

Insights 2022

Macroeconomic View

Economic Growth

This is a financial promotion. Your capital is at risk, the value of investments may fall and rise and you may not get back the full amount you invested. Past performance is not indicative of future returns.

Europe: How will the European economy navigate through rising policy and geopolitical risks?

Rapid post-pandemic economic growth rates will gradually decline across Europe. In the absence of a protracted and expanding conflict stemming from the Russian invasion of Ukraine spreading to broader Europe, growth is expected to remain above trend in the Eurozone for at the next three years (averaging c. 2.7%) as fiscal and monetary conditions will tighten more slowly than in both the US and UK. UK growth is forecast to drop below trend in 2024 due to faster monetary policy normalisation and continued labour shortages, averaging 2.2% over the next 3 years. Across Europe, energy supply disruptions pose a risk to growth and inflation. As noted above, Europe will feel a larger impact from the Ukraine crisis, both in terms of economic growth and market volatility. In the downside case, this could raise the prospect of reflexivity effects where economic growth is further stymied by persistent underperformance of financial assets. In a more severe geopolitical scenario, experts see European growth declining to 2.2% in 2022 and to 0.9% in 2023¹.

¹Hypothetical return expectations are based on simulations with forward looking assumptions, which have inherent limitations. Such forecasts are not a reliable indicator of future performance.

Exhibit 1

EU and UK real economic growth is expected to remain above trend through 2025

Region	Source	2022	2023	2024	2025
EU	European Central Bank	4.2%	2.9%	1.6%	
	IMF	3.9%	2.5%	1.9%	1.7%
	OECD	4.3%	2.5%		
	Bloomberg Consensus	4.0%	2.5%	1.8%	
	Goldman Sachs	4.1%	2.6%	1.6%	1.5%
	Deutsche Bank	3.8%	2.8%	1.4%	1.1%
	J.P. Morgan	4.7%	3.1%		
	Average	4.1%	2.7%	1.7%	1.4%
υк	Bank of England	3.8%	1.3%	1.0%	
	IMF	4.7%	2.3%	1.6%	1.5%
	OECD	4.7%	2.1%		
	Bloomberg Consensus	4.4%	2.1%	1.7%	
	Goldman Sachs	4.7%	2.2%	1.5%	1.4%
	Deutsche Bank	3.5%	1.7%	1.4%	1.2%
	J.P. Morgan	3.7%	1.4%		
	Average	4.2%	1.9%	1.4%	1.4%

Note: Trend growth is estimated at c. 1.3% in the EU, and at c. 2.0% in the UK Source: As detailed above

Europe's rapid growth over the next two years (Exhibit 1) is expected to be driven by postpandemic reopening, the release of pent-up savings, easing of supply chain disruptions as well as fiscal and monetary policies that will remain supportive longer than in other regions. However, at some point, tightening policy may expose weaknesses

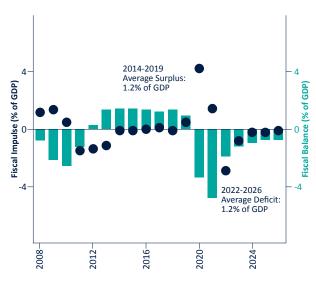
in the balance sheets of highly indebted countries, Italy in particular. A more recent risk to the outlook arises from the fragility of energy supplies concurrent with the shift to renewables and more recently from the current geopolitical instability in Eastern Europe.

Fiscal policy will remain accommodative in 2022, but there is a risk of a sharp tightening in 2023 if there is no amendment to the scal rules in Europe.

The European Commission will keep the Stability and Growth Pact (SGP) rules suspended in 2022, allowing more flexibility on deficits (see below). The fiscal deficit in the euro area is expected to be -3.9% in 2022. While this is a reduction from 2021 (-7.1%), it still represents one of the largest fiscal deficits since 2010, as illustrated in Exhibit 2. The German government agenda includes fiscal expansionary measures to fund the country's new digital and climate initiatives and is expected to result in a deficit greater than -2% of GDP in 2022. The newly formed coalition is also expected to adjust the rules regarding the implementation of the federal debt brake to increase its flexibility. The French, Italian and Spanish deficits are all forecast to exceed -5% of GDP as they attempt to keep the economic recovery on track. In addition, the European Commission has committed to injecting over €500B into the economy over the course of 2022, divided between its Long-Term Budget 2021-2027 (€166B) and the NextGenerationEU program (€338B). The main beneficiaries of the NextGeneration EU program will be Italy and Spain, which are expected to receive €12B and €11B respectively in 2022. The UK for its part expects net borrowing to remain elevated in the next fiscal year at £183B.

Exhibit 2

Euro Area's 2022 average fiscal deficit will still be one of the largest since 2010, but the fiscal impulse will decline



Note: Bars show the cyclically adjusted primary balance, circles show the resulting fiscal impulse
Source: BCA

A strategic review of governance, including the SGP.

The European Commission launched a strategic review of its economic governance in October 2021. This review will include the controversial Stability and Growth Pact (SGP), a set of fiscal rules designed in the late 90s that prescribe all EU member states to keep budget deficits below 3% of GDP and public debt-to-GDP ratios below 60%. The pact allows a 20-year grace period for countries overshooting the debt target to reach compliance, and was designed to limit systemic risks caused by member countries with independent fiscal policies. The SGP informed the European response to the great financial crisis in 2008, forcing punishing austerity that lead to soaring youth unemployment and the rise of populist anti-EU political parties. Critics argue that rules are severely outdated and unsuitable for the current environment. The rules don't allow for counter-cyclical fiscal spending, nor do they differentiate between types of spending, such as productive investment in long-term infrastructure projects. Furthermore, the rules have been inconsistently enforced and the current debt target appears unrealistic in light of the EU's public debt ratios which, on average, increased by 15% to 94% of GDP over the course of the pandemic. Finally, the current targets appear even more unachievable when one considers the EU's push for a green and digital transition which is estimated to require €650B in annual investments (both public and private) each year until 2030.

Italy and France are spearheading the charge for increased flexibility, with French President Emmanuel Macron and Italian Prime Minister Mario Draghi issuing a joint statement in December supporting a reform of the EU fiscal rules. They argue that the existing rules are "too obscure and excessively complex" and should be reformulated so that governments are able to match structural reforms with "large-scale investment in research, infrastructure, digitisation and defence". Their view is echoed by several other countries, most notably Spain. Countering this initiative are the so-called "frugal four" of Austria, the Netherlands, Denmark and Sweden. These four issued a joint statement demanding that member states recommit to "reducing excessive debt ratios" as soon as the COVID crisis has passed. The statement did however leave some room to re-negotiate the existing rules but argued in favour of "sticking to a rules-based fiscal framework" and highlighted the need for better and more systematic enforcement.

Germany's position is more aligned with that of the fiscally conservative members, but the country's representatives have stated that they are open to talks and agree on the need for simplification. In September, Germany held its first election without Angela Merkel leading the CDU since 2005, which resulted in the formation of a new "traffic light" coalition government composed of the centre-left Social Democratic Party of Germany (SPD), the liberal Free Democratic Party (FDP) and the Greens. Christian Lindner, the newly appointed German federal Finance Minister and leader of the fiscally conservative FDP, has previously underscored the importance of fiscal rules and the reduction of sovereign debt ratios. Lindner, however, describes himself as a "friendly hawk" and stated his openness to proposals to improve the existing fiscal rules.

Experts believe that the negotiations are unlikely to lead to a direct change to the 3% and 60% rules, given that any amendments require unanimous approval, but there are points of common ground to build upon. There is general agreement that some reform and flexibility are required. The most likely scenario is that some form of a "golden rule" will be established to exclude deficit spending that is labeled as "green" and there will be a tweak to the existing rules to ease the adjustment path for the more indebted nations. Investors must be cognisant, however, that there is a real risk to the economic recovery in Europe if the SGP rules are reintroduced in 2023.

Peripheral European countries have sustainable levels of debt, but there is little dry powder left to facilitate counter-cyclical fiscal policy in the event of a recession.

The Italian bond market is the biggest in the European Union, with roughly €2.3 trillion in outstanding bonds as of 31 January 2022. Italy's total net government debt is over 142% of GDP. This makes Italy the most significant solvency risk in Europe. Given its importance, we closely monitor trends in the country's fiscal outlook and debt sustainability. Our modeling in Exhibit 3 suggests that Italy's debt problem is manageable, as the cost of debt is expected to remain below the nominal rate of growth. We estimate the weighted average interest rate on Italy's existing debt to be 2.2%. This is expected to continue to gradually decline as old expensive debt matures and is re-issued at lower rates. For example, in March 2022 a bond issued in 2011 with a yield of 5.2% will mature. At the time of writing, this could be refinanced at a yield of sub-2%. Italy's existing debt has an average maturity of 2029, so even if Italian bond yields moved materially higher in the medium-term, it will take multiple years for the higher interest rate to start having a material impact on the overall debt servicing costs¹.

Debt dynamics are also a function of other key variables such as long-term growth and fiscal stance. We find that the IMF's forecast for Italian trend GDP growth of 2.3% and a primary budget deficit (i.e., budget before interest expense) of near-zero would be enough to stabilise the debt, allowing it to decline to 134% of GDP by 2031.

Such a level of debt is still highly elevated and vulnerable to periods of market volatility. As such, Italy is likely to continue to require the ongoing support of the ECB and European Union. For example, Italy is expected to be a major beneficiary of the European Union's €800 billion post-pandemic recovery fund, standing to receive some €200 billion in grants and loans in the coming years.

¹Hypothetical return expectations are based on simulations with forward looking assumptions, which have inherent limitations. Such forecasts are not a reliable indicator of future performance.

Exhibit 3

Italy's national balance sheet will take a long time to recover from the pandemic

Itoly	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Italy	Actual	Est.										
Net Debt-to-GDP (end of year)	142%	142%	139%	138%	138%	138%	137%	136%	136%	135%	135%	134%
Real GDP growth	-8.9%	6.2%	3.8%	2.2%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Inflation forecast (GDP deflator)	1.2%	1.6%	1.7%	1.2%	1.2%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%
Nominal GDP growth	-7.7%	7.8%	5.5%	3.4%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
Weighted average interest rate on total outstanding debt	2.7%	2.2%	2.1%	2.0%	2.0%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
Debt servicing cost as percent of GDP (int rate x debt level)	3.3%	3.1%	2.9%	2.8%	2.7%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
IMF baseline forecast of government primary balance, % GDP	-6.2%	-7.1%	-1.7%	-0.7%	-0.3%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%

Source: Partners Capital

1. Forecasts from 2021-2026 are from IMF October 2021 World Economic Outlook and January 2021 update.

2. Growth, inflation and cost of debt held constant at the expected trend rate after 2026.

3. Net debt is debt held by the public, which excludes intragovernmental debt but includes debt held by the ECB. Source: IMF, Partners Capital

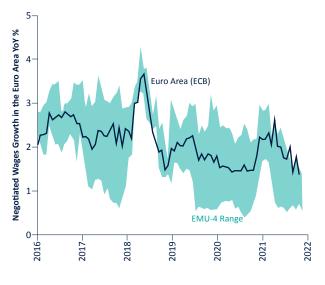
Italian borrowing costs have been suppressed by ECB purchases. In total, the ECB owns Italian debt worth roughly €700B, which is about 25% of all outstanding Italian public debt. This was first purchased through the Public Sector Purchase Program (PSPP), launched after the Eurozone debt crisis, and more recently via the Pandemic Emergency Purchases Program (PEPP), the program launched to battle the COVID crisis. As discussed below, the ECB is expected to gradually tighten policy in response to higher inflation this year. However, unlike the US Federal Reserve or Bank of England, it is unlikely that the ECB will begin to unwind its balance sheet, which should continue to give Italy some financial breathing room.

Monetary policy likely to gradually tighten as central banks look to have reached an inflection point on the back of record-high inflation.

Inflation in the Eurozone reached a record high of +5.1% in January, surpassing the previous peak of +4.1% in July 2008. The elevated level of headline inflation is primarily being driven by volatile factors (in particular energy prices which increased by +28.6%), as core inflation (which excludes food and energy) peaked at a more modest +2.6% in December before declining to +2.3% in January. The ECB's latest estimates suggest that headline inflation will peak in 2022 before moving back below +2% in 2023 due to the more demanding base effects of higher energy/commodities prices and the easing of supply chain disruptions. It should be noted that these forecasts were made prior to the Russian invasion of Ukraine which will likely skew inflation risks further to the upside for the duration of the crisis.

On a longer-term basis, wage inflation is a more fundamental driver of core inflation. Wages in the Eurozone have remained subdued (Exhibit 4) despite employment reaching pre-pandemic levels as many member states entered the pandemic with doubledigit unemployment rates.

Exhibit 4 Euro area wage growth remains subdued

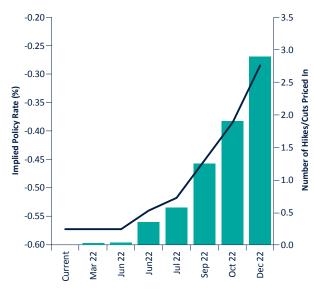


Source: Morgan Stanley

In response to the latest inflation data, the ECB has announced that it will end its pandemic emergency purchase program and "recalibrate" its asset purchase program at the March 2022 policy meeting. ECB president Christine Lagarde also refused to rule out a rate hike in 2022. This would imply a rather abrupt end to the asset purchase program which they had previously stated would end prior to any potential rate hikes (Exhibit 5 and 6). The sharp shift in monetary policy marks a turning point for the ECB which has had negative policy rates since 2015. However, the pace and magnitude of expected ECB rate increase remain well below those of the Fed, implying continued weakness in the Euro currency which should provide favourable terms of trade for its export markets.

Exhibit 5



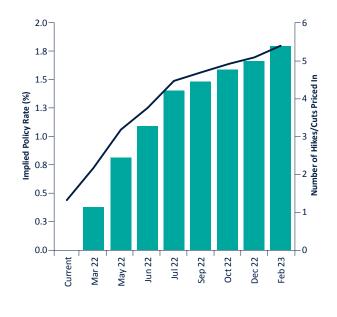


Source: Bloomberg

In the UK, inflation pressures are much higher, with CPI inflation at +5.5% in January, its highest level since 1992. The Bank of England (BoE) expects inflation to peak around +7% in the spring before fading in the second half of the year. Similar to the Eurozone, energy prices (+22.7%) were the major contributor to inflation. The key differentiating factor in the UK is that more persistent factors have also materialised with core inflation hitting a high of +4.4% in January. The UK labour market appears to be exceptionally tight with 3-month average wage growth running at +4.2% as of February (historical average 2.7%) and the unemployment rate expected to fall below 4% in Q1 2022 driven by the lowest level of job seekers per vacancy on record. The Bank of England, contending with labour market pressures, has taken a more aggressive stance and was the first developed market central bank to raise interest rates since the pandemic began. The main bank rate was raised from 0.10% to 0.25% in December 2021 and a further 0.25% to 0.50% in February 2022. Investors have priced in a further five hikes by the BoE in 2022 alone (Exhibit 6). With terminal rates seen at c. 1.8% compared to c. 2.0% in the US, the differential will likely not in itself impact Sterling's exchange rate to the US dollar but may impact domestic consumption as residential mortgage rates in the UK tend to be variable and indexed to short-tend borrowing rates.

Exhibit 6





Source: Bloomberg

Energy Crisis & Geopolitics A key factor that will dictate the success of central bank efforts to control inflationary forces will be the resolution of the current energy crisis. European natural gas prices rose by over 250% in 2021¹, significantly impacting households both in the EU and in the UK, where 30%² to 40%³ of electricity is generated via natural gas respectively. The ECB affirmed in its February statement that energy continues to be the main reason for the elevated rate of inflation and the BoE expects 75% of the rise in inflation between December 2021 and April 2022 to be attributable to energy and goods prices with UK energy regulator Ofgem having announced they are lifting the energy price cap by 54%⁴ from April 2022.

What has caused the current crisis? Critics argue that the security of the current energy supply in Europe has been overlooked by European policymakers focused primarily on the green transition. The EU has committed to reducing carbon emissions by at least 55% compared to 1990 levels by 2030 and to be carbon neutral by 2050 while the UK has a legally binding net zero

1 Reuters

- 3 Gov.UK
- 4 Ofgem
- 5 ISS Europa

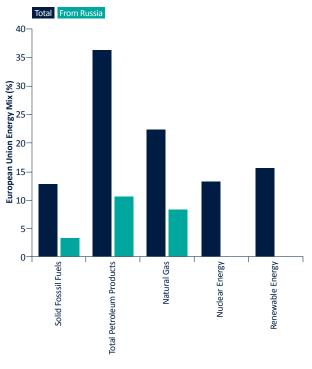
² EC Europa

target by 2050 and targets to reduce emissions by 78% by 2035 relative to 1990 levels. These policies have led to an overreliance on natural gas as a baseload energy source with Europe having already closed more than half of its coalfired power plants by the end of 2021 and the remainder set to fully close by 2030. Germany's decision to phase out nuclear power facilities by the end of 2022⁵ has further exacerbated the situation. In addition, a bitterly cold European winter in 2020/2021 left natural gas inventories at decade lows, a coal shortage in China led to a spike in Liquefied natural gas (LNG) prices as China switched from coal to LNG) which would usually serve as an alternative to piped natural gas and Russia began restricting the flow of natural gas to the continent in what the International Energy Agency deemed an attempt to exert pressure to seal approval for the Nord Stream 2 pipeline.

More recently, Russia's decision to invade Ukraine has increased the risk of energy supply disruptions, particularly in Europe. As shown in Exhibit 7, Russia is by far the largest exporter of fossil fuels to the EU, supplying c. 41% of natural gas, 47% of solid fuel and 27% of oil imports to the EU in 2019⁶. At the time of writing, both the US and Europe have chosen to apply sanctions only to financial institutions and individuals and to exclude several banks from the SWIFT payment system. For now, other than suspending approval of the Nord Stream 2 pipeline, they have been reluctant to apply sanctions to the energy sector. Experts suggest that in the event of full-scale sanctions on the Russian energy market, the price of Brent oil would rise to between \$120-150/barrel. The consequences of this would be a sharp increase in inflation and a significant hit to growth with real household consumption expected to fall and energy rationing likely applied to heavy industry in Europe. Absent further sanctions the current rise in oil and gas prices has prompted analysts at J.P. Morgan to increase their 2022 European inflation forecasts by +0.4% to 3.6%. Goldman Sachs have also lowered their 2022 growth outlook for Europe by -0.25% to +4%.

Exhibit 7





Source: IEA

A series of tough choices. With households across the continent facing soaring costs of living, policymakers have been left with a series of difficult choices. Central banks have had their hands forced into tightening monetary policy which will in effect raise the cost of living further for European and UK households. At a broader policy level, the European Commission has adopted a more pragmatic approach as part of its latest "taxonomy for sustainable finance" by proposing to label nuclear and natural gas as 'green energy' sources if they can meet certain conditions⁷. Russia's recent aggression will likely prompt a full reassessment of the benefits and costs of nuclear power which has the potential to provide a more significant degree of energy independence. Governments, wary of the political fallout, have taken several measures to limit price increases for consumers. The UK has announced a £9B package to partly offset the increase in domestic and commercial energy bills⁸, Germany is planning to scrap this year's surcharge on electricity

- 6 EC Europa
- 7 Financial Times
- 8 Financial Times
- 9 Reuters
- 10 The Guardian

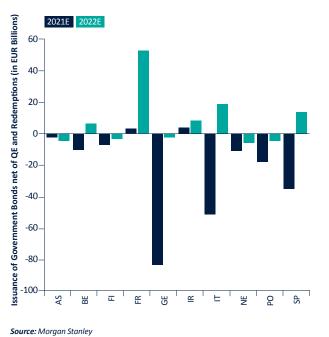
bills (which is used to support renewable power), Italy has spent over €8B since the summer to curb retail energy price increases and has announced another €1.7B package in January and Spain implemented tax cuts for consumers until May 2022⁹. The French government, facing a re-election bid in April 2022, took a more draconian approach and forced the state energy giant EDF to take an €8.4B financial hit to limit household energy hikes to 4% this year.¹⁰

Investment Implications The outlook for European equities remains mixed. Some sectors will undoubtedly benefit from the push for green investment and others may benefit from the rising inflation and rates environment simply because of the inherent Value bias to Europe (in the absence of large Growth sectors). However, over the longer term, in the absence of a material growth impetus, it is hard to imagine broad-based outperformance versus economies such as the US and China.

Within fixed-income securities, European peripheral risk may come to the fore once again. Rising energy costs, which could be impacted further by any potential sanctions, and the associated inflationary pressures are likely to weigh particularly heavily on European peripheral debt. These energy costs alongside significant inflation in food prices increase the probability of some degree of social unrest and the risk of early elections given that several governments are sitting on razor-thin majorities or operating on technocratic mandates. The inflationary pressures have also accelerated the ECB's removal of stimulus with the pandemic emergency purchase program set to end in March 2022 and a recalibration of the asset purchase program also set to be announced shortly. The unwinding of these programs leaves the bond market and peripheral bonds in particular very exposed. Aberdeen Standard Investments noted that "the ECB is the only thing that's been keeping the bond market at bay and it is being forced into retreat". Net new issuance is set to increase substantially as well as noted in Exhibit 8. While peripheral spreads have widened somewhat in recent months they remain well below the highs observed in the last 5 years.

Exhibit 8

Net new issuance is set to increase significantly



¹⁰ https://www.theguardian.com/business/2022/jan/14/france-edfcap-household-energy-bills

DISCLAIMER

Copyright © 2023, Partners Capital Investment Group LLP

Within the United Kingdom, this material has been issued by Partners Capital LLP, which is authorised and regulated by the Financial Conduct Authority of the United Kingdom (the "FCA"), and constitutes a financial promotion for the purposes of the rules of the Financial Conduct Authority. Within Hong Kong, this material has been issued by Partners Capital Asia Limited, which is licensed by the Securities and Futures Commission in Hong Kong (the "SFC") to provide Types 1 and 4 services to professional investors only. Within Singapore, this material has been issued by Partners Capital Investment Group (Asia) Pte Ltd, which is regulated by the Monetary Authority of Singapore as a holder of a Capital Markets Services licence for Fund Management under the Securities and Futures Act and as an exempt financial adviser. Within France, this material has been issued by Partners Capital Europe SAS, which is regulated by the Autorité des Marchés Financiers (the "AMF").

For all other locations, this material has been issued by Partners Capital Investment Group, LLP which is registered as an Investment Adviser with the US Securities and Exchange Commission (the "SEC") and as a commodity trading adviser and commodity pool operator with the Commodity Futures Trading Commission ("CFTC") and is a member of the National Future's Association (the "NFA").

This material is being provided to clients, potential clients and other interested parties (collectively "clients") of Partners Capital LLP, Partners Capital Asia Limited, Partners Capital Investment Group (Asia) Pte Ltd, Partners Capital Europe SAS and Partners Capital Investment Group, LLP (the "Group") on the condition that it will not form a primary basis for any investment decision by, or on behalf of the clients or potential clients and that the Group shall not be a fiduciary or adviser with respect to recipients on the basis of this material alone. These materials and any related documentation provided herewith is given on a confidential basis. This material is not intended for public use or distribution. It is the responsibility of every person reading this material to satisfy himself or herself as to the full observance of any laws of any relevant jurisdiction applicable to such person, including obtaining any governmental or other consent which may be required or observing any other formality which needs to be observed in such jurisdiction. The investment concepts referenced in this material may be unsuitable for investors depending on their specific investment objectives and financial position.

This material is for your private information, and we are not soliciting any action based upon it. This report is not an offer to sell or the solicitation of an offer to buy any investment. While all the information prepared in this material is believed to be accurate, the Group, may have relied on information obtained from third parties and makes no warranty as to the completeness or accuracy of information obtained from such third parties, nor can it accept responsibility for errors of such third parties, appearing in this material. The source for all figures included in this material is Partners Capital Investment Group, LLP, unless stated otherwise. Opinions expressed are our current opinions as of the date appearing on this material only. We do not undertake to update the information discussed in this material. We and our affiliates, officers, directors, managing directors, and employees, including persons involved in the preparation or issuance of this material may, from time to time, have long or short positions in, and buy and sell, the securities, or derivatives thereof, of any companies or funds mentioned herein.

Whilst every effort is made to ensure that the information provided to clients is accurate and up to date, some of the information may be rendered inaccurate by changes in applicable laws and regulations. For example, the levels and bases of taxation may change at any time. Any reference to taxation relies upon information currently in force. Tax treatment depends upon the individual circumstances of each client and may be subject to change in the future. The Group is not a tax adviser and clients should seek independent professional advice on all tax matters.

Within the United Kingdom, and where this material refers to or describes an unregulated collective investment scheme (a "UCIS"), the communication of this material is made only to and/or is directed only at persons who are of a kind to whom a UCIS may lawfully be promoted by a person authorised under the Financial Services and Markets Act 2000 (the "FSMA") by virtue of Section 238(6) of the FSMA and the Financial Services and Markets Act 2000 (Promotion of Collective Investment Schemes) (Exemptions) Order 2001 (including other persons who are authorised under the FSMA, certain persons having professional experience of participating in unrecognised collective investment schemes, high net worth companies, high net worth unincorporated associations or partnerships, the trustees of high value trusts and certified sophisticated investors) or Section 4.12 of the FCA's Conduct of Business Sourcebook ("COBS") (including persons who are professional clients or eligible counterparties for the purposes of COBS). This material is exempt from the scheme promotion restriction (in Section 238 of the FSMA) on the communication of invitations or inducements to participate in a UCIS on the grounds that it is being issued to and/or directed at only the types of person referred to above. Interests in any UCIS referred to or described in this material are only available to such persons and this material must not be relied or acted upon by any other persons.

Within Hong Kong, where this material refers to or describes an unauthorised collective investment schemes (including a fund) ("CIS"), the communication of this material is made only to and/or is directed only at professional investors who are of a kind to whom an unauthorised CIS may lawfully be promoted by Partners Capital Asia Limited under the Hong Kong applicable laws and regulation to institutional professional investors as defined in paragraph (a) to (i) under Part 1 of Schedule to the Securities and Futures Ordinance ("SFO") and high net worth professional investors falling under paragraph (j) of the definition of "professional investor" in Part 1 of Schedule 1 to the SFO with the net worth or portfolio threshold prescribed by Section 3 of the Securities and Futures (Professional Investor) Rules (the "Professional Investors").

Within Singapore, where this material refers to or describes an unauthorised collective investment schemes (including a fund) ("CIS"), the communication of this material is made only to and/or is directed only at persons who are of a kind to whom an unauthorised CIS may lawfully be promoted by Partners Capital Investment Group (Asia) Pte Ltd under the Singapore applicable laws and regulation (including accredited investors or institutional investors as defined in Section 4A of the Securities and Futures Act).

Within France, where this material refers to or describes to unregulated or undeclared collective investment schemes (CIS) or unregulated or undeclared alternative Investment Funds (AIF), the communication of this material is made only to and/or is directed only at persons who are of a kind to whom an unregulated or undeclared CIS or an unregulated or undeclared AIF may lawfully be promoted by Partners Capital Europe under the French applicable laws and regulation, including professional clients or equivalent, as defined in Article D533-11, D533-11-1, and D533-13 of the French Monetary and Financial Code.

Certain aspects of the investment strategies described in this presentation may from time to time include commodity interests as defined under applicable law. Within the United States of America, pursuant to an exemption from the US Commodity Futures Trading Commission (CFTC) in connection with accounts of qualified eligible clients, this brochure is not required to be, and has not been filed with the CFTC. The CFTC does not pass upon the merits of participating in a trading program or upon the adequacy or accuracy of commodity trading advisor disclosure. Consequently, the CFTC has not reviewed or approved this trading program or this brochure. In order to qualify as a certified sophisticated investor a person must (i) have a certificate in writing or other legible form signed by an authorised person to the effect that he is sufficiently knowledgeable to understand the risks associated with participating in unrecognised collective investment schemes and (ii) have signed, within the last 12 months, a statement in a prescribed form declaring, amongst other things, that he qualifies as a sophisticated investor in relation to such investments.

This material may contain hypothetical or simulated performance results which have certain inherent limitations. Unlike an actual performance record, simulated results do not represent actual trading. Also, since the trades have not actually been executed, the results may have under- or overcompensated for the impact, if any, of certain market factors, such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any client will or is likely to achieve profits or losses similar to those shown. These results are simulated and may be presented gross or net of management fees. This material may include indications of past performance of investments or asset classes that are presented gross and net of fees. Gross performance results are presented before Partners Capital management and performance fees, but net of underlying manager fees. Net performance results include the deduction of Partners Capital management and performance fees, and of underlying manager fees. Partners Capital fees will vary depending on individual client fee arrangements. Gross and net returns assume the reinvestment of dividends, interest, income and earnings.

The information contained herein has neither been reviewed nor approved by the referenced funds or investment managers. Past performance is not a reliable indicator and is no guarantee of future results. Investment returns will fluctuate with market conditions and every investment has the potential for loss as well as profit. The value of investments may fall as well as rise and investors may not get back the amount invested. Forecasts are not a reliable indicator of future performance.

Certain information presented herein constitutes "forwardlooking statements" which can be identified by the use of forward-looking terminology such as "may", "will", "should", "expect", "anticipate", "project", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology. Any projections, market outlooks or estimates in this material are forward –looking statements and are based upon assumptions Partners Capital believe to be reasonable. Due to various risks and uncertainties, actual market events, opportunities or results or strategies may differ significantly and materially from those reflected in or contemplated by such forward-looking statements. There is no assurance or guarantee that any such projections, outlooks or assumptions will occur.

Certain transactions, including those involving futures, options, and high yield securities, give rise to substantial risk and are not suitable for all investors. The investments described herein are speculative, involve significant risk and are suitable only for investors of substantial net worth who are willing and have the financial capacity to purchase a high risk investment which may not provide any immediate cash return and may result in the loss of all or a substantial part of their investment. An investor should be able to bear the complete loss in connection with any investment.

All securities investments risk the loss of some or all of your capital and certain investments, including those involving futures, options, forwards and high yield securities, give rise to substantial risk and are not suitable for all investors.