## Japan Economics Analyst

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> Gao Hua Economics Research at https://portal.ghsl.cn

### The Yen Should Weaken and Will Weaken

Tetsufumi Yamakawa tetsufumi.yamakawa@gs.com +81 3 6437 9960

Yuriko Tanaka yuriko.tanaka@gs.com +81 3 6437 9964

Chiwoong Lee chiwoong.lee@gs.com +81 3 6437 9984 The yen is gradually starting to weaken. This is easing financial conditions in Japan after severe tightening. The effective yen rate is down about 10% from its most recent peak and our Financial Conditions Index is subsiding from a sharp spike.

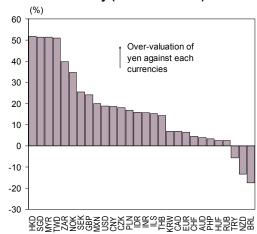
We are expecting the effective yen rate to fall around 10% during the next 12 months as the result of a correction against Asian currencies as well as the US\$. In particular, Asian EM monetary policy is moving in a different direction to Japan's, and we expect their currencies to appreciate by double digits (%) against the yen. Such movement should gain impetus from the renminbi appreciation we envisage.

Yen/US\$ remains the most significant cross for the Japanese economy due to US\$ dominance in trade settlement. However, the Japanese economy and Japanese share prices are now much more sensitive to Asian currencies due to changes in the trade structure. Export market competition with Asian companies is a growing factor. Asian currency appreciation against the yen is both a booster for Japanese competitiveness and a source of growth for exports of Japanese goods and services through the transfer of purchasing power to Asia.

The BOJ remains reactive in policy conduct and cautious on additional QE, but even limited measures (such as an increase in fund supplies) should spur yen depreciation given that other major central banks look like they are considering QE exits. In that sense we see a golden opportunity to combat deflation using a weaker yen.

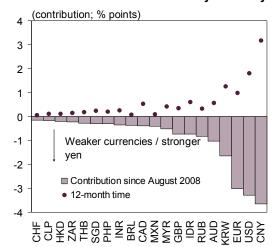
## Pronounced Asian Currency Undervaluation in Yen Cross Rates

### Overvaluation/Undervaluation vs. Yen by Currency (GSDEER Basis)



Source: GS Global ECS Research.

# Yen Correction Against Asian Currencies to Drive Decline in the Effective Yen Rate Effective Yen Rate Contribution by Currency



Note: See note to exhibit 11. Source: GS Global ECS Research.





### Weekly Wrap-Up

### **Real Economy: Wages Still Falling**

The production recovery is being fueled by intentional stockpiling (see Exhibit 1). Last week's release showed production increasing for an 11th successive month with a 2.5% rise in January (after 1.9% growth in December; firms were planning a 1.3% increase as of the December release). Exports are growing strongly, driven by Asia. Meanwhile, our proprietary Global Leading Indicator, which is a good predictor of Japanese exports and production, suggests that the production recovery will be sustained for at least the next three months. Its February final reading was +3.1% yoy (January was +1.4%). Based on corporate plans for February-March, production is on course for 4.6% sequential growth in January-March, the fourth successive quarterly increase (October-December was +4.6%).

However, a primary driver of the production recovery is post-financial crisis restocking, and there are signs that this is losing momentum. The inventory ratio, which leads production, has fallen close to pre-crisis levels, spearheaded by IT-related goods. In addition, relative to the prior plans, production is not increasing as much as before. We estimate 1H2010 GDP growth at close to zero due to an economic policy hiatus. Consequently, a slowdown seems unavoidable for production even though the recovery trend should be maintained.

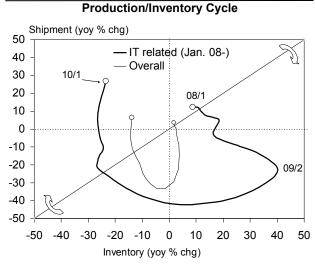
The stagnation in the wages/employment environment is dragging on, exacerbated by relentless pressure on

the corporate sector to cut fixed costs. Cash remuneration has fallen short of year-earlier levels for five quarters in succession. Wages inched up +0.1% in January, but only after a record 5.9% fall in December caused by cuts in winter bonuses. Meantime, recovery remains a distant prospect for employment, although the January data showed unemployment improving to 4.9% (from December 5.2%) and the job offers/applicants ratio improving to 0.46X (0.43X; the all-time low is 0.42X, recorded in August 2008). No end is in sight to the balanced contraction whereby firms are paring labor cost, most notably wages, to lower their breakeven point as they lose pricing power in a stubbornly deflationary environment. We note that unit labor cost (ULC) started to fall again in October-December and factors are in play to accelerate its decline (see Exhibit 2).

## Monetary Policy (BOJ Watch): Clear Friction Between BOJ and the Government

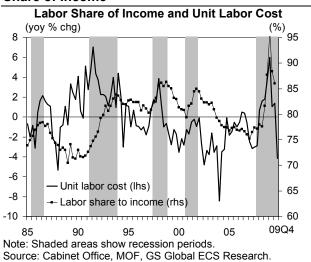
The BOJ is maintaining its reactive stance in policy conduct while the production and inventory cycle sustains improvement driven by external demand, particularly the pickup in Asia. A huge gulf exists between the market, which would like to see more aggressive QE to combat deflation, and the BOJ's view that an increase in JGB purchases would be damaging for fiscal rectitude while additional easing would anyway have little effect with such a slack credit multiplier.

Exhibit 1: Intentional Stockpiling Continues



Source: METI, GS Global ECS Research.

Exhibit 2: ULC Falling in Tandem with Labor Share of Income

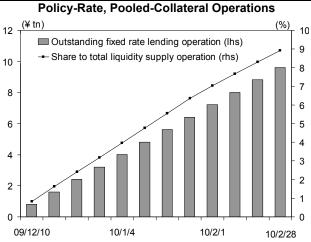


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Clear friction has developed between the BOJ and the government/Ministry of Finance, which want to see aggressive quantitative easing (QE). The pressure for measures such as expansion of long-dated JGB operations can only increase given the impasse reached in fiscal policy. The lower house has passed the FY2010 budget containing child allowances and other substantial income transfers to the household sector, but these will not start to boost the economy until June. What is more, the multiplier effect from the household subsidy policy may well be cancelled out by a rise in the household savings rate fueled by concerns over the sustainability of government debt in the face of structural growth in the fiscal deficit.

Potentially we see three options for the BOJ if it undertakes additional QE. (1) It could expand its policy-rate fund supply facility, either by raising the target for policy-rate-fixed pooled-collateral operations (currently set at \\ \pm 10 \) tn for end-March), or by extending this supply from the current three months to 6-12 months (this would be ECB-style OE). (2) It could increase its outright purchases of long- and short-dated JGBs (BOE style). (3) It could purchase unconventional assets such as equities (Fed style). The most realistic options from the standpoint of "least BOJ resistance" are expansion/extension of fund supplies and an increase in purchases of short-dated JGBs (the BOJ would be likely to break the BOJ Note Rule before too long if it increased long-dated purchases; see Exhibit 3).

## Exhibit 3: The Rising Balance of Policy-Rate Funds



Note: Total liquidity supply operation includes outstanding longterm JGB outright purchase operations.

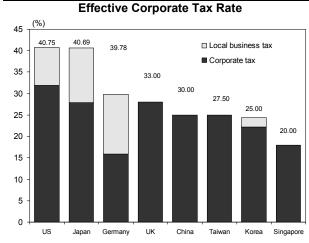
Source: BOJ.

### Fiscal Policy: Talk of a Corporate Tax Cut

We are sticking with our catch-up scenario, where yen depreciation (a correction of the yen strength that has existed since the financial crisis) eases financial conditions, giving impetus to Japan's slow recovery in production and profits and leading to outperformance for Japanese equities against other major markets where monetary conditions are tightening (see the January 20 Japan Economics Analyst, Catch-up Scenario for Japan). This scenario requires changes in macro-policy implementation, particularly after the July upper-house election, to sustain recovery for the economy and the stock market. At the very least we need the administration to eradicate its "anti- (big) business", "anti-rich", "anti-market" image with an outright majority for the DPJ that eliminates the need for the current coalition.

In respect of tax reform, a corporate tax reduction is an urgent issue. Japan's effective tax rate is 40.7% compared with 24.2%-25.0% for Asian competitors. Restoration of Japanese companies' competitive advantage versus Korean and Taiwanese counterparts requires both a weaker yen and a cut in the tax rate. The DPJ has been cautious or even negative on this score, hinting at a tax on retained earnings, but recently there have been indications of a change in stance, including a February 28 speech by cabinet office vice-minister Furukawa, who is secretary general of the National Policy Unit and wields some influence in policy making. (See Exhibit 4).

Exhibit 4: Reduction in the Corporate Tax Rate is an Urgent Issue



Source: MOF.

### The Yen Should Weaken and Will Weaken

#### Introduction

The yen is gradually starting to depreciate. This is easing financial conditions in Japan after severe tightening. The real effective yen rate is down about 10% from its most recent peak, to 146.2 (January 1980 = 100; 163.0 in January 2009), while our Financial Conditions Index has eased almost 100 bp from its peak.

In the forex market the role of main funding currency for carry trades is shifting back from US\$ to the yen as the Fed probes for the quantitative easing (QE) exit. We forecast yen depreciation to \fomega98/US\$ over the next 12 months, which is in part a correction of yen overvaluation.

We are expecting the effective yen rate to fall around 10% during the next 12 months as the result of a correction against Asian currencies as well as US\$. In particular, Asian EM monetary policy is moving in a different direction to Japan's, and we expect their currencies to appreciate by double digits (%) against the yen. Such movement should gain impetus from the renminbi appreciation we envisage.

Yen/US\$ remains the most significant trend due to US\$ dominance in export/import settlement. However, the Japanese economy and Japanese share prices are now much more sensitive to Asian currencies due to structural change in trade, including higher levels of competition with Asian companies. Asian currency appreciation against the yen is both a booster for Japanese competitiveness and a source of growth for Japanese goods and services exports via the transfer of purchasing power to Asia.

Although the BOJ remains reactive in policy conduct and cautious on additional QE, any further QE it might undertake should spur yen depreciation, even if the increase in fund supply is limited, given that other major central banks are turning toward the QE exit. In that sense we see a golden opportunity to combat deflation through a weaker yen.

## Our Forex Forecasts: An Accelerating Yen Correction

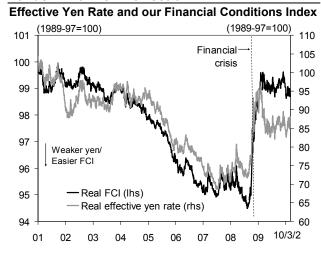
The yen is finally easing after its post-financial crisis spurt. The real effective yen rate rose nearly 40%, from 119.9 in August 2008 all the way to a recent peak of 163.0 in January 2009 (January 1980 = 100), and is now down about 10% from the peak.

This has been reflected in our Japan Financial Conditions Index (FCI), which incorporates the effective yen rate, real long- and short-term interest rates, and equity prices. The FCI spiked (= tightened) after the crisis due to the yen's appreciation and a rise in real interest rates in the deflationary environment. Since December 2009 it has started to fall, albeit not far. It climbed 513 bp between August 2008 and its November 2009 peak and has descended 93 bp as of end-February (see Exhibit 5).

## Yen/US\$: Carry trade funding shifting back to yen from US\$

One factor behind dollar depreciation against the yen was an uptrend in the US/Japanese central bank total asset ratio, or base money ratio on the liabilities side. This was due to the Fed's aggressive QE after the financial crisis and the BOJ's more muted response. The ratio has now started to decline. At the same time, the divergence that is developing between Japanese

Exhibit 5: Financial Conditions Easing in Tandem with Yen Correction



Source: GS Global ECS Research.

**Exhibit 6: An Accelerating Yen Correction** 

#### **Our Forex Forecasts**

	Mar. 02	3-mo	6-mo	12-mo		GSDEER
G3						
USD/JPY	88.8	92.0	94.0	98.0	(-10.4)	105.5
EUR/USD	1.36	1.45	1.45	1.35	(0.8)	1.22
EUR/JPY	120.8	133.4	136.3	132.3	(-9.5)	128.7
vs. Asian Currencies						
KRW/JPY	7.74	8.00	8.55	9.33	(-20.6)	8.28
CNY/JPY	13.0	13.5	13.8	15.1	(-16.1)	15.4
INR/JPY	1.94	2.09	2.17	2.28	(-17.7)	3.77
MYR/JPY	26.3	27.9	29.4	30.6	(-16.3)	39.8
IDR/JPY	0.96	1.01	1.04	1.11	(-16.5)	1.11
THB/JPY	2.72	2.79	2.87	2.99	(-10.1)	3.12
Others						
GBP/JPY	133.6	170.2	173.9	157.8	(-18.1)	167.8
AUD/JPY	80.3	87.4	89.3	88.2	(-9.9)	83.4
BRL/JPY	49.5	57.5	57.0	56.0	(-13.0)	40.7

Note: Figures in ( ) show expected change over the 12-month horizon against the yen (- denotes weaker yen).

Source: GS Global ECS Research.

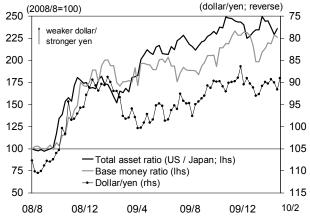
and US monetary policy is prompting a shift back from US\$ to the yen in the forex market as the main funding currency for carry trades (see Exhibit 7).

Second, Japan's broad balance of payments (BBoP; =current account + net foreign direct investment + net portfolio investment) is still running a large deficit, although smaller than before. The BBoP shows the forex supply/demand generated by trade and capital transactions. Japanese BBoP deterioration has been reflected in forex supply/demand to only a limited extent because of extremely high forex hedging ratios on overseas portfolio investments by yen-funded institutional investors such as insurers. These ratios should be reduced as expectations for a rise in US interest rates take hold, creating fresh demand for US\$ (see Exhibit 8).

Third, the yen is still markedly overvalued against

**Exhibit 7: Contraction for the Fed Balance** Sheet/Expansion for the BOJ Balance Sheet?

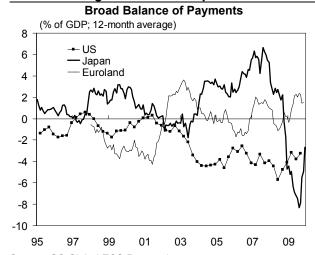
### Japanese-US Central Bank Asset and Base Money Ratio vs. ¥/US\$



Note: Base money (bank notes + reserves) is a liability on central bank balance sheets.

Source: BOJ, FED, GS Global ECS Research.

**Exhibit 8: Large Deficits for Japan's BBoP** 



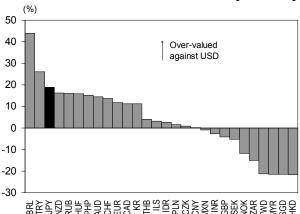
Source: GS Global ECS Research.

US\$. According to the Goldman Sachs Dynamic Equilibrium Exchange Rate (GSDEER) model, the yen is 18.8% overvalued—more than any other DM currency—versus an equilibrium exchange rate of ¥105.5/US\$ 1. In contrast, many Asian currencies remain undervalued (see Exhibit 9).\

We also note the potential for a yen selloff due to the increased global focus on sovereign risk. Default risk is very low for Japan, which has a high level of net assets, but its government debt is conspicuous in a peer comparison at 217.1% of GDP on a gross basis at end-December (up from 141.7% in March 2000) and 115.5% on a net basis (60.3%), which could make it vulnerable to a deterioration in market sentiment.

**Exhibit 9: Yen the Most Overvalued DM Currency Against US\$** 

Overvaluation/Undervaluation vs. US\$ by Currency



Source: GS Global ECS Research.

<sup>1</sup> GSDEER is designed for medium- to long-term currency assessments. The model calculates equilibrium exchange rates using (1) the terms of trade variable, (2) the labor productivity growth variable, (3)mean reversion to the purchasing power parity, along with the countryspecific factors.

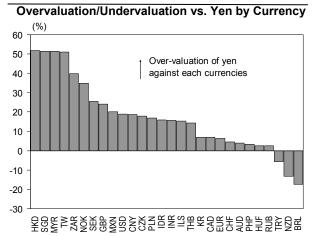
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### Asian currencies: Appreciation vs. yen to accelerate

Over the next 12 months, we expect Asian currencies to accelerate to double-digit (%) appreciation against the yen. This is based on growing divergence from Japan in monetary policy, which should spur a correction of the yen appreciation that occurred after the financial crisis. We expect early tightening in Asia, where domestic demand is robust and inflation concerns are surfacing. We noted above that Asian currencies are significantly undervalued against the dollar, which means there is a wide gap to close with Japan in terms of divergence from equilibrium value. The Indian rupee, Indonesian rupiah, and Malaysian ringgit are particularly undervalued (see Exhibit 10).

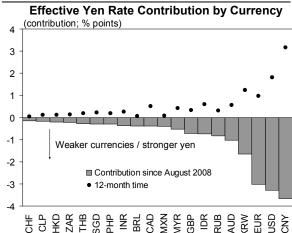
The appreciation we anticipate for the Chinese renminbi should be supportive for Asian currency appreciation against the yen in the medium to long term. We are expecting policymakers to tolerate greater renminbi appreciation than is factored into forward rates. Our forecast is Rmb6.83/US\$ for three months (forward rate is Rmb 6.77/US\$ [NDF as of March 2]), Rmb6.83/US\$ for six months (Rmb 6.73/US\$), and Rmb6.49/US\$ for 12 months (Rmb 6.65/US\$). Renminbi appreciation should amplify the upside for Asian currencies. We expect Asian currency appreciation against the yen to be a main driver for a decline in the effective yen rate despite yen appreciation against the euro<sup>2</sup> (see Exhibit 11).

Exhibit 10: Pronounced Asian Currency Undervaluation in Yen Cross Rates



Source: GS Global ECS Research.

Exhibit 11: Yen Correction Against Asian Currencies to Drive Decline in the Effective Yen Rate



Note: Bar graph shows contributions since the financial crisis. ● indicates our 12-month forecast.

Source: GS Global ECS Research.

## Forex Sensitivity: Japan's Growing Sensitivity to Asian Currencies

Yen/US\$ remains the most significant for corporate activity by virtue of the US\$ predominance in export and import settlement. US\$ had a 49.8% weighting in export settlement for June-December 2009 compared with only 6.7% for the euro and 39.5% for the yen. Even the weighting for imports, which include substantial reverse imports from overseas subsidiaries, was 70.5%, compared with 3.6% and 24.2%, respectively.

At the same time, however, the Japanese economy and Japanese equities are becoming increasingly sensitive to Asian currencies due to change in the trade structure with Asia. Export competition is growing rapidly between Japanese firms and Korean, Taiwanese, and Chinese firms in particular. Production elasticity to the yen/won rate has reached -0.69 for autos and electronic components, which are sectors where there is a high level of competition between Japanese and Korean manufacturers (-0.69 means a 6.9 pp decline in Japanese production for 10% won depreciation against the yen; the time frame is 2007-2009. Elasticity for 1999-2009 was -0.52).

The correlation coefficient for yen/won and equity prices (TOPIX) reached 0.97 for 2007-2009 (1999-2009 was 0.66), implying that the won appreciation we expect against the yen will be a tailwind for Japanese equity recovery (see Exhibits 12 and 13).

<sup>&</sup>lt;sup>2</sup> Our Global Markets Research Group has a tactical trade, long a basket of Asian currencies (MYR, IDR, INR) versus the yen.

Exhibit 12: Increase in Production Sensitivity to Yen/Won Led by Sectors where Export Competition is Extensive

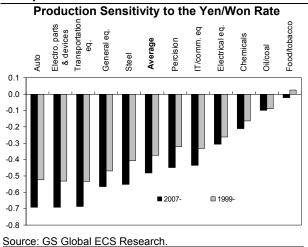
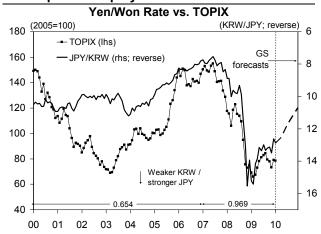


Exhibit 13: High Correlation between Yen/Won and Japanese Equity Prices



Note: Numbers in exhibit show correlation coefficients. Source: Datastream, GS Global ECS Research.

### Benefits from Yen Depreciation: Revival in Export Competitiveness / Transfer of Purchasing Power to Asia

The potential knock-on from yen depreciation, and particularly a correction against Asian currencies, is not only a revival in Japanese corporate export competitiveness but also a transfer of purchasing power to Asia that leads to growth in exports of Japanese goods and services to the region.

Korea is particularly significant in respect of competitiveness due to its high level of competition with Japan. The Export Similarity Index (ESI), which is a gauge of bilateral overlap in export products, shows levels of 90% for the current decade, up from 65.6% in 1990. This signifies that around 90% of the

two countries' export products are competing against each other. The focuses are chemicals, steel, and autos (see Exhibit 14; For further details on ESI, see Reference).

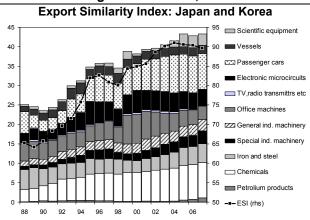
In respect of purchasing power transfer, we note that the Asian weighting in Japanese goods exports has already grown strongly this decade. The latest July-December 2009 statistics show the Asian weighting rising to 55.2% (from 41.1% at the start of 2000) including 19.2% for China (6.3%). The weightings for the US and Europe have shrunk to 16.3% (29.7%) and 11.6% (16.3%), respectively (see Exhibit 15).

By contrast, the Asian share of services exports (receipts in the services account)<sup>3</sup> remains relatively low, which suggests the currency appreciation we expect against the yen will boost exports in areas such as transportation and travel as well as goods. Service export weightings for January-December 2009 were 30.7% for Asia (start of 2000 34.5%), including 6.8% for China (3.4%), 24.8% for the US (33.8%), and 29.8% for Europe (18.8%).

## Monetary Policy Conduct: Golden Opportunity to Ease Financial Conditions

The BOJ remains "reactive", rather than "preemptive' in its policy conduct and shows no sign of relenting in its caution on QE. It maintains that financial conditions are sufficiently accommodative but the severe post-crisis tightening suggests otherwise to us. In our view, additional easing by the BOJ is essential for the financial condition rebalancing needed in Japan (see Exhibit 16).

Exhibit 14: Increased Export Competition with Korea Centering on Chemicals, Autos



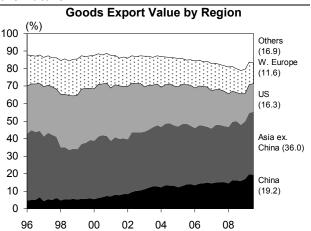
Source: GS Global ECS Research.

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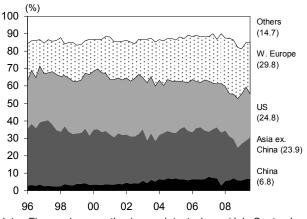
 $<sup>^{\</sup>rm 3}$  Services include travel, transportation, business intermediaries, license fees etc.

Goldman Sachs Global ECS Research

Exhibit 15: Asian (Chinese) Weighting in Japanese Goods Exports has Grown Rapidly / Services Exports to Asia Should Accelerate in the Future



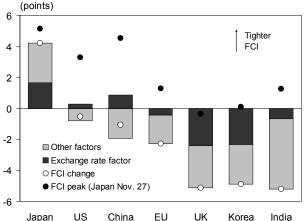
#### Services Export Value by Region



Note: Figures in parenthesis are latest share (July-September 2009)
Source: BOJ.

## Exhibit 16: Financial Conditions Still Conspicuously Tight in Japan

## Financial Condition Index Movement Since the Financial Crisis: International Comparison



Note: Change from August 6 2008 to present (February 26). Source: GS Global ECS Research.

Broadly, the options we see for the BOJ are (1) expansion/extension of policy-rate fund supplies (ECB-style QE), (2) purchase of conventional assets (government bonds, BOE-style), and (3) purchase of unconventional assets (corporate bonds, equities, Fedstyle). (1) and (2) (increased operations in short-dated JGBs, which fall outside the BOJ Note Rule) are comparatively lightweight but even they should make meaningful contribution to easing financial conditions via the mechanism of forex adjustment if Asian and other key central banks are at least turning in the direction of a QE exit, albeit with differences in methods and degree. We are not exaggerating when we talk of a golden opportunity for combating Japanese deflation by proactively steering a different course from other key central banks.

## Reference: Export Similarity Index and International Competitive Coefficient

**The Export Similarity Index (ESI)** measures the similarity in export structure between two countries. The formula is as follows.

$$ESI_{ab} = \sum Min(X^{i}_{a}/X_{a}, X^{i}_{b}/X_{b})$$

ESI<sub>ab</sub>: Export Similarity Index between countries a and b

Xi : Export amount of traded good i for country a

X<sub>a</sub> : Total export amount of country a

X<sub>b</sub> : Export amount of traded good i for country b

X<sub>b</sub>: Total export amount of country b

The weights of each traded good in each country's exports are calculated. ESI is defined as the sum of the lower weight of the two countries for each traded good. The closer the ESI is to 1, the closer the resemblance of the two countries' export structures.

#### Tetsufumi Yamakawa

### **Upcoming Releases**

Date	Time	Indicators and events		GS	Consensus	Previous
Mar. 04	<b>8:50</b> 10:30	MOF Corporate Statistics (Q4; actual) Capex BOJ MPM Member Noda Speaks JGB Liquidity Supply Auction	уоу %	-17.3%	-18.4%	-24.8%
Mar. 08	8:50	Balance of Payments (Jan.)				
		Current account		¥591.5 bn		¥900.7 bn
	8:50	Money Stock (Feb.)	yoy %	n.a.		+2.9%
	14:00	Economy Watchers Survey (Feb.)		n.a.		37.4
Mar. 09	14:00	Business Condition Indices (Jan.)		n.a.		+3.3
		30-Year JGB Auction				
Mar. 10	8:50	Machinery Orders (Jan.) Core private orders	mom %	-2.0%		+20.1%
	8:50	Corporate Goods Price Index (Feb.)				
		Domestic CGPI	yoy %	-1.5%		-2.2%
Mar. 11	8:50	GDP Revision (Q4) 5-Year JGB Auction	qoq ann. %	n.a.		+4.6%

- October-December Corporate Statistics ( $\sqrt{\sqrt{}}$ ): We expect capex to remain far below the year-earlier level although we forecast that the decline will narrow to 19.8% yoy, from July-September 25.7%. It is a base statistic for GDP revision and we forecast that October-December GDP (March 11 release) will be revised down to around +2.8% qoq annualized (from preliminary +4.6%; July-September final was  $\pm 0.0\%$ ). We are expecting a substantial downward revision for GDP led by private-sector capex.
- **January Machinery Orders** ( $\sqrt{1/1}$ ): Capex is emerging from the trough. Machinery orders (private sector excluding shipping and electric power) lead machinery investment by three to six months, primarily in manufacturing. We forecast -2.0% mom for January after the surge in December (+20.1%). The level is still about 40% lower than the peak, at  $\frac{1}{2}$ 751.2 bn versus  $\frac{1}{2}$ 1.2 tn (January 2008), which shows how far we are from a full recovery. External orders, particularly for China, continue to be offset by weak domestic orders.
- February Corporate Goods Price Index ( $\sqrt{\sqrt{}}$ ): The corporate goods price index (CGPI) is basically trending down due to slack domestic demand although with fluctuations stemming from the oil price. We forecast -1.5% yoy for February, which is narrower than January (-2.2%) but nonetheless another substantial decline.

Note: The importance of the economic indicator in terms of its impact on the market is indicated by "very high:  $\sqrt{V}$ ", "high:  $\sqrt{V}$ ".

## **Key Data**

### Main Economic Forecasts

	Calendar year Fiscal year			Quarterly														
	2009*	2010	2011	2009	2010	2011	1Q2009*	2Q*	3Q*	4Q*	1Q2010	2Q	3Q	4Q	1Q2011	2Q	3Q	4Q
Real GDP (% qoq ann)	-5.0	1.9	1.6	-2.2	1.6	1.7	-12.3	5.2	0.0	4.6	0.5	1.5	1.5	1.5	1.5	2.2	1.5	1.7
Private consump.	-1.0	1.9	0.5	0.8	1.2	0.5	-5.2	4.6	2.4	2.7	1.5	1.0	0.7	0.4	0.4	1.0	0.1	0.2
Private capex	-19.3	0.5	6.4	-15.5	3.5	6.9	-30.6	-15.6	-9.8	4.0	2.4	4.2	5.2	6.1	6.7	6.9	7.1	7.8
Ind. prod. (yoy % chg)	-22.3	13.2	5.1	-10.1	8.5	5.6	-34.6	-27.8	-20.1	-5.4	24.4	16.1	9.4	4.9	4.7	4.8	5.1	5.8
Corporate profits				-15.0	0.0	5.0												
GDP deflator (yoy % chg)	-1.0	-1.8	-0.2	-1.7	-1.2	-0.1	0.3	-0.6	-0.6	-3.0	-2.3	-2.1	-1.7	-0.7	-0.4	-0.3	-0.1	0.0
Core CPI (yoy % chg)	-1.3	-1.0	-0.5	-1.6	-0.8	-0.4	0.0	-1.0	-2.3	-1.7	-1.2	-1.0	-1.0	-0.7	-0.5	-0.5	-0.4	-0.4
Current account (¥ tn)	13.3	11.6	8.4	14.2	10.5	7.8	2.5	3.3	4.1	3.4	3.4	2.9	3.1	2.1	2.4	2.0	2.4	1.7

<sup>\*</sup> Shows actual figures

Source: GS Global ECS Research Forecasts.

### **Recent Economic Indicators**

		1Q2009	2Q2009	3Q2009	4Q2009	7/09	8/09	9/09	10/09	11/09	12/09	1/10
Real GDP	% qoq ann.	-12.3	5.2	0.0	4.6							
Industrial production	% mom	-22.2	8.3	7.4	4.6	2.1	1.6	2.1	0.5	2.2	1.9	2.5
	% yoy	-34.6	-27.8	-20.1	-5.4	-22.7	-19.0	-18.4	-15.1	-4.2	5.1	18.2
Tertiary activity	% mom	-3.1	-0.7	0.6	-0.2	0.5	0.3	-0.5	0.4	-0.1	-0.9	
Leading indicator (CI)	2005=100	75.6	78.6	84.8	91.6	82.8	84.1	87.6	89.5	91.0	94.3	
Real household consumption	% yoy	-3.3	-0.3	0.5	2.0	-2.0	2.6	1.0	1.6	2.2	2.1	1.7
Retail sales	% yoy	-3.9	-2.8	-1.9	-0.7	-2.4	-1.7	-1.4	-0.9	-1.1	-0.3	2.6
Machinery orders (a)	% mom	-9.9	-4.9	-0.9	0.5	-9.3	0.5	10.5	-4.5	-11.3	20.1	l
Housing starts	% yoy	-21.4	-31.9	-35.8	-20.9	-32.1	-38.3	-37.0	-27.1	-19.1	-15.7	-8.1
Export volume (b)	% yoy	-42.5	-33.2	-24.9	-1.2	-27.6	-25.4	-21.8	-13.0	-1.5	14.7	41.3
Import volume (b)	% yoy	-18.9	-20.8	-12.6	-5.0	-14.9	-12.8	-10.2	-11.7	-2.1	-0.8	2.1
Trade balance (c)	¥ bn	-493	1,395	1,453	1,731	474	546	433	715	546	470	
Current account balance (c)	¥ bn	1,792	3,951	3,803	3,782	1,220	1,239	1,344	1,376	1,305	1,101	
Unemployment rate	%	4.5	5.1	5.4	5.2	5.6	5.4	5.3	5.2	5.3	5.2	4.9
CPI National (excl. fresh food)	% yoy	0.0	-1.0	-2.3	-1.7	-2.2	-2.4	-2.3	-2.2	-1.7	-1.3	-1.3
Domestic corporate price	% yoy	-1.9	-5.5	-8.3	-5.2	-8.5	-8.5	-7.9	-6.8	-5.0	-3.9	-2.1
Money stock M2	% yoy	2.1	2.6	2.8	3.3	2.7	2.8	3.0	3.4	3.3	3.1	2.9
¥/US\$ exchange rate (d)	¥/US\$	93.6	97.3	93.6	89.7	94.5	94.8	91.5	90.3	89.2	89.6	91.2
Three-month TIBOR (d)	%	0.70	0.59	0.55	0.50	0.56	0.55	0.54	0.53	0.52	0.46	0.45
Benchmark bond yield (d)	%	1.28	1.45	1.34	1.31	1.34	1.37	1.31	1.33	1.35	1.26	1.33
Nikkei 225 stock price (d)	¥	7,930	9,294	10,141	9,959	9,691	10,430	10,303	10,066	9,641	10,169	10,662

<sup>(</sup>a) Private-sector orders, excluding electric power and shipping. (b) Customs cleared. (c) Balance of payments, seasonally adjusted.

<sup>(</sup>d) Period average.

### **Economic Calendar**

Monday March 1	Tuesday March 2	Wednesday March 3	Thursday March 4	Friday March 5
	Household Survey (All households; Jan.) (actual): +1.7% yoy  Labor Market (Jan. actual) Unempl. rate: 4.9% Job offers/appl.: 0.46X  [10yr JGB Auction]	Monthly Labor Stat. (Jan.) (actual): +0.1% yoy	MOF Corporate Stats. (Q4) Capex (zctual): -17.3% yoy  BOJ Noda Speaks  [JGB Liquidity Supply Auction]	
March 8	March 9	March 10	March 11	March 12
Balance of Payments (Jan.) Current a/c (E): ¥591.5 bn	Leading Indicator (Jan.)	Corporate Price (Feb.) (E): -1.5% yoy	GDP Revision (Q4)	Mfg. Operating Rate (Jan.)
Economy Watchers Survey		Machinery Orders (Jan.) (E): -2.0% mom		
Money Stock (Feb.)	[30yr JGB Auction]	(=)	[5yr JGB Auction]	
March 15	March 16	March 17	March 18	March 19
Consumer Confidence (Feb.)	Monetary Policy Meeting FOMC	Tertiary Activity (Jan.)  Monetary Policy Meeting BOJ Governor's Press Conf.	Reuter Tankan (Mar.) [JGB Liquidity	
	[20yr JGB Auction]		Supply Auction]	
March 22	March 23	March 24	March 25	March 26
HOLIDAY		Customs-Cleared Trade (TBD; Feb.)		CPI (Mar./Feb.)
			[2yr JGB Auction]	
March 29	March 30	March 31	April 1	April 2
Retail Sales (Feb.)	Household Survey (All households; Feb.) Labor Market (Feb.) Industrial Production (Feb.)	Monthly Labor Stat. (Feb.) Housing Starts (Feb.)	BOJ Tankan (Mar.)	

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