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# Japan Economic Focus

## The bright and dark sides of fiscal expansion – A step closer to MMT?

- **As monetary policy approaches a critical threshold with policy rates nearing the so-called reversal rate where further cuts do more harm than good, there is increasing attention to the potential effectiveness of fiscal expansion under low interest rates in major economies, including Europe and Japan in particular.**
- **Japanese fiscal policy was initially expected to turn contractionary in FY19 due to the October consumption tax hike (equivalent to 1.0% of GDP), but measures were subsequently taken to mitigate this effect (eg, free education policy) and now policy is set to turn expansionary with a large-scale economic package.**
- **That package totals JPY13.2trn (including JPY9.4trn [1.7% of GDP] in "real water" contributing directly to GDP growth). The portion contained in the FY19 supplementary budget alone (JPY4.5trn; to be compiled jointly with the FY20 initial budget) will exceed the average supplementary budget since PM Abe returned to office in December 2012 (JPY3.6trn).**
- **The multiplier effect of fiscal expenditure under supplementary budgets typically peaks in the second quarter. With the latest package, however, outlays will be distributed over several years through the utilization of funds, with any boost to GDP growth correspondingly spread out.**
- **Although gross JGB issuance will likely increase y/y in order to finance the package, net issuance should actually decrease slightly with the MoF tapping accumulated funds from previously frontloaded bonds. As a result, any upward pressure on yields from JGB supply and demand, along with any rise in inflation (expectations) due to the package, should be limited.**
- **Fiscal expansion under a sustained environment of low inflation and interest rates backed by the BoJ's monetary accommodation in terms of both quantity (quantitative easing) and rates (yield curve controls) calls to mind modern monetary theory (MMT), which openly advocates unfettered fiscal expansion. Yet even without relying on such extreme fiscal theories, it is clear that a policy mix of monetary accommodation and fiscal expansion should help to suppress concerns around the economy losing momentum, especially in FY20.**
- **Given the limited scope for further easing, monetary policy might be expected to play a more subordinate role of supporting fiscal expansion through the stable absorption of JGBs at low cost. Looking at liabilities in the consolidated balance sheet of the BoJ and central government, the BoJ's share (base money) has risen to 35% as total liabilities reaching JPY1585trn (285% of GDP) in 2019.**

Tetsufumi Yamakawa
+81 3 4530 1130
tetsufumi.yamakawa@barclays.com
BSJL, Japan

Kazuma Maeda
+81 3 4530 1544
kazuma.maeda@barclays.com
BSJL, Japan

Shinji Ebihara
+81 3 4530 1523
shinji.ebihara@barclays.com
BSJL, Japan

www.barclays.com

*Policy focus shifts from monetary easing to fiscal expansion*

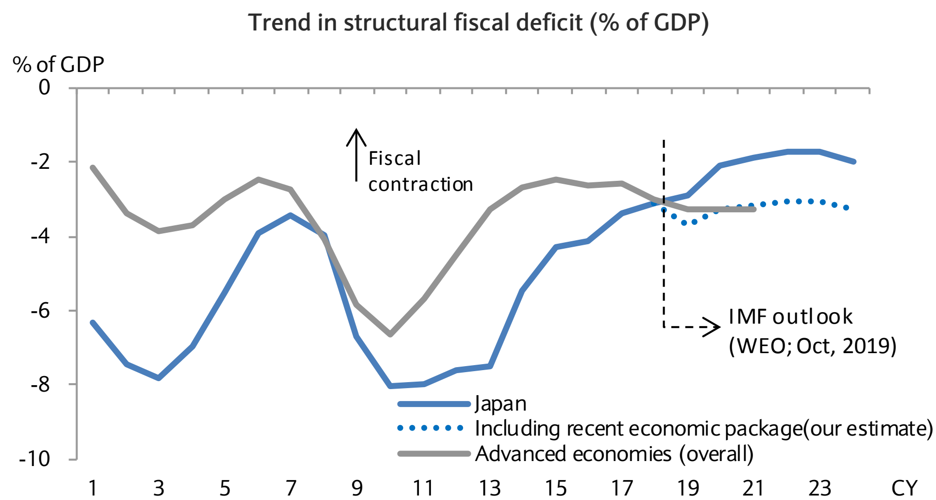
As policy rates (interest on the policy-rate balance of excess reserves: -10bp; long-term interest rate (10y yields): 0%+20bp) near the so-called reversal rate where further cuts do more harm than good, major economies, especially Europe (the euro area) and Japan, have seen a decline in expectations for further monetary easing, along with increasing attention to the potential effectiveness of fiscal expansion under low rates. Japan has relied heavily on monetary easing with the introduction of quantitative and qualitative monetary easing in April 2013, the launch of the negative interest rate policy in January 2016 and the adoption of yield curve controls in September 2016. Now the policy focus is shifting from monetary easing to fiscal expansion as the former reaches a critical threshold.

*A shift in fiscal policy stance: From contractionary to neutral, and then expansionary*

As evident from the trend in the structural fiscal deficit, Japanese fiscal policy was initially expected to turn contractionary in FY19 due to the October consumption tax hike (JPY5.7trn; equivalent to 1% of GDP). However, mitigating measures were subsequently taken (eg, free education policy), virtually offsetting this contractionary effect out to at least H1 FY20. Now fiscal policy is set to turn expansionary under a large-scale economic package. This dramatic reversal in the fiscal policy stance (compared with initial assumptions) should offer some support to the economy[1], where there are strengthening indications of a temporary slump due in part to payback from the frontloading of demand prior to the consumption tax hike (see Figures 1-3).

FIGURE 1

**Structural fiscal deficit turns expansionary, contrary to earlier expectations for contraction, reflecting the change in fiscal policy stance**




Note: We assume expansionary fiscal policy leads to deterioration in the fiscal balance equivalent to the FY19 supplementary budget (JPY4.5trn) and that fiscal consolidation in FY20-22 proceeds at only half the projected pace (IMF projects that the primary balance will improve by JPY6.3trn over that three-year period).
Source: IMF, Barclays Research

[1] Judging from economic indicators released since the consumption tax hike, real GDP growth appears likely to contract temporarily in Q4 (our forecast: -3.0% q/q saar vs. +1.8% in Q3 [second preliminary revision]) with a lingering possibility that consumption will remain sluggish for a prolonged period on the back of waning household purchasing power and deteriorating sentiment, due in part to payback around consumer durables, as after the last consumption tax hike. Meanwhile, industrial production is on track to continue decreasing in Q4 (by -4.3% q/q based on METI forecast indices for November and December, after a -0.5% decline in Q3) on payback from earlier inventory accumulation prior to the consumption tax hike to cope with frontloaded demand. The probability of recession estimated on the basis of trends in industrial production and long-short interest rate spreads fell to 21% as of June 2019 (recent bottom), but has since risen to 72% as of end-2019 based on METI forecast indices (exceeding the 50% threshold for the first time since March 2019 (53%; see Figure 3).

FIGURE 2

**Fiscal contraction linked to consumption tax hike virtually neutralized by mitigating fiscal measures**

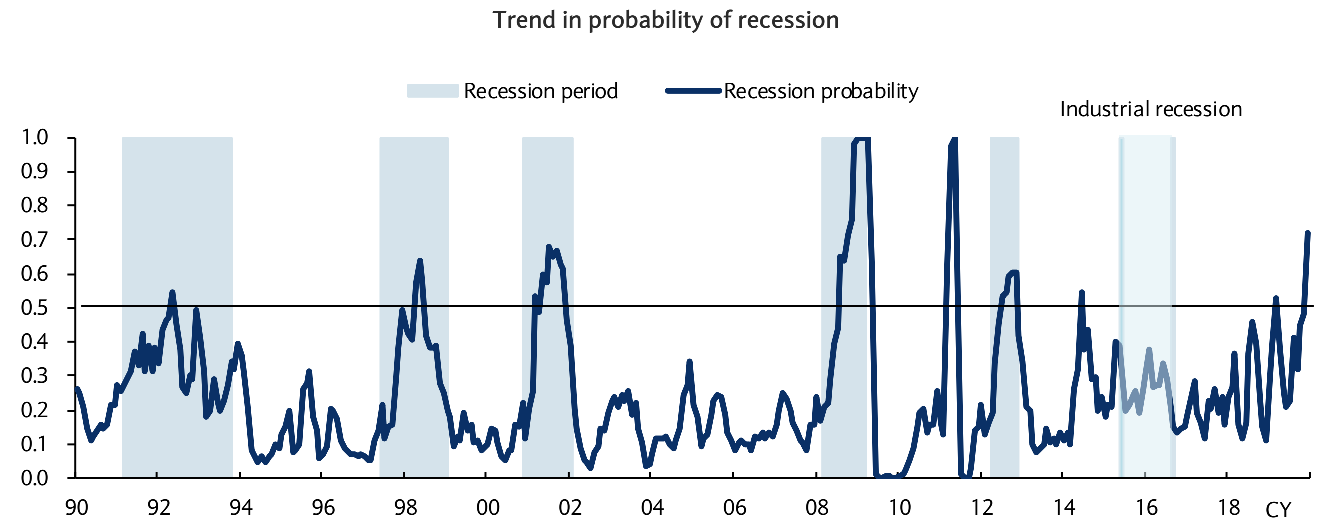
**Consumption tax hike vs. fiscal offsets**

| | JPYtrn |
|---|---|
| ●Tax revenue increase from VAT hike (A) | 5.2 |
| —Tax revenue increase from VAT hike | 5.7 |
| —Tax revenue decrease due to VAT hike exemptions | -1.1 |
| —Tax revenue increase due to cigarette and income tax revisions | 0.6 |
| ●Measures to enhance social security, etc. (B) | 3.2 |
| —Free education (mainly for pre-school) | 1.7 |
| —Support benefits to pensioners, etc. | 1.1 |
| —Compensation for medical fees, etc. | 0.4 |
| ●Additional special measures to alleviate VAT hike impact (C) | 2.3 |
| —Public works based on national resilience program | 1.3 |
| —5pp point rebate for cashless transactions at small retailers | 0.3 |
| —Enhanced mortgage tax breaks, auto tax breaks, etc. | 0.3 |
| —Merchandise coupons for low-income households | 0.2 |
| —Housing benefits, next-generation home point system | 0.2 |
| Net fiscal expenditure (= B+C-A) | +0.3 |
| —Direct impact on households (ex public works) | -1.0 |

Source: MoF, Barclays Research

FIGURE 3

**Probability of recession spikes into end-2019**




Note: Calculated using a probit model with business cycle reference dates (recession = 1; expansion = 0) as the explained variable and industrial production (3mma compared with previous three months) and long-short interest rate spread (10y JGB yields – 3m euroyen TIBOR) as the explanatory variables. The industrial recession (China shock from June 2015-September 2016) is treated as an economic expansion since the Cabinet Office did not designate it an economic recession. November-December calculated using METI production forecast indices and unchanged long-short interest rate spread.
Source: Cabinet Office, METI, Bloomberg, Barclays Research

*Scale/content of large economic package: Larger than historical averages*

The latest economic package totals JPY13.2trn (2.4% of GDP) and contains JPY9.4trn (1.7% of GDP) in "real water" contributing directly to GDP growth (the portion of the package excluding fiscal investments and loans). The FY19 supplementary budget will be combined with the FY20 initial budget, but will be implemented first; this alone (JPY4.5trn) will exceed the average supplementary budget since PM Abe returned to office in December 2012 (JPY3.6trn, with a range of JPY2.4-5.1trn, excluding the FY12 reconstruction budget following the Great East Japan Earthquake)[2]. As the package to be included in FY19 supplementary budget will boost GDP growth by as much as +0.9pp, and by +1.8% in total on cumulative basis, assuming a multiplier effect from fiscal expenditure of 1.1, it should be large enough to alleviate the risk of a further decline in the economy and prices after the anticipated setback following the consumption tax hike (see Figures 4-5).

FIGURE 4

**The FY19 supplementary budget portion of the latest package alone exceeds the size of past supplementary budgets**

**Scale of supplementary budgets**

| FY/supplement budget | Passage | Expend (JPYtrn) | Contents |
|---|---|---|---|
| 2013 1st | 06/02/2014 | 4.6 | Reconstruction/disaster prevention JPY2.3trn; strengthening competitiveness JPY1.4trn; VAT hike offsets JPY0.6trn |
| 2014 1st | 03/02/2015 | 2.4 | Consumption stimulus/house purchasing supports JPY1.2trn; reconstruction/disaster prevention JPY1.0trn |
| 2015 1st | 20/01/2016 | 2.5 | Birth decline/population aging measures JPY1.2trn; reconstruction/disaster prevention JPY0.5trn; TPP-related agricultural supports JPY0.3trn |
| 2016 1st | 17/05/2016 | 0.8 | April 2016 Kumamoto earthquake reconstruction budget |
| 2nd | 11/10/2016 | 4.1 | Reconstruction/disaster prevention JPY2.0trn; 21st century infrastructure enhancements JPY1.4trn; childcare/elderly care JPY0.7trn |
| 3rd | 31/01/2017 | 0.6 | Reconstruction/disaster prevention JPY0.2trn (linked to torrential rains, typhoons, etc. in Hokkaido/Tohoku regions) |
| 2017 1st | 01/02/2018 | 2.7 | Reconstruction/disaster prevention JPY1.3trn; productivity revolution JPY0.5trn; TPP-related agricultural support JPY0.3trn |
| 2018 1st | 07/11/2018 | 0.9 | Reconstruction/disaster prevention JPY0.7trn (linked to torrential rains in Western Japan, earthquakes in Northern Osaka, Eastern Iburi area of Hokkaido) |
| 2nd | 07/02/2019 | 3.0 | Disaster prevention/national resilience JPY1.1trn; TPP-related agricultural support JPY0.3trn |
| FY average | - | 3.6 | |
| **Supplementary budgets exceeding JPY10trn** | | | |
| 1998 | - | 10.3 | Public investment, employment measures, financial system stabilization measures |
| 2009 1st | 2009/05/29 | 13.9 | Financial measures JPY3.0trn, child support measures JPY2.0trn, employment measures JPY1.3trn |
| 2011 | - | 15.3 | Primarily a budget for reconstruction from Great East Japan Eartquake (including nuclear power plant damages) |
| 2012 1st | 2013/01/31 | 10.2 | Reconstruction/disaster prevention JPY3.8trn, growth strengthening mesures through capex stimulus, etc. JPY1.8trn |

Note: Excludes funds for redemption of reconstruction bonds in FY13-15 and contingency funds (eg, Kumamoto earthquake restoration) in FY16. FY98 figures combine two supplementary budgets; FY11 combines four supplementary budgets.
Source: MoF, Barclays Research

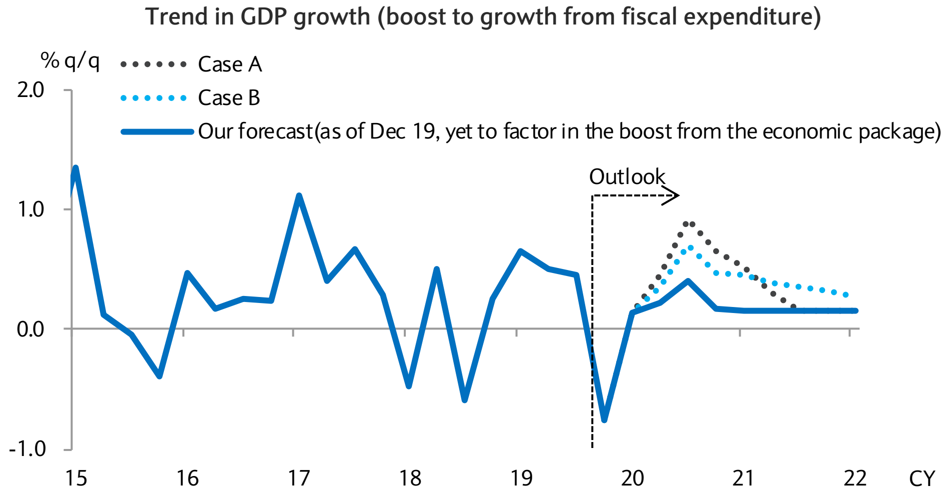
| | Total | (Of which FILP) | FY19 supp. budget | FY20 initial budget |
|---|---|---|---|---|
| Fiscal expenditure | 13.2 | 3.8 | 6.5 | 3.1 |
| Public investment | 6.0 | 2.7 | 2.2 | 1.1 |
| Other | 7.2 | 1.1 | 4.1 | 2.0 |
| Real water | 9.4 | - | 6.5 | 3.1 |
| Additional expenditure | 7.4 | - | 6.5 | 1.1 |

Source: MoF, Cabinet Office, Nikkei newspaper (4 December 2019), Barclays Research

[2] Large-scale supplementary budgets exceeding JPY10trn have previously been compiled for only emergency purposes, eg, to address financial crises or large-scale natural disasters (on only four occasions: FY98, FY09, FY11 and FY11). The latest package, including the FY20 initial budget, will rival these "emergency" budgets in size despite the economy being in a phase of expansion

FIGURE 5

**Fiscal expenditure under economic package to boost GDP growth by as much as +1.8pp**



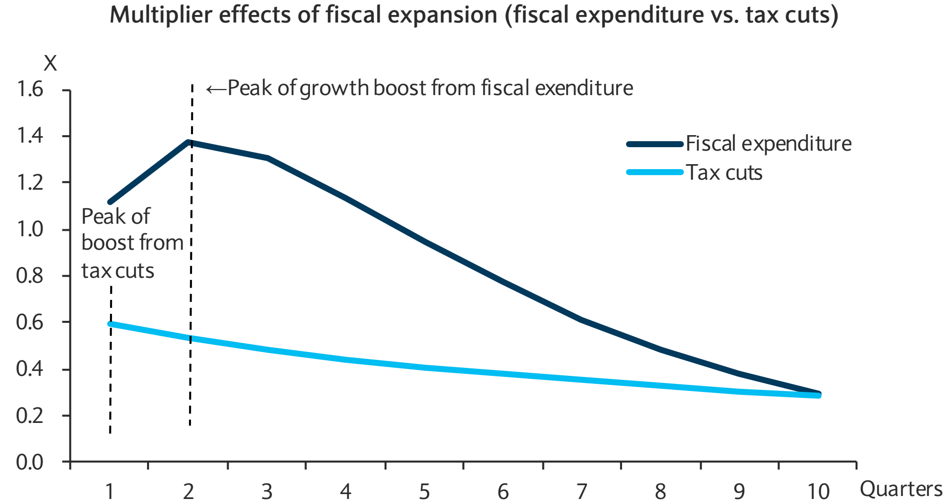

Note: Case A; Fiscal expenditure of economic stimulus package, including those in FY19 supplementary budget in particular, to be concentrated in 1H FY20. Case B: Fiscal expenditure to be distributed almost evenly in FY20 as well as in FY21.
Source: Cabinet Office, Barclays Research

*Fiscal expenditure within the latest economic package could be spread out over several years/boost to growth could also be dispersed*

The effects of fiscal expenditure incorporated into a supplementary budget typically materialize within a short period of time (with multiplier effects peaking in the second quarter), then quickly fade. Assuming this pattern, the effects should be concentrated in H1 FY19. With the latest package, however, those effects could spread out over several years through the utilization of funds that disburse fiscal expenditure flexibly and more evenly (budget allocations secured first, disbursements come later as needed). We expect real GDP growth to stay in a range around potential (0.5-0.8% annualized, in our estimates) over our current forecasting horizon through FY21 (our forecasts: +1.0%/+1.0% for FY19/CY19; +0.5%/+0.4% for FY20/CY20; +0.7%/+0.8% for FY21/CY21). However, we have yet to factor in the likely boost to growth from the package due to current uncertainties around the timing of expenditures. Accounting for a latent boost from economic package, GDP growth rate could end up with above potential growth rate, in particular in FY20 when large portion of fiscal expenditure included in a package is expected to be spent (see Figure 6).

FIGURE 6

**Fiscal expenditure multiplier effects materialize quickly, but also fade quickly**



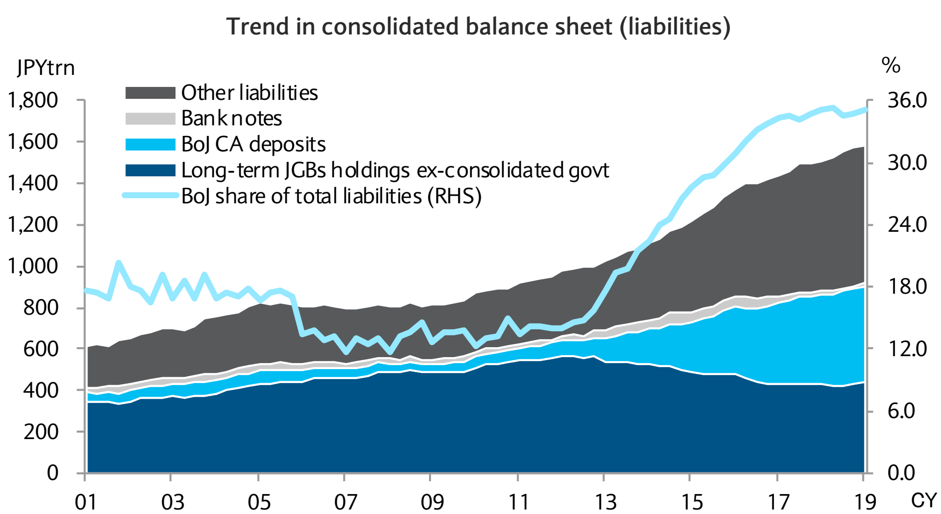

Note: Structural VAR using three variables (tax revenues, public demand, GDP growth) based on Blanchard/Perotti (2002); Data period: Q1 00~Q4 18. Source: Barclays Research

*A step closer to MMT*

Japan's turn toward expansionary fiscal policy through large-scale economic measures under a sustained environment of low inflation and low interest rates resembles the model of "Modern Monetary Theory (MMT)", which openly advocates unfettered fiscal expansion by countries that issue their own currency. Yet even without relying on such extreme theories, expanding fiscal policy in order to alleviate concerns about a loss of economic momentum could be fully justified in the short term when monetary policy is nearing a critical threshold, as discussed above. Under MMT, monetary policy falls into a subordinate role of passively financing fiscal policy. Although the BoJ's monetary accommodation through QE and YCC has not necessarily entered the realm of MMT, it has clearly contributed to the sustainability of the government's debt by stabilizing long-term interest rates at low levels and facilitating JGB absorption. Looking at the consolidated balance sheet of the BoJ and central government, the BoJ's liabilities (base money) have risen to JPY556trn (100% of GDP), or 35% of overall liabilities (JPY1585trn, or 285% of GDP), in 2019 (see Figure 7).

FIGURE 7

**BoJ's share of liabilities on consolidated balance sheet has spiked**



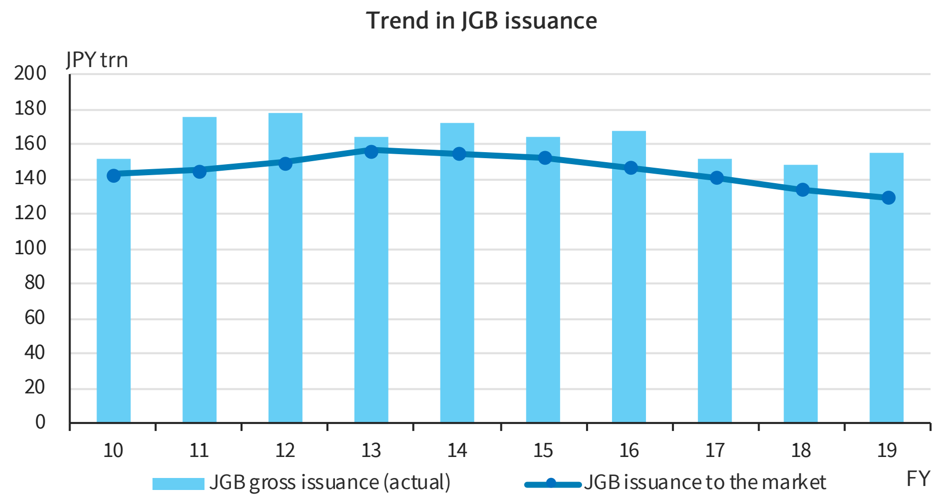

Source: Cabinet Office, BoJ, Barclays Research

*FY20 JGB issuance: Net issuance to decline slightly y/y*

Any upward pressure on yields should also be limited from the viewpoint of JGB supply. In terms of FY20 JGB issuance plans, we believe gross issuance is likely to increase y/y with the large-scale economic package, but expect calendar-based issuance to the market to decrease slightly from the previous fiscal year given that the MoF has indicated it will utilize funds raised through the aggressive issuance of frontloaded bonds, as it did when gross issuance ticked up with the FY19 supplementary budget. For example, a JPY100bn bimonthly (JPY600bn yearly) increase in 40y JGBs and JPY100bn monthly (JPY1.2trn yearly) decrease in liquidity enhancement (tap) auctions for JGBs with remaining maturity of 5-15.5 years would reduce issuance to the market to JPY128.8trn in FY20 from JPY129.4trn in FY19. With domestic and overseas investors still showing a strong preference for carry, we expect any scope for yields to rise in terms of supply and demand to remain limited (see Figure 8).

FIGURE 8

**Net JGB issuance likely to edge lower in FY20**




Source: MoF, Barclays Research

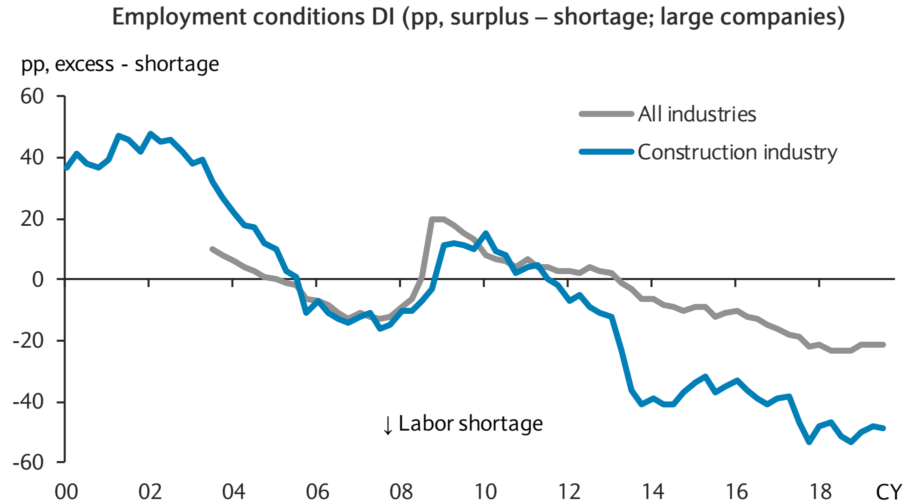
*Fiscal/monetary policy mix*

Japan has more outstanding debt (IMF estimate as a percentage of GDP in 2019: 238% on a gross basis; 154% on a net basis) than any other major economy with little scope for additional fiscal expansion from the viewpoint of debt sustainability. However, it is leading the way with a shift toward large-scale fiscal expansion while sustaining monetary accommodation, including NIRP. Medium/long-term issues aside, this may be warranted as an approach to suppressing the risk of an economic slowdown in the wake of the consumption tax hike. Sustaining the current monetary accommodation (we expect the BoJ to retain current monetary policies through our forecasting horizon to FY21[3]) while expanding fiscal policy is also important in supporting any boost to the economy from fiscal expansion. Although a worker shortage in the construction industry could hinder smooth implementation of the budget and suppress the multiplier effect of fiscal expenditure centered around public investment (aimed at enhancing "national resilience"), any constraint will likely be limited now that construction related to the Olympics has run its course and the tightening of employment conditions has peaked out (see Figure 9).

[3] We believe risks to the economy and prices will remain skewed to the downside in the wake of the consumption tax hike, especially in H2 FY19. In this context, we do not rule out the possibility of further easing by the BoJ. However, we expect the BoJ to account for the effects of the aforementioned economic package and revise up its real GDP growth forecast (current median forecast of the majority of Policy Board members: +0.7% in FY20, +1.0% in FY21) in the quarterly Outlook Report to be released after the 20-21 January 2020 MPM

FIGURE 9

**Employment tightness trending sideways**




Source: BoJ, Barclays Research

*The bright and dark sides of fiscal expansion*

Large-scale fiscal expansion through the recently compiled economic package should raise GDP growth (and underpin CPI inflation) while suppressing stagnation risk via multiplier effects in the short term. In the longer term, however, it raises the issues of a decline in fiscal discipline and a drop in the BoJ's credibility as it effectively continues to finance the fiscal deficit. As a "tail-risk" scenario, with very low probability of realization at present, it might be able to assume the situation where a sustainability of government debt continues to deteriorate as a consequence of reversal between stagnated potential growth rate and higher (real) long-term interest rates. For multiplier effect out of fiscal expansion to be sustained over the long term, rather than waning quickly, it would be required for various policies, including those for labour market liquidation through an easing of dismissal regulation, to be adopted along with monetary easing/fiscal expansion in order to enhance long-term potential growth rate.

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