

U.S. Macro Focus

Bare "Cliff Avoidance," Budget Agony to Continue

- The bare bones agreement to limit the scope of tax increases in 2013 removes for now the threat of immediate, severe fiscal tightening. However, the "incomplete" agreement leaves both short-term and long-term spending decisions to the new Congress in just the next couple of months. A two-month delay in sequestration roughly coincides with needed action to raise the Federal debt ceiling. Such further agreements may be reached with even more difficulty.
- The agreement to raise income tax rates on joint filers earning more than \$450,000 while limiting tax deductions above \$250,000 and other measures is billed as a \$600 billion 10-year agreement. The actual calendar year 2013 economic impact of all fiscal changes includes the lapsed payroll tax holiday (about 0.7 percentage point of GDP), upper income tax measures (roughly 0.4 percentage point), and new healthcare taxes (0.1 percentage point) with sequestration an open question post the two-month delay (0.6 percentage point of GDP if immediately enacted).
- Away from the added uncertainty over a debt ceiling increase, the near-term impact of the agreement appears close to our overall assumption, but differs in details. Upper income tax increases are somewhat larger than we have long assumed, but the extension of long-term unemployment insurance, some tax credits and other smoothing measures offset it.
- As noted, the agreement merely forestalled very large tax increases (marginal income tax rates and revenues that would have been raised through the Alternative Minimum Tax). This leaves the phase out of the temporary payroll tax increase as the largest immediate drag. Away from the potential for sequestration to be enacted (though unlikely) the measures are not sufficient to stabilize the public debt/GDP ratio in either the 10-year budget window or especially the period beyond.
- An ideal budget agreement would have limited near-term fiscal restraint while making structural changes to gradually stabilize public debt in the longer term. The latest agreement removes a good portion of the immediate fiscal tightening threat, but does nothing to resolve these longer-term challenges. The next potential showdown over the debt ceiling and sequestration may revive such efforts.

Steven C Wieting

+1-212-816-7148

steven.wieting@citi.com

Shawn Snyder

shawn.snyder@citi.com

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Citi Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Is Debt Ceiling the Only Reform Mechanism?

Something akin to the barest minimum “cliff avoidance” has been achieved in the early hours of 2013 with an accord now passed in both the U.S. House of Representatives and Senate. We would make several points about the agreement, and the difficulty reaching it.

1. Severe immediate tightening has been put off, and additional elements of fiscal tightening, such as sequestration, may be mitigated in coming months.
2. An agreement to raise the Federal debt ceiling was not addressed, so this leaves a new “cliff date” within 1Q 2013. How this will be resolved is the near-term issue of maximum uncertainty.
3. An important metric to judge any agreement is whether it stabilizes the size of the public debt relative to GDP in the coming decade. By itself, the modest tax increases far from accomplish this. But further actions to alter sequestration (*raise* projected spending) or cut spending will alter estimates for this metric.
4. An ideal plan would have avoided near-term tightening and put in place a gradual, long-term fiscal consolidation. This agreement does neither. It allows the payroll tax and upper income tax rates to rise, providing meaningful fiscal restraint in 2013 (alone in excess of a full percentage point of GDP). It raises revenue without significant systematic tax reform, and does it without addressing an unsustainable future course for long-term spending. While a fiscal induced new recession would carry even greater negative consequences, in our view, the pact is nearly as far from a “grand bargain” as can be imagined.

Fiscal “Small Ball” with Extra Innings

The last-minute agreement to limit the reach of tax increases for 2013 provides only the barest relief that an abrupt recession-inducing fiscal tightening has been avoided. As discussed previously (please see our *Morning Comments* of December 17, 2012), the agreement represents an “incomplete deal.” Further agreements to alter the course of sequestration (automatic spending cuts) have been left for the new Congress with a new deadline of two months. More importantly, the conditions that will allow for a timely increase of the U.S. debt ceiling within 1Q 2013 haven’t been addressed. The impacts of these two issues are timed close together, and are thus likely to be dealt with at the same time.

Deal represents fiscal drag, but a small portion of the “full cliff.”

As we had expected, the rise in the payroll tax (two percentage points of income up to \$113,700) represents the single largest element of near-term tightening, an increase of roughly \$120 billion in 2013. (Notably, among other new healthcare taxes in 2013, the Medicare tax will also rise 0.9 percentage point for joint filers above \$250,000).

The agreement to extend current income tax rates for individuals and joint filers below \$400,000/\$450,000 in annual income, relief from the reach of the Alternative Minimum Tax, and limited increases in capital income taxes (20% from 15% for the maximum capital gains and dividend tax) leaves the likely extent of fiscal tightening in 2013 at about 1 1/4% of GDP, assuming some further action to slow or replace spending cuts under sequestration while still keeping spending under downward pressure.

The immediate impact is close to our assumptions. However, the composition of the measures differed from our expectations. We had not anticipated income tax rate increases and limits to deductions at the levels chosen (\$450,000 and \$250,000, respectively). However, we also did not expect the one-year extension of

long-term unemployment insurance and a variety of tax credits that offset the larger increase on upper income payers.

With real private GDP growing in excess of 3% prior to concerns over fiscal tightening in 2012, the agreement doesn't suggest a *large* or *immediate* change in our moderate growth outlook for 2013, with weakness concentrated in the near term as tax increases take effect. However, the large uncertainties left by the incomplete deal means this conclusion may need to be revisited in coming weeks.

The lapse in the payroll tax cut of the past two years and higher marginal rates for upper incomes still represents a meaningful drag on consumer demand in the early part of 2013, in line with our tepid growth forecast for the current quarter of just over 1%. However, a potential drag several times as large has passed as a mere threat. The rise in U.S. equities and tightening credit spreads in the past few months now sustained in the immediate aftermath of the deal signal a significant reduction in the perceived risk of a new outright economic contraction. Away from any new turbulence related to the unfinished business over the debt ceiling and potential spending cuts, we expect a recovery within 2013 to gather strength as the year progresses (again please see our comments of Dec. 17, 2012).

At the same time, the lack of action on the debt ceiling, the complete absence of long-term structural budget reforms (despite the catalyst for action presented by the cliff) and a mere two-month delay on sequestration leave the outlook somewhat more uncertain than our base case suggested.

The two sides may misjudge the willingness to compromise as action on the debt ceiling looms in 1Q.

With the U.S. literally at the statutory debt ceiling, an agreement to raise it will need to be in place before the first quarter 2013 has ended. An increase is required to avoid dramatic federal spending cuts, or close to 40% of non-interest spending. (Early 2013 revenues will change little under the present agreement.) Such would *immediately* balance the U.S. budget while avoiding any missed U.S. Treasury interest payments, assuming such payments are prioritized.

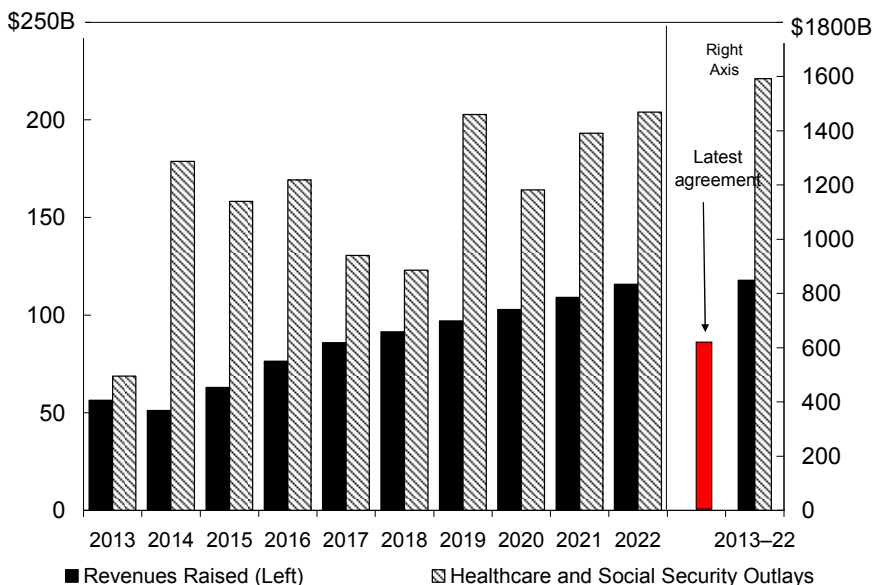
The last showdown over the debt ceiling in mid-2011 created significant declines in consumer and business confidence and severe financial market turmoil before an agreement was in place. With a similar last-minute agreement, lasting damage to the U.S. economy's performance was largely avoided. We imagine that experience with such an episode will limit its "shock value," ahead. However, if both sides believe the other will *not* induce an actual crisis and thus cave to the other's demands, the chance for a miscalculation is significant.

The partial agreement leaves longer-term imbalances at best a work in progress, and at worst repositioned for renewed neglect. With the barest of long-term spending measures absent from the current agreement, Republicans are likely to seize on the debt ceiling issue again as a catalyst for action. While a more complete agreement and long-term budget focus is needed, any such showdown could mean relief from uncertainty is short-lived.

Repositioned for Neglect?

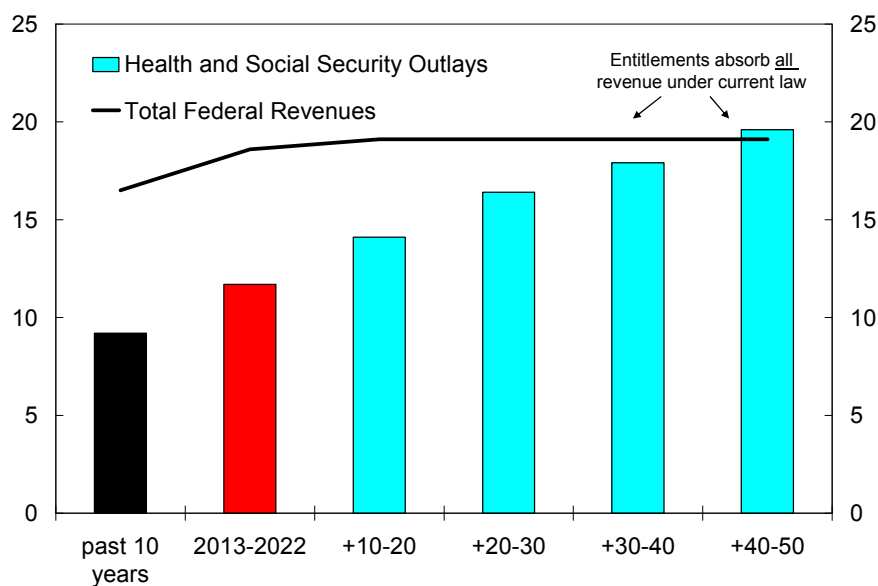
As figure 1 shows, the imposition of higher income tax rates on upper incomes alone can offset a meaningful share of the projected increase in entitlement outlays in the coming decade, somewhat limiting the near-term pressure for structural reform. However, imbalances build even more rapidly outside the 10-year budget window than within (see figure 2).

Figure 1. Estimated Revenues Raised from Increase in Top Two Marginal Income Tax Rates to pre-2001 Level vs Expected Annual Increase in Major Entitlement Program Outlays (\$Blns) and a 10-Year Estimate for the latest Agreement



Source: OMB, Citi Research Note: OMB Annual revenue estimates reflect income tax increases for filers with \$200,000/\$250,000 in income, but other high income tax provisions are included (examples include higher dividend and capital gains taxes). The actual agreement reflects a higher income tax threshold of \$400,000/\$450,000 and is reflected in the 10-year projection.

Figure 2. Revenues and Primary Spending As % of GDP, By Category, Under CBO's Long-Term Budget Scenario Through 2085 (Alternative Fiscal Scenario)



Source: CBO, Citi Research Note: Revenues estimated from CBO alternative baseline scenario altered to reflect income and capital tax increases for filers with \$200,000/\$250,000 in income and other high income tax provisions. The actual agreement reflects a higher income tax threshold, and a lower dividend tax among other differences.

Despite a strong catalyst for action, significant structural budget reforms couldn't be agreed upon.

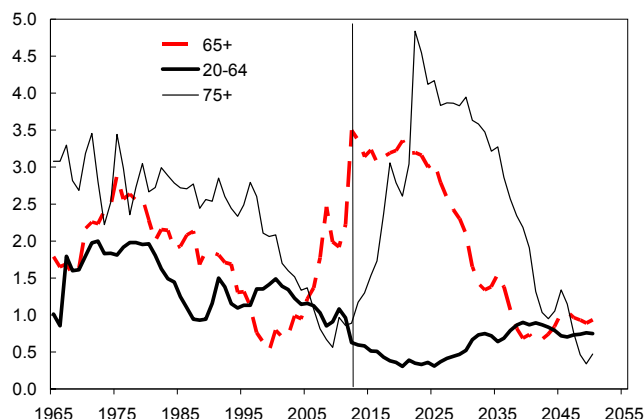
Achieving greater progress in stabilizing public finances will likely get even more difficult with the passage of time. Notably, the fiscal cliff was believed to provide significant pressure for a bipartisan agreement to reform entitlement spending. Away from a possible showdown over the debt ceiling, such pressure has now passed.

The latest fiscal deal doesn't even attempt to grab the "low hanging fruit" of entitlement reform, making an adjustment to the inflation rate used for Social Security cost of living adjustments and indexing of tax brackets. The so-called chained CPI more closely resembles the inflation gauge already used to measure U.S. output, adjusting for changes in the mix of products sold over time. Notably, the median U.S. worker hasn't increased his or her wages as much as the chained CPI has risen in the past decade.

In future negotiations, the Chained CPI and Medicare eligibility age (linking it to the full retirement age for Social Security benefits or life expectancy) are obvious targets for action.

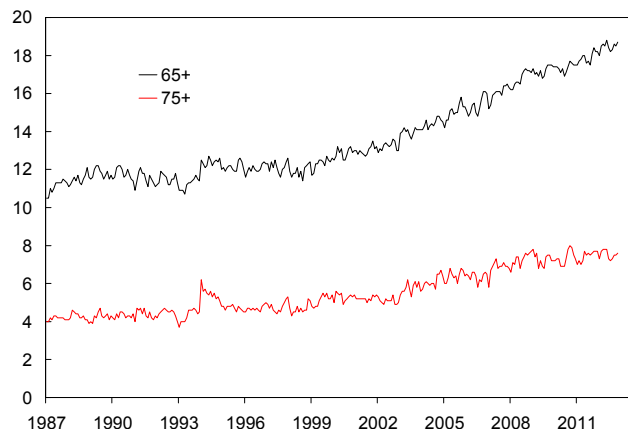
As noted, such "low hanging fruit" will become ever more difficult to find. In ten years time, the population over 75 will be the most rapidly growing demographic cohort at the time, rather than today's 65-70 year olds. As figures 3-4 show, even with dramatic advances in health and life expectancy, the labor force participation rate of the 75+ population drops very sharply relative to 65-75 year olds. A package of measures needed to alter the course of underlying healthcare demand and supply seems greatly needed, but seems far more complex and difficult to achieve politically.

Figure 3. Projected U.S. Population 20-64, 65+ and 75+, Y/Y%



Sources: Census

Figure 4. Labor Force Participation Rate at Age Threshold (%)



Source: BLS

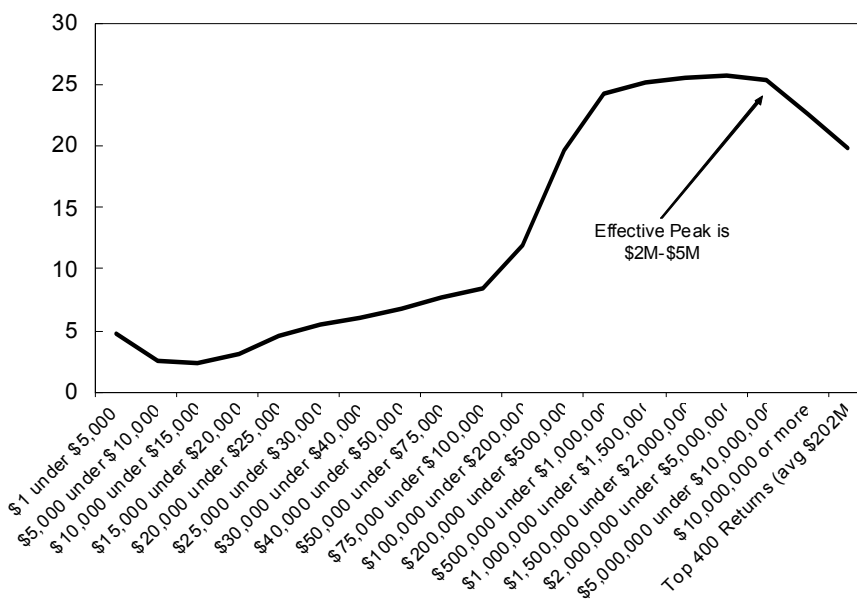
Future Grand Bargain Perhaps More Elusive

Finally, those envious of recent Presidential Candidates Mitt Romney or John Kerry's effective income tax rate – reportedly both below 14% in the two years prior to their candidacy – should be disappointed that rates won't be equalized for tax payers going forward through reform of the tax code (see figure 5). While the accord took very small steps to lower income-sensitive deductions and exclusions, much more could be done to raise revenues if the tax code were shredded, with both tax preferences and deductions eliminated, and income of any sort treated

equally. Approximating this, the widely cited Simpson-Bowles plan noted this could be compatible with a maximum personal income tax rate of 23%, an increase for some, but a cut for many, while eliminating meaningful disincentives to work and hire.

In conclusion, with the fiscal cliff “defanged,” and the parties taking a piecemeal approach to spending restraint and other steps going forward, we are left to suspect that a true, comprehensive “grand bargain” in the future now has a somewhat lower probability.

Figure 5. Effective Federal Tax Rate in 2009 By Income Group (Payroll Taxes Excluded)



Source: IRS

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability which includes investment banking revenues.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Research product ("the Product"), please contact Citi Research, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance [E6WYB6412478]. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

NON-US RESEARCH ANALYST DISCLOSURES

Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

Citigroup Global Markets Inc

Steven C Wieting; Shawn Snyder

OTHER DISCLOSURES

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the issuer(s) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citi Research to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

Important Disclosures for Morgan Stanley Smith Barney LLC Customers: Morgan Stanley & Co. LLC (Morgan Stanley) research reports may be available about the companies that are the subject of this Citi Research research report. Ask your Financial Advisor or use smithbarney.com to view any available Morgan Stanley research reports in addition to Citi Research research reports.

Important disclosure regarding the relationship between the companies that are the subject of this Citi Research research report and Morgan Stanley Smith Barney LLC and its affiliates are available at the Morgan Stanley Smith Barney disclosure website at www.morganstanleysmithbarney.com/researchdisclosures.

For Morgan Stanley and Citigroup Global Markets, Inc. specific disclosures, you may refer to www.morganstanley.com/researchdisclosures and https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

This Citi Research research report has been reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval was conducted by the same person who reviewed this research report on behalf of Citi Research. This could create a conflict of interest.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by.

The Product is made available in **Australia** through Citi Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in **Brazil** by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of **Canada** by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. This product is available in **Chile** through Banchile Corredores de Bolsa S.A., an indirect subsidiary of Citigroup Inc., which is regulated by the Superintendencia de Valores y Seguros. Agustinas 975, piso 2, Santiago, Chile. The Product is made available in **France** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 1-5 Rue Paul Cézanne, 8ème, Paris, France. The Product is distributed in **Germany** by Citigroup Global Markets Deutschland AG ("CGMD"), which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). CGMD, Reuterweg 16, 60323 Frankfurt am Main. Research which relates to "securities" (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) is issued in **Hong Kong** by, or on behalf of, Citigroup Global Markets Asia Limited which takes full responsibility for its content. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Research is made available through Citibank, N.A., Hong Kong Branch, for its clients in Citi Private Bank, it is made available by Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citibank N.A. is regulated by the Hong Kong Monetary Authority. Please contact your Private Banker in Citibank N.A., Hong Kong, Branch if you have any queries on or any matters arising from or in connection with this document. The Product is made available in **India** by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in **Indonesia** through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. The Product is made available in **Israel** through Citibank NA, regulated by the Bank of Israel and the Israeli Securities Authority. Citibank, N.A. Platinum Building, 21 Ha'arba'ah St, Tel Aviv, Israel. The Product is made available in **Italy** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. Via dei Mercanti, 12, Milan, 20121, Italy. The Product is made available in **Japan** by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. If the Product was distributed by SMBC Nikko Securities Inc. it is being so distributed under license. In the event that an error is found in an CGMJ research report, a revised version will be posted on the Firm's Citi Velocity website. If you have questions regarding Citi Velocity, please call (81 3) 6270-3019 for help. The Product is made available in **Korea** by Citigroup Global Markets Korea Securities Ltd., which is regulated by the Financial Services Commission, the Financial Supervisory Service and the Korea Financial Investment Association (KOFIA). Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. KOFIA makes available registration information of research analysts on its website. Please visit the following website if you wish to find KOFIA registration information on research analysts of Citigroup Global Markets Korea Securities Ltd. <http://dis.kofia.or.kr/fs/dis2/fundMgr/DISFundMgrAnalystPop.jsp?companyCd=A03030&pageDiv=02>. The Product is made available in Korea by Citibank Korea Inc., which is regulated by the Financial Services Commission and the Financial Supervisory Service. Address is Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. The Product is made available in **Malaysia** by Citigroup Global Markets Malaysia Sdn Bhd (Company No. 460819-D) ("CGMM") to its clients and CGMM takes responsibility for its contents. CGMM is regulated by the Securities Commission of Malaysia. Please contact CGMM at Level 43 Menara Citibank, 165 Jalan Ampang, 50450 Kuala Lumpur, Malaysia in respect of any matters arising from, or in connection with, the Product. The Product is made available in **Mexico** by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, Integrante del Grupo Financiero Banamex ("Accival") which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comisión Nacional Bancaria y de Valores. Reforma 398, Col. Juárez, 06600 Mexico, D.F. In **New Zealand** the Product is made available to 'wholesale clients' only as defined by s5C(1) of the Financial Advisers Act 2008 ("FAA") through Citigroup Global Markets Australia Pty Ltd (ABN 64 003 114 832 and AFSL No. 240992), an overseas financial adviser as defined by the FAA, participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in **Pakistan** by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in the **Philippines** through Citicorp Financial Services and Insurance Brokerage Philippines, Inc., which is regulated by the Philippines Securities and Exchange Commission. 20th Floor Citibank Square Bldg. The Product is made available in the Philippines through Citibank NA Philippines branch, Citibank Tower, 8741 Paseo De Roxas, Makati City, Manila. Citibank NA Philippines NA is regulated by The Bangko Sentral ng Pilipinas. The Product is made available in **Poland** by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul.Senatorska 16, 00-923 Warszawa. The Product is made available in the **Russian Federation** through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any

information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in **Singapore** through Citigroup Global Markets Singapore Pte. Ltd. ("CGMSPL"), a capital markets services license holder, and regulated by Monetary Authority of Singapore. Please contact CGMSPL at 8 Marina View, 21st Floor Asia Square Tower 1, Singapore 018960, in respect of any matters arising from, or in connection with, the analysis of this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore Branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Please contact your Private Banker in Citibank N.A., Singapore Branch if you have any queries on or any matters arising from or in connection with this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). This report is distributed in Singapore by Citibank Singapore Ltd ("CSL") to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this report. Please contact your Citigold/Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this report. This report is intended for recipients who are accredited investors as defined under the Securities and Futures Act (Cap. 289). Citigroup Global Markets (Pty) Ltd. is incorporated in the **Republic of South Africa** (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in **Spain** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 29 Jose Ortega Y Gasset, 4th Floor, Madrid, 28006, Spain. The Product is made available in the **Republic of China** through Citigroup Global Markets Taiwan Securities Company Ltd. ("CGMTS"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan and/or through Citibank Securities (Taiwan) Company Limited ("CSTL"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan, subject to the respective license scope of each entity and the applicable laws and regulations in the Republic of China. CGMTS and CSTL are both regulated by the Securities and Futures Bureau of the Financial Supervisory Commission of Taiwan, the Republic of China. No portion of the Product may be reproduced or quoted in the Republic of China by the press or any third parties [without the written authorization of CGMTS and CSTL]. If the Product covers securities which are not allowed to be offered or traded in the Republic of China, neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities in the Republic of China. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security or financial products. Any decision to purchase securities or financial products mentioned in the Product must take into account existing public information on such security or the financial products or any registered prospectus. The Product is made available in **Thailand** through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in **Turkey** through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Buyukdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the **U.A.E.**, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different Citi Research ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. The Product is made available in **United Kingdom** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in **United States** by Citigroup Global Markets Inc, which is a member of FINRA and registered with the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority.

Pursuant to Comissão de Valores Mobiliários Rule 483, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citi Research's Products can be found at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations.

The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted.

Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product. With the exception of our product that is made available only to Qualified Institutional Buyers (QIBs) and other product that is made available through other distribution channels only to certain categories of clients to satisfy legal or regulatory requirements, Citi Research concurrently disseminates its research via proprietary and non-proprietary electronic distribution platforms. Periodically, individual Citi Research analysts may also opt to circulate research posted on such platforms to one or more clients by email. Such email distribution is discretionary and is done only after the research has been disseminated via the aforementioned distribution channels. Citi Research simultaneously distributes product that is limited to QIBs only through email distribution.

The level and types of services provided by Citi Research analysts to clients may vary depending on various factors such as the client's individual

preferences as to the frequency and manner of receiving communications from analysts, the client's risk profile and investment focus and perspective (e.g. market-wide, sector specific, long term, short-term etc.), the size and scope of the overall client relationship with Citi and legal and regulatory constraints. Citi Research product may source data from dataCentral. dataCentral is a Citi Research proprietary database, which includes Citi estimates, data from company reports and feeds from Reuters and Datastream.

© 2013 Citigroup Global Markets Inc. Citi Research is a division of Citigroup Global Markets Inc. Citi and Citi with Arc Design are trademarks and service marks of Citigroup Inc. and its affiliates and are used and registered throughout the world. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure of this report (the "Product"), including, but not limited to, redistribution of the Product by electronic mail, posting of the Product on a website or page, and/or providing to a third party a link to the Product, is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient to any third party. Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, disseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST
