The following information applies to financial research, published by the Research department of the International Wealth Management division at Credit Suisse, in compliance with laws, regulations, and relevant international standards applicable to research. This information summarizes the internal procedures and policies, including standards of good practice, designed to assist in identifying conflicts of interest that might affect the impartiality of research. The information below is not applicable to research reports of the Credit Suisse Research department of the Global Markets division.

**Credit Suisse ethical values**

Financial research analysts are required to observe high standards of integrity and ethical behavior. Each employee is obliged to adhere to the ethical values defined in the Credit Suisse Code of Conduct, which is available at:


Among others, contained therein are the following guiding principles:

- Abiding by laws, rules and regulations (including insider trading laws) as well as the internal policies of Credit Suisse Group.
- Being familiar with guidelines, manuals and emerging best business practices relevant to their duties and implementing them conscientiously to the best of their abilities.
- Acting at all times in good faith, responsibly, with due care, competence and diligence, and without any misrepresentation of material facts.
- Acting at all times in an honest and ethical way, including the ethical handling of actual or apparent conflicts of interests.
- Acting objectively, without allowing his or her judgment to be subordinated.

**Research department**

**Structure**

The research department is organizationally, hierarchically and functionally separate from the Global Markets division, the securities trading (incl. proprietary trading) and sales department as well as the credit department.

Research analysts may not accept any requests to produce research reports for which the result has been defined in advance and may not accept any privileges, gifts or other favors offered to them by companies they analyze. Similarly, they may not give any promises to publish positive research reports, a specified rating or a specified price target. Research analysts may not hold executive office or have some other significant influence at the company being analyzed and are generally prohibited from acquiring, either directly or via third parties for their own account any securities of the company being analyzed.

**Preparation**

Credit Suisse policy is only to publish financial research that is impartial, independent, clear, fair and not misleading. Research analysts are required to ensure that they have a reasonable basis for their analysis and recommendations.

Information that contains an indication of past performance of a relevant investment or a financial index, includes appropriate performance information which covers at least the immediately preceding five years, or the whole period for which the investment has been offered, or the financial index has been established if less than five years. In every case that performance information is based on and show complete 12-month periods.

Research Compliance monitors the adherence to laws, regulations, directives and internal procedures regarding the publication of research reports. Compensation of Credit Suisse analysts from the Division International Wealth Management is not dependent on individual transactions effected by the Investment Banking business, and the best interests of the client should supersede analysts’ personal interests. Hence, analysts are not allowed to derive any personal advantage from their research at the expense of the clientele.

**Dissemination**

The research analyst may neither distribute research results internally (e.g. to the Global Markets department) nor externally (e.g. to the analyzed company) in order to have the report verified or even approved prior to publication, unless getting permission from LCD to do so. All research reports are available in electronically and in some cases in printed form. Research is communicated to all the recipients in a customer
category (recipient group) inside and outside the bank at the same time.

Managing conflicts of interest

Credit Suisse has systems and controls for the identification, avoidance, management or disclosure of conflicts of interests faced by research analysts in preparation of financial research.

The types of conflicts considered could include conflicts between the Research department of Division International Wealth Management at Credit Suisse and the Global Markets Division, between Credit Suisse clients and Credit Suisse own interest (such as proprietary trading and investment banking activities) and the personal interests of Credit Suisse officers and employees.

Credit Suisse policies, controls and procedures in this regard include:

- Internal guidance and regular training on the identification of possible issues of conflict as and when they arise;
- Maintenance of robust information barriers between different parts of the bank to restrict the flow of material non-public information to avoid inadvertent spread or misuse;
- Escalation procedures for ensuring that issues identified are referred to and considered at the appropriate level within the bank;
- Editorial and peer review process of research prior to publication;
- Monitor potential conflict arising out of publication of research before, during and after Investment Banking transactions;
- Exclusion on the preparation of research on companies where Credit Suisse owns a majority interest;
- Compliance with rules on personal account dealing; and
- General prohibition on the trading activity of research analysts in any securities of the companies in their research coverage.

Credit Suisse discloses in its research reports, in accordance with applicable law and regulation, details of interests, including those of Credit Suisse and its affiliated companies and those of the analyst, that are or may be relevant in the context of the report.

Fundamental research

Following are explanations of research methodology used in the areas of global macro, equities, credit and real estate APAC Research and Fundamental Micro Themes. All recommendations are reviewed and communicated on an ongoing basis. Credit Suisse policy is to update research reports as it deems appropriate, based on developments with the subject company, the sector or the market that may have a material impact on the research views or opinions stated herein.

With the exception of Swiss Institutional Credit Research (SICR), all fundamental research groups are classified as secondary (buy-side) research.

Global Economics & Real Estate Research

Methodology

Based on a quantitative and qualitative assessment of real economy and monetary indicators, Global Economics Research derives macroeconomic forecasts such as GDP and inflation trends. This fundamental macroeconomic view also serves as a basis for its interest rate forecasts, which are backed both by long-term and short-term quantitative models.

The views and forecasts of Global Economics Research flow into the investment process and are provided to the other asset classes as one input factor for their recommendations. Forecasts are reviewed regularly (on a monthly basis) and if necessary in ad hoc meetings. The views and forecasts are regularly communicated.

Global Real Estate Research identifies property markets' position in the real estate cycle and assess future supply, rental dynamics, total return, and market risks for direct real estate investments. The coverage consists of all major global commercial and residential real estate markets, selected Emerging property markets and thematic investment opportunities (e.g., senior housing, sustainable real estate).

Global Equity & Credit Research

Equity Methodology

At a stock level, the analysis implies both, qualitative and quantitative factors. The recommendation takes into account the relative attractiveness of individual stocks within the sector/industry with respect to several factors such as earnings growth, profitability, balance-sheet structure and valuation. The valuation methodologies applied include discounted cash flow calculations (DCF), valuation multiples (e.g. price/earnings, EV/EBITDA, price/book value) as well as sum-of-the-parts valuation.

Equity Ratings and recommendations

The stock recommendations are *BUY*, *HOLD* and *SELL* and are dependent on the expected absolute performance of the individual stocks on a 6–12+ month investment horizon.

Credit Methodology

The credit research is based on a regular assessment of fundamental data and market expectations. The analysis is quantitative and qualitative in nature. At the individual securities level, Credit Suisse focuses on the major currencies (US dollar, euro, British pound, Swiss franc). In this regard, the analysis covers a wide spectrum of issuers, also including issuers domiciled in emerging market countries. With respect to the assessments of issuers’ credit profiles, the analysis takes into account the appraisals by the ratings agencies, as well as the review of key financial ratios, the strategic
positioning of the issuer, industry trends and possible event risks (process risks, acquisitions, etc.). The resulting Fundamental Credit View reflects our assessment of the overall trend in the issuer’s credit profile from a fundamental point of view and can be classified as "strongly positive", "positive", "stable", "negative", "strongly negative".

**Bond Recommendations**

Individual bonds are assessed based on the issuer’s Fundamental Credit View, bond specific factors and relative value considerations as well as on forecasts for total returns on an approximately 3–6 month horizon, resulting in BUY, HOLD and SELL ratings. The recommendations form the basis for investment recommendations and switch ideas.

**Swiss Institutional Credit Research**

The Swiss Institutional Credit Research of Private Banking division at Credit Suisse assigns ratings to investment-grade and sub-investment-grade issuers. Ratings are based on our assessment of a company’s creditworthiness and are not recommendations to buy or sell a bond. The ratings scale (AAA, AA, A, BBB, BB, B and below) is dependent on our assessment of an issuer’s ability and willingness to meet its financial commitments on a timely manner and in full. For the AA, A, BBB, BB, B and below categories, creditworthiness is further detailed with a scale of High, Mid, or Low, with High being the strongest sub-category rating. AAA – Highest possible rating with extremely strong debt-servicing capacity. This capacity is unlikely to be adversely affected by foreseeable events. High AA, Mid AA, Low AA – obligor’s debt-servicing capacity is very strong. High A, Mid A, Low A – obligor’s debt-servicing capacity is strong, but slightly more exposed to adverse business and economic developments. High BBB, Mid BBB, Low BBB – obligor’s debt-servicing capacity is adequate, but with increased likelihood of weakened debt-servicing capacity in case of adverse business or economic developments. High BB, Mid BB, Low BB – existing debt-servicing capacity; could become inadequate due to major uncertainties or exposure to negative business, financial or economic developments. High B, Mid B, Low B and below – higher vulnerability to default. Existing ability and willingness to pay could become impaired through adverse business, financial or economic developments. An Outlook indicates the direction a rating is likely to move over a twelve to eighteen month period. Outlooks may be "positive", "stable" or "negative". A positive or negative Rating Outlook does not imply a rating change is inevitable. Similarly, ratings for which outlooks are stable could be upgraded or downgraded before an outlook moves to positive or negative if circumstances warrant such an action. A rating may also be "under review", indicating a potential rating action.