

# Apollo Enterprise Solutions

## Initiating Coverage

Sector: Financial Services

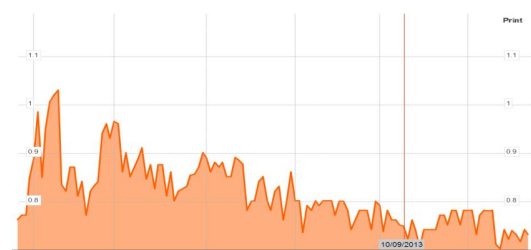
**Target Price: €0.87**
**Rating: BUY**

Year	Sales €/000	Ebitda €/000	Ebitda margin %	Ebit €/000	Ebit margin %	EV/ Ebitda x	EV/ Ebit x	PER x
2013F	1.409	(2.721)	n.m.	(2.968)	n.m.	n.m.	n.m.	n.m.
2014F	3.099	(787)	n.m.	(1.030)	n.m.	n.m.	n.m.	n.m.
2015F	6.696	1.144	17,1%	905	13,5%	27,28	34,50	n.m.
2016F	9.374	1.911	20,4%	1.578	16,8%	16,34	19,79	12,91
2017F	13.124	3.313	25,2%	2.943	22,4%	9,42	10,61	7,11

New	
Rating	BUY
Risk Rating	Medium
Target (€)	0,87

Market Data (€)	
Close Price (€)	0,68
Share Outstanding (m)	42,8
Market Cap. (€/m)	29,1
Market Float (%)	29,9
Avg daily Vol. (000s)	7
Past 12 Months	Max 1,02 Min 0,68

Performance	3 M	12 M
Absolute	-18,1	n.a.
Relative	-21,3	n.a.



**Activity.** Apollo Enterprise Solutions Ltd. ("AES") is the leading provider of advanced technology solutions for large banks and other financial enterprises. AES' TRUE™ Consumer Credit Portfolio Management System addresses the entire life-cycle of credit products with an emphasis on credit, collections and recoveries. AES's customers, large banks and other financial institutions, utilize the TRUE™ System as outsourced Software as a Service ("SaaS"). Without disrupting the bank's existing systems, AES' TRUE™ System applies the bank's business rules (e.g. how much discount to apply to a customer group) to the bank's own data and combines that with its own advanced Agent Emulation™ technology and outside information, such as credit bureau reports, to formulate highly targeted debt settlement offers for delinquent accounts or even new offers to good standing accounts. The combination of information increases collections, enables replacement of manual systems, and reduces administration and staffing. AES estimates to produce approximately 5% saving costs (i.e. \$50,000,000 in additional gross margin on a \$10,000,000,000 loan portfolio).

**The sector.** The potential market that AES could attack is very big. In US as of September 30, 2013, total consumer indebtedness was \$11.28 trillion, up by 1.1% from its level in the second quarter of 2013. Mortgage balances shown on consumer credit reports stand at \$7.90 trillion, up by \$56 billion from their level in the second quarter. Just over three quarters of all EU MFI loans reside in the euro area, and almost one quarter are in the EU countries outside the euro area. In 2011, total EU MFI loans grew by € 0.88 trillion, or 3.7%. Within the euro area, total loans grew by 4% in 2011, while in the EU countries outside the area, total loans increased by a more modest 2%.

**Valuation.** BUY, Target Price €0.87, risk medium. We use two methods to value Apollo Enterprise Solutions: DCF and ratios analysis. We believe that the two methodologies are able together to catch the "correct" AES equity value. Finally, we average the values resulting from these two methods to arrive at our final valuation of company value. Taking an average of the two valuations, AES' resulting equity value is equal to US\$50,4 mln, or US\$1,18 per share. At the exchange rate Euro/US dollar of 1.35, AES' equity value results of €0.87 per share.

Our equity value forecast, do not prudentially taking into account the intangibles value, meaning for example the strong shareholders' network, the unique ability to create value for clients, etc., so that we maintain our equity value of €0.87 per share

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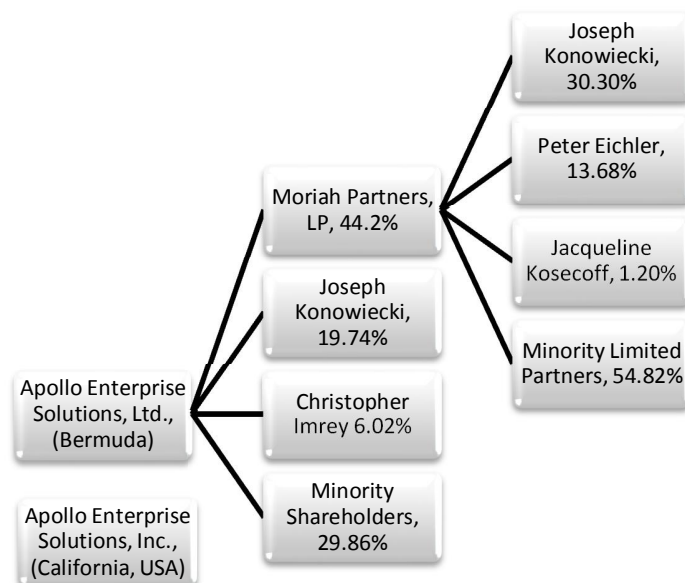
### Activities

Apollo Enterprise Solutions Ltd. ("AES") is the leading provider of advanced technology solutions for large banks and other financial enterprises. AES TRUE™ Consumer Credit Portfolio Management (the "TRUE™ System") System addresses the entire life-cycle of credit products with an emphasis on credit, collections and recoveries. By emulating the best practices of live agents, it improves operational effectiveness, delivers sustainable performance lifts, reduces the cost of operations and enhances the overall customer experience.

AES' TRUE™ System is today the first totally automated, real-time, self-service Agent Emulation system for consumer credit products making complex transactions simple and accessible.

The Company was incorporated on 26 September 2012 as a Bermuda exempted company under the laws of Bermuda under the name of APOLLO ENTERPRISE SOLUTIONS, LTD. pursuant to the Companies Act.

**Fig. 1 – Corporate Structure**



Source: AES

### Board of directors

The Board of Directors is formed by extremely expert people in different aspects of financial services. AES board of directors is composed by five people, three of them directly or indirectly AES' shareholders.

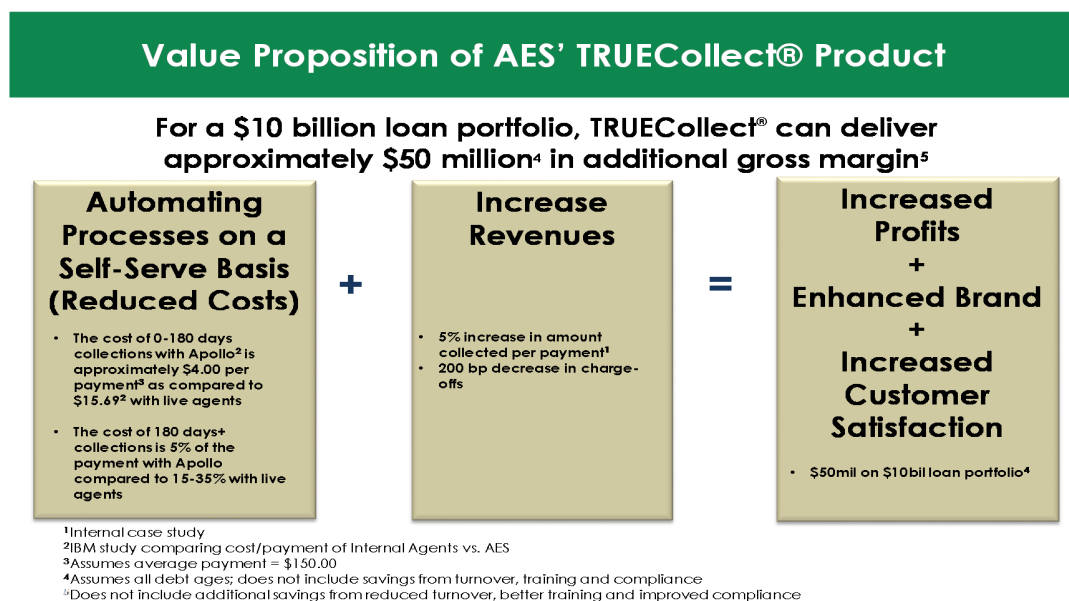
- Joseph S. Konowiecki, Chairman & Chief Executive Officer
- Jacqueline Kosecoff, PhD, Director
- Christopher Imrey, Director

- James Keyes, Director
- Sharon Ward, Director

The TRUE™ System, a comprehensive suite of enterprise class software products, seeks to provide superior economic returns in credit portfolio management by increasing efficiency in debt collection.

AES's customers, large banks and other financial institutions, utilize the TRUE™ System as outsourced Software as a Service ("SaaS"). Without disrupting the bank's existing systems, AES' TRUE™ System applies the bank's business rules (e.g. how much discount to apply to a customer group) to the bank's own data and combines that with outside information, such as credit bureau reports, to formulate highly targeted debt settlement offers for delinquent accounts or even new offers to good standing accounts. The combination of information increases collections, enables replacement of manual systems, and reduces administration and staffing. AES estimates to produce approximately 5% saving costs (i.e. \$50,000,000 in additional gross margin on a \$10,000,000,000 loan portfolio).

Fig. 2 – Value proposition of AES's TrueCollect Product



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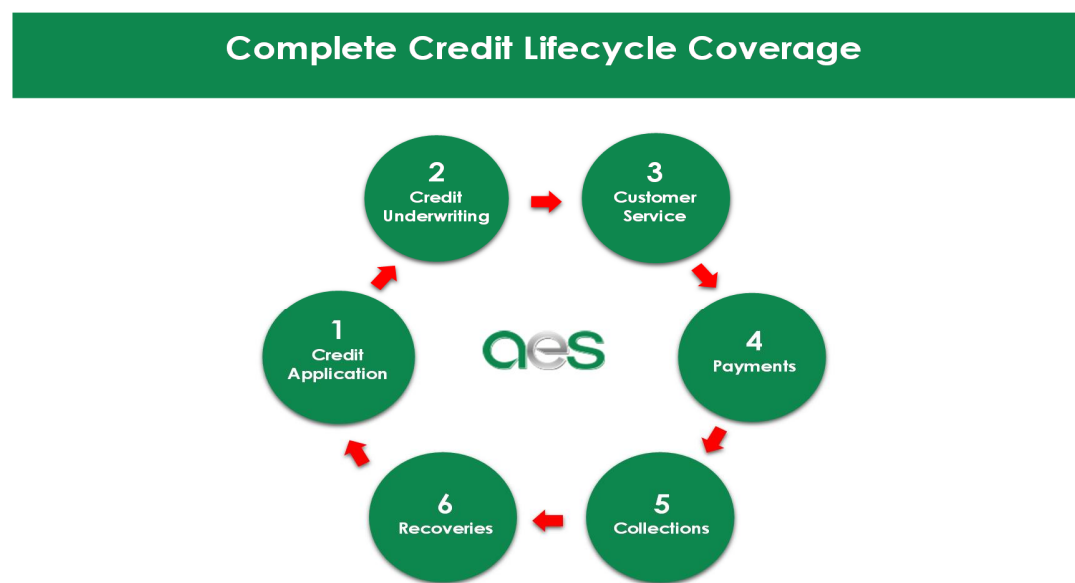
Source: AES

AES designs the TRUE™ system to assist consumers with making personal choices related to financial services: acquiring new services, paying off existing services, settling delinquent services, and getting answers about services. The system is powered by AES' proprietary Intelligent Decision Engine, which uses Choice Technology™ logic and complex business rules to fully automate the decision making process required by such multifaceted transactions. To

maximize the uptake of offers and conclude transactions to the satisfaction of both consumers and creditors, the TRUE™ system calculates and then presents a set of pre-approved choices individually tailored for each consumer.

The TRUE™ system assists consumers in resolving their personal financial distress by generating multiple choices, or possible settlement offers, and matching them to the consumers' personal profile and financial situation. The TRUE™ system empowers consumers to clearly understand their debt obligations on a self-serve basis online, and enables consumers to resolve situations of financial distress in the privacy of their own home, without interference from live collection agents.

**Fig. 3 – Complete Credit Lifecycle Coverage**



© 2013 AES U.S. Patents 7,814,005; 7,818,229; 7,848,978; 8,347,402; 8,321,339; 8,239,224; 8,407,138; 8,504,468. New Zealand Patent 555,166; Australia Patent 2005295176; South Africa 2007/02750. Other Patents Pending. V3.5 TRUE, Intelligent Decisioning, TRUECommand, TRUEChoice, TRUECollect®, TRUEScore, TRUEServe, TRUEPay, TRUEStrat, TRUEAgent, TRUESelect, TRUEContact, TRUENet and TRUECompliance are trademarks of Apollo Enterprise Solutions, Inc. 33

Source: AES

Most importantly, consumers are treated with a gentler “tone of voice” than is customary in the financial services industry, thus fostering an environment of goodwill and trust between them and the creditors. The consumer experience is further enhanced by offering not one, but several settlement alternatives or choices, thus giving the consumers the freedom to choose.

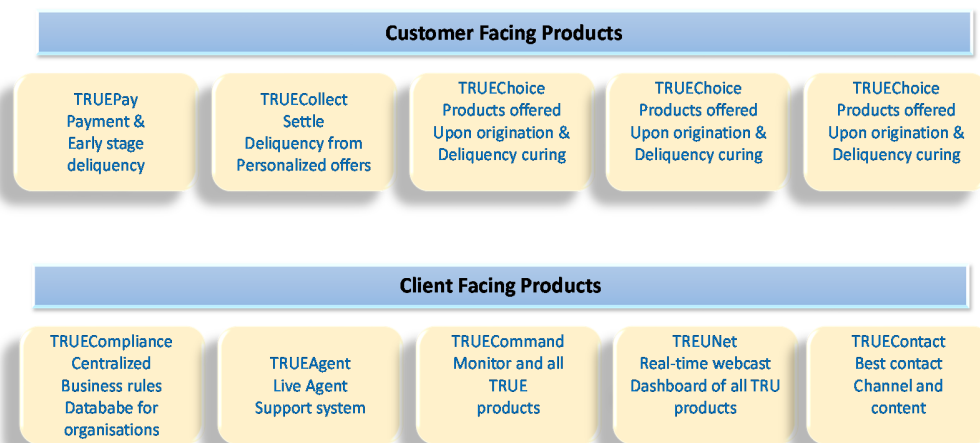
The TRUE™ System consists of several complementary modules including:

- TRUECollect® module, which emulates the best practices of live agents to allow creditors to recover delinquent debts faster and more efficiently. It Enables customers to settle their delinquent accounts using a private website by selecting settlement offers that are automatically tailored according to each individual's personal profile, credit rating and past behavior;
- TRUECommand™, a comprehensive command, control and monitoring cockpit. The cockpit enabling managers to monitor, command and control the operations of all AES TRUE products;

- TRUEScore™, which pulls customers' credit scores in real-time and provides real score scenarios based on payments;
- TRUEChoice™, which emulates sales agent behavior to provide any number of product offerings to prospective customers based on their financial profile. Upon paying-off delinquent debt and based on customers' credit rating, financial products are offered to customers for which they now qualify.
- TRUEServe™, which emulates customer service agent behavior to provide automated, customer-specific answers to customer inquiries. Presents customers with a small set of Q&As selected based on their personal and credit profiles as well as their most recent activity;
- TRUENet™, a local area webcasting network that improves operating floor efficiencies for banks, lenders, and other credit product marketers;
- TRUEContact™, a module for contact and channel management. Automatically selects the optimum communication channel and message content based on the customers' demographic, credit profile and past behavior.

The TRUECollect® module provides real-time, optimized settlement offers and comprehensive portfolio analytics for the entire collections process. TRUECollect® emulates the best practices of live agents, while providing for greater compliance and security. The TRUECollect® module allows creditors to recover delinquent debts faster and more efficiently than any other solution on the market today, while significantly improving the customer experience. It is the world's most advanced customer self-service and self-settlement system.

**Fig. 4 – Customers and Clients Facing Products**



*Source: AES*

Regardless of how global consumers have reached their point of financial distress, they require positive guidance in dealing with their immediate situation and education to assist them in

making better choices in the future. Customers who are in financial distress and have no assistance for improving their creditworthiness need an empowering self-service solution to:

1. help them understand and receive the best choices for resolving a debt,
2. education on the affect to their creditworthiness based on the choice they select,
3. positive psychological reinforcement that they are a valued customer. The TRUE™ Agent Emulation™ System provides these solutions.

The TRUE™ Agent Emulation™ System is a Software as a Service (SaaS) solution consisting of a series of compatible customer-centric modules that provide organizations with the ability to manage the entire credit portfolio lifecycle. The TRUE™ System is powered by AES' proprietary Intelligent Decision Engine, which automates complex transaction decisioning of business rules.

It utilizes AES's patented Choice Technology™ through which it emulates the best practices of live customer-facing agents in order to present customers with individually tailored based on their individual profile.

The TRUE™ Agent Emulation™ System can assist customers across multiple divisions of a creditor in resolving their personal financial distress, choosing a new product or service, or even getting answers to complex customer service questions by generating multiple choices, or possible settlement offers, and matching them to the customer's personal profile and financial situation. It enables customers to interact with a creditor on a self-serve basis online, and empowers and educates customers to resolve situations in the privacy of any environment of their choice, at any time, on any device, without interference from live agents. Most importantly, customers are treated with a kinder and gentler "tone of voice" than is customary in the financial services industry, thus fostering an environment of goodwill and trust between them and the creditors.

We believe that main benefits to the clients are:

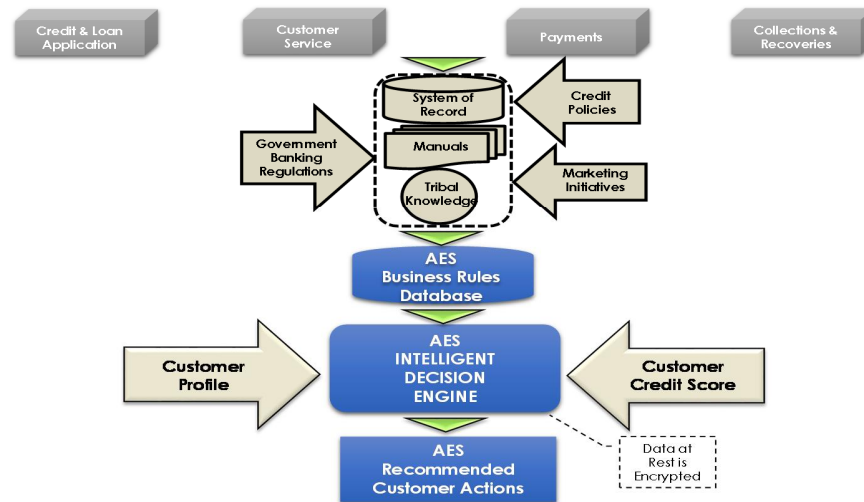
- Increased profitability;
- Reduced write-offs;
- Less internal costs;
- Improved regulatory compliance;
- Increased customers trust;
- Improved customer satisfaction;
- Ability to sells new products;
- Reduced customer attrition.
- Enhanced customer contact information acquisition.

As far as customers are concerned, we believe that benefits could be:

- Self capability;
- Earlier presentation of best settlement choices;
- Reduced emotional and psychological stress;
- Better informed decision through education;
- Earlier resolution of delinquency;

- Faster improvement of credit scores;
- Access to new products easier and faster.

**Fig. 5 - Underlying the AES Suite of Products is breakthrough Agent Emulation™ technology**



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**Source: AES**

AES's technologies are protected by a broad, world-wide intellectual property portfolio that includes thirty-five (35) patents issued, allowed and pending. The company has offices in Los Angeles, New York, London, Sydney and Frankfurt.



**Fig. 6 - Patent**

PATENT TITLE	PAT. OFFICE INTERNAL #	PATENT NO.	STATUS
SYSTEM FOR RESOLVING TRANSACTIONS	11/256,405		Allowed
SYSTEM AND METHOD FOR COMPILING INFORMATION	11/256,404	8,504,468	Issued
METHOD FOR FUTURE PAYMENT TRANSACTIONS	11/372,850	7,818,229	Issued
DYNAMIC CREDIT SCORE ALTERATION	11/372,767	7,814,005	Issued
ENHANCED TRANSACTION RESOLUTION TECHNIQUES	11/372,588	7,848,978	Issued
SYSTEM AND METHOD FOR RESOLVING TRANSACTIONS- AUSTRALIA	2005295176	2005295176	Issued
SYSTEM AND METHOD FOR RESOLVING TRANSACTIONS- SOUTH AFRICA	2007-01365	2007/01365	Issued
SYSTEM AND METHOD FOR RESOLVING TRANSACTIONS- NEW ZEALAND	555166	555166	Issued
SOFTWARE DEVELOPMENT AND DISTRIBUTION WORKFLOW EMPLOYING	12/657,192	8,347,402	Issued
SYSTEM AND METHOD FOR RESOLVING TRANSACTIONS WITH VARIABLE	12/657,215	8,321,339	Issued
ENHANCED TRANSACTION RESOLUTION TECHNIQUES	12/928,208	8,239,224	Issued
SYSTEM AND METHOD FOR RESOLVING TRANSACTIONS	2007538077		Allowed
METHOD FOR FUTURE PAYMENT TRANSACTIONS	12/925,312		Allowed
SYSTEM FOR RESOLVING TRANSACTIONS	13/199,801		Allowed

Source: AES

### Main key marketing alliances

One of the main driver to fast expand business, it to make alliances and joint-venture with other companies. Normally, big alliances with big companies meaning big success. AES has been able to sign important alliances and JV with:

- **Oracle** - Top 5 provider of banking systems in the world. Oracle is will provide an Asia-Pacific sales force for AES products and Oracle consultants will provide installation and consulting services for all AES products. Oracle provides banking software applications the Top 20 banks in the world.
- **First Data** - Largest payment service provider in the world. First Data will provide a North America, EMEA, and South America sales force for AES products, and will integrate AES products with First Data's next generation banking system VisionPlus, which is being deployed to banks in 60 countries
- **FIS** - Top 5 provider of banking systems in the world. FIS is integrating AES products with their core banking products which will give AES access to FIS' processing and technology relationships with the Top 50 global banks, targeting the Top10.
- **Western Union** - One of the largest global payment service providers. Western Union plans to integrate AES products into their Speedpay platform which supports 10,000 billers in the Financial Services, Auto Finance, Insurance, Mortgage, Telecom, and Utilities industries in the US.
- **PricewaterhouseCoopers & KPMG** - Global consulting firms with world-wide practices for the Financial Services industry. PricewaterhouseCoopers and KPMG consultants to provide project management and consulting services related to all AES products. KPMG and PwC are recommending the AES suite of products to Top 25 Bank targets in North America and EMEA.



- **Hewlett Packard** - HP and AES have formed a strategic alliance to explore building cloud based enterprise self-service ecosystems for financial services companies that will enable them to improve corporate enterprise business model operations, streamline business processes, enhance the consumer experience, and achieve greater return on technology investments.

## ***The Sector***

AES mainly operates in consumer market, so that we kick off with a survey on credit market.

### **Household Debt and Credit Developments in 2013 Q3 in US market (source: Federal Reserve Bank of New York).**

Aggregate consumer debt increased in the third quarter by \$127 billion, the largest increase seen since the first quarter of 2008. As of September 30, 2013, total consumer indebtedness was \$11.28 trillion, up by 1.1% from its level in the second quarter of 2013. Overall consumer debt remains 11% below its peak of \$12.68 trillion in 2008Q3.

Mortgages, the largest component of household debt, increased by 0.7% in the third quarter of 2013. Mortgage balances shown on consumer credit reports stand at \$7.90 trillion, up by \$56 billion from their level in the second quarter.

Balances on home equity lines of credit dropped by \$5 billion (0.9%) and now stand at \$535 billion. Household non-housing debt balances increased by 2.7%, with gains of \$31 billion in auto loan balances, \$33 billion in student loan balances, and \$4 billion in credit card balances.

Delinquency rates improved for most loan types in 2013Q3. As of September 30, 7.4% of outstanding debt was in some stage of delinquency, compared with 7.6% in 2013Q2. About \$831 billion of debt is delinquent, with \$600 billion seriously delinquent (at least 90 days late or “severely derogatory”).

Delinquency transition rates for current mortgage accounts are near pre-crisis levels, with 1.6% of current mortgage balances transitioning into delinquency. The rate of transition from early (30-60 days) into serious (90 days or more) delinquency increased slightly, to 22.7%, while the cure rate – the share of balances that transitioned from 30-60 days delinquent to current – also worsened somewhat, dropping to 25.7%.

About 355,000 consumers had a bankruptcy notation added to their credit reports in 2013Q3, roughly flat compared to the same quarter last year.

### **Housing Debt**

- Originations, which we measure as appearances of new mortgage balances on consumer credit reports, dropped slightly to \$549 billion.
- About 168,000 individuals had a new foreclosure notation added to their credit reports between July 1 and September 30.
- Foreclosures have been on a declining trend since the second quarter of 2009 and are now at the lowest levels seen since the end of 2005.
- Mortgage delinquency rates have seen consistent improvements; 4.3% of mortgage balances were 90+ days delinquent during 2013Q3, compared to 4.9% in the previous quarter.
- Delinquency rates on Home Equity Lines of Credit increased to 3.5%, up from 3.0% in 2013Q2.

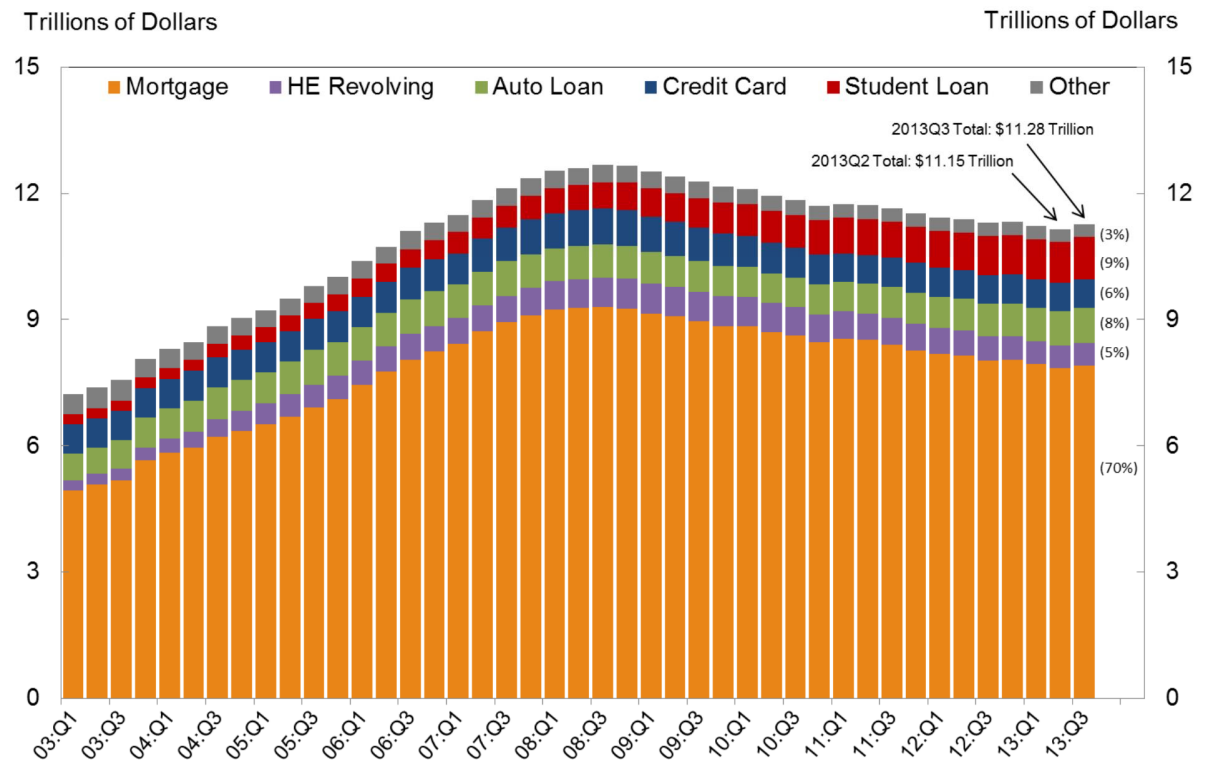
### Student Loans and Credit Cards

- Outstanding student loan balances reported on credit reports increased to \$1.027 trillion as of September 30, 2013, a \$33 billion increase from the second quarter.
- the 90+ day delinquency rate increased, and is now at 11.8%
- Balances on credit cards accounts increased by \$4 billion.
- The 90 + day delinquency rate on credit card balances fell to 9.4%.

### Auto Loans and Inquiries

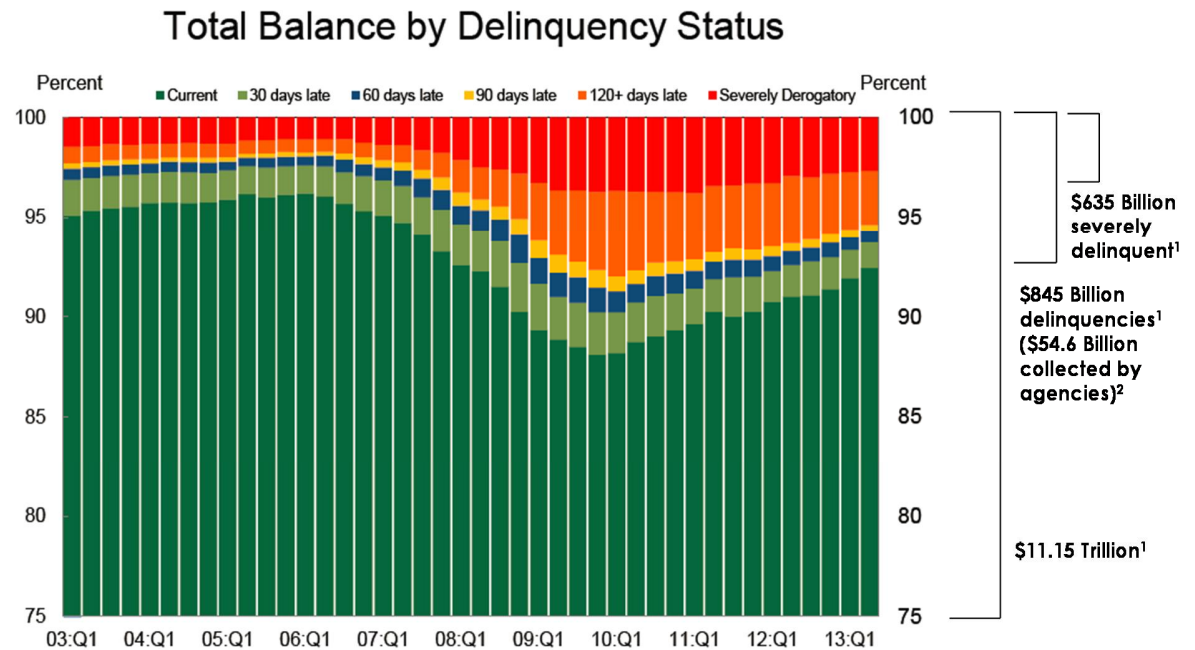
- Auto loan originations increased in the third quarter of 2013 to \$97.4 billion, the highest level since 2007Q3.
- The percentage of auto loan debt that is 90 or more days delinquent continued its downward trend, and now stands at 3.4%.
- The number of credit inquiries within six months – an indicator of consumer credit demand – increased. There were 168 million inquiries in 2013Q3, compared to 159 million inquiries in 2013Q2.

**Fig. 7 – Total Net Balance and its Composition**



Source: FRBNY Consumer Credit Panel/Equifax

**Fig. 8 – Growing Consumer Debt Worldwide**

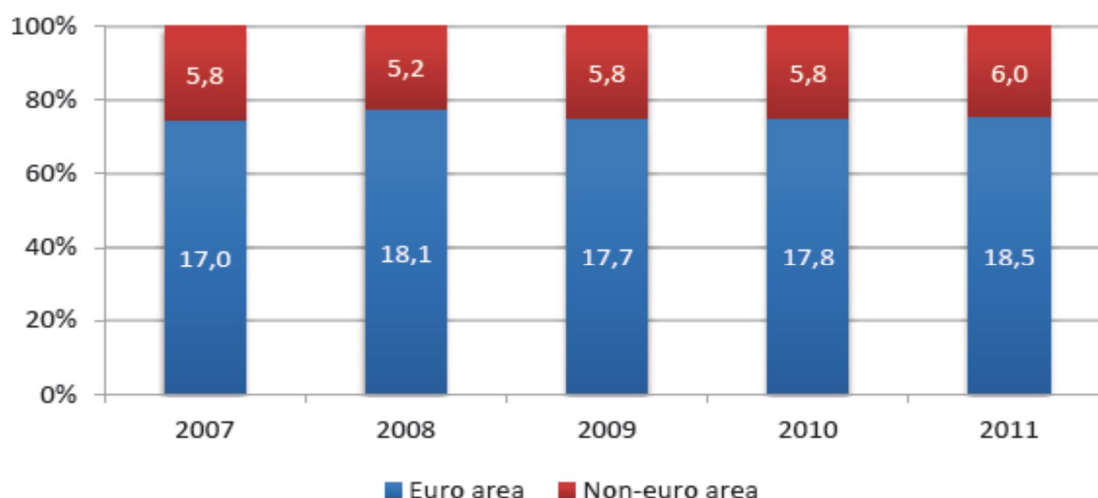


Source: FRBNY Consumer Credit Panel/Equifax

### Loans Structure In Europe

Just over three quarters of all EU MFI loans reside in the euro area, and almost one quarter are in the EU countries outside the euro area. In 2011, total EU MFI loans grew by € 0.88 trillion, or 3.7%. Within the euro area, total loans grew by 4% in 2011, while in the EU countries outside the area, total loans increased by a more modest 2%.

**Fig. 9 – Total loans in the EU MFIs (Euro trillion)**



*Source: EBF "European banking sector, facts and figures 2012"*

### **Dynamics**

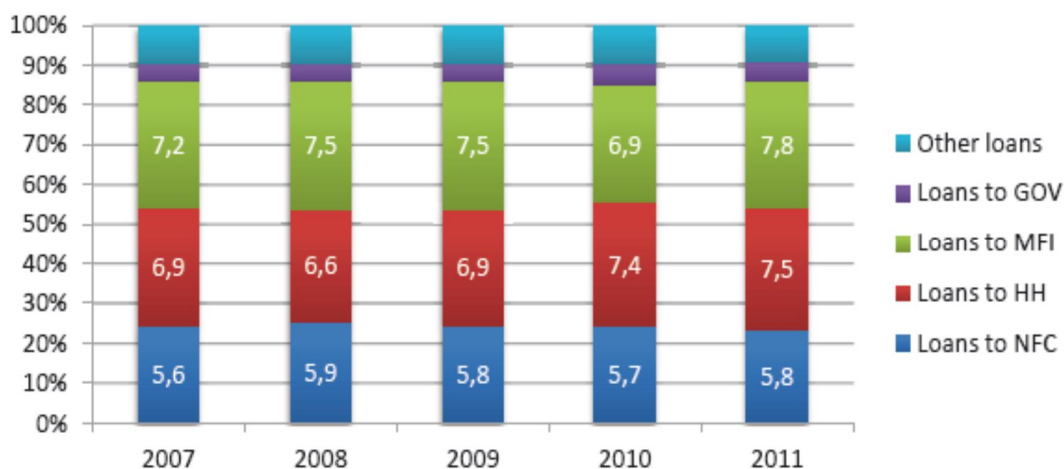
The lion's share of loan growth in the EU was on the account of inter-bank lending, € 0.84 trillion, which represents over 12% annual growth of this loan portfolio component. This represents a significant increase after a sharp fall in 2010 (-8%) and a largely neutral result the year before that (0.8%).

France, Germany, the Netherlands and Finland have all strongly contributed to the increase in the stock of MFI lending to MFI's by the end of 2011. This strong inter-bank lending growth was secured by the European Central Bank's two 3-year liquidity operations performed at the end of 2011, the total amount of which totaled around € 1 trillion. With this action, the ECB, as a lender of last resort, ensured that the euro area banking sector (narrowly) avoided a credit crunch. As a result, the vast majority of the provided liquidity was used at the inter-bank market, and only a fraction of it was passed on to the real economy.

Taking this loan portfolio component out of the equation, the remaining components combined present a rather stagnant situation in the EU.

With regard to the loans to governments, in 2010, the loan portfolio saw a steep increase of over 20%, but in 2011, it shrank by some 4.4%, while still keeping the level of total loans to governments outstanding significantly higher than during the previous decade.

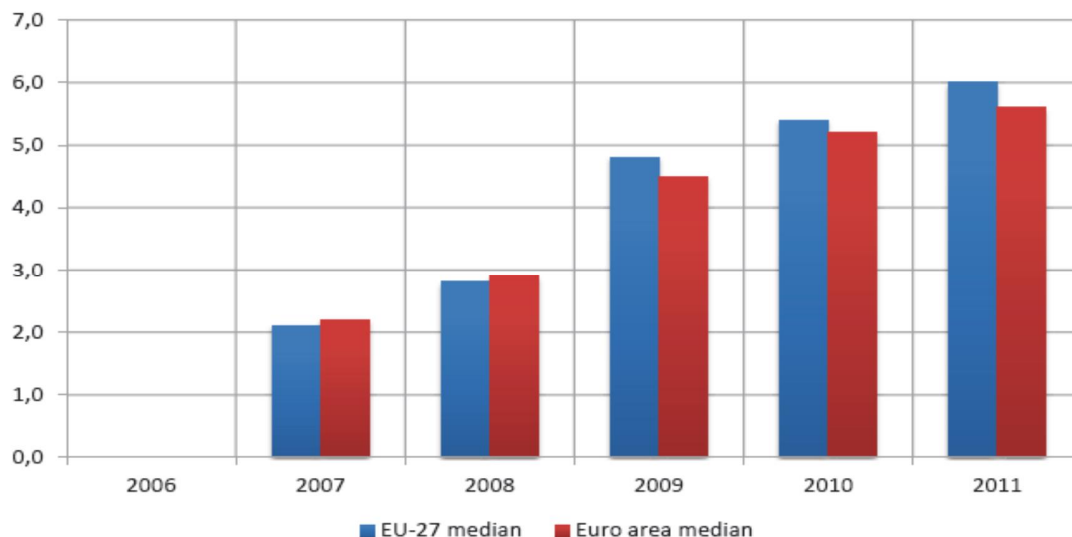
**Fig. 10 – Composition of EU MFI loans by sector (Euro trillion)**



Source: EBF "European banking sector, facts and figures 2012"

As far as NPLs are concerned, according to International Monetary Fund (IMF), the level of non-performing loans, as a share in total loans, was still rather high in most EU countries in 2011. Median NPL ratio was at 6.0% in the EU-27, and at 5.6% in the euro area.

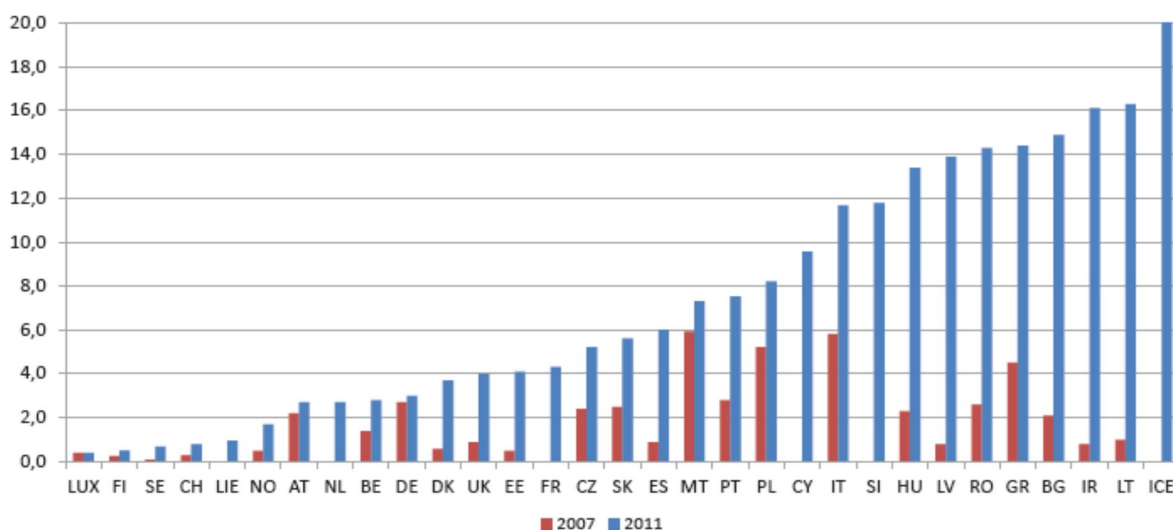
**Fig. 11 – NPL, % of total loans, medians across countries (IMF, EBF estimates)**



Source: EBF "European banking sector, facts and figures 2012"

The graph below shows a mixed picture across the EU Member States. The highest share of NPLs was registered in Ireland and Lithuania, 16.1% and 16.3% respectively. Romania, Greece and Bulgaria had an NPL ratio just below 15% of total loans in 2011. The most favorable situation regarding NPLs was observed in Luxembourg, Finland and Sweden, where fractions of NPL were below 1%.

**Fig. 12 – NPLs to total loans, % (IMF)**



Source: EBF "European banking sector, facts and figures 2012"

### Recent European NPL data

European banks' non-performing loans have doubled in just four years to reach close to €1.2tn and are expected to keep rising, according to analysis that provides a disquieting backdrop to the region's forthcoming assessment of lenders' balance sheets.

A report by PwC found that non-performing loans (NPLs) rose from €503bn in 2008 to €1.187tn in 2012, with rises in the most recent year driven by deteriorating conditions in Spain, Ireland, Italy and Greece. It predicted further rises in the years ahead because of the "uncertain economic climate".

According to PwC, the "reshaping" of European bank balance sheets had several more years to run as lenders shed troubled and unwanted loans and attempted to strengthen their balance sheets.

They estimates European banks are sitting on €2.4tn of non-core loans that they plan to wind down or sell off. The first eight months of 2013 have seen €46bn of European loan portfolio transactions, equal to the entire amount recorded in 2012.

The PwC figures come after the European Central Bank this month unveiled plans for a comprehensive assessment of the health of the Eurozone's banking system as it prepares to take on responsibility to oversee the region's banking sector.

The ECB's probe will encompass a wide range of bank assets and will go on to subject balance sheets to "stress tests" aimed at assessing how resilient lenders are to shocks.

The review of banks' asset quality will attempt to use more closely harmonized definitions of NPLs in a bid to offer greater clarity about the respective states of different euro-area banking sectors.

As things stand, cross-country comparisons are riddled with uncertainties because of the different methodologies used.



PwC's figures, which are derived from lenders' accounts, showed that Germany, the EU's biggest economy, had the highest amount of non-performing loans at the end of 2012, at €179bn, (€196 at the end of 2011).

Spain had €167bn of NPLs, up sharply from the €136bn recorded for 2011. Britain's €164bn of non-performing loans represented a decline from €172bn in 2011.

**Fig. 13 - Estimated quantum of NPLs by country 2008-11 (€bn)**

	2008	2009	2010	2011
Germany	142	204	196	196
United Kingdom	88	155	172	172
Spain	66	97	111	136
Ireland	15	88	109	119
Italy	42	59	78	107
<b>Sub-total</b>	<b>353</b>	<b>603</b>	<b>666</b>	<b>730</b>
France	51	77	87	88
Netherlands	32	58	52	52
Greece	12	19	27	40
Sweden	7	15	14	13
Russia	1	17	25	26
Austria	9	12	17	18
Denmark	8	13	16	17
Poland	9	12	15	15
Portugal	5	8	10	12
Turkey	7	10	10	8
Ukraine	2	6	8	7
Hungary	2	3	5	7
Romania	1	3	5	6
Czech Republic	3	4	5	6
Slovakia	N/A	N/A	2	2
Finland	1	1	1	1
<b>Sub-total</b>	<b>150</b>	<b>258</b>	<b>299</b>	<b>318</b>
<b>Total</b>	<b>503</b>	<b>861</b>	<b>965</b>	<b>1,048</b>

Source: PWC issue 4: a growing non core assets market – July 2012

Data clearly shows that European banks (but also other banks) need a definitive technology solution to manage consumer credit portfolio. We believe that AES are able to strong help its clients to better manage their credit portfolios.

Technology solutions we believe is necessary also because the non-performing loans have non-linear effect, as Yixim Hou (Corresponding author of Department of Economics University of Birmingham) demonstrate (The Non-performing loans – Some bank-level Evidences).

## **Credit Policy**

Company's credit policy is important. It should not be arrived at by default. The board should determine company's credit criteria, which credit rating agency you use, who is responsible for checking prospective and existing customer creditworthiness, the company's standard payment terms, the procedure for authorizing any exemption and the requirements for regular reporting.

The policy should be written down and kept up to date with current creditworthiness of specific customers, especially ones with large lines of credit or that increase their orders, plus warnings or notes of current poor experience. The policy should be disseminated to all sales staff, the financial controller and the board.

## **Credit in practice**

Start your credit decision making process when first meeting with new prospective customers or clients. If necessary, consider allowing small orders to get underway quickly. This may be a reasonable level of risk and may ensure that new business is not lost. In a sales negotiation it is professional, not 'anti-selling', to be upfront about terms for payment.

Use an 'Account Application Form' that includes a paragraph for the buyer to sign, agreeing to comply with your stated payment terms and conditions of sale. On a 'welcome letter' restate the terms and conditions. Your 'Order Confirmation' forms can stress your terms and conditions. Invoices should show the payment terms boldly on the front and re-state the date the payment is due.

It's worth bearing in mind that lax credit decisions are often exploited by fraudsters. The famous 'long fraud' involves a customer making a series of small purchases which are paid for in full. Gradually, the supplier gains confidence and extends more and more credit. The fraudster then places a very large order, and disappears with the goods. But it needn't be fraud: a company with its own problems might attempt to trade out of trouble and go bust leaving you with massive unpaid invoices.

It's a good idea to prioritize your research. The 80/20 rule suggests that 20% of your customers will generate 80% of your revenue, so list accounts in descending order of value and give the top slice a full credit check and regular review.

## **Why use credit portfolio management**

The financial crisis was driven in part by the inability of financial institutions to effectively identify and manage underlying credit risks in sophisticated investment vehicles.

The 2007-08 credit crunch has been far more complex than earlier crunches because financial innovation has allowed new ways of packaging and reselling assets. It is intertwined with the growth of the subprime mortgage market in the United States, but it is really a crisis that occurred because of the mispricing and misunderstanding of the risk of these products.

New assets were developed based on the subprime and other mortgages, which were then sold to investors in the form of repackaged debt securities of increasing sophistication.

The strong demand for higher yielding assets, in turn, supported in the rapid growth of the originated-and-distribute model of credit intermediation, in the which underlying credit risk is first unbundled and then repackaged, tiered, securitized, and distributed to investors. Various entities participated in this process at various stages in the chain running from origination to final distribution.

The apparent disconnect between the true credit quality of the underlying assets risks and the promised performance of the structured instrument backed by the proved eventually to be a major flaw. Of course, assets risks must be first known and then disclosed.

Technology and reporting strong help to know risks. Technology and reporting constraints were partly to blame for the lack of early warning indicators before and during the crisis. Going forward, success will depend on the ability of risk managers to accurately assess and address evolving changes in risk.

During the crisis financial institution regulators reaction was relatively strong. The Dodd-Frank Act now requires banks to retain a portion of the credit risk for any asset. Regulators are seeking expanded disclosure of risk-related data for analysis. Market participants, in addition to regulators, are demanding higher levels of transparency. Better credit risk management data in crucial to this.

Most of leading financial institutions are upgrading technology infrastructure and risk reporting capabilities. They have made tremendous investments, in both time and money, to gather detailed risk-centric data. Well-designed credit risk management dashboard can enables firms to further leverage their data-related investments to improve and accelerate decision making, and require little additional investment.

Reporting capabilities have evolved and become more sophisticated over time, enabling end users to better manage and interpret complex information.

On the other side, dashboard reporting, coupled with drill-down capabilities, enables user to:

- Summarize the most relevant metric;
- Call attention to key areas on concern;
- Access detailed information that is required to understand root causes and underlying trends;
- Identifying, escalate, and potentially mitigate the impact of newly arising credit risk concerned earlier in the process.

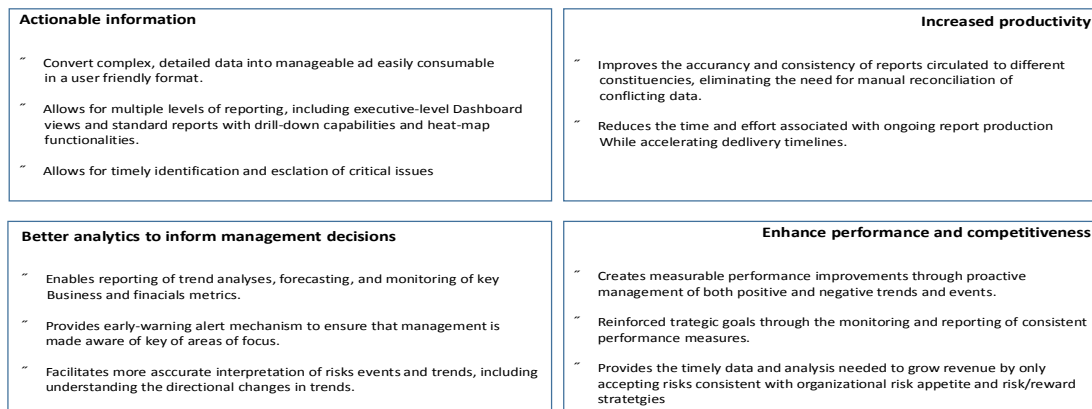
In order to create a robust and scalable reporting and analytical platform for management reporting and monitoring purposes, there are a number of basic tenets that form the basis of the design approach:

- End users needs and expectations should form the basis for business requirements and design considerations;
- Existing legacy system constrains must be considered, but should not limit the final target operating model;
- Roll out of the system should be evolutionary (vs."big bang"), with the additional capabilities phases on over time;
- Reporting capabilities should be designed to accommodate both on-screen dashboard views and traditional physical and electronic report;
- The level of detailed data imported into the repository may vary across data types, but must be consistent with envisioned drill down and scenario modelling and capabilities;
- The envisioned solution should solution be structured to accommodate changes over time, as new needs and requirements are identified.

A well-designed credit risk dashboard can enable financial institution to make better business decisions by providing timely and actionable information, increasing visibility of risks across to organization. Effective credit risk dashboard provide management with the tools necessary to measure and communicate risk appetite. In addition, clearly established risk baseline can strong help financial institutions identify issues that may arise from the cumulative impact of enterprise-wide risks and evolving business models over time.

**Fig. 14 – Main benefit of a credit risk management dashboard**

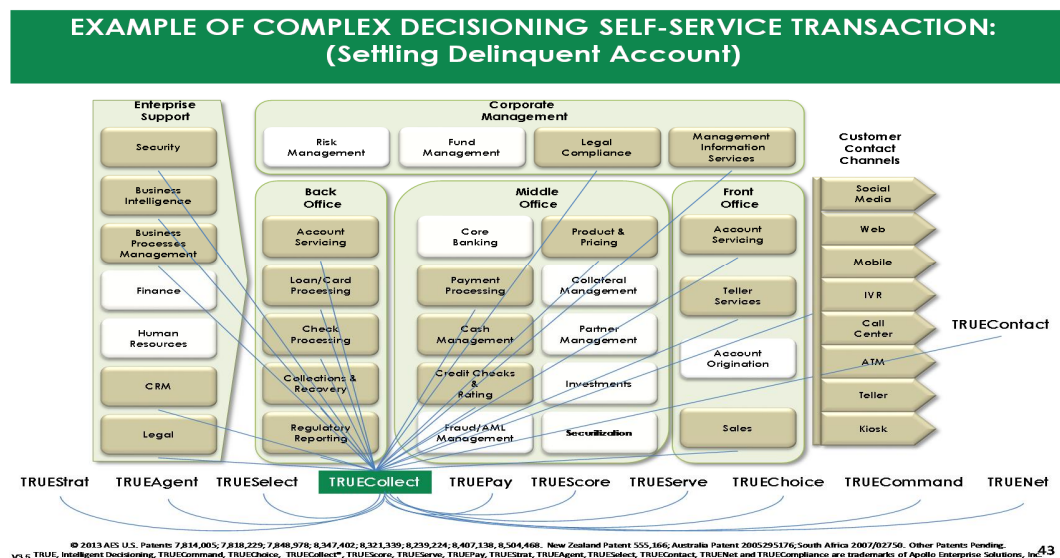
## Benefit of a credit risk management dashboard



Source: *Integrae SIM*

AES' advance technology solution, match the requirements to set up a good dashboard and are able to strong benefit their clients' needs.

**Fig. 15 – Example of complex decisioning self-service transaction**



Source: *Integrae SIM*

## **Results**

The Company's subsidiary, Apollo Enterprise Solutions, Inc., has been in operation since 2003. The Company's auditor performed its first audit of the Company's accounts as of December 31, 2012.

Apollo Enterprise Solutions, Ltd. ("AES" or the "Company") was incorporated in Bermuda on September 27, 2012 for the purpose of effecting a reverse triangular merger with its wholly owned subsidiary Apollo Enterprise Solutions, Inc. ("Apollo Inc.") or "Subsidiary".

Prior to 2008, the Company capitalized certain research and development. The Company continues to invest in its software to modify and improve its products. This is the only research and development in which the Company currently engages. Since 2008, the Company has adopted an accounting policy of expensing such costs as incurred. All of these accounting policies are in accordance with Generally Accepted Accounting Principles as applied in the United States and are reflected in the Company's operating subsidiary's independent accountant's review reports.

Apollo Inc. continues as the operating entity and develops and sells computer based software solutions for the credit portfolio recovery activities of financial institutions worldwide (Banks, Finance Companies, Collection Agencies, etc.). AES continues to serve as merely a holding company.

Apollo, Inc. has developed a patented software tool known as the debt collection decision engine now called by a suite of names under the TRUE™ trademark (TRUE™ Collect, TRUE™ Recover, etc.). Apollo has modified its proprietary software to enable more rapid installation of its products using menu driven options once customers have contracted with them.

The consolidated financial statements include Apollo Enterprise Solutions, Ltd and its Subsidiary which is 100% owned by Apollo Enterprise Solutions, Ltd.

The Company has certain transactions originally denominated in foreign currency. These transactions have been translated into United States dollars at the time of the transaction. The foreign currency gain/loss is insignificant. All intercompany balances and transactions have been eliminated in consolidation.

As far as credit risks are concerned, at times, the companies maintain bank balances in excess of federally insured limits. No losses have been experienced on such balances.

### **2013-17F forecast**

To do our 2013-17 forecast, we take into account some key drivers. First of all Banking IT investments and major challenges in global banking.

**Fig. 16 – Banking Technology Spending**

- Worldwide banking technology spending will range from \$270 billion - \$460 billion in 2013<sup>1</sup>
  - “ North America: \$98 billion<sup>2</sup>
  - “ Europe: \$91 billion<sup>2</sup>
  - “ Asia. Pacific: \$81 billion<sup>2</sup>
- Worldwide average spending on banking technology software in 2013 = \$51.3 billion<sup>2</sup>
  - “ North America: \$18.6 billion (2013)<sup>3</sup>
  - “ Europe: \$17.3 billion (2013)<sup>3</sup>
  - “ Asia. Pacific: \$15.4 billion (2013)<sup>3</sup>
- Worldwide spending on banking technology will grow by 3.6% in 2014 and 3.4% in 2015<sup>2</sup>

<sup>1</sup> Celent and Gartner Group

<sup>2</sup> Estimate based on Forrester Research Inc., DB Research

<sup>3</sup> Celent

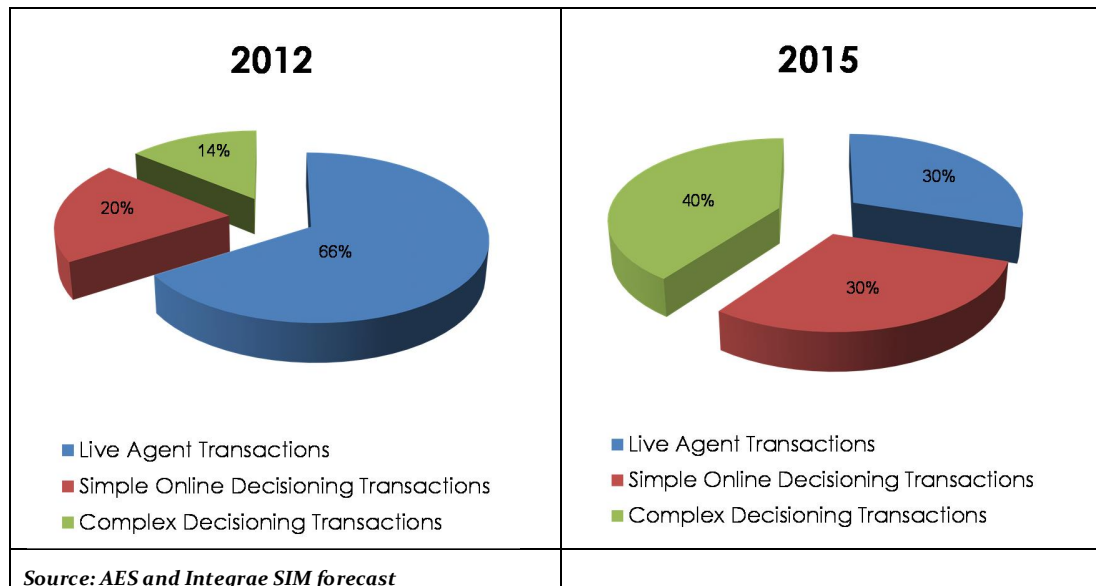
As far as major challenges in global banking are concerned, driving profitability and optimizing technology, we believe that in the coming years banks will:

- Replace manual labor with automation. Banks burdened with out-of-date IT systems, to win-back or retain customers and increase internal efficiency, systems will need upgrading across the board and optimize through Straight Through Processing: Minimizing human input to make staff savings, represents more than half of a bank's costs;
- Lower operating costs. Since 2010, banks using modern banking platforms have an average of 25% higher RoA, 37% higher return on capital than banks running on legacy applications;
- Reduce write-offs. Increase delinquent debt recovery and improve client education;
- Optimize through greater self-service channel usage: More customers carrying out their own banking transactions without staff intervention;
- Increase number of products sold per customer. Optimize through First-Time Resolution: Fewer points of contact between customers and staff translates to lower costs.
- Improve client brand. The Benefit is the need for shared centers will fall. Middle and back-offices will handle only exceptions, fewer people will be needed, customer service levels will increase, and costs will dramatically drop.



We Forecast that 'till 2015, market structure is going to change increasing complex decision transactions and reducing live agent transactions.

**Fig. 17 – AES' unique market positions**



Moreover, we also take into account the following market drivers:

- Growing consumer debt worldwide (US\$ 20-25 trillion);
- US \$845 bn of US delinquencies (Federal Reserve Bank of New York, Q3 2013);
- US \$ 45 bn of annual US credit card write-off (Federal Reserve Bank of New York, Q3 2013);
- 27% of US car loans for new vehicles in 2013 went to borrowers with credit scores of less than 500 and US \$ 17.2 bn in bond backed by these loans were issued this year, just below the US \$ 20 bn in 2005 (Private sector data);
- European Household gross debt in income ratio at 10 year highs (Eurostat);
- Continue focus and increase in regulation across the global financial system, meaning focus on automating procedures and ensure best practice and provide robust audit trail;
- Global credit card circulating to reach 2.7 bn by 2015 (Global Industry Analysts, Inc);
- US mortgage origination volume saw a 16% increase over same quarter YoY. The upward trend in volumes over past eight quarters points to a consistently improving housing market (Experian);
- Worldwide spending on banking technology > US \$ 270 bn in 2013 and estimated to increase by 3.6% in 2014 and 3.4% in 2015 (Celent AES estimate based on Forrester Research).



Last but not least, further market penetration. Following current clients and direct sales & prospects:

- **USA current clients.** Top 5 US Bank (credit cards). Perpetual license granted to FI 2010 for lump-sum one-time payment of US \$ 4 million
- **USA prospects clients.** Top 5 US Bank (credit cards, loans, overdraft mortgages).
  - Top 15 US Bank (credit cards, loans and mortgages);
  - Top 25 US bank (credit cards and loans);
  - Top 5 Mortgage services (mortgages);
  - US department of Education.
- **Australia prospects client.** Top 4 Australian Bank (credit cards, auto loans).
- **Europe current clients.** Lloyds TSB (credit cards, loans, and overdraft).
  - Services have been provided to Lloyds TSB under the agreement since September 2009;
  - Term of agreement to September 2014, with Lloyd's option to extend;
  - Recently deployed AES System across all Lloyd's collections (non-recovery) departments;
  - Other Lloyds brand are covered by the agreement and services to be provided at the election of Lloyds.
- **Europe prospects client.**
- Top 5 Italian Bank (credit cards, loans)
- First data (multiple tier 1 & 2 clients)
- Top 10 global financial institution (FI) with presence in Spain, US, UK and Brazil (credit cards, loans)
- Top 5 Spanish Bank (credit cards, loans).

**Fig. 18 – Profit & Loss Account (US\$/ooo)**

P&L Summary	2012A	2013F	2014F	2015F	2016F	2017F
Total Revenue	3.014	1.902	4.184	9.040	12.655	17.718
Total COGS	517	552	838	1.474	1.990	2.687
<b>Gross Margin</b>	<b>2.497</b>	<b>1.350</b>	<b>3.346</b>	<b>7.565</b>	<b>10.665</b>	<b>15.031</b>
Admin Expenses	4.911	5.473	4.862	6.469	8.410	10.933
<b>Net Income</b>	<b>(2.414)</b>	<b>(4.123)</b>	<b>(1.516)</b>	<b>1.096</b>	<b>2.255</b>	<b>4.098</b>
Amortization	323	323	323	323	450	500
Depreciation	10	10	4	-	-	-
Interest (Accrued)		115	126	126	(125)	(125)
<b>EBITDA</b>	<b>(2.080)</b>	<b>(3.674)</b>	<b>(1.063)</b>	<b>1.545</b>	<b>2.580</b>	<b>4.473</b>
<i>Ebitda margin</i>	<i>n.m.</i>	<i>n.m.</i>	<i>n.m.</i>	<i>17,1%</i>	<i>20,4%</i>	<i>25,2%</i>
<b>EBIT</b>	<b>(2.414)</b>	<b>(4.007)</b>	<b>(1.390)</b>	<b>1.222</b>	<b>2.130</b>	<b>3.973</b>
<i>Ebit margin</i>	<i>n.m.</i>	<i>n.m.</i>	<i>n.m.</i>	<i>13,5%</i>	<i>16,8%</i>	<i>22,4%</i>

Source: AES and Integrae SIM forecast

**Fig. 19 – Assets & Liabilities (US\$ /ooo)**

A&L Summary	2012A	2013F	2014F	2015F	2016F	2017F
<b>ASSETS</b>						
Cash	18	224	751	1.875	4.069	8.191
AR	625	54	354	654	929	1.179
FF&E net of Depr	14	4	(o)	(o)	(o)	(o)
Other Assets Net of Amort	1.883	1.560	1.236	913	463	(37)
<b>Total Assets</b>	<b>2.540</b>	<b>1.842</b>	<b>2.341</b>	<b>3.442</b>	<b>5.461</b>	<b>9.334</b>
<b>LIABILITIES</b>						
AP & Current Liabilities	952	1.443	1.333	1.213	1.103	1.003
Preferred Dividend Payable	1.835	2.407	2.980	3.553	4.125	4.698
Loans	1.120	2.100	2.100	2.100	2.100	2.100
Accrued Interest	22	138	263	389	264	139
<b>Total Liabilities</b>	<b>3.929</b>	<b>6.088</b>	<b>6.676</b>	<b>7.255</b>	<b>7.592</b>	<b>7.940</b>
<b>Equity</b>						
Common Stock	1	1	1	1	1	1
Preferred Stock	12.473	12.473	12.473	12.473	12.473	12.473
Contributed Capital	7.925	9.764	11.764	11.764	11.764	11.764
Retained Earnings	(21.787)	(26.483)	(28.573)	(28.050)	(26.369)	(22.844)
<b>Total Equity</b>	<b>(1.389)</b>	<b>(4.246)</b>	<b>(4.335)</b>	<b>(3.813)</b>	<b>(2.131)</b>	<b>1.393</b>
<b>Total Liabilities &amp; Equity</b>	<b>2.540</b>	<b>1.842</b>	<b>2.341</b>	<b>3.442</b>	<b>5.461</b>	<b>9.333</b>

Source: AES and Integrae SIM forecast

**Fig. 20 – Cash Flow Statement (US\$/ooo)**

<b>Cash Flow Summary</b>	<b>2012A</b>	<b>2013F</b>	<b>2014F</b>	<b>2015F</b>	<b>2016F</b>	<b>2017F</b>
Operating Earnings (Loss)	(2.414)	(4.123)	(1.516)	1.096	2.255	4.098
Amortization	323	323	323	323	450	500
Depreciation	10	10	4	-	-	-
Accrued/(Paid) Interest	-	115	126	126	(125)	(125)
Tax Payments		(1)	(1)	(1)	(1)	-
Decr /(Incr) of AR		571	(300)	(300)	(275)	(250)
Incr /(Decr) of AP		491	(110)	(120)	(110)	(100)
<b>Source/(Use) of Cash</b>	<b>(2.080)</b>	<b>(2.613)</b>	<b>(1.474)</b>	<b>1.124</b>	<b>2.194</b>	<b>4.123</b>
Incr /(Decr) in Loans		980	-	-	-	-
Sale of Common Stock		1.839	2.000	-	-	-
<b>Source/(Use) of Cash</b>	<b>-</b>	<b>2.819</b>	<b>2.000</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net Source/Use of Cash</b>	<b>(2.080)</b>	<b>206</b>	<b>526</b>	<b>1.124</b>	<b>2.194</b>	<b>4.123</b>
Cash Beginning of Period		18	224	751	1.875	4.069
<b>Cash End of Period</b>	<b>(2.080)</b>	<b>224</b>	<b>751</b>	<b>1.875</b>	<b>4.069</b>	<b>8.191</b>

*Source: AES and Integrae SIM forecast*

## Valuation

We use two methods to value Apollo Enterprise Solutions: DCF and ratios analysis. We believe that the two methodologies are able together to catch the “correct” AES equity value. Finally, we average the values resulting from these two methods to arrive at our final valuation of company value.

### Discounted Cash Flow

We apply a 5 years DCF model with the following input data:

- Risk free rate of 1,87% as a 10 years Treasury’s yield (source, Bloomberg);
- US market risk premium of 2,50% (source, prof. A. Damodaran);
- Beta of 1,2x as the peers average Beta (source, Bloomberg and Infiniticals);
- Debt to equity of 0,85x;
- Long term growth of 1,5%.

**Fig. 21 – Main input data**

Wacc Input data	
Risk Free Rate	1,87%
Beta	1,20
Market Premium	2,50%
Tax Rate	30,0%
Debt/Equity	50,0%
Ke	4,37%
Kd	3,50%
Wacc	3,41%

Source: *Integrae SIM*

Based on our forecasts and assumptions, AES’ equity value results of US\$51,3 mln, meaning US\$1,20 per share.

**Fig. 22 – DCF Model**

<b>Discounted Cash Flow</b>		<b>2013F</b>	<b>2014F</b>	<b>2015F</b>	<b>2016F</b>	<b>2017F</b>	<b>2018F</b>	<b>TV</b>
EBIT	-	4.007	- 1.390	1.222	2.130	3.973	5.562	
Operating Taxes		1.202	417	(366)	(639)	(1.192)	(1.668)	
NOPLAT	-	2.805	- 973	855	1.491	2.781	3.893	
Depreciations		333	328	323	450	500	550	
Δ NWC								
Investments			(980)					
FCFO		(2.472)	(1.626)	1.179	1.941	3.281	4.443	58.865
Discounted FCFO		(2.390)	(1.520)	1.066	1.697	2.774	3.633	48.137
FCFO actualized		5.260						
TV actualized DCF		48.137						
<b>Enterprise Value</b>		<b>53.398</b>						
Net Debt		2.100						
<b>Equity Value</b>		<b>51.298</b>						
<b>Equity Value per share</b>		<b>1,20</b>						

*Source: Integrae SIM calculations*

### **Peer Multiple Valuation**

We also value AES through peer ratios analysis, applying the international peer group forward (EV/Sales, EV/Ebitda, EV/Ebit), for 2013F to 2015F, bear in mind that AES' has not competitors that operate along all the value chain.

**Fig. 23 – AES' main competitors**

Feature	Benefit	Apollo Enterprise	Collections Marketing	Debt Resolve	Online Resources	
Complete suite of Agent Emulators	Compatible Agents for origination, servicing, and collections	Yes	No	No	No	AES is the only company with a complete set of live agent emulator software, i.e. software that emulates live agents that originate/sell new credit products (loans, credit cards, mortgages, etc.), live agents that perform customer service, and live agents that deal with delinquent customers ("collection agents").
True Agent Emulators	Emulate best agents' behavior; Comply with all business rules	Yes	No	No	No	AES is the only company that has "true" live agent emulators, i.e. its software emulates the behavior of the best live agents while staying 100% in compliance with all business rules imposed by banking regulators and inside bank departments.
Non-infringing technology	No risk of patent infringement litigation	Yes	No	No	Yes	AES has the only patented technology for offering users sets of offers (new products, delinquency settlements, etc.) generated in real time based on the user's unique profile and credit score.
Estimated payments processed to date	Proven track record	\$5 billion	\$100 million	\$100 million	\$100 million	AES has the deepest experience, as it has processed over \$5 billion worth of self-serve payments, over 50 times more than other

Source: *Integrae SIM*

AES' results is going to start significant in 2015, so that we do not take into consideration 2013-2014F average peer ratios. Moreover, we consider significant the 2016-17F AES' results, but the average ratios for competitors are not available. For this reason, we take the 2015F average sample EV/Sales, EV/Ebitda and EV/Ebit and we suppose an increase of 10% in sales, Ebitda and Ebit respectively, so that ratios are 10% lower than the previous year. Following we examine the direct peers.

**Fig. 24 – AES' peers**

Company	EV/Sales			EV/Ebitda			EV/Ebit			Ebitda margin		
	2013F	2014F	2015F	2013F	2014F	2015F	2013F	2014F	2015F	2013F	2014F	2015F
ACI Worldwide Inc.	2,50	2,05		9,03	7,18		13,94	10,93		27,7%	28,5%	
Weathernews Inc	1,69	1,67	1,65	6,72	6,30	6,10	8,28	7,71	7,71	25,2%	26,5%	27,1%
Lender Processing Services Inc.	1,89	2,05	1,89	7,34	7,52	6,87	9,51	10,08	8,66	25,7%	27,3%	27,5%
Bureau Veritas	2,80	2,66	2,47	14,82	13,71	12,52	17,06	15,90	14,71	18,9%	19,4%	19,7%
Synopsys Inc	2,47	2,31	2,18	8,59	7,68	7,11	10,17	9,13	10,18	28,7%	30,1%	30,6%
Bottomline Technologies Inc	2,99	2,66		15,50	12,26	12,00	17,48	13,40	13,00	19,3%	21,7%	
Fuchun Communications Co Ltd	10,22	7,83	6,53				38,69	27,41	21,68			
Jibannet Co Ltd	12,48	9,36	7,68				42,78	29,94	23,96			
Average	4,63	3,82	3,73	10,33	9,11	8,92	19,74	15,56	14,27	24,2%	25,6%	26,3%

Source: *Integrae SIM on Financials and Bloomberg Data*

**Fig. 25 – Calculated ratios**

Calculated Ratios for 2016-17F	2016	2017
EV/ Sales	3,36	3,02
EV/EBITDA	8,03	7,22
EV/EBIT	12,84	11,56

*Source: Integrae SIM on Infiniti and Bloomberg Data*

Based on the average peer ratios for 2015-17F, AES equity value results of US\$49,5 mln or US\$1.18 per share, close to DCF result.

Taking an average of the two valuations, AES' resulting equity value is equal to US\$50,4 mln, or US\$1,18 per share. At the exchange rate Euro/US dollar of 1.35, AES' equity value results of €0,87 per share.

Our equity value forecast, do not prudentially taking into account the intangibles value, meaning for example the strong shareholders' network, unique ability to create value for clients, etc., so that we maintain our equity value of €0,87 peer share

**Fig 26 – The Intangible premium**

Average Equity Value	
DCF US\$	1,20
Ratios US\$	1,16
Average US\$	1,18
Exchange rate €/US\$	1,35
Average €	0,87

*Source: Integrae SIM*



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Regulation No. 11971/1999**

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### **Rating system**

The BUY, HOLD and SELL ratings are based on the expected total return (ETR – absolute performance in the 12 months following the publication of the analysis, including the ordinary dividend paid by the company), and the risk associated to the share analyzed. The degree of risk is based on the liquidity and volatility of the share, and on the rating provided by the analyst and contained in the report. Due to daily fluctuations in share prices, the expected total return may temporarily fall outside the proposed range.

<b>Rendimento Totale Atteso – ETR – per differenti categorie di rischio e di rating</b>			
Rating	Low Risk	Medium Risk	High Risk
BUY	ETR $\geq$ 7.5%	ETR $\geq$ 10%	ETR $\geq$ 15%
HOLD	-5% < ETR < 7.5%	-5% < ETR < 10%	0% < ETR < 15%
SELL	ETR $\leq$ -5%	ETR $\leq$ -5%	ETR $\leq$ 0%
U.R.	Rating e/o target price Under Review		
N.R.	Stock Not Rated		

The methods that INTEGRÆ SIM SpA prefers to use for value the company under analysis and the Expected Total Return are those which are generally used, such as the market multiples method which compares average multiples (P/E, EV/EBITDA, and other) of similar shares and/or sectors, and the traditional financial methods (DCF, DDM, EVA etc). For financial securities (banks and insurance companies) INTEGRÆ SIM SpA tends to use methods based on comparison of the ROE and the cost of capital (embedded value for insurance companies).

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