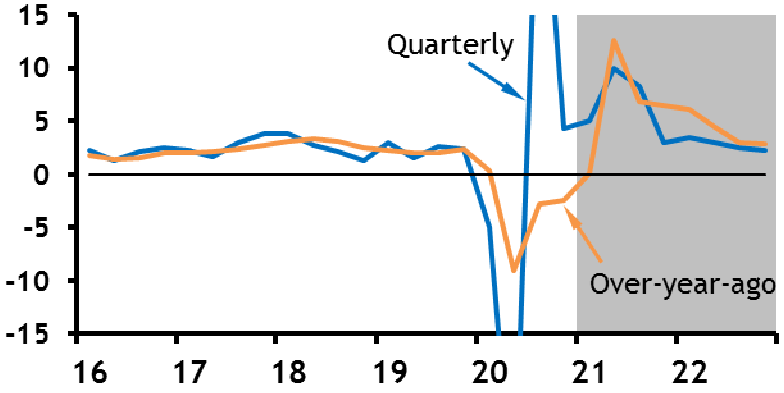
Boom growth ahead is a risk, yet most countries' housing price growth are well below their historical max

US: Growth outlook

Strong turn up in GDP growth this year with vaccine and fiscal stimulus

US Real GDP growth

%ch, annual rate

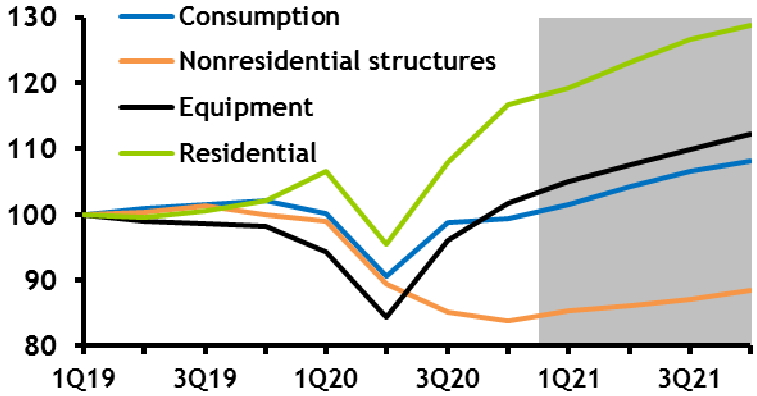


Source: BEA, J.P. Morgan forecast

Strong recovery to push up US real GDP growth to 6.7% this year

US Real domestic demand

index, 1Q19=100



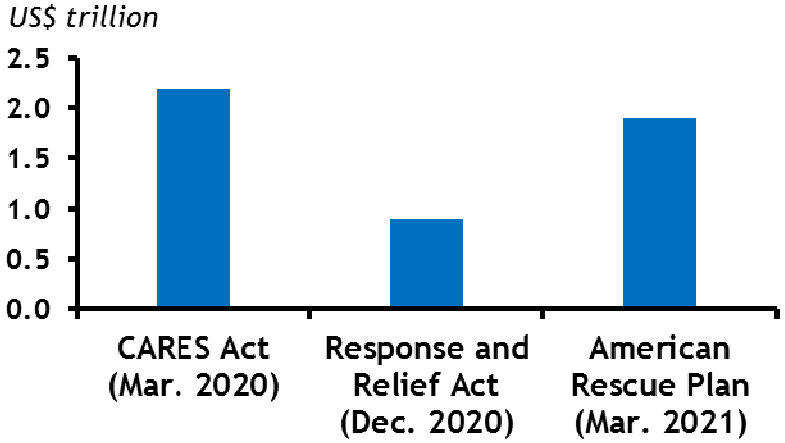
Source: BEA, J.P. Morgan forecast

Stronger in residential construction, equipment investment, and goods consumption

US: Fiscal policy

Aggressive fiscal stimulus serves as a bridge to broader recovery

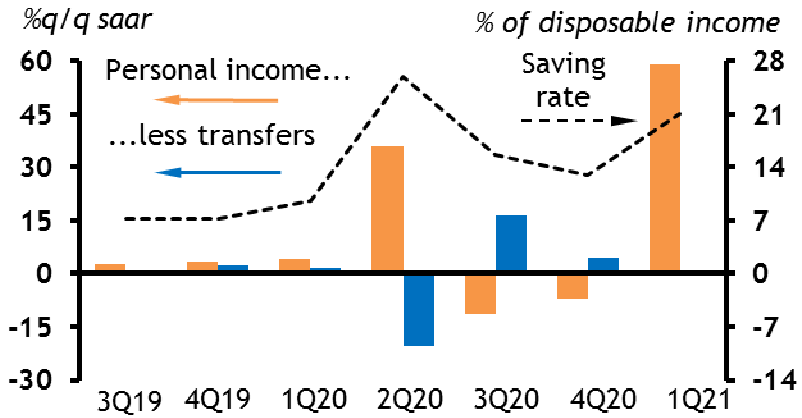
US fiscal stimulus packages



Source: J.P. Morgan

Series of fiscal stimulus, with stimulus checks, small business supports, and unemployment aid

US real personal income and saving

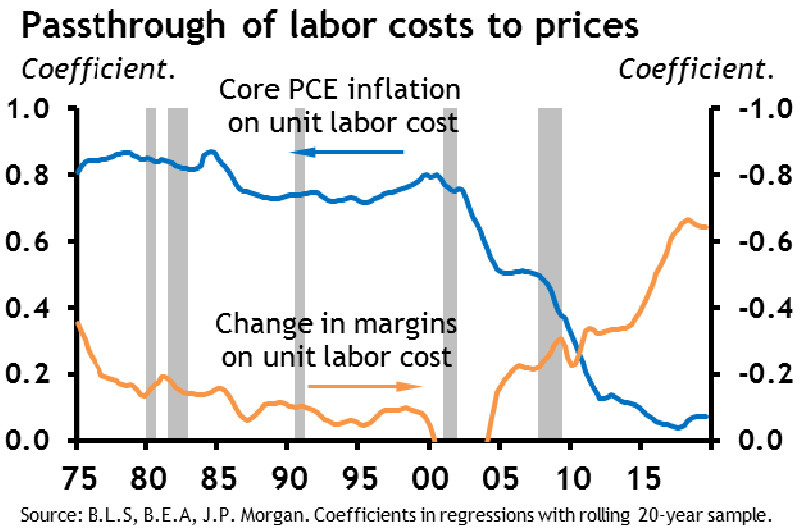


Source: BEA, J.P. Morgan

Jump in 1Q personal income, nearly all due to transfer payments. Higher savings should spill over to later quarters' consumptions

US: Inflation outlook

US underlying inflation trend will firm only modestly



Passthrough from wage costs to consumer prices has fallen while impact of wage costs on margins has risen

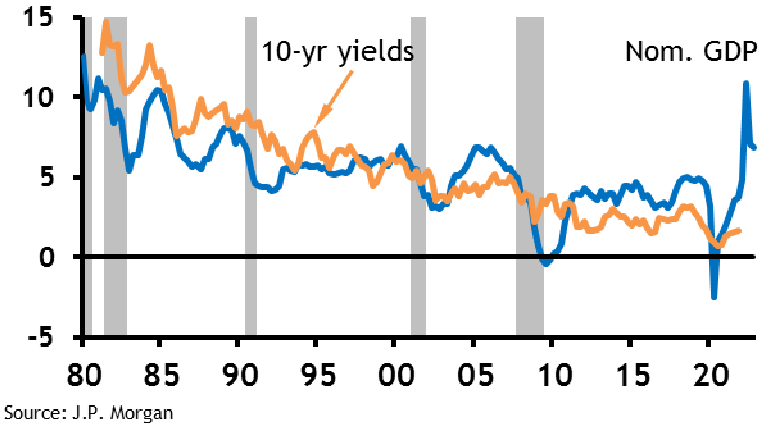
- Core PCE inflation to mark 1.9%y/y this and next year
- Well-anchored inflation expectation and flat Phillips Curve
- Tighter labor market will result in wage inflation, yet transmission from wage to price is missed
- Money supply spiked, but the link is missing from higher spending to inflation
- Travel-related prices may jump, but weights are not significant

US yield rise and spillover (1)

Rising US yields reflect macro fundamentals

US nominal GDP and 10-yr yield

%, ar. GDP is 8q ch. forecast through 4Q22



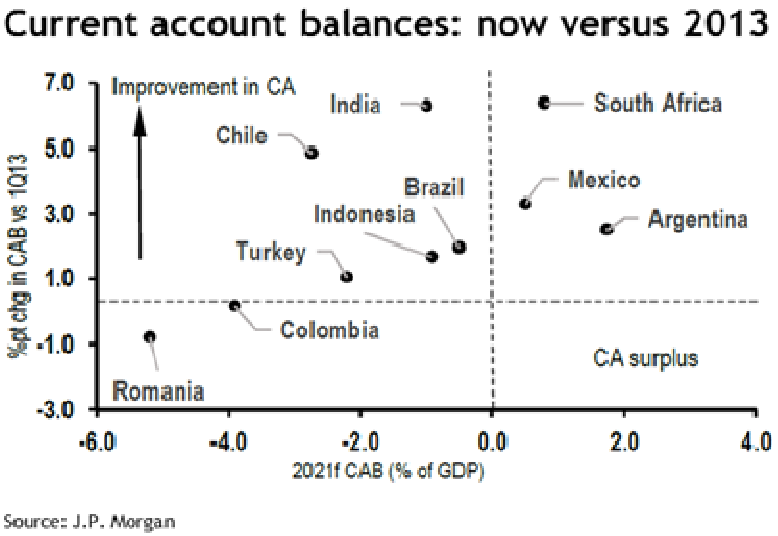
Source: J.P. Morgan

US nominal GDP growth should reach about 7% this year and next on average

- UST 10yr yields rose, consistent with macro backdrops (upward revision in growth and inflation)
- Current level of UST yields does not appear to pose a threat to US growth
- Tapering announcement should be around the end of this year, yet rate normalization is likely off the table at least through 2022

US yields rise and spillover (2)

EM fundamentals less vulnerable to a Fed taper than in 2013



"Fragile 5" running broadly balanced CA, as the deficits have narrowed since 2013

- EM assets usually rally when global growth/inflation recovers, but hit by DM real rate increases (i.e., taper tantrum)

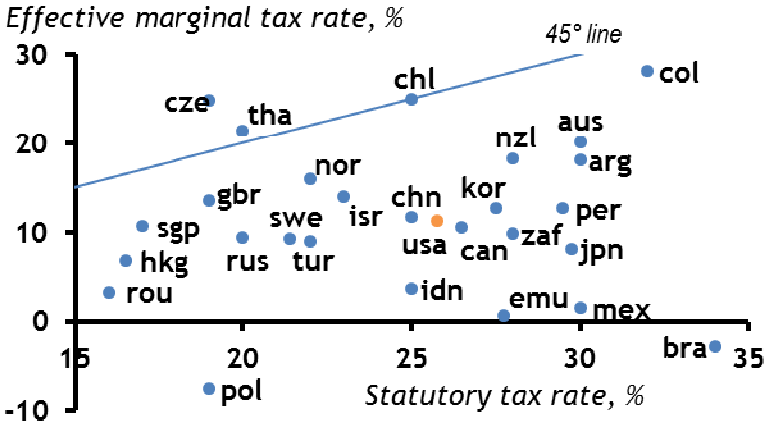
This time may be different:

- EM output gap should remain negative (vs. overheating in 2013; further recovery should be in the pipeline)
- Current account deficits are smaller now; private net savings is higher to provide a buffer
- Risks/vulnerabilities are in elevated debt levels

US: Corporate tax hike?

US corporate tax hike may have a limited macro impact

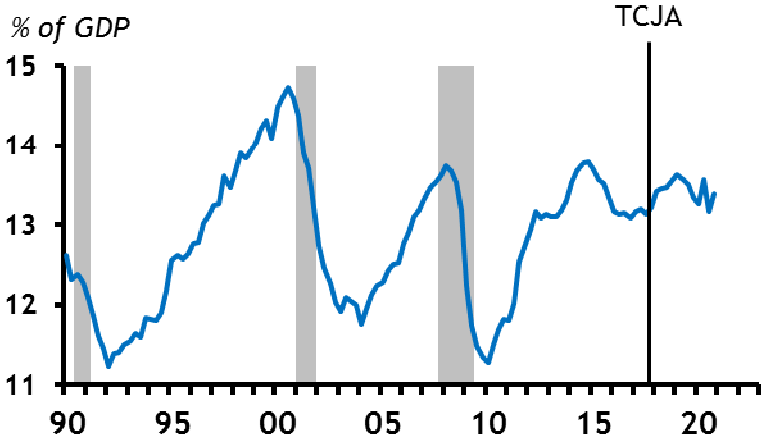
Global corporate tax rates, 2019



Source: OECD, J.P. Morgan

US corporate tax rate (effective marginal) is still low in international comparison (revenue to GDP ratio is also low)

US business capital expenditures

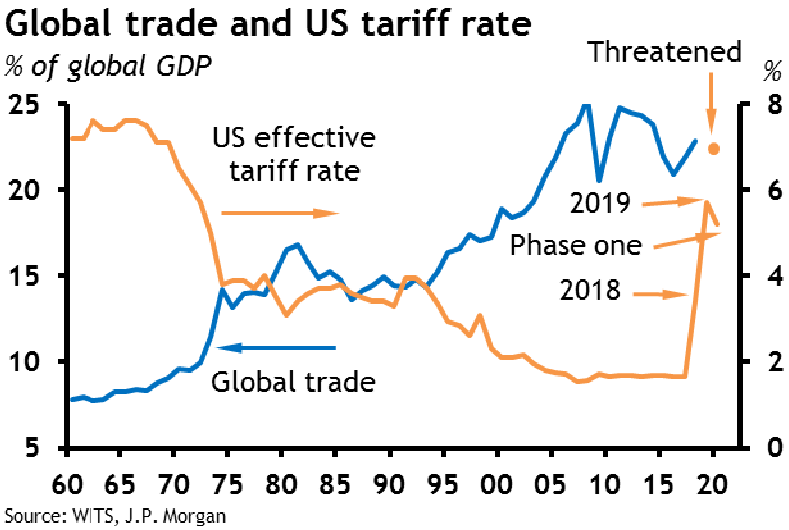


Source: Federal Reserve, J.P. Morgan

Tax cuts and Jobs Act of 2017 had little impact on business capex

US-China power conflict

Evolving from 2018-19 trade war to great power conflict in 2020-25*



Tit-for-tat tariff increases indirectly drag down global growth through sentiment

Developing 'great-power' competition

- Conflict shifts to technology
- Financial sector is a potential battlefield
- Geopolitical conflict an underlying constant

Baseline scenario:

- Reduced reliance on tariffs
- Gradual decoupling on technology
- Gradual US recovery amid a slowing trend in China

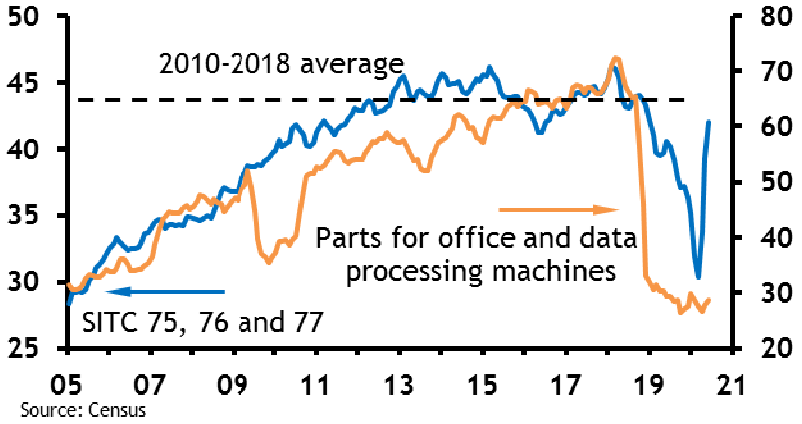
Source: The election and the US-China great power conflict, Oct 14, 2020

Out of China and repercussions

US-China tensions accelerating shift toward a more diversified regional supply chain

China share of US tech imports

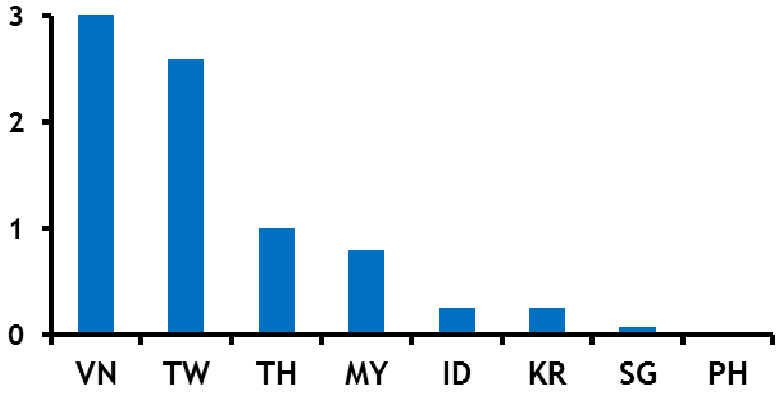
% share of same type imports, 3mma, both scales



Source: Census

Shift in US import share from EMAX

% change in share, 1H20 less 2018



Source: Census, SITC 75, 76, and 77 categories

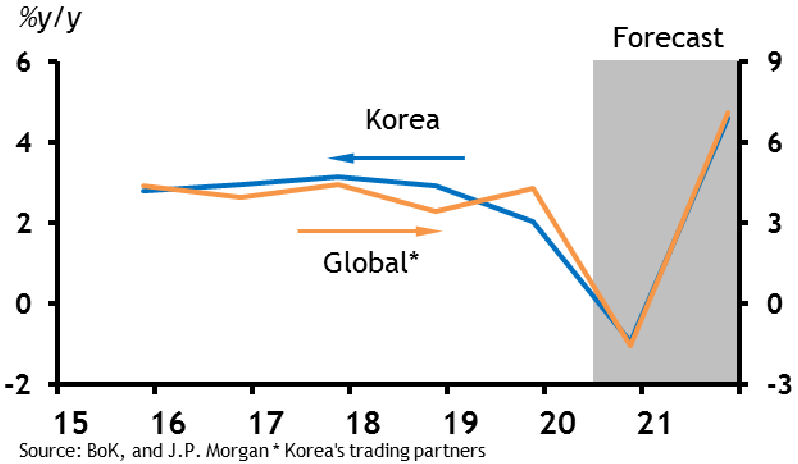
Reduced Chinese share in high-end tech inputs (servers and comm. equipment)

OEMs leading the diversification towards regional economies

Korea: Global spillover

Korea's 2021 real GDP growth should turn up sharply due to global spillover to its exports growth

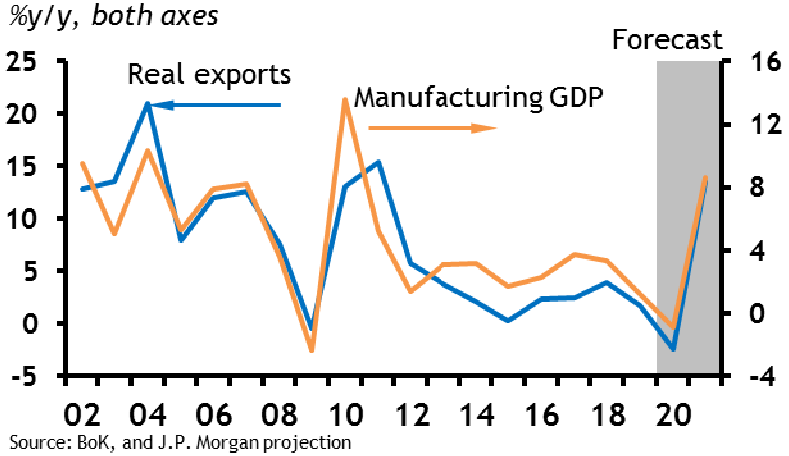
Global and Korean real GDP growth



Source: BoK, and J.P. Morgan * Korea's trading partners

Expected sharp rebounds of real GDP growth in 2021 for Korea's trading partners and Korea

Real exports and manufacturing GDP



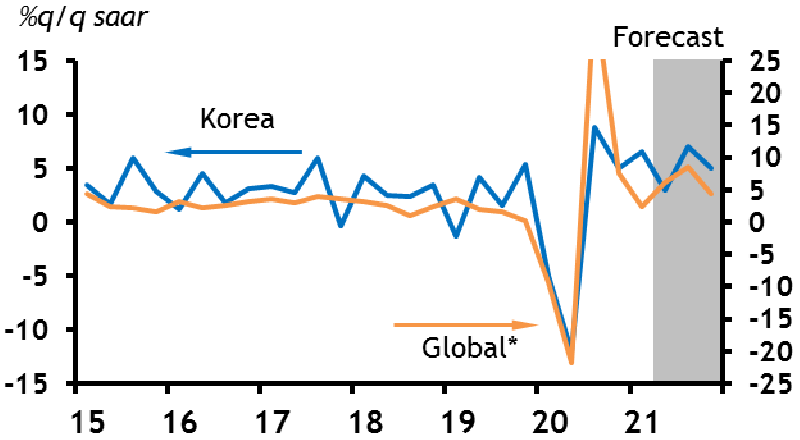
Source: BoK, and J.P. Morgan projection

We expect about 13%y/y real export growth, and about 9% manufacturing growth in 2021

Korea: Quarterly growth

Stronger quarterly growth in 2H with ease in virus containment efforts

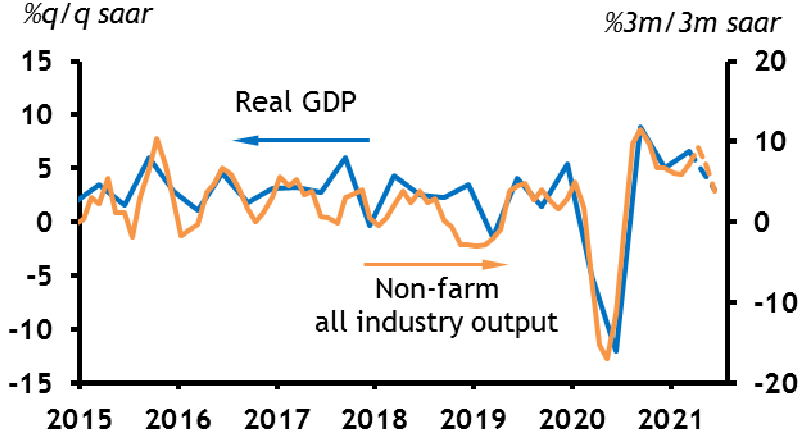
Korea and global GDP growth



Source: BoK, and J.P. Morgan * Korea's trading partners

Korea's quarterly real GDP growth to peak in 3Q after a moderation in 2Q

Real GDP and non-farm all industry output



Source: BoK, NSO, and J.P. Morgan. Dotted lines are JPM forecasts

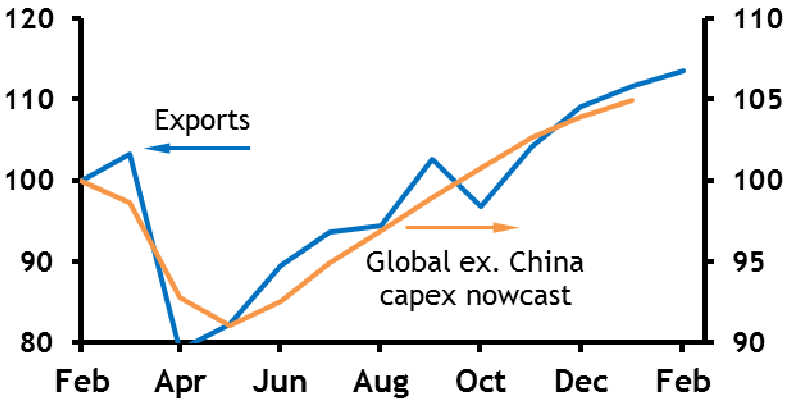
Some slowdown in 2Q IP likely with supply bottleneck's drag on auto production and with a moderation in exports growth

Korea: Exports

Korea’s exports growing in line with global capex recovery

Korea's customs exports and global capex

2020 Feb = 100

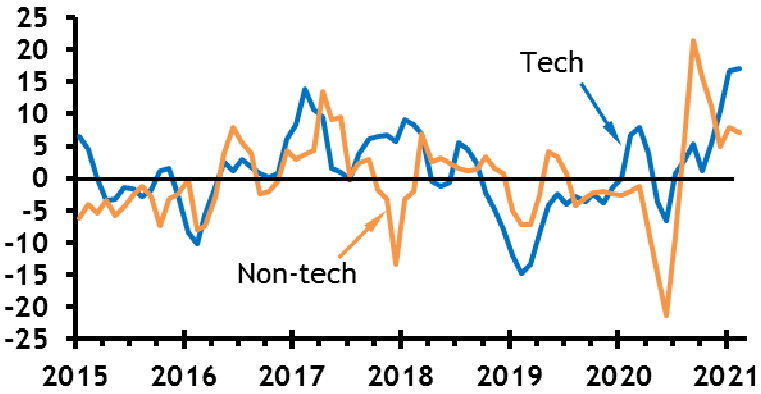


Source: MoTIE, and J.P. Morgan

Global capex recovers robustly, and Korean exports are a bellwether indicator for global capex

Customs exports - tech vs. nontech

% 3m/3m sa



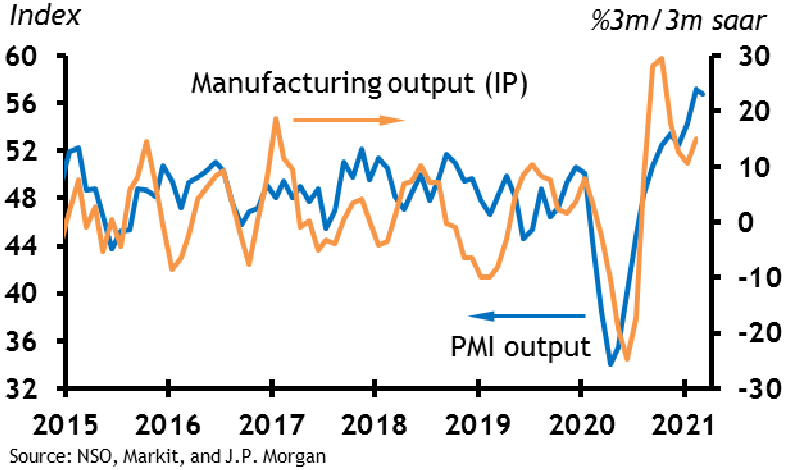
Source: MoTIE, KITA, and J.P. Morgan

Tech exports have been leading the overall growth in recent months

Korea: Manufacturing sector

PMI hints at production capacity squeeze to meet elevated demand

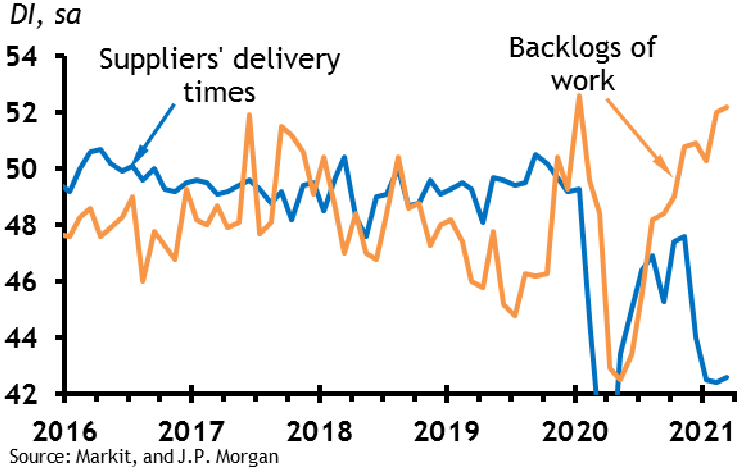
Manufacturing output - PMI vs IP



Source: NSO, Markit, and J.P. Morgan

Manufacturing PMI was at a decade-high level, suggesting strong manufacturing sector performance

Manufacturing PMI details



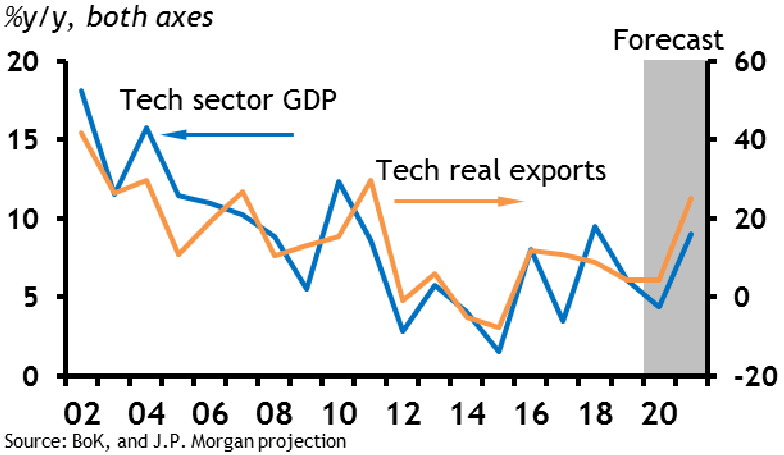
Source: Markit, and J.P. Morgan

With supply bottlenecks (mostly intermediate goods), there is a hint of production capacity squeeze

Korea: Tech sector outperformance

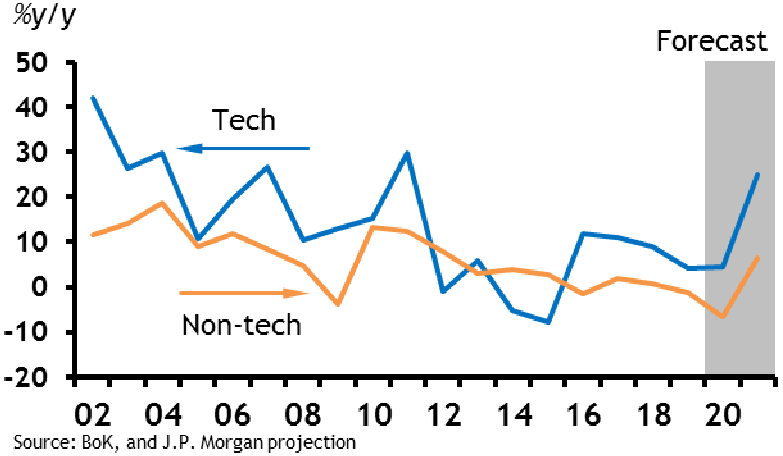
Tech sector's share has risen to 11% of GDP; we expect further growth

Tech sector outlook



Source: BoK, and J.P. Morgan projection

Tech vs. nontech real exports



Source: BoK, and J.P. Morgan projection

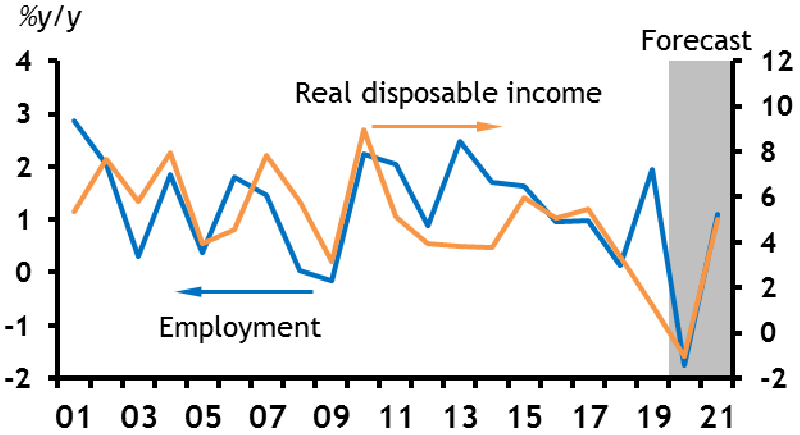
Continued global tech demand on personal devices, larger data storage and processing, and faster transmission through 5G networks

Tech exports to rise about 25%, while non-tech exports to rise 6.5% which is similar pace as in 2012-15 average

Korea: Private consumption

While it is not a full-recovery, employment, income and consumption growth should recover from a low base in 2020

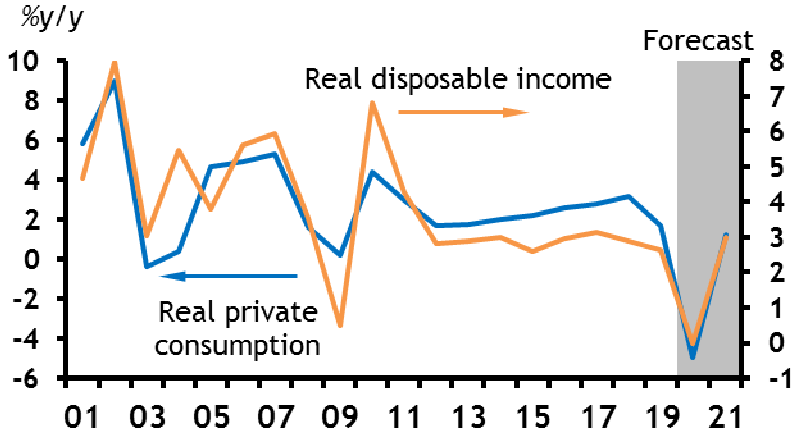
Employment and Income



Source: BoK, and J.P. Morgan forecast

Even if we assume an incomplete recovery in employment to lag a GDP recovery, employment growth should bounce from a low base

Income and private consumption



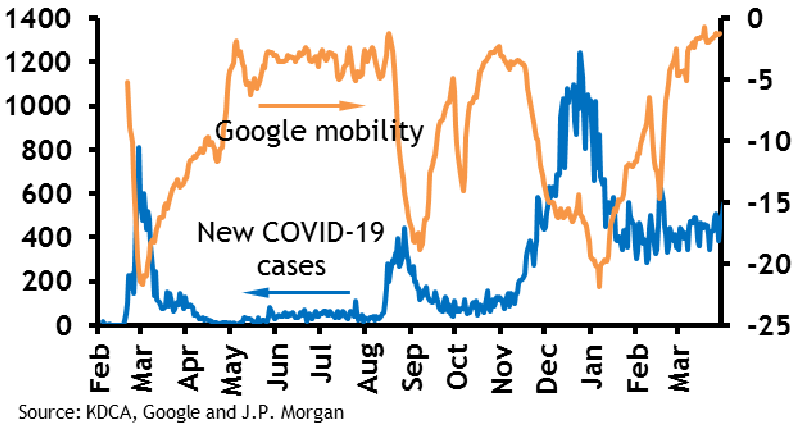
Source: BoK, and J.P. Morgan forecast

Income growth recovery (along with employment recovery) implies low-1% pace private consumption growth in 2021

Korea: COVID-19 impacts

The new caseloads stabilized since February; subsequent infection waves had smaller impacts than the first wave

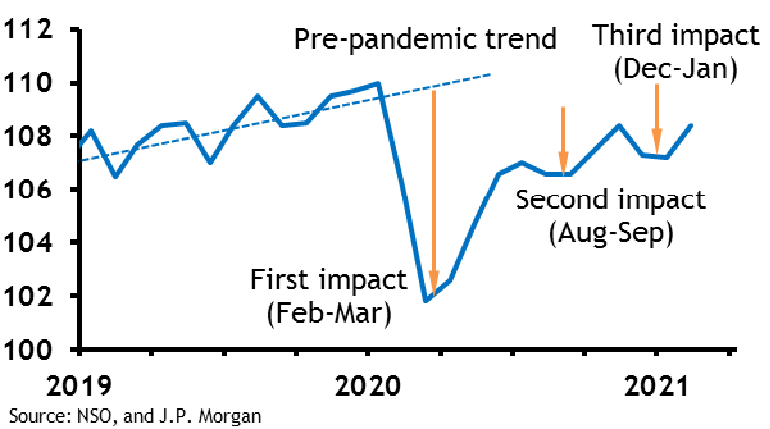
Korea COVID-19 and activity trends



Source: KDCA, Google and J.P. Morgan

COVID-19 caseloads stabilized at around the previous peak; mobility recovered

COVID-19 and service activities



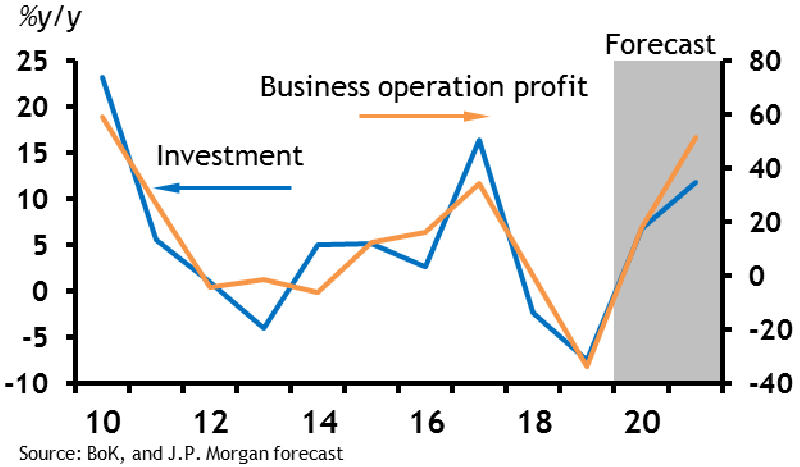
Source: NSO, and J.P. Morgan

Second and third impacts on service activity were more benign than the first impact

Korea: Fixed investment

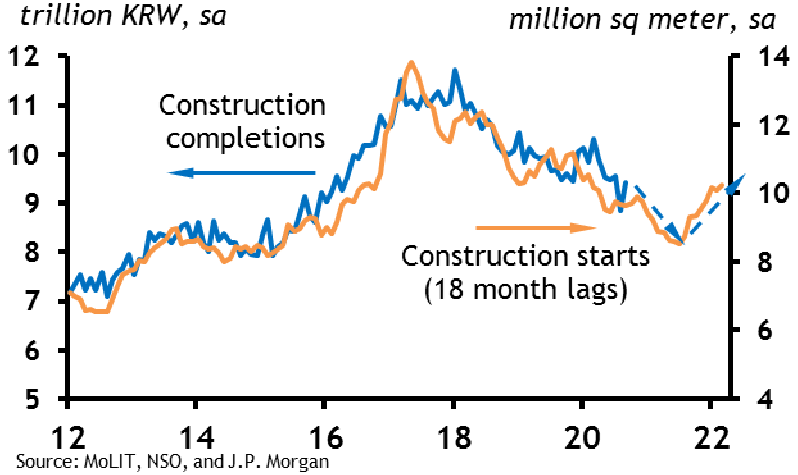
Facility investment is resilient; construction investment to turn up in 2H21

Facility investment



Source: BoK, and J.P. Morgan forecast

Construction starts and completions



Source: MoLIT, NSO, and J.P. Morgan

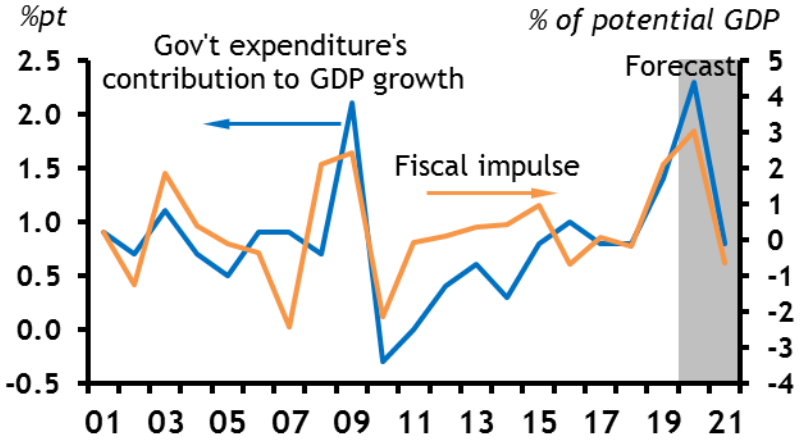
Facility investment growth should remain resilient in 2021 boosted by robust profit growth, led by the tech sector

Construction investment should fall further in 1H21, but recover in 2H after a multi-year down cycle

Korea: Fiscal buffer

Greatest fiscal stimulus in 2020 since GFC; fiscal balance should be broadly maintained in 2021

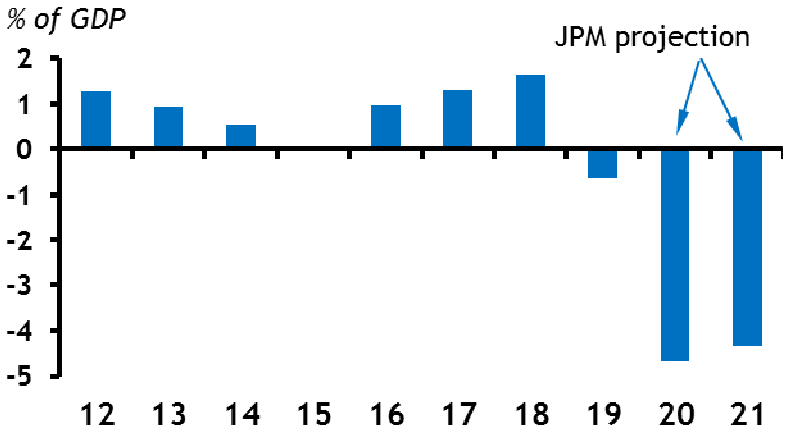
Fiscal impulse and growth impact



Source: BoK, MoEF, and J.P. Morgan forecast

Largest fiscal impulse and government contribution to GDP growth in 2020 since 2009; 2021 stance is broadly neutral

Fiscal balance (consolidated)



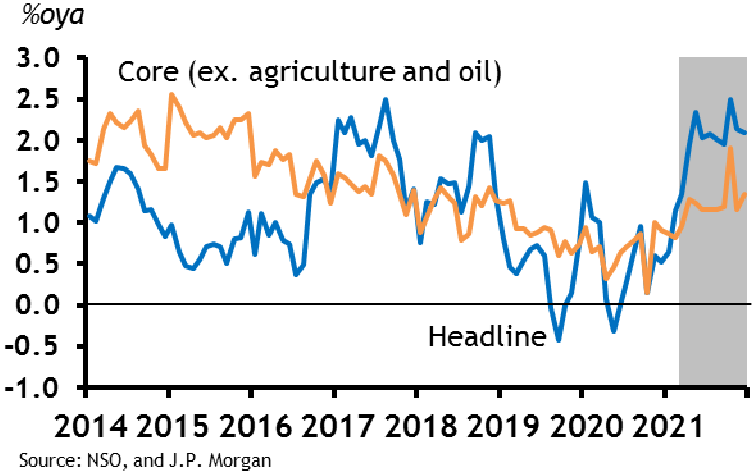
Source: MoEF, BoK, and J.P. Morgan

We expect the fiscal deficit to be 4.3% of GDP in 2021, broadly similar to 2020

Korea: Consumer inflation

Consumer inflation to spike in 2Q, then moderate through 2021

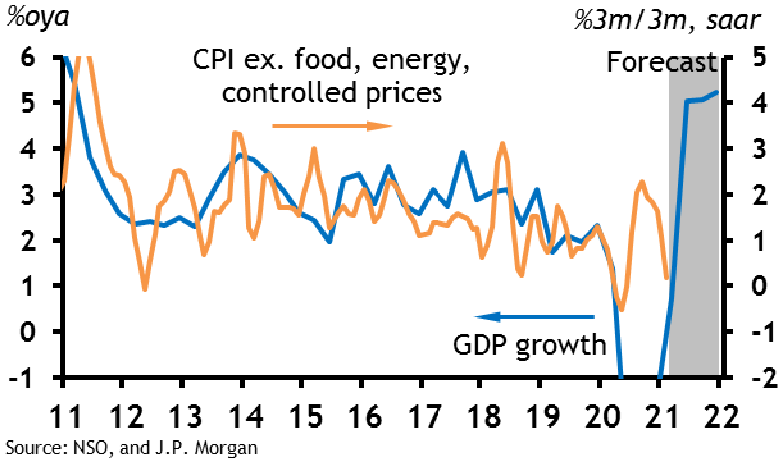
Inflation forecast



Source: NSO, and J.P. Morgan

Inflation should spike to mid-2% in 2Q to gradually stabilize around a 2% pace through 2021

GDP and demand-side price pressure



Source: NSO, and J.P. Morgan

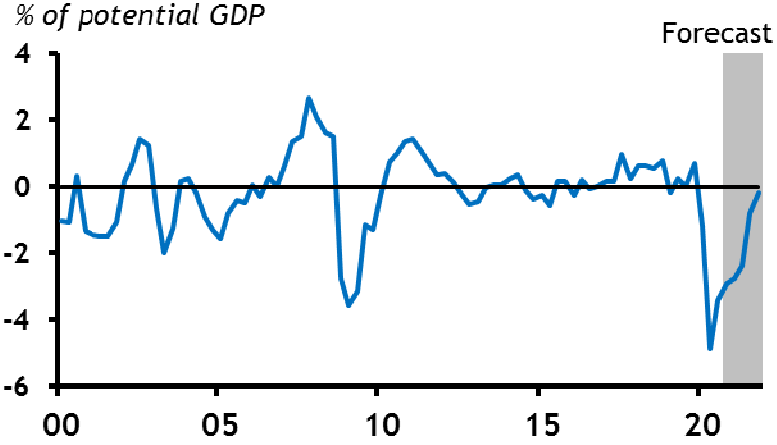
Supply-side price pressures are building up (energy and food); core prices should gradually follow a turn-up in GDP

Monetary policy

Upside risk to BoK's growth and inflation outlook; we now expect two hikes in 2022

Output gap

% of potential GDP

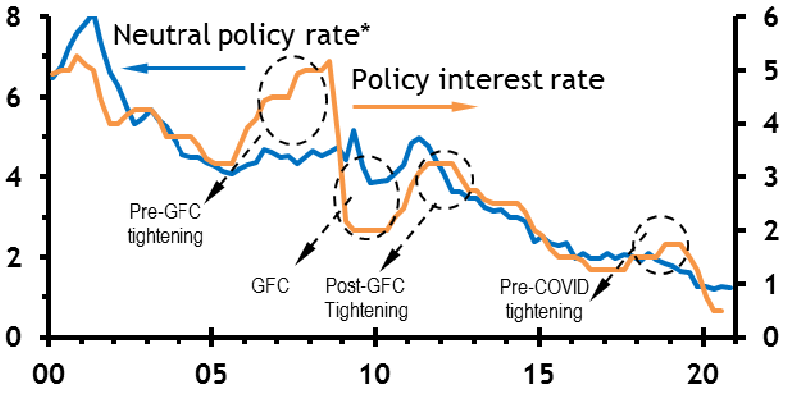


Source: BoK, and J.P. Morgan estimation

Output gap remain negative for now, but is expected to close next year

Monetary policy stance

%p.a. both axes



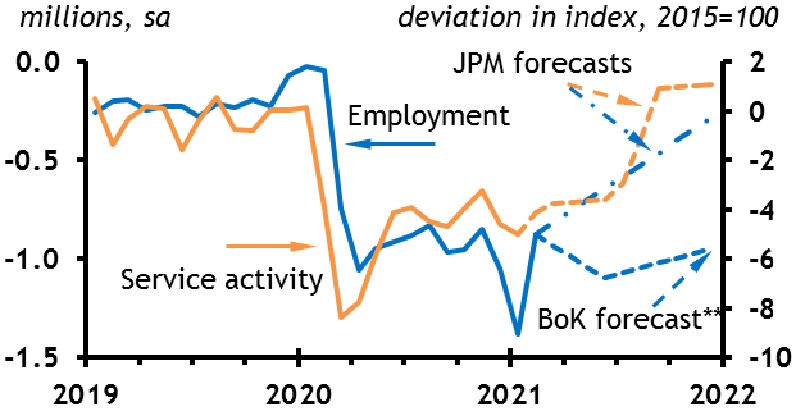
Source: BoK, and J.P. Morgan estimates, * Sum of inflation expectation and real neutral rate

While MPC is not ready yet, recovery would lead to a step-wise normalization

Monetary policy

Balance between macro and financial stability, which should tilt to financial stability once macro recovery becomes evident

Employment and service activity*



Source: NSO, and J.P. Morgan forecasts. * Deviations from 2010-19 linear trend
** Based on BoK's semi-annual forecast on employment's over-year-ago difference

If service activity recovers as we expect, BoK's employment forecast has upside risk

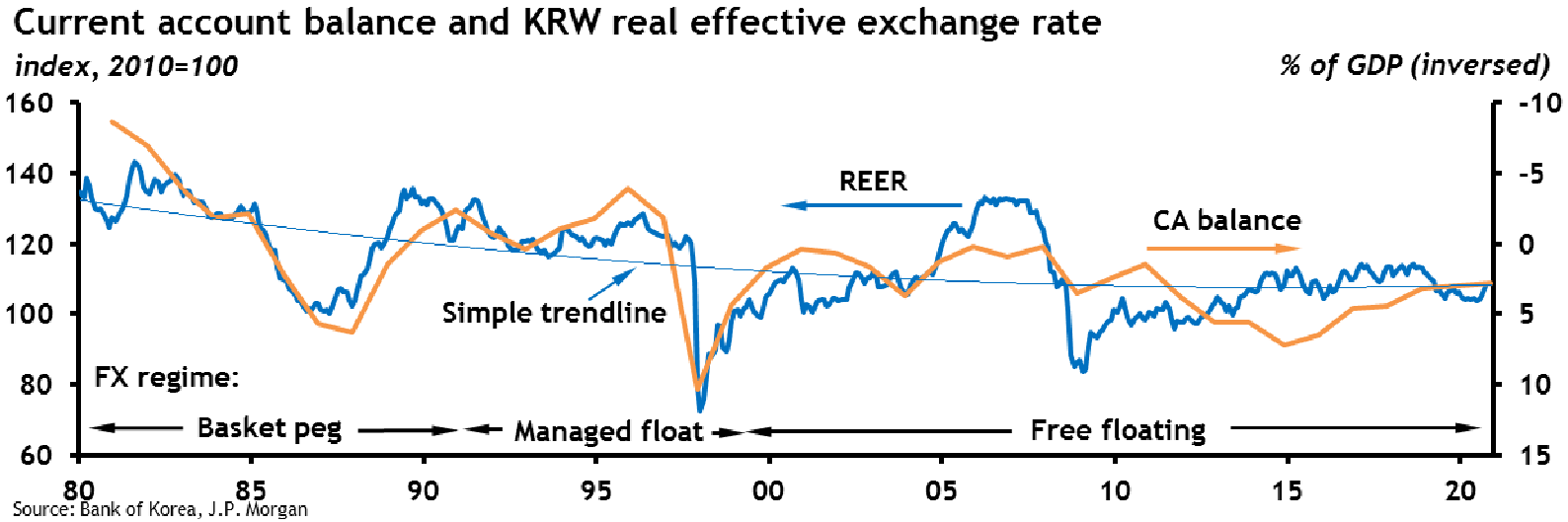
- MPC is not ready yet for a hike; balance between macro and financial stability tilted to macro
- Conservative macro outlooks, as they still see uncertainty on COVID-19 recovery path

- Yet, we believe BoK's GDP (3.0 vs. JPMe 4.6) and inflation (1.3 vs. JPMe 2.0) outlook has upside risk

- Tentative call: 25bp hikes in 1Q22 and 3Q22
- Timing and magnitude of hikes would depend on incoming data and signal

Korea won currency value

KRW REER is likely at equilibrium; impact on CA may be smaller than before

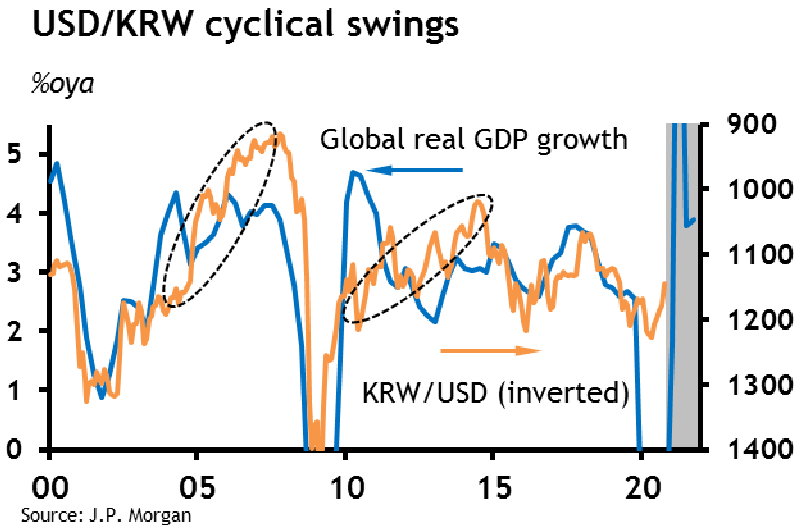


1. Korea's REER is likely aligned with fundamentals and long-term trend

2. Relationship between REER and CA balance has changed in the last decade, likely implying a limited spillover from real appreciation in exports

Korea won currency value

KRW and global cyclical recovery: JPM house KRW view is 1115 at end-2021E



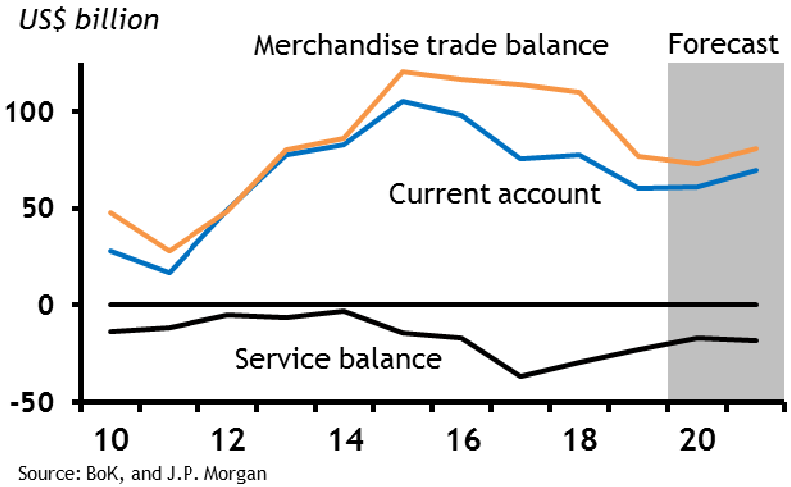
KRW's pro-cyclicality implies a modest appreciation against the USD

- KRW (vs USD) usually appreciates through a global cyclical upturn after a recession (yet with some lag)
- That would imply KRW appreciation through 2021
- But we recently revised our USD/KRW call from 1050 to 1115 by end-2021
- Need to check the balance between US exceptionalism (stronger USD) and global recovery (stronger KRW)

Korea: External account

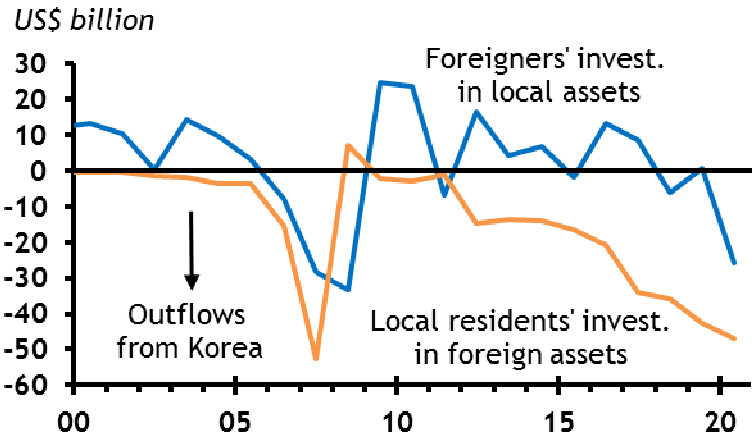
Structural current account surplus, to be recycled out to overseas investment

Current account balance



Source: BoK, and J.P. Morgan

Cross-border equity portfolio flows



Source: BoK and J.P. Morgan * annualized year-to-date for 2020

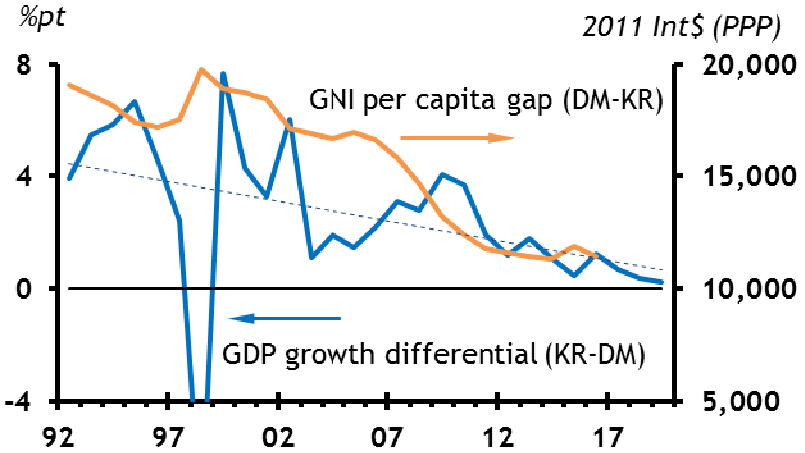
Current account surplus should continue with demographic forces to save (IMF: 2.1%pts of 3.3% GDP CA norm is from demographic factors)

Local residents continue to recycle CA surplus to overseas investment, likely providing a partial offset to KRW appreciation pressure

Korea: Long-term challenges

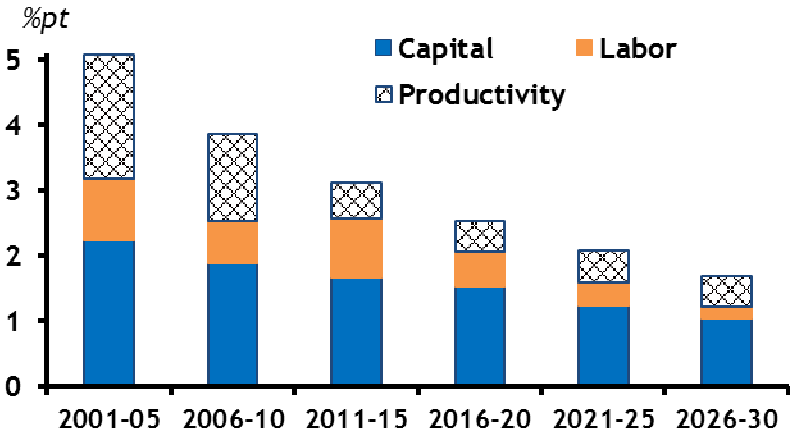
We expect Korea's potential GDP growth to slow to mid-1% pace in 10 years

Korea's growth and income compared to DM



Source: World Bank and J.P. Morgan

Composition of potential growth



Source: J.P. Morgan estimates

Secular slowdown is a natural process as income rises and industry structure matures

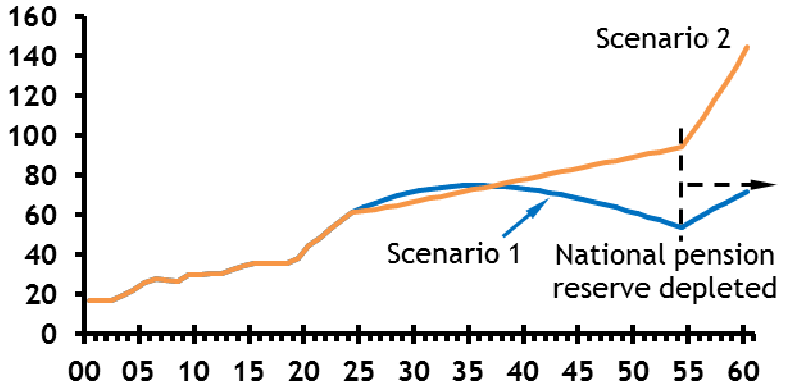
- Demographic headwinds on labor inputs
- Slower capital accumulation
- Rise in per-worker productivity

Korea: Long-term challenges

Demographic headwinds likely to push up government debt ratio, but not unsustainably, and unlikely to undermine external stability

Government debt projection

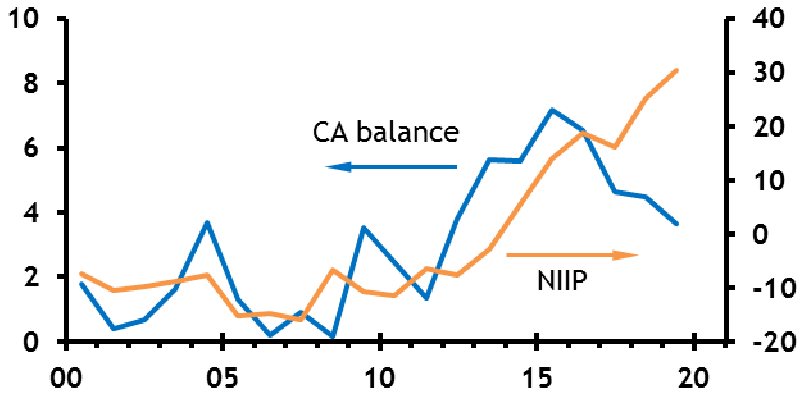
% of GDP



Source: MoEF, and J.P. Morgan projection

CA and net int'l investment position

% of GDP, both axes



Source: BoK, IMF, and J.P. Morgan

- Scenario 1: Primary balance is set to honor the fiscal rule
- Scenario 2: Primary balance is set to 2000-24 average

Aging may also induce higher CA surplus; Analogy with Japan's experience (Japan's NIIP was 31.6% of GDP in 2001 rising to 65.7% in 2019)

Economic forecasts

South Korea: economic indicators

	Average 2014-18	2019	2020	2021f
Real GDP, % change	3.0	2.0	-1.0	4.6
Consumption*	1.9	1.9	-1.5	1.2
Investment*	1.6	-0.8	0.2	1.2
Net trade*	-0.5	1.0	0.4	2.1
Consumer prices, %oya	1.3	0.4	0.5	2.0
% Dec/Dec	1.2	0.7	0.5	2.1
Producer prices, %oya	-0.2	0.0	-0.5	3.9
Government balance, % of GDP	0.9	-0.6	-4.7	-4.3
Current account balance	87.8	59.7	75.3	84.8
% of GDP	5.6	3.6	4.6	4.7

* Contribution to growth of GDP.

Source: Bank of Korea, NSO, Ministry of Economy and Finance, J.P. Morgan estimates

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