



# FIRST BERLIN

Equity Research

**BUY**

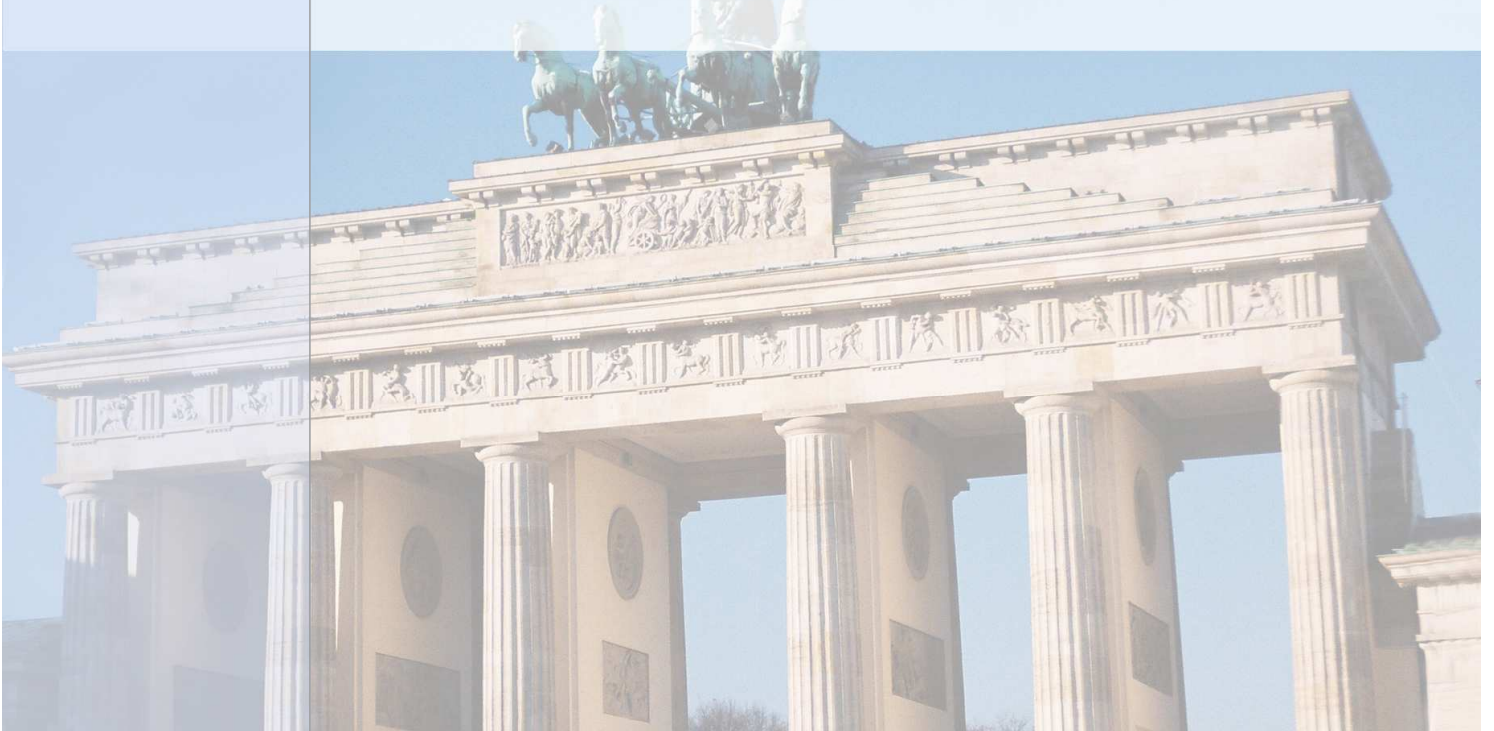
**FROGSTER INTERACTIVE PICTURES AG**

GERMANY /  
ENTERTAINMENT SOFTWARE

INITIATING COVERAGE

PRICE TARGET: €30.40  
PREVIOUS CLOSE: €18.88  
RETURN POTENTIAL: 61.0%

09 NOVEMBER 2009





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## FROGSTER INTERACTIVE PICTURES AG

GERMANY / ENTERTAINMENT SOFTWARE

Primary exchange: Frankfurt Stock Exchange

Bloomberg symbol: FRG GR

ISIN: DE000A0F47J1

RATING:	<b>Buy</b>
PRICE TARGET:	<b>€30.40</b>
RETURN POTENTIAL:	<b>61.0%</b>
RISK RATING:	<b>High</b>

### TOP PLAYER IN THE MARKET FOR ONLINE GAMES

**Due to its Massively Multiplayer Online Role-Playing Game (MMORPG) “Runes of Magic” (RoM), which the company introduced in Dec 2008, Frogster has already become a well-known name in the game industry. Although relatively new, this game has already gained c. 2.2m customers worldwide. We are impressed by the success of RoM and forecast that the game will also develop strongly in the next years. We believe its other promising titles such as “The Chronicles of Spellborn” (TCoS) and the expected strong growth of the online game industry will also be positive triggers for Frogster. We initiate our coverage with a €30.40 price target and a Buy rating.**

**RoM with an impressive start** Between Dec 2008 and Jul 2009, RoM increased its sales month-on-month by more than 40% on average. According to Frogster’s management, the game is adding several thousand new users every day, who on average spend >€20 on it every month. A unique selling point of the game is that it can be downloaded for free and generates revenues through the sale of virtual items. This differentiates it from competing products such as “World of Warcraft”, which has to be purchased and requires a subscription.

**Low cost business model allows for high margins** In contrast to traditional game companies, Frogster’s CoGS do not contain manufacturing costs related to game boxes. As it is offering its games mainly through the internet, Frogster also does not have to pay a high distribution margin to retailers.

**Shareholders look for a strategic investor** On 19 October, several of Frogster’s shareholders e.g. Impera Total Return AG, created a pool, which is to comprise investors with a combined holding of at least 50% of the shares. The aim is to sell the majority of Frogster to a strategic partner within the next nine months at market value at the time, but at least €30 per share.

**Profitable H1/09 due to the success of RoM** Frogster’s H1/09 sales amounted to €5.1m (+516.1% y-o-y) due to strong RoM. EBIT and net profit came in at €1.1m, an impressive increase compared to H1/08 when EBIT was -€1.6m and net profit -€1.5m. The bottom-line was positively impacted by a much lower share of other operating costs in sales (37.2% vs 152.3% in H1/08) and personnel costs (29.1% vs 117.3% in H1/08).

### FINANCIAL HISTORY & PROJECTIONS

	2007	2008	2009E	2010E	2011E	2012E
Revenue (€m)	3.97	2.29	12.01	24.02	42.04	63.06
Y-o-y growth	na	-42.4%	425.0%	100.0%	75.0%	30.0%
EBITDA (€m)	-3.03	-3.43	3.75	7.73	13.58	20.43
EBITDA margin	-76.2%	-149.9%	31.2%	32.2%	32.3%	32.4%
EBIT (€m)	-6.83	-5.60	2.70	6.37	11.18	16.84
EBIT margin	-171.9%	-244.6%	22.5%	26.5%	26.6%	26.7%
Net income (€m)	-4.57	-4.61	1.82	4.41	7.79	11.87
EPS (diluted) (€)	-1.81	-1.83	0.71	1.72	3.04	4.63
P/E (x)	na	na	26.6	10.0	6.2	4.0
DPS (€)	0.00	0.00	0.00	0.00	0.00	0.00
Yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FCF (€m)	0.00	-2.31	0.11	1.89	4.61	8.17
Net gearing	-12.6%	-21.0%	-19.6%	-32.2%	-50.9%	-59.9%
Liquid assets (€m)	1.11	1.47	1.58	3.47	8.08	16.25

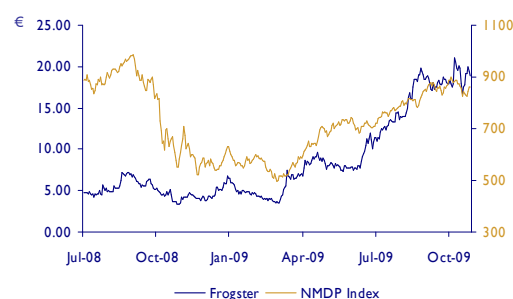
### COMPANY PROFILE

Headquartered in Berlin, the Frogster Group is a publisher of online computer games with additional offices in San Francisco and Seoul. The company focuses on the operation and distribution of virtual worlds, so called Massively Multiplayer Online Games (MMOGs). At the end of June 2009, Frogster had 117 employees.

### TRADING DATA

Closing price (06.11.09)	€18.88
Shares outstanding	2.56m
Market capitalisation	€48.37m
52-week range	€3.50 / 21.01
Average volume (12 months)	8,968

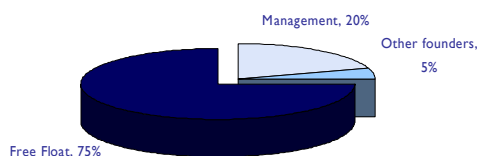
### STOCK OVERVIEW



### COMPANY DATA (as of 30 June 2009)

Liquid assets	€0.92m
Current assets	€2.76m
Intangible assets (incl. goodwill)	€2.99m
Total assets	€10.38m
Current liabilities	€2.29m
Shareholders' equity	€8.09m

### SHAREHOLDERS





## **INVESTMENT CASE**

### **UNIQUE BUSINESS MODEL / SIGNIFICANT COMPETITIVE ADVANTAGE**

Frogster is the only listed German company which offers client-based, free-to-play MMOGs with Triple-A quality. Due to its large customer base resulting from the success of RoM and its popular gaming portal, OnlineWelten.com, the company has a significant competitive advantage compared with other online game companies.

### **IMPRESSIVE DEVELOPMENT OF RUNES OF MAGIC**

RoM is a MMORPG, which users can download and play free of charge. The game generates revenues through micro transactions e.g. the sale of virtual items, which allow the players to improve the qualities of their characters and of the entertainment experience. Similar games have been very successful in Asia. Between December 2008, when the game was launched, and July 2009, RoM increased its sales month-on-month by more than 40% on average. According to Frogster's management, the game is adding several thousand new users every day, with each paying user spending more than €20 per month on average. Additional growth is expected to come from new language versions – Frogster has released a Russian language version in July 2009, a French and Spanish version in September and a Korean version in October – as well as an extension of the game, improvements of the payment system and IT infrastructure.

### **BREAKEVEN IN H1/09 / ADDITIONAL GROWTH THROUGH NEW TITLES**

In H1 2009, Frogster reported positive EBIT and net income for the first time since 2007. After the introduction of RoM as an open-beta version in December 2008, the related revenues exhibited dynamic growth, which led to H1 sales being 516.1% higher than in H1/08. Moreover, in H1/09 Frogster reported a much lower share of other operating expenses (comprise marketing and travel expenses and software development costs among other items) and personnel costs y-o-y. As we expect RoM to continue to increase its customer base at a high level and new releases such as the open-beta version of TCoS should contribute to sales from 2010, we forecast that the positive trend from H1 will continue in the future.

### **ONLINE GAMES SEGMENT TO GROW DYNAMICALLY**

In its latest "Global Entertainment and Media Outlook 2009-13", PWC forecasts that the global market for online games will grow at a CAGR of 10.6% until 2013. KZero Worldwide, whose figures also include premium subscriptions, micro transactions etc., expects the virtual worlds sector to increase its revenues worldwide from \$1.3bn in 2009 to \$9.0bn in 2013.

### **STILL HIGH UPSIDE POTENTIAL**

Although Frogster's stock has increased by over 400% since March 2009, we still believe there is significant upside potential. The weighted average of our DCF model and peer group analysis generates a fair value of €30.40, which corresponds to an upside of 61%.



## SWOT ANALYSIS

### STRENGTHS

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- Unique and innovative business model
- According to management, Frogster is one of very few Europe-based MMOG publishers with worldwide business. Also, RoM is the first, and currently only, free-to-play MMORPG with Triple-A quality in Europe
- With RoM, management proved that they have a flair for picking hit titles
- MMOGs have a lifecycle of 5-10 years compared to 1-2 years with traditional video games
- In contrast to traditional video games, MMORPGs generate recurring revenues
- As it has a large customer base, due to the huge success of RoM and its popular game portal, Onlinewelten.com, Frogster has a significant competitive advantage
- Frogster's games have received positive comments in various game magazines and portals e.g. tentonhammer.com, mmosite.com, GameStar, SpielXpress, mmorpg.com, onrpg.com, Computer Bild Spiele, Buffed, PC Games, Canard PC, PC Format
- Lower share of CoGS (especially no costs related to distribution agents as well as no costs related to virtual items and manufacturing of game boxes) compared with traditional video game publishers
- Office in Asia, the most important online game market in the world, according to PWC
- Equity ratio of 77.9% at the end of H1 2009, net cash of €0.9m

### WEAKNESSES

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- Limited financing capabilities due to small size
- In H1/09, RoM was responsible for 65-70% of Frogster's revenues, according to management

### OPPORTUNITIES

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- Growing sales from other titles such as "Bounty Bay Online" (BBO) and TCoS
- In case of RoM, converting more registered users into active users and increasing the average amount spent by active users e.g. through expansion of the game with new free content and challenges, improvement of payment systems and game download
- Due to the big success of RoM, Frogster has an excellent reputation on the market and thus is able to get licenses for promising new games much easier than less known competitors
- According to KZero Worldwide, global revenues of the virtual worlds sector will grow from \$1.3bn in 2009 to \$9.0bn in 2013
- A strong strategic investor, who could help Frogster to grow its business further

### THREATS

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- Programming mistakes in games as well as technical and service issues may have a negative impact on Frogster's reputation
- Larger and financially stronger competitors
- There is a risk that new games do not meet the expectations of the gaming community



## VALUATION

### DISCOUNTED CASH FLOW MODEL

In order to determine Frogster's WACC, we use our multi-factor risk model, which takes company-specific risk factors into account, such as management strength, balance sheet and financial risk, company size and free float.

Our WACC calculation, which generates a value of 12.7%, is based on a risk-free rate of 3.8%, a market risk premium of 4.0% and target equity ratio of 77.9% (the same as in HI/09). In our DCF model, we use a planning period until 2020, a terminal sales growth rate of 3% due to the fact that Frogster also operates in strongly growing emerging markets such as Asia, and a corporate tax rate of 30%.

	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E
<b>Net sales</b>	<b>12,012</b>	<b>24,024</b>	<b>42,042</b>	<b>63,063</b>	<b>81,982</b>	<b>103,502</b>	<b>126,790</b>	<b>150,563</b>
Change y-o-y	425%	100%	75%	30%	10%	8%	7%	6%
<b>EBIT</b>	<b>2,703</b>	<b>6,366</b>	<b>11,183</b>	<b>16,838</b>	<b>21,971</b>	<b>21,735</b>	<b>19,652</b>	<b>18,820</b>
Operating margin	23%	27%	27%	27%	27%	21%	16%	13%
<b>NOPLAT</b>	<b>1,892</b>	<b>4,456</b>	<b>7,828</b>	<b>11,786</b>	<b>15,380</b>	<b>15,215</b>	<b>13,757</b>	<b>13,174</b>
+ Depreciation#	1,044	1,367	2,393	3,589	4,666	5,891	7,216	6,311
<b>Net Operating Cash Flow</b>	<b>2,936</b>	<b>5,824</b>	<b>10,221</b>	<b>15,376</b>	<b>20,046</b>	<b>21,105</b>	<b>20,973</b>	<b>19,485</b>
- CAPEX	-2,830	-3,893	-5,586	-7,315	-8,019	-9,705	-11,343	-10,524
Capex	-1,887	-2,932	-4,685	-6,264	-7,073	-8,629	-10,179	-9,335
Working capital	-944	-961	-901	-1,051	-946	-1,076	-1,164	-1,189
<b>Free Cash Flow</b>	<b>106</b>	<b>1,931</b>	<b>4,635</b>	<b>8,061</b>	<b>12,027</b>	<b>11,401</b>	<b>9,629</b>	<b>8,961</b>
<b>PV of FCF</b>	<b>103</b>	<b>1,680</b>	<b>3,579</b>	<b>5,524</b>	<b>7,315</b>	<b>6,155</b>	<b>4,614</b>	<b>3,810</b>

PV of FCFs in explicit period	47,085
PV of FCFs in terminal period	40,198
<b>Enterprise Value</b>	<b>87,283</b>
+Net cash / -Net debt (30 June 2009)	919
<b>Shareholder Value</b>	<b>88,202</b>

<b>Number of shares outstanding</b>	<b>2,562</b>
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<b>WACC</b>	<b>12.7%</b>
cost of equity	15.1%
pre-tax cost of debt	6.0%
normal tax rate	30.0%
after-tax cost of debt	4.2%
share of equity	77.9%
share of debt	22.1%
<b>Fair value per share</b>	<b>€34.43</b>

WACC	Terminal EBIT margin						
	7.0%	8.0%	9.0%	10.0%	11.0%	12.0%	13.0%
8.7%	50.85	55.03	59.21	63.39	67.57	71.75	75.93
9.7%	43.17	46.37	49.58	52.79	56.00	59.20	62.41
10.7%	37.45	39.98	42.50	45.02	47.54	50.06	52.58
11.7%	33.04	35.05	37.07	39.09	41.11	43.12	45.14
12.7%	29.52	31.15	32.79	34.43	36.06	37.70	39.34
13.7%	26.64	27.98	29.33	30.67	32.02	33.36	34.71
14.7%	24.25	25.36	26.48	27.59	28.71	29.82	30.94
15.7%	22.22	23.16	24.09	25.02	25.95	26.88	27.82

### PEER GROUP ANALYSIS

As according to PWC, Asia is the main market worldwide for online games, our peer group mainly consists of companies which are based in this part of the world. Market caps in the group range between €24.3m and €2.2bn. The two biggest peers in terms of sales are China-based company Shanda Entertainment and Korean NCsoft Corporation with 2008 sales of €354.4m and €199.8m respectively. Games developed by Shanda include "The World of Legend" and "The Age", whereas NCsoft owns "Lineage" and "Aion" among others.

Most companies from our peer group generate high EBIT and net profit margins of up to 52.6%. We believe that one reason for this could be the enormous popularity of free-to-play MMORPGs with micro transactions in Asia. Another possible reason is the lower corporate tax rate in Asian countries compared with Europe and North America. For example,



according to KPMG the corporate tax rate in Taiwan was 25.0% in 2008, whereas in France and the US it was 33.3% and 40.0% respectively. Please see appendix I and II for more details on the peers and competing products.

	Share price	Shares outst.	Market Cap (m)	Net debt	EV (m)	EV/Sales		EV/EBITDA		EV/EBIT		P/E	
						2009E	2010E	2009E	2010E	2009E	2010E	2009E	2010E
UserJoy Technology (TWD)	185.50	30.01	5567.4	-381.9	5185.5	4.62x	3.09x	9.81x	6.11x	10.04x	6.24x	12.85x	7.86x
Actoz Soft Co. Ltd. (KRW)	15350.00	9.07	139270.6	-46380.6	92890.0	0.66x	0.59x	3.35x	2.72x	3.67x	2.98x	14.51x	11.92x
Funcom NV (NOK)	3.90	52.82	206.0	-254.3	-48.3	na	na	na	na	4.27x	na	na	14.08x
Asiasoft Corporation (THB)	6.55	303.24	1986.2	-768.9	1217.4	0.80x	0.76x	3.15x	2.92x	5.36x	4.92x	11.70x	10.69x
Shanda Entertainment (USD)	48.98	66.77	3270.3	-580.9	2689.4	3.56x	2.86x	7.80x	6.50x	8.83x	7.52x	13.34x	13.15x
NCsoft Corporation (KRW)	131000.00	21.70	2842045.0	-315795.0	2526250.0	5.35x	4.78x	11.55x	10.01x	12.27x	10.03x	17.03x	13.37x
Perfect World (USD)	45.67	39.12	1786.7	317.2	2103.9	6.83x	5.33x	12.52x	9.76x	12.89x	10.01x	16.16x	13.28x
Median						4.09x	2.98x	8.80x	6.31x	8.83x	6.88x	13.92x	13.15x
Frogster AG (EUR)	18.88	2.54	47.9	-0.9	46.9	3.77x	1.85x	9.71x	4.87x	14.62x	5.99x	26.21x	10.01x
<b>Premium/Discount (Median)</b>						<b>-7.8%</b>	<b>-37.8%</b>	<b>10.3%</b>	<b>-22.7%</b>	<b>65.6%</b>	<b>-12.9%</b>	<b>88.3%</b>	<b>-23.8%</b>
Target price EV/Sales	<b>€24.36</b>												
Target price EV/EBITDA	<b>€20.11</b>												
Target price EV/EBIT	<b>€15.02</b>												
Target price P/E	<b>€14.28</b>												
<b>Fair value</b>	<b>€18.44</b>												

Note: All prices in local currency

For the peer group analysis, we use the EV/Sales, EV/EBITDA, EV/EBIT and P/E multiples for 2009 and 2010. The average of the different multiples shows that Frogster is currently trading at a 2.4% premium to its peers. According to the peer group analysis, the fair value for the stock is €18.44.

We base our valuation on the Discounted Cash Flow method and the Peer Group analysis. As Frogster's market capitalisation is only €48.4m and thus the company is a micro-cap stock, we weight the peer group analysis at just 25%. The weighted average of both valuation methods generates a **fair value of €30.40 for the stock, which suggests an upside of 61.0% at current level.**

### Valuation summary

	Weight	Target price (€)
Discounted cash flow	75%	34.43
Peer Group analysis	25%	18.44
<b>Weighted average</b>		<b>30.43</b>

### CONCLUSION

Since March 2009, Frogster's stock has gained over 400% in value. The reason for this was the huge success of RoM, which led to a sales increase y-o-y in H1/09 of 516.1%. Although Frogster is minimally overvalued now compared to our peer group, we see the stock as being attractively valued at present due to its promising products, solid financials and the excellent growth prospects for the worldwide online game industry.



## RISK ANALYSIS

### DEPENDENCE ON HIT TITLES

The gaming industry is highly dependent on a few hit titles. In order to be successful, Frogster has to be able to identify and acquire licenses, which have big sales potential and conduct the distribution process creatively, efficiently and globally.

### RISKS RELATED TO LICENSING FROM THIRD-PARTY DEVELOPERS

Frogster generates revenues from games for which the company acquires licenses from external developers. Thus, a delay with regard to the development of respective software, poor game quality and loss of prepayments paid to licensing partners, constitute major risks for Frogster.

### LOSS OF KEY INDIVIDUALS

The success of Frogster's business is highly dependent on the creativity, competence and experience of its staff. The loss of a key employee would constitute a major setback for the company.

### CURRENCY FLUCTUATIONS

Frogster does business not just in the Euro area, but also in other countries worldwide. As the company does not secure itself against currency fluctuations, it is exposed to currency risk.

## RECENT RESULTS & FORECASTS

### SALES AND EARNINGS FORECASTS

For the first half of 2009, Frogster reported sales of €5.1m (+516.1% y-o-y), an EBIT of €1.1m (22.1% margin, H1/08: -€1.6m) and net profit of €1.1m (H1/08: -€1.5m). Sales in H1 were very positively impacted by the introduction of MMORPG RoM in Europe and North America in December 2008, which grew its revenues by more than 40% per month until the end of June. At the same time, at €1.1m, EBIT and net profit were much higher y-o-y due to significantly lower share of other operating costs and personnel expenses. Between 2007 and 2008, Frogster shifted its business model away from traditional video games publishing to online games.

We believe the positive development in H1 will continue into H2 2009 because of new language versions of RoM, expansion of the game as well as improvements of payment and download. In July 2009, the company released an open-beta Russian language version of RoM; thereafter a French and Spanish version in September and an open-beta Korean version in October.



For the next years, we believe that the company will continue to benefit from the popularity of its existing games, as according to management the lifecycle of MMORPGs is 5 to 10 years. In 2010, Frogster plans to introduce a free-to-play version of TCoS. Frogster should also benefit from the dynamic growth of the online game industry.

On 20 August 2009, Frogster announced that it signed an agreement with the Taiwanese development studio Runewaker Entertainment regarding worldwide licensing rights. The agreement concerns a new MMORPG with Triple-A quality, which the studio will develop by the end of 2013. As Runewaker Entertainment developed the very successful MMORPG RoM, we believe that the new project will provide an additional boost to Frogster's sales and profitability growth.

### Breakdown of total sales

in € '000	FY 2008	Share
MMOG	824	36.0%
Ad-sales	1,088	47.6%
Others	376	16.4%
<b>Total sales</b>	<b>2,288</b>	<b>100.0%</b>

Table 1

Source: Frogster

**MMOG:** Revenues from "Runes of Magic" "Bounty Bay Online" and "Stone Age 2"

**Ad-sales:** Revenues from advertising through OnlineWelten

**Others:** Development services of Frogster Asia related to "The Chronicles of Spellborn"

### Breakdown of net income

in € '000	FY 2008	Share
MMOG	-335	7.8%
Ad-sales	35	-0.8%
Others	-3,985	93.0%
<b>Total net income</b>	<b>-4,285</b>	<b>100.0%</b>

Table 2

Source: Frogster

### Geographic breakdown of total sales

in € '000	FY 2008	Share
Germany	1,968	86.0%
Rest of the World	320	14.0%
<b>Total sales</b>	<b>2,288</b>	<b>100.0%</b>

Table 3

Source: Frogster

### Forecast of the breakdown of total sales 2009E-2012E

in € '000	2009E	Share	2010E	Share	2011E	Share	2012E	Share
MMOG	10,438	86.9%	21,646	90.1%	38,973	92.7%	59,248	94.0%
Ad-sales	1,141	9.5%	1,898	7.9%	2,649	6.3%	3,342	5.3%
Others	432	3.6%	480	2.0%	420	1.0%	473	0.8%
<b>Total sales</b>	<b>12,012</b>	<b>100.0%</b>	<b>24,024</b>	<b>100.0%</b>	<b>42,042</b>	<b>100.0%</b>	<b>63,063</b>	<b>100.0%</b>

Table 4

Source: First Berlin



## **BALANCE SHEET AND CASH FLOW**

The most important positions on Frogster's balance sheet are deferred tax assets, concessions, rights and licenses as well as goodwill. Deferred tax assets of €4.4m have been impacted by a loss carried forward of €10.9m (as of 30.06.2009), which Frogster had accumulated. Concessions, rights and licenses (€1.3m) comprise licenses for games, internally used software and rights. Goodwill (€1.7m) stems from the consolidation of Frogster's subsidiaries. Since giving up the publishing and distribution of traditional video games in 2008, Frogster has no inventories on its balance sheet.

On the liabilities side of the balance sheet, the company had €4,288 of financial debt on 30 June 2009. According to management, this amount stemmed from an account overdraft. All other liabilities had a maturity of maximum one year. The financial debt was more than balanced by a cash position of €0.9m. At the end of H1 2009, Frogster had an equity ratio of 77.9%.

Due to expected strong growth in sales and profitability, we forecast the company's cash position to develop very positively in the coming years. For 2013, we forecast that cash will amount to €28.7m.

## BUSINESS DESCRIPTION

### BUSINESS SUMMARY

Frogster Interactive Pictures AG was founded in 2005 through a management buy-out (MBO) of the German subsidiary of a French game publisher. The MBO was conducted by Christoph Gerlinger, Frogster's CEO, and Dirk Weyel (COO). Frogster is headquartered in Berlin and has been listed in the Entry Standard of the Frankfurt Stock Exchange since 2006. At the end of June 2009, the company had 117 employees in total.

Between 2007 and 2008, Frogster underwent a strategy change, away from the difficult traditional video games business, which generates lower margins e.g. due to high costs related to development and manufacturing of games as well as retail margins, and towards the online games business, which management regard as much more promising. The company has focused on so called Massively Multiplayer Online Games (MMOGs) and is the only listed German company which offers such games.

### Massively Multiplayer Online Games (MMOGs)

MMOGs are persistent virtual worlds in which thousands of participants can create their own virtual existence. They are usually role-playing games that take place in fantasy or medieval worlds and can be played over long periods of time.

Although since 2002 several consoles have existed, which have had online game capabilities, the PC is still the dominant platform when it comes to MMOGs. Most online games must be bought and after that require the payment of a monthly subscription fee. Additional purchases of equipment and accessories can be made online.

For the publishers, MMOGs have the advantage that they generate continuous revenue streams. This is what differentiates them from traditional video games, which only earn money when the software is purchased. MMOGs generate sales either through subscription fees, pay-to-play models or microtransactions, whereby gamers buy in-game accessories and items to enhance their gaming experience. Microtransactions are very popular in Asia, where most people are less wealthy than in Europe and North America and software piracy is a big issue.

### Frogster's value chain



Chart 1

Source: Frogster, First Berlin



## GAMES PORTFOLIO

### Runes of Magic

RoM was developed by the Taiwanese studio Runewaker Entertainment. It is a classical fantasy online game with more than 2,300 quests and approx. 30 individual classes, which all have unique skills. In 2008, Frogster bought exclusive licenses from Runewaker for the US and Canada, all European countries except Turkey, and Korea.

What differentiates RoM from other MMOGs, especially “World of Warcraft”, is that it can be downloaded for free and generates money not through subscription fees but purchases of virtual items within the game. “World of Warcraft” is the world’s most successful game in this genre with 11.5m subscribers according to PWC. The monthly subscription fee for this game is up to \$15.

In December 2008, Frogster introduced an open-beta version of RoM in German and English. The commercial launch followed in March 2009. Since December 2008, c. 2.2m players have registered for the game in Europe and North America. During the period to July 2009 the game added several thousand users every day and revenues increased month-on-month by more than 40% on average. The big popularity of the game since its launch is best illustrated by the fact that it achieved monthly revenues of >€500,000 as early as in March 2009 although Frogster had budgeted this only for the end of 2009. According to Frogster’s management, RoM contributed between €3m and €4m to total sales in H1 2009.

In order to extend the game’s customer base, Frogster is introducing new language versions. In July and September 2009, the company published a Russian (open-beta server), French and Spanish language version. A Korean open-beta version has been released in October. Moreover, Frogster and Runewaker want to boost the game’s growth further. To achieve this Frogster plans regular expansion of the game with new free content and challenges, introduction of additional payment methods, improved customer friendliness, better download possibilities and stronger marketing of related merchandising articles. Although the game can be downloaded for free, the retail box “Runes of Magic – Chapter II: The Elven Prophecy”, which Frogster introduced in September, has been a big success so far. According to Frogster, German unit sales in the first week have been higher than for the new version of Electronic Arts’ “Need for Speed”.

### Registered users, paying users and monthly revenues

	Unique visitors	Thereof: Registered users	Thereof: Active users	Thereof: Paying users	Average monthly spending in €	Monthly revenue
<i>as of October 2009</i>						
Share		20%	12%	22%		
Figure	10,800	2,203	270	59	21	1,247
<i>Scenario</i>						
Share		25%	15%	25%		
Figure	15,000,000	3,802,500	570,375	142,480	25	3,561,992

Table 5

Source: Frogster, First Berlin



Since publication, “Runes of Magic” has received several awards including the following:

- (1) Several times at the top of the daily top 100 download charts of [www.gamershell.com](http://www.gamershell.com) (August 2009)
- (2) First place in Amazon’s “All computer games” charts on release day (March 2009)
- (3) Reader’s choice Award 2008 “Best New Game” – [mmsite.com](http://mmsite.com) (February 2009)
- (4) 2008 Best Free-to-Play Award “Surprise Hit 2008” – [tentonhammer.com](http://tentonhammer.com) (January 2009)

### **Bounty Bay Online**

With “Bounty Bay Online” (BBO) players enter the Age of Discovery spanning the 15th to the 17th century. In a seafarer setting, players are able to choose a career as a merchant, sailor, fisherman, pirate or adventurer and make their fortune on land and sea.

In February 2007, when the game was introduced, it was the only MMORPG of its kind and at the beginning was distributed through a subscription model. In March 2008, Frogster started a free-to-play server with an integrated item shop.

BBO was developed by the Chinese company Snail Game. Under the name “Voyage Century” the game has been one of the most popular titles in China. Frogster owns exclusive licenses for Germany, Austria, Switzerland and the rest of Europe.

So far, Frogster has introduced German, English and French versions of the game, a Spanish version is currently in the making. According to management, BBO generates six-digit revenues every month with more than 10,000 new registrations and average monthly revenue per paying user of €20. In H1 2009, the game contributed between €600k and €800k to total sales. In Q4 2009, Frogster will introduce the Add-on “Beyond the Horizon” with new game content and new characters.

### **The Chronicles of Spellborn**

With TCoS, which was developed by the Dutch studio Spellborn NV, players enter into an impressive online scenario with scenic landscapes, majestic cities and the remnants of an ancient civilization. Several gaming magazines and websites e.g. [SpielXPress](http://SpielXPress) (18/2009), [mmsite.com](http://mmsite.com) (12/2008) and [Gamestar.de](http://Gamestar.de) (4/2009) have already issued positive comments on TCoS.

The game was introduced in 2008 in Europe and North America with a subscription-based version, which however has not been very successful since. In 2010, Frogster plans to introduce a free-to-play version, which is currently developed by a joint-venture of Spellborn NV and Frogster Asia. We expect the free-to-play version to increase TCoS’s share in total revenues.



## **Stone Age 2**

Stone Age 2 was developed by the Japanese studio DigiPark, which had already successfully operated its predecessor in China, Korea and Japan with almost 10 million players. Frogster has owned a license for Germany since 2008.

## **SUBSIDIARIES**

### **Frogster America Inc.**

Founded in December 2008 and located in San Francisco, Frogster America is responsible for the operation and marketing of Frogster's MMO games in North and South America. Frogster Interactive holds 90% of the shares. The remaining 10% stake is owned by Lars Koschin, who is CEO of Frogster America and Andreas Weidenhaupt, CEO Frogster Online Gaming. At the end of June 2009, the subsidiary had 11 employees.

### **Frogster Asia Co. Ltd.**

Frogster Asia was founded in 2006 and is based in Seoul, Korea. The subsidiary has started to develop a MMO game tailored towards the Asian, European and US markets. Frogster Interactive owns the worldwide exclusive distribution rights. In November 2009, Frogster Asia is going to publish a Korean version of RoM and is expected to launch TCoS on the Korean market in 2010. Frogster Asia also plans to publish third party MMO games. The subsidiary had 12 employees at the end of June 2009. Frogster Interactive owns a stake of 63%. The remaining 37% are held by Sunny Park, the company's CEO.

### **Frogster Online Gaming GmbH**

Frogster Online Gaming GmbH, based in Berlin, operates and distributes Frogster's MMOGs in Europe. The subsidiary is the result of the merger between OnlineWelten and Yusho in July 2008. Frogster Interactive holds a stake of 90%, the remaining 10% are owned by the management. At the end of June 2009, Frogster Online Gaming GmbH and Frogster Interactive Pictures AG – the holding company - had 86 and 8 employees respectively.

With 8.5 million visitors and 132 million monthly page impressions in September 2009, OnlineWelten ranks among Germany's most far-ranging MMO and gaming web platforms and benefits Frogster's MMOG business with its community. Yusho is an operator of MMOGs on own hardware infrastructure with a billing system for subscriptions and sale of virtual goods. Both OnlineWelten and Yusho are today part of Frogster Online Gaming GmbH.



## MANAGEMENT

**Christoph Gerlinger** is the CEO of Frogster. At the beginning of 2005, he and COO Dirk Weyel, bought the business from a French games publisher. In 1999, Mr Gerlinger co-founded CDV Software Entertainment AG, which he took public as CFO in 2000 and co-managed until the end of 2001. From 1996 to 1999, he co-built the German computer games business of Psygnosis, a Sony group company. Mr Gerlinger holds an MBA from Johann Wolfgang von Goethe University in Frankfurt.

**Dirk Weyel** is Chief Operating Officer and as such responsible for Marketing, Sales and Business Development. Mr Weyel started his career in the music industry before switching to the gaming sector as Product Manager at Psygnosis Germany in 1998. After that, from 2000 to 2004, he established the specialist games marketing and localization agency 4-Real Intermedia along with three partners. From 2004, Mr Weyel was European Marketing Director for a French computer games publisher.

**Andreas Weidenhaupt** is Chief Licensing Officer and CEO of Frogster Online Gaming GmbH. While being a consultant in marketing strategies and brand development from 1997, he built up extensive knowledge on MMOGs. In 2004, Mr Weidenhaupt founded OnlineWelten and within the space of a few years turned it into one of the largest online gaming portals in Europe. Since July 2008, OnlineWelten has been part of Frogster Online Gaming GmbH.

**Sunny Park** is CEO of Frogster Asia Co. Ltd. Before co-founding Frogster Asia, he was Managing Director of the Global Business Division of Gravity, a leading global provider of MMOGs such as the blockbuster “Ragnarok Online”. Mr Park started his career in the advertising industry following a MBA from Yonsei University in Seoul and worked for several years in Russia and the US among other countries.

**Lars Koschin** is CEO of Frogster America. Mr Koschin began his career in the interactive entertainment industry as co-founder of Gamigo, where he spent six years overseeing all technical and MMOG-related operations as Chief Technical Officer. At Gamigo, he launched the first fully localised MMOG in Germany (“The 4th Coming”) and many more titles in Europe. In July 2007, he took over the CTO role at Curse Inc., a highly popular MMOG portal. He also managed Gameforge Productions Inc. in San Francisco from January 2008 to April 2009. Mr Koschin graduated from the Management Akademie of RWE and from TraiCen Technology School in Germany. He also holds the official multimedia teaching license of the German government.



## MARKET OVERVIEW

### ONLINE GAMES TO GROW DYNAMICALLY UNTIL 2013

According to PWC, the online game segment will grow dynamically until 2013. For Massively Multiplayer Online Games (MMOGs), the consultancy expects worldwide growth at a CAGR 09-13 of 10.6%.

In North America, the online game market has grown at double-digit rates since 2004 (e.g. 14.2% in 2008). Growth in that period has been driven by the increase in broadband subscribers and the transition to the current generation of consoles, which offer online features. However, in the years 2009 to 2013, the expected slowdown in broadband household growth will lead to a lower CAGR. For the US and Canada, PWC expects a CAGR 09-13 of 6.2% and 7.3% respectively.

The growth in other regions – EMEA, Asia Pacific and Latin America – has been fuelled by the same factors as in North America in the last years. However, as the growth in broadband connections is expected to develop more strongly, growth in online games in these regions is forecast to outperform North America during the period 2009 to 2013.

For EMEA, PWC forecasts a CAGR 09-13 for the online game market of 11.8% with the highest growth in Central and Eastern Europe (CAGR 09-13 of 13.7%). For Asia Pacific, where China and South Korea are the dominant markets and most games are free to download and financed by micro transactions, PWC is looking for slightly lower growth than in EMEA (CAGR 09-13 of 11.6%). With a CAGR 09-13 of 28.8%, PWC forecasts by far the highest average growth rate for Latin America. The reason for this is that growth in broadband connections in the region has lagged other regions and is only expected to take off in the coming years.

### VIRTUAL WORLDS TO GROW AT A CAGR 09-13 OF 62.2%

In its study “Virtual Worlds: 2010 and beyond”, KZero Worldwide forecasts that the virtual worlds sector will increase its worldwide revenues until 2013 at a CAGR 09-13 of 62.2%. For 2009, the consultancy firm expects worldwide revenues to equal \$1.3bn, whereas for 2013 it forecasts that they will reach as high as \$9.0bn. As the main growth drivers, KZero sees an ever increasing number and variety of virtual worlds, as well as an increase in ARPPU (average revenue per paying user) and conversion rates from active to paying users.

The figures which KZero use consist of premium subscriptions, micro transactions for currencies and virtual goods, marketing from third-parties and supply chain companies operating in the sector such as developers, server companies and other technical services.



## APPENDIX I - PEERS

Company	Country	Fiscal-year 2008' financials		
		Sales	EBIT margin	Net margin
UserJoy Technology (TWD)	Taiwan	501.4m	28.0%	28.7%
Actoz Soft Co. Ltd. (KRW)	Korea	93,324.4m	19.2%	8.9%
Funcom NV (NOK)	Norway	227.3m	-14.6%	-84.7%
Asiasoft Corporation (THB)	Thailand	1,587.4m	15.9%	11.7%
Shanda Entertainment (CNY)	China	3,569.1m	40.4%	40.0%
NCsoft Corp (KRW)	Korea	346,834.1m	14.4%	7.4%
Perfect World (CNY)	China	1,437.2m	52.6%	45.0%

Source: CapitalIQ



## APPENDIX II – EXAMPLES OF COMPETING PRODUCTS

Title	Release date	Genre	Description	Developer
Entropia Universe	2003	MMORPG, MMOFPS, Science Fiction	Virtual economy with in-game to real-life currency exchange	MindArk
Ragnarok Online	2003	MMORPG, Fantasy	Free to play server, Valkyrie, optional servers subject to a charge, has a cashshop	Gravity Interactive, Inc.
Angels Online	2006	MMORPG, Fantasy	Free to play, optional item purchases	UserJoy Technology
ArchLord	2006	MMORPG, Medieval fantasy	Free play, players may purchase in-game currency	NHN Corporation
LaTale	2008	MMORPG, Fantasy	Free to play with items available for purchase	Actoz Soft
Dragonica	2009	MMORPG, Fantasy	Free to play, optional cash shop purchases	Barunson Interactive
Jade Dynasty	2009	MMORPG, Fantasy	Free to play, item purchase via shop	Perfect World Entertainment
Anarchy Online	2001	MMORPG, Science Fiction	Free trial period, monthly subscription fee	Funcom
World of Warcraft	2004	MMORPG, Fantasy	Free trial period, monthly subscription fee	Activision Blizzard
Age of Conan	2008	MMORPG, Fantasy	Free trial period, monthly subscription fee	Funcom
Adventure Quest Worlds	2008	MMORPG, Fantasy	Free or premium (paid) accounts available, premium accounts allow access to special quests and items	Artix Entertainment
Warhammer Online	2008	MMORPG, Fantasy	Free trial period, monthly subscription fee	Mythic Entertainment (subsidiary of Electronic Arts)
Free Realms	2009	Fantasy MMO Adventure Game	Free to play with optional monthly subscription for extra content	Sony Online Entertainment
Fantasy Westward Journey	2004	MMORPG, Fantasy	Prepaid cards	NetEase
Maple Story	2003	MMORPG, Fantasy	Microtransactions, prepaid cards	Nexon
Legend on the Mir	2003	MMORPG, Fantasy	Prepaid cards, virtual items sales, premium subscriptions	Wemade Entertainment
World of Legend	2003	MMORPG, Fantasy	Prepaid cards, virtual items sales, premium subscriptions	Shanda Games
Lineage	1998	MMORPG, Medieval fantasy	Subscription, prepaid cards	NCSOFT
Runescape	2001	MMORPG, Fantasy	Subscription, prepaid cards	Jagex Ltd.



Title	Release date	Genre	Description	Developer
Club Penguin	2006	Virtual world	Premium subscription, prepaid cards	Club Penguin Entertainment
Dofus	2006	MMORPG, Fantasy	Free-to-play, subscription	Ankama Games
Lord of the Rings Online	2007	MMORPG, Fantasy	Subscription	Turbine Inc.
Everquest	1999	MMORPG, Fantasy	Trial period, subscription	Sony Online Entertainment
Aion	2008	MMORPG, Fantasy	Subscription, prepaid cards	NCSOFT
Eve Online	2003	MMORPG, Science Fiction	Trial period, subscription	CCP Online
Metin 2	2004	MMORPG, Fantasy	Free-to-play	Ymir Entertainment
Perfect World	2007	MMORPG, Fantasy	Free-to-play with item sales	Perfect World Entertainment
Allods Online	2009	MMORPG, Fantasy	Free-to-play with items sales	Nival Online
Atlantica Online	2008	MMORPG, Fantasy	Free-to-play	NDOORS Corporation

MMORPG: Massively Multiplayer Online Role-Playing Game

MMOFPS: Massively Multiplayer Online First Person Shooter

Source: Wikipedia, company websites



## INCOME STATEMENT ANALYSIS

All figures in €'000	2008	2009E	2010E	2011E	2012E	2013E
<b>Sales</b>	<b>2,288</b>	<b>12,012</b>	<b>24,024</b>	<b>42,042</b>	<b>63,063</b>	<b>81,982</b>
Cost of goods sold	-794	-3,483	-6,967	-12,192	-18,288	-23,775
<b>Gross profit</b>	<b>1,494</b>	<b>8,529</b>	<b>17,057</b>	<b>29,850</b>	<b>44,775</b>	<b>58,207</b>
Other operating income	753	1,201	2,402	4,204	6,306	8,198
Personnel expenses	-2,041	-3,495	-6,991	-12,234	-18,351	-23,857
Depreciation and amortisation	-2,167	-1,044	-1,367	-2,393	-3,589	-4,666
Other operating expenses	-3,636	-2,488	-4,735	-8,244	-12,303	-15,912
<b>Operating income (EBIT)</b>	<b>-5,597</b>	<b>2,703</b>	<b>6,366</b>	<b>11,183</b>	<b>16,838</b>	<b>21,971</b>
Net financial result	31	7	-52	-34	149	577
Extraordinary income / expenses	-730	0	0	0	0	0
<b>Income before taxes &amp; minority interests</b>	<b>-6,296</b>	<b>2,710</b>	<b>6,315</b>	<b>11,150</b>	<b>16,986</b>	<b>22,548</b>
Taxes	949	-813	-1,894	-3,345	-5,096	-6,764
<b>Net income / loss (before minorities)</b>	<b>-5,346</b>	<b>1,897</b>	<b>4,420</b>	<b>7,805</b>	<b>11,891</b>	<b>15,784</b>
Minority interests	732	-76	-9	-16	-24	-32
<b>Net income / loss</b>	<b>-4,614</b>	<b>1,821</b>	<b>4,411</b>	<b>7,789</b>	<b>11,867</b>	<b>15,752</b>
<b>EPS</b>	<b>-1.80</b>	<b>0.71</b>	<b>1.72</b>	<b>3.04</b>	<b>4.63</b>	<b>6.15</b>
<b>Ratios</b>						
Gross margin	65.3%	71.0%	71.0%	71.0%	71.0%	71.0%
EBIT margin	neg.	22.5%	26.5%	26.6%	26.7%	26.8%
EBITDA margin	neg.	31.2%	32.2%	32.3%	32.4%	32.5%
Net income margin	neg.	15.2%	18.4%	18.5%	18.8%	19.2%
Tax rate	15.1%	30.0%	30.0%	30.0%	30.0%	30.0%
<b>Expenses as % of sales</b>						
Cost of goods sold	34.7%	29.0%	29.0%	29.0%	29.0%	29.0%
Personnel expenses	89.2%	29.1%	29.1%	29.1%	29.1%	29.1%
Depreciation and amortisation	94.7%	8.7%	5.7%	5.7%	5.7%	5.7%
Other operating expenses	158.9%	20.7%	19.7%	19.6%	19.5%	19.4%
<b>Y-o-y growth</b>						
Total revenues	-42.4%	425.0%	100.0%	75.0%	50.0%	30.0%
Operating income	-18.0%	-148.3%	135.6%	75.7%	50.6%	30.5%
Net income / loss	0.9%	-139.5%	142.2%	76.6%	52.4%	32.7%



## BALANCE SHEET ANALYSIS

All figures in €'000	2008	2009E	2010E	2011E	2012E	2013E
<b>Current Assets</b>	<b>2,318</b>	<b>2,851</b>	<b>9,843</b>	<b>19,232</b>	<b>32,972</b>	<b>50,420</b>
Trade receivables	278	236	1,181	2,067	3,101	4,031
Tax receivables	22	38	190	333	499	648
Other assets	551	1,000	5,000	8,750	13,125	17,063
Liquid funds	1,466	1,576	3,471	8,083	16,248	28,679
<b>Non-Current Assets</b>	<b>6,377</b>	<b>6,674</b>	<b>6,914</b>	<b>7,069</b>	<b>9,743</b>	<b>12,150</b>
Concessions, rights and licenses	744	1,276	2,552	4,466	6,699	8,709
Goodwill	1,452	1,720	1,720	1,720	1,720	1,720
PP&E	173	216	505	883	1,324	1,722
Deferred tax assets	4,008	3,462	2,138	0	0	0
<b>Total Assets</b>	<b>8,695</b>	<b>9,524</b>	<b>16,757</b>	<b>26,301</b>	<b>42,715</b>	<b>62,570</b>
<b>Current Liabilities</b>	<b>1,717</b>	<b>1,394</b>	<b>5,891</b>	<b>10,309</b>	<b>15,463</b>	<b>20,102</b>
Provisions	162	360	721	1,261	1,892	2,459
Trade payables	707	400	2,000	3,500	5,250	6,825
Advances received	20	34	170	298	446	580
Other liabilities	828	600	3,000	5,250	7,875	10,238
<b>Long-term liabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Bank debt	0	0	0	0	0	0
<b>Shareholders Equity</b>	<b>6,978</b>	<b>8,054</b>	<b>10,781</b>	<b>15,892</b>	<b>27,128</b>	<b>42,313</b>
<b>Total Shareholders Equity &amp; Debt</b>	<b>8,695</b>	<b>9,524</b>	<b>16,757</b>	<b>26,301</b>	<b>42,715</b>	<b>62,570</b>
<b>Ratios</b>						
Current ratio	1.35	2.04	1.67	1.87	2.13	2.51
Quick ratio	1.02	1.30	0.79	0.98	1.25	1.63
Equity ratio (as %)	80.3%	84.6%	64.3%	60.4%	63.5%	67.6%
Debt to equity ratio (gearing)	-21.0%	-19.6%	-32.2%	-50.9%	-59.9%	-67.8%
Equity per share	2.72	3.14	4.21	6.20	10.59	16.52
Net debt	-1,466	-1,576	-3,471	-8,083	-16,248	-28,679
Capital employed (CE)	6,978	8,130	10,866	15,992	27,252	42,468
Return on equity (ROE)	-58.4%	24.2%	46.8%	58.4%	55.2%	45.4%
Return on capital employed (ROCE)	-58.4%	24.1%	46.4%	58.0%	54.9%	45.2%
Days of inventory turnover	24	n.a	n.a	n.a	n.a	n.a
Days of sales outstanding (DSO)	98	8	11	14	15	16
Days of payables outstanding	221	58	63	82	87	93



## CASH FLOW ANALYSIS

All figures in €'000	2008	2009E	2010E	2011E	2012E	2013E
<b>Net income</b>	<b>-4,614</b>	<b>1,821</b>	<b>4,411</b>	<b>7,789</b>	<b>11,867</b>	<b>15,752</b>
Depreciation	2,167	1,044	1,367	2,393	3,589	4,666
Change in working capital	3,568	-944	-961	-901	-1,051	-946
Others	-2	76	9	16	24	32
<b>Operating Cash Flow</b>	<b>1,118</b>	<b>1,997</b>	<b>4,827</b>	<b>9,297</b>	<b>14,429</b>	<b>19,504</b>
<b>CAPEX</b>	<b>579</b>	<b>-1,887</b>	<b>-2,932</b>	<b>-4,685</b>	<b>-6,264</b>	<b>-7,073</b>
<b>Free Cash Flow</b>	<b>1,697</b>	<b>111</b>	<b>1,895</b>	<b>4,611</b>	<b>8,165</b>	<b>12,431</b>
Financial Cash Flow	0	0	0	0	0	0
<b>Change in cash</b>	<b>355</b>	<b>111</b>	<b>1,895</b>	<b>4,611</b>	<b>8,165</b>	<b>12,431</b>
<b>Cash at the beginning of the period</b>	<b>1,111</b>	<b>1,466</b>	<b>1,576</b>	<b>3,471</b>	<b>8,083</b>	<b>16,248</b>
<b>Cash at the end of the period</b>	<b>1,466</b>	<b>1,576</b>	<b>3,471</b>	<b>8,083</b>	<b>16,248</b>	<b>28,679</b>
Free Cash Flow per share (€)	0.66	0.04	0.74	1.80	3.19	4.85
<b>Y-o-y growth</b>						
Operating Cash Flow	n.a	78.6%	141.7%	92.6%	55.2%	35.2%
CAPEX	n.a	-425.9%	-55.4%	-59.8%	-33.7%	-12.9%
Free Cash Flow per share	n.a	-93.5%	1614.4%	143.3%	77.1%	52.2%



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**STRONG BUY:** Expected return greater than 50% and a high level of confidence in management's financial guidance

**BUY:** Expected return greater than 25%

**ADD:** Expected return between 0% and 25%

**REDUCE:** Expected negative return between 0% and -15%

**SELL:** Expected negative return greater than -15%

Our risk ratings are Low, Medium, High and Speculative and are determined by ten factors: corporate governance, quality of earnings, management strength, balance sheet and financing risk, competitive position, standard of financial disclosure, regulatory and political uncertainty, company size, free float and other company specific risks. These risk factors are incorporated into our valuation models and are therefore reflected in our price targets. Our models are available upon request to First Berlin clients.

Up until 16 May 2008, First Berlin's investment rating system was three tiered and was a function of our expectation of return (forecast price appreciation and dividend yield) over the specified year. Our investment ratings were as follows: **BUY:** expected return greater than 15%; **HOLD:** expected return between 0% and 15%; and **SELL:** expected negative return.

#### **ADDITIONAL DISCLOSURES**

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