

Global Telecoms

Monetizing the Mobile Money Opportunity



- **Mobile money as a telco opportunity** — We see mobile money as an under-appreciated opportunity for telecom companies as it extends their revenue base into areas currently monopolized or, in some cases, ignored by the financial services industry. Potential key winners assuming proper market development would be emerging market telco plays such as Bharti, Telkom Indonesia, XL Axiata, Indosat, PLDT, MTN, MTS and Vodacom. Developed market players with significant exposure in EM, such as Singtel, Millicom, Telenor and Vodafone, also stand out as potential beneficiaries of mobile money evolution.
- **Focus on Emerging Markets telcos** — Emerging markets present a more attractive mobile money opportunity for telcos given the underdeveloped financial sector ecosystem relative to mobile penetration. Telcos thus become enablers of financial inclusion for the unbanked, presenting opportunities in terms of both wallet container and payment services. Given superior mobile and dealer network penetration relative to traditional financial system penetration in EM, telcos are potentially able to engage in both remittance and mobile payment services with greater convenience. Unlike data service, which has partially cannibalized voice/SMS, mobile money comes in as a purely incremental business as it taps into a different segment of the consumer wallet.
- **Developed Market models are tough to monetize** — DM telcos may find it difficult to effectively monetize on mobile money. This is because of well developed financial ecosystems as well as the high level of smartphone penetration. The high level of smartphone penetration moves the value capture away from the telcos to the financial enablers such as credit card companies/banks, with transactions executed online, via bank mobile applications or via NFC. The high bank penetration, on the other hand, weakens the ability of the telcos to extend into financial services.
- **How much can mobile money contribute?** — The level of revenue and profit contribution varies depending on local market conditions and regulations. We view this as still a greenfield exercise for most of the telcos globally as their initiatives are still in their infancy stages. We see that an early mover such as Safaricom is generating nearly 18% of revenues from its M-PESA mobile money platform and added more than a quarter of its EBITDA growth since launch. We conservatively estimate that mobile money could contribute an additional 6-8% in incremental profits within 5 years for some of the EM telcos if the systems are set in place. This may rise further should the telcos be able to popularize mobile money as payment methods and not just rely on remittance models. We believe the markets have yet to recognize this potential given the lack of clarity on most telcos' plans and targets on this relatively new segment.

Arthur Pineda

+65-6657-1174

arthur.pineda@citi.com

Simon Weeden

+44-20-7986-4204

simon.weeden@citi.com

Laurie Fitzjohn-Sykes, CFA

+44-20-7986-4114

laurie.fitzjohnsykes@citi.com

Michael Rollins, CFA

+1-212-816-1116

michael.rollins@citi.com

Dalibor Vavruska

+44-20-7986-4276

dalibor.vavruska@citi.com

Thato Motlanthe

+27-11-944-0834

thato.motlanthe@citi.com

Gaurav Malhotra, CFA

+91-22-6631-9885

gaurav.a.malhotra@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.

Contents

Where Mobile Money could work	3
An incremental business	4
A new revenue stream	4
Defining mobile payments/mobile money	5
Mobile Money models for EM vs. DM	7
Developed Market Focused Models	8
Emerging Market Focused Models	11
Relationship between banks and Mobile Money:	
Where opportunities lie	13
Who is engaged in Mobile Money?	15
Who can monetize on Mobile Money?	17
Case Study: Vodafone in m-payments	19
M-PESA – the emerging market transactions case study	19
Developed world m-payments in the market	21
Key success factors to monetizing Mobile Money for telcos	22
Where Mobile Money could work	23
Companies With Mobile Money Exposure	27
Bharti Airtel (BRTI.BO)	28
Opportunity Within the Asian Mobile Money Space	28
Indosat (ISAT.JK)	31
Passiveness Had Limited Take-up Although Potential Remains	31
Millicom Intl Cellular (MICsdb.ST)	34
Financial Services Is a Key Growth Driver	34
Mobile Telesystems OJSC (MBT)	37
Untapped Credit Market Opportunities	37
MTN Group Limited (MTNJ.J)	40
Finding its Feet in an Ocean of Potential	40
PLDT (TEL.PS)	43
Opportunity in Remittances in SMS-savvy Market	43
PT Telkom (TLKM.JK)	46
Leading Mobile Money in Indonesia, But Not a Pure Play	46
PT XL AXIATA TBK. (EXCL.JK)	49
Better Indonesia Mobile Money Opportunity	49
SingTel (STEL.SI)	52
Opportunity in Affiliates	52
Telenor ASA (TEL.OL)	55
Early Success in Pakistan, Further Launches Planned	55
Vodacom Group Limited (VODJ.J)	58
Looking to Build on Success	58
Vodafone Group PLC (VOD.L)	62
Leading in Mobile Money Space	62
Appendix A-1	68

Where Mobile Money could work

We identify the key names for mobile money globally. While a number of the major players have articulated and embarked on mobile money strategies, very few have been able to monetize, with most developed market telcos likely unable to capture meaningful value away from traditional financial institutions given the prevalence of banking networks and the use of NFC-based technologies where telco participation is limited to mere real estate on the handset/SIM card.

The key potential beneficiaries, however, are the emerging market telcos with the opportunity for mass market financial inclusion. Some developed market telcos such as Vodafone, Telenor, Millicom and Singtel are able to participate by developing their proprietary mobile money platforms and rolling them out across their emerging market subsidiaries/affiliates. We conservatively estimate that mobile money could contribute an additional 6-8% in incremental profits within 5 years for some of the emerging market telcos, which likely have not yet been factored in by the street given the lack of clarity on plans and regulations.

Figure 1. Emerging Market Mobile Money Plays

	Ticker	Rating	Price 10-Jun	Target Price	Yield (%)	ETR (%)	EV/EBITDA	CY2013E		
								P/E	P/BV	ROE (%)
Bharti	BRTI.BO	1	284.00	370.00	0.6	30.8	6.2	23.8	1.9	8%
Launched Airtel Money in 2012 and has partnered with Axis bank. More than 7000 agents have been launched even in the two trial provinces										
PT Telkom	TLKM.JK	2	10,500	11,400	4.5	13.0	6.9	14.5	3.7	26%
Launched T-Cash in 2009 and has seen nearly 8% of its subs use the service										
Indosat	ISAT.JK	1	5,300	6,300	0.6	19.4	3.9	18.4	1.5	nm
Launched Dompotku in 2008. Marketing push has been limited with the company opting for a follower strategy										
XL Axiata	EXCL.JK	2	4,525	5,500	2.8	24.4	5.5	17.7	2.3	14%
Launched XL Tunai. Take-up has been limited so far with <300k users.										
MTN	MTNJ.J	2	170.50	190.00	5.6	13.3	5.9	13.3	3.4	26%
Offers mobile money services in several African countries including Nigeria and Uganda, where it's a champion. 38% of subs have registered for mobile money, contributing 11% to the topline in 2012										
Vodacom	VODJ.J	3	112.75	100.00	7.1	-4.2	6.7	12.7	7.5	61%
Offered Vodafone's M-PESA platform. Nearly 52% of subs in Tanzania use mobile money. Service offer is being expanded to other markets										
Mobile Telesystems	MBT.N	1	18.22	23.10	7.7	33.6	4.4	10.3	4.0	41%
Focus is on NFC and P2B services. Acquired 25% stake in MTS Bank targeting to tap into underpenetrated credit market of Russia leveraging on its own distribution channels, subscriber data and their credit history										
PLDT	TEL.PS	3	3,100	2,700	5.7	-7.2	8.5	17.3	4.4	26%
Offers Smartmoney which allows for local and domestic remittances and mobile payments services										

Source: Citi Research, Company

Figure 2. Developed Market Mobile Money Plays

	Ticker	Rating	Price 10-Jun	Target Price	Yield (%)	ETR (%)	EV/EBITDA	CY2013E		
								P/E	P/BV	ROE (%)
Vodafone	VOD.L	1	1.92	2.15	5.3	17.4	6.2	12.2	1.2	11%
Offers mobile money services in developed (NFC) and emerging markets (Remittances). Owns M-PESA brand which has launched services in 8 markets. Has seen huge success in African markets of Kenya and Tanzania										
Millicom	MICsdb.ST	1	513.50	645.00	5.4	28.9	4.9	14.8	3.2	22%
Offers domestic remittances services in most of its African and Latin American markets. Targets growing revenue from MFS from \$40m in 2012 (1% of group) to \$600m-\$1b in 2017 (7-11% of group)										
Telenor	TEL.OL	2	121.10	130.00	5.4	12.3	5.5	12.8	2.5	19.3%
Offers mobile money services in Pakistan. Planning to roll out in other EM markets and NFC based service in its DM markets in Nordic region										
Singtel	STEL.SI	2	3.68	3.95	5.1	11.9	9.0	14.8	2.3	16%
Offers developed and emerging market mobile money platforms from NFC in DM to remittances for international and EM associates										

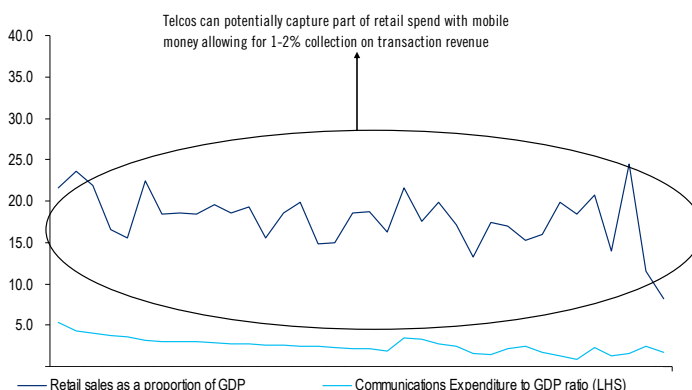
Source: Citi Research

An incremental business

A new revenue stream

Mobile money presents an opportunity for telcos to raise incremental revenues by expanding outside of their traditional voice, SMS and data revenue models by encroaching into the space dominated by or, in some cases, ignored by financial services institutions. This expands the telcos' ability to monetize beyond just the consumer's telco budgets by providing its customers a potentially more convenient method to handle monetary transactions. This allows telcos to expand into the retail value chain in areas traditionally dominated by financial institutions. Telcos can engage in taking a fee from the transactions by facilitating the transaction.

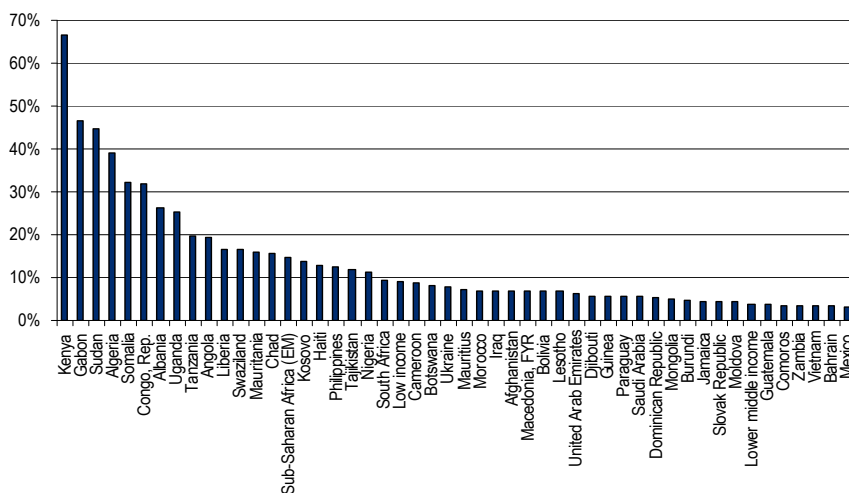
Figure 3. Telcos can participate in the retail value chain dominated by cash and credit



Source: Citi Research, World Bank

The digitization of money has also allowed mobile subscribers to transfer money via their mobile phones to subscribers and non-subscribers in various locations. This allows the telcos to compete as remittance operators or as payment facilitators. This had been centered on EM names and is still mostly in their infancy stages.

Figure 4. Top 50 markets based on those who have received money via their mobile phones



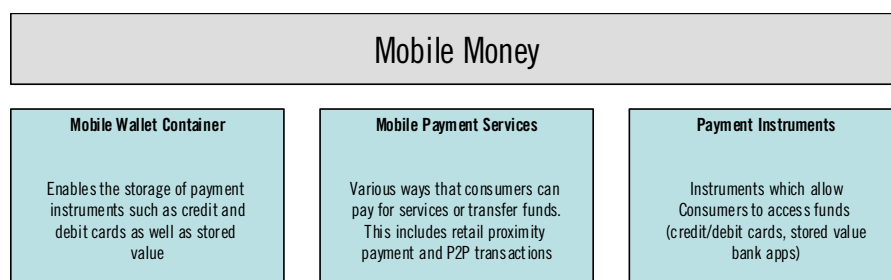
Source: World bank, Citi Research

Telcos in some ways present an inherent competitive advantage in this field of money transfer, particularly for the emerging markets where bank penetration levels remain relatively modest as compared to telecom subscriber and distribution network penetration levels. Money transfers, both domestic and international, are also prevalent in these markets.

Defining mobile payments/mobile money

Broadly defined, mobile payments or mobile money is a combination of wallet container, payment services and payment instruments executed through the use of a mobile phone. These are functions traditionally have been executed via cash or through the use of financial institutions, which facilitate the transfer of funds.

Figure 5. Mobile Money segments



Source: Citi Research

Telecom companies tend to focus on mobile payment and mobile wallet containers segments as payment instruments do not typically generate any meaningful incremental revenues for the telcos with value typically accruing to the software/application developer or the enabling entities (ex. credit/debit card companies, banks). Telco revenue models for mobile payments are typically transaction-based, thus raising focus on mobile payment services as the primary means of generating revenue. Mobile wallet containers are also necessary to store the digital value facilitated by Mobile payment services. Telcos may also monetize on wallet container services by recognizing interest on the digital money float.

A look at mobile payment service – Mobile payment services typically take the following forms:

- **Retail proximity payments** which replace cash or traditional credit/debt card swipe function with near field communications or barcode-based technology or, in the case of less developed markets, SMS-based payment to the merchant.
- **Retail remote payments** which allow for payments using a web-based interface. This includes traditional large screen transactions being migrated to the small screen/mobile phone (for example – transactions on Citibank or Amazon.com executed on a smartphone).
- **Person to person payments** which allow customers to transfer value from one mobile wallet to another. This is commonly used in emerging markets where money remittance services are well used due to migrant workforces.

Globally, the models for EM and DM are distinct, with DM focusing more towards retail proximity payments models while EM names have seen a bias towards mobile money transfers as the main method of monetization. Unlike data service which tends to cannibalize voice/SMS revenues in varying degrees and may require

extensive investment in networks, the revenues from mobile money are distinctly separate from the traditional telco revenue streams as they draw from a separate segment of the consumer wallet and are more incremental in nature.

Investment requirements are far more manageable for mobile money as compared to mobile data, for instance. While there are no explicit/generic global benchmarks to date we see examples such as Safaricom and Vodafone's M-PESA spending cUS\$30m to scale up the service. MTN Uganda, on the other hand, spent cUS\$10.5m before driving the service to positive FCF based on GSMA estimates. Millicom, on its part, had guided for capex at a mere US\$2m per country to start mobile money services with a target of 100% ROIC for the service.

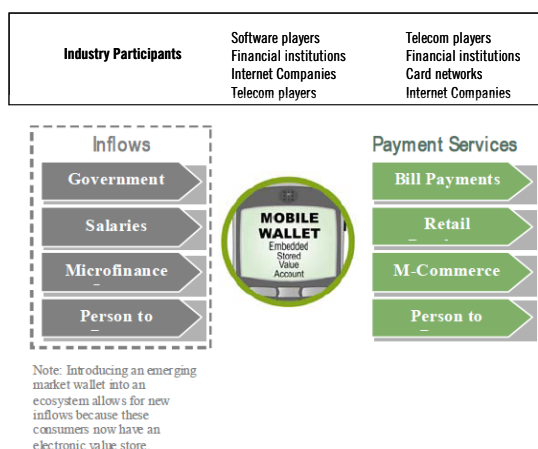
Telcos globally are recognizing this opportunity and have set out specific strategies to cash in on mobile money in varying degrees. Global, regional and local players have attempted to develop their own systems or have worked with financial enablers to allow them to monetize on this mobile money phenomenon.

Mobile Money Models for EM vs. DM

The mobile money model/service is materially different for developed markets and emerging markets. Developed market telcos typically tend to be more post-paid centric and operate within a well developed financial ecosystem. DM names also offer a more advanced handset ecosystem which allows for greater internet, program and hardware functionalities on the part of the user. Mobile money models for DM thus tend to be more sophisticated and comprehensive in terms of potential services. Monetization however becomes far more difficult with value accruing mostly to the supply chain such as the financial services industry or the enablers of the service.

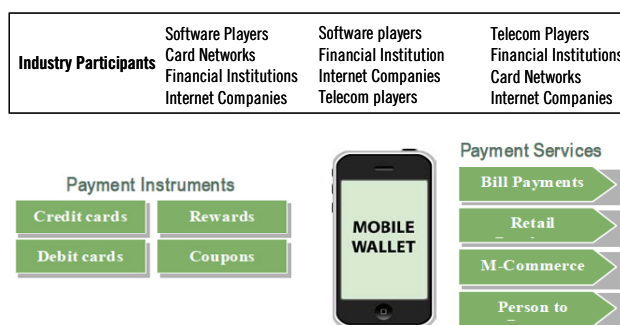
Emerging markets, on the other hand, are predominantly pre-paid in nature and operate with weaker financial institution penetration. While mobile payments may be seen in limited degrees, mobile money in EM has so far centered on money remittance (P2P flow oriented) with more sophisticated services limited given limitations on financial institution penetration as well as handset advancements.

Figure 6. EM Mobile Money Value Chain



Source: Citi Research (Citi GPS: Upwardly Mobile)

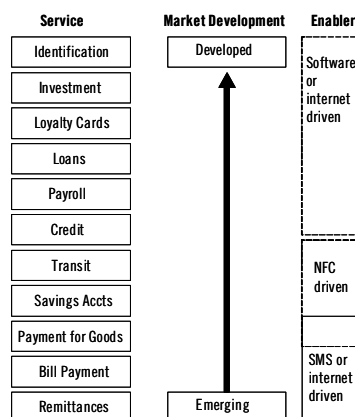
Figure 7. DM Mobile Money Value Chain



Source: Citi Research (Citi GPS: Upwardly Mobile)

As the market maturity evolves, so does the level of sophistication for the types of services available. EM-based services tend to be very basic with remittance and bill payments. DM-based services on the other hand are more personalized with services evolving beyond payments and more towards mobile banking.

Figure 8. Mobile Payment Evolution



Source: Citi Research

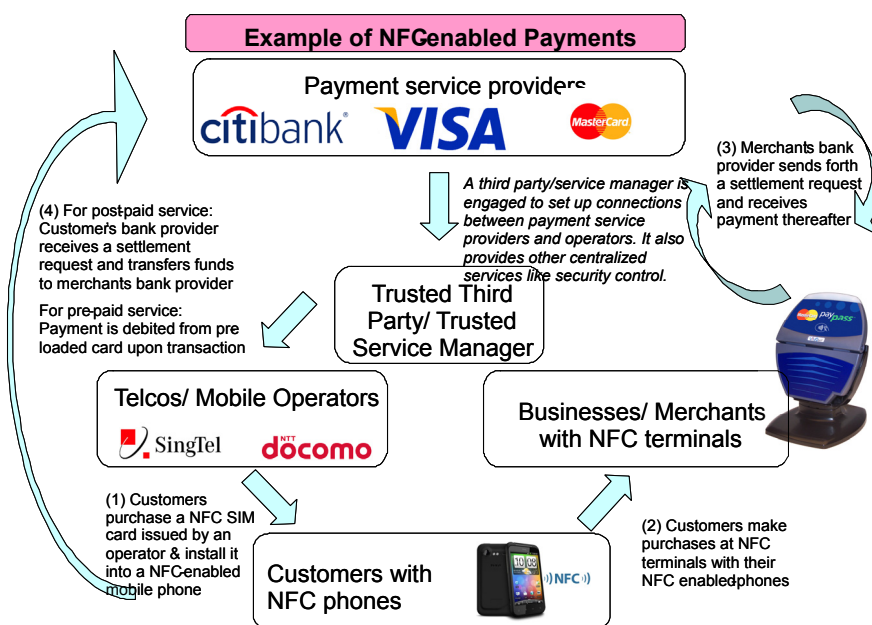
Developed Market Focused Models

We look at the primary models employed by developed market telcos for mobile money.

Developed Market Model: NFC

The most commonly used feature for DM mobile wallets lies with near field communications (NFC) which allows consumers to pay for services using their handheld devices embedded with a NFC chip. Telco participation and value chain capture for such services however is limited and varies depending on the NFC model employed. Some NFC models have had the telcos participating on the service with SIM-card activated NFCs which are issued and authenticated by the operators where they could potentially engage in a mark-up. The revenue model for this however is non-recurring in nature and incremental at best. More recently, finance/payment companies such as Visa have started partnering directly with handset vendors such as Samsung, potentially bypassing the telcos altogether on NFC activations.

Figure 9. NFC process flow



Note: There could be other variations of NGENabled payments. For e.g., Samsung partnered with Visa for the provision of NFC mobile payment. Samsung NGENabled handsets have secured chips embedded within and can be loaded with Visa's payWave app. Participation from telco/mobile operators is not required as there is no need to purchase an operator-issued NFC SIM card.

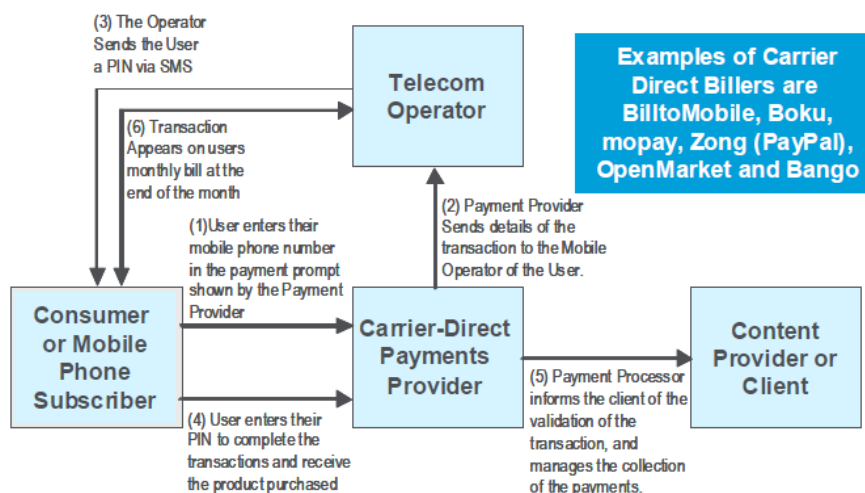
Source: Citi Research

Developed Market Model: Carrier-Direct Transaction

With post-paid subscriptions, DM telcos are able to perform carrier-direct transactions which allow the customer to use his/her mobile subscription, via the telecom operator, to purchase goods/services. Purchases are charged directly to the customer's phone bill and allow the telco and its subscribers to bypass banks and credit card companies. For a fee, telcos act as facilitators for the transaction, paying the merchant on behalf of the customer and collecting money from consumers for purchases. The key challenge for mass adoption of the service lies

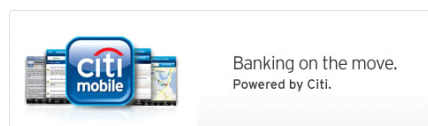
with inherent competition with more efficient financial institutions such as credit card companies or online payment companies. These may be able to offer more cost-efficient back-end services which reduce the effectiveness of telcos in scaling up carrier direct service.

Figure 10. Example of Carrier Direct Billing Process Flow



Source: Citi Research (Citi GPS: Upwardly Mobile II)

Figure 11. Citibank MobileBanking



E.g. of banking services available on mobile

- Funds transfer
- Bill payment
- Check account balance
- View last four transaction details

Source: Citi Research, Citibank

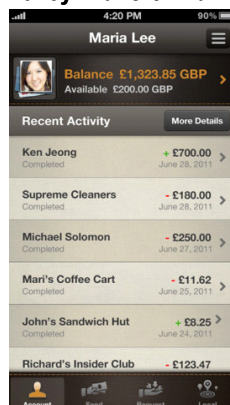
Developed Market Model : Online Transaction

The proliferation of smartphones has also raised consumers' ability to access and move money using cloud/web-based options. Online banking applications allow consumers to transact using their mobile phones. Citibank, for example, would offer a mobile application on iOS and Android which allows consumers to transact on their mobile phones. e-Commerce companies that allow money transfers such as PayPal have also evolved into the small screen, allowing mobile customers to use their smartphones as tools to facilitate transactions.

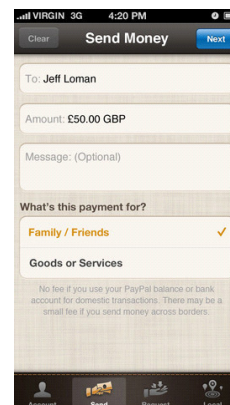
The online transaction model however is difficult to monetize for the telcos as the telcos are just used as pipes for the service. Value typically accrues to the online enablers with telcos limiting participation to just providing the data packets as provided by smartphone data plans.

Figure 12. PayPal Money Transfer & Mobile Payment Services See Telcos as Mere Providers of Data Packets

Money Transfer via Mobile

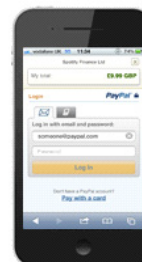
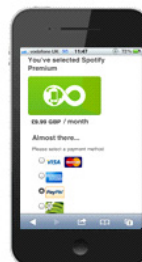
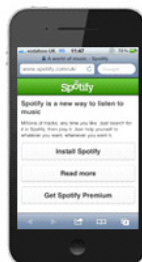


1. Select the recipient in contacts/ type email add or mobile no.



2. Enter the amt you want to send and confirm transaction with login details. A SMS or email will be received confirming money is in the designated PayPal account.

Mobile Payment



Source: Citi Research, PayPal

It is important to note that M-Commerce models using online transactions have little direct bearing on telco revenues. Revenue and value accretion from such transactions typically accrue to enablers such as PayPal for instance or credit card companies. Outside of data use which is typically packaged alongside smartphone data subscriptions, telcos have very little direct participation in such transactions.

Emerging Market Focused Models

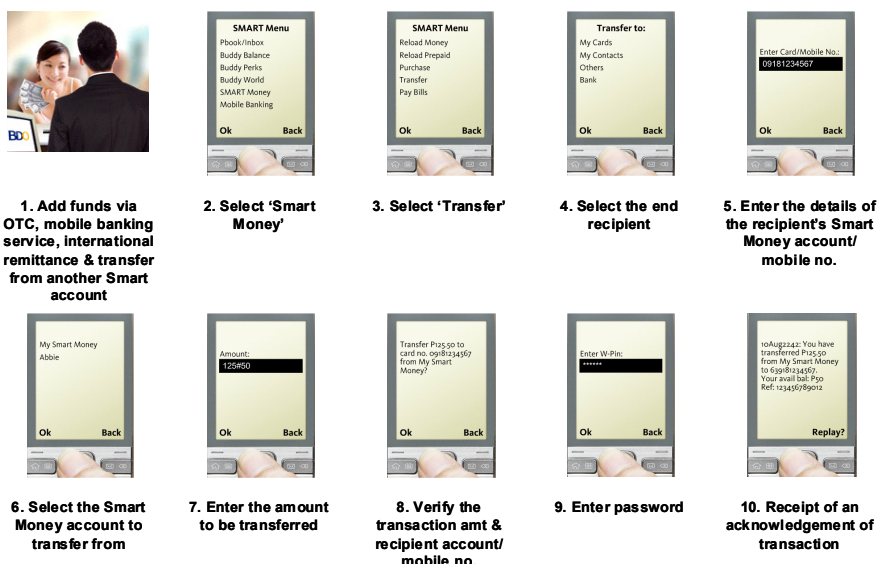
Emerging Market usage models: P2P, Bill Payment and Goods Payment.

Compared to DM telcos which tend to centre on transaction and payment services, emerging market mobile payments tend to be far less sophisticated and tend to focus more on basic money flow/remittance and payments with their handset ecosystem and financial services industries far less developed. Banking penetration in some emerging markets for instance are weak relative to mobile penetration. This allows the telcos with customer relationships to address financial needs which may not be served by traditional financial institutions due to (1) weak branch penetration or (2) non-economic transaction/deposit amounts limitation for banks. Unlike telcos which are accustomed to and built for micro-denominated transactions, financial institutions typically demand a higher level of investment.

This weak financial enablement raises opportunities for the telcos to capture a greater share of the value chain by moving the potential value capture away from typical service enablers such as the financial institutions to the telcos themselves, which can provide most of the services themselves in most cases without the need for a third party tie-up. Superior distribution networks via pre-paid network dealership models (as discussed further on page 16) allow consumers to find greater conveniences in utilizing mobile money as a means for financial inclusion.

Given that most of the EM names are feature phone dependent, mobile payment/remittance models tend to be SMS-driven. We examine how the transactions are enacted on the origination segment (illustrated by PLDT's SMART Money) and withdrawal segment (illustrated by M-PESA).

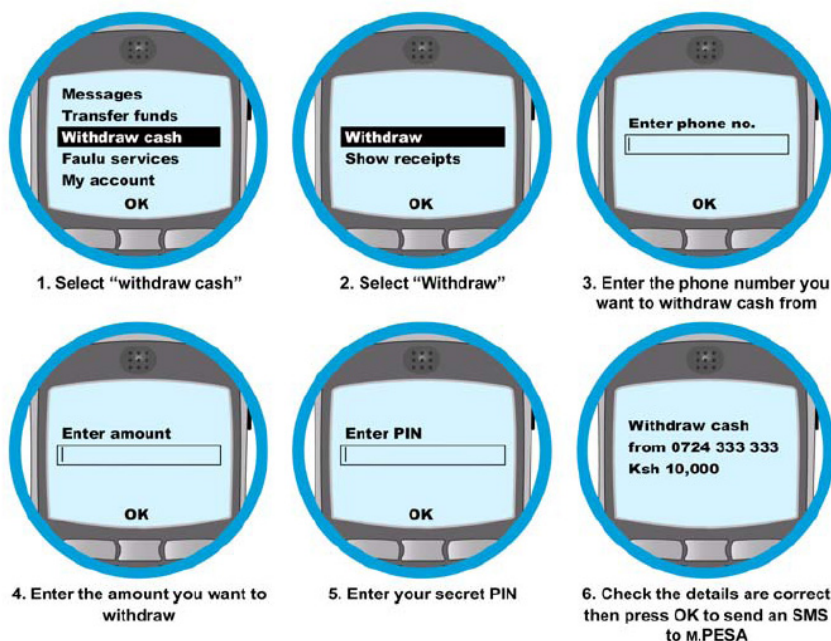
Figure 13. SMART Money Transfer Process Flow – Remittance



Source: Citi Research, PLDT/Smart Communications

As illustrated above, funds are collected then remitted via a menu based system and secured with passwords. Withdrawing the cash on the other hand is similarly simple and is executed via a menu-based SMS system.

Figure 14. M-PESA Mobile Payment Process Flow – Withdrawal from mobile wallet



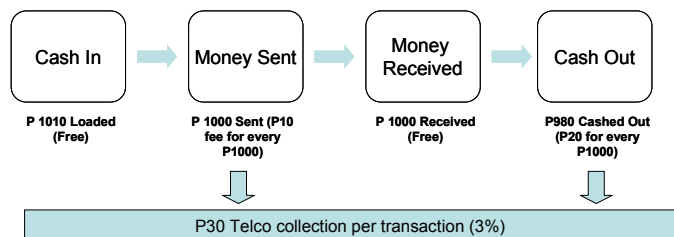
Source: M-PESA

Monetization models

Unlike DM models where the value mostly accrues to enablers on payment based transactions, EM telcos may get to retain a much more significant portion of transaction value as they execute the cash transference themselves where possible. Based on the examples illustrated below in the Philippines and in Kenya, the telcos are able to pocket c3-7% of the transaction value by charging on the outbound transaction and on the withdrawal transaction components. Telcos thus generate revenues on the frequency and size of the transactions with the revenue model premised on a service fee.

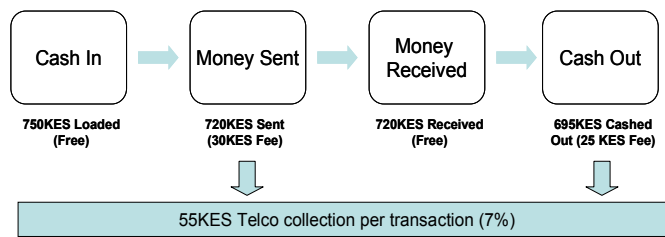
Depending on the regulatory structure of the market, some telcos may be able to derive additional interest income from the cash float retained in the consumers' mobile money wallets. This however is contingent on local market policy with some regulators disallowing telcos to expand into this.

Figure 15. Philippines: Globe Telecom GCASH Flow



Source: Citi Research

Figure 16. Kenya: Safaricom M-PESA Payment Cashflow



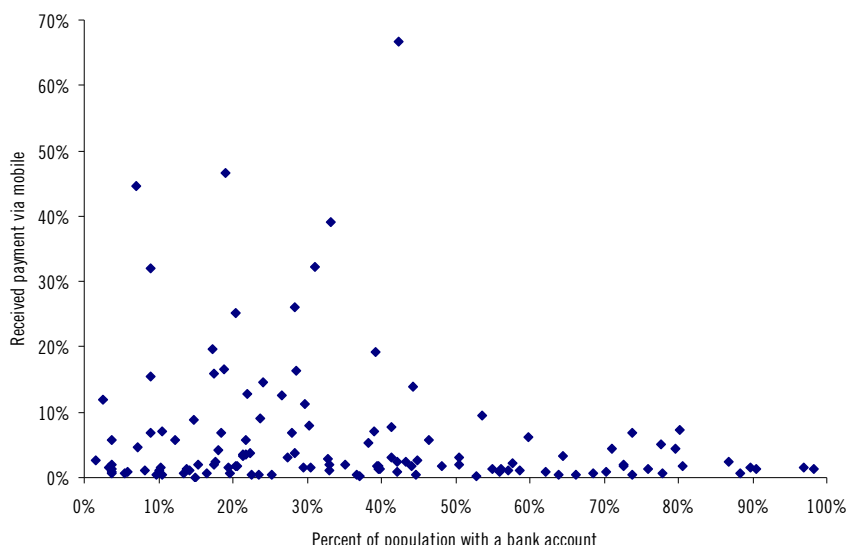
Source: Citi Research

Relationship between banks and mobile money: Where opportunities lie

Fewer bank accounts = greater mobile transfer opportunity for EM

Banking penetration plays a part in the success of mobile money transfers. Markets with low banking penetration levels tend to be the markets where mobile money transfers are most successful. Highly penetrated markets on the other hand tend to have fewer mobile money transfers given likely ease in accessing banking facilities or the availability of direct internet banking via the formal channels (via smartphone browser or banking application for instance). This is evidenced in markets like Singapore where bank accounts as a percentage of population lie at a high 98% while only 1% move money via mobile phones. Contrast this with Kenya where bank penetration lies at a mere 42% with 67% of the population availing of mobile money transfer.

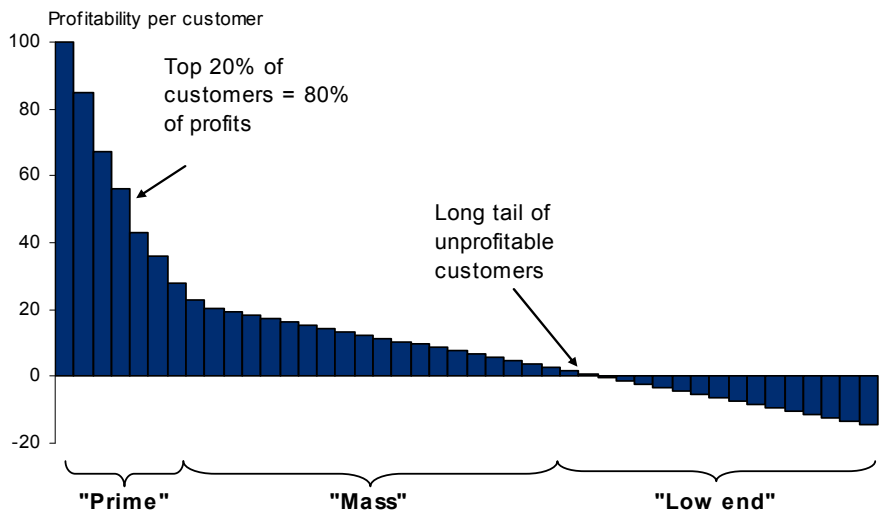
Figure 17. Banking penetration vs. mobile money transfer ratio



Source: Citi Research, World Bank

Economics point to a mobile advantage. Financial institutions may find it unattractive to reach out to the lower segment of the unbanked population given the economics of the business, especially for the emerging markets where wealth concentration is more pronounced. BCG's study on Pakistan for example indicated that the top 20% of customers account for nearly 80% of a bank's profits, leaving a "long-tail" of economically less attractive customers which the banks may not necessarily focus on. Mobile banking allows telcos to target this "long-tail" where they most likely already have ongoing client relations via traditional telecom services given much higher levels of mobile penetration. Telcos are also more accustomed to micro denominations which banks could find unwieldy. Piggybacking on existing network infrastructure, telcos can operate P2P transactions profitably, even when dealing less than US\$1 per transaction.

Figure 18. Profitability per customer in Pakistan indicates a focus on the top for financial institutions, leaving an opening for telcos to address the long tail



Source: Boston Consulting Group, Citi Research

The competitive advantage of distribution. The key advantage of mobile money models as compared to traditional financial institutions lies with their potentially superior distribution network. EM telcos typically operate on pre-paid models with high levels of dealer partnerships. These dealers are responsible for distributing both SIM cards as well as top-up services needed by the consumers. These dealers typically far exceed the number of bank branches. In Kenya, for example, where mobile money had been most successful to date, this ratio lies at 46 dealers for every bank branch. In Pakistan, there are nearly 2 Easypaisa dealers for every any 1 bank branch.

High banking penetration a problem for DM Telcos in monetizing mobile money

Opportunities on this front are far less for developed market plays given the high banking penetration levels and the availability of online banking. Telcos in this sense present little more than just a pipe since banks can deal directly with consumers through their own branch/ATM networks which are more highly proliferated or through their online banking services which can be availed through the internet or through software-based mobile applications. For transactional services, credit card companies dominate the space with their reach extending into NFC partnerships. In these cases, telcos are relegated to being just a pipe service where money is made only from the offer of data services or the sale of NFC-enabled devices.

Who is engaged in mobile money?

Telcos across the globe had started to actively evolve a mobile payment strategy. We look at the major players across the globe and their mobile payment initiatives in the following tables. We note that mobile money strategies typically cross over from mobile payments to mobile money transfers (such as remittances).

Figure 19. NFC-based Payment Initiatives of Selected Telcos (More Commonly Observed in DMs)

Company	Main market where service is made available	Type of mobile payment initiative (s)	Main partners involved (as announced)
China Mobile	China	- NFC-based service usable at POS terminals with UnionPay's "Quick Pass" or China Mobile's "Mobile Phone Wallet"	China Merchants Bank, Shanghai Pudong Development Bank, Citic, Bank of China & China Everbright Bank, Unionpay
China Unicom	China	- NFC-based mobile wallet usable at POS terminal with UnionPay's "Quick Pass"	China Merchant Bank
Etisalat	Middle East	- Flous, a NFC-based or app-based mobile wallet service	MasterCard, Oberthur
MTS	Russia	- NFC-based service leveraging on MasterCard PayPass technology	MTS Bank, MasterCard
NTT DoCoMo	Japan	- Osafu-Keitai, a NFC-based or app-based service	Sony
Orange	U.K.	- Orange Quick Tap, a NFC-based service	Barclaycard
SingTel	Singapore	- mWallet, a NFC-based service	Gemalto, DBS, EZ-Link
Telenor	Norway	- Valyou, a NFC-based mobile wallet	DNB
Telia	Sweden	- WyWallet, a NFC-based, SMS-based or app-based service	Tele2, Telenor, Three
AT&T, Verizon, T-Mobile	U.S.	- Isis Mobile Wallet, a NFC-based service	Verizon Wireless, AT&T, T-Mobile
Vodafone	Europe, Australia	- SmartPass, a NFC-based service	Visa
Sprint	U.S.	- Google Wallet, a NFC-based service	Google, Sprint, Mastercard

Source: Citi Research, Company Announcements

We note that there is a greater push for NFC-based payment initiatives in the developed market space. Telecom operators generally partner with financial institutions, other telecom operators or even device providers such as Sony in the provision of NFC-based payment services.

For non-NFC-based mobile payment/ remittance initiatives, telcos tend to be more active in the emerging market space, for example, Africa and Latin America. The mobile payment/ remittance services are usually text-based thereby allowing users to subscribe to such services even if they only have access to basic feature phones. As in the case of NFC-based payment initiatives, telco operators usually partner with other entities such as financial service corporations in the development of mobile payment services.

Several telcos, for example Singtel, offer a full suite of mobile money services from contactless payment services via NFC which is prevalent for developed markets down to international remittance services which it can extend to affiliates such as Globe Telecom which in turn can propagate its own mobile remittance service.

Figure 20. Non-NFC-based Mobile Payments/ Remittances Initiatives of Selected Telcos (More Commonly Observed in EMs)

Company	Main market where service is made available	Type of mobile payment/ remittance initiative(s)	Main partners involved (as announced)
America Movil	Latin America	- Transfer, a SMS-based service	Banamex, Banco Inbursa
Beeline	Russia	- RURU, a SMS-based or app-based service, possibly NFC-based in the future	Alfa Bank
Bharti Airtel	India, Africa	- Airtel Money, a SMS-based service	
Etisalat	Nigeria	- Easywallet, SMS-based and web-based service	Various banks such as First Bank, Zenith Bank
Globe	Philippines	- G Cash, a SMS-based or app-based service	BPI, BangKo
Indosat	Indonesia	- Dompetku	Multiple banks, Alfamart
MTN Group	Africa	- MTN MobileMoney	Fundamo
NTT DoCoMo	Japan	- DoCoMo money transfer, an app-based service	Mizuho Bank
Orange	Africa, Middle East	- Orange Money, a SMS-based money transfer service linked to bank accounts	Various banks such as Equity Bank in Kenya
PLDT	Philippines	- Smart Money, a SMS-based or app-based service	BDO
Saudi Telecom	Middle East	- Mobile payment service for VIVA users	Macalla, International Turnkey Systems
SingTel	Singapore	- mRemit, a SMS-based or OTC service, allowing remittance of money via mCash	Globe
Tata Teleservices	India	- mRupee, a SMS-based service	ICICI Bank
Telefonica (Movistar)	Latin America	- Wanda, a SMS-based service	MasterCard
Telenor	Pakistan	- Easypaisa, a SMS-based service	Tameer Micro Finance Bank
Vodafone	India	- M-PESA, a SMS-based service	ICICI Bank
Vodafone	Kenya	- M-PESA, a SMS-based service	Saficom
XL Axiata	Indonesia	- XL Tunai, a SMS-based service	Western Union, Alfamart
XL Axiata	Indonesia	- XL M-Banking, a UMB or SMS-based service	30 bank partners in Indonesia such as Mandiri, BNI, BCA, BRI, Citibank

Source: Citi Research, Company Announcements

Citi Research has produced a number of research reports on mobile money and the corresponding ecosystem. Links to these reports are found below:

[Citi GPS: DISRUPTIVE INNOVATION – Ten Things to Stop and Think About \(April 2013\)](#)

[Citi's Global E-Commerce Retail Outlook – Global Omnichannel Trends and Top Retail Picks for 2013 \(April 2013\)](#)

[Citi GPS: UPWARDLY MOBILE - An Analysis of the Global Mobile Payments Opportunity \(March 2012\)](#)

[Citi GPS: UPWARDLY MOBILE II - A Long and Winding Road for Mobile Payments – Eight Crucial Questions, Answered \(November 2012\)](#)

Who can monetize on mobile money?

It isn't about transaction value, but monetization models

A lot of telcos across the globe had articulated strategies on mobile money. Juniper Research suggests US\$670b in transaction value by 2015 while IE Market Research suggests US\$1tn in mobile money transactions by 2016. While the numbers may appear staggering, it is important to separate the transaction value from the actual potential telco *collection* value from mobile money.

Very few telcos are able to effectively monetize on the service. Developed market telcos will find it increasingly difficult to monetize on mobile money simply because of the function they are primarily used for. Value from contactless payment services such as NFC models is broadly immaterial given that value typically accrues to the enabling companies with telcos just simplistically providing the physical real estate to host the enabling companies (credit card companies for instance or the software application). Involvement in the actual transaction itself however is low with the telco service broadly disaggregated from the action, especially with smartphones. This we believe broadly demotes the role of the telco back to the "pipes" with very little value add unless they themselves are the providers of the technology.

We believe emerging market telcos however offer a much greater chance in monetizing mobile money as telcos play an active role in executing transactions. Given that the telcos themselves are the enablers to mobile money transfers such as remittances and bill payments, they are able to charge customers more meaningfully for the service. In addition, some are able to make money out of the wallet float. The challenge for the telcos would thus be generate sufficient transaction volume to actually meaningfully drive revenues.

A look at the successful EM plays. Globally, there are very few good profitable examples of mobile money with most still at infancy stages. To date, the key success story for mobile money lies with Safaricom in Kenya using the M-PESA mobile payments infrastructure (*discussed in detail in the next section*). Within 5 years of launch, M-PESA usage had extended to 15m users to date (c78% of its subs). The total value of M-PESA transactions approximate to 18% of GDP at north of US\$6b in money moved. This translated to nearly US\$200m in incremental revenue for the company. M-PESA now contributes nearly 18% of Safaricom's total revenue base.

Pakistan also saw moderate levels of success with its mobile payments platform. Telenor acquired 51% of Tameer Bank in 2008 to comply with regulatory requirements and launched its mobile payments service in 2009. Mobile money now contributes 3% of Telenor Pakistan revenues and is targeted to rise to 7% of revenues by FY15. Easypaisa's extensive distribution network outnumbered total industry bank branches 2:1, allowing it greater conveniences in serving customers.

Tanzania also saw significant mobile money uptake, contributing between 7-9% of Millicom Tanzania revenues. As with Safaricom and Telenor Pakistan, distribution/agents were widespread with the number of Millicom TigoPesa agents alone approximating the total number of bank branches within in the market.

Figure 21. Key statistics for markets with more mature mobile money platforms

	Safaricom	Millicom Tanzania	Telenor Pakistan	Millicom Paraguay
Mobile Wallets in Use	M-PESA 15m	TigoPesa 2.2m (inc. both OTC and mobile wallet users)	Easypaisa 5m (inc. both OTC and mobile wallet users)	Giros Tigo 899k (inc. both OTC and mobile wallet users)
% of operator subs using mobile wallet platform	78%	36%	16%	23%
Contribution to revenues for highlighted telco operation (%)	18%	7-9% (to Millicom Africa region revenues)	3% (of Telenor Pakistan revenues)	NA. Estimated at <1% (to Millicom Group revenues)
Main use of mobile money	Remittances, top-ups, payment service	Remittances, top-ups, payment service	Remittances, top-ups, payment service, savings	Remittances, top-ups, payment service
Mobile money revenue model	Transfer fee, withdrawal fee, money float	Transfer fee, withdrawal fee	Transfer fee, withdrawal fee	Transfer fee
Technology used	SMS-based system menu	SMS-based system menu	SMS-based system menu	SMS-based system menu
Funding model	Pre-paid at agent level or ATM	Pre-paid at agent level	Pre-paid at agent level situated at authorized shops, Tameer Microfinance Bank branches	Pre-paid at agent level
Total Agent base	46k	>10k	22k	1k
Population per agent	900	<4,700	~8,000	~6,500
Average monthly deposit via agent	KES69b (~US\$810m) per month	n.a.	n.a.	n.a.
Average monthly withdrawal via agent	KES62b (~US\$730m) per month	n.a.	n.a.	n.a.
Average monthly transaction amount	KES80b (~US\$940m) per month	n.a.	Rs14b (US\$140m) per month	n.a.

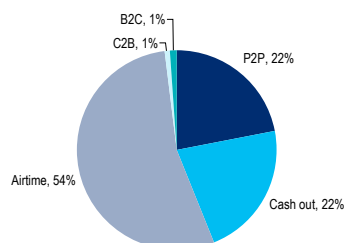
Source: Citi Research

Case Study: Vodafone in m-payments

Vodafone has seen success with its M-PESA service in Kenya and Tanzania and is now rolling out a similar model in India. For the developed markets it has set itself the blue sky aim of enabling its customers to manage without both a wallet/purse or keys by 2020, using instead their smartphone for all of these functions. The initial DM launch of a prepaid NFC payment card (Smartpass - handset sticker to follow) is to be followed by more sophisticated wallet and ticketing features. Importantly, the prepaid card will support peer to peer payments, a potentially key opportunity.

M-PESA – the emerging market transactions case study

Figure 22. Uses of M-PESA by customers



Source: Company Reports

Emerging market offerings work best where there is a large gap between mobile penetration and take up of banking services. Mobile payments have filled the gap for the unbanked with basic transaction and now savings and loan services which Vodafone and Safaricom are branding M-SHWARI.

Vodafone management says that the payments product is complex to implement, takes some time to build confidence among the customers and reach scale before going viral and requires heavy investment in back office support and also patience. As a result of the relatively high back office commitment, EBITDA margins on the service are limited to around 30%, in the case of Safaricom which offers M-PESA in Kenya, and are not expected to rise much from there. Payments now make up approaching 20% of Safaricom's revenue and the company already has 1.2m customers on its M-Shwari service. M-Shwari provides interest bearing savings accounts and micro loans to customers registered with Commercial Bank of Africa (the banking partner) via their mobile phones.

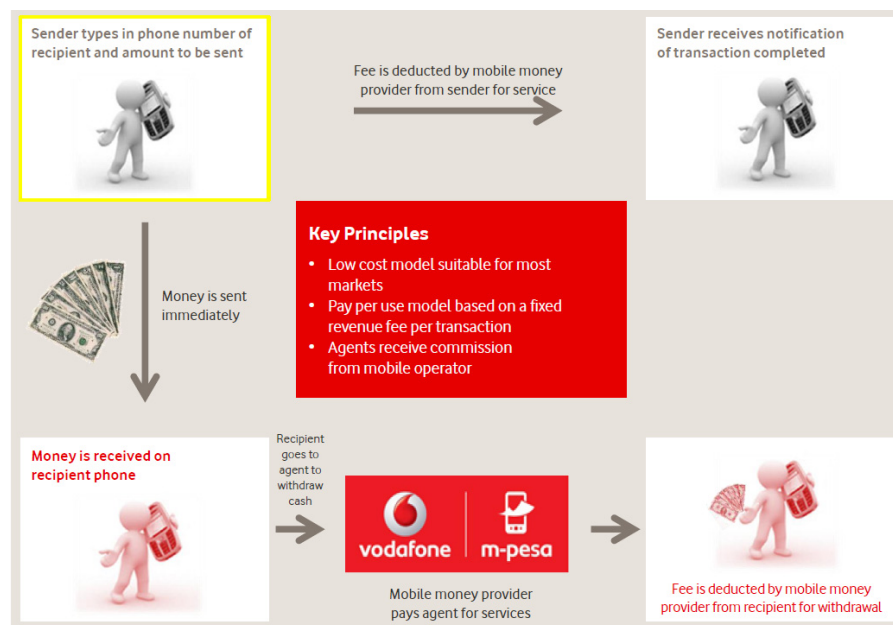
M-PESA is still growing fast with a 27% yoy increase in customers in the 8 markets where it is available. P2P transaction values amount to \$1.2b per month. Overall transactions have a mean of around \$27 (including salaries and utility bill payments) but a much lower median of about \$5-7.

In India, tighter banking regulations are a constraint, but the company sees mobility of labor and the inconvenience of remitting funds currently as a substantial opportunity and expects progress over 18-24 months.

In South Africa, by contrast, the product was not richly featured enough to perform in a market with a high penetration of bank accounts, online financial services and credit cards and with retail outlets already widely populated with electronic point of sale terminals. M-PESA is scheduled to relaunch later in the year with the interface issue with retail points of sale and banks addressed plus taking advantage of some easing of the legal rules.

However, to some extent M-PESA is still something of an exception. Vodafone so far sees it as an unambiguous success in Kenya (Safaricom) and Tanzania and regards only the offers in the Philippines and Uganda from peers as similarly successful. The model was not successful initially in South Africa as it did not interface with the more sophisticated financial services market there.

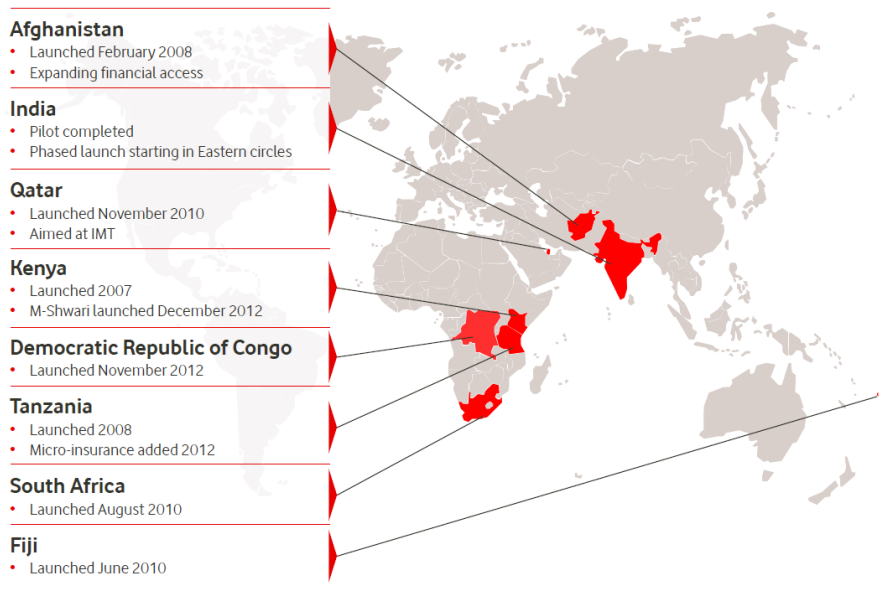
Figure 23. How does M-PESA work?



Source: Vodafone

Figure 24. M-PESA: Live Markets

M-Pesa: live markets



Source: Vodafone

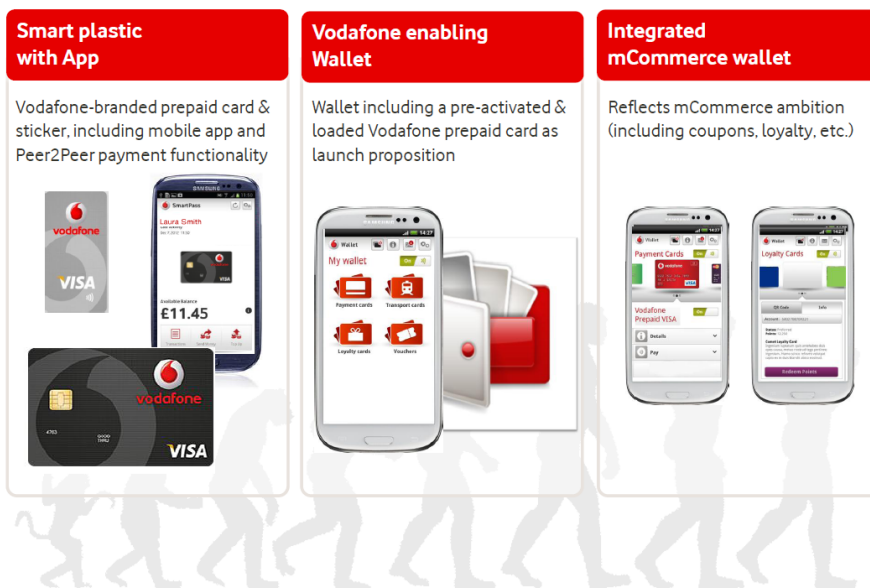
Developed world m-payments in the market

Developed markets have no need to enable a basic payments and remittance service and so m-payments need to add something new in terms of features and convenience. Vodafone argues that the industry has until recently faced a chicken or egg situation with lack of compatible handsets and absence of merchant terminals or readers for transport ticketing.

For its first product (Figure 25) it is offering a prepaid card (and, in due course, a sticker which could go on the back of a phone), with a smartphone app to control the service. Importantly, the service will include the ability to make payments peer-to-peer, filling a potentially important gap in the market.

The next step is to be an electronic wallet held in a secure environment on the SIM. This would include the Vodafone prepaid card functionality from the start and would be expanded to an integrated m-commerce wallet later on. The wallet could then include hosted electronic cards from banks plus coupons and loyalty programs from stores. We expect transport ticketing to also be an important feature given trial data showing that to be a key driver of customer adoption of NFC.

Figure 25. Step-by-step development to Vodafone's planned "integrated m-commerce wallet"

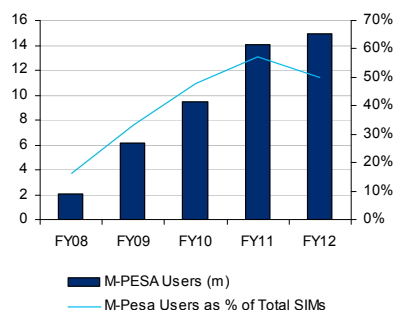


Source: Vodafone

Key success factors to monetizing mobile money for telcos

Based on the Safaricom/Telenor/Millicom experience, we identify key factors which had helped drive the success of its mobile money platform.

Figure 26. M-PESA Users Trend



Source: Citi Research, Safaricom

Significant unbanked population segment – We see significant banking penetration vs mobile penetration mismatch in Kenya. 7 years since its launch, 60% of the population currently lies unbanked vs. 77% of the population holding mobile phones. The existing customer relationship offered by the telco allows them to potentially tap into both the banked and unbanked segments by offering greater conveniences and potentially more economical money options.

Wide agent network – In Kenya's case, average distance to bank branches lay at nearly 16-17km for the unbanked population and 7-8km for those with formal banking channels. Mobile money options gave the population a viable and more accessible substitute to formal banking channels with nearly 46k dealers/agents able to receive and distribute money as compared to just 1k bank branches in Kenya. In Pakistan, EasyPaisha dealers lie at 5.5k vs. the 2.5k total bank branches in the country. Accessibility to mobile money agents thus creates a compelling reason for the wider population to take up the service instead of relying on financial institutions' branch-based model.

Domestic and international migration and remittance – Large rural-urban migrations have helped in the development of mobile remittance service. Markets like Kenya and Tanzania have seen significant movements in domestic labor which had resulted in split families. This creates some need to financially connect the families with the breadwinner.

Workable competitive pricing – Outside of simple proximity convenience, services need to be priced competitively with other formal channels. Safaricom's service fee for instance is charged based on transfer amount. For Rs2500 transfer, service fee lies at 2% as compared to 4% service fee for a comparable domestic wire transfer. EasyPaisha on the other hand charges an acceptable c3-4% service fee on average. This incentivizes consumers to opt for mobile money transfers instead of the traditional remittance channels.

Sufficient knowledge and trust in the service – Vodafone's Safaricom had committed to investing heavily to create brand awareness of the product. It had been able to leverage on the brand goodwill of Safaricom. Agents on the other hand were standardized to create uniformity, better recognition and ultimately consumer trust in an unproven service. In some ways the Philippine telcos which were early movers in mobile money had failed to do this. Problems with vanishing pre-paid load had also served to create some distrust on the service. Bulletproof security on the wallet value is thus necessary.

Favorable regulatory environment – In Kenya's case, we've seen light handed regulations which had allowed mobile money to flourish. Telcos were allowed to directly handle transactions via their agents, allowing for greater value chain capture and incentivizing the telcos to expand the business significantly to grow their revenue base. This is in contrast with other markets which require direct tie-ups with financial institutions, leading to value leakage and reduced incentive on the part of the telco. Potential solutions to this, were possible is to acquire a financial license directly such as what Telenor did in Pakistan with the acquisition of a small bank.

Where Mobile Money could work

Profitable mobile money opportunities lie primarily in the EM space primarily because of the significant gap between the mobile penetration and bank penetration needed to facilitate mobile money change,

Figure 27. Asian Mobile Money Remittance Potential

	High Mobile Penetration		Significant unbanked population*		Significant domestic labor migration**		Competitive domestic mobile remittance pricing vs. Financial institutions		Favorable regulatory environment		Potential
China	72%	▲	Low. 36% unbanked.	▼	Yes. 6% Crude Migration Intensity (CMI)	▲	No. Remittance rates are already low at 0.5%-1%. Mobile remittance at 0.15%.	▼	No. Telcos are required to tie-up with financial institutions.	▼	✗ Low. Competitive pricing and low unbanked population ratio.
India	74%	▲	65% unbanked	▲	Yes. 8% CMI	▲	Yes. Mobile remittance rate at 1-3%, vs. 5% range for money remittance service.	▲	No. Telcos need to partner with financial institutions, hampering agent growth	▼	✓✓ Moderate but regulatory environment limits value capture
Thailand	119%	▲	Low. 27% unbanked	▼	Yes, 13% CMI	▲	No. High bank penetration and very low bank remittance rates (c25bp) makes it difficult to monetize.	▼	Yes. Telcos are allowed to deal directly with consumers on mobile money.	▲	✗ Low to Moderate Benefit of unbanked target diluted by competitive pricing
Indonesia	102%	▲	Yes. 80% unbanked	▲	Yes, 8.4% CMI	▲	Yes. 1% average commission rate for mobile money vs. >3% for money remittance service	▲	Yes. Telcos have received remittance licenses from the government, reducing need to share value with financial institutions.	▲	✓✓✓ High but needs sustained operator commitment.
Philippines	105%	▲	Yes: 73% unbanked	▲	Yes, 15% CMI	▲	Yes. 7% frictional fee for traditional money remittance vs. 3% for telcos	▲	Yes. Telcos are allowed to deal directly with consumers on mobile money.	▲	✓✓✓ High but needs sustained operator commitment.
Malaysia	127%	▲	Low. 34% unbanked.	▼	Yes, 21% CMI	▲	No. 2% for Mobile money transfer vs. 1% for domestic remittance service.	▼	Yes. Telcos are allowed to deal directly with consumers on mobile money.	▲	✗ Low. Low unbanked population and competitive pricing.
Korea	110%	▲	No. 7% unbanked	▼	Yes. 12% CMI	▲	Immaterial due to high bank penetration	◀▶	Yes, for NFC.	▲	✗✗✗ Very NFC focused.
Taiwan	121%	▲	No. 13% unbanked.	▼	N/A	◀▶	Immaterial due to high bank penetration	◀▶	No. Telcos need to partner with financial institutions, hampering agent growth.	▼	✗✗✗ Very NFC focused
HK	213%	▲	No. 11% unbanked	▼	No. City-state.	◀▶	Immaterial due to high bank penetration	◀▶	Yes, for NFC.	▲	✗✗✗ Very NFC focused
Singapore	149%	▲	No. 2% unbanked.	▼	No. City-state.	◀▶	Immaterial due to high bank penetration	◀▶	Yes, for NFC and for money remittance	▲	✗✗✗ Very NFC focused
Australia	128%	▲	1% Unbanked	▼	Yes, 18% CMI	▲	Immaterial due to high bank penetration	◀▶	Yes, for NFC.	▲	✗✗✗ Very NFC focused
Japan	99%	▲	No. 4% unbanked.	▼	No. 5% CMI.	▼	Immaterial due to high bank penetration	◀▶	Yes, for NFC.	▲	✗✗✗ Very NFC focused

Source: Citi Research, UNDP

Figure 28. African Mobile Money Remittance Potential

	High Mobile Penetration		Significant unbanked population*		Significant domestic labor migration**		Competitive domestic mobile remittance pricing vs. Financial institutions		Favorable regulatory environment		Potential
Nigeria	62%	▲	Yes. 71% unbanked	▲	Yes. 30% internal migration in few selected states.	▲	No. Banking remittance charges 0.01% of amount transferred plus fixed fee of N2000. Mobile remittance charges at N1700	▼	No. Telcos are required to tie-up with financial institutions.	▼	✕ Low to Moderate Benefit of unbanked target diluted by competitive pricing and regulatory aspects
Uganda	41%	◀▶	Yes. 89% unbanked	▲	No, 5% CMI	▼	Yes. M-Money charges are lower	▲	Yes. Telcos are allowed to deal directly with consumers although customer money is deposited in a bank account.	▲	✓✓ Moderate. Mobile penetration levels are a hurdle
Tanzania	55%	◀▶	Yes. 83% unbanked	▲	Yes 14%	▲	Yes. M-Money charges are 3-140% cheaper vs. other formal and informal channels	▲	Yes. Telcos are allowed to deal directly with consumers on mobile money.	▲	✓✓✓ High but needs sustained operator commitment.
Kenya	78%	▲	Yes. 58% unbanked	▲	Yes, 13% CMI	▲	Yes. M-PESA charges are lower for small amounts and almost half for large amounts vs. other channels like Postpay and Western Union	▲	Yes. Safaricom is now providing financial services like M-SEWARI such as micro loans	▲	✓✓✓ Best in class
South Africa	131%	▲	No. Only 19% unbanked	▼	Yes, 15% CMI	▲	No. high level of banking inclusion which allows transfer at very low ratse	▼	No. Telcos are required to tie-up with financial institutions.	▼	✕ Low. Competitive pricing and low unbanked population ratio.

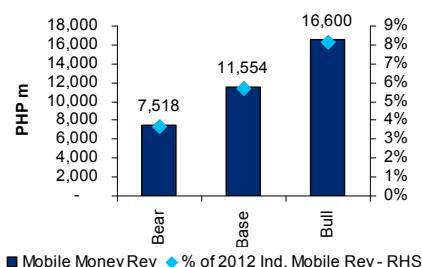
Source: Citi Research, UNDP

Figure 29. Latin America Mobile Money Remittance Potential

	High Mobile Penetration		Significant unbanked population*		Significant domestic labor migration**		Competitive domestic mobile remittance pricing vs. Financial institutions	Favorable regulatory environment	Potential
Bolivia	70%	▲	Yes ,72%	▲	Yes, 15% CMI	▲	Neutral. Domestic remittances could charge upto 5-7% vs. 5% for telcos	Yes. Regulator seeked Millicom's advice to draft MFS regulation.	✓✓✓ High but needs sustained operator commitment.
Colombia	105%	▲	Yes ,70%	▲	Yes, 20% CMI	▲	No. average remittance charge on an average is 2% vs. 8% for telcos	No. Mobile wallet is not allowed. Banking regulations are quite strict.	✗ Moderate. Benefit of unbanked target diluted by competitive pricing and regulatory aspects
Paraguay	100%	▲	Yes ,78%	▲	Yes, 26% CMI	▲	Yes. Just at 4%, P2P transfer tariffs are low at just 1%	Yes. Telcos are allowed to deal directly with consumers. Simplified KYC norms	✓✓✓ High but needs sustained operator commitment.
El Salvador	110%	▲	Yes ,86%	▲	Yes, 16% CMI	▲	Mobile remittance at 6%. Domestic remittance could go much above 2% for remittance below US\$1,000.	Yes. Telcos can offer domestic remittances with a couriers license	✓✓✓ High but needs sustained operator commitment
Guatemala	99%	▲	Yes ,78%	▲	Yes, 11% CMI	▲	Mobile remittance at 6%. Domestic remittance above 4% depending on amt of transfer.	Yes. Telcos can offer domestic remittances with a couriers license	✓✓✓ High but needs sustained operator commitment
Honduras	80%	▲	Yes ,79%	▲	Yes, 17% CMI	▲	Mobile remittance at 4%. Domestic remittance above 4% depending on amt of transfer.	No clear regulatory framework but bank-led model has been around	✓✓ Moderate. Pricing differential is not clear cut.

Source: Citi Research

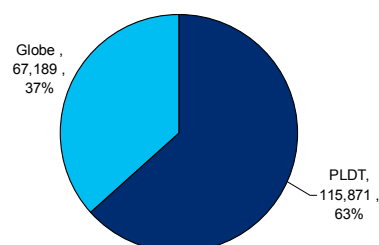
Figure 30. Philippines – Projected Mobile Money Revenues within 5 years



■ Mobile Money Rev ◆ % of 2012 Ind. Mobile Rev - RHS

Source: Citi Research

Figure 33. Philippines – Total Mobile Revenue Market Share (FY12, PHP m)



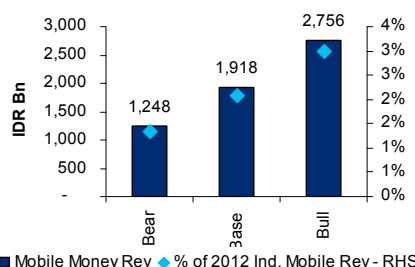
Source: Citi Research, Company Data

Figure 36. Philippines – Assumptions for Market Sizing

- Crude migration index of 15% for the derivation of number of domestic migrants in 2013
- Growth in domestic migrants of c.2.2-2.3% from 2013-2017
- Adoption rate of 37% (bear), 57% (base) and 82% (bull) by 2017
- 20% of income (using nominal GDP per capita as a proxy) being remitted
- 5% of income used for transaction (non-remittance) based mobile payments
- 3% commission fee (revenues) on the amount remitted/transacted being collected by telcos
- 50% gross profit margin for telcos

Source: Citi Research

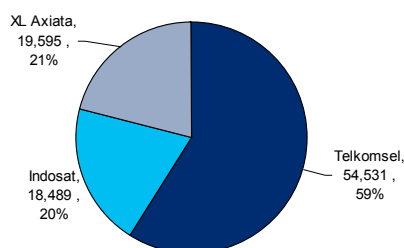
Figure 31. Indonesia – Projected Mobile Money Revenues within 5 years



■ Mobile Money Rev ◆ % of 2012 Ind. Mobile Rev - RHS

Source: Citi Research

Figure 34. Indonesia – Total Mobile Revenue Market Share (FY12, IDR b)



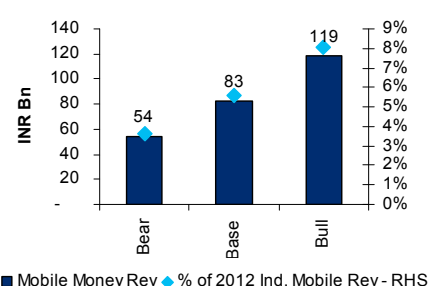
Source: Citi Research, Company Data

Figure 37. Indonesia – Assumptions for Market Sizing

- Crude migration index of 8% for the derivation of number of domestic migrants in 2013
- Growth in domestic migrants of c.2.1-2.4% from 2013-2017
- Adoption rate of 37% (bear), 57% (base) and 82% (bull) by 2017
- 20% of income (using nominal GDP per capita as a proxy) being remitted
- 5% of income used for transaction (non-remittance) based mobile payments
- 1% commission fee (revenues) on the amount remitted/transacted being collected by telcos
- 50% gross profit margin for telcos

Source: Citi Research

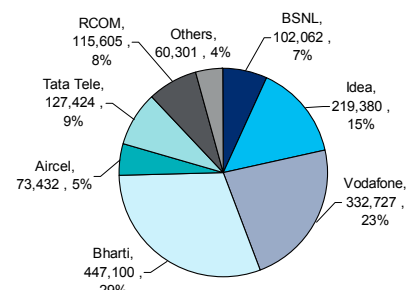
Figure 32. India – Projected Mobile Money Revenues within 5 years



■ Mobile Money Rev ◆ % of 2012 Ind. Mobile Rev - RHS

Source: Citi Research

Figure 35. India – Total Mobile Revenue Market Share



Source: Citi Research, TRAI

Figure 38. India – Assumptions for Market Sizing

- Crude migration index of 12%. This is slightly higher than the 8% CMI by state given the intra-state migration.
- Growth in domestic migrants of c.2.4-2.5% from 2013-2017
- Adoption rate of 37% (bear), 57% (base) and 82% (bull) by 2017
- 20% of income (using nominal GDP per capita as a proxy) being remitted
- 5% of income used for transaction (non-remittance) based mobile payments
- 3% commission fee (revenues) on the amount remitted/transacted being collected by telcos
- 50% gross profit margin for telcos

Source: Citi Research

Companies With Mobile Money Exposure

Company Focus

Bharti Airtel (BRTI.BO) Opportunity Within the Asian Mobile Money Space

Gaurav Malhotra, CFA
+91-22-6631-9885
gaurav.a.malhotra@citi.com

Buy	1
Price (10 Jun 13)	Rs284.00
Target price	Rs370.00
Expected share price return	30.3%
Expected dividend yield	0.6%
Expected total return	30.8%
Market Cap	Rs1,135,262M US\$19,894M

Price Performance (RIC: BRTI.BO, BB: BHARTI IN)



■ **Mobile money initiative: Airtel Money** — Bharti in India launched a mobile money service under the brand name 'Airtel Money' in 2012 in partnership with Axis Bank. It also has mobile money services in 15 markets in Africa including Kenya and Uganda where its competitor has seen a high success rate. In India, mobile money has seen limited success so far despite significant intra-country migration and lower banking penetration. We attribute this to low user awareness owing to limited marketing and promotions while we see regulations as tough but not a major hurdle. With Vodafone (having more experience in this space) also launching similar services, we see potential for these services to takeoff in India with a higher push from telcos.

■ **Regulations are high but not a deterrent** — The Indian banking regulator (RBI) has allowed for semi closed wallet which allows users to load money in their account but withdrawals can be through a banking channel only. This remains a barrier for the telcos to quickly roll out the service leveraging on their sales network. However, Bharti has overcome this through partnering with Axis bank and now has set up extensive Airtel money - Axis Bank outlet which provides cash withdrawal facility. RBI, however, has not yet allowed overseas remittances through telco channels which is a negative given the quantum of foreign remittances to India.

■ **Targeted distribution network** — Bharti has launched mobile money service at a pan India level where users can load cash on their mobile money account for activities like utilities payment or mobile to mobile money transfer etc. However, for cash withdrawal facilities (required for remittances), Bharti has developed a strong agent network of (~7000 mobile money agents) only in Mumbai and in the state of Uttar Pradesh and Bihar as these two states have the highest migrant population, mainly in Mumbai.

■ **How big a factor?** — Based on the assumptions set out in Figure 38, we estimate potential mobile remittance industry contribution margin at Rs41b by 2017 on total mobile money revenues of cRs83b. We see Bharti to be a bigger winner in this segment given its early lead while other players are still rolling out the services. Bharti should also benefit from its operations in Africa where acceptance of mobile remittances is much higher compared to India. For Bharti, we estimate mobile money could potentially generate an additional 7% to consolidated profits by FY18 from India operations alone. The glide path to this however has yet to be determined as it depends on the commitment of the company to develop the service which is still at early days.

Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2012A	42,594	11.22	-29.6	25.3	2.1	8.6	0.4
2013A	22,757	5.99	-46.6	47.4	2.1	4.4	0.4
2014E	45,257	11.92	98.9	23.8	1.9	8.3	0.6
2015E	64,896	17.09	43.4	16.6	1.8	11.1	1.5
2016E	89,080	23.46	37.3	12.1	1.6	14.1	3.6

Source: Powered by dataCentral

BRTI.BO: Fiscal year end 31-Mar						Price: Rs284.00; TP: Rs370.00; Market Cap: Rs1,135,262m; Recomm: Buy					
Profit & Loss (Rsm)	2012	2013	2014E	2015E	2016E	Valuation ratios	2012	2013	2014E	2015E	2016E
Sales revenue	714,508	803,112	879,075	929,775	978,389	PE (x)	25.3	47.4	23.8	16.6	12.1
Cost of sales	-452,849	-537,996	-574,200	-598,869	-620,885	PB (x)	2.1	2.1	1.9	1.8	1.6
Gross profit	261,659	265,116	304,875	330,906	357,503	EV/EBITDA (x)	7.4	7.1	6.2	5.4	4.7
Gross Margin (%)	36.6	33.0	34.7	35.6	36.5	FCF yield (%)	5.1	3.8	6.7	11.0	13.9
EBITDA (Adj)	237,123	248,704	279,515	310,033	342,780	Dividend yield (%)	0.4	0.4	0.6	1.5	3.6
EBITDA Margin (Adj) (%)	33.2	31.0	31.8	33.3	35.0	Payout ratio (%)	9	17	13	24	44
Depreciation	-105,454	-128,646	-140,119	-149,993	-158,259	ROE (%)	8.6	4.4	8.3	11.1	14.1
Amortisation	-28,227	-26,394	-16,359	-15,323	-14,765	Cashflow (Rsm)					
EBIT (Adj)	103,442	93,664	123,037	144,717	169,757	EBITDA	237,123	248,704	279,515	310,033	342,780
EBIT Margin (Adj) (%)	14.5	11.7	14.0	15.6	17.4	Working capital	14,863	-32,437	-24,001	-10,798	-5,451
Net interest	-38,185	-43,844	-37,338	-30,149	-20,453	Other	-26,735	-30,347	-39,410	-48,372	-58,535
Associates	0	0	0	0	0	Operating cashflow					
Non-op/Except	0	0	0	0	0	Capex	-151,357	-133,990	-130,998	-122,280	-121,739
Pre-tax profit	65,257	49,820	85,698	114,568	149,304	Net acq/disposals	-9,749	0	0	0	0
Tax	-22,602	-27,151	-39,410	-48,372	-58,535	Other	-24,985	5,226	8,725	15,774	24,967
Extraord./Min.Int./Pref.div.	-61	88	-1,031	-1,300	-1,688	Investing cashflow					
Reported net profit	42,594	22,757	45,257	64,896	89,080	Dividends paid	-4,568	-4,272	-6,836	-17,730	-44,218
Net Margin (%)	6.0	2.8	5.1	7.0	9.1	Financing cashflow					
Core NPAT	42,594	22,757	45,257	64,896	89,080	Net change in cash	-454	16,465	46,014	79,863	84,286
Per share data						Free cashflow to s/holders					
Reported EPS (Rs)	11.22	5.99	11.92	17.09	23.46		54,603	40,657	72,784	118,633	150,306
Core EPS (Rs)	11.22	5.99	11.92	17.09	23.46						
DPS (Rs)	1.00	1.00	1.60	4.15	10.35						
CFPS (Rs)	59.31	48.96	56.91	66.06	73.41						
FCFPS (Rs)	14.38	10.71	19.17	31.24	39.58						
BVPS (Rs)	133.27	138.14	148.26	160.68	172.49						
Wtd avg ord shares (m)	3,798	3,798	3,798	3,798	3,798						
Wtd avg diluted shares (m)	3,798	3,798	3,798	3,798	3,798						
Growth rates											
Sales revenue (%)	20.2	12.4	9.5	5.8	5.2						
EBIT (Adj) (%)	6.0	-9.5	31.4	17.6	17.3						
Core NPAT (%)	-29.6	-46.6	98.9	43.4	37.3						
Core EPS (%)	-29.6	-46.6	98.9	43.4	37.3						
Balance Sheet (Rsm)											
Cash & cash equiv.	38,432	54,897	100,910	180,773	265,059						
Accounts receivables	63,735	71,639	78,415	82,937	87,273						
Inventory	1,308	2,566	1,674	2,811	1,909						
Net fixed & other tangibles	710,366	716,584	708,371	681,589	646,023						
Goodwill & intangibles	660,889	634,553	618,193	602,871	588,106						
Financial & other assets	95,886	97,001	98,144	99,082	100,038						
Total assets	1,570,616	1,577,240	1,605,708	1,650,063	1,688,409						
Accounts payable	0	0	0	0	0						
Short-term debt	0	0	0	0	0						
Long-term debt	690,232	699,733	704,815	703,974	695,876						
Provisions & other liab	346,576	325,302	309,236	305,966	305,859						
Total liabilities	1,036,808	1,025,035	1,014,051	1,009,939	1,001,735						
Shareholders' equity	506,113	524,598	563,020	610,186	655,048						
Minority interests	27,695	27,607	28,638	29,938	31,626						
Total equity	533,808	552,205	591,658	640,124	686,674						
Net debt	651,800	644,836	603,904	523,201	430,817						
Net debt to equity (%)	122.1	116.8	102.1	81.7	62.7						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

Bharti Airtel

Company description

Bharti Airtel, through its group companies, provides cellular-phone services in all of India's 23 telecom circles. The group also provides fixed-line phone services, broadband, long-distance and enterprise services. Major shareholders are Bharti Telecom, SingTel and Vodafone.

Investment strategy

We rate Bharti shares as Buy with a target price of Rs370. While value accretion in Africa will be challenging, the key stock driver continues to be the domestic India business, which is improving. Competition has started to decline among local telcos and muted spectrum bidding reduces the potential for regulatory hits. In addition, reduced sub acquisition costs and stringent activation rule should help EBITDA.

Valuation

Our target price for Bharti of Rs370 comprises: (i) Core business value of Rs366/sh based on Sep-14E DCF; (ii) We estimate value depletion from Africa acquisition at Rs18/sh; (iii) We add the towerco value (100% Infratel + 42% of Indus) at Rs85/sh; and (iv) We reduce the potential cash outgo (Rs63/sh). The DCF is based on a WACC of 11.4%, a terminal growth rate of 3% and beta of 0.7. We prefer DCF as peak capex burden is behind the company and it should start to generate significant free cash flows. The target price is equivalent to Mar-14E EV/EBITDA of 7.3x, P/CEPS of 7.0x, and P/E of 31.1x.

Risks

The key risks to our investment thesis which could prevent the shares from reaching our target price include: 1) a slower-than-expected turnaround in Africa, which would result in greater value depletion; 2) the India business not improving due either to sustained high competition between existing operators or price disruption in voice by Reliance Industries (as and when it enters); and 3) Adverse regulatory rulings/policies.

Company Focus

Arthur Pineda

+65-6657-1174

arthur.pineda@citi.com

Buy	1
Price (10 Jun 13)	Rp5,300
Target price	Rp6,300
Expected share price return	18.9%
Expected dividend yield	0.6%
Expected total return	19.4%
Market Cap	Rp28,799,848M
	US\$2,937M

Price Performance (RIC: ISAT.JK, BB: ISAT IJ)



Indosat (ISAT.JK)

Passiveness Had Limited Take-up Although Potential Remains

■ **Mobile money initiative: Dompetku** — Indosat launched its mobile money initiative known as Dompetku in 2008. We estimate take-up levels to be muted at c300k vs. Telkomsel's reported 6mn given its follower approach to the business so far as it waits for the industry to mature further. Recent industry moves towards operator interoperability of mobile money services across the big 3 Indonesian operators however should serve to accelerate service take-up by lowering barriers to the service and raising network pull effects.

■ **Indonesian regulators have empowered the telcos by granting them remittance licenses** — On top of its own dealer network, Indosat had also partnered with multiple bank partners as well as Alfamart and other retailers to increase distribution points. With increasing competitor and banking regulator push for mobile remittances and payments, we expect Indosat will also refine its strategy in this space.

■ **Indosat as a bigger beneficiary vs. Telkom** — Similar to XL, Indosat offers a purer play in mobile operations, unlike Telkom which is saddled with a bigger fixed line component. Management indicated in the press (*Indonesia Finance*) that it targets to grow the service to 3m users by FY13 with a longer-term target of 50% of its subscriber base using its mobile money solution. Previous slow take-up was linked to Indosat not materially investing in customer acquisition and usage stimulation. Similar to XL, given the interoperability within operators, Indosat should benefit as it allows their users to access wider base of the bigger operator - Telkomsel.

■ **How big a factor?** — Indonesia mobile money penetration levels currently rank the lowest among the Asian markets we cover with <2% regularly using their phones for mobile money service. The gap between mobile penetration and bank penetration on the other hand ranks the highest among the Asian markets. Based on our estimates, Indonesia may see Rp1.9tr in mobile money revenues assuming increased service maturity and consumer awareness/adoption. This in turn allows for potential Rp959b in EBITDA accretion with very little investment required. Indosat has not articulated any plans, strategies or targets on mobile money to date. Assuming that Indosat will get fair share of its mobile money revenues as defined by its subscriber market share, we believe mobile money can potentially generate an additional 7% to Indosat's earnings by FY17 depending on the development commitment of the industry players. Under this scenario, profit contribution from mobile money will be highest for Indosat given its relatively thinner net profit margins owing to high financial charges.

Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Dec	(RpB)	(Rp)	(%)	(x)	(x)	(%)	(%)
2011A	943	174	211.7	30.5	1.6	5.2	1.7
2012A	1,646	303	74.6	17.5	1.5	8.8	0.7
2013E	1,565	288	-4.9	18.4	1.5	8.3	0.6
2014E	1,885	347	20.4	15.3	1.4	9.6	2.6
2015E	2,322	427	23.2	12.4	1.3	11.0	4.2

Source: Powered by dataCentral

ISAT.JK: Fiscal year end 31-Dec						Price: Rp5,300; TP: Rp6,300; Market Cap: Rp28,799,848m; Recomm: Buy					
Profit & Loss (Rpb)	2011	2012	2013E	2014E	2015E	Valuation ratios	2011	2012	2013E	2014E	2015E
Sales revenue	20,529	22,419	23,940	25,631	26,939	PE (x)	30.5	17.5	18.4	15.3	12.4
Cost of sales	-4,541	-4,815	-4,873	-5,199	-5,434	PB (x)	1.6	1.5	1.5	1.4	1.3
Gross profit	15,988	17,604	19,066	20,432	21,504	EV/EBITDA (x)	5.2	4.4	3.9	3.6	3.4
Gross Margin (%)	77.9	78.5	79.6	79.7	79.8	FCF yield (%)	4.4	4.2	5.1	5.8	10.0
EBITDA (Adj)	9,664	10,540	11,068	11,741	12,370	Dividend yield (%)	1.7	0.7	0.6	2.6	4.2
EBITDA Margin (Adj) (%)	47.1	47.0	46.2	45.8	45.9	Payout ratio (%)	51	11	11	40	52
Depreciation	-6,558	-8,273	-8,416	-7,923	-7,439	ROE (%)	5.3	2.0	1.8	7.7	11.4
Amortisation	0	0	0	0	0	Cashflow (Rpb)	2011	2012	2013E	2014E	2015E
EBIT (Adj)	3,106	2,267	2,652	3,818	4,930	EBITDA	9,664	10,540	11,068	11,741	12,370
EBIT Margin (Adj) (%)	15.1	10.1	11.1	14.9	18.3	Working capital	2	-1,257	256	237	122
Net interest	-1,837	-1,944	-1,718	-1,720	-1,651	Other	-2,346	-2,294	-1,762	-2,161	-2,391
Associates	0	0	0	0	0	Operating cashflow	7,320	6,989	9,562	9,816	10,101
Non-op/Except	62	138	-333	92	106	Capex	-6,048	-5,766	-8,095	-8,157	-7,229
Pre-tax profit	1,331	462	601	2,189	3,386	Net acq/disposals	7	3,100	0	0	0
Tax	-265	26	-150	-547	-846	Other	3	-23	0	0	0
Extraord./Min.Int./Pref.div.	-98	-112	-118	-124	-130	Investing cashflow	-6,038	-2,689	-8,095	-8,157	-7,229
Reported net profit	969	375	333	1,518	2,409	Dividends paid	-324	-417	-188	-166	-759
Net Margin (%)	4.7	1.7	1.4	5.9	8.9	Financing cashflow	-1,135	-2,647	98	-842	-2,502
Core NPAT	943	1,646	1,565	1,885	2,322	Net change in cash	147	1,653	1,566	817	370
Per share data	2011	2012	2013E	2014E	2015E	Free cashflow to s/holders	1,272	1,224	1,467	1,659	2,872
Reported EPS (Rp)	178	69	61	279	443						
Core EPS (Rp)	174	303	288	347	427						
DPS (Rp)	89	35	31	140	222						
CFPS (Rp)	1,347	1,286	1,760	1,806	1,859						
FCFPS (Rp)	234	225	270	305	529						
BVPS (Rp)	3,407	3,471	3,498	3,747	4,050						
Wtd avg ord shares (m)	5,434	5,434	5,434	5,434	5,434						
Wtd avg diluted shares (m)	5,434	5,434	5,434	5,434	5,434						
Growth rates	2011	2012	2013E	2014E	2015E						
Sales revenue (%)	3.7	9.2	6.8	7.1	5.1						
EBIT (Adj) (%)	-9.7	-27.0	17.0	44.0	29.2						
Core NPAT (%)	211.7	74.6	-4.9	20.4	23.2						
Core EPS (%)	211.7	74.6	-4.9	20.4	23.2						
Balance Sheet (Rpb)	2011	2012	2013E	2014E	2015E						
Cash & cash equiv.	2,224	3,917	5,377	6,088	6,352						
Accounts receivables	1,500	2,039	2,177	2,331	2,450						
Inventory	6	22	24	26	27						
Net fixed & other tangibles	45,886	41,511	41,412	41,869	41,882						
Goodwill & intangibles	1,367	1,374	1,367	1,359	1,352						
Financial & other assets	2,250	6,362	6,304	6,264	6,184						
Total assets	53,233	55,225	56,661	57,937	58,247						
Accounts payable	6,723	6,004	6,506	7,021	7,364						
Short-term debt	4,842	4,298	4,305	3,327	1,289						
Long-term debt	18,564	17,690	18,624	19,158	19,668						
Provisions & other liab	4,135	7,837	7,567	7,298	7,011						
Total liabilities	34,264	35,830	37,002	36,803	35,332						
Shareholders' equity	18,515	18,861	19,007	20,358	22,009						
Minority interests	454	534	652	776	906						
Total equity	18,969	19,395	19,658	21,134	22,914						
Net debt	21,182	18,071	17,553	16,396	14,605						
Net debt to equity (%)	111.7	93.2	89.3	77.6	63.7						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citigroup.com
For definitions of the items in this table, please click [here](#).

Indosat

Company description

Indosat is the second-largest wireless service provider in Indonesia by subscribers, operating a GSM network on the 900/1800/2100 band. In 2012 it also was awarded a license to deploy 3G services on 900MHz. It also provides international long distance services, domestic long distance services (since 2003), fixed wireless services (since 2004), and broadband & narrowband fixed data services. Indosat is listed on the Indonesia Stock Exchange and has ADRs listed on the New York Stock Exchange.

Investment strategy

We rate Indosat shares as Buy (1) with a target price of Rp6,300. The company is witnessing strong operating improvements ahead of peers while investments in data networks will allow it to compete with peers on equal footing, where it had lagged in the past. Company also owns significant spectrum in crucial 900MHz and 1800Mhz spectrum which puts it in a advantageous position in terms of capex savings. Valuations also remain one of the lowest in the regional context and are 1 std dev below long-term mean.

Valuation

Our target price of Rp6,300 for Indosat is based on an NPV-derived fair value post tower sales of Rp6,050 and a 5% stake in Tower Bersama at Rp250 (at market value). Our fair value of Rp6,050 values Indosat on a FY13E DCF basis using 11.0% WACC and 1.25% terminal growth rate. We estimate WACC using a 7% risk free rate, 1.0x beta, 6% equity risk premium. At our target price, Indosat would trade at 4.7x EV/EBITDA.

Risks

Downside risks that could result in the shares trading below our target price include: (1) faster-than-anticipated capex and resultant higher network opex, depreciation and financing charges related EBITDA margin and net profit margin compression (2) intense competition led by smaller operators (3) sharp depreciation in Indonesian Rupiah.

Company Focus

Simon Weeden

+44-20-7986-4204

simon.weeden@citi.com

Laurie Fitzjohn-Sykes, CFA

+44-20-7986-4114

laurie.fitzjohnsykes@citi.com

Buy	1
Price (10 Jun 13)	SKr513.50
Target price	SKr645.00
Expected share price return	25.6%
Expected dividend yield	3.3%
Expected total return	28.9%
Market Cap	SKr49,104M
	US\$7,489M

Price Performance

(RIC: MICsdb.ST, BB: MIC SS)



Millicom Intl Cellular (MICsdb.ST) Financial Services Is a Key Growth Driver

- **Millicom is ahead on financial services** — Millicom has now launched mobile financial services (MFS) in most of its markets. Currently 12.5% of customers use MFS and it was 1% of group revenue in 2012. Though in more mature markets like Tanzania 40% of customers use MFS and it is already 7-9% of revenue. Currently this is mainly basic domestic transfers, but Millicom plans to introduce more complex financial services in time.
- **Supportive regulation** — Millicom currently has supportive regulation in the majority of its markets. Millicom operates under a courier's license similar to Western Union, and therefore does not need a banking license and so cannot pay interest or do more complex services beyond basic transfers. Millicom does need to confirm to KYC and AML regulations. Examples of the supportive regulation are in DRC and Bolivia the regulator asked Millicom's advice on drafting MFS regulation. In Paraguay the banks lobbied the regulator to require all Millicom MFS customers to have a bank account; Millicom then explained the benefits of MFS for the economy, shown by Kenya, and the regulator then dropped plans for further regulation.
- **Current economic model** — Millicom currently enables domestic remittances. The broad economic model is as follows for a cash transfer: the customer pays 4% commission, 1% of this is paid to the cash-in agent, 1% to the cash-out agent. Or for peer to peer transfers only 1% is charged, with no fees to agents.
- **When to introduce interoperability** — Enabling customers to transfer money across networks (interoperability) will be a key factor to enabling growth of MFS in markets with an even split of market share. Millicom believes this will benefit all players in the market, but is also careful of introducing interoperability too soon since it will provide a benefit to the smaller operators who have not already invested in MFS.
- **How big a factor?** — MFS is a key driver of growth for Millicom. Millicom targets growing revenue from MFS from \$40m in 2012 (1% of group) to \$600m-\$1b in 2017 (7-11% of group). We forecast MFS driving 15-25% of the group EBITDA growth from 2012-17.

Millicom Intl Cellular (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales (\$M)	4,530.0	4,814.0	5,261.3	5,753.3	6,464.0
Net Income (\$M)	900.0	508.0	525.5	563.9	652.6
Diluted EPS (\$)	8.65	5.01	5.28	5.67	6.56
Diluted EPS (Old) (\$)	8.65	5.01	5.28	5.67	6.56
PE (x)	9.0	15.6	14.8	13.8	11.9
EV/EBITDA (x)	4.3	4.4	4.9	4.5	4.2
DPS (\$)	5.40	2.64	4.22	5.10	6.56
Net Div Yield (%)	6.9	3.4	5.4	6.5	8.4

MICSdb.ST: Fiscal year end 31-Dec						Price: SKr513.50; TP: SKr645.00; Market Cap: SKr49,104m; Recomm: Buy					
Profit & Loss (US\$m)	2011	2012	2013E	2014E	2015E	Valuation ratios	2011	2012	2013E	2014E	2015E
Sales revenue	4,530	4,814	5,261	5,753	6,464	PE (x)	9.0	15.6	14.8	13.8	11.9
Cost of sales	-1,006	-1,133	-1,639	-1,798	-2,085	PB (x)	3.2	3.3	3.2	3.1	2.9
Gross profit	3,524	3,681	3,623	3,955	4,379	EV/EBITDA (x)	4.3	4.4	4.9	4.5	4.2
Gross Margin (%)	77.8	76.5	68.9	68.7	67.7	FCF yield (%)	10.5	7.4	1.2	6.8	8.7
EBITDA (Adj)	2,087	2,065	1,939	2,114	2,311	Dividend yield (%)	6.9	3.4	5.4	6.5	8.4
EBITDA Margin (Adj) (%)	46.1	42.9	36.9	36.7	35.7	Payout ratio (%)	62	53	80	90	100
Depreciation	-739	-811	-840	-857	-864	ROE (%)	33.0	21.2	21.9	22.5	25.0
Amortisation	22	-6	0	0	0	Cashflow (US\$m)					
EBIT (Adj)	1,348	1,254	1,099	1,258	1,446	EBITDA	1,974	1,921	1,779	1,951	2,144
EBIT Margin (Adj) (%)	29.8	26.0	20.9	21.9	22.4	Working capital	15	84	-50	-50	0
Net interest	-172	-206	-229	-252	-249	Other	-377	-420	-477	-516	-560
Associates	0	0	0	0	0	Operating cashflow					
Non-op/Except	-14	-1	0	0	0	Capex	-756	-1,001	-1,159	-857	-909
Pre-tax profit	1,071	897	710	842	1,031	Net acq/disposals	107	-55	30	0	-450
Tax	19	-393	-248	-264	-311	Other	33	-38	0	0	0
Extraord./Min.Int./Pref.div.	-165	4	63	-14	-68	Investing cashflow					
Reported net profit	925	508	525	564	653	Dividends paid	-551	-558	-333	-496	-590
Net Margin (%)	20.4	10.6	10.0	9.8	10.1	Financing cashflow					
Core NPAT	900	508	525	564	653	Net change in cash	-1,164	-180	-333	-496	-340
Per share data						Free cashflow to s/holders					
Reported EPS (\$)	8.89	5.01	5.28	5.67	6.56	856	584	93	528	676	
Core EPS (\$)	8.65	5.01	5.28	5.67	6.56						
DPS (\$)	5.40	2.64	4.22	5.10	6.56						
CFPS (\$)	15.50	15.63	12.58	13.91	15.92						
FCFPS (\$)	8.23	5.76	0.93	5.30	6.79						
BVPS (\$)	24.11	23.49	24.79	25.62	26.92						
Wtd avg ord shares (m)	104.0	101.4	99.5	99.5	99.5						
Wtd avg diluted shares (m)	104.0	101.4	99.5	99.5	99.5						
Growth rates											
Sales revenue (%)	15.6	6.3	9.3	9.4	12.4						
EBIT (Adj) (%)	15.8	-7.0	-12.3	14.4	15.0						
Core NPAT (%)	47.1	-43.6	3.4	7.3	15.7						
Core EPS (%)	53.3	-42.1	5.4	7.3	15.7						
Balance Sheet (US\$m)											
Cash & cash equiv.	881	1,174	964	996	881						
Accounts receivables	277	322	372	422	422						
Inventory	0	0	0	0	0						
Net fixed & other tangibles	3,335	3,521	3,810	3,811	3,856						
Goodwill & intangibles	2,170	2,419	2,419	2,419	2,869						
Financial & other assets	619	775	775	775	775						
Total assets	7,282	8,211	8,340	8,423	8,803						
Accounts payable	436	436	436	436	436						
Short-term debt	621	693	693	693	693						
Long-term debt	1,817	2,566	2,566	2,566	2,816						
Provisions & other liab	1,962	2,180	2,180	2,180	2,180						
Total liabilities	4,836	5,875	5,875	5,875	6,125						
Shareholders' equity	2,446	2,336	2,465	2,548	2,678						
Minority interests	0	0	0	0	0						
Total equity	2,446	2,336	2,465	2,548	2,678						
Net debt	1,557	2,085	2,295	2,263	2,628						
Net debt to equity (%)	63.7	89.3	93.1	88.8	98.1						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

Millicom Intl Cellular

Company description

Millicom is a mobile operator in 13 countries with over 30m customers. In Central America (40% of revenues), it is the market leader in El Salvador, Guatemala and Honduras. In South America (32% of revenues) Millicom is market leader in Paraguay, 2nd in Bolivia and the 3rd in Colombia. In Africa (23% of revenues) it is the number 2 or 3 player in 6 markets.

Investment strategy

We rate Millicom Buy. We argue that Millicom offers strong growth prospects from a diversified collection of emerging market assets. Growth is being driven by rising penetration, take-up of mobile data and strong macro growth, and longer term value-added services such as mobile payments could be a significant contributor to growth. No asset is greater than 15% of the group, reducing regulatory and political risk. In addition, Millicom has a strong management team with a history of returning cash to shareholders.

Valuation

We value Millicom at SKr 645 per share based on a SOTP model cross-checked with a DCF analysis. In our SOTP, we value assets from 4x 2013e EV/EBITDA for DRC to 10.0x for Cable. Our DCF valuation has a WACC of 12.9% and perpetuity growth rate of 1.5%.

Risks

We see two reasons why the share price could underperform our target. First, Millicom is a relatively small player usually competing against better funded and bigger operators. The risk is that these larger operators decide to use their relative balance sheet strength to squeeze Millicom's market share positions. Second, there is the risk that governments try to raise additional taxes or confiscate Millicom's licenses. On the positive side, there are two reasons why the share price may do better than we forecast. First, as a small high growth player, Millicom could be an attractive take-over target. Second, management has historically executed well on the business plan, beating street expectations. This trend may continue going forward. If the impact on the company from any of these factors proves to be greater/less than we anticipate, we believe the stock will likely have difficulty achieving our target price or could outperform it.

Company Focus

Mobile Telesystems OJSC (MBT) Untapped Credit Market Opportunities

Dalibor Vavruska

+44-20-7986-4276
dalibor.vavruska@citi.com

Buy	1
Price (10 Jun 13)	US\$18.22
Target price	US\$23.10
Expected share price return	26.8%
Expected dividend yield	6.9%
Expected total return	33.6%
Market Cap	US\$18,119M

Price Performance

(RIC: MBT.N, BB: MBT US)



- **Mobile money initiatives: MTS Dengi** — MTS partnered with MTS Bank in 2011, announcing an acquisition of a 25% stake in MTS Bank in October 2012, targeting to tap into the underpenetrated credit market of Russia, leveraging the strong brand name, retail network of 4400 stores, subscriber data and their payment history. Russia remains predominantly a cash society with over 90% of the value of payments exchanged in cash; penetration of credit cards is low at approximately 15%. At the end of 2012 MTS Dengi had c1.2m credit cards, other products include NFC payment via enabled SIM cards. MTS and its peers also offer mobile payments solutions, where customers can use either deposits on mobile account or their bank card to pay for services, including utility bills and some types of transport. VimpelCom estimates mobile payments contribute less than 1% of total revenue in Russia having been launched only 1.5 yrs ago.
- **Regulatory hurdles** — Anti-money laundering and know-your-client rules apply to transactions exceeding Rub 15 thousands. Banking license is required for provision of financial services, including credit and lending. Mobile payment regulation is nascent, the regulation to cap fees to 1% for small payments is currently being considered by the government. Credit and lending require a banking license and fall under the Russian banking regulations.
- **Distribution network** — MTS Dengi is available in all 4400 retail shops of MTS, which has the second largest distribution network behind a quasi independent retailer, Euroset. 71m mobile customers of MTS are potential users of the services. Payment solutions are also available online via operators' website.
- **How big a factor?** — MTS and MTS Bank have an agreement to share net proceeds at a 30:70 ratio. MTS expects financial products to contribute at least 5% of net earnings by 2017.

Mobile Telesystems OJSC (USD)

Year to 31 Dec	2010A	2011A	2012E	2013E	2014E
Sales (\$M)	11,293.2	12,318.7	12,918.5	13,305.3	14,472.8
Net Income (\$M)	1,381.4	1,443.9	1,723.1	1,818.8	2,067.2
Diluted EPS (\$)	1.44	1.47	1.67	1.76	2.00
Diluted EPS (Old) (\$)	1.44	1.47	1.67	1.76	2.00
PE (x)	12.6	12.4	10.9	10.3	9.1
EV/EBITDA (x)	4.9	4.8	4.6	4.4	4.0
DPS (\$)	1.04	1.01	1.25	1.41	1.70
Net Div Yield (%)	5.7	5.5	6.9	7.7	9.3

MBT.N: Fiscal year end 31-Dec						Price: US\$18.22; TP: US\$23.10; Market Cap: US\$18,119m; Recomm: Buy					
Profit & Loss (US\$m)	2010	2011	2012E	2013E	2014E	Valuation ratios	2010	2011	2012E	2013E	2014E
Sales revenue	11,293	12,319	12,918	13,305	14,473	PE (x)	12.6	12.4	10.9	10.3	9.1
Cost of sales	-2,989	-3,536	-3,809	-3,905	-4,247	PB (x)	5.6	5.2	4.5	4.0	3.5
Gross profit	8,305	8,783	9,109	9,400	10,225	EV/EBITDA (x)	4.9	4.8	4.6	4.4	4.0
Gross Margin (%)	73.5	71.3	70.5	70.7	70.7	FCF yield (%)	5.4	6.5	6.9	9.9	9.4
EBITDA (Adj)	4,873	5,144	5,339	5,423	5,927	Dividend yield (%)	5.7	5.5	6.9	7.7	9.3
EBITDA Margin (Adj) (%)	43.1	41.8	41.3	40.8	41.0	Payout ratio (%)	72	69	75	80	85
Depreciation	-2,137	-2,335	-2,441	-2,509	-2,608	ROE (%)	42.7	43.7	45.0	41.0	41.3
Amortisation	0	0	0	0	0	Cashflow (US\$m)	2010	2011	2012E	2013E	2014E
EBIT (Adj)	2,735	2,809	2,898	2,914	3,319	EBITDA	4,873	5,144	5,339	5,423	5,927
EBIT Margin (Adj) (%)	24.2	22.8	22.4	21.9	22.9	Working capital	-48	90	-73	-65	-176
Net interest	-693	-594	-620	-580	-548	Other	-1,040	-1,261	-1,173	-1,094	-1,250
Associates	0	0	0	0	0	Operating cashflow	3,785	3,973	4,093	4,265	4,500
Non-op/Except	24	-115	38	110	7	Capex	-2,842	-2,804	-2,784	-2,410	-2,728
Pre-tax profit	2,066	2,099	2,316	2,445	2,778	Net acq/disposals	0	0	0	0	0
Tax	-517	-532	-588	-621	-705	Other	661	249	0	0	0
Extraord./Min.Int./Pref.div.	-168	-124	-4	-5	-5	Investing cashflow	-2,182	-2,555	-2,784	-2,410	-2,728
Reported net profit	1,381	1,444	1,723	1,819	2,067	Dividends paid	-976	-1,240	-1,032	-1,292	-1,455
Net Margin (%)	12.2	11.7	13.3	13.7	14.3	Financing cashflow	-3,204	-394	-1,609	-1,808	-1,632
Core NPAT	1,381	1,444	1,723	1,819	2,067	Net change in cash	-1,601	923	-301	46	140
Per share data	2010	2011	2012E	2013E	2014E	Free cashflow to s/holders	943	1,169	1,308	1,855	1,772
Reported EPS (\$)	1.44	1.47	1.67	1.76	2.00						
Core EPS (\$)	1.44	1.47	1.67	1.76	2.00						
DPS (\$)	1.04	1.01	1.25	1.41	1.70						
CFPS (\$)	3.95	4.03	3.96	4.13	4.36						
FCFPS (\$)	0.98	1.19	1.27	1.79	1.72						
BVPS (\$)	3.26	3.53	4.04	4.55	5.14						
Wtd avg ord shares (m)	958	985	1,033	1,033	1,033						
Wtd avg diluted shares (m)	958	985	1,033	1,033	1,033						
Growth rates	2010	2011	2012E	2013E	2014E						
Sales revenue (%)	14.5	9.1	4.9	3.0	8.8						
EBIT (Adj) (%)	7.0	2.7	3.2	0.6	13.9						
Core NPAT (%)	36.2	4.5	19.3	5.6	13.7						
Core EPS (%)	-46.4	1.7	13.8	5.6	13.7						
Balance Sheet (US\$m)	2010	2011	2012E	2013E	2014E						
Cash & cash equiv.	1,262	1,937	1,636	1,683	1,823						
Accounts receivables	801	868	910	937	1,019						
Inventory	320	291	305	314	342						
Net fixed & other tangibles	7,972	8,205	8,548	8,449	8,569						
Goodwill & intangibles	2,818	2,708	2,708	2,708	2,708						
Financial & other assets	1,306	1,308	1,328	1,360	1,431						
Total assets	14,478	15,318	15,437	15,452	15,893						
Accounts payable	629	799	799	799	799						
Short-term debt	768	1,161	985	469	292						
Long-term debt	6,393	7,554	7,154	7,154	7,154						
Provisions & other liab	2,445	2,153	2,153	2,153	2,153						
Total liabilities	10,234	11,667	11,090	10,575	10,398						
Shareholders' equity	3,125	3,482	4,173	4,699	5,311						
Minority interests	1,119	169	174	178	183						
Total equity	4,244	3,651	4,346	4,878	5,495						
Net debt	5,899	6,778	6,502	5,940	5,623						
Net debt to equity (%)	139.0	185.6	149.6	121.8	102.3						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

Mobile Telesystems OJSC

Company description

Mobile Telesystems (MTS) is the Russian mobile market leader. MTS owns 100% stakes in UMC (a mobile operator in Ukraine) and Uzdurobita (Uzbekistan), an 80% stake in VivaCell (Armenia) and a 49% stake in a mobile operator in Belarus. The company is majority-owned by Sistema, a Russian financial/industrial group. It is listed on the NYSE and locally on the MICEX.

Investment strategy

We rate the stock Buy. We think that the market is underestimating mobile data growth, driven by cheaper and better handsets and repairing supply/demand balances. We are also optimistic in principle about prospects for consolidation, regulatory developments and LTE licensing in Russia. We think that MTS has a sensible (middle ground) investment strategy; it is leading the market towards profitability and ROIC-focus, and also driving progressive industry moves. Unlike some peers, MTS has also lately avoided controversial lawsuits; shareholder conflicts; or battles with regulators. The upside implied by our DCF model suggests the stock is undervalued at current levels.

Valuation

Our target price for MTS is US\$23.1. Our valuation methodology is based on a 10-year discounted cash flow (DCF) analysis. Our model assumes a 9-13% cost of equity and 8-12% WACC over our forecast period. The WACC is calculated by weighting the cost of equity and cost of debt by the market values of equity (our fair value) and debt. Our cost of equity is calculated based on our forecasts for US 30yr government bond yields (risk-free rate); Russian country spread (based on Russian 2042 US\$ Eurobond pricing) and equity risk premium.

Due to the sensitivity of DCF modelling to WACC and long-term assumptions, we also look at benchmark multiples such as EV/EBITDA and EV/subscriber and ROIC analysis to cross-check the fundamental value derived from our DCF model.

Risks

The company faces a range of risks including competitive, political, M&A and economic (dependence on the oil price driven Russian economy and stability of the Russian currency).

We are forecasting weakening of the Russian ruble by around 9% between 2011 and 2013, followed by small gradual strengthening thereafter.

Our model assumes fairly stable market share in Russia and only a gradual voice traffic growth and pricing declines. Nor do we factor in a major boom of machine-to-machine applications, tablets or wireless substitutes of fixed-line internet into our forecasts.

If the impact on the company from any of these factors proves to be greater or less than we anticipate, the stock could outperform or under perform our price target.

Company Focus

Thato Motlanthe

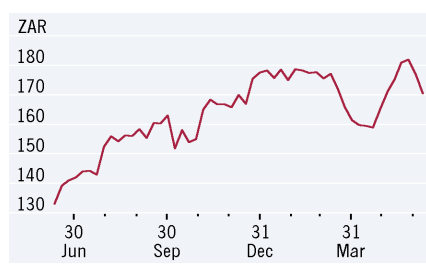
+27-11-944-0834

thato.motlanthe@citi.com

Neutral	2
Price (10 Jun 13)	R170.50
Target price	R190.00
Expected share price return	11.4%
Expected dividend yield	5.6%
Expected total return	17.0%
Market Cap	R320,868M
	US\$32,206M

Price Performance

(RIC: MTNJ.J, BB: MTN SJ)



MTN Group Limited (MTNJ.J) Finding its Feet in an Ocean of Potential

- **Mobile money initiatives** — MTN Mobile Money had nearly 10m registered users at the end of FY 12 (Dec); a c5.3% penetration of total group subs. This was up two-thirds from 2011 illustrating the powerful growth in demand for the service, albeit from a low base. MTN – a particularly diverse group with 21 markets – offers mobile money in several of these countries; though Uganda has the largest profile presently and Nigeria the largest potential, in our view.
- **Uganda** — Uganda makes up c78% of active group mobile money users, although the count in terms of registered users is c38%. MTN Uganda enjoyed a 46% increase in registered mobile money users to 3.5m (45% of subs) during 2012. Revenue-wise, mobile money grew by 96% in 2012 and currently contributes c11% to total MTN Uganda sales.
- **Nigeria** — In terms of active users (0.1% of group), Nigeria is still small in a mobile money context – Rwanda (7.7%), Ivory Coast (6.4% of group) and Ghana (4.8%) are actually next in line after Uganda. However, Nigeria presents the biggest potential for MTN Mobile Money as a single market based on sheer size (160ml ppn), MTN's market share and economics.
- **Challenges** — Key regulatory challenges in African markets revolve around (i) nervousness of banks about telcos encroaching on banking “turf”; (ii) financial stability and risks of failure; and (iii) know your customer (KYC) regulations. More generally, however, MTN's main challenge is to overcome bottlenecks like inadequate merchant networks and training (understanding and use of the service) in order to capture the growth potential of the mobile money platform.
- **The model** — The likes of Uganda see monthly transactions of c\$470m, for instance, and MTN deploys different models to try to monetize the mobile money opportunity. For example, MTN has a complex tariff structure in Uganda but uses a “percentage of value” model in Ghana. MTN deploys c40.3k agents as a group aggregate, mainly in Uganda (46%), Nigeria (25%) and Ghana (11%).
- **How big a factor?** — At this stage, MTN does not disclose targets for mobile money and is, in our view, perhaps still working on optimizing the model and getting it right in its various markets. This should give the company better visibility in where the service could go within the group. However, the size of some of MTN's markets in Africa – and the group's leading position in many of these – certainly point to big potential for MTN Mobile Money.

MTN Group Limited (ZAR)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales (RM)	121,884.0	121,865.0	133,844.8	144,381.3	155,868.9
Net Income (RM)	20,607.5	20,018.6	23,419.3	25,896.3	28,916.7
Diluted EPS (R)	11.12	10.89	12.80	14.15	15.80
Diluted EPS (Old) (R)	11.12	10.89	12.80	14.15	15.80
PE (x)	15.3	15.7	13.3	12.0	10.8
EV/EBITDA (x)	6.7	6.1	5.9	5.5	5.0
DPS (R)	7.49	8.24	9.48	10.90	12.53
Net Div Yield (%)	4.4	4.8	5.6	6.4	7.4

MTNJ.J: Fiscal year end 31-Dec						Price: R170.50; TP: R190.00; Market Cap: R320,868m; Recomm: Neutral					
Profit & Loss (Rm)	2011	2012	2013E	2014E	2015E	Valuation ratios	2011	2012	2013E	2014E	2015E
Sales revenue	121,884	121,865	133,845	144,381	155,869	PE (x)	15.3	15.7	13.3	12.0	10.8
Cost of sales	-62,581	-63,186	-69,832	-75,448	-80,710	PB (x)	3.6	3.6	3.4	3.2	3.1
Gross profit	59,303	58,679	64,012	68,933	75,158	EV/EBITDA (x)	6.7	6.1	5.9	5.5	5.0
Gross Margin (%)	48.7	48.2	47.8	47.7	48.2	FCF yield (%)	2.0	-1.0	-2.1	0.7	1.7
EBITDA (Adj)	46,296	50,437	52,744	57,040	61,987	Dividend yield (%)	4.4	4.8	5.6	6.4	7.4
EBITDA Margin (Adj) (%)	38.0	41.4	39.4	39.5	39.8	Payout ratio (%)	67	76	74	77	79
Depreciation	-13,296	-13,735	-15,575	-16,917	-17,510	ROE (%)	25.6	22.5	25.5	26.6	28.2
Amortisation	-2,194	-2,218	-2,218	-2,218	-2,218	Cashflow (Rm)	2011	2012	2013E	2014E	2015E
EBIT (Adj)	38,075	36,096	39,529	42,797	47,684	EBITDA	53,565	52,049	57,322	61,932	67,412
EBIT Margin (Adj) (%)	31.2	29.6	29.5	29.6	30.6	Working capital	-4,835	-1,819	411	453	326
Net interest	-1,582	-3,787	-2,143	-1,416	-1,277	Other	-18,409	-29,563	-36,465	-37,014	-39,988
Associates	-38	3,009	2,500	2,846	3,173	Operating cashflow	30,322	20,667	21,267	25,371	27,749
Non-op/Except	1,957	587	0	0	0	Capex	-24,099	-23,854	-27,941	-23,312	-22,458
Pre-tax profit	38,412	35,905	39,886	44,227	49,579	Net acq/disposals	3,483	765	0	0	0
Tax	-13,853	-11,836	-13,162	-14,595	-16,361	Other	0	-3,970	0	0	0
Extraord./Min.Int./Pref.div.	-3,976	-4,050	-3,304	-3,736	-4,301	Investing cashflow	-20,616	-27,059	-27,941	-23,312	-22,458
Reported net profit	20,583	20,019	23,419	25,896	28,917	Dividends paid	0	0	0	0	0
Net Margin (%)	16.9	16.4	17.5	17.9	18.6	Financing cashflow	-9,386	-5,759	0	0	0
Core NPAT	20,608	20,019	23,419	25,896	28,917	Net change in cash	4,401	-14,093	-6,675	2,059	5,291
Per share data	2011	2012	2013E	2014E	2015E	Free cashflow to s/holders	6,223	-3,187	-6,675	2,059	5,291
Reported EPS (R)	11.10	10.89	12.80	14.15	15.80						
Core EPS (R)	11.12	10.89	12.80	14.15	15.80						
DPS (R)	7.49	8.24	9.48	10.90	12.53						
CFPS (R)	16.36	11.24	11.62	13.86	15.16						
FCFPS (R)	3.36	-1.73	-3.65	1.12	2.89						
BVPS (R)	47.17	47.18	50.12	52.95	55.75						
Wtd avg ord shares (m)	1,854	1,838	1,830	1,830	1,830						
Wtd avg diluted shares (m)	1,854	1,838	1,830	1,830	1,830						
Growth rates	2011	2012	2013E	2014E	2015E						
Sales revenue (%)	6.3	0.0	9.8	7.9	8.0						
EBIT (Adj) (%)	8.4	-5.2	9.5	8.3	11.4						
Core NPAT (%)	49.8	-2.9	17.0	10.6	11.7						
Core EPS (%)	48.8	-2.0	17.5	10.6	11.7						
Balance Sheet (Rm)	2011	2012	2013E	2014E	2015E						
Cash & cash equiv.	45,832	38,051	34,433	36,161	39,061						
Accounts receivables	17,916	17,523	19,246	20,761	22,412						
Inventory	2,629	2,593	2,848	3,072	3,317						
Net fixed & other tangibles	71,610	77,485	87,057	91,121	93,823						
Goodwill & intangibles	34,540	33,935	33,935	33,935	33,935						
Financial & other assets	8,881	11,797	11,797	11,797	11,797						
Total assets	181,408	181,384	189,316	196,847	204,345						
Accounts payable	25,054	25,915	28,303	30,495	32,717						
Short-term debt	10,462	10,790	10,790	10,790	10,790						
Long-term debt	23,554	21,742	21,742	21,742	21,742						
Provisions & other liab	29,639	30,050	30,050	30,050	30,050						
Total liabilities	88,709	88,497	90,885	93,077	95,299						
Shareholders' equity	88,897	89,006	94,550	99,889	105,165						
Minority interests	3,802	3,881	3,881	3,881	3,881						
Total equity	92,699	92,887	98,431	103,770	109,046						
Net debt	-11,816	-5,519	-1,901	-3,629	-6,529						
Net debt to equity (%)	-12.7	-5.9	-1.9	-3.5	-6.0						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

MTN Group Limited

Company description

MTN is the number two cellular operator in South Africa, with 35% of the market and 16.4 million subscribers in South Africa. The total number of subscribers spread over Nigeria, and other sub-Saharan African and Middle East countries has reached over 108m. MTN has a 77% free float, making it a highly liquid share. MTN South Africa is generating significant cash flow, which is allowing the group to pursue expansion options throughout the Middle East and Africa.

Investment strategy

We rate MTN Group Neutral. MTN has been a strong operator, and on an operational basis despite facing tough competition in its various markets. MTN faces increasingly maturing markets, which means having to work harder to generate growth; Nigeria remains key and still offers some impetus on subscriber growth over the medium-term albeit under some pressure at the moment. Some of MTN's other markets are also rebounding from a difficult spell of aggressive competition and could aid medium-term growth.

While we are positive on MTN in the medium to long term, the stock's valuation looks full after a strong run and the company faces some near-term challenges in key markets like SA and Nigeria.

Valuation

Mobile telecoms companies are generally strong operational cash generators. In our valuation approach, we use discounted cash flow analysis to arrive at the valuation of MTN. In the forecast of cash flows, provision is made for ongoing or maintenance capital expenditure, which we believe is a necessary cost of ongoing operations. While in its growth phase, depreciation is seldom as high as the maintenance capex charge when the network is fully rolled out. This is true in MTN's case, as South African operations will require significant maintenance capex even when the network reaches its capacity. Our target price of R190 is based on the sum-of-the-parts valuation of each of MTN's geographic operations on a DCF basis.

Risks

We would highlight the market risk associated with extensive investment in operations outside of South Africa, and the high forecast risk of operations in markets with little third-party knowledge on which to base our assumptions. If the impact of these risks is greater than we anticipate, then the share price might not reach our target price. On the other hand, we believe that MTN might continue to post strong earnings growth and that the market continues to value the stock as a momentum play, rather than on its free cash flow and risk fundamentals. This could cause the share price to rise above our target price. Furthermore, the high risk that we anticipate may manifest itself in a one-off event, either positive or negative. In particular, MTN faces litigation risk in some of its markets including Iran and Nigeria, which may or may not result in cash outflows.

Company Focus

PLDT (TEL.PS) Opportunity in Remittances in SMS-savvy Market

Arthur Pineda

+65-6657-1174
arthur.pineda@citi.com

Sell	3
Price (10 Jun 13)	P3,100.00
Target price	P2,700.00
Expected share price return	-12.9%
Expected dividend yield	5.7%
Expected total return	-7.2%
Market Cap	P669,773M US\$15,830M

Price Performance (RIC: TEL.PS, BB: TEL PM)



■ **Mobile money initiative: Smart Money.** PLDT launched Smart Money in 2001 in partnership with a local universal bank, Banco de Oro. The service was initially envisioned as a means to transfer money and airtime over the air and pay for goods and services using a bank originated card. The service was eventually expanded in 2004 with a service called Smart Padala (Smart Send) which allows foreign workers to directly remit value to Smart Money holders. In 2012, Smart Money had moved to evolve its service to include NFC-based offers. Take-up for Smart's mobile money service had initially been slow owing to lack of visibility on the service. However, we see room for utilization levels to increase with a more consistent push on the part of the telcos for mobile money.

■ **Regulatory hurdles are low enough.** The Philippine Central Bank (BSP) provided adequate runway for mobile operators such as PLDT to experiment with mobile money transfers to grow the business and address the unbanked. Know Your Client (KYC) requirements for example have been eased to allow customers to just register once, allowing for greater ease of transaction by reducing frictional elements. Identification requirements for deposit/withdrawals have also been reduced to just one valid ID. Agency dealings have been allowed outside the traditional financial institutions regulated by the BSP.

■ **Comprehensive distribution network.** Smart Money's cash in/out distribution network is enhanced by its 12 partner banks, the availability of 9000 ATMs and more than 5000 independent agents nationwide. Given the favorable regulatory environment, non-financial institutions are allowed to act directly as agents thereby materially expanding last mile access for consumers and raising consumer convenience. While this is a far cry from M-PESA's >45000 strong agent count in Kenya, it does provide a strong alternative to the domestic banking system where total nationwide bank branches lie at a mere 8714.

■ **How big a factor?** We estimate potential mobile remittance industry contribution margin at P5.8b on industry revenue of P11.5b by FY17 on scenario anchored on domestic remittances and limited mobile-based retail payments. This however excludes potential interest income from the float. From a revenue/EBITDA perspective, our base case scenario points to a 4% potential revenue/EBITDA accretion owing to mobile money assuming the embryonic regulatory structures are held in place and relevant marketing and distribution investments are made by PLDT. Earnings accretion lies at c6% of group income. For pure domestic mobile plays, we see the potential profit enhancement from mobile remittance services at 8% by FY17.

Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Dec	(PM)	(P)	(%)	(x)	(x)	(%)	(%)
2011A	39,035	203.80	-9.4	15.2	4.0	32.5	6.1
2012A	38,001	175.89	-13.7	17.6	4.5	25.7	5.5
2013E	38,625	178.78	1.6	17.3	4.4	25.8	5.7
2014E	38,966	180.35	0.9	17.2	4.4	25.7	5.7
2015E	42,259	195.59	8.4	15.8	4.4	27.7	6.1

Source: Powered by dataCentral

TEL.PS: Fiscal year end 31-Dec						Price: P3,100.00; TP: P2,700.00; Market Cap: P669,773m; Recomm: Sell					
Profit & Loss (Pm)	2011	2012	2013E	2014E	2015E	Valuation ratios	2011	2012	2013E	2014E	2015E
Sales revenue	156,603	172,626	172,194	178,224	186,228	PE (x)	15.2	17.6	17.3	17.2	15.8
Cost of sales	-66,850	-72,545	-66,252	-67,178	-68,360	PB (x)	4.0	4.5	4.4	4.4	4.4
Gross profit	89,753	100,081	105,941	111,046	117,868	EV/EBITDA (x)	8.9	9.1	8.5	7.9	7.4
Gross Margin (%)	57.3	58.0	61.5	62.3	63.3	FCF yield (%)	8.1	6.4	6.0	6.5	7.1
EBITDA (Adj)	79,959	78,558	82,381	87,921	92,616	Dividend yield (%)	6.1	5.5	5.7	5.7	6.1
EBITDA Margin (Adj) (%)	51.1	45.5	47.8	49.3	49.7	Payout ratio (%)	93	98	99	99	97
Depreciation	-27,957	-32,820	-31,823	-32,169	-32,542	ROE (%)	26.4	24.4	25.8	25.7	27.7
Amortisation	-8,781	-3,997	-400	-400	-400	Cashflow (Pm)	2011	2012	2013E	2014E	2015E
EBIT (Adj)	43,221	41,741	50,158	55,352	59,674	EBITDA	79,959	78,558	82,381	87,921	92,616
EBIT Margin (Adj) (%)	27.6	24.2	29.1	31.1	32.0	Working capital	8,295	16,016	-2,017	1,649	2,577
Net interest	-5,119	-5,530	-5,305	-4,876	-4,582	Other	-9,045	-15,339	-10,754	-15,645	-16,679
Associates	2,035	1,538	1,570	1,587	1,598	Operating cashflow	79,209	79,235	69,610	73,926	78,513
Non-op/Except	2,540	6,842	6,080	2,080	2,080	Capex	-31,207	-36,396	-29,273	-30,298	-30,728
Pre-tax profit	42,677	44,591	52,503	54,143	58,769	Net acq/disposals	0	0	7,825	0	0
Tax	-11,040	-8,522	-13,904	-15,241	-16,580	Other	1,495	-2,662	0	-192	-254
Extraord./Min.Int./Pref.div.	60	53	62	64	70	Investing cashflow	-29,712	-39,058	-21,448	-30,490	-30,982
Reported net profit	31,697	36,122	38,661	38,966	42,259	Dividends paid	-41,598	-36,934	-38,273	-38,511	-40,816
Net Margin (%)	20.2	20.9	22.5	21.9	22.7	Financing cashflow	-40,204	-48,628	-44,002	-47,308	-40,048
Core NPAT	39,035	38,001	38,625	38,966	42,259	Net change in cash	9,379	-8,896	4,160	-3,872	7,483
Per share data	2011	2012	2013E	2014E	2015E	Free cashflow to s/holders	48,002	42,839	40,337	43,627	47,786
Reported EPS (P)	165.49	167.19	178.94	180.35	195.59						
Core EPS (P)	203.80	175.89	178.78	180.35	195.59						
DPS (P)	189.00	172.00	177.14	178.25	188.92						
CFPS (P)	413.55	366.74	322.19	342.16	363.40						
FCFPS (P)	250.62	198.28	186.70	201.93	221.17						
BVPS (P)	770.31	687.56	699.48	701.59	708.27						
Wtd avg ord shares (m)	191	216	216	216	216						
Wtd avg diluted shares (m)	192	216	216	216	216						
Growth rates	2011	2012	2013E	2014E	2015E						
Sales revenue (%)	-1.1	10.2	-0.3	3.5	4.5						
EBIT (Adj) (%)	-22.2	-3.4	20.2	10.4	7.8						
Core NPAT (%)	-7.1	-2.6	1.6	0.9	8.4						
Core EPS (%)	-9.4	-13.7	1.6	0.9	8.4						
Balance Sheet (Pm)	2011	2012	2013E	2014E	2015E						
Cash & cash equiv.	46,615	37,735	41,895	38,023	45,506						
Accounts receivables	16,245	16,379	16,102	16,666	17,414						
Inventory	3,827	3,467	3,458	3,579	3,740						
Net fixed & other tangibles	210,351	212,347	208,965	206,669	204,554						
Goodwill & intangibles	89,278	79,733	79,319	79,111	78,965						
Financial & other assets	33,506	60,807	52,684	52,815	52,951						
Total assets	399,822	410,468	402,423	396,864	403,131						
Accounts payable	29,554	30,451	30,375	31,438	32,850						
Short-term debt	26,009	12,989	18,797	9,232	9,232						
Long-term debt	91,280	102,821	91,284	92,052	92,820						
Provisions & other liab	100,760	114,965	110,211	111,994	114,708						
Total liabilities	247,603	261,226	250,667	244,717	249,611						
Shareholders' equity	151,833	149,060	151,637	152,092	153,535						
Minority interests	386	182	120	55	-15						
Total equity	152,219	149,242	151,756	152,147	153,520						
Net debt	70,674	78,075	68,186	63,261	56,546						
Net debt to equity (%)	46.4	52.3	44.9	41.6	36.8						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

PLDT

Company description

Philippine Long Distance Telephone Company (PLDT), which was founded in 1928, through its principal business groups provides domestic and international long distance and cellular telephone services in the Philippines. The company is listed on the Philippine Stock Exchange with ADRs listed on the New York Stock Exchange. The major shareholders are First Pacific, NTT and NTT DoCoMo.

Investment strategy

We rate PLDT shares Sell with a target price of P2,700. PLDT operating momentum fails to impress, while guidance remains unexciting both on growth and on cost savings post Digitel consolidation. Competition continues to be intense with no near-term material relief in sight. On the other hand, the company's media interests will offset the benefits of declining capex. Moreover, post a strong run-up in the share price owing to domestic liquidity inflows, we now find valuations to be unconvincing. That said, company is backed by a strong 6-7% yield, which provides support to our P2,700 target price.

Valuation

We use a DCF to determine the fair value for PLDT given the visibility of its cash flows and general absence of volatility. We apply a WACC of 9.9% and a terminal value of 1.0%. Our valuations include the Digitel business which was acquired in 2011 and factors in the increased number of shares issued to accommodate the deal. Based on this method, we value PLDT at P2,700. At our target price, the stock would trade at 15.1x FY13E PER and 7.8x FY13E EV/EBITDA.

Risks

Key risks to our investment thesis on PLDT include: 1) Competition - Better-than-expected improvement in competition and faster-than-anticipated growth in data revenues. 2) Cost savings - Better-than-anticipated opex and capex savings from site co-location, head count reduction. 3) Macro - Reduction in bond yield will make PLDT yield even more attractive

Company Focus

PT Telkom (TLKM.JK)

Leading Mobile Money in Indonesia, But Not a Pure Play

Arthur Pineda

+65-6657-1174

arthur.pineda@citi.com

Neutral	2
Price (10 Jun 13)	Rp10,500
Target price	Rp11,400
Expected share price return	8.6%
Expected dividend yield	4.5%
Expected total return	13.0%
Market Cap	Rp211,680,000M US\$21,589M

Price Performance

(RIC: TLKM.JK, BB: TLKM IJ)



- Mobile money initiative: T-Cash** — Telkomsel launched its mobile payment business under the names of Telkomsel Cash (T-Cash) and Flexi-Cash. Telkomsel was able to provide mobile money services after Bank Indonesia allowed the telco to conduct card-based payment activities in 2007 and remittance services in 2009. The group is likewise likely to launch international remittance tie-ups with Singtel owing to the latter's 35% ownership in Telkomsel. To date, c8% of Telkomsel's subscriber base have at one point availed of the mobile money service, although regular users are likely far less at <2%.
- Regulatory obstacles to diminish over time** — Mobile money has yet to take off in Indonesia despite having 80% of population unbanked mainly due to regulatory barriers and ambiguity. However, we do see that there could be progress in mobile banking as Bank Indonesia takes on a more active role in studying the implementation of mobile banking. At end-April it released a set of guidelines on branchless banking in the form of bank-led, telco-led or hybrid models. The active role of the central bank in elucidating the guidelines could set the stage for the mobile money market to take off.
- Partnerships between telcos and other companies to widen distribution network** — We have also seen active collaboration between telcos and other companies. For example, Telkomsel had partnered with Bank Negara Indonesia as well as mini markets in order to proliferate the service. A total of 300k ATM outlets for T-cash are targeted by this year. However, we do note that these multi-party collaborations could potentially dilute profits attributable to the telcos as a result of revenue sharing with the partners. T-Cash, XI Tunai and Dompetku have also partnered with one another to allow cross-operator P2P transfer as a form of support for Bank Indonesia's push for a cashless society.
- How big a factor?** — Based on the parameters we set out on Figure 37, we estimate potential industry revenue of Rp1.9tn by 2017 on a moderate/base case scenario anchored on domestic remittances alone. We are excluding any potential interest income the telco operator may earn on the float retained within the system. We also have yet to factor in potential revenues from the provision of day-to-day mobile payment service which has become a popular payment method in Kenya. From an earnings perspective, we see the possibility of a mere 2% accretion by FY17 owing to mobile money. Due to PT Telkom's exposure to fixed line business (c.29% contribution to revenues and c.23% to EBITDA), benefits from mobile money would be diluted.

Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Dec	(RpB)	(Rp)	(%)	(x)	(x)	(%)	(%)
2011A	12,105	600	6.9	17.5	4.5	26.3	2.8
2012A	13,523	671	11.7	15.7	4.1	27.3	3.9
2013E	14,558	722	7.7	14.5	3.7	26.9	4.5
2014E	15,605	774	7.2	13.6	3.4	26.3	4.8
2015E	16,683	828	6.9	12.7	3.1	25.7	5.1

Source: Powered by dataCentral

TLKM.JK: Fiscal year end 31-Dec						Price: Rp10,500; TP: Rp11,400; Market Cap: Rp211,680,000m; Recomm: Neutral					
Profit & Loss (Rpb)	2011	2012	2013E	2014E	2015E	Valuation ratios	2011	2012	2013E	2014E	2015E
Sales revenue	71,253	77,143	83,045	87,370	91,695	PE (x)	17.5	15.7	14.5	13.6	12.7
Cost of sales	-28,482	-31,256	-33,108	-34,589	-36,083	PB (x)	4.5	4.1	3.7	3.4	3.1
Gross profit	42,771	45,887	49,937	52,781	55,612	EV/EBITDA (x)	8.1	7.5	6.9	6.5	6.1
Gross Margin (%)	60.0	59.5	60.1	60.4	60.6	FCF yield (%)	7.8	5.0	8.3	8.6	9.7
EBITDA (Adj)	26,916	29,060	31,325	33,020	34,702	Dividend yield (%)	2.8	3.9	4.5	4.8	5.1
EBITDA Margin (Adj) (%)	37.8	37.7	37.7	37.8	37.8	Payout ratio (%)	49	62	65	65	65
Depreciation	-14,557	-14,238	-13,822	-14,221	-14,457	ROE (%)	23.9	25.9	26.9	26.3	25.7
Amortisation	-306	-218	0	0	0	Cashflow (Rpb)					
EBIT (Adj)	21,695	25,301	29,311	31,370	33,580	EBITDA	36,558	39,757	43,132	45,591	48,037
EBIT Margin (Adj) (%)	30.4	32.8	35.3	35.9	36.6	Working capital	148	-2,058	1,362	311	372
Net interest	-1,091	-1,459	-1,117	-997	-908	Other	-6,153	-9,758	-8,280	-8,772	-9,368
Associates	-10	-11	0	0	0	Operating cashflow					
Non-op/Except	263	397	584	582	580	Capex	-14,031	-17,300	-18,735	-18,994	-18,494
Pre-tax profit	20,857	24,228	28,778	30,955	33,252	Net acq/disposals	0	0	0	0	0
Tax	-5,387	-5,866	-7,753	-8,364	-9,046	Other	-474	5,989	0	0	0
Extraord./Min.Int./Pref.div.	-4,505	-5,512	-6,466	-6,986	-7,522	Investing cashflow					
Reported net profit	10,965	12,850	14,558	15,605	16,683	Dividends paid	-6,069	-7,127	-9,463	-10,143	-10,844
Net Margin (%)	15.4	16.7	17.5	17.9	18.2	Financing cashflow					
Core NPAT	12,105	13,523	14,558	15,605	16,683	Net change in cash	2,568	5,060	3,125	2,322	3,513
Per share data						Free cashflow to s/holders					
Reported EPS (Rp)	544	637	722	774	828		16,522	10,641	17,480	18,136	20,547
Core EPS (Rp)	600	671	722	774	828						
DPS (Rp)	296	414	469	503	538						
CFPS (Rp)	1,516	1,386	1,796	1,842	1,937						
FCFPS (Rp)	820	528	867	900	1,019						
BVPS (Rp)	2,357	2,557	2,809	3,080	3,370						
Wtd avg ord shares (m)	20,160	20,160	20,160	20,160	20,160						
Wtd avg diluted shares (m)	20,160	20,160	20,160	20,160	20,160						
Growth rates											
Sales revenue (%)	3.8	8.3	7.7	5.2	5.0						
EBIT (Adj) (%)	-3.5	16.6	15.8	7.0	7.0						
Core NPAT (%)	6.9	11.7	7.7	7.2	6.9						
Core EPS (%)	6.9	11.7	7.7	7.2	6.9						
Balance Sheet (Rpb)											
Cash & cash equiv.	9,634	13,118	16,243	18,565	22,079						
Accounts receivables	5,250	5,409	5,930	6,299	6,678						
Inventory	758	579	657	711	764						
Net fixed & other tangibles	74,897	77,047	81,960	86,732	90,770						
Goodwill & intangibles	1,789	1,443	1,443	1,443	1,443						
Financial & other assets	10,726	13,773	14,243	14,611	14,979						
Total assets	103,054	111,369	120,476	128,361	136,713						
Accounts payable	8,355	7,456	7,664	7,857	8,051						
Short-term debt	4,913	5,658	253	253	253						
Long-term debt	12,958	13,617	18,805	19,589	20,373						
Provisions & other liab	15,847	17,660	19,889	20,804	21,789						
Total liabilities	42,073	44,391	46,612	48,503	50,466						
Shareholders' equity	47,510	51,541	56,636	62,098	67,937						
Minority interests	13,471	15,437	17,228	17,760	18,309						
Total equity	60,981	66,978	73,865	79,858	86,246						
Net debt	8,237	6,157	2,815	1,277	-1,453						
Net debt to equity (%)	13.5	9.2	3.8	1.6	-1.7						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

PT Telkom

Company description

Telkom, a majority state-owned company, is the principal provider of telecommunications services in Indonesia, providing local and domestic long-distance telephone services. Its 65%-owned subsidiary Telkomsel is the largest wireless service provider in Indonesia, operating a GSM network on the 900/1800/2100 band. The company also provides fixed wireless services, data communications, leased lines and certain value-added services either directly or indirectly through its affiliates. Telkom is listed on the Indonesia Stock Exchange and has ADRs listed on the New York Stock Exchange.

Investment strategy

We rate PT Telkom shares Neutral (2) with a target price of Rp11,400. Telkom offers moderate growth prospects driven by its 65% owned subsidiary Telkomsel's lead in network investments coupled with its strong balance sheet and superior cash flows which put it ahead of competition, in our view. Telkom's dividend yield is also an attraction that comes with upside potential on the back of its net cash balance sheet. That said stock had witnessed strong run up in YTD FY13. Moreover we see little likelihood of company changing its payout levels from current 65% guidance despite inefficient balance sheet.

Valuation

We use DCF based sum-of-the-parts valuation to reach our target price of Rp11,400. We use a WACC of 9.9% (RFR of 7% and Equity Risk Premium of 6%) and a terminal growth assumption of 2% for Telkomsel and 0% for fixed-line operations. Our Rp11,400 fair value is broken down as follows: 1) Rp2,200 per share for the wholly owned fixed-line business; and 2) Rp9,200 per share for Telkom's 65% stake in Telkomsel (per share value is arrived assuming Treasury shares will be retired). On our target price of Rp11,400, we value Telkom at a 14.7x FY14E P/E and 7.1x FY14E proportionate EV/EBITDA, justified given its 7% recurring earnings CAGR for FY12-15E and FCF yield of 8-10%.

Risks

Downside risks that could prevent shares from reaching our target price include: 1) Competitive threats in both its fixed and wireless businesses; specific to the wireless business, should irrational price competition return; 2) accelerated deterioration of the traditional fixed line business on fixed-to-mobile substitution; and 3) expensive or value destructive acquisitions. Upside risk comes from: 1) Moves towards higher payout and balance sheet optimization; and 2) Optimal asset allocation.

Company Focus

PT XL AXIATA TBK. (EXCL.JK) Better Indonesia Mobile Money Opportunity

Arthur Pineda

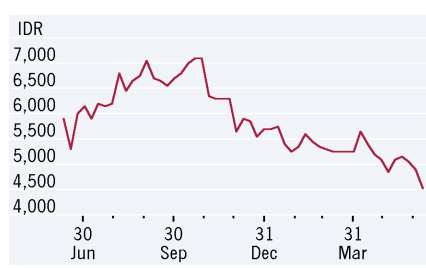
+65-6657-1174

arthur.pineda@citi.com

Neutral	2
Price (10 Jun 13)	Rp4,525
Target price	Rp5,500
Expected share price return	21.5%
Expected dividend yield	2.8%
Expected total return	24.4%
Market Cap	Rp38,618,572M US\$3,939M

Price Performance

(RIC: EXCL.JK, BB: EXCL IJ)



■ **Mobile money initiative: XL Tunai** — XL also recently launched a mobile money initiative known as XL Tunai and had at least 250,000 users as of Feb 2013. XL Tunai started providing a domestic fund transfer service in June 2012 with about 2,000 agents on the ground. Services were further expanded to include online shopping, air ticketing and bill payments. Moreover all the three telcos have partnered with each other under an “e-money” initiative which will allow users to send money to subscribers of other operators as well.

■ **We see XL as a bigger beneficiary** — If successfully implemented, we see XL to be the most direct beneficiary of the mobile money initiative within Indonesia. This is owing to its (1) pure play mobile operation unlike Telkom which is saddled with a significant fixed line component; (2) budget oriented subscriber base which may have elevated dependence on domestic money remittances. If overseas remittances via mobile rise in future, XL is well placed to benefit owing to strong Axiata group presence in the region.

■ **Partnerships between telcos and with other companies to widen distribution network** — Top three operators have also partnered with one another to allow cross-operator P2P transfer as a form of support for Bank Indonesia's push for a cashless society. Interoperability within operators is a key positive for small operators like XL and Indosat as it allows their users to access wider base of the bigger operator - Telkomsel. On top of its own retail centers, XL has partnered with retail merchants/outlets to widen its distribution platform.

■ **How big a factor?** — Based on the parameters we set out on Figure 37, we estimate potential mobile remittance industry contribution margin at Rp959b and industry revenue of Rp1.9tn by 2017 on a moderate/base case scenario anchored on domestic remittances alone. From a revenue and EBITDA perspective, our base case scenario points to a c2% revenue and EBITDA accretion owing to mobile money assuming that XL will get fair share of its mobile money revenues as defined by its subscriber market share. Earnings accretion could be higher at c5% by FY17E assuming IT/dealership/marketing investments are made and the early stage regulatory and cost structures are held in place. This could expand further assuming that the industry moves beyond remittances and increases revenue collection from purchase transactions.

Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Dec	(RpB)	(Rp)	(%)	(x)	(x)	(%)	(%)
2011A	3,168	372	4.3	12.2	2.8	24.9	2.9
2012A	2,878	338	-9.2	13.4	2.5	19.8	3.0
2013E	2,174	256	-24.4	17.7	2.3	13.7	2.8
2014E	2,836	333	30.4	13.6	2.1	16.4	3.7
2015E	3,222	379	13.6	11.9	1.9	16.9	4.2

Source: Powered by dataCentral

EXCL:JK: Fiscal year end 31-Dec						Price: Rp4,525; TP: Rp5,500; Market Cap: Rp38,618,572m; Recomm: Neutral					
Profit & Loss (Rpb)	2011	2012	2013E	2014E	2015E	Valuation ratios	2011	2012	2013E	2014E	2015E
Sales revenue	18,260	20,970	22,082	24,098	25,514	PE (x)	12.2	13.4	17.7	13.6	11.9
Cost of sales	-7,076	-9,245	-10,538	-11,069	-11,617	PB (x)	2.8	2.5	2.3	2.1	1.9
Gross profit	11,184	11,725	11,544	13,030	13,897	EV/EBITDA (x)	5.3	5.2	5.5	4.9	4.5
Gross Margin (%)	61.2	55.9	52.3	54.1	54.5	FCF yield (%)	5.0	-4.9	0.1	5.0	7.2
EBITDA (Adj)	9,198	9,646	9,389	10,680	11,409	Dividend yield (%)	2.9	3.0	2.8	3.7	4.2
EBITDA Margin (Adj) (%)	50.4	46.0	42.5	44.3	44.7	Payout ratio (%)	35	40	50	50	50
Depreciation	-4,611	-4,994	-5,685	-6,086	-6,368	ROE (%)	22.3	19.0	13.7	16.4	16.9
Amortisation	0	0	0	0	0	Cashflow (Rpb)					
EBIT (Adj)	4,587	4,652	3,704	4,594	5,042	EBITDA	9,198	9,646	9,389	10,680	11,409
EBIT Margin (Adj) (%)	25.1	22.2	16.8	19.1	19.8	Working capital	585	-953	74	136	95
Net interest	-579	-601	-805	-813	-746	Other	-1,350	-398	-1,423	-1,646	-1,702
Associates	0	0	0	0	0	Operating cashflow	8,433	8,295	8,041	9,170	9,802
Non-op/Except	-144	-299	0	0	0	Capex	-6,522	-10,176	-8,005	-7,230	-7,016
Pre-tax profit	3,865	3,751	2,899	3,781	4,296	Net acq/disposals	-162	175	-3	-3	-4
Tax	-1,035	-987	-725	-945	-1,074	Other	0	0	0	0	0
Extraord./Min.Int./Pref.div.	0	0	0	0	0	Investing cashflow	-6,683	-10,001	-8,008	-7,233	-7,020
Reported net profit	2,830	2,765	2,174	2,836	3,222	Dividends paid	-911	-1,107	-1,151	-1,087	-1,418
Net Margin (%)	15.5	13.2	9.8	11.8	12.6	Financing cashflow	-1,118	1,497	-153	-1,837	-2,918
Core NPAT	3,168	2,878	2,174	2,836	3,222	Net change in cash	632	-209	-120	100	-136
Per share data						Free cashflow to s/holders	1,911	-1,881	36	1,940	2,785
Reported EPS (Rp)	333	325	256	333	379						
Core EPS (Rp)	372	338	256	333	379						
DPS (Rp)	130	135	128	167	189						
CFPS (Rp)	991	975	945	1,078	1,152						
FCFPS (Rp)	225	-221	4	228	327						
BVPS (Rp)	1,609	1,807	1,927	2,132	2,344						
Wtd avg ord shares (m)	8,508	8,508	8,508	8,508	8,508						
Wtd avg diluted shares (m)	8,508	8,508	8,508	8,508	8,508						
Growth rates											
Sales revenue (%)	7.0	14.8	5.3	9.1	5.9						
EBIT (Adj) (%)	-7.4	1.4	-20.4	24.0	9.7						
Core NPAT (%)	4.3	-9.2	-24.4	30.4	13.6						
Core EPS (%)	4.3	-9.2	-24.4	30.4	13.6						
Balance Sheet (Rpb)											
Cash & cash equiv.	998	792	671	771	635						
Accounts receivables	670	528	556	606	642						
Inventory	67	50	52	57	61						
Net fixed & other tangibles	27,666	31,730	34,050	35,193	35,842						
Goodwill & intangibles	0	0	0	0	0						
Financial & other assets	1,770	2,356	2,481	2,698	2,854						
Total assets	31,171	35,456	37,810	39,326	40,034						
Accounts payable	2,815	2,654	2,794	3,050	3,229						
Short-term debt	3,820	4,307	2,500	3,000	0						
Long-term debt	6,906	9,213	12,018	10,768	12,268						
Provisions & other liab	3,937	3,912	4,104	4,366	4,591						
Total liabilities	17,478	20,086	21,416	21,184	20,088						
Shareholders' equity	13,693	15,370	16,393	18,142	19,946						
Minority interests	0	0	0	0	0						
Total equity	13,693	15,370	16,393	18,142	19,946						
Net debt	9,728	12,728	13,847	12,997	11,633						
Net debt to equity (%)	71.0	82.8	84.5	71.6	58.3						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

PT XL AXIATA TBK.

Company description

XL Axiata is Indonesia's third largest mobile operator by subscriptions and second largest mobile operator by revenue market share. The company offers 2G and 3G wireless voice and data services across Indonesia. It is 67% owned by Axiata of Malaysia and 13% owned by Etisalat of the UAE. Both are strategic investors of the stock with multi-country telco operations. Free float was raised to around 20% from <1% via a share placement completed by Axiata in 1Q10.

Investment strategy

We rate XL Axiata shares as Neutral. We believe XL Axiata offers attractive growth in the medium term and potential dividend plays over the longer-term. XL offers moderate growth (5% FY12-15E EBITDA CAGR) with semblance of operational improvements in the horizon coupled with inexpensive valuations in a regional context (FY13E EV/EBITDA of 6.5x on our TP). We rate management execution as the best among the major Indonesian telecommunications operators and believe management will be able to ride on the data wave despite short-term margin and marketing hitches. That said, elevated capex limits yield surprise over the short to medium term which in turn limits further valuation expansion.

Valuation

Our target price of Rp5,500 values XL Axiata on a FY13 DCF basis using 10.1% WACC and 1.5% terminal growth rate. We estimate WACC using an 7% risk free rate, 0.85x beta, 6% equity risk premium and 10.2% pre-tax cost of debt. At our target price, XL would trade at 21.5x PER and 6.5x EV/EBITDA for FY13E.

Risks

Key risks to our investment case and target price lie with both company- and country-specific factors. Should the competitive environment worsen with a renewed price war, we may see revenue momentum slow and capex increase. In addition, loss of market share should competitors engage in more attractive offers could result in weaker revenues and profits. Potential increases in Indonesian bond yields might also serve to negatively impact our NPVs as they serve to raise the cost of capital. Weakening domestic currency would also impact our target price given US dollar debt exposure and likely capital outflow from the country. Upside risks include: 1) Capital management initiatives, and 2) Faster than anticipated growth in data revenues owing to smartphones and wireless broadband and voice revenues owing to smart bundling.

Company Focus

SingTel (STEL.SI) Opportunity in Affiliates

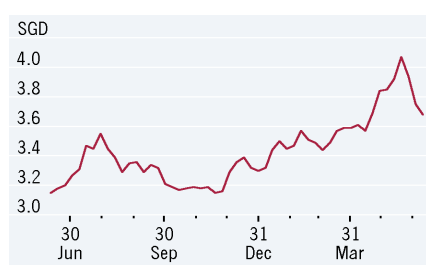
Arthur Pineda

+65-6657-1174

arthur.pineda@citi.com

Neutral	2
Price (10 Jun 13)	S\$3.68
Target price	S\$3.95
Expected share price return	7.3%
Expected dividend yield	4.6%
Expected total return	11.9%
Market Cap	S\$58,672M
	US\$46,976M

Price Performance (RIC: STEL.SI, BB: ST SP)



■ **Mobile money initiatives.** Singtel as a group offers one of the most comprehensive mobile money offers among the Asian telcos with DM offers on NFC-based platforms in Singapore and Australia as well as EM-based strategies with its affiliates with money transfer initiatives in the Philippines, Indonesia, India and Thailand. An internal reorganization with its group Digital Life has placed greater emphasis in generating increased cooperation of such initiatives across the group. This allows for greater scalability of Singtel's mobile money platform. Singtel is also one of the few Asian telcos which can effectively leverage on cross-border mobile money offers with international remittance services being progressively rolled out across the markets in which they are operating.

■ **Regulatory hurdles.** For its developed market offer, Singtel had seen significant government support for NFC and mobile money development. Within Singapore, its mobile wallet function is loosely regulated provided that they operate within certain limits. Similar developments are happening in Australia with trial NFC networks. Across its EM portfolio, the level of government involvement varies significantly depending on local market dynamics. For its key markets such as India, bank tie-ups are still necessary. Philippines and Indonesia however have allowed direct money dealings outside of regulated financial institutions, allowing telcos to capture bigger value.

■ **Distribution network.** Domestic distribution for Singtel's DM-oriented mobile money solutions is less relevant given their predominantly post-paid orientation and high bank penetration levels. This allows the consumers to deal directly with either the telcos or the banks. Regionally however, distribution is still in the start-up stages. In Indonesia it offers more than 7000 agents on top of bank access. In the Philippines, Globe has partnered with more than 1800 agents on top of ATM access. In India, Airtel has launched in two states with nearly 7000 agents on top of the usual bank partnerships.

■ **How big a factor?** Singtel has not articulated any targets so far. For the developed market segment, we believe revenue contribution will be minimal given market efficiencies and competition from the traditional financial institutions which offer extensive reach within Singapore and Australia. Should it gain sufficient scale on its mPayments platform, however, we do see a potential to charge merchants a transaction fee similar to the credit card model. We believe opportunities are greater within its emerging market portfolio with Bharti, Telkomsel and Globe offering mobile remittance solutions. These could generate an incremental 6% of profits for Indonesia, India and Philippines.

Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(\$M)	(\$)	(%)	(x)	(x)	(%)	(%)
2012A	3,676	0.23	-3.1	15.9	2.5	15.4	4.3
2013A	3,611	0.23	-1.7	16.2	2.4	15.2	4.6
2014E	3,970	0.25	10.0	14.8	2.3	16.2	5.1
2015E	4,350	0.27	9.6	13.5	2.2	16.8	5.6
2016E	4,789	0.30	10.1	12.2	2.1	17.6	6.1

Source: Powered by dataCentral

STEL.SI: Fiscal year end 31-Mar						Price: S\$3.68; TP: S\$3.95; Market Cap: S\$58,672m; Recomm: Neutral					
Profit & Loss (\$m)	2012	2013	2014E	2015E	2016E	Valuation ratios	2012	2013	2014E	2015E	2016E
Sales revenue	18,826	18,183	18,084	18,377	18,642	PE (x)	15.9	16.2	14.8	13.5	12.2
Cost of sales	na	na	na	na	na	PB (x)	2.5	2.4	2.3	2.2	2.1
Gross profit	na	na	na	na	na	EV/EBITDA (x)	10.0	9.8	9.0	8.3	7.6
Gross Margin (%)	na	na	na	na	na	FCF yield (%)	4.3	5.2	5.6	4.7	6.5
EBITDA (Adj)	7,224	7,306	7,843	8,413	9,059	Dividend yield (%)	4.3	4.6	5.1	5.6	6.1
EBITDA Margin (Adj) (%)	38.4	40.2	43.4	45.8	48.6	Payout ratio (%)	68	74	75	75	75
Depreciation	-2,002	-2,127	-2,175	-2,218	-2,262	ROE (%)	16.7	14.8	15.9	16.6	17.6
Amortisation	0	0	0	0	0	Cashflow (\$m)	2012	2013	2014E	2015E	2016E
EBIT (Adj)	3,217	3,073	3,130	3,191	3,250	EBITDA	5,219	5,200	5,305	5,409	5,512
EBIT Margin (Adj) (%)	17.1	16.9	17.3	17.4	17.4	Working capital	11	-92	-6	17	16
Net interest	-341	-298	-276	-268	-262	Other	480	711	364	520	701
Associates	2,005	2,106	2,538	3,004	3,547	Operating cashflow	5,710	5,818	5,663	5,946	6,229
Non-op/Except	86	-154	-58	-47	-1	Capex	-2,249	-2,059	-2,356	-3,194	-2,451
Pre-tax profit	4,967	4,726	5,333	5,880	6,535	Net acq/disposals	-918	-698	0	0	0
Tax	-978	-1,216	-1,421	-1,576	-1,747	Other	358	200	0	0	0
Extraord./Min.Int./Pref.div.	-1	-2	0	0	0	Investing cashflow	-2,809	-2,557	-2,356	-3,194	-2,451
Reported net profit	3,989	3,508	3,912	4,303	4,788	Dividends paid	-4,111	-2,518	-2,679	-2,983	-3,270
Net Margin (%)	21.2	19.3	21.6	23.4	25.7	Financing cashflow	-4,264	-3,702	-2,184	-2,469	-2,757
Core NPAT	3,676	3,611	3,970	4,350	4,789	Net change in cash	-1,363	-441	1,123	284	1,021
Per share data	2012	2013	2014E	2015E	2016E	Free cashflow to s/holders	2,544	3,061	3,307	2,753	3,778
Reported EPS (\$)	0.25	0.22	0.25	0.27	0.30						
Core EPS (\$)	0.23	0.23	0.25	0.27	0.30						
DPS (\$)	0.16	0.17	0.19	0.21	0.23						
CFPS (\$)	0.36	0.37	0.36	0.37	0.39						
FCFPS (\$)	0.16	0.19	0.21	0.17	0.24						
BVPS (\$)	1.47	1.50	1.58	1.66	1.76						
Wtd avg ord shares (m)	15,932	15,932	15,932	15,932	15,932						
Wtd avg diluted shares (m)	15,932	15,932	15,932	15,932	15,932						
Growth rates	2012	2013	2014E	2015E	2016E						
Sales revenue (%)	3.4	-3.4	-0.5	1.6	1.4						
EBIT (Adj) (%)	2.1	-4.5	1.9	2.0	1.9						
Core NPAT (%)	-3.3	-1.8	10.0	9.6	10.1						
Core EPS (%)	-3.1	-1.7	10.0	9.6	10.1						
Balance Sheet (\$m)	2012	2013	2014E	2015E	2016E						
Cash & cash equiv.	1,346	911	2,034	2,317	3,338						
Accounts receivables	3,927	3,680	3,660	3,720	3,773						
Inventory	208	214	213	216	219						
Net fixed & other tangibles	11,580	11,725	11,906	12,881	13,070						
Goodwill & intangibles	11,365	11,995	11,995	11,995	11,995						
Financial & other assets	11,991	11,458	11,877	12,469	13,306						
Total assets	40,418	39,984	41,685	43,599	45,702						
Accounts payable	5,053	4,898	4,871	4,950	5,022						
Short-term debt	131	392	392	392	392						
Long-term debt	8,663	7,537	8,037	8,537	9,037						
Provisions & other liab	3,143	3,192	3,187	3,201	3,214						
Total liabilities	16,990	16,019	16,487	17,081	17,665						
Shareholders' equity	23,428	23,965	25,198	26,519	28,037						
Minority interests	0	0	0	0	0						
Total equity	23,428	23,965	25,198	26,519	28,037						
Net debt	7,447	7,018	6,395	6,612	6,091						
Net debt to equity (%)	31.8	29.3	25.4	24.9	21.7						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

SingTel

Company description

SingTel operates in Singapore and Australia (through wholly owned SingTel Optus). SingTel Group provides a comprehensive portfolio of services, including voice and data services over fixed, wireless and Internet platforms. SingTel is Singapore's incumbent telecoms services provider, while SingTel Optus is the leading challenger to incumbent Telstra in Australia. SingTel has actively expanded a wireless-centric footprint across the region through significant equity stakes in leading wireless operators in home markets, such as AIS (Thailand), Telkomsel (Indonesia), Globe (the Philippines) and Bharti (India). SingTel is listed on the Singapore and Australian Stock Exchanges.

Investment strategy

We rate SingTel shares as Neutral with a target price of S\$3.95. It offers a combination of cash-flow generation from its developed market portfolio in Australia and Singapore, and growth elements through its emerging-market exposure in Thailand, Indonesia, India and the Philippines. The group's strong cash flow and underleveraged balance sheet allow it to pay healthy dividends while offering growth through its emerging-market exposure. Among large-cap Singaporean stocks, we find SingTel offering one of the highest yield propositions. That said, the prospects of further capital management are low, in our view, given the group is looking to aggressively ramp up its Digital Life business with S\$2bn allocated for investments over the next 3 years. Moreover, we think the stock lacks any strong catalysts to drive the name further.

Valuation

Given SingTel's geographically diverse operations, we use an SOTP valuation. This leads to a S\$4.16 fair value, to which we apply a 10% holding-company discount on listed affiliates to attain a S\$3.95 target price. Our SOTP estimate includes 9.5x FY14E EV/EBITDA attribution for the Singapore business (5-15% discount vs. domestic peers owing to Singtel's material exposure to Fixed services) and a DCF-based calculation for Australia (perpetual growth rate of 1.5% and a WACC of 8.1%). We factor in a 1.23 S\$/A\$ rate while translating our A\$ DCF fair value for Optus into S\$. We value listed associates at Citi target prices and at nil for PBTL given unclear profitability visibility. We use a DCF-based equity value for Telkomsel of Rp274trn as of Dec-13 (WACC of 9.9%, terminal growth rate of 2.0%), in valuing SingTel's 35% stake.

Risks

Risks that may prevent the shares from reaching our target price include: 1) Overpayment in M&A transactions; (2) Volatility in regional currencies which may result in varying S\$ translation of earnings and value; 3) Regulation - the Singapore government (through Temasek Holdings) holds a stake of c.52% in SingTel and has committed to reducing its stake to nil over time as part of its FTA agreement with the US. We see a recurring stock overhang threat, but are comforted by our view of Temasek not being a value-destroyer by looking to sell indiscriminately at any value, but instead looking to structure a gradual stake reduction over the longer term. Upside risks to our target price include: 1) Capital management initiatives; and 2) Data monetization with LTE.

Integrated Telecommunication Services (GICS) | Telecommunications Services (Citi)
Western Europe | Norway

Company Focus

Simon Weeden

+44-20-7986-4204

simon.weeden@citi.com

Laurie Fitzjohn-Sykes, CFA

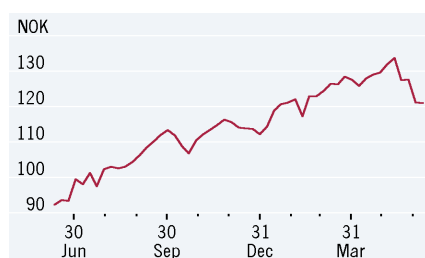
+44-20-7986-4114

laurie.fitzjohnsykes@citi.com

Neutral	2
Price (10 Jun 13)	NKr121.10
Target price	NKr130.00
Expected share price return	7.3%
Expected dividend yield	5.0%
Expected total return	12.3%
Market Cap	NKr188,910M
	US\$32,748M

Price Performance

(RIC: TEL.OL, BB: TEL NO)



Telenor ASA (TEL.OL)

Early Success in Pakistan, Further Launches Planned

- **Expanding beyond initial success** — Telenor sees an opportunity in mobile financial services in both emerging and developed markets. Telenor has already achieved success in Pakistan after acquiring a stake in a local bank with a basic transfer service and plans to launch a similar service in Thailand and Malaysia shortly. For the Nordic markets Telenor plans a m-wallet service.
- **Pakistan success** — In Pakistan Telenor acquired 51% of Tameer Bank to launch mobile financial services, called EasyPaisha in Oct 2009. Only banks can receive a branchless banking license in Pakistan. Customers have a 'level 0' account which has lower registration requirements and also low balance and transaction limits. EasyPaisha has been successful with basic transfers: it now has >4m unique users per month. In 2012 Telenor handled \$1.4b of domestic transfers with 25k agents. In 2012 financial services was c.3% of Telenor Pakistan's revenue, and Telenor expects this to increase to 7% in 2015. EasyPaisha is now moving to more advanced services, launching savings and insurance in Oct-12.
- **Planned launches** — DTAC (Thailand) has a license to launch basic financial services and plans to do so later in 2013. Digi (Malaysia) has partnered with a bank in a JV, commercial launch of basic services is planned in 2H 2013.
- **How big a factor?** — Financial services have become a significant driver of growth in Pakistan, but Pakistan is only 6% of Telenor's EV on our SOTP. Telenor plans to launch in Malaysia and Thailand in 2013, though overall exposure to mobile financial services remains low.

Telenor ASA (NOK)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales (NkrM)	98,515.7	101,718.3	103,957.2	108,132.2	111,232.0
Net Income (NkrM)	9,940.9	13,676.6	14,636.0	16,764.7	17,897.9
Diluted EPS (Nkr)	6.14	8.74	9.49	11.10	11.96
Diluted EPS (Old) (Nkr)	6.14	8.74	9.49	11.10	11.96
PE (x)	19.7	13.9	12.8	10.9	10.1
EV/EBITDA (x)	6.1	5.7	5.5	5.2	4.8
DPS (Nkr)	5.00	6.00	6.50	7.70	8.30
Net Div Yield (%)	4.1	5.0	5.4	6.4	6.9

TEL.OL: Fiscal year end 31-Dec						Price: NKR121.10; TP: NKR130.00; Market Cap: NKR188,910m; Recomm: Neutral					
Profit & Loss (NKRm)	2011	2012	2013E	2014E	2015E	Valuation ratios	2011	2012	2013E	2014E	2015E
Sales revenue	98,516	101,718	103,957	108,132	111,232	PE (x)	19.7	13.9	12.8	10.9	10.1
Cost of sales	na	na	na	na	na	PB (x)	2.3	2.6	2.5	2.3	2.2
Gross profit	na	na	na	na	na	EV/EBITDA (x)	6.1	5.7	5.5	5.2	4.8
Gross Margin (%)	na	na	na	na	na	FCF yield (%)	5.9	3.6	4.9	8.6	9.4
EBITDA (Adj)	30,526	32,848	35,884	37,814	39,362	Dividend yield (%)	4.1	5.0	5.4	6.4	6.9
EBITDA Margin (Adj) (%)	31.0	32.3	34.5	35.0	35.4	Payout ratio (%)	81	69	68	69	69
Depreciation	-11,162	-10,282	-10,342	-10,366	-10,155	ROE (%)	9.3	9.6	19.3	22.0	22.0
Amortisation	-8,486	-12,322	-4,203	-4,212	-4,127	Cashflow (NKRm)	2011	2012	2013E	2014E	2015E
EBIT (Adj)	10,393	9,376	20,840	23,085	24,931	EBITDA	30,041	31,980	35,384	37,664	39,212
EBIT Margin (Adj) (%)	10.5	9.2	20.0	21.3	22.4	Working capital	2,482	7	0	0	0
Net interest	-1,395	-2,207	-2,358	-2,324	-2,098	Other	-7,723	-8,339	-8,402	-8,918	-9,481
Associates	4,655	4,051	4,404	5,013	5,119	Operating cashflow	24,801	23,648	26,982	28,746	29,732
Non-op/Except	-198	524	0	0	0	Capex	-13,261	-16,892	-17,852	-12,949	-12,621
Pre-tax profit	13,454	11,744	22,886	25,775	27,952	Net acq/disposals	121	-6,958	0	0	0
Tax	-5,365	-5,287	-6,044	-6,594	-7,383	Other	982	1,286	5,467	3,058	3,156
Extraord./Min.Int./Pref.div.	-52	1,130	-2,561	-2,523	-2,778	Investing cashflow	-12,158	-22,564	-12,385	-9,890	-9,466
Reported net profit	8,037	7,587	14,281	16,658	17,791	Dividends paid	-8,830	-13,940	-11,921	-12,425	-14,302
Net Margin (%)	8.2	7.5	13.7	15.4	16.0	Financing cashflow	-12,868	-4,723	-16,312	-15,778	-14,302
Core NPAT	9,941	13,677	14,636	16,765	17,898	Net change in cash	-706	-4,095	-1,713	3,078	5,964
Per share data	2011	2012	2013E	2014E	2015E	Free cashflow to s/holders	11,539	6,756	9,131	15,797	17,110
Reported EPS (NKR)	4.96	4.85	9.26	11.03	11.89						
Core EPS (NKR)	6.14	8.74	9.49	11.10	11.96						
DPS (NKR)	5.00	6.00	6.50	7.70	8.30						
CFPS (NKR)	15.31	15.11	17.50	19.04	19.87						
FCFPS (NKR)	7.12	4.32	5.92	10.46	11.43						
BVPS (NKR)	52.74	47.20	48.68	51.82	56.01						
Wtd avg ord shares (m)	1,620	1,565	1,542	1,510	1,497						
Wtd avg diluted shares (m)	1,620	1,565	1,542	1,510	1,497						
Growth rates	2011	2012	2013E	2014E	2015E						
Sales revenue (%)	3.9	3.3	2.2	4.0	2.9						
EBIT (Adj) (%)	-16.9	-9.8	122.3	10.8	8.0						
Core NPAT (%)	12.2	37.6	7.0	14.5	6.8						
Core EPS (%)	14.2	42.4	8.6	16.9	7.7						
Balance Sheet (NKRm)	2011	2012	2013E	2014E	2015E						
Cash & cash equiv.	12,899	8,805	7,091	10,169	16,133						
Accounts receivables	0	0	0	0	0						
Inventory	0	0	0	0	0						
Net fixed & other tangibles	49,620	43,596	51,106	53,689	56,155						
Goodwill & intangibles	45,193	50,783	46,580	42,368	38,241						
Financial & other assets	59,458	65,628	64,566	66,521	68,484						
Total assets	167,172	168,812	169,343	172,746	179,014						
Accounts payable	0	0	0	0	0						
Short-term debt	10,767	10,275	10,275	10,275	10,275						
Long-term debt	23,157	39,826	39,826	39,826	39,826						
Provisions & other liab	45,520	42,027	42,027	42,027	42,027						
Total liabilities	79,444	92,127	92,127	92,127	92,127						
Shareholders' equity	84,818	73,628	74,158	77,562	83,829						
Minority interests	2,910	3,057	3,057	3,057	3,057						
Total equity	87,728	76,685	77,216	80,619	86,886						
Net debt	21,024	41,296	43,010	39,931	33,967						
Net debt to equity (%)	24.0	53.9	55.7	49.5	39.1						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

Telenor ASA

Company description

Telenor is the Norwegian incumbent telecom operator, with integrated units in Denmark and Sweden. The Nordic assets account for c45% of group value, on our estimates, with Eastern European, Russia and South-east Asian mobile units the rest. The Norwegian government owns c53% of the company.

Investment strategy

We rate Telenor Neutral. Telenor has superior operations to the sector, has resolved recent Vimpelcom disputes and secured spectrum in sixcircles in India. However, we argue that this is now reflected in a premium valuation and therefore we have a Neutral rating.

Valuation

We value Telenor at NOK 130/share based on a SOTP. We value Vimpelcom, DTAC, Digi and Grameenphone at market value. We value the Nordic operations at 5.9x 2013E EV/EBITDA.

Risks

We see the following risks that could prevent the shares from reaching our target price. First, we estimate that c40% of Telenor's value is generated from emerging markets. Second, uncertainty remains around Indian operations and the current investigation into the 2008 2G auction. Third, Telenor's underleveraged balance sheet increases the risk of value-destructive M&A. If the impact of these risk factors is more or less negative than we anticipate, then the share price could fail to reach or rise above our target price.

Company Focus

Vodacom Group Limited (VODJ.J) Looking to Build on Success

Thato Motlanthe

+27-11-944-0834

thato.motlanthe@citi.com

Sell	3
Price (10 Jun 13)	R112.75
Target price	R100.00
Expected share price return	-11.3%
Expected dividend yield	7.1%
Expected total return	-4.2%
Market Cap	R167,767M
	US\$16,839M

Price Performance

(RIC: VODJ.J, BB: VOD SJ)



■ **Mobile money initiatives** — Mobile money has not taken off in SA but has been a major success in Vodacom's main international market, Tanzania, since M-PESA was launched there in 2008. After some initial stuttering, active M-PESA users have grown to 4.9m or 51.5% of Vodacom's subscriber base in Tanzania. M-PESA revenues grew by c125% in FY 13 and now constitute c14.1% of Service revenues in Tanzania. Vodacom plans to roll-out M-PESA in its other International markets (DRC, Mozambique and Lesotho) and has kicked this off in DRC during the Mar-13 quarter.

■ **Regulation** — M-PESA in Tanzania has enjoyed a relatively benign regulatory environment in terms of mobile money. Although the expanding profile and range of mobile money services did create some unease among commercial banks; the central bank embraced the bigger picture of providing access to the poor and remote parts of the economy outside of the traditional banking sector. Therefore, the service continues to benefit from an enabling environment which has been key to its success. As an indication of banks' buy-in to M-PESA, Vodacom has actually also signed MoUs with a number of financial institutions in Tanzania that would allow holders to access and transact on their bank accounts via M-PESA.

■ **Business model** — M-PESA in Tanzania is a total payment solution (includes water, electricity, TV bills etc) which does not require users to have bank accounts; key in a country where many do not meet the minimum requirements to open an account. 160 organisations have accepted bill payments via M-PESA, with plans to grow this to 600; and individual users to 6m. The service presently facilitates between c\$750-800m in monthly transactions, with tariffs charged on a sliding scale. Vodacom derives an ARPU of c\$1.50 from M-PESA.

■ **Distribution network** — Vodacom built its agent network from its airtime distribution channel, and has deployed an "aggregator model" – allowing agents to recruit sub-agents – into this network, which has enabled the company to quickly scale the size of its agent distribution network. Vodacom has c49k M-PESA agents in Tanzania.

■ **How big a factor?** — Vodacom plans to re-launch M-PESA in SA, though we still believe that regulation and a comparatively sophisticated banking market will make this difficult to crack. Vodacom's target is for M-PESA to initially grow to a 15% contribution to International sales. On FY 13 figures this would translate to R1.7b (c2.5% of group) in mobile money revenues, from the current R0.6b.

Vodacom Group Limited (ZAR)

Year to 31 Mar	2012A	2013A	2014E	2015E	2016E
Sales (RM)	66,929.0	69,917.0	72,198.7	76,429.1	80,759.2
Net Income (RM)	10,374.0	12,770.0	13,026.2	13,595.0	14,221.4
Diluted EPS (¢)	709	872	890	929	971
Diluted EPS (Old) (¢)	709	872	890	929	971
PE (x)	15.9	12.9	12.7	12.1	11.6
EV/EBITDA (x)	7.7	7.0	6.7	6.4	6.1
DPS (¢)	710	785	801	836	874
Net Div Yield (%)	6.3	7.0	7.1	7.4	7.8

VODJ.J: Fiscal year end 31-Mar						Price: R112.75; TP: R100.00; Market Cap: R167,767m; Recomm: Sell					
Profit & Loss (Rm)	2012	2013	2014E	2015E	2016E	Valuation ratios	2012	2013	2014E	2015E	2016E
Sales revenue	66,929	69,917	72,199	76,429	80,759	PE (x)	15.9	12.9	12.7	12.1	11.6
Cost of sales	-30,368	-32,102	-33,536	-35,906	-38,365	PB (x)	8.9	7.9	7.5	7.2	6.8
Gross profit	36,561	37,815	38,663	40,523	42,395	EV/EBITDA (x)	7.7	7.0	6.7	6.4	6.1
Gross Margin (%)	54.6	54.1	53.6	53.0	52.5	FCF yield (%)	10.3	10.9	10.2	10.8	11.1
EBITDA (Adj)	23,092	25,021	26,250	27,592	29,122	Dividend yield (%)	6.3	7.0	7.1	7.4	7.8
EBITDA Margin (Adj) (%)	34.5	35.8	36.4	36.1	36.1	Payout ratio (%)	100	90	90	90	90
Depreciation	-5,882	-6,364	-6,815	-7,241	-7,770	ROE (%)	59.5	66.1	61.0	60.5	60.1
Amortisation	0	0	0	0	0	Cashflow (Rm)					
EBIT (Adj)	16,617	18,897	19,433	20,349	21,350	EBITDA	22,828	25,029	26,248	27,590	29,120
EBIT Margin (Adj) (%)	24.8	27.0	26.9	26.6	26.4	Working capital	1,124	-179	-1,061	-721	-748
Net interest	-639	-810	-664	-697	-724	Other	550	470	0	0	0
Associates	0	0	0	0	0	Operating cashflow	24,502	25,320	25,187	26,870	28,372
Non-op/Except	-374	579	0	0	0	Capex	-7,568	-7,286	-8,353	-9,106	-10,080
Pre-tax profit	15,933	18,434	18,769	19,652	20,626	Net acq/disposals	-23	357	0	0	0
Tax	-5,730	-5,210	-5,443	-5,699	-5,982	Other	-411	-225	-225	-225	-225
Extraord./Min.Int./Pref.div.	-47	-233	-300	-358	-423	Investing cashflow	-8,002	-7,154	-8,578	-9,331	-10,305
Reported net profit	10,156	12,991	13,026	13,595	14,221	Dividends paid	-7,947	-11,817	-11,681	-11,916	-12,436
Net Margin (%)	15.2	18.6	18.0	17.8	17.6	Financing cashflow	-8,556	-10,096	-18,311	-11,916	-12,436
Core NPAT	10,374	12,770	13,026	13,595	14,221	Net change in cash	8,025	8,139	-1,701	5,623	5,631
Per share data						Free cashflow to s/holders	16,934	18,034	16,834	17,764	18,292
Reported EPS (¢)	694	887	890	929	971						
Core EPS (¢)	709	872	890	929	971						
DPS (¢)	710	785	801	836	874						
CFPS (¢)	1,675	1,730	1,720	1,835	1,938						
FCFPS (¢)	1,157	1,232	1,150	1,213	1,249						
BVPS (¢)	1,267	1,421	1,497	1,576	1,659						
Wtd avg ord shares (m)	1,463	1,464	1,464	1,464	1,464						
Wtd avg diluted shares (m)	1,463	1,464	1,464	1,464	1,464						
Growth rates											
Sales revenue (%)	9.4	4.5	3.3	5.9	5.7						
EBIT (Adj) (%)	21.3	13.7	2.8	4.7	4.9						
Core NPAT (%)	7.4	23.1	2.0	4.4	4.6						
Core EPS (%)	7.7	23.0	2.0	4.4	4.6						
Balance Sheet (Rm)											
Cash & cash equiv.	3,781	6,528	6,528	6,528	6,528						
Accounts receivables	11,379	10,971	11,730	12,842	13,570						
Inventory	832	861	869	899	942						
Net fixed & other tangibles	24,907	28,178	30,701	33,316	35,896						
Goodwill & intangibles	5,123	5,332	5,332	5,332	5,332						
Financial & other assets	2,208	3,721	3,710	3,700	3,689						
Total assets	48,230	55,591	58,870	62,616	65,957						
Accounts payable	15,406	17,780	17,486	17,907	17,930						
Short-term debt	2,413	6,630	6,630	6,630	6,630						
Long-term debt	9,012	7,881	8,514	8,713	9,194						
Provisions & other liab	2,469	2,084	3,614	5,223	6,426						
Total liabilities	29,300	34,375	36,244	38,473	40,179						
Shareholders' equity	18,530	20,800	21,910	23,069	24,281						
Minority interests	400	416	716	1,074	1,497						
Total equity	18,930	21,216	22,626	24,143	25,778						
Net debt	7,644	7,983	8,616	8,815	9,296						
Net debt to equity (%)	40.4	37.6	38.1	36.5	36.1						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

Vodacom Group Limited

Company description

Vodacom is the leading cellular operator in South Africa, with 54% of the market and over 28m subscribers in South Africa. Vodacom is also a leading operator in Tanzania, DRC, Lesotho and quickly gaining share in Mozambique. It's subscriber base stood at 41.3m at the end of June 09. Vodacom operations also include Gateway, African satellite network operator, acquired in Dec 08.

Vodacom is 65% owned and controlled by Vodafone, which acquired control in May 2009. Telkom simultaneous agreed to unbundled its shares to its shareholders, thus bring about a listing of Vodacom on the JSE on the 19th of May 2009.

Investment strategy

We rate the stock Sell. The South African market has started to mature and offers fewer growth opportunities. The medium-term consumer landscape has also gotten tougher, which we believe could impact on telecom spending. Importantly, against this backdrop, we expect a rise in competition to put further pressure on Vodacom's prospective ARPU and growth. Although growth could hold up for now, we believe the risks have increased and expect earnings to go backwards in FY 14.

Vodacom's stock looks expensive on valuation and we believe that the share should de-rate to reflect its increased risk profile.

Valuation

Our DCF valuation is R96.73/sh, which we round up to R100 in setting our target price. Our valuation incorporates WACC of c10.5% and a terminal growth rate of 2% for South African operators and 11.3%/3.1% for its other operations.

90% of our DCF is driven by South African operations. At our target price, Vodacom would trade at an implied 2014e EV/EBITDA of 6.4x, which is towards the upper ranges of our valuation benchmarks for Vodacom's emerging market peers.

Risks

We see the following as the main risks to the share price exceeding our target price:

An improvement in the economic and consumer landscape, improved dividends and potential special dividends, strong cost and margin management and a continued benign competitive environment.

More generally, we highlight the following risks:

Not being able to recover the loss of revenue from interconnection. As seen in markets like Egypt, it can take a one or two quarters to make up for loss in revenue from tariffs as prices are cut.

Cell-C has become more aggressive. Cell-C has not been able to make inroads into the South African market, and has seen its market share remain low since 2007. Cell-C is in a strong position to cut tariffs, which may put pressure on Vodacom as it targets an increase in market share to 25% from c13-14% currently.

Expansion may reduce returns. Vodacom has a patchy record in pursuing acquisitions and expanding outside of South Africa. It has had to impair Mozambique in the past, as well as the recent Gateway acquisition. We see a risk to dividends and cashflow if further acquisitions are made and believe Vodacom would benefit more from increasing its dividend and returning cash to shareholders.

Increasing regulatory noise - ICASA has had a limited impact on the South African market so far. But it has become more vocal (along with the government) in wanting to reduce pricing on mobile. A more hostile regulator may change the favourable dynamic operators have enjoyed since mobile started in 1993/4.

Wireless Telecommunication Services (GICS) | Telecommunications Services - Wireless (Citi)
Western Europe | United Kingdom

Company Focus

Simon Weeden

+44-20-7986-4204

simon.weeden@citi.com

Buy	1
Price (10 Jun 13)	£1.92
Target price	£2.15
Expected share price return	12.1%
Expected dividend yield	5.3%
Expected total return	17.4%
Market Cap	£93,269M
	US\$145,113M

Price Performance

(RIC: VOD.L, BB: VOD LN)



Vodafone Group PLC (VOD.L) Leading in Mobile Money Space

■ **Mobile money initiative** — Vodafone owns the platform and brand behind M-PESA which it offers in 8 markets, most successfully so far in Kenya and Tanzania. In Kenya payments revenue is 18% of the total and a proportion of that (~11%) goes to Vodafone as royalties. It is also growing fast in Tanzania although will not be particularly material to a group of Vodafone's size unless it sees similar success in a large market like India. Vodafone is pushing on with mobile money services in developed markets as well where it is more of a convenience and where we see the monetization as harder to achieve.

■ **Emerging markets – M-PESA in Kenya** — In Kenya Vodafone associate Safaricom reported M-PESA customers reached 17.1m by the end of March - 88% of its total customer base – while 30 day active users reached 10.5m. M-PESA revenue increased to KES21.8b (US\$260m) up 29.5% yoy and the company sees 32% of its airtime top ups via the platform. During its FY13 to March it grew agent numbers by 66% yoy to 65,547, widening availability.

■ **Emerging markets – M-PESA outside Kenya** — M-PESA also continues to perform well in Tanzania, with approximately 4.9m active users, and was launched in DRC in November 2012. South Africa will see the service relaunched later in 2013 after a revamp to incorporate interface options with retail points of sale and banks without which it has been struggling. Vodafone launched M-PESA in India in April 2013 with ICICI bank.

■ **Developed markets** — Vodafone argues that the industry has until recently faced a chicken or egg situation with lack of compatible handsets and absence of merchant terminals or readers for transport ticketing. For its first product (Smartpass) it is offering a prepaid card and a smartphone app to control the service (already launched in Italy). The next step is to be an electronic wallet held in a secure environment on the SIM which can be extended with new features over time. Vodafone has set itself the aim of enabling customers to rely solely on their smartphone for their money and house keys by 2020.

Vodafone Group PLC (GBP)

Year to 31 Mar	2012A	2013A	2014E	2015E	2016E
Sales (£M)	46,417.0	44,445.0	44,709.3	44,355.2	44,876.6
Profit Before Tax (£M)	9,307.0	3,267.0	11,009.5	11,839.7	12,451.7
Diluted EPS (p)	14.8	15.6	15.8	17.1	18.3
Diluted EPS (Old) (p)	14.8	15.6	15.8	17.1	18.3
PE (x)	13.0	12.3	12.2	11.2	10.5
EV/EBITDA (x)	5.7	6.3	6.2	5.9	5.5
DPS (p)	13.5	10.2	10.2	10.2	10.2
Net Div Yield (%)	7.0	5.3	5.3	5.3	5.3

VOD.L: Fiscal year end 31-Mar						Price: £1.92; TP: £2.15; Market Cap: £93,391m; Recomm: Buy					
Profit & Loss (£m)	2012	2013	2014E	2015E	2016E	Valuation ratios	2012	2013	2014E	2015E	2016E
Sales revenue	46,417	44,445	44,709	44,355	44,877	PE (x)	13.0	12.3	12.2	11.2	10.5
Cost of sales	-27,894	-27,273	-27,687	-27,293	-27,401	PB (x)	1.2	1.3	1.3	1.2	1.2
Gross profit	18,523	17,172	17,023	17,062	17,476	EV/EBITDA (x)	5.7	6.3	6.2	5.9	5.5
Gross Margin (%)	39.9	38.6	38.1	38.5	38.9	FCF yield (%)	6.4	3.3	6.4	6.9	10.5
EBITDA (Adj)	14,475	13,275	13,193	13,293	13,602	Dividend yield (%)	7.0	5.3	5.3	5.3	5.3
EBITDA Margin (Adj) (%)	31.2	29.9	29.5	30.0	30.3	Payout ratio (%)	91	65	65	60	56
Depreciation	-5,769	-5,798	-6,028	-5,959	-5,912	ROE (%)	8.4	0.6	10.7	11.1	11.5
Amortisation	-2,137	-1,994	-2,008	-1,969	-1,958	Cashflow (£m)	2012	2013	2014E	2015E	2016E
EBIT (Adj)	6,569	5,483	5,157	5,365	5,732	EBITDA	18,180	13,743	13,193	13,293	13,602
EBIT Margin (Adj) (%)	14.2	12.3	11.5	12.1	12.8	Working capital	206	318	50	50	50
Net interest	-1,614	-1,432	-1,453	-1,377	-1,287	Other	-6,845	-4,454	-4,401	-4,382	-4,426
Associates	4,963	6,477	7,306	7,852	8,006	Operating cashflow	11,541	9,607	8,842	8,961	9,227
Non-op/Except	-4,316	-7,729	0	0	0	Capex	-7,735	-8,549	-6,751	-7,316	-6,077
Pre-tax profit	9,307	3,267	11,009	11,840	12,452	Net acq/disposals	4,628	741	0	0	0
Tax	-2,304	-2,594	-2,964	-3,206	-3,312	Other	3,929	4,731	4,820	6,422	6,834
Extraord./Min.Int./Pref.div.	-64	-238	-323	-357	-383	Investing cashflow	822	-3,077	-1,930	-893	757
Reported net profit	6,939	435	7,723	8,277	8,757	Dividends paid	-6,947	-5,185	-5,389	-5,357	-5,302
Net Margin (%)	14.9	1.0	17.3	18.7	19.5	Financing cashflow	-11,131	-1,312	-8,416	-8,826	-8,772
Core NPAT	7,550	7,696	7,723	8,277	8,757	Net change in cash	1,232	5,218	-1,504	-758	1,212
Per share data	2012	2013	2014E	2015E	2016E	Free cashflow to s/holders	6,219	3,156	6,036	6,432	9,594
Reported EPS (p)	13.6	0.9	15.8	17.1	18.3						
Core EPS (p)	14.8	15.6	15.8	17.1	18.3						
DPS (p)	13.5	10.2	10.2	10.2	10.2						
CFPS (p)	22.6	19.4	18.1	18.5	19.3						
FCFPS (p)	12.2	6.4	12.3	13.3	20.1						
BVPS (p)	155.0	146.1	151.3	157.1	164.1						
Wtd avg ord shares (m)	50,612	49,282	48,701	48,164	47,536						
Wtd avg diluted shares (m)	50,958	49,434	48,945	48,408	47,780						
Growth rates	2012	2013	2014E	2015E	2016E						
Sales revenue (%)	1.2	-4.2	0.6	-0.8	1.2						
EBIT (Adj) (%)	-2.0	-16.5	-5.9	4.0	6.8						
Core NPAT (%)	-14.0	1.9	0.4	7.2	5.8						
Core EPS (%)	-11.4	5.1	1.4	8.4	7.2						
Balance Sheet (£m)	2012	2013	2014E	2015E	2016E						
Cash & cash equiv.	10,195	14,439	12,935	12,176	13,389						
Accounts receivables	9,010	7,946	7,896	7,846	7,796						
Inventory	486	450	450	450	450						
Net fixed & other tangibles	24,138	28,379	28,594	28,702	28,867						
Goodwill & intangibles	59,514	52,397	50,896	50,176	48,218						
Financial & other assets	36,233	39,087	41,573	43,002	44,174						
Total assets	139,576	142,698	142,343	142,352	142,894						
Accounts payable	15,236	16,198	16,125	16,068	16,005						
Short-term debt	5,418	11,274	3,822	3,630	3,438						
Long-term debt	28,362	29,108	34,397	32,668	30,939						
Provisions & other liab	12,358	13,630	13,686	13,907	14,100						
Total liabilities	61,374	70,210	68,029	66,273	64,483						
Shareholders' equity	76,935	71,477	73,348	75,144	77,483						
Minority interests	1,267	1,011	966	935	928						
Total equity	78,202	72,488	74,314	76,079	78,411						
Net debt	23,585	25,943	25,284	24,121	20,989						
Net debt to equity (%)	30.2	35.8	34.0	31.7	26.8						

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com
For definitions of the items in this table, please click [here](#).

Vodafone Group PLC

Company description

Vodafone operates near globally, providing a range of telecoms services centred on mobile. Vodafone has equity interests in 26 countries and partner networks in over 40. In the US, its associated undertaking operates as Verizon Wireless and is the market leader.

Investment strategy

We rate Vodafone Buy. We expect Vodafone to benefit from high exposure to its fast-growing US associate Verizon Wireless, which it may be able to exit in the next 12 months creating a significant cash return event, and its emerging market assets but the company faces ongoing revenue pressure in Europe. Regulatory focus has been on increasing fixed-line fibre speeds but recent rhetoric from the European Commission has been more supportive of mobile as well.

Valuation

Our valuation of Vodafone and £2.15 target price are based on our SOP, which sets the stake in Verizon Wireless to 7x 2013e EBITDA gross of tax and puts an average of 4.3x on the European assets and 6.7x on the AMAP assets.

Risks

Risks that could prevent the shares from reaching our target price include: competition, regulation, technological obsolescence, translation impacts from exchange rates, M&A and spectrum costs. In addition, the discretionary dividend from Verizon Wireless may be skipped or a lower amount paid than our forecast from time to time.

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

Citigroup Global Markets Inc. owns a position of 1 million USD or more in the debt securities of Vodafone Group PLC

Citi is acting as Sell Side advisor to Indosat in its divestment of Tower Assets.

Citi is acting as a jointbookrunner for Bharti Airtel Ltd's bond offering.

Citigroup is acting as joint bookrunner for Temasek's sale of its stake in Singapore Telecommunications Ltd.

Within the past 12 months, Citigroup Global Markets Inc. or its affiliates has acted as manager or co-manager of an offering of securities of Millicom Intl Cellular, Indosat, Bharti Airtel, Telenor ASA, SingTel.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Millicom Intl Cellular, Vodafone Group PLC, Vodacom Group Limited, MTN Group Limited, Mobile Telesystems OJSC, Indosat, Bharti Airtel, Telenor ASA, PT Telkom, SingTel.

Citigroup Global Markets Inc. or its affiliates expects to receive or intends to seek, within the next three months, compensation for investment banking services from Vodafone Group PLC, Vodacom Group Limited, MTN Group Limited, Mobile Telesystems OJSC, Indosat, Telenor ASA, SingTel.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Millicom Intl Cellular, Vodafone Group PLC, PT XL AXIATA TBK., Vodacom Group Limited, PLDT, MTN Group Limited, Mobile Telesystems OJSC, Indosat, Bharti Airtel, Telenor ASA, PT Telkom, SingTel in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as investment banking client(s): Millicom Intl Cellular, Vodafone Group PLC, Vodacom Group Limited, MTN Group Limited, Mobile Telesystems OJSC, Indosat, Bharti Airtel, Telenor ASA, PT Telkom, SingTel.

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, securities-related: Millicom Intl Cellular, Vodafone Group PLC, PT XL AXIATA TBK., Vodacom Group Limited, PLDT, MTN Group Limited, Mobile Telesystems OJSC, Indosat, Bharti Airtel, Telenor ASA, PT Telkom, SingTel.

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: Millicom Intl Cellular, Vodafone Group PLC, PT XL AXIATA TBK., Vodacom Group Limited, PLDT, MTN Group Limited, Mobile Telesystems OJSC, Indosat, Bharti Airtel, Telenor ASA, PT Telkom, SingTel.

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.

The Firm is a market maker in the publicly traded equity securities of Millicom Intl Cellular, Vodafone Group PLC, MTN Group Limited, Telenor ASA, SingTel.

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.

Citi Research Equity Ratings Distribution

Data current as of 31 Mar 2013

	12 Month Rating			Relative Rating		
	Buy	Hold	Sell	Buy	Hold	Sell
Citi Research Global Fundamental Coverage	48%	39%	12%	7%	87%	7%
% of companies in each rating category that are investment banking clients	53%	49%	43%	65%	49%	51%

Guide to Citi Research Fundamental Research Investment Ratings:

Citi Research stock recommendations include an investment rating and an optional risk rating to highlight high risk stocks.

Risk rating takes into account both price volatility and fundamental criteria. Stocks will either have no risk rating or a High risk rating assigned.

Investment Ratings: Citi Research investment ratings are Buy, Neutral and Sell. Our ratings are a function of analyst expectations of expected total return ("ETR") and risk. ETR is the sum of the forecast price appreciation (or depreciation) plus the dividend yield for a stock within the next 12 months. The Investment rating definitions are: Buy (1) ETR of 15% or more or 25% or more for High risk stocks; and Sell (3) for negative ETR. Any covered stock not assigned a Buy or a Sell is a Neutral (2). For stocks rated Neutral (2), if an analyst believes that there are insufficient valuation drivers and/or investment catalysts to derive a positive or negative investment view, they may elect with the approval of Citi Research management not to assign a target price and, thus, not derive an ETR. Analysts may place covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and / or trading in the company's securities (e.g. trading suspension). As soon as practically possible, the analyst will

publish a note re-establishing a rating and investment thesis. To satisfy regulatory requirements, we correspond Under Review and Neutral to Hold in our ratings distribution table for our 12-month fundamental rating system. However, we reiterate that we do not consider Under Review to be a recommendation. **Relative three-month ratings:** Citi Research may also assign a three-month relative call (or rating) to a stock to highlight expected out-performance (most preferred) or under-performance (least preferred) versus the geographic and industry sector over a 3 month period. The relative call may highlight a specific near-term catalyst or event impacting the company or the market that is anticipated to have a short-term price impact on the equity securities of the company. Absent any specific catalyst the analyst(s) will indicate the most and least preferred stocks in the universe of stocks under consideration, explaining the basis for this short-term view. This three-month view may be different from and does not affect a stock's fundamental equity rating, which reflects a longer-term total absolute return expectation. For purposes of NASD/NYSE ratings-distribution-disclosure rules, most preferred calls correspond to a buy recommendation and least preferred calls correspond to a sell recommendation. Any stock not assigned to a most preferred or least preferred call is considered non-relative-rated (NRR). For purposes of NASD/NYSE ratings-distribution-disclosure rules we correspond NRR to Hold in our ratings distribution table for our 3-month relative rating system. However, we reiterate that we do not consider NRR to be a recommendation.

Prior to October 8, 2011, the firm's stock recommendation system included a risk rating and an investment rating. **Risk ratings**, which took into account both price volatility and fundamental criteria, were: Low (L), Medium (M), High (H), and Speculative (S). **Investment Ratings** of Buy, Hold and Sell were a function of the Citi Research expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating. Additionally, analysts could have placed covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and/or trading in the company's securities (e.g. trading suspension). Stocks placed "Under Review" were monitored daily by management and as practically possible, the analyst published a note re-establishing a rating and investment thesis. For securities in developed markets (US, UK, Europe, Japan, and Australia/New Zealand), investment ratings were: Buy (1) (expected total return of 10% or more for Low-Risk stocks, 15% or more for Medium-Risk stocks, 20% or more for High-Risk stocks, and 35% or more for Speculative stocks); Hold (2) (0%-10% for Low-Risk stocks, 0%-15% for Medium-Risk stocks, 0%-20% for High-Risk stocks, and 0%-35% for Speculative stocks); and Sell (3) (negative total return). For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings were: 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.

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 Singapore PTE LIMITED	Arthur Pineda
Citigroup Global Markets Ltd	Simon Weeden; Laurie Fitzjohn-Sykes, CFA; Dalibor Vavruska
Citigroup Global Markets Inc	Michael Rollins, CFA
Citigroup Global Markets (Pty) Ltd	Thato Motlanthe
Citigroup Global Markets India Private Limited	Gaurav Malhotra, CFA

OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 10 June 2013 04:00 PM on the issuer's primary market.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Millicom Intl Cellular, Vodafone Group PLC, MTN Group Limited, Telenor ASA. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citiVelocity.com.)

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.

Citigroup Global Markets Inc. or its affiliates acts as a corporate broker to Vodafone Group PLC.

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 Wealth Management disclosure website at www.morganstanley.com/online/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/fundMgr/DISFundMgrAnalystPop.jsp?companyCd2=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 Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 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
