



# Economic trends in 2011-12: the World and Russia

**Julia Tsepliaeva**

Chief Economist Russia & CIS

+7 495 785 6022

[julia.tsepliaeva@bnpparibas.com](mailto:julia.tsepliaeva@bnpparibas.com)

## World Economy: Country Breakdown

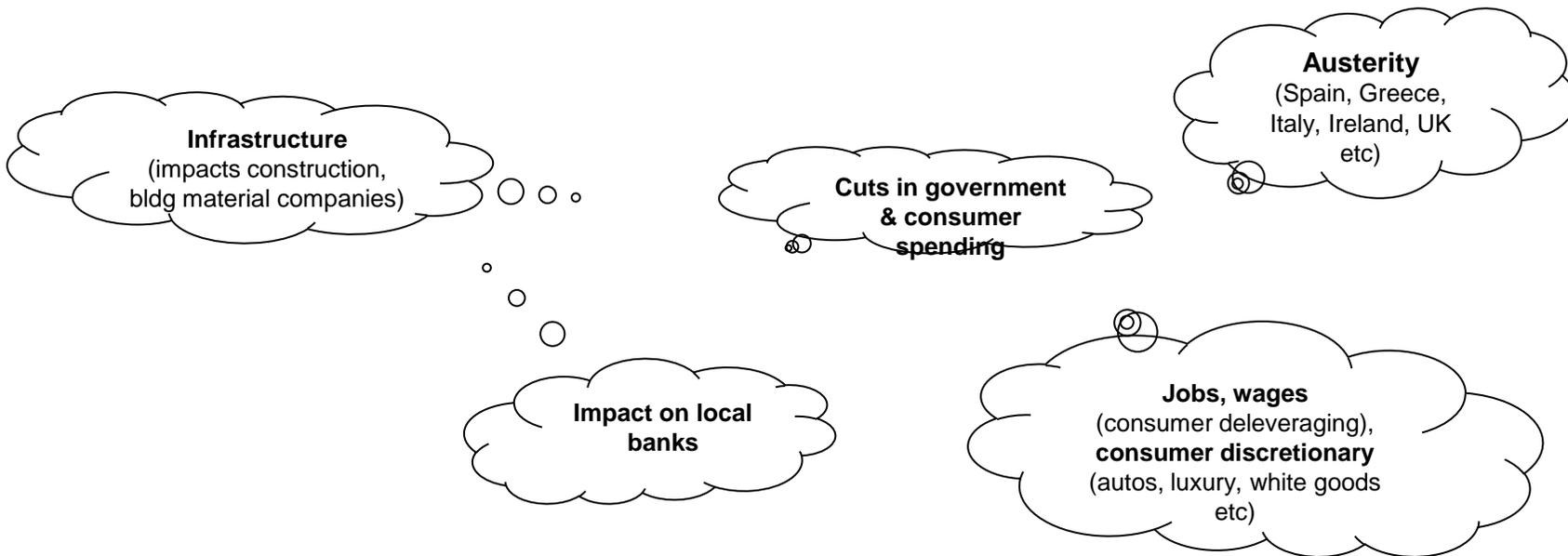
Country	World GDP & GDP Weights			
	Weight	2009	2010	2011
<b>US</b>	<b>20.4</b>	<b>-2.6</b>	<b>2.8</b>	<b>2.7</b>
Japan	6.0	-6.3	3.9	-1.2
Germany	4.0	-4.7	3.5	3.4
France	3.0	-2.5	1.5	2.0
Italy	2.5	-5.2	1.2	0.9
UK	3.1	-4.9	1.3	1.5
Canada	1.8	-2.5	3.1	2.4
<b>China</b>	<b>12.6</b>	<b>9.2</b>	<b>10.3</b>	<b>9.5</b>
Brazil	2.9	-0.6	7.5	3.8
Russia	3.0	-7.9	4.0	5.0
India	5.1	6.7	7.7	8.8
<b>Eurozone</b>	<b>15.1</b>	<b>-4.0</b>	<b>1.7</b>	<b>1.8</b>
World	100.0	-0.6	4.8	4.0

Source: BNP Paribas



# Uncertainty ahead?

The Evolution of Global Financial Crisis - 2007 to 2010			
Early 2007 to Present	Mid 2007 to 2008	2008 to Present	2011-12
Real Estate Crisis	Banking Crisis Phase I	Banking Crisis Phase II	Sovereign Credit Risks
Residential Commercial	Securities Market	Bank Loans	



## Global Economy: slowdown in growth + inflation challenge

- The Japanese earthquake and tsunami have reduced our forecast of global growth this year to 4% compared with 4.8% in 2010. Japanese GDP has been seriously affected
- We estimate effect of oil price shock at 0.5pp for the US and eurozone (and some more in some emerging markets)
- The US recovery looks better now: we project growth at around 2.5% and 3.1% in 2011 and 2012 respectively. In the eurozone, we expect economic growth to be 1pp below that in the US, but still above potential , averaging 1.65% in 2011-12. Germany continues to outperform
- Chinese growth is slowing but does not rise any concerns
- Global inflation picked up to 3.5% in 2010 – and we expect it to raise further to 4.4% in 2011. Monetary policies still remain stimulative. Stabilisation in food prices and oil prices in 2012 should result in CPI slowing to 3.6% in 2012
- Recent high food prices have a structural component and a more temporary one (La Nina)

GDP Forecast

	2009	2010	2011F	2012F	2013F
World	-0.6	4.8	4.0	4.4	4.2
G7	-3.7	2.8	1.8	2.5	2.4
US	-2.6	2.9	2.5	3.1	2.8
Japan	-6.3	3.9	-1.2	1.6	1.3
Eurozone	-4.0	1.7	1.8	1.5	1.7
China	9.1	10.3	9.5	9.2	8.8
UK	-4.9	1.3	1.5	1.5	2.6
Canada	-2.5	3.1	2.4	2.8	2.9
Asia Ex-Japan	6.2	9.2	8.3	8.1	8.0
CEE	-5.8	3.1	4.0	4.4	3.5
Latin America	-2.0	6.2	4.5	3.1	3.5

Source: BNP Paribas

CPI forecast

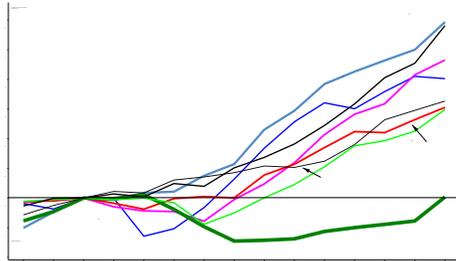
	2009	2010	2011F	2012F	2013F
World	1.8	3.5	4.4	3.6	3.4
G7	-0.1	1.4	2.4	1.6	1.7
US	-0.3	1.6	2.6	1.5	2
Japan	-1.4	-0.7	0.6	0.7	0.7
Eurozone	0.3	1.6	2.7	2	1.5
China	-0.7	3.3	4.3	4	3.8
UK	2.2	3.3	4.6	2.4	1.8
Canada	0.3	1.8	2.1	2.5	2.3
Asia Ex-Japan	0.6	4.5	5.2	4.2	4
CEE	7.9	5.1	7.5	6.3	5.7
Latin America	5.6	7.2	8	7.4	6.6

Source: BNP Paribas



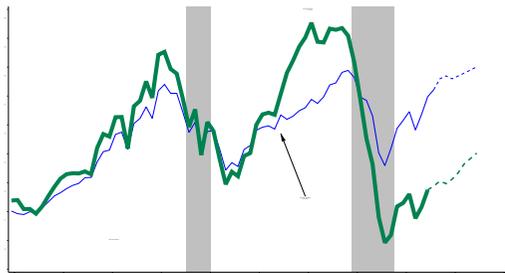
# US: Gradually Making Progress

This has been the slowest recovery in the post-war period although there was a pick-up in momentum in Q4 2010.



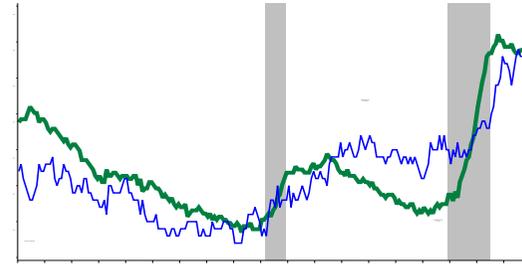
Source: Reuters Ecowin Pro, BNP Paribas

Household net worth is gradually improving as rising stock values and high saving rates more than offset the impact of falling house prices. We expect the gradual improvement to continue.



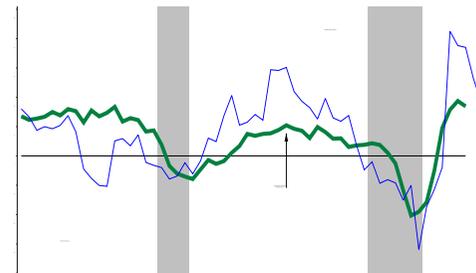
Source: Reuters Ecowin Pro, BNP Paribas

Virtually all of the decline in the unemployment rate from 10.1% in October 2009 to 8.9% in February 2011 is accounted for by declining labour force participation. We expect better job growth and further declines in participation to push the unemployment rate lower.



Source: Reuters Ecowin Pro, BNP Paribas

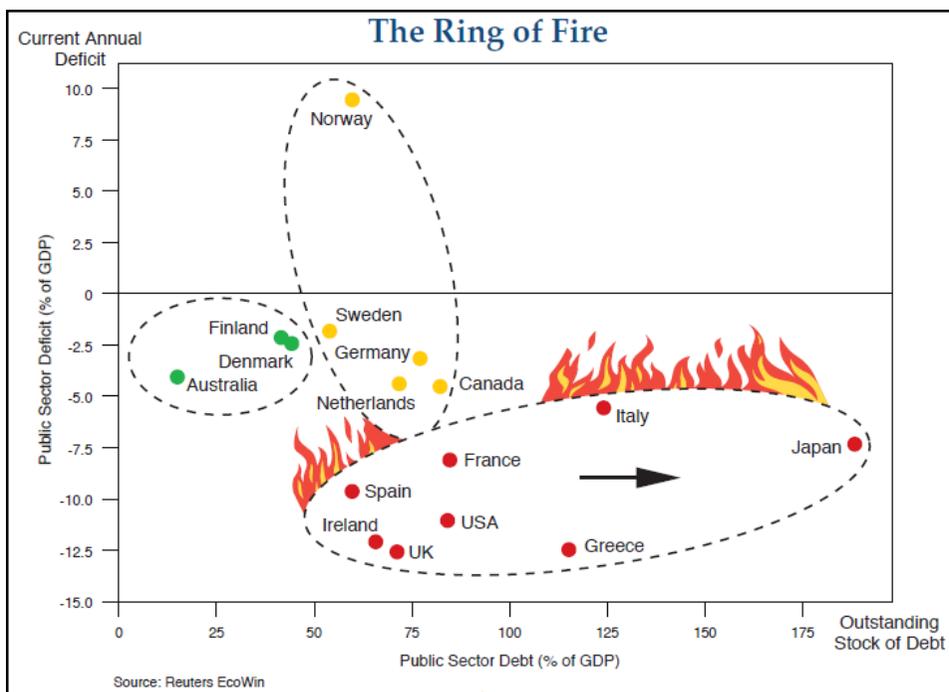
US corporations have proven to be globally competitive and are investing to maintain their edge. Equipment and software investing should continue to be strong.



Source: Reuters Ecowin Pro, BNP Paribas



# Sovereign debt concerns – The Eurozone is not alone



Country	Gross Gov. Debt (% GDP)			
	2009	2010	2011F	2012F
Australia	17.6	21.5	24.0	25.0
Canada	31.3	29.4	30.6	29.8
Denmark	41.4	42.3	44.7	46.7
France	78.3	81.7	84.8	86.8
Germany	73.4	75.1	74.3	73.5
Greece	126.8	142.5	155.5	162.3
Ireland	65.5	99.3	111.4	119.5
Italy	116.0	119.0	119.3	118.8
Japan	173.0	181.0	189.0	195.0
Korea	32.6	33.3	32.5	31.7
Netherlands	60.8	64.3	66.1	65.9
Norway	44.1	45.0	44.1	42.4
Portugal	82.9	92.4	99.7	104.4
Spain	53.2	62.0	67.8	72.2
Sweden	41.9	40.2	38.2	35.3
Switzerland	38.8	38.2	37.5	36.7
UK	71.2	77.5	80.5	83.6
US	53.5	61.2	70.1	75.2
<b>median</b>	<b>57.2</b>	<b>63.2</b>	<b>69.0</b>	<b>72.9</b>
<b>mean</b>	<b>66.8</b>	<b>72.6</b>	<b>76.1</b>	<b>78.0</b>



## Redemptions & Funding Needs

	2011	2012	2013
<b>Ireland</b>			
Redemptions (EURbn)	4.4	5.6	6.0
Redemptions (% GDP)	2.7	3.5	3.8
Budget balance (EURbn)	-16.4	-12.9	-10.1
Funding needs (EURbn)	20.8	18.5	16.1
Redemptions as % of Funding Needs	21.1	30.2	37.4
<b>Portugal</b>			
Redemptions (EURbn)	9.6	8.5	8.7
Redemptions (% GDP)	5.8	5.1	5.2
Budget balance (EURbn)	-9.6	-7.0	-5.1
Funding needs (EURbn)	19.3	15.5	13.8
Redemptions as % of Funding Needs	50.0	54.8	63.1
<b>Spain</b>			
Redemptions (EURbn)	45.1	46.4	54.8
Redemptions (% GDP)	4.3	4.4	5.2
Budget balance (EURbn)	-72.1	-54.9	-38.7
Funding needs (EURbn)	117.2	101.3	93.5
Redemptions as % of Funding Needs	38.5	45.8	58.6
<b>Italy</b>			
Redemptions (EURbn)	160.2	187.2	119.1
Redemptions (% GDP)	10.1	11.6	7.2
Budget balance (EURbn)	-74.2	-67.5	-55.5
Funding needs (EURbn)	234.4	254.7	174.6
Redemptions as % of Funding Needs	68.3	73.5	68.2

Source: BNP Paribas, Bloomberg



# BNPP view on EUR/USD: Last quarter vs. Current View

## BNP Paribas view (as of 2010-end)

- Foreign debt crisis increases risks for EUR
- High refinancing needs from EU periphery (in particular Italy and Spain) increase pressure
- Funding needs in 2011: Ireland (EUR20.8bn), Portugal (EUR19.3bn), Spain (EUR117.2bn), Italy (EUR234.4bn). The peak of demand is expected in Q3'11

	Q211	Q311	Q411	Q112	Q212	Q312	Q412
EUR/USD	1.23	1.22	1.20	1.22	1.24	1.26	1.25
EU Refi Rate (%)	1.00	1.00	1.00	1.00	1.00	1.00	1.25
Fed Funds Rate (%)	0.25	0.25	0.25	0.25	0.25	0.25	0.50

Source: BNP Paribas

## BNP Paribas view (as of Mar-2011)

- Less concerns on debt crisis in 2011-12: successful save for Ireland, Greece.
- Developed mechanism of further financial support
- Stronger economic growth in Germany (3.5%/y/y in 2010 )
- ECB is likely to start tightening, which is expected to be aggressive.

	Q211	Q311	Q411	Q112	Q212	Q312	Q412
EUR/USD	1.45	1.46	1.40	1.37	1.33	1.30	1.29
EU Refi Rate (%)	1.25	1.50	1.75	2.00	2.25	2.50	2.50
Fed Funds Rate (%)	0.25	0.25	0.25	0.25	0.25	0.75	1.00

Source: BNP Paribas

**Level of uncertainty is remaining high**

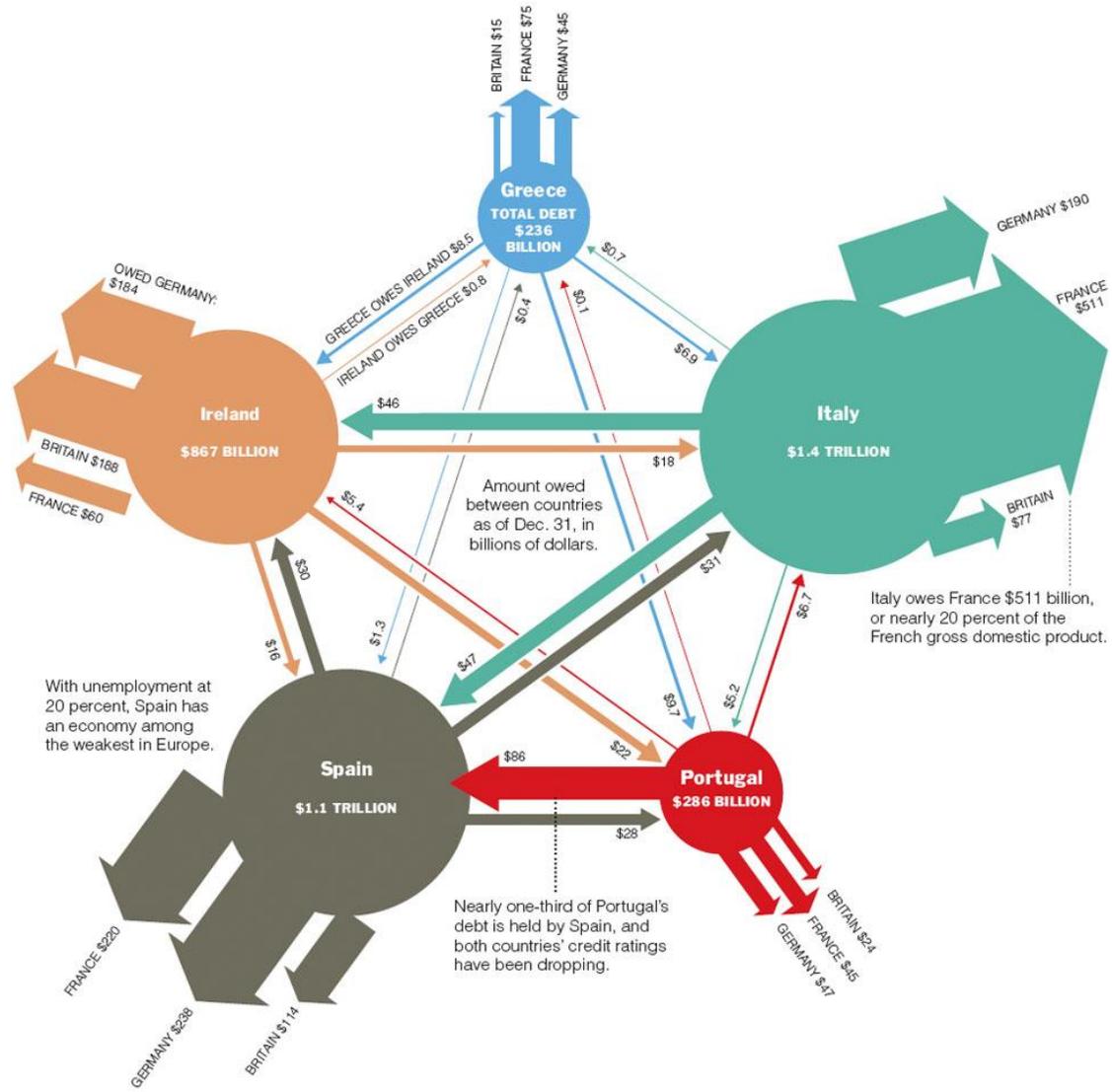
**Debt crisis is not over**



**high volatility is likely**



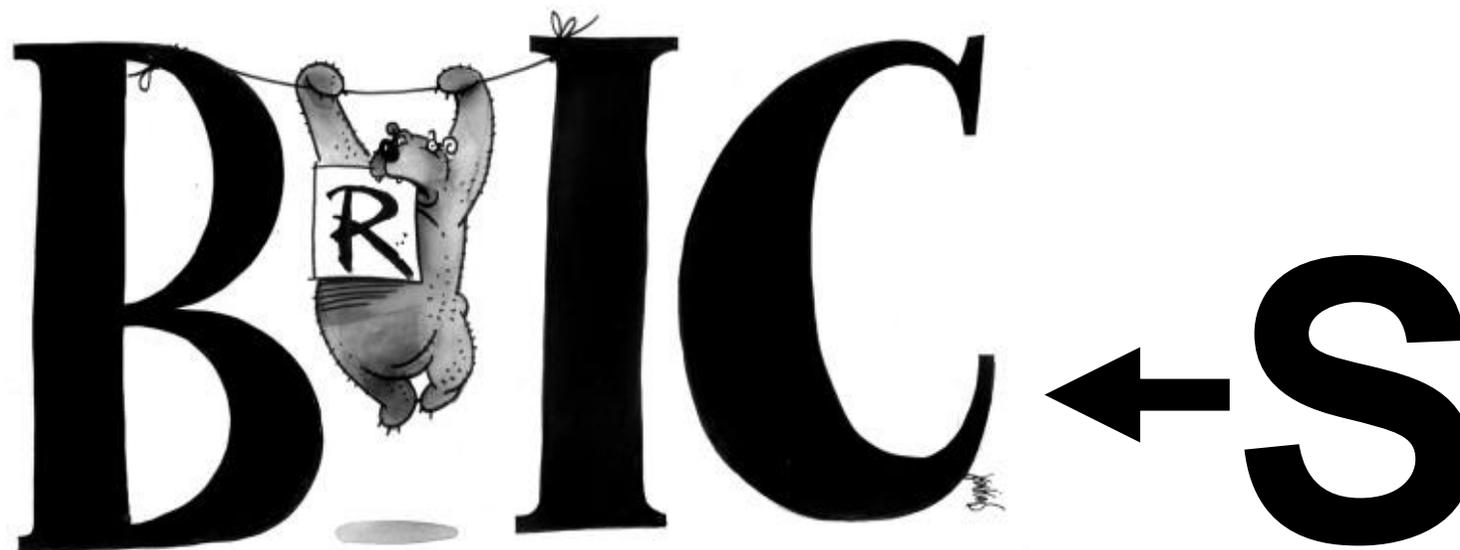
# Interconnections Increase Concerns



Source: New York Times



## BRIC: Russia Underperformed



Country	GDP growth (% y/y)				Key Policy Rate (%) (year-end)				CPI (% y/y)			
	2010	2011F	2012F	2013F	2010	2011F	2012F	2013F	2010	2011F	2012F	2013F
Brazil	7.5	3.8	2.0	4.1	10.75	13.00	12.00	10.75	5.0	6.7	5.7	4.8
Russia	4.0	5.0	5.7	4.3	7.75	9.00	9.00	8.00	6.9	9.6	8.7	8.0
India	8.6	8.8	8.3	8.6	6.25	7.50	8.00	8.50	9.5	8.0	5.8	5.3
China	10.3	9.5	9.2	8.8	5.81	6.81	7.06	7.06	3.3	4.3	4.0	3.8

Source: BNP Paribas



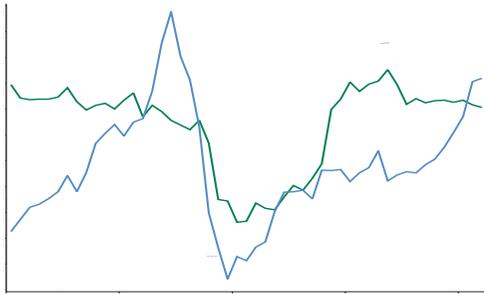
# RUSSIA

- Economic growth acceleration to 5+% y/y
- Inflation up – tightening ahead
- Balanced budget: SWF preserved, no Eurobond issuance
- Election Season: no changes in economic policy ahead



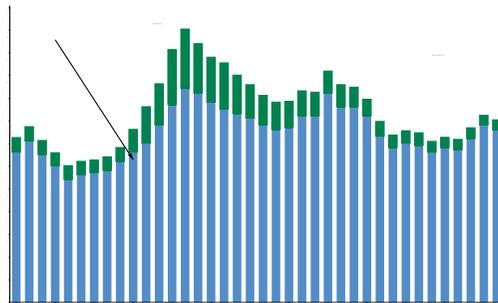
# Recovery Continues...trends stabilise

Industrial growth has become the locomotive of recovery. We expect it to remain high at 5.6% y/y in 2011 (8.2% y/y in 2010)



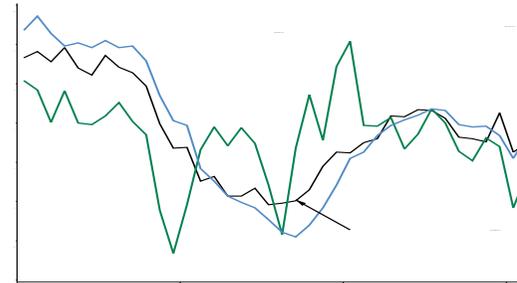
Source: FSSS, Bloomberg, BNP Paribas

Spike in unemployment avoided (% of economically active population). Unemployment is likely to decline further in 2011 (BNPP forecasts 6.9% in 2011 vs. 7.5% in 2010)



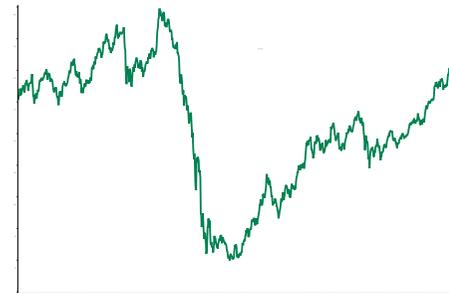
Source: FSSS, BNP Paribas

Recovery in consumption has become visible in 2010 and should be sustainable. We see private consumption accelerating to 5% y/y in 2011



Source: FSSS, BNP Paribas

RTS performance was impressively good in 2009 – but Russia underperforms EMEA in 2010. We expect c.+25% in 2011



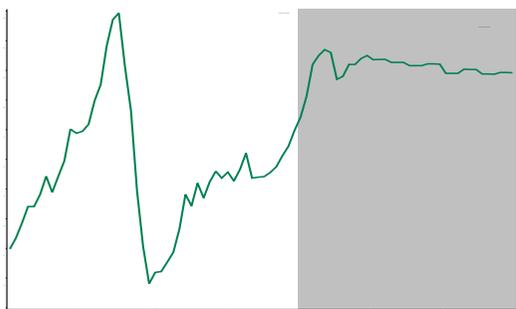
Source: Reuters Ecowin Pro



## New Optimism: consensus in a range of 4-5% for the medium term

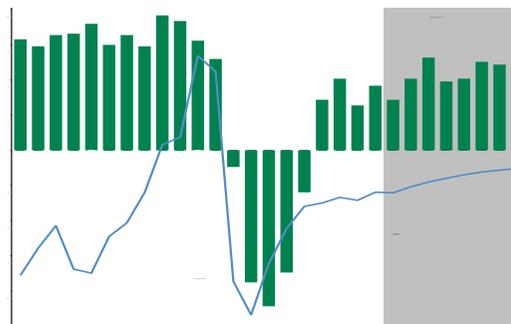
- We expect oil prices to remain favourable for Russia ( USD111/bbl and USD112/bbl is expected in 2011 and 2012 respectively)
- We are bullish on the pace of recovery, expecting 5% in 2011 and 5.7% in 2012
- Consensus on economic growth: in the range 4-5%. We expect growth to average 5% in the medium term
- Russia is likely to return to pre-crisis growth rates of 7-8% if oil prices exceed USD120-140/bbl

: We expect Urals to stay around USD110-112/bbl in the coming years



Source: BNP Paribas

GDP growth has accelerated on the back of higher oil



Source: FSSS, Bloomberg

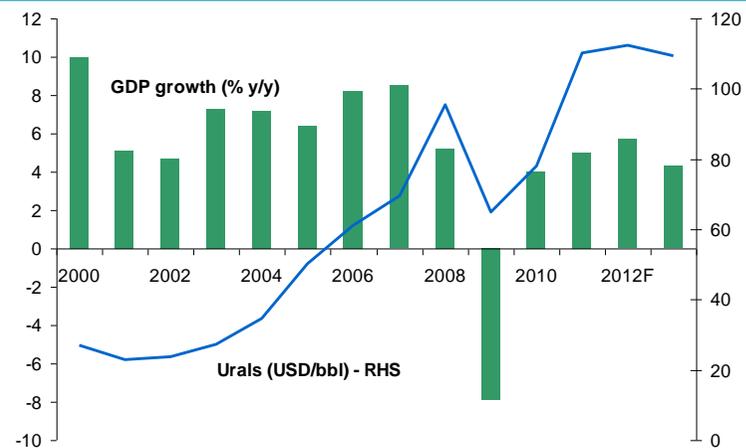


# Crude Support

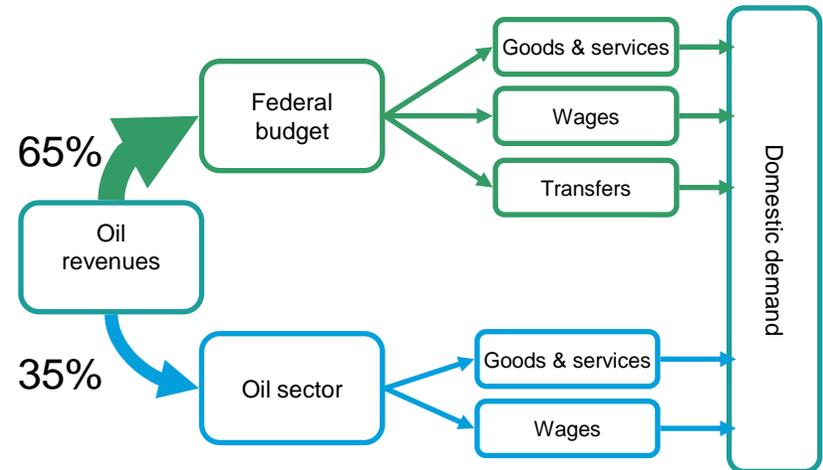
## High oil prices essential for acceleration in growth

- Oil prices are the main leading indicator for Russia – with a very short lag
  - USD 10/bbl increase in oil prices adds ~USD 20bn to budget revenues and at least USD 25bn to exports
  - 10% increase in oil prices adds 0.8-0.9pp to GDP growth
  - Higher oil prices = better sentiment on Russia = net capital inflow. Domestic demand strength is a function of oil prices
  - Dependence on oil has increased since pre-crisis period, in particular on the fiscal side
  - Oil and gas sector accounts for 20-22% of GDP, 53-55% of federal budget revenues, 66% of exports and 60+% of the equity market
- Oil price impact is asymmetric: decline is more painful than the same-sized increase is beneficial**

GDP growth (% y/y) and oil prices



Source: FSSS, Bloomberg, BNP Paribas



Source: BNP Paribas



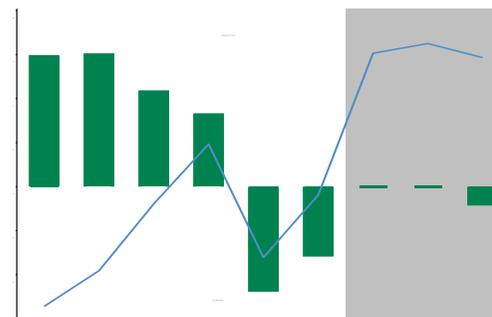
# Fiscal Story: Temporary Return to Fiscal Prudence

## Budget deficit forecast

	2010	2011 Budget Law	2011 BNPP view	2012 Budget Plan	2012 BNPP view
RUB bn					
<b>Revenues</b>	<b>8304</b>	<b>8618</b>	<b>10718</b>	<b>9504</b>	<b>11504</b>
Oil Revenues	3830	4003	6020	4406	6306
Non-oil Revenues	4474	4615	4730	5097	5197
<b>Expenditures</b>	<b>10116</b>	<b>10385</b>	<b>10750</b>	<b>11237</b>	<b>11500</b>
<b>Deficit</b>	<b>1812</b>	<b>1767</b>	<b>0</b>	<b>1734</b>	<b>0</b>
Reserve Fund Financing	994.0	242.3	0.0	147.1	0.0
<b>Deficit (% of GDP)</b>	<b>-4.1</b>	<b>-3.6</b>	<b>0.0</b>	<b>-3.1</b>	<b>0.0</b>
Urals (USD/bbl)	78.2	75	111	75	113

Source: MoF, BNP Paribas

## Budget deficit (% GDP) and oil prices



Source: MoF, Reuters, BNP Paribas

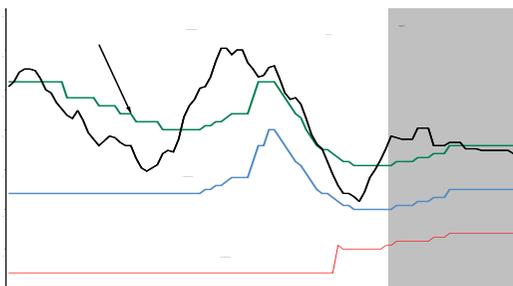
## Russia returns to balanced budget on the back of high oil prices

- Although we expect further growth in spending, extra oil revenues should help to balance the budget in 2011-12
- Although the government has stated its intention to limit oil transfers to the budget to 4% of GDP, this is unlikely to materialize. It will continue using significantly more in oil revenues to finance current expenditure
- The Reserve Fund could be fully preserved/ slightly replenished in 2011 (USD 25.4bn at 01.01.2011)
- Financing needs are declining. In 2011, the government is planning to drastically increase privatisation revenues to additionally reduce borrowing requirements
- No further Eurobond placements, in our view ( the 2011 budget law allows borrowing of USD 4.8bn)
- Domestic borrowing plan is likely to be revised from RUB 1370bn to RUB 670bn – no serious impact on yields due to massive placement volumes
- Sovereign debt should not exceed 15% of GDP in the medium term – a safe and comfortable level



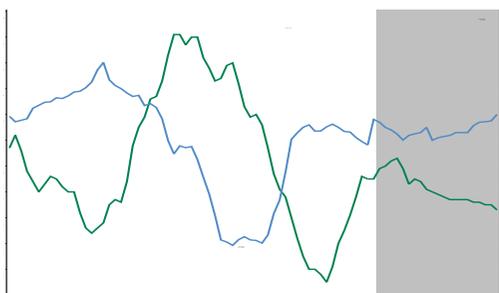
# Monetary Tightening Ahead

Acceleration in inflation should result in aggressive monetary tightening



Source: CBR, FSSS, BNP Paribas

Money supply growth is fuelling inflation in 2011 and beyond



Source: CBR, FSSS, BNP Paribas

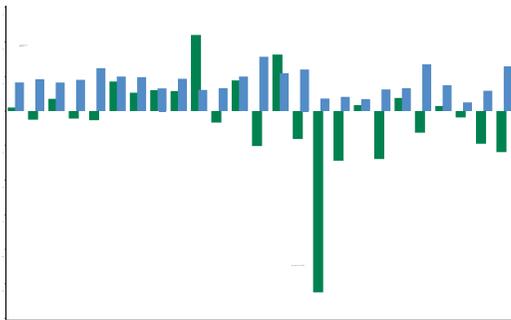
- In 2011, food inflation is likely to remain high with the 15% hike in tariffs also fuelling CPI
- Inflation expectations have also leaped
- We expect money supply growth to remain high on the back of economic recovery and solid petro-dollar inflows (BNPP view: 35% in 2011 vs. 28.5% in 2010)
- We expect CPI inflation to accelerate to 9.6% y/y (2011 average) and 8.7% y/y (end-2011) while the government and CBR maintain their target at 7% (6.5% set in the 2011 budget law)
- The CBR has already begun tightening and we expect it to be aggressive (+125bp in 2011 as a whole). We are maintaining our refi rate forecast of 9% for end-2011
- No impact on growth or lending rates, in our view



# Capital Inflows: From Negative to Neutral; From Neutral to Positive

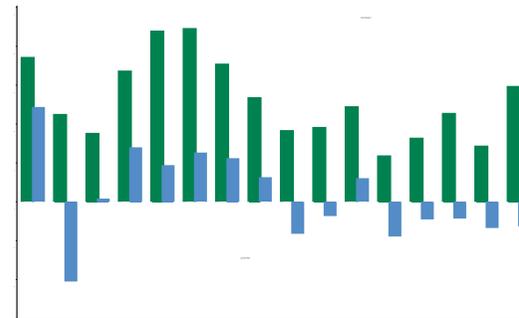
- Capital inflows has become increasingly important for the rouble
- Net capital outflow was sizable at USD 28.8bn in Q1'2011 (USD 52.4bn in 2009 and USD 35.3 in 2010)
- We expect capital inflow of USD 5-10bn in 2011
- Political story may provoke higher capital outflow (risk for 2011-12)
- We expect the debt rollover ratio to increase from 103% in 2010 to 125% in 2011
- Net FDI is likely to remain modest (below 1% of GDP)

Capital outflows and current account



Source: FSSS

Low FDI is a chronic problem



Source: CBR, BNP Paribas



## Rouble: Generally, Appreciation...

### FX forecast (end of period)

	Q211	Q311	Q411	Q112	Q212	Q312	Q412	Q113	Q213	Q313	Q413
USD/RUB	27.03	27.34	28.22	28.72	28.30	28.63	28.31	27.86	27.32	28.51	27.11
<b>RUB vs. basket</b>	32.50	<b>33.00</b>	33.30	<b>33.50</b>	32.50	<b>32.50</b>	32.00	<b>32.00</b>	31.50	<b>33.00</b>	31.50
EUR/RUB	39.19	39.92	39.51	39.35	37.64	37.22	36.52	37.05	36.61	38.49	36.87
EUR/USD	1.45	1.46	1.40	1.37	1.33	1.30	1.29	1.33	1.34	1.35	1.36

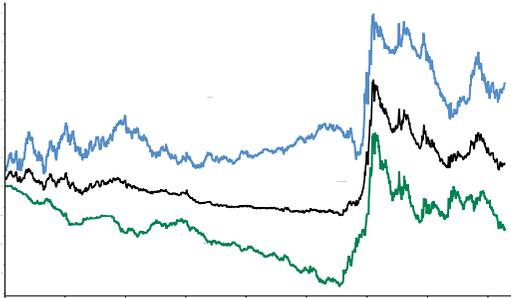
Source: BNP Paribas

- The government may want a weaker rouble to bolster industrial growth, although a stronger rouble is supportive for consumption and investment. It will continue looking for a compromise
- However, the current spike in dollar inflows makes appreciation the only likely scenario
- Rouble remains undervalued (macroeconomic factors support its appreciation). It underperformed EMEA currencies in 2010



# ...But Higher Volatility

## The Rouble vs. the Bi-Currency Basket



Source: Reuters

## Tax Schedule

Date	Tax due	Expected amount
		<i>RUB bn</i>
~15	Payments to extra budgetary funds	150
~20	VAT	180
~25-27	Excise duties + Mineral Resources	200
~28-29	Corporate Profit Tax	200

Source: MoF, BNPP

- We consider a drop in oil prices to USD 60-80/bbl (even if short-lived) as the main risk for Russia's economic and FX performance
- The regulator is aiming to shift to a floating exchange rate regime in the medium term. Dirty free floating is a realistic target. Lower interventions of the CBR are strengthening current tendencies in the market
- Recently, the CBR widened its corridor for the rouble to 32.45-37.45 and reduced volumes of interventions from USD 650mn to USD 600mn. These changes are calling for better perception of rouble strengthening. Further liberalization is on horizon
- Rouble volatility has been accepted by the CBR and should help to limit speculative capital inflows and foreign borrowing by the corporate sector
- No strict capital control measures are planned
- Seasonality of the rouble is likely to persist (we expect temporary highs in periods of large tax payments or of sizable foreign borrowing)



# Russia: Main Macro Indicators

	Year					2010				2011				2012			
	'09	'10	'11 <sup>(1)</sup>	'12 <sup>(1)</sup>	'13 <sup>(1)</sup>	Q1	Q2	Q3	Q4	Q1 <sup>(1)</sup>	Q2 <sup>(1)</sup>	Q3 <sup>(1)</sup>	Q4 <sup>(1)</sup>	Q1 <sup>(1)</sup>	Q2 <sup>(1)</sup>	Q3 <sup>(1)</sup>	Q4 <sup>(1)</sup>
<b>Components of Growth</b>																	
GDP (% q/q) nsa	-	-	-	-	-	-15.0	8.0	10.9	2.7	-15.3	8.9	11.9	1.5	-15.2	10.2	11.7	1.2
GDP (% q/q) sa	-	-	-	-	-	1.0	0.7	-1.0	3.7	0.6	1.6	0.0	2.6	0.8	2.7	-0.2	2.3
GDP (% y/y)	-7.9	4.0	5.0	5.7	4.3	3.5	5.0	3.1	4.5	4.1	5.0	6.0	4.8	5.0	6.2	6.0	5.7
GDP (USD bn)	1225.8	1465	1864	2073	2371	330.0	358.0	384.2	392.3	420.0	455.7	489.0	499.3	467.1	506.7	543.8	555.3
Private Consumption	-4.8	2.7	5.0	5.2	5.5	0.1	4.6	6.7	0.0	3.5	5.0	5.5	6.0	4.8	5.1	5.5	5.5
Public Consumption	-0.5	0.7	0.3	0.0	1.3	1.8	0.7	0.2	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Fixed Investment	-16.2	6.0	8.0	5.0	6.0	-4.1	5.3	7.2	9.8	0.5	9.5	11.0	11.0	5.0	5.2	5.0	4.8
Exports (% y/y)	-4.7	11.1	10.1	0.5	0.5	18.5	3.9	9.5	12.3	11.0	10.0	8.0	11.5	0.5	1.0	0.5	0.0
Imports (% y/y)	-30.4	25.4	20.5	15.0	15.0	10.7	20.8	34.8	35.3	12.0	20.0	25.0	25.0	14.0	14.4	15.5	16.0
Industrial Production	-11.0	8.2	5.6	4.5	4.1	9.5	10.9	6.4	6.5	5.9	5.6	5.6	5.3	3.5	4.5	5.0	4.9
Savings Ratio (%)	18.8	18.0	18.6	21.0	21.0	12.4	19.9	18.8	20.7	17.0	19.0	19.0	19.5	19.5	20.5	22.0	22.0
<b>Inflation &amp; Labour</b>																	
CPI	11.8	6.9	9.5	8.7	8.0	7.2	5.9	6.2	8.1	9.6	9.9	9.3	9.2	8.9	8.7	8.7	8.6
CPI <sup>(2)</sup>	8.8	8.8	8.7	8.5	7.5	6.4	5.8	7.0	8.8	9.6	9.9	9.0	8.7	8.8	8.7	8.7	8.5
Unemployment Rate (%)	8.2	7.5	6.9	6.4	6.2	8.8	7.4	6.8	7.2	7.6	6.8	6.6	6.5	6.5	6.5	6.3	6.3
<b>External Trade</b>																	
Trade Balance (USD bn)	111.6	151.4	150.0	110.0	90.0	46.5	39.2	29.2	36.4	48.2	36.8	32.5	32.5	30.0	30.0	30.0	20.0
Current Account (USD bn)	49.5	71.1	75.0	35.0	15.0	33.3	18.0	5.7	14.1	31.8	20.5	11.4	11.4	10.0	10.0	8.0	7.0
Current Account (% GDP)	4.0	4.9	4.0	1.7	0.6	10.1	5.0	1.5	3.6	7.6	4.5	2.3	2.3	2.1	2.0	1.5	1.3
Net FDI (USDbn)	-7.2	-10.5	5.0	11.0	23.7	-2.2	-2.0	-3.3	-3.0	-1.0	0.0	3.0	3.0	2.5	1.5	4.5	2.5
Net FDI (% GDP)	-0.6	-0.7	0.3	0.5	1.0	-0.7	-0.6	-0.9	-0.8	-0.2	0.0	0.6	0.6	0.5	0.3	0.8	0.5
<b>Financial Variables</b>																	
Gen. Gov. Budget (% GDP)	-6.4	-3.9	0.0	0.0	-1.0	-	-	-	-	-	-	-	-	-	-	-	-
Gross Gov. Debt (% GDP) <sup>(2)</sup>	7.5	7.9	7.8	8.2	9.0	-	-	-	-	-	-	-	-	-	-	-	-
<b>Interest &amp; FX Rates<sup>(2)</sup></b>																	
Official Interest Rate (%)	8.75	7.75	9.00	9.00	8.00	8.25	7.75	7.75	7.75	8.00	8.50	8.75	9.00	9.00	9.00	9.00	9.00
3-Month Rate (%)	7.05	4.10	4.00	4.50	5.00	4.50	4.00	3.80	4.10	3.96	3.50	3.70	4.00	4.00	4.20	4.40	4.50
USD/RUB	30.24	30.36	28.22	28.31	27.11	29.00	30.23	30.56	30.4	28.43	27.03	27.34	28.22	28.72	28.30	28.63	28.31

Footnotes: (1) Forecast (2) End Period

Figures are year-on-year percentage changes unless otherwise indicated

Source: BNP Paribas



# Thank you!



# Disclaimer

**This report has been written by our strategy teams. Such reports do not purport to be an exhaustive analysis and may be subject to conflicts of interest resulting from their interaction with sales and trading which could affect the objectivity of this report. (Please see further important disclosures in the text of this report).**

This report is a marketing communication. It is not independent investment research. It has not been prepared in accordance with legal requirements designed to provide the independence of investment research, and is not subject to any prohibition on dealing ahead of the dissemination of investment research. The information and opinions contained in this report have been obtained from, or are based on, public sources believed to be reliable, but no representation or warranty, express or implied, is made that such information is accurate, complete or up to date and it should not be relied upon as such. This report does not constitute a prospectus or other offering document or an offer or solicitation to buy or sell any securities or other investment. Information and opinions contained in the report are published for the assistance of recipients, but are not to be relied upon as authoritative or taken in substitution for the exercise of judgement by any recipient, are subject to change without notice and not intended to provide the sole basis of any evaluation of the instruments discussed herein. Any reference to past performance should not be taken as an indication of future performance. To the fullest extent permitted by law, no BNP Paribas group company accepts any liability whatsoever (including in negligence) for any direct or consequential loss arising from any use of or reliance on material contained in this report. All estimates and opinions included in this report are made as of the date of this report. Unless otherwise indicated in this report there is no intention to update this report. BNP Paribas SA and its affiliates (collectively "BNP Paribas") may make a market in, or may, as principal or agent, buy or sell securities of the issuers mentioned in this report or derivatives thereon. BNP Paribas may have a financial interest in the issuers mentioned in this report, including a long or short position in their securities and/or options, futures or other derivative instruments based thereon, or vice versa. BNP Paribas, including its officers and employees may serve or have served as an officer, director or in an advisory capacity for any issuer mentioned in this report. BNP Paribas may, from time to time, solicit, perform or have performed investment banking, underwriting or other services (including acting as adviser, manager, underwriter or lender) within the last 12 months for any issuer referred to in this report. BNP Paribas may be a party to any agreement with the issuer relating to the production of this report. BNP Paribas, may to the extent permitted by law, have acted upon or used the information contained herein, or the research or analysis on which it was based, before its publication. BNP Paribas may receive or intend to seek compensation for investment banking services in the next three months from or in relation to an issuer mentioned in this report. Any issuer mentioned in this report may have been provided with sections of this report prior to its publication in order to verify its factual accuracy.

BNP Paribas is incorporated in France with limited liability. Registered Office 16 Boulevard des Italiens, 75009 Paris. This report was produced by a BNP Paribas group company. This report is for the use of intended recipients and may not be reproduced (in whole or in part) or delivered or transmitted to any other person without the prior written consent of BNP Paribas. By accepting this document you agree to be bound by the foregoing limitations.

© BNP Paribas (2010). All rights reserved.

## **Certain countries within the European Economic Area**

This report is solely prepared for professional clients. It is not intended for retail clients and should not be passed on to any such persons. This report has been approved for publication in the United Kingdom by BNP Paribas London Branch, a branch of BNP Paribas, 10 Harewood Avenue, London NW1 6AA, which is regulated by the Financial Services Authority for the conduct of its investment business in the United Kingdom and registered in England & Wales under No. FC13447. This report has been approved for publication in France by BNP Paribas, a credit institution licensed as an investment services provider by the CECEI and the AMF, whose head office is 16, Boulevard des Italiens 75009 Paris, France.

This report is being distributed in Germany either by BNP Paribas London Branch, or by BNP Paribas Niederlassung Frankfurt am Main, regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin).

**United States:** This report is being distributed to US persons by BNP Paribas Securities Corp., or by a subsidiary or affiliate of BNP Paribas that is not registered as a US broker-dealer to US major institutional investors only. BNP Paribas Securities Corp., a subsidiary of BNP Paribas, is a broker-dealer registered with the Securities and Exchange Commission and a member of the National Association of Securities Dealers, the New York Stock Exchange and other principal exchanges. BNP Paribas Securities Corp. accepts responsibility for the content of a report prepared by another non-US affiliate only when distributed to US persons by BNP Paribas Securities Corp.

**Japan:** This report is being distributed to Japanese based firms by BNP Paribas Securities (Japan) Limited, Tokyo Branch, or by a subsidiary or affiliate of BNP Paribas not registered as a financial instruments firm in Japan, to certain financial institutions defined by article 17-3, item 1 of the Financial Instruments and Exchange Law Enforcement Order. BNP Paribas Securities (Japan) Limited, Tokyo Branch, a subsidiary of BNP Paribas, is a financial instruments firm registered according to the Financial Instruments and Exchange Law of Japan and a member of the Japan Securities Dealers Association. BNP Paribas Securities (Japan) Limited, Tokyo Branch accepts responsibility for the content of a report prepared by another non-Japan affiliate only when distributed to Japanese based firms by BNP Paribas Securities (Japan) Limited, Tokyo Branch. Some of the foreign securities stated on this report are not disclosed according to the Financial Instruments and Exchange Law of Japan.

**Hong Kong:** This report is being distributed in Hong Kong by BNP Paribas Hong Kong Branch, a branch of BNP Paribas whose head office is in Paris, France. BNP Paribas Hong Kong Branch is regulated as a Registered Institution by Hong Kong Monetary Authority for the conduct of Advising on Securities [Regulated Activity Type 4] under the Securities and Futures Ordinance.

