

US consumption will remain healthy

- Retail sales dipped by 0.1% in February, but “core” sales, excluding motor vehicles, gasoline and building materials, rose by 0.2% and are up by 3.5% year-over year. Like other high-frequency data, these monthly retail sales bounce around a lot.
- Consumer spending in Q1 2016 will be a bit softer than earlier expectations. However, real consumption, the largest contributor to GDP growth, will continue to rise at a healthy pace in 2016, supported by increases in real disposable personal income.
- Consumer purchasing power will continue to rise, as employment gains slow but wages accelerate modestly.
- Sources of strength in consumption: motor vehicles, household equipment and furnishings, and recreational goods; consumer electronics; and healthcare, transportation, and food and accommodations services.
- Sources of weakness in consumption: food and beverages, apparel, utilities, and financial services and insurance.
- Real disposable personal income, improved household balance sheets and moderate increases in credit are projected to fuel solid consumer spending in 2016.

Amid bouncy and often-revised high-frequency data, it is important to remain grounded in the underlying fundamentals. The February US retail sales report is a case in point: it was a soft report, driven in part by the decline in gasoline prices, and the strong January gains were revised down. Moreover, monthly reports can be confusing: retail sales of motor vehicles fell for the second consecutive month even though total auto sales in January-February were higher than in December (a jump in fleet sales for leasing will show up in fixed business investment). For the near term, this weak retail sales report modestly dampens the outlook for consumption in Q1 2016. However, the underlying fundamentals that drive overall consumer spending remain healthy.

The most important factor driving US consumer spending – real disposable personal income – continues to grow at a healthy pace. Household balance sheets are improving. Consumer borrowing is continuing to grow and credit is readily available. Real consumption is projected to rise at a rate of approximately 2.5% in 2016 and be the largest contributor to GDP growth.

Retail sales comprise only 35% of total consumption, and they tend to bounce around on a month-to-month basis. The monthly fluctuations reflect seasonal adjustments and technical factors that are not picked up by the seasonals, the timing of big ticket item sales, changes in gasoline prices and other developments.

The largest portion of consumption – approximately 65%, or 42% of GDP – is services, which includes housing and utilities, healthcare, transportation, recreation, food services and accommodation, and financial services and insurance. In the largest services category, housing and utilities (25% of consumption of services), calculations of spending for shelter – a very large component – are imputed from surveys of homeowners and renters. Historically, they have not followed home prices very closely.

Real consumption of healthcare services – over \$1.9trn, or 17% of total consumption – is heavily influenced by quality adjustment calculations of the US Bureau of Economic Analysis and the reimbursements schedules of the government and insurance companies.

Low Inflation worries are excessive, 1 March 2016

BoJ's negative rates: lessons for monetary policy, 10 February 2016

China's currency devaluation is actually a positive, 7 January 2016

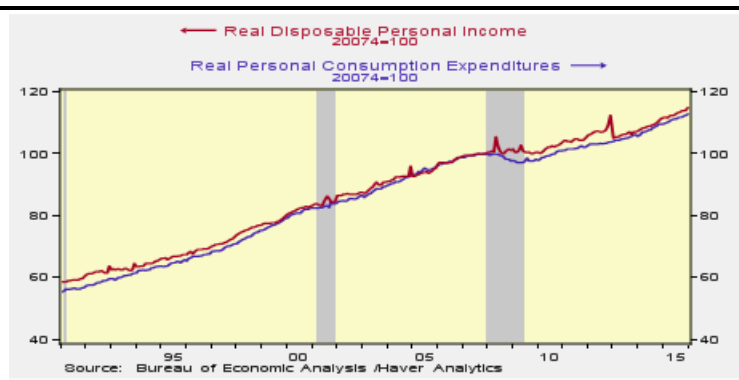
Monetary policy: transparency and clarity require a strategy, 2 October 2015

Global economic performance: influences of China, commodity prices and currencies, 29 September 2016

15 March 2016

Over time, by far the most reliable predictor of real consumption is real disposable personal income; that is, in the aggregate, adjusted for inflation, people spend their disposable income. Chart 1 illustrates this close relationship by showing the levels of both indexed to Q4 2007=100.

Chart 1: Income and spending



Source: Bureau of Economic Analysis/ Haver Analytics

The narrowing of the gap between real consumption and real disposable income from 1990 to 2007 reflected declining personal saving as a percent of disposable income, as consumer spending was buoyed by rising household net worth and consumer debt. By 2007, personal saving as a percent of disposable income had fallen to 3% from 8% in 1991. During the 2008-09 recession, disposable personal income was heavily subsidized by government income support. Even then, however, household balance sheet deterioration and caution constrained spending and the rate of personal saving jumped to 6% in 2009.

During the early stages of recovery, growth in consumption modestly exceeded disposable income. Real disposable income jumped in late 2012 and fell back in 2013, reflecting the one-time spike in dividends in late 2012 in anticipation of the tax increases imposed in January 2013 (higher payroll taxes and Medicare surtax), and a subsequent reduction in disposable income. But these developments had little impact on the trend in spending.

In the last several years, real consumer spending has closely tracked real disposable income, and the rate of personal saving has settled at around 5%. Measured year-over-year through January 2016, real disposable personal income rose by 2.75% while real consumption was up by 2.9%. In the prior year, real disposable income was up by 4.0% while consumption rose 3.8% (see Chart 2).

Chart 2: Recent trends in income and spending



Source: Bureau of Economic Analysis/ Haver Analytics

Growth in disposable personal income has been lifted by gains in employment, modest wage rises and sustained rapid increases in government transfer payments, including social security, veterans' benefits, and Medicare and Medicaid.

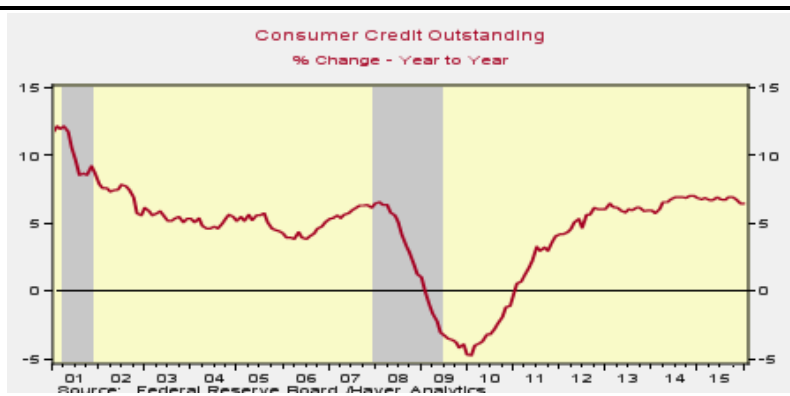
Real purchasing power has been boosted by lower energy prices that have temporarily reduced headline inflation. In response to the savings, in the aggregate, households have

spent a portion and saved a portion, resulting in a modest rise in the rate of personal saving. History suggests that such large declines in energy prices affect consumption with a lag and when households come to believe the increase in disposable income is permanent – that is, that oil prices are not going back toward \$10/barrel – the additional disposable income will be spent.

Other factors affecting consumption: Beyond the positive trend in real disposable personal income, the gains in employment and improving labor markets have boosted confidence. However, when controlling for real disposable personal income, surveys of consumer confidence add little value in predicting the future trend in consumer spending.

Consumer credit is also supporting spending growth. Real costs of borrowing are low, consumer borrowing is growing rapidly – even faster than it did during the prior expansion – and credit is readily available (See Chart 3).

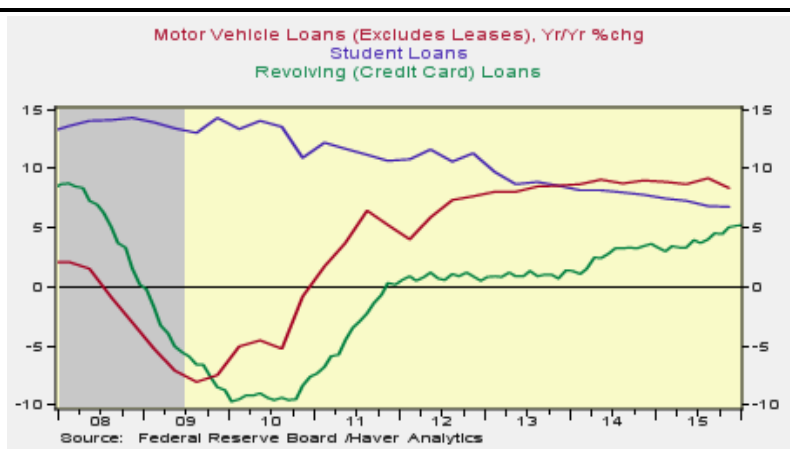
Chart 3: Consumer credit outstanding



Source: Federal Reserve Board/ Haver Analytics

During the last several years, there has been a marked acceleration in revolving credit card debt outstanding, sustained rapid growth in automobile loans and a significant deceleration in student loans outstanding (see Chart 4). This striking change in the composition of the growth of credit reflects mounting consumer confidence, the sustained strength in the auto sector and the federal government’s belated attempt to rein in the out-of-control growth in student loans.

Chart 4: Motor vehicle loans/student loans /revolving loans



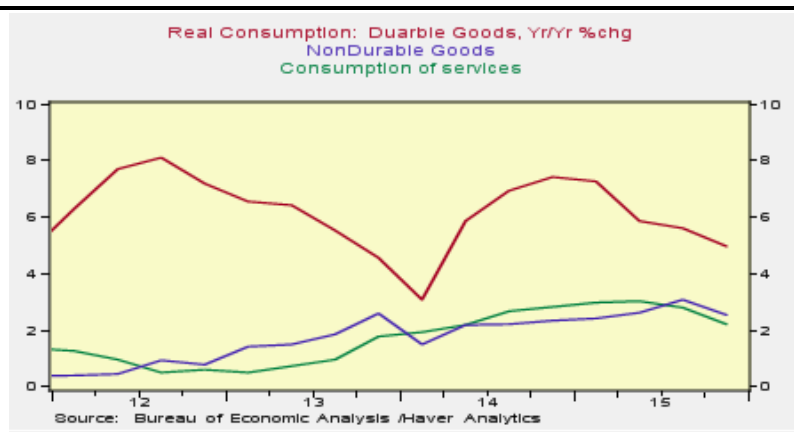
Source: Federal Reserve Board/ Haver Analytics

The wealth effect – the effect of changes in household net worth on the propensity to spend – has been very muted so far this expansion, and dramatically smaller than its estimated impact prior to the financial crisis. That is, the dramatic stock market rebound above its prior expansion peak and recovery of home values have had a seemingly minor impact on aggregate consumption independent of the trend in real disposable income. This reflects consumer caution, even after balance sheet repair. It may also reflect the

concentration of wealth among higher-income households, and the associated implication for the propensity to spend among all income cohorts.

Spending trends: Among goods, the strongest spending trends are for durable household furnishings and equipment (Chart 5). Motor vehicle sales remain at a high level, but the rate of increase of real spending has slowed. Real spending on non-durable goods has been growing modestly. Interestingly, since energy prices collapsed, the increase in real spending on gasoline and other energy goods has been fairly modest.

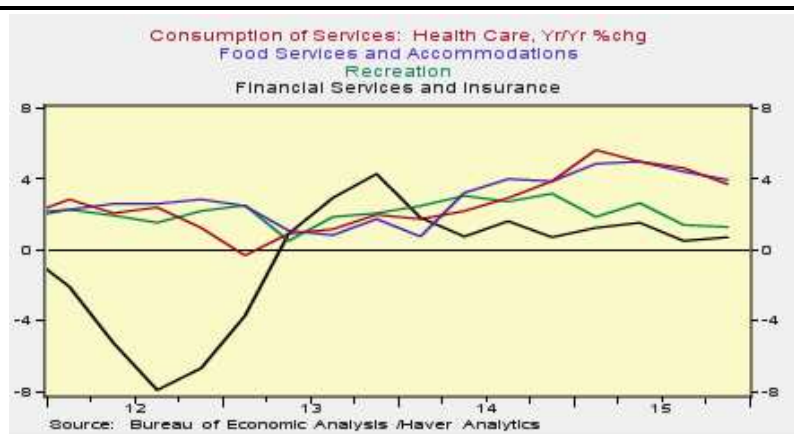
Chart 5: Composition of real consumption



Source: Bureau of Economic Analysis/ Haver Analytics

The largest spending increase in real terms has been for healthcare services; it has risen by 4% annualized in the last two years (Chart 6). To some extent, this reflects the impact of Obamacare. Spending on transportation services, and food and accommodations services—both which are much smaller spending categories than healthcare – has risen by the same percentage. Real spending on food and beverages, apparel, utilities, and financial services and insurance has been growing very slowly.

Chart 6: Consumption of services



Source: Bureau of Economic Analysis/ Haver Analytics

Positive outlook for consumer spending: Growth in personal income is projected to continue to support a continued healthy rise in real consumption. While employment growth is expected to moderate, wages are projected to accelerate. This will maintain the pace of growth in wages and salaries.

In the past year, employment has been growing by 1.9% (just over 200,000 per month), the same pace as real GDP, while labor productivity has been virtually flat. While the level of layoffs is expected to remain muted, businesses are expected to temper hiring, in part due to rising costs of employment – wages and non-wage costs.

Tighter labor markets are expected to push up wages. The unemployment rate of 4.9% is close to standard estimates of the natural rate of unemployment and there is anecdotal evidence of skill mismatches and labor shortages. Wages have begun to edge up and are projected to rise moderately higher. Business non-wage costs continue to rise rapidly, particularly for medical insurance costs, as Obamacare is implemented.

The recent increase in oil prices will reverse the earlier decline in headline inflation and temporarily dampen real purchasing power. However, with energy prices far below their earlier lofty levels, household purchasing power will remain elevated. With this support and continued improvements in household balance sheets, history suggests that consumers will continue to spend.

Disclaimer

This document was compiled by the above mentioned authors of the economics department of Berenberg Capital Markets LLC (hereinafter also referred to as "BCM"). BCM has made any effort to carefully research and process all information. The information has been obtained from sources which we believe to be reliable such as, for example, Thomson Reuters, Bloomberg and the relevant specialised press. However, we do not assume liability for the correctness and completeness of all information given. The provided information has not been checked by a third party, especially an independent auditing firm. We explicitly point to the stated date of preparation. The information given can become incorrect due to passage of time and/or as a result of legal, political, economic or other changes. We do not assume responsibility to indicate such changes and/or to publish an updated document. The forecasts contained in this document or other statements on rates of return, capital gains or other accession are the personal opinion of the author and we do not assume liability for the realisation of these.

This document is only for information purposes. It does not constitute a financial analysis, investment advice or recommendation to buy financial instruments. It does not replace consulting regarding legal, tax or financial matters. This document is classified as objective for the purposes of FINRA rules. Please contact Berenberg Capital Markets LLC (+1 617.292.8200), if you require additional information.

Remarks regarding foreign investors

The preparation of this document is subject to regulation by US law. The distribution of this document in other jurisdictions may be restricted by law, and persons, into whose possession this document comes, should inform themselves about, and observe, any such restrictions.

This document is meant exclusively for institutional investors and market professionals, but not for private customers. It is not for distribution to or the use of private investors or private customers.

Copyright

BCM reserves all the rights in this document. No part of the document or its content may be rewritten, copied, photocopied or duplicated in any form by any means or redistributed without the BCM's prior written consent.

© July 2015 Berenberg Capital Markets LLC

Contacts: BCM

www.berenberg.com

e-mail US: firstname.lastname@berenberg-us.com



BERENBERG
CAPITAL MARKETS

EQUITY RESEARCH

RESEARCH

AEROSPACE & DEFENCE

Andrew Gollan +44 20 3207 7891
Charlotte Keyworth +44 20 3753 3013
Ross Law +44 20 3465 2692

AUTOMOTIVES

Adam Hull +44 20 3465 2749
Paul Kratz +44 20 3465 2678

BANKS

Adam Barrass +44 20 3207 7923
James Burbridge +44 20 3753 3014
James Chappell +44 20 3207 7844
Andrew Lowe +44 20 3465 2743
Eoin Mullany +44 20 3207 7854
Peter Richardson +44 20 3465 2681
Jonathan Sharpe +44 20 3753 3031

BEVERAGES

Javier Gonzalez Lastra +44 20 3465 2719
Batuhan Karabekir +44 20 3465 2631
Adam Mizrahi +44 20 3465 2653

BUSINESS SERVICES, LEISURE & TRANSPORT

Najet El Kassir +44 20 3207 7836
Stuart Gordon +44 20 3207 7858
Simon Mezzanotte +44 20 3207 7917
Josh Puddle +44 20 3207 7881
Alastair Reid +44 20 3207 7841

CAPITAL GOODS

Sebastian Kuenne +44 20 3207 7856
Philippe Lorrain +44 20 3207 7823
Rizk Maldi +44 20 3207 7806

CAPITAL GOODS (cont.)

Horace Tam +44 20 3465 2726
Simon Toennesen +44 20 3207 7819

CHEMICALS

Sebastian Bray +44 20 3753 3011
Andrew Heap +44 20 3207 7918
John Klein +44 20 3207 7930
Evgenia Molotova +44 20 3465 2664

CONSTRUCTION

Lush Mahendrarajah +44 20 3207 7896
Robert Muir +44 20 3207 7860
Olivia Peters +44 20 3465 2646
Michael Watts +44 20 3207 7928

FOOD MANUFACTURING AND H&PC

Yordana Mavrodieva +44 20 3207 7817
Fintan Ryan +44 20 3465 2748
James Targett +44 20 3207 7873

GENERAL RETAIL

Conrad Bartos +44 20 3753 3053
Michelle Wilson +44 20 3465 2663

HEALTHCARE

Scott Bardo +44 20 3207 7869
Jakob Berry +44 20 3465 2724
Alistair Campbell +44 20 3207 7876
Graham Doyle +44 20 3465 2634
Klara Fernandes +44 20 3465 2718
Tom Jones +44 20 3207 7877
Louise Pearson +44 20 3465 2747
Laura Sutcliffe +44 20 3465 2669

UK

Matthew Chawner +44 20 3207 7847
Alexandra Clément +44 20 3753 3018
Fabian De Smet +44 20 3207 7810
Toby Flaux +44 20 3465 2745
Karl Hancock +44 20 3207 7803
Sean Heath +44 20 3465 2742
David Hogg +44 20 3465 2628
Peter Kaineder +44 20 3753 3062
James Matthews +44 20 3207 7807
David Mortlock +44 20 3207 7850
Eleni Papoula +44 20 3465 2741
Bhavin Patel +44 20 3207 7926
Richard Payman +44 20 3207 7825
George Smibert +44 20 3207 7911
Anita Surana +44 20 3207 7855
Paul Walker +44 20 3465 2632

FRANCE

Thibault Bourgeat +33 1 5844 9505
Alexandre Chevassus +33 1 5844 9512
Dailia Farigoule +33 1 5844 9510
Clémence Peyraud +33 1 5844 9521
Benjamin Voisin +33 1 5844 9507

SCANDINAVIA

Frederik Angel +44 20 3753 3055
Marco Weiss +49 40 350 60 719

INSURANCE

Trevor Moss +44 20 3207 7893
Iain Pearce +44 20 3465 2665
Sami Taipalus +44 20 3207 7866

LUXURY GOODS

Zuzanna Puszc +44 20 3207 7812

MEDIA

Robert Berg +44 20 3465 2680
Laura Janssens +44 20 3465 2639
Sarah Simon +44 20 3207 7830

METALS & MINING

Alessandro Abate +44 20 3753 3029
Fawzi Hanano +44 20 3207 7910
Yuriy Vlasov +44 20 3465 2674

MID CAP GENERAL

Robert Chantray +44 20 3207 7861
Gunnar Cohrs +44 20 3207 7894
Sam England +44 20 3465 2687
Ned Hammond +44 20 3753 3017
Benjamin May +44 20 3465 2667
Anna Patrice +44 20 3207 7863
Simona Sarli +44 20 3207 7834
Julia Scheufler +44 20 3753 3016
Owen Shirley +44 20 3465 2731

REAL ESTATE

Kai Klose +44 20 3207 7888
Tina Munda +44 20 3465 2716

SWITZERLAND, AUSTRIA & ITALY

Andrea Ferrari +41 44 283 2020
Stephan Hofer +41 44 283 2029
Carsten Kinder +41 44 283 2024
Gianni Lavigna +41 44 283 2038
Jamie Nettleton +41 44 283 2026
Benjamin Stillfried +41 44 283 2033

SALES TRADING

HAMBURG

Alexander Heinz +49 40 350 60 359
Gregor Labahn +49 40 350 60 571
Marvin Schweden +49 40 350 60 576
Tim Storm +49 40 350 60 415
Philipp Wiechmann +49 40 350 60 346
Christoffer Winter +49 40 350 60 559

LONDON

Mike Berry +44 20 3465 2755
Stewart Cook +44 20 3465 2752
Mark Edwards +44 20 3753 3004
Tristan Hedley +44 20 3753 3006
Peter King +44 20 3753 3139
Christoph Kleinasser +44 20 3753 3063
Chris McKeand +44 20 3207 7938
Simon Messman +44 20 3465 2754
AJ Pulley +44 20 3465 2756
Paul Somers +44 20 3465 2753

SALES TRADING

Scott Duxbury +1 646 445 5573
Christopher Kanian +1 646 445 5576
Lars Schwartz +1 646 445 5571
Bob Spillane +1 646 445 5574

Internet www.berenberg.com E-mail: firstname.lastname@berenberg.com

TECHNOLOGY

Jean Beaubois +44 20 3207 7835
Georgios Kertsos +44 20 3465 2715
Gal Munda +44 20 3465 2746
Tammy Qiu +44 20 3465 2673

TELECOMMUNICATIONS

Usman Ghazi +44 20 3207 7824
Siyi He +44 20 3465 2697
Laura Janssens +44 20 3465 2639
Paul Marsch +44 20 3207 7857
Michael Summerville +44 20 3207 7914

THEMATIC RESEARCH

Nick Anderson +44 20 3207 7838
Chris Armstrong +44 20 3207 7809
Asad Farid +44 20 3207 7932

TOBACCO

Jonathan Leinster +44 20 3465 2645

UTILITIES

Robin Abrams +44 20 3465 2635
Andrew Fisher +44 20 3207 7937
Mehul Mahatma +44 20 3465 2698
Lawson Steele +44 20 3207 7887

ECONOMICS

Carsten Hesse +44 20 3753 3001
Kallum Pickering +44 20 3465 2672
Holger Schmieding +44 20 3207 7889

EQUITY SALES

SPECIALIST SALES

AUTOMOTIVE & THEMATICS

Chris Armstrong +44 20 3207 7809

BANKS & DIVERSIFIED FINANCIALS

Iro Papadopoulou +44 20 3207 7924

CHEMICALS, CONSTRUCTION & CAP GOODS

Jina Zachrisson +44 20 3207 7879

CONSUMER STAPLES

Rupert Trotter +44 20 3207 7815

CONSUMER DISCRETIONARY

Victoria Maigrot +44 20 3753 3010

HEALTHCARE

Frazer Hall +44 20 3207 7875

MEDIA & TELECOMMUNICATIONS

Julia Thannheiser +44 20 3465 2676

SALES

BENELUX

Miel Bakker +44 20 3207 7808
Martin de Laet +44 20 3207 7804
Alexander Wace +44 20 3465 2670

GERMANY

Michael Brauburger +49 69 91 30 90 741
Nina Buechs +49 69 91 30 90 735
André Grosskurth +49 69 91 30 90 734
Florian Peter +49 69 91 30 90 740
Joerg Wenzel +49 69 91 30 90 743

UK

Matthew Chawner +44 20 3207 7847
Alexandra Clément +44 20 3753 3018
Fabian De Smet +44 20 3207 7810
Toby Flaux +44 20 3465 2745
Karl Hancock +44 20 3207 7803
Sean Heath +44 20 3465 2742
David Hogg +44 20 3465 2628
Peter Kaineder +44 20 3753 3062
James Matthews +44 20 3207 7807
David Mortlock +44 20 3207 7850
Eleni Papoula +44 20 3465 2741
Bhavin Patel +44 20 3207 7926
Richard Payman +44 20 3207 7825
George Smibert +44 20 3207 7911
Anita Surana +44 20 3207 7855
Paul Walker +44 20 3465 2632

FRANCE

Thibault Bourgeat +33 1 5844 9505
Alexandre Chevassus +33 1 5844 9512
Dailia Farigoule +33 1 5844 9510
Clémence Peyraud +33 1 5844 9521
Benjamin Voisin +33 1 5844 9507

SCANDINAVIA

Frederik Angel +44 20 3753 3055
Marco Weiss +49 40 350 60 719

SWITZERLAND, AUSTRIA & ITALY

Andrea Ferrari +41 44 283 2020
Stephan Hofer +41 44 283 2029
Carsten Kinder +41 44 283 2024
Gianni Lavigna +41 44 283 2038
Jamie Nettleton +41 44 283 2026
Benjamin Stillfried +41 44 283 2033

SALES TRADING

HAMBURG

Alexander Heinz +49 40 350 60 359
Gregor Labahn +49 40 350 60 571
Marvin Schweden +49 40 350 60 576
Tim Storm +49 40 350 60 415
Philipp Wiechmann +49 40 350 60 346
Christoffer Winter +49 40 350 60 559

LONDON

Mike Berry +44 20 3465 2755
Stewart Cook +44 20 3465 2752
Mark Edwards +44 20 3753 3004
Tristan Hedley +44 20 3753 3006
Peter King +44 20 3753 3139
Christoph Kleinasser +44 20 3753 3063
Chris McKeand +44 20 3207 7938
Simon Messman +44 20 3465 2754
AJ Pulley +44 20 3465 2756
Paul Somers +44 20 3465 2753

E-mail: firstname.lastname@berenberg.com

PARIS

Vincent Klein +33 1 58 44 95 09
Antonio Scutto +33 1 58 44 95 03

TRADING

LONDON

Edward Burlison-Rush +44 20 3753 3055
Richard Kenny +44 20 3753 3083

ELECTRONIC TRADING

Daniel Eichhorn +49 40 350 60 391
Matthias Führer +49 40 350 60 597

CRM

Jessica Jarmyn +44 20 3465 2696
Edwina Lucas +44 20 3207 7908
Greg Swallow +44 20 3207 7833

CORPORATE ACCESS

Lindsay Arnold +44 20 3207 7821
Jennie Jiricny +44 20 3207 7886
Stella Siggins +44 20 3465 2630

EVENTS

Laura Hawes +44 20 3753 3008
Suzy Khan +44 20 3207 7915
Charlotte Kilby +44 20 3207 7832
Natalie Meech +44 20 3207 7831
Ellen Parker +44 20 3465 2684
Sarah Weyman +44 20 3207 7801

US SALES

BERENBERG CAPITAL MARKETS LLC

Member FINRA & SIPC

SALES

Kelleigh Faldi +1 617 292 8288
Isabella Fantini +1 646 445 4861
Shawna Giust +1 646 445 7216
Zubin Hubner +1 646 445 5572
Jessica London +1 646 445 7218
Ryan McDonnell +1 646 445 7214
Emily Mouret +1 415 802 2525
Peter Nichols +1 646 445 7204
Kieran O'Sullivan +1 617 292 8292
Jonathan Saxon +1 646 445 7202

SALES TRADING

Scott Duxbury +1 646 445 5573
Christopher Kanian +1 646 445 5576
Lars Schwartz +1 646 445 5571
Bob Spillane +1 646 445 5574

E-mail: firstname.lastname@berenberg-us.com

CRM

Laura Cooper +1 646 445 7201

CORPORATE ACCESS

Olivia Lee +1 646 445 7212

ECONOMICS

Mickey Levy +1 646 445 4842