

## Equities

14 October 2010 | 10 pages

# UTV Software Communications (UTVS.BO)

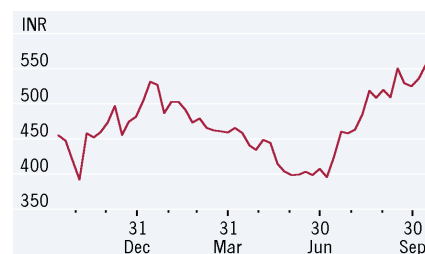
## 2QFY11 Operationally In-line; Gaming – The Joker in the Pack

- Company Update
- Target price change
- Estimate change

- **In-line quarter** — EBIT growth of ~180% Y/Y to ~Rs420m was largely in line with our/consensus estimates. Margins for both movies & TV increased Y/Y – a mix of a) business turnaround and b) partly buoyed by the inventory write-off against the net worth, which boosted 'reported' profits. Revenues at ~Rs2.4bn were flat Y/Y & headline PAT increased ~4x on last year's low base to Rs402m.
- **Debt equity remains >1x** — Increasing leverage is a concern – net debt increased ~Rs1bn QoQ to ~Rs10bn. As per FY10 annual report, net worth declined by Rs6bn driven by the inventory write-down – mgmt indicates the split between movies & broadcasting verticals was ~Rs4.5bn & ~Rs1.5bn respectively.
- **Gaming – the joker in the pack?** — We are currently ~35% below mgmt's FY11E Ignition revenue guidance as we build in some delays; however, we have ~18% EBIT margins in FY12E assuming sale of ~1m units of *El Sheddai* and *Reich*. Visibility on pre-sale agreements, publisher/distribution tie-ups, timelines of the final launch (will depend on publisher), and status of the other 6-8 planned publishing titles are important events to watch out for. Mgmt highlighted that Indiagames has turned to black this quarter & Truegames too is expected to break even in FY11E; however, Ignition is the key for overall segmental performance.
- **Key points to focus on** — a) Visibility of gaming launch timing and any indicators determining financial performance; b) increased gearing and impact on cost of debt; c) return ratios for movie business given the gradual reduction in business volatility; and d) margin performance of broadcasting in future.
- **Maintain Sell** — Despite a marginal cut to our FY11-12E revenues forecasts, we increase our EBIT estimates by 29-35%; factoring both the inventory write-down & good movie business performance in 1HFY11. We reiterate Sell/High Risk and revise our SOTP-based target price to Rs505 as we roll forward to Mar12E from Sept11E. The stock has underperformed the market by ~115% in the last 2 years; it has been flat relatively in the last 6 months.

<b>Sell/High Risk</b>	<b>3H</b>
Price (14 Oct 10)	Rs563.95
Target price	Rs505.00
	<i>from Rs375.00</i>
Expected share price return	-10.5%
Expected dividend yield	0.1%
<b>Expected total return</b>	<b>-10.4%</b>
Market Cap	Rs22,915M
	US\$517M

### Price Performance (RIC: UTVS.BO, BB: UTV IN)



### Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2009A	356	10.42	-55.1	54.1	1.4	3.9	0.0
2010A	533	13.13	26.0	43.0	3.0	4.9	0.0
2011E	1,173	28.86	119.9	19.5	2.6	14.1	0.1
2012E	1,470	36.18	25.4	15.6	2.2	15.3	0.2
2013E	1,719	42.30	16.9	13.3	1.9	15.4	0.2

Source: Powered by dataCentral

### Aditya Mathur

 +91-22-6631-9841  
 aditya.mathur@citi.com

### Surendra Goyal, CFA

 +91-22-6631-9870  
 surendra.goyal@citi.com

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

Citi Investment Research & Analysis 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.

Fiscal year end 31-Mar	2009	2010	2011E	2012E	2013E
<b>Valuation Ratios</b>					
P/E adjusted (x)	54.1	43.0	19.5	15.6	13.3
EV/EBITDA adjusted (x)	nm	60.9	17.3	12.6	10.1
P/BV (x)	1.4	3.0	2.6	2.2	1.9
Dividend yield (%)	0.0	0.0	0.1	0.2	0.2
<b>Per Share Data (Rs)</b>					
EPS adjusted	10.42	13.13	28.86	36.18	42.30
EPS reported	10.42	13.13	28.86	36.18	42.30
BVPS	405.68	190.07	218.34	253.35	294.48
DPS	0.00	0.00	0.50	1.00	1.00
<b>Profit &amp; Loss (RsM)</b>					
Net sales	6,066	6,641	10,709	13,999	17,476
Operating expenses	-6,964	-6,229	-8,970	-11,627	-14,600
<b>EBIT</b>	<b>-899</b>	<b>412</b>	<b>1,739</b>	<b>2,372</b>	<b>2,877</b>
Net interest expense	77	-384	-619	-753	-731
Non-operating/exceptionals	854	204	210	265	310
<b>Pre-tax profit</b>	<b>32</b>	<b>231</b>	<b>1,330</b>	<b>1,885</b>	<b>2,455</b>
Tax	433	270	-173	-415	-737
Extraord./Min.Int./Pref.div.	-109	32	15	0	0
<b>Reported net income</b>	<b>356</b>	<b>533</b>	<b>1,173</b>	<b>1,470</b>	<b>1,719</b>
Adjusted earnings	356	533	1,173	1,470	1,719
Adjusted EBITDA	-829	473	1,811	2,512	3,028
<b>Growth Rates (%)</b>					
Sales	39.7	9.5	61.3	30.7	24.8
EBIT adjusted	-247.7	145.8	322.5	36.4	21.3
EBITDA adjusted	-228.1	157.1	282.6	38.7	20.5
EPS adjusted	-55.1	26.0	119.9	25.4	16.9
<b>Cash Flow (RsM)</b>					
<b>Operating cash flow</b>	<b>-7,376</b>	<b>2,773</b>	<b>-917</b>	<b>1,139</b>	<b>2,042</b>
Depreciation/amortization	70	62	71	140	152
Net working capital	-7,376	2,432	-2,146	-471	171
<b>Investing cash flow</b>	<b>-3,663</b>	<b>-179</b>	<b>-346</b>	<b>-657</b>	<b>-405</b>
Capital expenditure	-3,380	-263	-346	-657	-405
Acquisitions/disposals	0	0	0	0	0
<b>Financing cash flow</b>	<b>11,261</b>	<b>-2,820</b>	<b>1,350</b>	<b>-548</b>	<b>-1,548</b>
Borrowings	2,003	4,927	1,373	-500	-1,500
Dividends paid	0	0	-24	-48	-48
<b>Change in cash</b>	<b>223</b>	<b>-226</b>	<b>87</b>	<b>-65</b>	<b>90</b>
<b>Balance Sheet (RsM)</b>					
<b>Total assets</b>	<b>22,597</b>	<b>20,070</b>	<b>24,735</b>	<b>26,973</b>	<b>28,535</b>
Cash & cash equivalent	937	711	797	732	822
Accounts receivable	1,960	1,403	2,054	2,570	3,112
Net fixed assets	4,392	4,593	4,868	5,384	5,637
<b>Total liabilities</b>	<b>7,303</b>	<b>12,021</b>	<b>15,552</b>	<b>16,368</b>	<b>16,259</b>
Accounts payable	0	0	0	0	0
Total Debt	4,700	9,627	11,000	10,500	9,000
<b>Shareholders' funds</b>	<b>15,294</b>	<b>8,049</b>	<b>9,183</b>	<b>10,605</b>	<b>12,277</b>
<b>Profitability/Solvency Ratios (%)</b>					
EBITDA margin adjusted	-13.7	7.1	16.9	17.9	17.3
ROE adjusted	3.9	4.9	14.1	15.3	15.4
ROIC adjusted	-3.7	4.0	9.2	10.5	11.1
Net debt to equity	24.6	110.8	111.1	92.1	66.6
Total debt to capital	23.5	54.5	54.5	49.8	42.3

For further data queries on Citi's full coverage universe please contact CIRA Data Services Asia Pacific at CIRADataServicesAsiaPacific@citi.com or +852-2501-2791



## 2QFY11 Results Review

Revenues at ~Rs2.4bn were flat Y/Y – in line with expectations

~4x increase in the 'reported' PAT on last year's low base, though high, was marginally below our estimates

Operationally, EBIT growth of ~180% Y/Y to ~Rs420m was largely in line with our/consensus estimates

Margins expanded Y/Y reflecting a mix of business turnaround and to some extent buoyed by the inventory write-off against the net worth

Movie business performance was healthy and largely in line with expectations - 2QFY10 movie revenues included Rs429m from the Hollywood movie, *The Happening*

Gaming business remained lackluster during the quarter

Management noted that the television segment margins improved YoY in both content and broadcasting segments

Besides the profit margins, we would monitor the capital employed/return ratios for the various businesses, in light of the impact of the decline in the net worth and given that the new businesses are in their infancy

Figure 1. Profit and Loss Summary (Rupees in Millions, Percent)

	2Q FY 10	2Q FY 11	% Change
Revenues from operations	2,345	2,378	1.4
Expenditure	-2,176	-1,940	-10.9
<b>EBITDA</b>	<b>169</b>	<b>438</b>	<b>159.0</b>
<i>Operating Margin (%)</i>	<i>7.2</i>	<i>18.4</i>	<i>1121 bps</i>
Other Income	45	37	-18.7
Interest	-119	-43	-64.0
Depreciation	-20	-21	5.6
<b>Profit before Tax</b>	<b>76</b>	<b>412</b>	<b>439.6</b>
Tax	27	0	-100.2
<i>Tax Rate (%)</i>	<i>-35.8</i>	<i>0.0</i>	<i>3584 bps</i>
<b>Profit after Tax</b>	<b>104</b>	<b>412</b>	<b>297.2</b>
Minority interest	-21	-10	-52.8
<b>PAT and MI</b>	<b>83</b>	<b>402</b>	<b>383.8</b>
<b>Cost Details</b>			
Direct Costs	1,768	1,503	-15.0
<i>% of sales</i>	<i>75.4</i>	<i>63.2</i>	<i>-1217 bps</i>
Personnel Costs	161	189	17.6
<i>% of sales</i>	<i>6.9</i>	<i>8.0</i>	<i>110 bps</i>
Other Expenditure	247	247	0.1
<i>% of sales</i>	<i>10.5</i>	<i>10.4</i>	<i>-14 bps</i>

Source: Company Reports

Figure 2. Segmental Results (Rupees in Millions, Percent)

Segment Revenue	2Q FY 10	2Q FY 11	% Change
Television	509	815	60.0
Movies	1,310	1,207	-7.8
Gaming & Interactive	599	357	-40.4
Less: Inter segment revenues	-73	-1	nm
<b>Total Revenues</b>	<b>2,345</b>	<b>2,378</b>	<b>1.4</b>
<b>Segment Results</b>			
Television	-140	49	-135.3
Movies	299	447	49.3
Gaming & Interactive	70	53	-24.9
<b>Total segment results before int, dep, tax</b>	<b>229</b>	<b>548</b>	<b>139.0</b>
Less: Interest(net)	-119	-43	
Less: Other unallocable exp (net of other inc)	-34	-94	173.4
<b>Total PBT</b>	<b>76</b>	<b>412</b>	<b>439.6</b>
<b>Segment EBIT (%)</b>			
<i>Television</i>	<i>-27.4</i>	<i>6.0</i>	<i>3344 bps</i>
<i>Movies</i>	<i>22.8</i>	<i>37.0</i>	<i>1417 bps</i>
<i>Gaming &amp; Interactive</i>	<i>11.7</i>	<i>14.7</i>	<i>304 bps</i>
<i>Total</i>	<i>9.5</i>	<i>23.0</i>	<i>1356 bps</i>

Source: Company Reports

Figure 3. Segmental Capital Employed (Rs Mn, % ROCE on EBIT)

RoCE (% On EBIT)	2Q FY 10	2Q FY 11	% Change
Television	-3.1	1.0	406 bps
Movies	3.1	7.9	477 bps
Gaming & Interactive	1.5	0.8	-67 bps

Source: Company Reports, CIRA

As per the FY10 annual report, decline in the net worth was ~Rs6.2bn driven by the inventory write-off

Net debt increased by 10% QoQ and is currently ~Rs10bn – mgmt expects to reduce debt through liquidity events (movie co-productions, release of AAA IPs), strategic initiatives and internal accruals from CY11 onwards

Leverage will remain at elevated levels in the near term; which may impact the cost of debt/interest costs going forward

Figure 4. Profit and Loss Summary (Rupees in Millions, Percent)

As of	30 Sept 09	31 Mar 10	30 Sept 10
Cash	838	711	520
Inventories	11,960	8,538	10,808
Sundry debtors	2,083	1,403	1,881
Loans and advances	3,528	3,336	2,875
Other current assets	2	3	4
<b>Current assets</b>	<b>18,410</b>	<b>13,992</b>	<b>16,089</b>
Current liabilities	2,299	2,005	2,181
Provisions	119	121	85
<b>Total current liabilities &amp; provisions</b>	<b>2,418</b>	<b>2,126</b>	<b>2,266</b>
<b>Net current assets</b>	<b>15,992</b>	<b>11,866</b>	<b>13,823</b>
Net PPE	4,722	4,593	4,566
Investments	2,373	201	21
Deferred tax asset (net of liabilities)	908	1,016	1,027
<b>Total assets</b>	<b>23,995</b>	<b>17,944</b>	<b>19,436</b>
Capital	342	406	406
Advance against warrants	390	0	0
Reserves and Surplus	12,698	7,317	8,260
<b>Shareholder's funds</b>	<b>13,430</b>	<b>7,723</b>	<b>8,666</b>
Debt	9,200	9,627	10,511
Minority interest	1,366	326	259
<b>Total liabilities and equity</b>	<b>23,995</b>	<b>17,944</b>	<b>19,436</b>

Source: Company Reports

## Maintain Sell, Target Price of Rs505

Our target price of Rs505 is based on our revised earnings estimates as we roll forward to Mar-12E estimates (from Sept-11E earlier). Our SOTP is enumerated below:

Figure 5. UTV Software Communications — Sum of the Parts Valuation

RsM	EV/EBIT Multiple	EBIT	EV adjusted for MI	Fair Value/share (Rs)
Movies	9.0x	2,111	19,000	468
TV Content	8.0x	129	1,034	24
Games Content	6.0x	652	3,420	84
	EV/Sales Multiple	Sales		
Broadcasting	2.0x	3,351	5,697	140
New Media	1.5x	205	308	8
Net cash			-8,916	-219
<b>Equity value</b>			<b>20,544</b>	<b>505</b>

Source: Citi Investment Research and Analysis estimates

## Earnings Revisions

**Figure 6. UTV Software Communications — Earnings Revision Summary**

Year to 31-Mar	2011E			2012E		
	Old	New	% Chg	Old	New	% Chg
Sales (Rs Mils.)	11,540	10,709	-7%	14,080	13,999	-1%
EBIT (Rs Mils.)	1,285	1,739	35%	1,843	2,372	29%
Net Profit (Rs Mils.)	788	1,173	49%	1,218	1,470	21%
Diluted EPS (Rs)	19.4	28.9	49%	30.0	36.2	21%
Dividend Per Share (Rs)	0.5	0.5	0%	1.0	1.0	0%

Source: Citi Investment Research and Analysis estimates

- We have marginally reduced our revenue estimates by ~1-7% over FY11-12E tweaking our gaming and TV revenues.
- Our EBITDA estimates are increased by 29-35% over FY11-12E driven by a) better movie business performance in 1HFY11 (driven by *Rajneeti*) and b) taking into account the higher margins in movies and broadcasting post the inventory write-off against the net worth.
- Interest costs and tax remain imponderables given the increasing leverage and extent of carry forward losses – mgmt guides to interest expenses of ~5% and effective tax rates of <10%. Our current estimates are slightly higher than this guidance.

## UTV Software Communications

### Valuation

Our target price of Rs505 is based on sum-of-the-parts valuation. We use EV/EBIT for most divisions, as this is the most widely used method in the absence of segmental profitability beyond the EBIT level. We value the movie business at 9x Mar12E EV/EBIT, a ~10% premium to the global filmed entertainment universe, justified in our view given the growth and scarcity premium applied to UTV. We value the TV content business at a Mar12E EV/EBIT of 8x, at a discount to Balaji Telefilms - one of the segment leaders in India - based on consensus earnings. We benchmark the gaming vertical in line with regional valuations and ascribe an EBIT multiple of 6x. We give the broadcasting business a 2x EV/Sales multiple on FY12E, at a discount to the leading broadcasters. We ascribe a 1.5x Mar12E EV/Sales on New Media.

### Risks

We rate UTV shares High Risk, instead of Low Risk as suggested by our quantitative risk-rating system, which tracks 260-day historical share price volatility. We believe this is warranted given the inherent earnings volatility in most divisions. The company's capital structure remains challenging; coupled with execution risks necessitate a higher risk rating. Upside risks that could sustain the stock above our target price include: 1) The gaming business could be valued at higher levels. Gaming remains a growth business globally. While we value UTV's gaming business at par with regional peers, a higher valuation accorded to UTV's gaming business (on account of higher growth) could result in upside; 2) The movie and/or broadcasting businesses doing better than expected could result in upside surprises to our estimates.

## Appendix A-1

### Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of all or any identified portion of this research report hereby certifies that, with respect to each issuer or security or any identified portion of the report with respect to an issuer or security that the research analyst covers in this research report, all of the views expressed in this research report accurately reflect their personal views about those issuer(s) or securities. The research analyst(s) also certify that no part of their 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 research report.

## IMPORTANT DISCLOSURES

### UTV Software Communications (UTVS.BO)

#### Ratings and Target Price History Fundamental Research

Analyst: Aditya Mathur  
Covered since June 18 2010

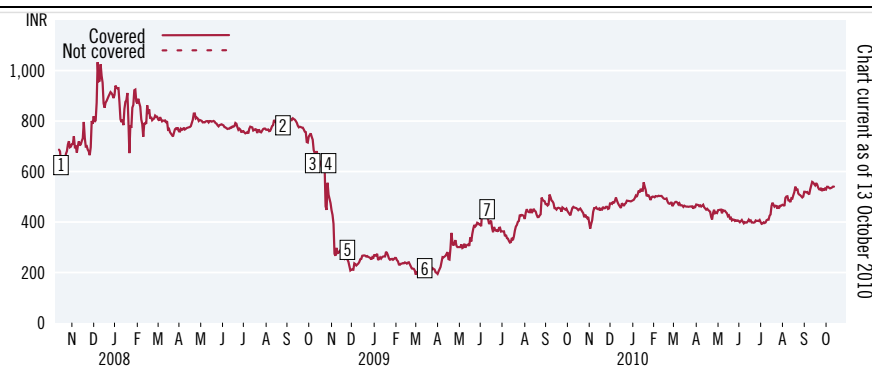


Chart current as of 13 October 2010

Date	Rating	Target Price	Closing Price
1 16-Oct-07	*1H	*887.00	679.95
2 26-Aug-08	*3H	*753.00	790.40
3 7-Oct-08	3H	*662.00	726.05

Date	Rating	Target Price	Closing Price
4 29-Oct-08	3H	*450.00	508.45
5 25-Nov-08	3H	*250.00	251.70
6 13-Mar-09	3H	*190.00	195.85

Date	Rating	Target Price	Closing Price
7 10-Jun-09	3H	*375.00	416.35

\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Citigroup Global Markets Inc. or its affiliates beneficially owns 1% or more of any class of common equity securities of UTV Software Communications. This position reflects information available as of the prior business day.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from UTV Software Communications in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, non-securities-related: UTV Software Communications.

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 Investment Research & Analysis product ("the Product"), please contact Citi Investment Research & Analysis, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance. 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 www.citigroupgeo.com. 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.

#### Citi Investment Research & Analysis Ratings Distribution

Data current as of 30 Sep 2010

	Buy	Hold	Sell
Citi Investment Research & Analysis Global Fundamental Coverage	53%	36%	11%
% of companies in each rating category that are investment banking clients	48%	45%	39%

#### Guide to Citi Investment Research & Analysis (CIRA) Fundamental Research Investment Ratings:

CIRA's stock recommendations include a risk rating and an investment rating.

**Risk ratings**, which take into account both price volatility and fundamental criteria, are: Low (L), Medium (M), High (H), and Speculative (S).

**Investment ratings** are a function of CIRA's expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating.

For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings are: Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

Guide to Citi Investment Research & Analysis (CIRA) Corporate Bond Research Credit Opinions and Investment Ratings: CIRA's corporate bond research issuer publications include a fundamental credit opinion of Improving, Stable or Deteriorating and a complementary risk rating of Low (L), Medium (M), High (H) or Speculative (S) regarding the credit risk of the company featured in the report. The fundamental credit opinion reflects the CIRA analyst's opinion of the direction of credit fundamentals of the issuer without respect to securities market vagaries. The fundamental credit opinion is not geared to, but should be viewed in the context of debt ratings issued by major public debt ratings companies such as Moody's Investors Service, Standard and Poor's, and Fitch Ratings. CBR risk ratings are approximately equivalent to the following matrix: Low Risk Triple A to Low Double A; Low to Medium Risk High Single A through High Triple B; Medium to High Risk Mid Triple B through High Double B; High to Speculative Risk Mid Double B and Below. The risk rating element illustrates the analyst's opinion of the relative likelihood of loss of principal when a fixed income security issued by a company is held to maturity, based upon both fundamental and market risk factors. Certain reports published by CIRA will also include investment ratings on specific issues of companies under coverage which have been assigned fundamental credit opinions and risk ratings. Investment ratings are a function of CIRA's expectations for total return, relative return (to publicly available Citigroup bond indices performance), and risk rating. These investment ratings are: Buy/Overweight the bond is expected to outperform the relevant Citigroup bond market sector index (Broad Investment Grade, High Yield Market or Emerging Market), performances of which are updated

monthly and can be viewed at <https://fdirect.citigroup.com/> using the "Indexes" tab; Hold/Neutral Weight the bond is expected to perform in line with the relevant Citigroup bond market sector index; or Sell/Underweight the bond is expected to underperform the relevant sector of the Citigroup indexes.

---

#### 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 India Private Limited

Aditya Mathur; Surendra Goyal, CFA

---

#### OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 14 October 2010 10:25 AM on the issuer's primary market.

Citigroup Global Markets Inc. or its affiliates beneficially owns 2% or more of any class of common equity securities of UTV Software Communications.

This Product has been modified by the author following a discussion with one or more of the named issuers/issuers of the named securities.

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 Investment Research & Analysis (CIRA) does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of CIRA 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. Incorporated (Morgan Stanley) research reports may be available about the companies that are the subject of this Citi Investment Research & Analysis (CIRA) research report. Ask your Financial Advisor or use [smithbarney.com](http://smithbarney.com) to view any available Morgan Stanley research reports in addition to CIRA research reports.

Important disclosure regarding the relationship between the companies that are the subject of this CIRA 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](http://www.morganstanleysmithbarney.com/researchdisclosures).

The required disclosures provided by Morgan Stanley and Citigroup Global Markets, Inc. on Morgan Stanley and CIRA research relate in part to the separate businesses of Citigroup Global Markets, Inc. and Morgan Stanley that now form Morgan Stanley Smith Barney LLC, rather than to Morgan Stanley Smith Barney LLC in its entirety. For Morgan Stanley and Citigroup Global Markets, Inc. specific disclosures, you may refer to [www.morganstanley.com/researchdisclosures](http://www.morganstanley.com/researchdisclosures) and [https://www.citigroupgeo.com/geopublic/Disclosures/index\\_a.html](https://www.citigroupgeo.com/geopublic/Disclosures/index_a.html).

This CIRA 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 CIRA. 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 Citigroup 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. 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 may not be distributed to private clients in Germany. The Product is distributed in Germany by Citigroup Global Markets Deutschland AG & Co.



KGaA, which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). Frankfurt am Main, Reuterweg 16, 60323 Frankfurt am Main. If the Product is made available in Hong Kong by, or on behalf of, Citigroup Global Markets Asia Ltd., it is attributable to Citigroup Global Markets Asia Ltd., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Product is made available in Hong Kong by The Citigroup Private Bank to its clients, it is attributable to Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. The Citigroup Private Bank and Citibank N.A. is regulated by the Hong Kong Monetary Authority. 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. Foro Buonaparte 16, 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 Nikko Cordial 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 Global Equities Online (GEO) website. If you have questions regarding GEO, 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 110-180, 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?companyCd2=A03030&pageDiv=02>. The Product is made available in Malaysia by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. 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 Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 06600 Mexico, D.F. In New Zealand the Product is made available through Citigroup Global Markets New Zealand Ltd. (Company Number 604457), a Participant of the New Zealand Exchange Limited and regulated by the New Zealand Securities Commission. Level 19, Mobile on the Park, 157 Lambton Quay, Wellington. 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 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. Chalubinskiego 8, 00-630 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 Gashka Street, 125047 Moscow. The Product is made available in Singapore through Citigroup Global Markets Singapore Pte. Ltd., a Capital Markets Services Licence holder, and regulated by Monetary Authority of Singapore. 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192. 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. 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 Gassef, 4th Floor, Madrid, 28006, Spain. The Product is made available in Taiwan through Citigroup Global Markets Taiwan Securities Company Ltd., which is regulated by Securities & Futures Bureau. No portion of the report may be reproduced or quoted in Taiwan by the press or any other person. No. 1, Songzhi Road, Taipei 110, Taiwan. 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, Bangkok, 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 CIRA 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 regulated by FINRA and 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. 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 CIRA's Products can be found at [www.citigroupgeo.com](http://www.citigroupgeo.com). 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.

© 2010 Citigroup Global Markets Inc. Citi Investment Research & Analysis is a division and service mark of Citigroup Global Markets Inc. and its affiliates and is used and registered throughout the world. 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 is prohibited by law and will result in prosecution. 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 information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient. 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

---