ECO FLASH

27 March 2020

COVID-19: Key measures taken by governments and central banks

Group Economic Research

- Major economic policy responses have been introduced to try to attenuate the impact of the Covid-19 pandemic on the economy.
- This document reviews the key measures taken by central banks and governments in a large number of countries as well as those taken by international organisations.
- It includes measures that were introduced through 27 March. It will be updated regularly.

Key central banks measures

US Federal Reserve (Fed)

- Monetary policy measures:
- Fed funds target rate:
 - 15 March: the Fed funds target rate was cut by 100 basis points (bp), to a range of 0-0.25% (effective 16 March).
- Discount rate:
 - 15 March: the discount rate was cut by 150 bp to 0.25% (effective 16 March), narrowing the spread with the Fed funds target rate by 50bp. Borrowing through the discount window was extended to periods as long as 90 days, prepayable and renewable by the borrower on a daily basis.
- Reserve rates:
 - 15 March: Interest on Reserves (IOR) and Interest on Excess Reserves (IOER) were lowered to 0.1% (effective 16 March).

- Required reserve ratio:
 - 15 March: the required reserve ratio was cut to 0% (effective 26 March).
- Quantitative Easing (QE):
 - 15 March: a new round of quantitative easing with securities purchases of at least USD 700 bn over the months ahead, including USD 500 bn in Treasury securities and USD 200 bn in agency mortgage-backed securities (effective 16 March). All principal payments from the Fed's holdings of Treasuries, agency debt and agency MBS will be fully reinvested in Treasuries and agency mortgage-backed securities.
 - 23 March: the securities purchasing programme for agency MBS was expanded to include commercial mortgage-backed securities (CMBS) issued or guaranteed by mortgage refinancing agencies (effective 23 March).
- Repurchase agreements (repo):
 - 15 March: continuation of regular term and overnight repurchase agreement operations. One to two overnight repo operations of at least USD 175 bn will be conducted



ECONOMIC RESEARCH DEPARTMENT



The bank for a changing world



daily, in addition to those conducted on a weekly basis: two 14-day operations of USD 45 bn each, one 1-month operation of USD 500 bn and one 3-month operation of USD 500 bn. According to the timetable announced so far, the Fed intends to use this mechanism to inject additional central bank liquidity of up to USD 5,855 bn through 9–10 April.

17 March: two overnight operations of USD 500 bn each will be conducted daily, at least through 20 March (in addition to the previously announced term operations).

- Commercial Paper Funding Facility (CPFF):

17 March: the Commercial Paper Funding Facility will be reactivated at least through 17 March 2021. The Fed created a Special Purpose Vehicle (SPV) that it has supplied with liquidity. The SPV purchases USD-denominated commercial paper from American issuers with the highest credit ratings (at least A-1/P-1/F-1). The maximum amount of a single issuer's commercial paper that the SPV may own at any time will be the greatest amount of commercial paper the issuer had outstanding on any day between 16 March 2019 and 16 March 2020. The price is set at the overnight index swap rate (OIS)+200bp. The SPV would be allowed to conduct a one-time purchase of commercial paper by issuers with a rating of at least A-2/P-2/F-2 at an unspecified price. The Treasury will cover any initial losses of up to USD 10 bn.

- Primary Dealer Credit Facility (PDCF):

17 March: the Primary Dealer Credit Facility will be reactivated for at least 6 months. Through this facility, the Fed provides guaranteed loans to primary dealers through their clearing bank at the discount rate (0.25% since Monday, 16 March). Loans have a term of up to 90 days and can be prepaid at any time. This facility expands the range of collateral that can be used to obtain central bank liquidity. In addition to collateral eligible for pledge in open market operations (Treasury securities, debt securities and agency MBS), collateral eligible for pledge under the PDCF includes a range of investment grade securities (at least BBB-), including corporate debt securities, international agency securities, commercial paper, municipal securities, mortgage-backed securities and asset-backed securities (only AAA-rated securities are accepted for CMBS, CLO and CDO), plus equity securities (with the exception of rights and warrants, mutual funds, unit investment trusts and exchange traded funds). Pledged collateral will be valued by the Bank of New York Mellon.

- Primary Market Corporate Credit Facility (PMCCF):

23 March: the Primary Market Corporate Credit Facility will be activated at least through 20 September 2020. The Federal Reserve Bank of New York will commit to lend to a special purpose vehicle (SPV) that will purchase qualifying bonds directly from eligible issuers (i.e. with a good rating) and to provide loans to eligible issuers. The Treasury will make a USD 10 bn equity investment in the SPV. SPV counterparties must have a rating of at least BBB-/Baa3, and the maturity of the bonds or loans

granted by the SPV must not exceed 4 years. For each eligible issuer, the maximum amount of outstanding bonds or loans borrowed from the SPV may not exceed the applicable percentage of the issuer's maximum outstanding bonds and loans on any day between 22 March 2019 and 22 March 2020: 140% for companies with an AAA/Aaa rating from a major rating agency, 130% for those with an AA/Aa rating, 120% for those with a A/A rating, and 110% for those with a BBB/Baa rating. Bonds and loans under the SPV will be callable by the eligible issuer at any time.

- Secondary Market Corporate Credit Facility (SMCCF):

23 March: the Secondary Market Corporate Credit Facility will be activated at least through 20 September 2020. The Federal Reserve of New York will lend to a special purpose vehicle (SPV) that will purchase in the secondary market corporate debt issued by eligible American issuers (i.e. those with a good credit rating). The SPV will also purchase eligible investment-grade corporate bond portfolios in the form of exchange traded funds. The Treasury will make an equity investment of USD 10 bn in the SPV. Issuers must have a rating of at least BBB-/Baa3, and the maturity of securities purchased by the SPV must not exceed 5 years. For any eligible issuer, the maximum amount of bonds that the SPV will purchase will be capped at 10% of the issuer's maximum bonds outstanding on any day between 22 March 2019 and 22 March 2020. The SPV may not purchase more than 20% of the assets of any particular ETF (as of 22 March 2020). Eligible bonds will be purchased at fair market value in the secondary market. The SPV will not purchase shares of ETF when they trade at prices that materially exceed the estimated NAV of the underlying portfolio.

Term Asset-Backed Securities Loan Facility (TALF):

23 March: the Term Asset-Backed Securities Loan Facility will be reactivated at least through 30 September 2020. This facility aims to facilitate the issuance of ABS backed by newly originated consumer and small business loans. The Federal Reserve Bank of New York lends to a special purpose vehicle (SPV), which will make available up to USD 100 billion of loans that will have a term of three years, will be nonrecourse to the borrower, and fully secured by eligible ABS. The Treasury will make an equity investment of USD 10 bn in the SPV. All US companies that maintain an account relationship with a primary dealer are eligible to borrow under the TALF. The not-synthetic ABS used as collateral must have an AAA credit rating, must be issued on or after 23 March 2020 and have an underlying credit exposure to auto loans, student loans, credit card receivables, small business loans guaranteed by the Small Business Administration (SBA) and certain other types of loans. For eligible ABS with underlying credit exposures that do not have a government guarantee, the interest rate will be 100 bp over the 2-year LIBOR swap rate for securities with a weighted average life of less than two years, or 100 bp over the 3-year LIBOR swap rate for securities with a weighted average life of two years or greater. The pricing of other eligible ABS will be set forth at a later date. The





SPV will assess an administrative fee equal to 10 bp of the loan amount. TALF loans will be pre-payable in whole or in part.

- Support for critical market functioning:

The Federal Open Market Committee (FOMC) will purchase Treasury securities and agency mortgage-backed securities in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions and the economy. The FOMC had previously announced it would purchase at least USD 500 billion of Treasury securities and at least USD 200 billion of mortgage-backed securities. In addition, the FOMC will include purchases of agency commercial mortgage-backed securities in its agency mortgage-backed security purchases.

- Standing US dollar liquidity swap line arrangements:

15 March: the cost of swap arrangements between six central banks (the Fed, ECB, BoE, BoJ, BNS, and BoC) was reduced by 25 bp to OIS+25 bp. USD-denominated loans in each jurisdiction were extended for 84 days (1-week operations were maintained). Decisions are effective the week of 16 March.

Swap arrangements between central banks:

20 March: the Fed, ECB, BoJ, BoE, BoC and BNS made a coordinated decision to increase the frequency of USD financing operations to banks in their jurisdiction: 7-day liquidity could be provided daily from 23 March through at least the end of April (currently on a weekly basis). Weekly 84-day operations (effective since 16 March) were maintained.

Money Market Mutual Fund Liquidity Facility (MMLF):

18 March: the Money Market Mutual Fund Liquidity Facility was reactivated until at least 30 September 2020. Under this facility, the Federal Reserve Bank of Boston provides secured lending to banks (all US depository institutions, US bank holding companies, and the US branches and agencies of foreign banks). The maturity date of an advance will equal the maturity date of the eligible collateral pledged to secure the advance (although in no case will the maturity date exceed 12 months). Eligible collateral under the Facility are assets purchased from money market funds: US Treasuries, securities and MBS issued by Government Sponsored Entities (loans at the discount rate; collateral is valued at amortized cost or fair value); ABCP and unsecured commercial paper issued by a US issuer with a shortterm rating at the time purchased from the MMF or pledged to the Reserve Bank with a rating no lower than A-1/F-1/P-1 (loans at 100 bp over the discount rate; the collateral valuation will be amortized cost). The Treasury, using the Exchange Stabilization Fund, will provide USD 10 bn as credit protection to the Reserve Bank. Advances are made without recourse: the borrower does not assume the credit risk associated with the collateral.

Regulatory measures:

- 15 March: equity capital and liquidity requirements were eased. The three bank regulators (Fed, FDIC and OCC) encourage banks to use their capital and liquidity buffers to help finance the economy. In terms of weighted capital requirements, this easing probably concerns the equity capital conservation buffer, and possibly the GSIB capital surcharge (the countercyclical buffer is set at 0% in the United States). So far, no announcements have been made concerning the comprehensive capital and analysis review (CCAR 2020).
- 18 March: the three bank regulators (Fed, FDIC, OCC) will neutralise the impact of MMLF participation on a bank holding company or depository institution in terms of weighted equity capital requirements and leverage requirements. The following will be excluded from the calculation of prudential ratios: assets serving as collateral for MMLF and assets purchased as of 18 March from an MMF to be used as collateral within the framework of MMLF (once the facility opens).
- 22 March: the regulators (Fed, FDIC, NCUA, OCC, CFPB, CSBS) encourage banks to be flexible with customers having difficulties honouring their debt. Jointly with the authority in charge of US GAAP (FASB), the regulators specified that modifications in loan conditions (deferred payment, exoneration of fees, and extension of repayment periods) due to the pandemic will not automatically be recognised as troubled debt restructuring (TDR). A deferred payment will not be considered as a late payment. Loans whose conditions have been eased can be used as collateral at the Fed's discount window. This measure eases the accounting and prudential frameworks (provisions and equity capital, respectively).
- 27 March: the Fed, the Federal Deposit Insurance Corporation (FDIC) and the Office of the Comptroller of the Currency (OCC) issued a rule that allows major banks to mitigate the effects the Current Expected Credit Loss (CECL) accounting standard in their regulatory capital for up to two years, in addition to the 3-year transition period already in place.

The federal banking regulators are moving ahead faster than the law: the CARES Act, which is pending House approval after being passed by the Senate on 25 March, has a measure (section 4014) that pushes back compliance with the new CECL standard to 31 December 2020, while lowering the community bank leverage ratio (CBLR) to 8% from 9%.

The federal banking regulators also issued a statement authorising the early adoption of the new methodology on how banks measure counterparty risk derivatives contracts for the Q1 reporting period. The Standardised Approach for Measuring Counterparty Credit Risk (SA-CCR), which was finalised in November 2019 with an effective date of 1 April, is considered to be more favourable for calculating risk-weighted assets because it takes into account central clearing and margin requirements.





European Central Bank (ECB)

Monetary policy measures on 12 March:

From 16 March 2020 through 9 June 2020, a new long-term refinancing operation (LTRO) with a fixed rate equal to the deposit rate (-0.50%) will be allocated each week. All 13 of these operations will reach maturity on 24 June 2020, the start-up date of the fourth TLTRO III.

- TLTRO III (3-year maturity): between June 2020 and June 2021, the interest rate on TLTRO III operations outstanding will continue to depend on the dynamics of loan distribution by the borrowing bank, but has been revised downwards. It will be 0.25 bp below the average benchmark rate prevailing over the duration of the operation, namely:
 - The rate on the main refinancing operations (credit supply not maintained but the bank, currently 0%),
 - The interest rate on the deposit facility (credit supply maintained, currently -0.50%),
 - The maximum total amount that the banks are entitled to borrow as part of these operations is raised from 30% to 50% of their stock of eligible loans as at 28 February 2019 (loans to nonfinancial companies and households, excluding home loans). According to our calculations, the maximum amount of TLTRO III loans outstanding is theoretically about EUR 2,900 bn. To enable banks to strengthen their use of ECB liquidity, it is exploring the possibility of easing collateral requirements.
- Private sector securities purchases: in addition to the Asset Purchase Programme (APP, reactivated for net purchases of up to EUR 20 bn as of November 2019, and with outstandings of EUR 2,732 bn at 29 February 2020), an additional EUR 120 bn will be allocated by the end of 2020 for the purchase of securities issued by the eurozone's private sector (i.e. between EUR 12 bn and 13 bn a month depending on the starting date of the additional purchases). The easing of capital and liquidity requirements were announced on 12 March.
- Solvency: the 117 banks placed under direct supervision of the Single Supervisory Mechanism (SSM) can use the capital buffers constituted as part of the Pillar 2 Guidance (P2G, 1.5% of weighted assets, on average, in the 2019 Supervisory Review and Evaluation Process (SREP) published on 28 January 2020) and the capital conservation buffer (2.5% of weighted assets). The banks will also be able to use in part the instruments noneligible for CET1 (for example, additional Tier 1 instruments, or Tier 2) to create capital buffers in Requirements compliance with Pillar 2 At 30 September 2019, the CET1 ratio of the supervised banks averaged 14.37%, which is 3.8 points higher than the average from the application of the Pillar 2 Guidance and Requirements as part of SREP 2019 (10.6%).
- Liquidity: the ECB announced that it is easing its liquidity coverage ratio (LCR) requirements, which is normally at 100%. According to 2013 Basel recommendations, banks

that draw on this facility during periods of hardship must inform the supervisor and submit a recovery plan to bring its LCR back to 100%. Banks under SSM supervision had an average LCR of 145.6% in third quarter 2019.

Monetary policy measures on 18 March:

- A new emergency securities purchasing programme was launched for EUR 750 bn, extending the existing securities purchasing programmes;
- Launch of the Pandemic Emergency Purchase Programme (PEPP) covering both public and private sector securities for a total of EUR 750 bn by the end of 2020, and beyond if necessary. The scope of securities eligible for the programme is the same as those eligible for the existing asset purchasing programmes (APP). The allocation key is still based on the member country's share of ECB capital, but greater flexibility was introduced relative to the APP, with the possibility of "fluctuations".

Concerning the existing programme:

- The Corporate Sector Purchase Programme (CSPP) is expanded to include all commercial paper issued by nonfinancial companies,
- The range of Additional Credit Claims (APP), a collateral category that does not comply with the Eurosystem's eligibility requirements but which are nonetheless eligible, will be expanded to include corporate debt so that the banks can make full use of the Eurosystem's refinancing operations.

Bank of England (BoE)

• Key rate cuts:

- 12 March: the Bank of England cut its key rate by 50 bp to 0.25%
- 19 March: the Bank of England cut its key rate by 15 bp to 0.10%

• Increase in the asset purchasing programme:

- Asset purchases increased from GBP 445 bn a year (including GBP 435 bn in Gilts and GBP 10 bn in corporate bonds) to GBP 645 bn,
- The BoE essentially announced the purchase of government bonds.
- The Term Funding Scheme with additional incentives for SMEs (TFSME) was set up to provide banks with a longterm refinancing programme (4 years) at a reduced rate (slightly higher than or equal to the Bank rate) aimed at the "real" economy. Available amounts will represent at least 5% of the stock of bank loans to households and non-financial companies. The amount can be increased in case of an increase in net loans outstanding to small and mid-sized enterprises. The BoE estimates that funds





EcoFlash

mobilised by the TFSME could potentially reach GBP 100 bn (although more are announced, details will follow).

Reduction in the bank's countercyclical capital buffer:

- The countercyclical capital buffer of banks was reduced from 1% of total risk weighted assets (RWA) in November 2019 to 0% on 11 March, for a period of 12 months.
- According to BoE, this measure will boost potential net financing of the economy by GBP 190 bn, or 13 times the amount committed in 2019.
- Cancellation of 2020 stress test for the eight major UK banks and building societies. This will allow lenders to focus on meeting the needs of their clients.
- 17 March 2020: HM Treasury and the Bank of England launch a COVID Corporate Financing Facility (CCFF). The CCFF will provide funding to businesses by purchasing commercial paper of up to one-year maturity, issued by firms making a material contribution to the UK economy. The facility will offer financing on terms comparable to those prevailing in markets in the period before the COVID-19 economic shock, and will be open to firms that can demonstrate they were in sound financial health prior to the shock. The facility will look through temporary impacts on firms' balance sheets and cash flows by basing eligibility on firms' credit ratings prior to the COVID-19 shock. Businesses do not need to have previously issued commercial paper in order to participate. The scheme will operate for at least 12 months and for as long as steps are needed to relieve cash flow pressures on firms that make a material contribution to the UK economy.

Bank of Japan (BoJ)

• Key rates:

No change in the key rate (which held at -0.1%).

• Quantitative easing (QE):

- The annual JGB securities purchasing programme was held at JPY 80,000 bn (USD 740 bn at an exchange rate of JPY 108),
- The exchange-traded funds (ETF) and J-REITS (investment funds tied to Japanese real estate) securities purchasing programme doubled to an annual capacity of JPY 12,180 bn (USD 113 bn),
- The corporate bond securities purchasing programme was increased to JPY 4,200 bn (USD 39 bn) annually.

Dollar swaps:

 The BoJ will draw on the swap line opened with the Fed at OIS + 25 bp.

Supranational institutions

IMF

The IMF stated that it had USD 1 trillion in funds available, given that USD 200 bn is currently committed (Ukraine, for example, is a candidate, now more than ever, for a new programme).

EBRD

EBRD promised an additional EUR 1 bn in liquidity lines, cash and export finance for its clients in its 38 countries of operation. Further measures will be announced soon. Note: EBRD investments currently amount to a cumulative total of EUR 10.1 bn.

European Union (EU)

• European institutions:

Given that the size and flexibility of the EU's budget is not exactly its strongest point, so far the European Commission has strived mainly to ensure the sufficient provisioning of medical equipment and supplies in the EU, while monitoring any export restrictions that member states might try to set up, co-ordinating decisions on air traffic and borders, and defining how the rules on monitoring government subsidies can be adapted to enable member states to stimulate their economies in an appropriate manner.

This is what we know about European fiscal resources that have been mobilised so far. It is important to keep in mind that the European Commission does not have the power to raise further revenues. At best, it can reallocate funds to different parts of its budget:

The EU budget provided EUR 1 bn in additional guarantees to the EIB to finance about EUR 8 bn in capital for SME to facilitate immediate relief to hard-hit SMEs, the EU budget will deploy its existing instruments in order to support them with liquidity, complementing measures taken at national level.

EUR 1 billion will be made available from the EU budget as a guarantee to the European Investment Fund (EIF) in the coming weeks to support approximately EUR 8 billion of working capital financing and help at least 100,000 European SMEs and small mid-caps:

- The support will be channelled through the existing instruments of the EIF Programmes that support investment. Lending will be refocused to working capital loans with a maturity of 12 months or more. In particular, the loan guarantees the EU programme for the Competitiveness of Small and Medium-Sized Enterprises will be boosted, together with the InnovFin SME Guarantees under the Horizon 2020 programme, so that banks offer access to bridge financing to micro enterprises, SMEs and small mid-caps.
- These instruments will be reinforced with €750 million through the European Fund for Strategic Investments (EFSI) in the coming weeks. In addition, as a further





dedicated measure, EFSI will provide to the EIF another EUR 250 million to quickly roll-out support to SMEs in a concerted effort with EU National Promotional Banks and Institutions.

- The European Commission supports all national measures that aim to limit the pandemic's impact on employment, but it does not have the capacity to act. The Commission did declare that it would accelerate preparations for a future legislative proposal: the European Unemployment Reinsurance Scheme. This is such a vast subject, however, that it is hard to imagine that it will lead to anything concrete in the short term.
- The "Coronavirus Response Investment Initiative" should enable member states to redirect EUR 37 bn in structural funds towards COVID-19-related spending:
 - With the "Coronavirus Response Investment Initiative" (CRII), the Commission proposes to direct EUR 37 billion under the cohesion policy to the COVID-19 outbreak and to implement this fully in 2020 through exceptional and accelerated procedures.
 - To this effect, the Commission proposes to relinquish this year its obligation to request refunding of unspent pre-financing for European structural and investment funds currently held by Member States. This amounts to about EUR 8 billion from the EU budget which Member States will be able to use to supplement EUR 29 billion of structural funding across the EU. This will effectively increase the amount of investment in 2020. A key element of the proposal is that it makes all potential expenditure for the fight against the COVID-19 outbreak eligible as of 1 February 2020 for financing under the Structural Funds so that Member States can spend the means as quickly as possible to fight the outbreak.
- Fiscal rules were eased to give Member States all the flexibility they need to make expenditures to combat the health crisis and stimulate the economy. These exceptional expenditures will not be taken into account under the rules limiting changes in spending. The European Commission will propose that the Council review the structural adjustment efforts that Member States are required to make. For the moment, it is relying on treaty clauses that allow Member States to take into account exceptional circumstances on a State by State basis, although it is preparing to intervene, if the Council were to request it to do so, to activate the clause pertaining to major economic shocks in the EU as a whole:
 - The Commission will propose to the Council to apply the full flexibility existing within the EU fiscal framework, with a view to helping Member States to address the COVID-19 outbreak and deal with its fallout.
 - When assessing compliance with the EU fiscal rules, the Commission will propose to the Council to exclude the budgetary effect of one-

- off fiscal measures taken to counterbalance the economic effects of COVID-19.
- The Commission considers that the flexibility to cater for "unusual events outside the control of government" is applicable to the current situation. When an unusual event outside the control of a government has a major impact on a Member State's fiscal position, the Stability and Growth Pact envisage that Member States can be allowed to temporarily depart from required fiscal adjustments. As a result, this clause can also accommodate exceptional spending to contain the COVID-19 outbreak. In particular, the clause can apply to health care expenditure and targeted relief measures for firms and workers, provided they are temporary and linked to the outbreak. The Commission will follow that making approach when proposals recommendations to the Council. The Commission will propose to the Council that the Union institutions adjust the fiscal efforts required from Member States in line with the EU fiscal rules. This would allow taking into account country-specific situations in case of negative growth or large drops in activity.
- The Commission stands ready to propose to the Council that the Union institutions activate the general escape clause to accommodate a more general fiscal policy support. This clause would in cooperation with the Council suspend the fiscal adjustment recommended by the Council in case of a severe economic downturn for the euro area or EU as a whole.

Measures for SMEs

- The SME guarantee fund will benefit from about EUR 1.2 billion in new financing, to provide public guarantee to bank loans to SME. The Fund will cover loans up to EUR 5 million, while easier procedures will be applied to guarantees below €3,000. To sustain exports, the Ministry of Economy will provide SACE (the exports credit agency) with a guarantee aimed at sustaining sectors hit by the crisis.
- For SMEs, payments for mortgages and loans are suspended. Until September 30th, revocable (overdraft) credit facilities cannot be revoked, non-instalment loans with contractual expiration are extended and payment of any instalment is suspended.

Governments

United States

Congress has passed the Coronavirus Aid, Relief, and Economic Security Act (CARES), an unprecedentedly large fiscal stimulus package (USD 2,200 bn, the equivalent to 10% of GDP or 50% of the annual Federal budget) prepared by the Trump administration. The bill doubled in size under pressure from the Democrats, who have a majority in the House, to cover the needs of low-income individuals and those who have lost their jobs. In addition to guaranteed loans for companies, which could amount to as much as USD 900 bn,





the Federal government will transfer roughly USD 630 bn to American households. Using a means-tested system, each American household will receive a cheque from the Treasury for a maximum amount of USD 3000 each. The Federal government will also top up unemployment benefits, which vary from state to state but which average roughly USD 300 a week, by USD 600 a week during the 4-month period ending 31 July 2020.

European countries

Germany

Finance Minister Olaf Scholz and Economic Minister Peter Altmaier have presented an emergency programme "A protective shield for employees and companies". The programme consists of four pillars:

- Making reduced hours compensation benefit (Kurzarbeitergeld) more flexible. In particular eligibility requirements will be loosened. The costs of the measure could be around EUR 10 bn.
- Tax-related liquidity assistance for businesses. To improve the liquidity of firms, options for deferring tax payments and reducing prepayments will be enhanced. Overall, businesses will be able to defer billions of euros in tax payments.
- 3. A protective shield worth billions for businesses. Healthy firms can experience liquidity problems of supply chain problems. The German government will protect businesses with new measures to provide liquidity, the volume of which is unlimited. This support will provided by the state investment bank KfW. The federal budget includes a guarantee framework of approximately EUR 460 billion. If necessary, this can be increased by up to EUR 93 billion at short notice. In addition, the KfW has a programme for the refinancing of export business which can be increased very quickly.
- Strengthening European cohesion. The German government welcomes the European Commission's idea of a Corona Response Investment Initiative with a volume of EUR 25 billion.

It also welcomes ECB banking supervision's announcement that it will utilise existing leeway to ensure that banks can continue to fulfil their role in funding the real economy, as well as the measures for providing liquidity to banks that were announced by the ECB on Wednesday, 11 March.

The Federal Ministry of Health has already been swiftly provided with around EUR 1 billion to fight the coronavirus, including for the procurement of protective equipment such as face masks and protective suits, support for the WHO in the international fight against the coronavirus, and the provision of additional funds for the Robert Koch Institute, Germany's leading public health institution. In addition, the Federal Ministry of Education and Research has received EUR 145 million to develop a vaccine and for treatment-related measures.

Bavaria has launched a EUR 10 billion to buy stakes in struggling companies.

France

At 20 March 2020, the government estimated the 2020 fiscal deficit at 3.9% of GDP based on a GDP growth forecast of -1%.

- Simplification and strengthening of partial unemployment = EUR 8.5 billion over a 2-month period. Specifics: companies pay their workers compensation equal to 70% of their gross wage (about 84% of net). Workers earning the minimum wage or less will receive 100% compensation. Companies are fully reimbursed by the State for gross monthly wages of up to EUR 6,927, or 4.5 times the minimum wage. Since 16 March, the Labour Ministry indicates that companies now have 30 days to file requests for partial unemployment, effective retroactively.
- Fiscal and social charges payable in March were postponed = EUR 32 bn (and could be waived if needed, on a case-by-case basis).
- A solidarity fund of EUR 1 bn a month to compensate very small and small businesses and the self-employed in the hardest-hit sectors.
- Specifics: EUR 1,500 in aid for businessmen that make less than EUR 1 m in turnover and whose business has declined by more than 70% in March 2020 compared to the year-earlier period; payable as of 31 March.
- EUR 2 bn for additional healthcare spending, which should also fund the increase in sick leave.
- Suspended payments of rent and utility bills (water, gas and electricity) for very small businesses experiencing hardships.
- Specifics: pertains to companies with fewer than 10 employees and sales of less than EUR 1 m, and which are under administrative closure, or can justify a decline in sales of at least 70% in March 2020 compared to the year-earlier period. The cost is carried by service providers.
- Introduction of a State guarantee for bank loans to companies amounting to EUR 300 bn.
 - Specifics: the guarantee will automatically cover all liquidity loans granted by banks between 16 March and 31 December. These loans can cover up to 25% of the company's annual turnover, thereby enabling them to face up to their most urgent needs. The loans can be repaid over a period of up to 6 years, which will enable companies to rebuild their financial manoeuvring room once the recovery gets underway. The State guarantee will cover 90% of the amount of the loans for microenterprises, SME and intermediate-sized businesses, to facilitate loan origination. The cost of the guarantee will be minimal depending on the maturity of the loan. For a 1-year loan, it will range from 0.25% for SME to 0.50% for intermediate and large companies.
- Public reinsurance will be activated for credit insurance exposure of up to EUR 10 bn + amplification of short-term





export credit reinsurance measures (doubling of the ceiling on exposure that can be reinsured by the State, to EUR 2 bn).

- Postponement of bank loan payments for a period of 6 months at no cost + credit mediation with the bank to reschedule bank loans
- Public contracts: the State and local administrations recognise COVID-19 as a force majeure for their public contracts. Consequently, no late penalties will be applied to any public contracts with State or local administrations.
- Options being examined: taking equity stakes in or temporarily nationalising key corporations devastated by the COVID-19 crisis, notably automobile manufacturers and air transport companies, to safeguard these companies; extension of unemployment benefits for the jobless who have exhausted their claims; Revision of the rules for tax loss carry-backs for the calculation of corporate tax.
- Other: suspension of all pending reforms (i.e. pension reform and real-time payment of housing allowances). The second round of measures to overhaul the unemployment insurance system (including tighter conditions for receiving jobless benefits), which was initially scheduled to take effect on 1 April, will be postponed until 1 September, Better compensation for parents taking time off work to care for their children (due to school closures) and for sick leave. The second round of municipal elections, initially set for 22 March, was postponed until a later date.

Italy

11 March:

Cassa depositi e prestiti SpA is allocating EUR 7 billion to companies facing the coronavirus emergency, MF reported.

16 March:

The Italian government published a decree calling for EUR 25 bn in additional spending to cover the effects of COVID-19. These expenditures are divided into four groups:

- The healthcare and emergency services system was bolstered through an increase in the national emergency fund of EUR 1.65 bn;
- Job and worker support measures:
 - Easier access to partial unemployment benefits,
 - EUR 600 in compensation for the self-employed,
 - Creation of an income of last resort fund,
 - Implementation of 15-day parental leave,
 - Childcare allowances (EUR 600, up to EUR 1000 for workers in jobs vital for combatting the crisis),
 - Higher advances for farmers benefiting from CAP, etc.
- Support for households and SME via the banking system:

- Moratorium on SME loans
- Strengthening of the guarantee fund:
- Free guarantee and elimination of access fees,
- Eligible for refinancing operations,
- Elimination of commissions,
- Expansion of assets covered,
- Suspension of the fund's normal operating terms,
- Limit on the guarantee was raised to EUR 5 million from EUR 2.5 million previously.
- Volatility adjustment" for insurance companies,
- Introduction of a counter-guarantee mechanism for banks, insured through la Cassa de Depositi e Prestiti, to increase investment in mid-sized and large companies (EUR 10 billion),
- Incentive to transform DTA (which is not eligible for capital requirements) into a tax credit (eligible as required capital) to accelerate cleanup of bank balance sheets without having an excessive impact on solvency ratios,
- Creation of an emergency fund for the entertainment industry, etc.
- Suspension of tax and social security payments and all other fiscal liabilities, with fiscal incentives for cleaning up work spaces and "rewards" for service employees:
 - For the hardest-hit sectors, suspension of the payroll withholding tax, social security contributions, and providential and compulsory insurance premiums,
 - Suspension of tax payments for taxpayers with revenues of less than EUR 2 million,
 - Non-application of withholding tax on selfemployed professionals without employees, and with revenue of less than EUR 400,000,
 - Suspension of the fiscal administration's litigation procedures,
 - EUR 100 bonus for all employees with revenue of less than EUR 40,000, etc.

The Italian Government has approved the "CuraItalia" decree (16 March), to counter the negative effects of the Coronavirus on the economy. Total measures amount to €25 billion, about 1.5% of GDP, with 3.5 billion to strengthen the health system, also financing the immediate hiring of about 20,000 health-care professionals.

- 18 March: Italian Prime Minister Giuseppe Conte calls for a European guarantee fund or special "coronavirus bonds" that will help EU states fund necessary health and government policies, a government source told Reuters Italian market regulator Consob introduced a three-month ban on net short positions for all shares traded on the Milan exchange amid the coronavirus-driven market turbulence, according to Reuters;
- 20 March: The Italian government is looking to extend a guarantee scheme protecting banks that lend to companies affected by the new coronavirus outbreak, insiders told Reuters. The new measures would reportedly extend the guarantee to 90% of new loans that banks provided to companies affected by the virus.





Spain

EcoFlash

The government of Pedro Sanchez announced Tuesday evening a EUR 200 million plan (18% of nominal GDP), of which EUR 117 bn will be funded directly by the State and EUR 83 bn will be collected via the private sector, mainly the banks. The plan calls for:

- EUR 100 bn in corporate financial guarantees.
- Deferred income tax payments for individuals and VAT and corporate tax payments for SME and the selfemployed (for those with sales of no more than EUR 6 million a year).
- An extension of the moratorium on the repayment of household loans, to 4 years from 2 years (this measure aims to protect low-income households).
- EUR 3.8 bn in funding to strengthen healthcare services.
- EUR 2 bn cash injection to support companies in the hardest-hit sectors (tourism, transport and hospitality).

Tuesday's fiscal package strengthens the measures already adopted last Thursday, which were much smaller in scope.

Belgium

- Reduce economic losses for companies:
 - During the 6 March 2020 meeting of the Council of Ministers, the federal government approved a series of measures to support companies and the self-employed who have been hit by the impact of the COVID-19 crisis. Under these measures, companies hit by the crisis can put employees on partial unemployment in order to preserve jobs. The government is also looking for ways to reschedule, postpone or suspend the payment of social welfare contributions, withholding taxes and other corporate and payroll taxes for companies and the self-employed.
- Temporary unemployment due to force majeure: Temporary unemployment due to force majeure will be extended by 3 months to 30 June 2020. Temporary unemployment due to force majeure can also be invoked while awaiting recognition of "ailing company" status. Companies need this status to be able to resort to temporary unemployment for economic reasons for their workers. Temporary unemployment for force majeure is recognised within a period of 3-4 days. Given the surge the number of applications for temporary unemployment benefits due to the coronavirus pandemic as well as measures to limit the dispersion of the virus, the government decided that each person entering into the system would immediately receive an allowance of EUR 1,450 a month, to preserve household purchasing power as best possible.
- Temporary unemployment for economic reasons: temporary unemployment benefits both for economic reasons and for force majeure will be increased from 65% to 70% of wages for a 3-month period. The goal is to limit the revenue loss of impacted workers.

- Payment plan for employer social welfare contributions: for payments of social security contributions due in the first and second quarters of 2020, hardships pertaining to the COVID-19 crisis will be accepted as a factor for seeking deferred payment terms.
- VAT payment plan: for businesses that can demonstrate their payment difficulties are linked to the COVID-19 outbreak, VAT payments can be rescheduled and penalties will be waived.
- Payment plan for professional withholding tax: under the same conditions, businesses will be able to reschedule professional withholding taxes without being liable for the usual late payment penalties.
- Payment plan for individual and corporate income taxes: for taxpayers who can demonstrate that their payment difficulties are linked to the COVID-19 outbreak, they can request deferred payment of individual and corporate income taxes.
- Reduced social security contributions for self-employed workers foreseeing a decline in revenues: self-employed workers who esteem that their revenues during the course of the year will be lower than those used to calculate their social security payments may request a reduction in their social security contribution.
 - Deferred or waived payment of social security contributions for the self-employed. For social security contributions due in the first two quarters of the year 2020, payment can be deferred for a year with no late payment interest fees, or simply waived. In both cases, the individual must demonstrate that payment difficulties are linked to the COVID-19 pandemic. Obtaining replacement income for the self-employed (bridging rights)
- Under the same conditions described above, a selfemployed worker whose activity is their main source of business will benefit from bridging rights due to the forced closure of business once this closure lasts over a week. The amount of financial aid is EUR 1,266.37 per month for individuals without family members and EUR 1,582.46 per month for heads of households.
- Flexibility in the execution of federal public contracts: the Federal government will not apply penalties or sanctions on service providers, businesses or the self-employed for all federal public contracts as long as they can demonstrate that the postponed or incomplete project is linked to the COVID-19 crisis.
- Payment deferrals and guarantee system: on the initiative of the ministry of finance and with the support of the National Bank of Belgium, the federal government reached an agreement with the financial sector. The agreement has two pillars:
 - The financial sector pledges to provide viable non-financial companies and the self-employed as well as mortgage holders who experience payment troubles pertaining to the Covid-19





- crisis the possibility of deferring payments up to 30 September 2020 at no cost.
- The federal authorities will activate a system of guarantees for all new loan production and credit lines with a maximum duration of 12 months that the banks grant to viable NFC and the self-employed. This will help preserve financing of the economy.
- The total amount of the guarantees is EUR 50 bn.

Denmark

Monetary policy: 13 March: an extraordinary lending facility was set up for weekly lending at -0.5%. Effective as of 20 March 2020 and to be maintained as long as necessary.

Banking supervision: the countercyclical buffer was suspended, effective immediately.

Fiscal policy:

- DKK 2.8 bn was unblocked to support the economy.
 The target for 2020 government bond issues was raised from DKK 75 bn to DKK 125 bn. The Treasury bond programme was expanded.
- 17 March: Sweden and Denmark announced funding of USD 300 m in guaranteed loans to the Scandinavian airline SAS (14.82% and 14.24% owned by the Swedish and Danish governments, respectively).
- 19 March: the Danish central bank raised its key rate to -0.6% from an all-time low of -0.75% to reduce downside pressures on the Danish krone arising from its euro peg.
- 20 March: The European Central Bank (ECB) and Danmarks Nationalbank have today reactivated a currency arrangement (swap line) and increased the maximum amount to be borrowed by Danmarks Nationalbank from €12 billion to €24 billion. It will remain in place for as long as needed. The purpose of the reactivation is for Danmarks Nationalbank to provide euro liquidity to Danish financial institutions.

• Finland

Bank supervision: 17 March: the supervisor lowered the countercyclical buffer with the hope of increasing bank lending capacity by EUR 52 bn.

Fiscal policy: 16 March: a working group was formed to propose labour market support measures; 20 March: the government is scheduled to discuss the amount to be allocated to crisis management, which should include EUR 5 bn in support measures for companies.

Sweden

Monetary policy:

16 March: Riksbank announced the purchase of an additional SDK 300 bn in securities for the year 2020.

13 March: Riksbank released SDK 500 bn (USD 51 bn) in interest-free loans to Swedish companies via the banks.

The central bank governor is prepared to take bigger monetary easing measures if necessary.

23 March: Riksbank will place SEK 400 bn at the disposition of banks in the form of loans (with a rate equivalent to the repo rate: 0%, with a 2-year maturity) to encourage them to increase lending to businesses. The operation will take place between 27 March and 17 April.

Fiscal policy:

16 March: the Swedish government announced a package of support measures totalling SDK 300 bn (USD 31 bn), including the cost of all sick leave reported by companies in the months of April and May.

The government is also offering companies the possibility of deferring tax and VAT payments retroactively, for all of the year 2020. This measure alone is expected to cost SDK 300 bn.

The Swedish government announced that loan guarantees of a maximum of SDK 5 bn (USD 504 m) would be granted to the airline companies, including SDK 1.5 bn to the Scandinavian airline SAS.

Banking supervision:

19 March: the Swedish bank supervisor recommends that banks cancel their dividend payouts.

Greece

20 March: Greece's bank association said lenders will offer a three-month suspension on loan repayments to individual borrowers significantly hit by the coronavirus crisis.

Hungary

All corporate and individual debt payments are suspended through the end of the year. Targeted reduction of social security contributions for the hardest hit sectors (tourism, services). Other measures will follow.

Iceland

Monetary policy: 13 March: the central bank lowered its 7-day deposit rate by 50 bp to 2.25%; 18 March: the central bank lowered its 7-day deposit rate again, by 50 bp to 1.75%.

Fiscal policy: an additional ISK 40 bn in Treasury bonds will be issued in Q2 2020.

Poland

- PLN 212 bn (EUR 57 bn) in financing for partial unemployment measures, deferred payment of social security contributions by companies, as well as additional spending on infrastructure and healthcare.
 - The key rate was lowered by 50 bp to 1%. Poland's central bank stated that it would boost bank liquidity (repos) and the sovereign bond market (securities purchases), without providing further detail.





Portugal

18 March:

- Portuguese lenders are in talks with the government to create a debt-relief scheme for households and businesses hurt by the virus outbreak.
- Fiscal stimulus of EUR 9.2 bn (4% of GDP), including:
 - EUR 3 bn in bank guarantees, a third of which are reserved for SME;
 - EUR 5.2 bn due to the deferred payment of income taxes and social security contributions,
 - reimbursement of wages up to 2/3 of the total wage.

19 March:

- Portugal rolled out a stimulus package worth EUR 9.2 bn to support its economy, including EUR 1 bn in payments to people and €3 billion in state-backed guarantees.
- Portugal's fiscal package is currently relatively small. The country is only in the early stages of the epidemic, with only 448 confirmed cases of COVID-19 reported so far. A much more ambitious stimulus package is expected to be launched in the days ahead.

27 March:

- A presidential decree set the ground for the new conditions of debt moratorium establishing the postponement of up to six months for the payment of corporate and housing loans. The measure entails nearly EUR 20 million in payments and it is only valid for customers whose payments are in regular situation.
- In addition, the communiqué of the Council of Ministers states that, "in order to support the maintenance of jobs and avoid dismissals for economic reasons," the law (which has been known as simplified layoff) "stipulates that during the period of reduction or suspension, as well as in the 60 days following its application, the employer may not terminate employment contracts, through collective dismissal or by termination of the job, in relation to the workers covered by the support measures".

• Czech Republic

Key policy rates were cut on two occasions, by 50 bp and 75 bp, to 1%.

• Romania

- A programme amounting to 2% of GDP covers partial unemployment measures, guaranteed corporate loans and deferred payment of corporate taxes due over the next two months.
- The key central bank rate was lowered by 50 bp to 2%.

• The United Kingdom

The government launched a GBP 12 bn Coronavirus Emergency Plan, including GBP 5 bn for the National Health System. These emergency funds are on top of the GBP 18 bn

in additional expenses already incorporated in the budget, which brings the total amount to GBP 30 bn (1.4% of GDP).

In addition to targeted loans from the BoE, SME should also benefit from deferred liabilities and public guarantees on liquidity loans.

COVID-19 Corporate Financing Facility (CCFF): under this facility, the BoE will purchase commercial paper to finance the working capital requirements of companies (payroll, rent, suppliers...). Maturities: 1 week to 12 months: OIS + spread "close to that prior to the crisis".

Slovenia

The government announced a EUR 1 bn stimulation plan (about 2% of GDP), including:

- EUR 600 m from the SID Banka financial mechanisms, which would provide more than EUR 200 m.
- EUR 115 m allocated to small and mid-sized enterprises by the Slovenia business fund.
- EUR 51 m will be paid to companies to help finance temporary unemployment (the State will cover wage compensation up to 40%).

Ukraine

The central bank rate was lowered by 50 bp to 10%.

European countries outside EU

Norway

Monetary policy:

Norges Bank lowered its key rate by 50 bp to 1%. The central bank will also boost liquidity by offering 3-month loans to banks.

Norges Bank increased purchases of Norwegian kroner from NOK 500 m (EUR 49 m) to NOK 1.6 bn (EUR 137 m) a day.

- 18 March: Norges Bank's Guidelines for pledging securities for loans from Norges Bank (Circular 1/2016) will be temporarily revised. The changes take effect immediately:
 - The required minimum outstanding volume of securities in NOK issued by a private entity is reduced to NOK 100 million.
 - The required minimum outstanding volume of securities in foreign currency issued by a private entity is reduced to the equivalent of EUR 50 million.
 - For securities other than Norwegian government securities, the maximum limit of 20 percent of the issue's (ISIN) volume outstanding is removed There is no upper limit on the collateral a borrower can pledge per ISIN.
 - Securities in NOK guaranteed by local government authorities are exempt from the credit rating requirement.





- ASH EcoFlash
- 19 March: Norges Bank will offer extraordinary F-loans with a maturity of one week, one month, three months, six months and twelve months.
- 19 March: Norges Bank allocated NOK 7.95 bn in exceptional loans to banks as part of a new 12-month programme.
- 20 March: Norges Bank cut its key rate by another 0.25% (after cutting its key rate from 1.5% to 1% on 13 March).

Bank supervision:

- A recommendation was addressed to the Finance Minister to reduce the countercyclical buffer from 2.5% to 1%, effective immediately.
- 25 March: the bank supervisor recommends that the government should not allow banks to pay dividends for the time being.

Fiscal policy:

15 March: the Norwegian government pledged to provide NOK 100 bn (EUR 8.5 bn) in funding to Norwegian companies in the form of loan guarantees (NOK 50 bn) for small to mid-sized companies, and NOK 50 bn in bond issues for the big bond-issuing companies.

Negotiations are underway between the ministry of industry and transport and the airline companies to release funding.

Russia

In compliance with the fiscal rules in effect, sovereign funds will be used to ensure the stability of fiscal revenues.

Turkey

- The key rate was cut by 100 bp to 9.75%.
- Central bank measures included:
 - Unlimited support for bank liquidity.
 - 500 bp reduction in the required reserve ratio on foreign currency deposits (which freed up USD 5.1 bn).
 - A 90-day extension on the maturity of corporate debt (rediscounted) maturing between March and June (USD 7.6 bn).
 - Extension of maximum maturities on new rediscounting operations (from 120 to 240 days, for example, for short-term operations).

Asia

China

(Total GDP in 2019 = rounded to RMB 100 trn = USD 14.3 trn)

Two main goals:

 Bring immediate support for corporates, to prevent bankruptcies and defaults, and limit instability risks in the financial sector. Stimulate activity to encourage a rapid rebound. The
most recent announcements show that the second
objective is increasingly important for Beijing, which is
asking local governments to help. Further stimulus
measures are expected in the coming weeks/months, on
all fronts.

Monetary policy:

- Interest rate cuts: moderate so far (MLF rate: to 3.15% from 3.25% end-2019/Loan prime rate: to 4.05% from 4.15% end-2019).
- Short-term liquidity injections to respond to demand;
- Reduction in Reserve Requirement Ratios = targeted cut of -50/200 bp on March 16th for some banks (release of RMB550bn in funds to be used for lending to enterprises hit by the COVID-19). There are different RRRs in the banking sector (RRR for largest banks = 12.5% before the latest cut).
- Relending programme (RMB700bn): to support SMEs and enterprises directly hit by the COVID-19.
- Special loan programs by policy banks (RMB 350 bn) for private enterprises and SMEs.
- "Window guidance"/Directives given to banks to help corporates, to refinance and give delays for loan repayments.
- Loosening of risk-management rules for banks. At the same time, rules to tighten supervision of shadow banking remain in place.
- Loosening of rules for corporate bond issuance and share sales in local markets.

Fiscal policy:

- Public investment: Quotas for local government domestic bond issuance has been increased: new LG bond issuance allowed, to be injected mostly in infrastructure projects = RMB 850 bn (in addition to the RMB 1 trn initially allowed for 2020). The stimulus plan relying on public investment will be expected to gain greater importance in short term.
- Fiscal spending to support the health sector (RMB 110 bn to start).
- Direct support for enterprises: temporary tax exemptions, social security exemptions (RMB500bn), electricity tariff cuts (by 5%).
- Tax cuts to support corporate investment and household consumption: a few incentives so far, likely to expand in the coming weeks.

Some examples of local government measures:

- Urban land use cost-cuts.
- Consumption vouchers.





ASH EcoFlash

South Korea

The government announced a series of support measures for:

- SMF
- Sectors that were hit hardest directly (retail trade and tourism).
- Job support measures (generalisation of partial unemployment, compensation for companies whose employees are unable to come to work because they must take care of their children at home).
- Household consumption (via various tax cuts, on new car purchases, for example, and "culture vouchers" to support movie theatres and performing arts centres, etc.).

New measures will probably be announced over the next several days.

16 March: the central bank held an emergency meeting during which it decided to lower the key rate by 50 bp to 0.75%.

Hong Kong

Hong Kong will have a second year of recession in 2020. No autonomous monetary policy (HKD peg to USD). But huge fiscal stimulus package = HKD 120 bn, or 4.1% of GDP, for fiscal year 2020-21 (vs. package of HKD 36 bn in FY2019-20). The HK government has the resources to fund the package (its fiscal reserves = 40% of GDP).

Measures:

- HKD 10000 cash handout to every adult permanent resident (spending= HKD 71 bn).
- Tax rebates and utilities subsidies.

In 2019-20, Hong Kong will have its first fiscal deficit in 15 years (1.3% of GDP).

For 2020-21, the deficit is projected at 4-5% of GDP.

India

Swap and open market operations were launched to face up to USD and INR liquidity squeezes. No key rate cuts have been made yet. No fiscal measures have been announced.

Announcement of a 1.7 trillion rupee economic stimulus plan (0,8% du PIB) that will be released through direct cash transfers and food security measures aimed at giving relief to millions of poor hit by the nationwide lockdown in the country.

Indonesia

- IDR 120 trillion (0.8% of GDP) to support business activity and suspend corporate taxes.
- 19 March: the central bank lowered its key rates by 25 bp to 4.5%.
- 23 March: the Indonesian government asked parliament to raise the budget deficit ceiling currently set at 3% of

GDP so that it can stimulate the economy. All of the measures announced so far amount to 1% of GDP.

Kazakhstan

The key policy rate was raised by 275 bp to bolster the tenge (KZT) against depreciation at the same time as the drop in oil prices (10 March) and the easing of prudential banking regulations (16 March). It also announced preferential rate loans to companies for a total of USD 920 million (0.5% of GDP).

Malaysia

- 3 March: key rates were lowered by 25 bp.
- A new government was just formed.
- 24 March: announcement of a fiscal stimulus package of USD 4.8 bn (1.3% of GDP).

Philippines

The key rate was lowered by 25 bp to 3.75% at the latest monetary policy meeting in early February.

Singapore

A plan amounting to 1.3% of GDP was launched including support measures for the sectors hit hardest by the COVID-19 pandemic, tax cuts and greater spending in the healthcare sector.

Taiwan

- Impact of COVID-19 moderate so far, sanitary crisis well managed since the very beginning.
- Fiscal/monetary policy stance already loose before the virus outbreak.
- Small fiscal package, aimed at helping industries hit by COVID19 (0.3% of GDP).
- 19 March: small cut in policy rate (-25 bp to 1.125%).

Thailand

A fiscal stimulation plan was launched, the main measures of which are geared towards SME and the sectors hit hardest by the COVID-19 crisis (mainly tourism). The key rate was cut by 25 bp to 1% at the latest monetary policy committee meeting in early February.

Vietnam

3 March: The government announced a fiscal stimulus package totalling USD 1.16 bn (VND 27 trillion) which corresponds to 0.5% of GDP. So far the stimulus has not been officially implemented.

The government issued a decree allowing businesses affected by the Covid-19 crisis to defer VAT payments (USD 970 m) and rent (USD 190 m) until June. Moreover, public-private partnership projects for the construction of





roadway infrastructure will be transformed into public investments.

- 13 March: the government allowed banks to defer loan payments, authorise deferred payments of capital and interest, reduce or forego transaction fees and payments and to grant new loans to companies affected by the Covid-19 crisis via preferential credit lines (which could amount to USD 12.3 bn).
- 17 March: the State Bank of Vietnam (SBV) cut its refinancing rate by 100 bp to 5%. The central bank also lowered the discount rate by 50 bp to 3.5%. These decisions were in keeping with the Fed's policy to lower interest rates.

Latin America

Argentina

Measures aimed at preserving labour and household income:

- Labour tax exemptions for economic sectors acutely affected by the shock, including leisure, tourism and transport, but also companies facing supply chain problems.
- Widening of specific programs already in place to protect labour.
- Increase in unemployment benefits.

Measures aimed at protecting population groups considered vulnerable:

- Extraordinary one-off payment for people already receiving specific social subsidies and low pensions;
- Postponement of maturities of debt due to Anses (April & May) for pensioners and people receiving social subsidies.
- Increased supply of food in public facilities.

Public investment:

- The public works budget is increased by ARS 100 bn (0.4% of GDP)
 - Relaunching of state-sponsored loans for construction of new houses or works in already existing homes.
 - Price controls: maximum prices will be imposed on specific goods (including food, hygiene, pharmaceutical and medical supplies) for at least 30 days. Prices will be set at levels prevailing on March 6, 2020. Industries will be asked to temporarily increase production to face the current increase in demand.
 - Financing for productive sectors: ARS 350 bn (1.3% of GDP) will be devoted to guarantee production and supply of basic goods.
- New financing line worth ARS 320 bn for working capital at subsidized rates (26%) for 180 days to be provided by banks.
- ARS 25 bn in new financing from Banco Nacion for specific economic sectors.

- Two other smaller financing lines for companies implementing "work from home" initiatives and for industrial infrastructure.
- Publicly sponsored plan for subsidised financing of consumer goods.
- Restrictions on exports of medical supplies.
- New program to encourage production of medical supplies.
- Reimbursements to exporters of industrial goods will be accelerated.

Brazil

Monetary policy:

- 16 March: Relax banks' capital requirement (by BRL 56 bn): expected to free up a potential BRL 637 bn for lending. Relax banks' loan loss provisions requirements for the next 6 months: enable banks to offer increased loans and better terms (e.g. extend maturities when refinancing) on BRL 3.2 trillion (around USD 640 bn) worth of corporate and household loans.
- 18 March: BCB cuts rates by 50 bps to historical low 3.75%. Complement lowering of banks' reserve requirements last week. FX intervention: BCB sells USD 830 m in 2 rounds of spot FX intervention as part of USD 3 bn intervention announced last week (BRL has lost ~25% YTD against USD). Bond market intervention: announced program to be carried out with Treasury to repurchase dollar denominated sovereign bonds held by Brazilian banks worth around USD 31 bn.

Fiscal policy:

- 17 March: BRL 147.3 bn package (around 2% of GDP) (around USD 30 bn at current exchange rate) Note: only an estimated BRL 32 bn (around USD 6.5 bn) of package will require new resources; BRL 83.4 bn (around USD 17 bn) aid directed to vulnerable populations including elderly and poor people.
 - Advancing Christmas bonuses for pensioners, second instalment of the 13th salary to the month of May to be paid to retirees and pensioners.
 - Transferring unclaimed funds from social security contributions to Brazilians' unemployment insurance fund (FGTS); basically salary bonuses.
 - Adding an additional 1 million Brazilians to Bolsa Familia income distribution program (BRL 3.1 bn).
 - BRL 59.4 bn (around USD 12 bn) ir incentives/temporary tax breaks to protect jobs
 - Suspension for three months of Simples Nacional tax (affecting 4.9 million companies) = temporary waiver of ~BRL 22.2 bn. Payment of the tax will be postponed to H2-2020.
 - Release of BRL 5 bn from the Worker's Support Fund (FAT) passed on to public banks to





- provide loans/working capital to micro, small and medium companies.
- BRL 4.5 bn (~USD 900 mn) in measures to combat the pandemic.
- Import tariffs reduced to zero for medicalhospital related products.
- Temporary exemption from IPI (tax on industrial products) for goods produced domestically or imported, that are necessary to combat Covid-19.
- 18 March: Announcement that domestic airlines' debt will be renegotiated (no further details).
- Support for 18 m informal and self-employed workers: BRL 15 bn (~USD 3 bn, 0.2% of GDP) over the next four months in the form of "corona-voucher" (will only be possible if Congress declares state of emergency to suspend deficit target).

Chile

- A stimulus package was announced last night (5% of GDP). The announced measures are similar to those in other countries: support for the healthcare sector, job protections and support for SME.
- The central bank also announced that it was cutting its key policy rate by 75 bp to 1%. An emergency credit line was also opened for SME and measures were announced to provide banks with liquidity. Peru announced similar measures.

• Colombia

Monetary policy:

18 March:

- Provide more liquidity to the market, both in pesos and dollars (includes measures taken on 12 March).
- Central Bank will auction swaps for USD 400 m and extended eligibility to pension fund and severance fund management companies.
- Extended access to repos auctions and discount window to money market funds managed through their managers (trust companies, brokerage firms, and investment management companies).
- Extension of terms on liquidity operations (repos) using private debt securities as collateral from 30 to 90 days and of repos with public debt securities from one day to 60 days.
- Increased the allotment of auctions for private debt instrument backed repos from COP 5 trillion (~ USD 1.2 bn) to COP 8 (~USD 1.9 bn); For public debt repos and from COP 12 trillion (~USD 2.8 bn) to COP 17 trillion (~USD 4bn).
- New mechanism of FX hedging through use of USD 1 bn in the form of 1-month non-deliverable forwards (NDFs)
- No decision on policy rate. Remains at 4.25% (to protect currency which has lost ~15% in a week).

Fiscal policy:

18 March:

- Package of ~USD 15 bn (~4% of GDP) (Note: no recourse to market funding as USD 12.1 bn will come from Saving and Stabilization Fund; USD 2.7 bn from national pension fund of local authorities).
- Max of USD 48 bn could be used from the state coffers to control economic impact of COVID-19 (maybe revised given current price of oil; for every dollar drop in price of oil barrel, government loses between USD 300 m and USD 400 m).

Amongst the 10 initiatives presented:

- Refund of VAT to one million families in April this year.
- Additional transfers will be made to Families (2.6 mn households, ~200k low-income youth and ~500k elders.
- Financial relief for households, SMEs and large companies facing financial difficulties. Refinancing scheme for a period of 2 months.
- Guarantees on lines of credit to help small companies protect payroll and reduce risks of massive layoffs.
- Eliminate VAT for health equipment import necessary in order to treat and combat the COVID-19 crisis.
- Reconnect homes previously cut off from water grid for unpaid utility bills;
- Spending to fight the pandemic (increase budget of the health ministry to buy medical equipment + increase testing capacity).

Ecuador

- The government announced new credit lines of USD 80 m from CAF, the development bank of Latin America, BID, the inter-American development bank, and the World Bank for the procurement of hospital equipment and to improve healthcare infrastructure.
- The president announced loan payment restructuring with the public bank, the 3-month suspension of employer charges, the possibility of debt restructuring with the private financial sector (60 days), and the deferral of corporate tax payments (60 days for businesses). Fitch downgraded Ecuador's sovereign rating to CCC.

Paraguay

The key rate was cut by 50 bp to 3.25%. No fiscal measures have been announced yet.

Peru

The country declared a national health emergency. The measures announced so far are very small in scope and are primarily geared towards helping the medical sector. It is too early to speak of a stimulus plan.





EcoFlash

North Africa & Middle East

Bahrain

One-week deposit rate cut by 75 bps. The Ministry of Finance announced a funding package of BHD 4.3 bn (USD 11.4 bn – 30.1% of GDP) that mainly includes include covering electricity and water payments for individuals and companies for three months starting in April.

Egypt

Egypt extends support to industries topped by energy price revisions.

Egypt's government introduced a set of measures on 17 March 2020 to support its economy, namely:

- Unifying and reducing natural gas price for industrials to USD 4.5/mmbtu.
- Reducing electricity prices for heavy and medium industries by EGP 0.10/kWh to GP 1.08/kWh.
- Maintaining electricity prices for other industries at their current level for 3–5 years.
- Allocation of EGP1 bn for exporters during March and April 2020 to repay overdue subsidy payments, in addition to another 10% to be disbursed in cash in June.
- Delaying real estate tax payments for factories and tourist facilities for a 3-month period.
- Imposing a number of stock market regulations topped by exempting non-residents from the capital gains tax permanently.
- Lifting administrative seizure on all taxpayers in return for payment of 10% of due tax payments and settling their tax dispute cases. For a detailed comment, refer to our strategy note published 18 March 2020. The cost of the measures is estimated at 2% of GDP.

The Monetary Policy Committee (MPC) decided in an extraordinary meeting, held 16 March 2020, to cut the overnight deposit, lending, and the rate of the main operation by 300 basis points to 9.25%, 10.25%, and 9.75%, respectively. The discount rate was also cut by 300 basis points to 9.75%. Decline in debt servicing estimated at 0.1% of GDP in FY2020 (ending June 2020) and 0.3% in FY2021. This is a very random estimate given the incomplete transmission of CBE rate cuts to T-bills.

Amer also said the central bank is extending the tenor of all bank loans for a period of six months. The extension applies whether the facility is held by an SME, a large corporation or an individual borrower.

Egypt slashed its policy overnight deposits rate by 300 bps on Monday to soften the likely economic slowdown linked to COVID-19. A strong pick up in lending activity is highly unlikely in the current circumstances but, on the plus side, it allows the government to issue new debt at lower rates.

A further EGP 6 bn (USD380m) was announced on Sunday to counter the COVID-19 economic impact. The government has already allocated funds to support the private sector, including:

- EGP 100 bn in 10% subsidised loans to the industrial private sector.
- EGP 50 bn provided by the central bank to support affected hotels.
- EGP 20 bn share purchase program by the central bank to slowdown the stock market sell-off. EGX 30, the main stock market benchmark, lost nearly 4,000 points since the onslaught of the pandemic.
- 14% annual raises for pensioners, starting in July (i.e. the new fiscal year, 2020/2021).
- EGP 27.6 bn to be disbursed to 2.4m families.

Israel

The Bank of Israel will purchase government bonds totalling NIS 50 billion, in order to ease credit conditions and support economic activity.

Israeli Prime Minister Benjamin Netanyahu said the government will expand an aid package to help the country deal with the coronavirus outbreak by 6 billion shekels to a total of 10 billion shekels (USD 2.8 billion). Of that, 8 billion shekels will be in a fund to provide cheap loans to businesses. Another 1 billion shekels will boost the health system by increasing medicine stocks and preparing hospitals to receive a larger number of patients. The final billion will be earmarked for needs such as the police force.

The government has already pledged to establish a 4 billion-shekel credit line for banks to lend money to businesses facing a cash crisis with government guarantees.

• Kuwait

Kuwait passed a bill to increase budget of ministries by KWD 500 m (USD 1.6 bn – 1.2% of forecast GDP) for FY 2020/21 to accommodate extra spending linked to the COVID-19 outbreak. Discount rate cut by 100 bps to 1.50%.

Oman

- The central bank announced that it was preparing to inject OMR 8.0 bn (USD 20.8 bn) into the banking system to boost liquidity. It also instructed banks to cut fees, adjust capital and credit ratios and allow repayment postponement for up to six months – especially for SMEs. Local banks were also encouraged to facilitate lending to sectors affected by COVID-19 such as healthcare, travel and tourism.
- The finance ministry has cut the budget to government agencies by 5% in 2020.





Qatar

- Repo rate cut by 50 bps to 1.00%.

EcoFlash

- 15 March: Qatar's Supreme Committee for Crisis Management (SCCM) announced a USD 23 bn stimulus package (12% of GDP), which includes the exemption of all medical and food products from customs duties for the next six months, and reduces land-use fees for companies.

• Saudi Arabia

Saudi Arabia stimulus plan:

- SAR 50 bn (USD 13.3 bn) under the Private Sector Financing Support Program => about 1.5% of GDP.
- Depositing an amount of about SAR 30 bn for banks and financing companies to delay the payment of the dues of the financial sector (banks and finance companies) from SMEs for a period of six months as of its date.
- Providing concessional finance of about SAR 13.2 billion for SMEs by granting loans from banks and finance companies to the SME sector.
- Depositing an amount of SAR 6 billion for banks and insurance companies to enable insurance entities (banks and insurance companies) to relieve SMEs from the finance costs of KAFALA Program for the purpose of minimizing finance costs for entities eligible to utilize from those guarantees during the Fiscal Year 2020 and support finance expansion.
- The government has agreed to cut SAR 50 bn (USD 13.3 bn) in budget spending, representing under 5% of total budgeted expenditure for the year.
- The Ministry of Finance also announced a SAR 70 bn (USD18.6 bn) in support for the private sector, complementing a SAR 50 bn package that was announced by the central bank SAMA last week. The finance ministry's package comes in the form of exemptions and postponements of government fees.
- Repo cut by 75 bps to 1.00%.

United Arab Emirates (UAE)

UAE stimulus plan:

- AED 100 bn (USD 27 bn approximately 7% of GDP).
- AED 50 bn in collateralised loans at zero cost to all UAEbased banks.
- AED 50 bn from regulatory capital buffers will be freed-up to boost lending capacity.
- Local banks are offered relief for up to six months from the payments of principal and interest on outstanding loans for companies and retail customers affected by the impact of COVID-19.

- All banks will be allowed to tap into a maximum of 60% of the capital conservation buffer, and, additionally, banks designated as systemically important by the CBUAE will be able to use 100% of their additional capital buffer for systemic importance.
- To facilitate greater access to financing, the CBUAE reduced the amount of capital banks have to hold for their loans to SMEs by 15 to 25%.
- Improved mortgage terms for first-time home buyers the loan to value (LTV) ratio was raised by 5% for those wishing to purchase property.
- Banks will be allowed to increase their exposure to real estate loans. The CBUAE statement said that "when the exposure reaches 20% of the banks' loan portfolio (measured by risk-weighted assets), banks will be allowed to increase it to 30%, but will be required to hold more capital".
- Reduced banking fees for small companies.

One-week certificates of deposit rate cut by 75 bps, repo was left unchanged at 1.50%.

The government approved an additional AED 16 bn (US 4.3 bn) in stimulus funding to support SMEs and expedite infrastructure works, bringing the total to counter the COVID-19 impact on the economy to AED 126 bn (approximately 8.7% of GDP) .Following central bank guidelines, local banks will reschedule or delay loan payments, reduce instalments and cur or reduce fees to six priority sectors: Aviation, hospitality, healthcare, retail, event management, consumer goods and education. These measures will be implemented initially for three months, starting 1 April to 30 June.

Algeria

The central bank cut its key rate by 25 bp to 3.25% and the required reserve ratio from 10% to 8%.

23 March: the government is targeting a 30% reduction in public expenditure in 2020.

Morocco

- 12 March: creation of a supervisory committee under the ministry of the economy and finances and a MAD 10 bn fund (8% of GDP) for the "protection of the health of citizens and to support the national economy."
- Morocco's key central bank rate was cut by 25 bp to 2%.
- 18 March: a special pandemic crisis management fund was opened that will be financed through donations deposited with Bank Al-Maghrib in Rabat.

Africa

Angola

No actions elated to COVID-19 outbreak so far employed but next MPC is scheduled on the 27th of March, where some actions are expected.





Kenya

EcoFlash

On Wednesday, the Central Bank of Kenya issued a set of emergency measures to as that the pandemic is expected to slow down economic growth in the country. These include:

- Extending personal loan repayment by up to 12 months, with priority given to customers who took loans as from March 1, 2020.
- Restructuring of corporate borrowers' lending.
- Dropping charges on mobile-money transactions to curb the use of cash for hygiene reasons until end of June. Despite exchange rate and inflationary pressures, the next MPC is likely to lower its key rate for a third consecutive meeting Monday, following other central banks which have adopted an accommodative stance to soften the pandemic effects on global supply chains.

Mozambique

To provide a buffer against the growing macroeconomic risk stemming from the impact of the coronavirus disease, the CB decided to loose domestic liquidity by lowering the national and foreign currency reserve requirements of commercial banks, with effect from 7 April, as follow: the mandatory reserve requirements ratio for liabilities in national currency was lowered to 11.5% and for liabilities in foreign currency to 34.5%.

Namibia

Following the footsteps of the SARB (South African Reserve Bank), which last week lowered its key policy rate by 100 basis points, the Central Bank of Namibia's key policy rate was cut by 100 basis points during a special MPC meeting held today, 23rd of March, to cushion the Namibian economy from the impact of the escalating global economic crisis from coronavirus disease 2019 (COVID-19) virus pandemic.

Nigeria

- The Central Bank of Nigeria (CBN) released a circular on 16 March covering six measures to be taken by the banking sector to control the economic effects of the coronavirus disease 2019 (COVID-19) virus, particularly to ensure stability within the financial sector.
- The measures include the extension of moratorium for one year on principal repayments on all CBN intervention facilities, interest-rate reduction from 9% to 5% per year on all CBN intervention facilities, the creation of NGN 50-billion (USD136 million) targeted credit facility for households and small and medium-sized enterprises, credit support for the healthcare industry, regulatory forbearance for banks to consider temporary restructuring of loans, and strengthening of the CBN loan-to-deposit ratio (LDR) policy.
- The official exchange rate was devalued by 15%.

South Africa

19 March: The central bank cut its key repo rate by 100 bp to 5.25% and introduced several measures to ensure market liquidity.

Last update: 27 March 2020

William De Vijlder

william.devijlder@bnpparibas.com



GROUP ECONOMIC RESEARCH

William De Vijlder Chief Economist	+33 1 55 77 47 31	william.devijlder@bnpparibas.com
ADVANCED ECONOMIES AND STATISTICS		
Jean-Luc Proutat Head – United States, United Kingdom	+33 1 58 16 73 32	jeanluc.proutat@bnpparibas.com
Hélène Baudchon France – Labour markets	+33 1 58 16 03 63	helene.baudchon@bnpparibas.com
Louis Boisset European Central Bank watch, Euro area global view, Japan	+33 1 57 43 02 91	louis.boisset@bnpparibas.com
Frédérique Cerisier Euro area (European gouvernance and public finances), Spain, Portugal	+33 1 43 16 95 52	frederique.cerisier@bnpparibas.com
Raymond Van Der Putten Germany, Netherlands, Austria, Switzerland – Energy, climate – Long-term projections	+33 1 42 98 53 99	raymond.vanderputten@bnpparibas.com
Tarik Rharrab Statistics	+33 1 43 16 95 56	tarik.rharrab@bnpparibas.com
BANKING ECONOMICS		
Laurent Quignon Head	+33 1 42 98 56 54	laurent quignon@bnpparibas.com
Laure Baquero	+ 33 1 43 16 95 50	laure.baquero@bnpparibas.com
Céline Choulet	+33 1 43 16 95 54	celine.choulet@bnpparibas.com
Thomas Humblot	+ 33 1 40 14 30 77	thomas.humblot@bnpparibas.com
EMERGING ECONOMIES AND COUNTRY RISK		
François Faure Head – Argentina	+33 1 42 98 79 82	francois.faure@bnpparibas.com
Christine Peltier Deputy Head – Greater China, Vietnam, South Africa	+33 1 42 98 56 27	christine.peltier@bnpparibas.com
Stéphane Alby Africa (French-speaking countries)	+33 1 42 98 02 04	stephane.alby@bnpparibas.com
Stéphane Colliac Turkey, Ukraine, Central European countries	+33 1 42 98 26 77	stephane.colliac@bnpparibas.com
Sara Confalonieri Africa (Portuguese & English-speaking countries)	+33 1 42 98 43 86	sara.confalonieri@bnpparibas.com
Pascal Devaux Middle East, Balkan countries	+33 1 43 16 95 51	pascal.devaux@bnpparibas.com
Hélène Drouot Korea, Thailand, Philippines, Mexico, Andean countries	+33 1 42 98 33 00	helene.drouot@bnpparibas.com
Salim Hammad Latin America	+33 1 42 98 74 26	salim.hammad@bnpparibas.com
Johanna Melka India, South Asia, Russia, CIS	+33 1 58 16 05 84	johanna.melka@bnpparibas.com
CONTACT MEDIA		
Michel Bernardini	+33 1 42 98 05 71	michel.bernardini@bnpparibas.com



OUR PUBLICATIONS



CONJONCTURE

Structural or in news flow, two issues analysed in depth



EMERGING

Analyses and forecasts for a selection of emerging economies



PERSPECTIVES

Analyses and forecasts for the main countries, emerging or developed



ECOFLASH

Data releases, major economic events. Our detailed views...



ECOWEEK

Weekly economic news and much more...



FCNTV

In this monthly web TV, our economists make sense of economic news



NOTRE SITE ONGLET ABONNEMENT

http://economic-research.bnpparibas.com

NOUS SUIVRE SUR LINKEDIN https://www.linkedin.com/showcase/bnp paribas-economic-research/ **OU TWITTER**

https://twitter.com/EtudesEco_BNPF

ECOTY WEEK

What is the main event this week? The answer is in your two minutes of economy

POUR RECEVOIR NOS PUBLICATIONS **VOUS POUVEZ VOUS ABONNER SUR** 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 an offer or solicitation to buy or sell any securities or other investment. It does not constitute investment advice, nor financial research or analysis. Information and opinion contained in the report are not to be relied upon as authoritative or taken in substitution for the exercise of judgement by any recipient; they 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 turture 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. 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 any issuer or person mentioned in this report or derivatives enteron. BNP Paribas may have a financial interest in any issuer or person mentioned in this report, including a long or short position in their securities and/or options, futures or other derivative instruments based thereon. Pinces, yields and other similar information included in the report. and/or options, futures or other derivative instruments based thereon. Prices, yields and other similar information included in this report are included for information purposes. Numerous factors will affect amker to pricing and there is no certainty that transactions could be executed at these prices. BNP Paribas, including its officers and employees may serve or have served as an officer, director or in an advisory capacity for any person 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 person referred to in this report. BNP Paribas may be a party to an agreement with any person relating to the production of this report. BNP Paribas, mgy to the extent permitted by law, have aded upon or used the information contained herein, or the research or analysis on which it was based, before its publication. BNP Paribas mgy receive or intend to seek compensation for investment banking services in the next three months from or in relation to any person mentioned in this report. Any person mentioned in this report may have been provided with sections of this report, from the first protter, to report may have been provided with sections of this report, from the first protter, and the 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.

Certain countries within the European Economic Area

This report has been approved for publication in the United Kingdom by BNP Paribas London Branch. BNP Paribas London Branch is authorised and supervised by the Autorité de Contrôle Prudentiel and authorised and subject to limited regulation by the Financial Services Authority. Details of the extent of our authorisation and regulation by the Financial Services Authority are available from us on request.

This report has been approved for publication in France by BNP Paribas SA. BNP Paribas SA is incorporated in France with Limited Liability and is authorised by the Autorité de Contrôle Prudentiel (ACP) and regulated by the Autorité des Marchés Financiers (AMF). Its 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 agn Main, a branch of BNP Paribas S.A. whose head office is in Paris, France. BNP Paribas S.A. – Niederlassung Frankfurt am Main, Europa Allea 12, 60327 Frankfurt is authorised and supervised by the Autorité de Contrôle Prudentiel and it is authorised and subject to limited regulation by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin).

United States: Thisreport is being distributed to US persons by BNP Paribas Securities Corp., or by a subsidiary or affiliate of BNP Paribas shatis not registered as a US broker-dealer. BNP Paribas Securities Corp., a subsidiary of BNP Paribas, is a broker-dealer registered with the U.S. Securities and Exchange Commission and a member of the Financial Industry Regulatory Authority and other principal exchanges. BNP Paribas Securities Corp. accepts responsibility for content of a report prepared by another non-U.S. affiliate only when distributed to U.S. persons by BNP Paribas Securities Corp.

prepared by another non-U.S. affiliate only when distributed to U.S. persons by BNP Panibas Securities Corp.

Japan: This report is being distributed in Japan by BNP Panibas Securities (Japan) Limited or by a subsidiary or affiliate of BNP

Panibas 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 Panibas Securities (Japan) Limited 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 and the Financial Futures Association of Japan. BNP Panibas Securities (Japan) Limited accepts
responsibility for the content of a report prepared by another non-Japan affiliate only when distributed to Japanese based firms
by BNP Panibas Securities (Japan) Limited. 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 registered as a Licensed Bankunder the Banking Ordinance and regulated by the Hong Kong Monetary Authority. BNP Paribas Hong Kong Branch is also a Registered Institution regulated by the Securities and Futures Commission for the conduct of Regulated Activity. Types 1, 4 and 6 under the Securities and Futures Ordinance.

Some or all the information reported in this document may already have been published on bit this violable hand.

https://globalmarkets.bnpparibas.com

@ BNP Paribas (2015), All rights reserved

© BNP Paribas (2015). All rights reserved. Prepared by Economic Research - BNP PARIBAS Registered Office: 16 boulevard des Italiens - 75009 PARIS

Tel: +33 (0) 1.42.98.12.34 - Internet:

www.group.bnpparibas.com

Publisher: Jean Lemierre. Editor: William De Vijlder

