Gold Sector Initiation

6 December 2011

Don't miss this golden opportunity

Gold, unlike any other asset, is imbued by both history and culture with special qualities that make it a better store of value than other generic assets, especially in times when the economy veers within shouting distance of catastrophe. Over the long term, gold has proven its worth as an effective store of value. An ounce of gold purchased in 1920 for US$21/oz is worth US$1,720/oz today.

The question for those considering gold as an investment is not whether or not gold is an effective store of value in the long run or even whether it is an effective hedge against inflation – for the most part, these points are given. The more pressing question for most long-only investors is: what is gold going to in the next two-to-five years?

We believe fundamental drivers – notably the drawn-out European debt crisis, US economic woes, structural inflationary pressure, and emerging market demand for gold – will continue to underpin higher gold prices. We favour Zijin Mining (2899 HK, Outperform) for its enviable track record of success and Zhaojin Mining (1818 HK, Outperform) for its gold price sensitivity.

Analysts

Karen Li, CFA
(852) 2532 6748
karenli@ccbintl.com

Kin Li
(852) 2533 2410
likinchung@ccbintl.com

Table of Contents

China Gold Sector

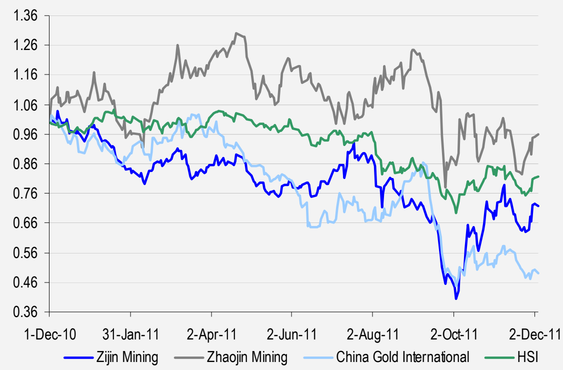
Don't miss this golden opportunity

Sector Rating: Overweight
(Initiation)

Initiate on the China Gold Sector with an Overweight rating. We believe the outlook for gold is positive, underpinned by the drawn-out European sovereign debt crisis, US economic woes, structural inflationary pressure, and emerging market demand for gold. We forecast the price of gold will average US$1,600/oz this year, then rise to US$1,850/oz in 2012F and US$2,000/oz in 2013F.

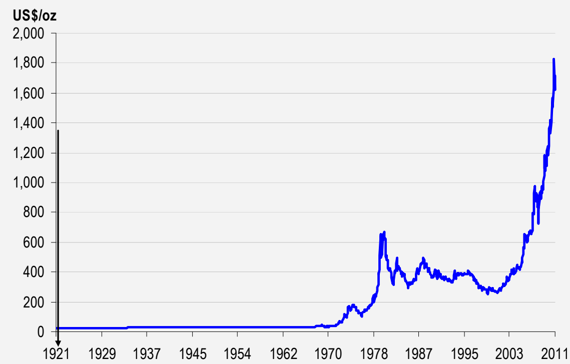
- **Central banks have emerged as net purchasers since 2Q09.** There has been large-scale gold purchasing by the central banks in 3Q11, amounting to 148.4 tonnes on a net basis. Rising gold demand from government purchases, especially in China, could have a profound effect on the gold market. Given China's massive foreign reserves, even a tiny 1ppt increase in its gold holdings – from the current 1.7% of total foreign reserves to 2.7% – would translate to around 620 tonnes of extra gold demand or 15% of the annual gold supply.
- **Gold ETFs – the sixth-largest "central bank".** As at November 2011, holdings in exchange-traded products backed by gold reached 2,161 tonnes, worth US$120b. This amount of gold means ETFs have supplanted China and Switzerland as the sixth-largest central bank by gold holdings. Investor preference for gold as a store of value in periods of financial and economic stress supports gold demand.
- **Chindia's love affair with gold.** Indian and Chinese investment demand for gold has jumped fivefold since 2001. Rising average incomes, a surplus of investable income derived from a high savings rate, improving living standards, and fears of an erosion of purchasing power should sustain China and India's love affair with gold.
- **Zijin and Zhaojin are our preferred picks.** We initiate coverage on Zijin Mining (2899 HK), Zhaojin Mining (1818 HK) and China Gold International (2099 HK), with Outperform ratings. A 1.0% change in our gold price assumption would move the 2012F earnings of Zijin, Zhaojin and China Gold by 0.9%, 1.9% and 1.5%, respectively.

Sector share price vs. HSI (rebased)



Source: Bloomberg

Gold spot price 1920-2011



Source: Bloomberg

Karen Li, CFA
(852) 2532 6748
karenli@ccbintl.com

Kin Li
(852) 2533 2410
likinchung@ccbintl.com

China gold miners valuations

Company	Stock Code	CCBIS rating	Last price (HK$)*	Target price (HK$)	P/E (x) 2011F	P/E (x) 2012F	P/B (x) 2011F	P/B (x) 2012F	EV/EBITDA (x) 2011F	EV/EBITDA (x) 2012F	ROE (%) 2011F	ROE (%) 2012F
Zijin Mining	2899 HK	Outperform	3.50	4.90	8.7	8.2	2.4	2.1	9.0	8.4	23.5	22.0
Zhaojin Mining	1818 HK	Outperform	14.10	16.60	18.2	13.3	5.0	4.0	11.3	8.5	27.5	29.8
China Gold International	2099 HK	Outperform	22.00	28.50	13.1	10.8	0.9	0.8	6.8	5.3	6.7	7.5

** Prices as at close on 5 December 2011*

Source: CCBIS estimates

Executive summary

Is the gold boom a bubble about to burst? We think not… We initiate coverage on China's gold sector with an Overweight rating. Gold is inversely correlated with the US dollar and traditionally serves as a store of value in periods of financial and economic stress. We believe fundamental drivers – notably the drawn-out European debt crisis, US economic woes, structural inflationary pressure, and emerging market demand for gold – will continue to underpin higher gold prices. We initiate coverage on Zijin Mining (2899 HK), Zhaojin Mining (1818 HK) and China Gold International (2099 HK), with Outperform ratings. We favor established gold miners Zijin, for its enviable track record of success and Zhaojin for its gold price sensitivity.

Robust gold fundamentals. Gold price is undergoing a period of consolidation on the change in inflation expectations and US dollar strength. We believe the outlook for gold remains broadly positive. The themes of structural US dollar weakness, inflation concerns, economic and geopolitical uncertainty are likely to come back into focus at some stage, driving investment demand for gold, and by extension, gold prices. We forecast gold price will average US$1,600/oz this year, and rise to US$1,850/oz in 2012F and US$2,000/oz in 2013F, from the current spot price of US$ 1,720/oz.

Golden opportunities. The disparity between physical gold and equity prices has widened since May 2011, as investors discount the challenging operating environment for miners, and as equities lose their investment appeal to ETFs. While it is difficult to predict an end to the de-rating of gold equities, valuations clearly have become much more attractive. Our China coverage is now trading at an average of 1.7x P/NPV (against a peak of: 2.8x), while on a P/E basis all stocks are trading at 11.2x 2012F P/E, below the historical average of 22.1x. With gold fundamentals broadly supportive, we believe some exposure is warranted.

Zijin Mining (2899 HK, Outperform): Backing the winner. Zijin is China's largest gold producer, with a proven track record of production and resource expansion. We expect robust gold and copper fundamentals to underpin 20% earnings CAGR for 2011F-2013F, and see upside to earnings as Zijin re-focuses on its gold-focused M&A strategy. Initiate with an Outperform rating. Our DCF-based price target of HK$4.90 puts the counter at 14.0 x P/E, 2.9x P/B 2012F and 9.0x EV/EBITDA.

Zhaojin Mining (1818 HK, Outperform): A gold-leverage play. Zhaojin is the fourth-largest gold mining company in China, with 2011 mine gold output estimated at 15.9 tonnes (510koz) and reserves of 252 tonnes (or 8.1moz). It offers un-hedged and pure gold exposure, with gold accounting for over 90% of its revenue. An aggressive production growth profile and value accretive acquisitions make Zhaojin one of the best gold-leverage plays in Asia. A 1% change in gold price would move Zhaojin's 2012F earnings by 1.9%, against 0.9% for Zijin and 1.5% for China Gold.

China Gold International (2099 HK, Outperform): Junior gold miner. China Gold is a junior gold miner; nevertheless, it offers significant resource upside through advanced exploration and acquisition support from its parent company, China National Gold Group, the only central state-owned gold producer in China. China Gold's capacity to turn its huge gold resources into operating mines is a possible driver of production growth. China Gold has fallen 50% since its IPO listing. Now trading at 0.8x 2012F P/B, China Gold has overly discounted execution risk. Our DCF-based target price of HK$28.50 places the counter at 14.0x P/E and 1.1x P/B, based on our 2012F forecast.

Gold miner summary

	Zijin Mining (2899 HK)	Zhaojin Mining (1818 HK)	China Gold International (2099 HK)
Market capitalization (US$m)	**13,224**	**5,269**	**1,118**
Mine profile	**Gold, copper, zinc and iron ore**	**Gold**	**Gold and copper polymetallic**
Mining method	Open-pit and underground	Underground	Open-pit and underground
Headquarter	Fujian	Shandong	Inner Mongolia
Estimated mine life	23	38	32
Gold reserves as of 2010 (tonne)	750	252	98
Average ore grades (gram/tonne)	0.5-5	2-3	0.7
Estimated unit production cost, 2011F (US$/tonne)	356	635	798
By-products	Copper, zinc, silver and iron	Copper	Copper, sliver, poly zinc and lead
Total gold output/mine gold (kg)			
2010	69,071/29,177	20,927/13,785	3,466
2011F	62,570/29,760	21,039/15,876	3,894
2012F	84,570/31,760	23,492/18,329	3,894
Total copper output/mine copper (tonne)			
2010	90,287/87,839	–	225
2011F	97,875/95,427	–	11,340
2012F	117,875/115,427	–	11,340
Gold as % of revenue (%)			
2010	65	92	100
2011F	68	93	58
2012F	79	93	65
Net profit sensitivity to 1% change in gold ASP (%)			
2011 F	0.7	2.0	1.2
2012 F	0.9	1.9	1.5
2013 F	0.8	1.9	1.5
Ratios & valuation			
P/E (x)			
2010	7.4	14.3	20.5
2011F	8.7	18.2	13.1
2012F	8.2	13.3	10.8
P/B (x)			
2010	1.9	6.4	0.4
2011F	2.4	5.0	0.9
2012F	2.1	4.0	0.8
EV/EBITDA (x)			
2010	10.8	17.3	17.6
2011F	9.0	11.3	6.8
2012F	8.4	8.5	5.3
ROE (%)			
2010	22.0	22.3	2.2
2011F	23.5	27.5	6.7
2012F	22.0	29.8	7.5
ROA (%)			
2010	12.5	12.8	1.6
2011F	12.6	15.9	4.7
2012F	11.8	19.5	5.3
EV/Reserve US$/oz	326	497	275

Source: CCBIS

Global gold miner peer comparison

Company	Stock code	Last price (L/C)	Market cap (US$m)	P/E (x) Historical	P/E (x) Current	P/E (x) Forward	P/B (x) Historical	P/B (x) Current	EV/EBITDA (x) Historical	EV/EBITDA (x) Current	EV/EBITDA (x) Forward	ROE (%) Historical	ROE (%) Current	ROE (%) Forward	ROA (%) Historical	ROA (%) Current	ROA (%) Forward
China			**4,127**	**15.3**	**18.5**	**10.2**	**3.1**	**3.2**	**11.9**	**9.4**	**6.2**	**14.3**	**15.4**	**19.7**	**7.6**	**11.3**	**17.2**
Zijin Mining	2899 HK	3.50	13,224	7.4	8.7	8.2	1.9	2.4	10.8	9.0	8.4	22.0	23.5	22.0	12.5	12.6	11.8
Zhaojin Mining	1818 HK	14.10	5,269	14.3	18.2	13.3	6.4	5.0	17.3	11.3	8.5	22.3	27.5	29.8	12.8	15.9	19.5
China Gold Int'l	2099 HK	22.00	1,118	20.5	13.1	10.8	0.4	0.9	17.6	6.8	5.3	2.2	6.7	7.5	1.6	4.7	5.3
Real Gold Mining	246 HK	8.81	1,030	7.6	6.5	5.6	1.4	1.2	6.4	3.0	2.8	22.6	19.0	17.3	20.0	17.4	15.4
G-Resources	1051 HK	0.48	1,043	–	53.3	5.5	1.5	1.3	–	19.8	2.7	(3.6)	2.9	24.4	(3.4)	4.8	25.2
Lingbao Gold	3330 HK	3.56	354	6.7	6.2	6.4	1.0	0.9	7.4	5.1	4.6	13.7	0.2	0.1	5.2	–	–
Sino Prosper SG	766 HK	0.11	106	–	13.3	1.3	0.5	–	–	3.7	0.6	(3.9)	0.3	22.0	(3.0)	0.3	16.4
Shandong Gold Mining	600547 CH	36.49	8,183	26.2	24.8	22.5	9.5	8.3	–	14.6	13.8	36.1	39.3	32.4	15.4	20.2	21.9
Zhongjin Gold	600489 CH	22.04	6,815	24.1	22.4	17.8	5.1	5.3	–	11.1	8.7	25.4	27.4	24.5	8.6	15.4	16.3
International																	
Senior gold miner			**20,744**	**18.3**	**14.4**	**10.5**	**1.9**	**1.9**	**8.4**	**8.1**	**6.2**	**9.9**	**14.5**	**17.8**	**6.4**	**10.0**	**12.2**
Barrick Gold	ABX US	51.02	51,010	11.7	10.5	8.6	2.3	2.1	7.7	7.2	5.8	19.2	21.7	23.4	10.8	14.1	15.2
Goldcorp Inc	GG US	51.39	41,917	25.1	22.7	16.3	2.0	1.9	12.4	12.8	9.0	8.8	8.8	11.4	6.3	6.8	9.3
Newmont Mining	NEM US	67.03	33,174	13.8	14.7	10.8	2.4	2.2	6.8	7.4	5.6	18.9	15.5	19.5	9.5	7.5	9.3
Newcrest Mining	NCM AU	35.39	27,736	26.6	16.9	13.5	2.0	1.8	13.4	9.3	7.6	9.7	11.2	11.8	7.7	10.4	11.6
Anglogold	AU US	47.02	18,133	–	11.7	6.7	–	3.5	7.9	–	–	2.7	38.5	43.6	0.9	–	–
Kinross Gold	KGC US	13.75	15,639	19.4	16.8	10.9	1.0	1.0	8.6	7.3	5.4	8.1	6.9	8.3	6.3	6.6	9.2
Yamana Gold Inc	AUY US	16.14	12,035	–	16.7	12.4	–	1.6	8.4	8.9	6.9	6.5	8.6	12.1	4.5	10.5	13.3
Gold Fields	GFI US	16.52	11,959	–	9.6	5.4	–	1.8	6.1	–	–	8.8	13.5	23.0	5.4	–	–
Iamgold Corp	IMG CN	19.66	7,267	17.4	16.1	13.3	2.1	2.1	8.4	7.3	6.0	10.8	13.0	15.4	8.6	13.8	17.4
Harmony Gold	HMY US	13.93	5,995	–	12.3	10.1	–	1.4	–	–	–	2.1	10.1	12.4	1.6	–	–
African Barrick	ABG LN	518.50	3,322	13.9	10.7	7.2	1.3	1.3	4.8	5.0	3.6	13.8	11.3	15.4	8.2	10.1	12.1

(continued on next page)

Global gold miner peer comparison (continued from previous page)

Company	Stock code	Last price (L/C)	Market cap (US$m)	P/E (x) Historical	P/E (x) Current	P/E (x) Forward	P/B (x) Historical	P/B (x) Current	EV/EBITDA (x) Historical	EV/EBITDA (x) Current	EV/EBITDA (x) Forward	ROE (%) Historical	ROE (%) Current	ROE (%) Forward	ROA (%) Historical	ROA (%) Current	ROA (%) Forward
Mid-tier miner			**7,951**	**35.5**	**26.2**	**12.7**	**2.8**	**2.6**	**25.8**	**9.8**	**7.4**	**13.3**	**16.3**	**18.3**	**9.1**	**15.2**	**17.1**
Freeport-Mcmoran	FCX UN	39.30	37,253	6.8	7.9	8.2	2.4	2.4	2.5	3.7	3.8	45.6	31.7	25.1	15.7	**20.9**	17.6
Buenaventura	BUENAVI1 PE	101.40	10,402	–	9.6	10.4	–	–	–	9.3	10.3	28.4	23.5	17.7	21.8	26.9	23.5
Eldorado Gold	ELD CN	17.72	9,614	34.2	27.6	16.2	3.0	2.9	16.4	14.6	9.6	7.3	10.3	15.1	5.7	10.3	15.6
Randgold Res	GOLD UW	104.26	9,563	–	23.5	14.4	–	4.3	–	–	–	6.0	20.1	25.7	5.4	–	–
Agnico-Eagle Min	AEM UN	43.04	7,289	–	23.0	12.8	–	2.0	13.5	9.4	6.6	10.4	6.9	14.8	6.8	7.0	12.7
Centerra Gold In	CG CN	22.63	5,261	11.8	13.8	9.1	3.6	3.4	7.2	8.4	6.0	29.0	25.1	28.2	26.1	25.0	28.0
New Gold Inc	NGD CN	10.81	4,791	23.1	22.9	15.6	2.3	2.2	12.7	13.0	9.0	9.9	8.9	10.4	6.8	6.0	6.0
Royal Gold Inc	RGLD UW	79.61	4,348	53.4	38.0	30.3	2.9	2.8	17.6	16.9	14.6	5.0	6.9	10.2	3.8	–	–
Petropavlovsk	POG LN	709.50	2,083	11.2	7.4	6.1	1.4	1.2	8.9	5.6	4.7	1.4	17.9	16.6	1.0	10.7	10.7
Semafo Inc	SMF CN	7.57	2,032	19.6	18.3	11.8	3.5	3.3	11.6	9.6	6.3	26.9	20.8	24.7	21.9	18.5	26.2
Centamin Egypt	CEY LN	100.10	1,713	124.1	8.8	6.2	3.6	2.2	160.2	7.3	5.5	3.0	23.4	26.5	2.9	24.9	25.3
Northgate Minera	NGX CN	3.71	1,066	–	114.1	11.6	2.2	2.0	7.8	9.9	4.9	(13.2)	(0.3)	5.2	(8.7)	1.3	5.8

Share price as of 5 December 2011

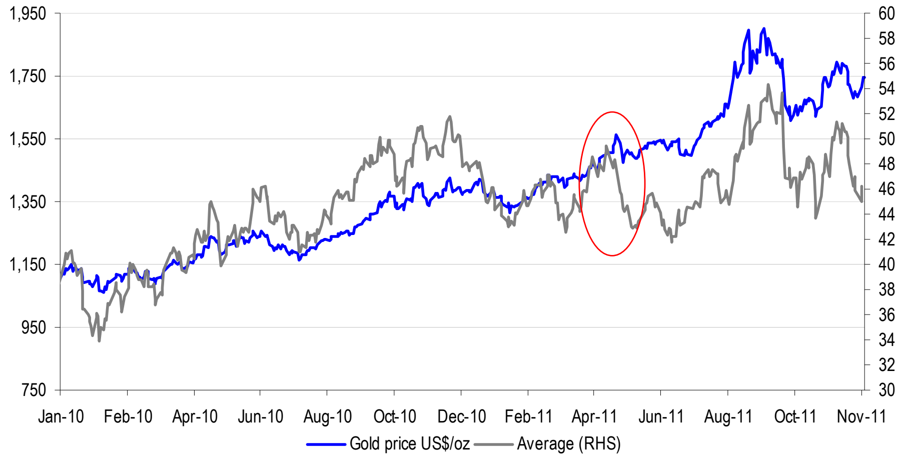
Source: Bloomberg, CCBIS

Industry outlook

Since the price of gold hit a record high of US$1,900/oz in early September this year, the gold market has been undergoing a period of consolidation, largely driven by the change in the expectation for inflation, US dollar strength and liquidation by financial institutions to meet short-term financing needs. Based on these factors, the gold market outlook remains broadly constructive. Structural US dollar weakness, concerns about inflation, economic and geopolitical uncertainty are themes that are going to be with us in one form or another for a long time. Each is bound to rear up at some stage, driving investment demand for gold and thus gold prices. We forecast an average gold price of US$1,600/oz this year, rising to US$1,850/oz in 2012F and US$2,000/oz in 2013F.

The disparity between physical gold and equity prices has widened since May 2011, as investors discount the challenging operating environment for miners, and as equities lose their investment appeal to ETFs. While it is difficult to predict an end to the de-rating of gold equities, valuations have recently become more attractive. Our China coverage is now trading at an average of 1.7x P/NPV (against a peak of 2.8x), while on a P/E basis all stocks are trading at 11.2x 2012F P/E, below the historical average of 22.1x. We believe some exposure is warranted.

Global gold miners share price vs. gold price



** Gold peer index is complied from the share price of Barrick Gold, GoldCorp, Newmont, Randgold, Agnico-Eagle, Zijin and Zhaojin*

Source: Bloomberg, CCBIS

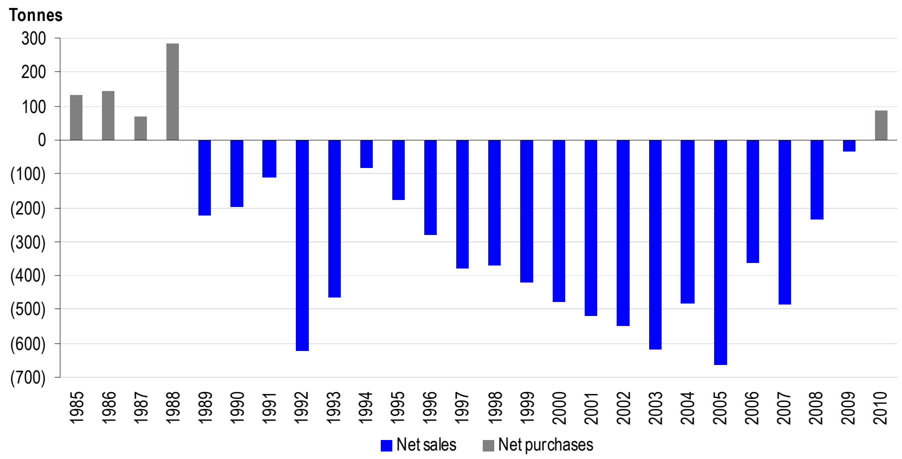
Fundamental catalysts

(1): A fundamental shift in the behavior of central banks

As a group, the central banks emerge as a net gold buyer. The past two years have seen a fundamental shift in the behaviour of central banks towards gold. After being large net sellers of gold from 1989 to 2009, central banks became net purchasers in 2Q09. This came as several key central banks, including China, Russia, India, Korea and Philippines purchased substantial amounts of gold over the past five years, while the central banks of Sri Lanka, Venezuela, Mauritius and Tajikistan bought smaller amounts.

The Bank of Korea bought 15 tonnes of gold for US$850m in November. The move follows earlier buying in June and July, when it bought 25 tonnes for US$1.24b in its first gold purchase in more than a decade. The scale of the central bank buying in the third quarter, at 148.4 tonnes on a net basis, was the largest since quarterly data began to be compiled in 2002.

Official sector net transactions since 1985



Source: GFMS, CCBIS

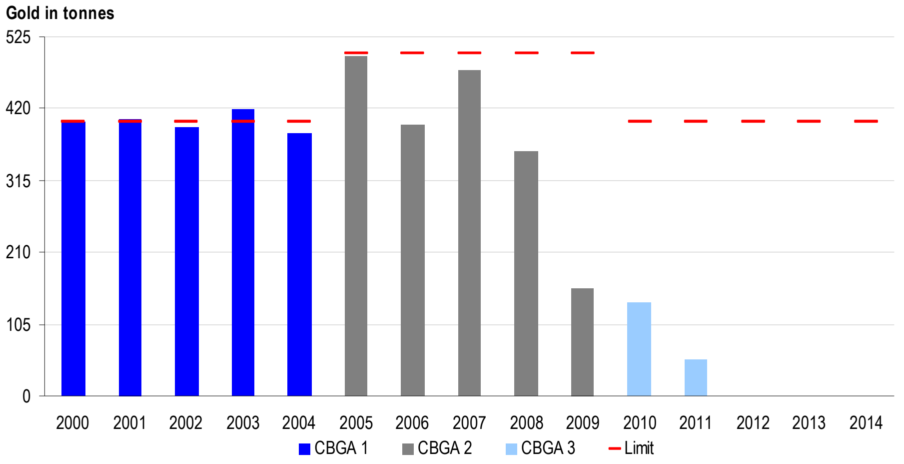
Lower European gold sales within CBGA. Sales of gold by European central banks have slowed significantly, along with a curtailment in the gold sales limit under the Central Bank Gold Agreement (CBGA) (also known as the Washington Agreement on Gold).

In the first Central Bank Gold Agreement (CBGA1) signed in September 1999, stipulated a disposal limit of up to 400 tonnes a year for five years as a ceiling on the volume of gold the European banks were allowed to sell to the market. The second Central Bank Gold Agreement (CBGA2) raised the ceiling to 500 tonnes in September 2004. However, actual European gold sales were 1,884 tonnes, 25% less than the ceiling allowed.

The third five-year CBGA (CBGA3), announced on August 2009, reduced the annual ceiling to 400 tonnes, in an acknowledgement that central banks' appetite for gold sales had diminished. Since then, European central banks have sold less than 194 tonnes of gold, representing 16% of the sales limit agreed upon in the CBGA3.

CCB International Securities Ltd
(A Wholly Owned Subsidiary of China Construction Bank)

European gold sales within Central Bank Gold Agreements (CBGA)



Source: IMF International Financial Statistics and European Central Bank, CCBIS

There is ample room for growth from official sector demand. The world's central banks together hold approximately 10.7% of their foreign reserves in gold, with vast differences across regions. Developed countries hold around a third of their reserves in gold, a legacy of the gold standard. The rest of the world holds less than 5% of their reserves in gold. Given the size of Asian reserves, even a tiny increase in the percentage of reserves held in gold could have a profound effect on the gold market. Among BRIC nations, as of November 2011, China holds a mere 1.7% of its total foreign reserves in gold, while Brazil, India and Russia hold 0.5%, 9.0% and 8.6%, respectively.

World's top-20 official gold holders as at November 2011

		Tonnes	% of reserves*
1	United States	8,133.5	75.5
2	Germany	3,401.0	72.6
3	IMF	2,814.0	
4	Italy	2,451.8	72.2
5	France	2,435.4	71.0
6	China	1,054.1	1.7
7	Switzerland	1,040.1	14.3
8	Russia	851.5	8.6
9	Japan	765.2	3.3
10	Netherlands	612.5	61.0
11	India	557.7	9.0
12	ECB	502.1	35.0
13	Taiwan	423.6	5.7
14	Portugal	382.5	88.9
15	Venezuela	365.8	63.8
16	Saudi Arabia	322.9	3.1
17	United Kingdom	310.3	17.0
18	Lebanon	286.8	32.1
19	Spain	281.6	39.5
20	Austria	280.0	56.9

** The precentage share held in gold of total foregin reserves is calculated based gold price of US$1,620/oz*

Source: World Gold Coucil, CCBIS

China – a surreptitious buyer of gold. China has not formally declared its gold holdings since April 2009, when it announced there were 1,054 metric tons. Widespread speculation has it that the tumbling dollar is beginning to erode China's purchasing power. All the more reason then that China may be diversifying into gold, oil and metals. In fact, China had secretly raised its gold reserves to 1,054 tonnes from 600 tonnes, when China last adjusted its state gold reserves figure in 2003. China's newfound interest in gold has taken the market off guard. If we accept that a 454 tonne increase in state purchases was spread out over the six years from 2003 to 2009, it would mean that China bought around 76 tonnes a year, nearly 2% of annual global gold supply. Given China's massive foreign reserves, a 1ppt increase in its gold holdings – from the current 1.7% of total foreign reserves to 2.7% – would translate to around 620 tonnes of extra gold demand or 15% of annual gold supply in 2010.

(2): Gold ETFs – the sixth-largest central bank

Gold ETFs are hitting record highs as investors turn to gold as a store of value in periods of financial and economic stress. As at November 2011, holdings in exchange traded-products backed by gold were valued at US$127.4b, based on Bloomberg data. This amount of gold held by ETFs meant that ETFs had supplanted China and Switzerland as the sixth-largest central bank.

As the European sovereign debt crisis unfolded in 2011, the demand for gold gained momentum – in 3Q11 demand for gold ETFs rose 58% from the year ago. In 3Q11 alone, gold ETFs were 77.6 tonnes, valued at US$4.2b, compared with 51.7 tonnes in 2Q11.

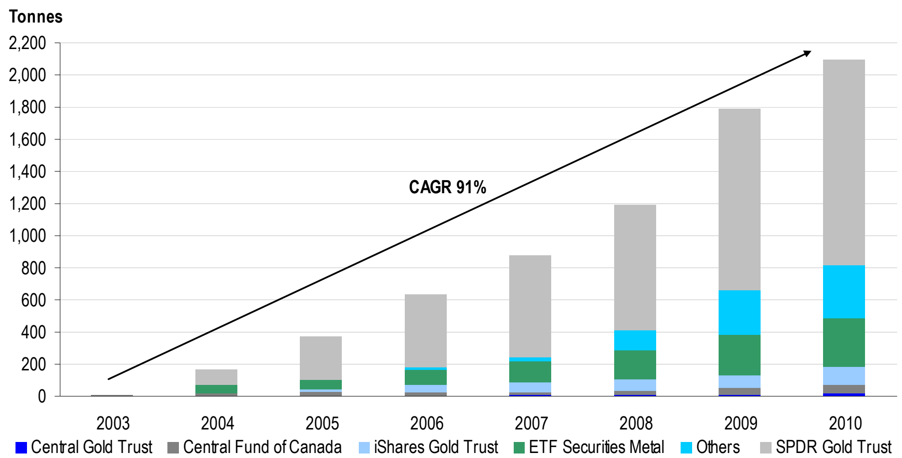
We believe gold ETFs, seen as new asset class by private investors, would continue to support investment demand for gold.

World gold holdings by official and private sectors

		Tonnes
1	United States	8,133.5
2	Germany	3,401.0
3	IMF	2,814.0
4	Italy	2,451.8
5	France	2,435.4
6	**Privately held gold**	**2,161.1**
	– SPDR Gold Shares	1,239.0
	– ETF Securities Gold Funds	259.8
	– ZKB Physical Gold	195.5
	– COMEX Gold Trust	137.6
	– Julius Baer Physical Gold Fund	93.5
	– Central Fund of Canada	52.7
	– NewGold ETF	47.8
	– Bullionvault	37.1
	– Sprott Physical Gold Trust	32.3
	– ETFS Physical Swiss Gold Shares	28.0
	– GoldMoney	19.0
	– Central Gold Trust	18.8
7	China	1,054.1
8	Switzerland	1,040.1

** The official gold holding data were complied as of November 2011.*
Source: World Gold Coucil, Bloomberg, CCBIS

Global ETF gold holdings



Source: GFMS, Bloomberg, CCBIS

(3): Rapid growth in investable demand from emerging markets

Gold has become an increasingly popular investment in the emerging markets, not only as jewellery, but also in the form of gold bars or coins. From 2001 to 2010, there was a huge jump in Chinese investment demand, from about 2 tonnes in 2001 to about 187 tonnes in 2010. During the same period, total Indian gold investments went from 104 tonnes in 2001 to 349 tonnes in 2010.

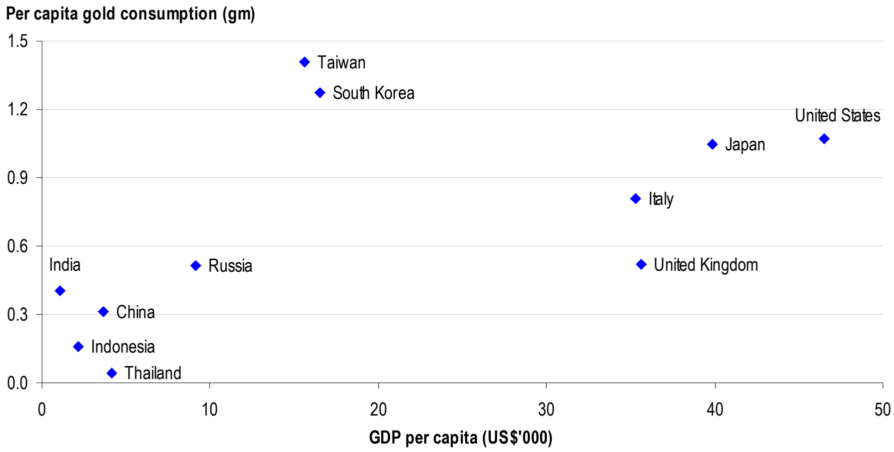
Growing investment demand from China and India (Kg)

	World Total		China				India			
	Demand	Investment	Jewelry	Investment	Industrial	Total	Jewelry	Investment	Industrial	Total
2001	3,915	281	203	2	13	219	598	104	32	**734**
2002	4,039	518	200	4	13	217	459	88	23	**571**
2003	4,234	943	201	6	19	226	442	86	21	**549**
2004	3,874	257	224	10	21	255	517	101	25	**642**
2005	4,116	719	241	11	23	276	586	136	28	**750**
2006	3,980	590	245	15	30	289	516	196	27	**739**
2007	3,942	395	302	29	35	366	558	213	25	**796**
2008	3,996	621	341	66	45	451	600	223	21	**845**
2009	4,326	1,573	376	110	57	542	471	171	14	**657**
2010	4,344	1,375	452	187	67	706	657	349	16	**1,022**
10-year CAGR (%)	1	19	9	62	20	14	1	14	(7)	**4**

Source: GFMS, CCBIS

India is a major gold buyer and has shown less price sensitivity in recent years. China, growing in affluence, is on course to supplant India as the largest gold consumer. As shown on the chart below, China's per capita demand for gold remains relatively low compared with western economies. By October 2011, China's inflation rate stood at 5.5% and in India it was 9.7%. Coupled with a potent combination of rising average incomes, a surplus of investable income derived from a high savings rate, improving living standards, and fears of an erosion of purchasing power should sustain China and India's growing love affair with gold.

Global gold consumption intensity (2009)



Source: GFMS, IMF, Wold Gould Council estimates, CCBIS

CCB International Securities Ltd
(A Wholly Owned Subsidiary of China Construction Bank)

Industry analysis

Gold is more than simply a commodity. Gold, unlike any other asset, is imbued by both history and culture with special qualities that make it a better store of value than other generic assets, especially in times when the economy veers within shouting distance of catastrophe. Over the long term, however, gold has proven its worth as an effective store of value. An ounce of gold purchased in 1920 for US$21/oz is worth US$1,720/oz today.

Market balance does not appear to affect the price of gold to the same extend as other commodities because it has limited industrial use (2% of annual demand), and is not consumed through use. Physical stocks continually accumulate above ground, and could come on to the market if the price were right. The result would be rising gold supply at high prices.

Global gold supply and demand (2001-2010)

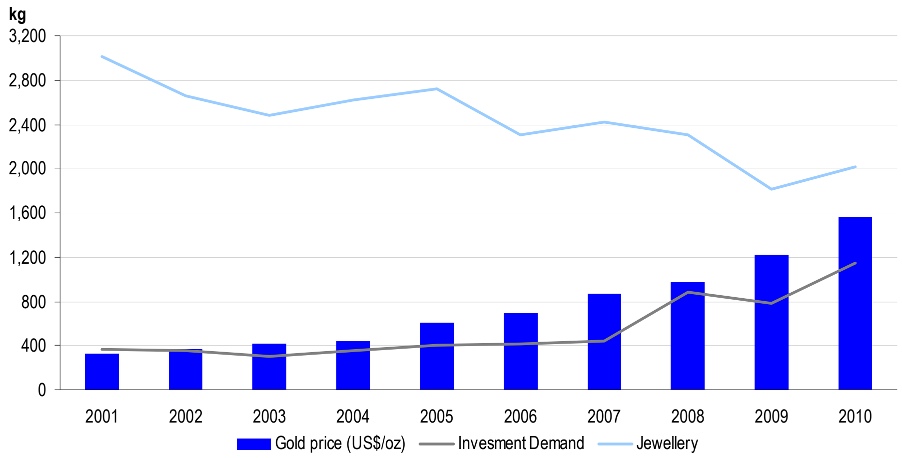
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	10-year CAGR (%)
Supply											
Mine production	2,646	2,619	2,624	2,496	2,550	2,482	2,476	2,408	2,589	2,693	1
Official sector sales	520	547	620	479	663	365	484	235	42	–	(100)
Old gold scrap	749	874	991	881	902	1,133	982	1,316	1,695	1,651	8
Dis-investment	–	–	–	18	–	–	–	37	–	–	-
Total supply	**3,915**	**4,039**	**4,234**	**3,874**	**4,116**	**3,980**	**3,942**	**3,996**	**4,326**	**4,344**	**1**
Demand											
Jewellery	3,009	2,662	2,484	2,616	2,719	2,300	2,424	2,304	1,814	2,017	(4)
Other	474	481	518	563	585	657	679	720	703	767	5
Total Fabrication	3,483	3,143	3,003	3,179	3,304	2,956	3,102	3,024	2,516	2,784	(2)
Official Sector Purchases	–	–	–	–	–	–	–	–	–	77	-
Bar investment	261	264	180	257	264	237	240	621	498	859	13
Net production dehedging	151	379	289	438	92	434	444	351	236	108	(3)
Net investment	20	254	763	–	455	353	155	–	1,075	516	38
Total demand	**3,915**	**4,039**	**4,234**	**3,874**	**4,116**	**3,980**	**3,942**	**3,996**	**4,326**	**4,344**	**1**

Source: GSFM, CCBIS

As at end-2010, GFMS (formerly, Gold Fields Mineral Services) estimated 166,600 tonnes of gold above ground. Annual gold demand and supply averaged 4,118 tonnes for the past five years. Gold supplies primarily come from mine production, central bank sales and purchases and from the recycling of above-ground stocks. On the demand side, fabrication (mostly jewellery), industry (including electronics and medical applications), and investment are the major sources of demand. Industrial use accounts for a mere 2% of annual demand.

Central bank sales and purchases of gold play an important role in the gold market. Historically, gold served as a strategic reserve asset by the central banks. After the breakdown of the Bretton Woods system in the 1970s, the US unilaterally terminated convertibility of the dollar to gold, accelerating the shift in the monetary system from the gold standard to fiat currencies, prompting a significant selloff of official gold stocks. After being large net sellers of gold from 1989 to 2009, central banks became net purchasers in 2Q09.

Gold price trend against investment demand and jewellery demand



Source: GFMS, World Gold Council, CCBIS

Gold price is a function of investment demand. Jewellery makes up most of gold demand, yet its share of total gold demand has declined over the past 10 years, from 89% to 64%. Empirical evidence tells us that the price of gold is more affected by investment demand. This is evident in the spectacular run in gold prices since December 2005, after breaking through the US$500/oz resistance level for the first time since 1981. Since December 2005, the price of gold has nearly quadrupled to US$1,720/oz despite the fact that global demand for gold has been fairly stable, at a mere 1% CAGR. Notably, from 2005 to 2010, investment demand (including bar hoarding and ETFs) grew strongly at 14% p.a., offsetting a 6% p.a. decline in jewellery demand.

Gold price trend since 1920

Source: GFMS, CCBSI, World Gold Council

.

Gold shines during times of high inflation and economic woe. The very persuasive "The impact of inflation and deflation of the case for gold", published by *Oxford Economics* in July 2011, puts gold price into statistical context. Key findings were broadly consistent with the orthodox view that gold is inversely correlated with the US dollar and performs well in periods of financial and economic turmoil as gold is considered a store of value against inflation and deflation.

- In the long term, gold is an effective hedge against inflation. A 1% increase in the general US price level leads to a 1% change in gold prices in the long run.

- For short-term fluctuations, the price of gold is negatively correlated with the change in US board exchange rate (coefficient: -0.837) and the US real interest rate (coefficient: -0.015) and positively correlated with economic and financial stress (denoted as credit default premium with a coefficient of + 0.0440).

    1. A 10% appreciation of the US dollar reduces the price of gold by 8.4%. (broadly in line with the elasticity estimated by the IMF, whereby 40-50% of gold price volatility since 2002 was dollar-related, with a 1% change in effective external value of the dollar leading to a change of over 1% in the gold price).

    2. A 100bp fall in the real interest rate results in a 1.5% rise in the price of gold.

    3. A 100bp rise in the credit premium increases the price of gold by 4.4% in the following quarter.

Oxford Economics' gold price equation

% Ch. $PG_t = \alpha + \beta_1$(% Ch. PG_{t-1}) + β_2(% Ch. PG_{t-2}) + β_3(US Inflation) + β_4(% Ch. Ex $Rate_t$) + β_5(Ch. Real $Rate_t$) + β_6(Ch. Default $Premium_{t-1}$) + β_7(Ch in growth rate of US monetary $base_t$) + γECM_{t-1} + Time Dummies
where PG is the price of gold (US$/troy ounce):

- **α** is the constant term;
- **β_1.....β_7** are coefficients capturing the impact on the price of gold of a 1% change in the variable;
- **γ** represents the speed of adjustment to the long run equilibrium;
- **US inflation** is the annual rate of CPI inflation in the US;
- **Ex Rate** is the US nominal effective exchange rate;
- **Real Rate** is the estimated real interest rate (calculated as the five year bond yield minus 5-year ahead inflation expectations reported by the University of Michigan Consumer survey, i.e. an ex ante measure of inflation expectations);
- **Default Premium** is the yield spread between BBB-rated corporate bonds and AAA-rated bonds;
- **US Monetary Base** is the seasonally adjusted US monetary base, (US$m).

Source: Oxford Economics "The impact of inflation and deflation on the case for gold" dated July 2011, CCBIS

An equation for a gold price estimate

Sample (adjusted): 1976Q2 2010Q3
Included observations: 138

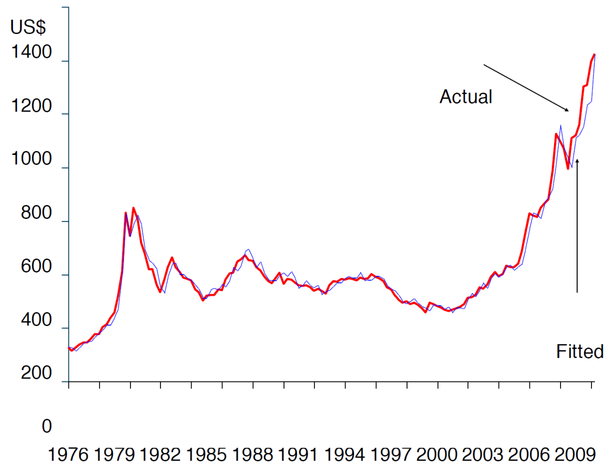
Dependent variable: Change Ln (gold price)

	Coefficient	Std error	t-statistic	p-value
EC term/speed of adjustment	(0.024)	0.016	(1.506)	0.135
Long run coefficients				
Constant	0.542	0.016	0.804	0.423
Ln (US price level)	1.000	–	–	–
Short run coefficients				
Δ Ln (Gold price (-1))	0.172	0.076	2.276	0.025
Δ Ln (Gold price (-2))	0.156	0.069	2.266	0.025
US inflation	0.004	0.002	1.875	0.063
Δ (US broad exchange rate)	(0.837)	0.169	(4.957)	0.000
Δ (US real interest rate)	(0.015)	0.008	(1.942)	0.054
Δ (credit default premium(-1))	0.044	0.021	2.078	0.040
Δ (growth rate of Fed balance sheet)	0.140	0.117	1.204	0.231
Time Dummies				
R-squared	0.541			0.016
Adjusted R-squared	0.500			0.079
S.E. of regression	0.056			(2.842)
Sum squared resid	0.396			(2.587)
Log likelihood	208.073			(2.738)
Durbin-Watson statistic	1.884			

Gold price	Price of gold, US$/troy ounce
US price Level	Level of US consumer price index
US inflation	Annual percentage change in US CPI
US broad exchange rate	US nominal broad exchange rate
US real interest rate	US medium term real interest rate
Credit default premium	Interest rate spread between AAA and BBB bonds
Fed balance sheet	Level of Federal Reserve balance sheet

Source: Oxford Economics "The impact of inflation and deflation on the case for gold" dated July 2011, CCBIS

Actual and fitted values from equation



Source : Oxford Economics/Haver Analytics, CCBIS

Zijin Mining (2899 HK)

Backing the winner

We initiate coverage on Zijin Mining (Zijin) with an Outperform rating and DCF-based price target of HK$4.90. Zijin is China's largest gold producer, with a proven track record of production and resource expansion. We expect robust gold and copper fundamentals to underpin 20% earnings CAGR in 2011F-2013F, and see upside to earnings as Zijin brings its gold-focused M&A strategy back to the forefront.

- **Senior gold miner.** Zijin has a remarkable track record of growing its resources, a key driver of production growth. Mine gold production grew at a 14% CAGR in the past five years, far outpacing global peers. Zijin has vast resources, a strong balance sheet and an experienced team of geologists to support its growth plans. We forecast a 6% and 17% production CAGR in mine gold and copper for 2011F-2013F, respectively.
- **Gold and copper exposure.** Gold and copper are Zijin's key growth drivers, with gold accounting 58% of its gross profit and the remainder deriving from copper (28%) and zinc (2%). A 1.0% change in our gold and copper assumptions would move Zijin's 2012 earnings by 0.9% and 0.4%, respectively.
- **Re-rating underway**. The stock has de-rated by 39% since December 2009, hurt by tailing system leakages and M&A delays. We believe a reacceleration of gold-focused M&As and a mine revamp should restore investor confidence and warrant re-rating. Our DCF valuation, based on a long-term gold price of US$1,250/oz, 2.0x P/NPV and 8.8% WACC, arrives at a target price of HK$4.90, placing the counter at 11.4x 2012F P/E and 2.9x 2012F P/B. This compares favorably to a mid-cycle valuation of 22.1x P/E and 2.8x P/B for gold plays.
- **Risks** include a weaker gold price, cost pressure and production delays.

Financial forecast

Year to 31 Dec	2009	2010	2011F	2012F	2013F
Revenue (RMB m)	20,215	27,769	29,217	38,397	52,546
Net profit (RMB m)	3,552	4,813	6,131	6,772	8,150
EPS (RMB)	0.28	0.39	0.34	0.36	0.43
YoY change (%)	1.3	40.8	(15.1)	6.4	20.4
DPS (RMB)	0.24	0.33	0.08	0.09	0.11
Yield (%)	8.2	11.3	2.9	3.2	3.9
PER (x)	10.4	7.4	8.7	8.2	6.8
PBR (x)	2.3	1.9	2.4	2.1	1.7
EV/EBITDA (x)	14.8	10.8	9.0	8.4	6.7
ROE (%)	19.6	22.0	23.5	22.0	22.3

Source: CCBIS estimates (Consensus net profit estimates: 2011F: RMB6,201m; 2012F RMB7,490m)

Company Rating: Outperform
(initiation)

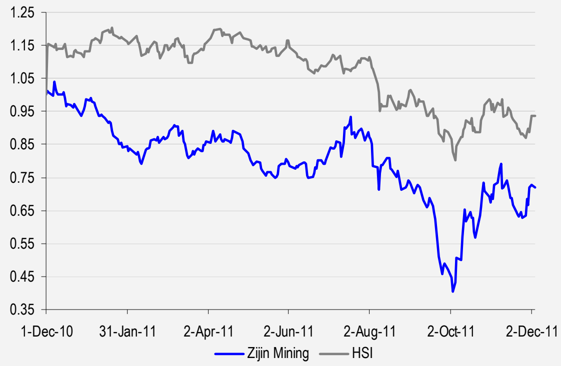
Price: **HK$3.50**
Target: **HK$4.90**
(initiation)

Trading data

52-week range	HK$ 1.95-5.09
Market capitalization (m)	HK$ 103,145/US$13,224
Shares outstanding (m)	21,812
Free float (%)	54%
3M average daily T/O (m share)	15.33
3M average daily T/O (US$m)	5.81
Expected return (%) – 1 year	40

Closing price on 5 December 2011

Stock price and HSI (rebased)



Source: Bloomberg

Karen Li, CFA
(852) 2532 6748
karenli@ccbintl.com

Kin Li
(852) 2533 2410
likinchung@ccbintl.com

Valuation

We value Zijin based on life-of-mine DCF valuation, in which we discount the free cash flow until the mining reserves fully deplete. Our target price for Zijin is set at HK$4.90, incorporating a WACC of 8.8%, a long-term gold price assumption of US$1,250/oz (against the spot: US$1,720/oz), and 2.0x P/NPV. Our P/NPV multiple for Zijin falls between that of Zhaojin (2.5x) and China Gold (1.8x) because;: (1) Zijin's production growth is below Zhaojin's; and (2) because Zijin has longer track record of production growth than China Gold.

Our target price puts the counter at 11.4x P/E, 2.9x P/B 2012F and 9.0x EV/EBITDA. This compares with a mid cycle valuation of 22.1x P/E and 2.8x P/B for Chinese gold companies.

We believe heightened macro uncertainty stemming from the financial crisis in the US and EU, together with resurgent expectations of inflation in the medium term, support gold price strength and improves valuation multiples of gold plays.

Share price (HK$) sensitivity vs. change in gold price

		Long term gold price (US$/oz)							
		1,100	1,200	1,250	1,350	1,450	1,550	1,650	1,750
WACC (%)	6.80	5.61	5.83	5.93	6.15	6.37	6.59	6.81	7.02
	7.80	5.06	5.26	5.36	5.57	5.77	5.97	6.18	6.38
	8.80	4.61	4.80	4.89	5.08	5.27	5.46	5.65	5.84
	9.80	4.24	4.42	4.50	4.68	4.86	5.03	5.21	5.38
	10.80	3.93	4.09	4.18	4.34	4.50	4.66	4.83	4.99

Source: CCBIS

Share price (HK$) sensitivity vs. change in copper price

		Long term copper price (US$/tonne)							
		3,500	4,500	5,500	6,000	6,500	7,000	7,500	8,500
WACC (%)	6.80	4.64	5.29	5.93	6.26	6.58	6.91	7.23	7.88
	7.80	4.25	4.81	5.36	5.64	5.92	6.20	6.48	7.04
	8.80	3.93	4.41	4.89	5.14	5.38	5.62	5.86	6.35
	9.80	3.65	4.08	4.50	4.72	4.93	5.14	5.36	5.78
	10.80	3.42	3.80	4.18	4.36	4.55	4.74	4.93	5.31

Source: CCBIS

Share price (HK$) sensitivity vs. change in gold and copper prices, WACC: 8.8%

		Long term gold price (US$/oz)							
		1,100	1,200	1,250	1,350	1,450	1,550	1,650	1,750
Copper price (US$/t)	4,500	4.13	4.32	4.41	4.60	4.79	4.98	5.17	5.36
	5,500	4.61	4.80	4.89	5.08	5.27	5.46	5.65	5.84
	6,500	5.09	5.28	5.38	5.57	5.76	5.95	6.14	6.33
	7,500	5.58	5.77	5.86	6.05	6.24	6.43	6.62	6.81
	8,500	6.06	6.25	6.35	6.54	6.73	6.92	7.11	7.30

Source: CCBIS

Earnings outlook

We forecast earnings to rise by a 20% CAGR in 2011F-2013F on the back of a 24% revenue CAGR. 2010 ROE was 22% and is expected to remain stable in a range of 22% to 23.5% in 2011F-2013F. By our estimate, Zijin could maintain gross margin at 31-41% and net margin at 16-21%.

Given the significant upward pressure on operating and financial costs of gold miners, we believe that cost control and economies of scale are important to maintain healthy net profit margin. Thus, Zijin, having the longest track record and significant economies of scale, has the ability to maintain a healthy margin, in our view.

While gold represented merely 60% of Zijin's revenue in 2010, Zijin's earnings are nevertheless highly sensitive to gold price volatility. For 2012F, we forecast gold will account for 58% of the company's gross profit with the remainder deriving from copper (28%) and zinc (2%). A 1% change in our gold and copper assumptions would move Zijin's 2012 earnings by 0.9% and 0.4%, respectively.

Zijin's remarkable record of resource expansion

Reserve (mt)	2006	2007	2008	2009	2010
Gold (tonne)	455.0	638.0	701.0	714.7	750.2
Silver (tonne)		3.0	1,700.0	1,855.2	1,827.9
Copper	6.7	9.4	9.6	10.6	10.6
Moly	0.3	0.3	0.4	0.4	0.4
Zinc + lead	2.4	3.9	5.3	5.2	5.2
Tungsten		0.1	0.1	0.2	0.2
Magnetite	188.0	167.9	168.0	185.6	184.5
Coal	–	–	–	–	459.2
Tin	0.1	0.1	0.1	0.1	0.1
Nickel	–	–	0.7	0.6	0.6
Pyrite	–	–	135.0	66.7	66.7

Source: Company data, CCBIS

Investment case

A proven senior gold miner. With 750 tonnes of gold reserves and 10.6mt of copper reserves, Zijin is the biggest gold miner and the second-largest copper producer in China. It has a long track record of gold production growth, and has been successful in acquiring and exploring gold assets to increase its gold reserve base since it was established in 1986. Production CAGR of mine gold was a staggering 14% over the past five years. Zijin's major assets include the Zijinshan mine – the biggest open-pit gold mine in China, which produced 16.2 tonnes (or 522koz) gold in 2010.

Gold and copper exposure. Gold and copper remain the key growth drivers for Zijin, with gold accounting 57% of its gross profit and the remainder deriving from copper (29%) and zinc (4%) in 2010. It has minimal hedging commitment – up to 25% of its gold production and none for other metals, making its earnings leveraged to gold and copper spot prices. For 2011F-2013F, we expect mine gold and copper production CAGR of 6% and 17%, respectively, underpinned by phase III expansion in Guizhou Shuiyindong gold mines and development of the Heilongjiang Duobaoshan copper mine. A 1.0% change in our gold price and copper price assumptions translates to a 0.9% and 0.4% increase in 2012F earnings, respectively.

Lowest-cost producer. Zijin's unit gold and copper production costs in 2010 were US$310/oz and US$1.9/lb, respectively, among the world's lowest, thanks to large-scale open-pit mining at its flagship mine Zijinshan, and a low strip-ratio and high recovery ratio. Even factoring in an aggressive cost outlook, we expect Zijin's unit gold and copper cost to remain competitive in a range of US$335-356/oz for gold and US$2.1-2.2/lb for copper in 2011F-2013F, underpinned by stable gold operations and new output contribution from the Duobaoshan copper mine.

Redoubling of gold-focused M&A. As at end-2010, Zijin has 750 tonnes of gold and 10.6mt copper capable of supporting a mine-life of 25 years for gold production and 92 years for copper mining. While copper makes up 47% of Zijin's current NAV by our estimate, Zijin's redoubling of gold-focused M&A, including in recent months, Kazakhstan Summer Gold, Australian Norton Gold (NGF AU, Not Rated), Gansu Lixian Gold and Tibet Gold Eagle. This could boost the company's gold NAV in near term. Announced M&As could enhance Zijin's gold reserves by over 40%. Having already acquired mines in Russia, Mongolia, Indonesia and Tajikistan, Zijin is building global brand, that would enhance its credibility and mining know-how by meeting international standards.

Greater financial flexibility. Zijin raised a five-year corporate bond of US$480m at a 4.25% coupon rate and maturing in June 2016. The bond is rated investment grade of A1 by Moody's, and is in part backed by a standby letter of credit worth of US$200m issued by the Bank of China. We believe the bond issuance gives Zijin added financing flexibility to make acquisitions.

Re-rating underway. The stock has de-rated by 39% since December 2009, as it has been hurt by tailing system leakages, M&A delays, and concerns over the depletion of Zijinshan's gold reserves. Zijin is keen to restore investor confidence by voluntarily conducting technical reviews of its gold assets. A JORC-compliant technical report, to be published in 1Q12, could serve as near-term catalyst. A reacceleration of gold-focused M&A and the revamping of its mines should restore investor confidence and warrant a re-rating.

Risks

- Dispersed locations increasing political risk
- Decline in gold, copper and zinc ASP significantly affecting Zijin's net profit margin
- M&A and production delays affecting revenue growth and our cost assumptions, leading to earnings risk

Zijin's mine map

Source: Company data, CCBIS

Zijin's global mine map

Source: Company data, CCBIS

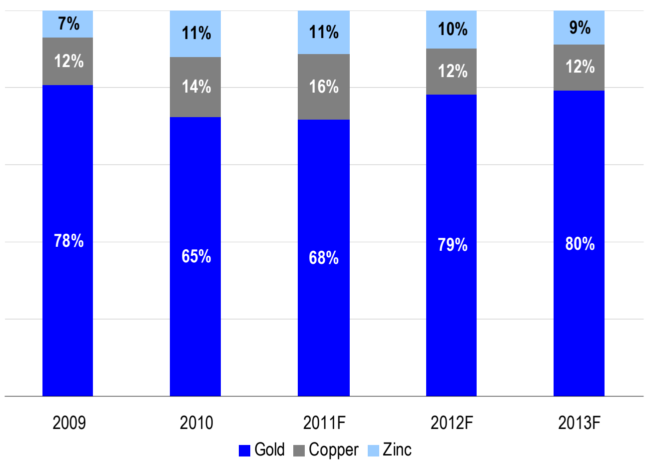
Zijin owns 25 mines and 3 smelters/refineries in China

Anhui	➢ Jiaochong Gold mine
Fujian	➢ Zijinshan ➢ Zijin Gold Refinery ➢ Wuping Yueyang Sliver Mine ➢ Liancheng Copper Molybdenum Mine
Gansu Gansu	➢ Lixian Gold Mine
Guizhou	➢ Shuiyindong Gold Mine ➢ Huilong Gold Mine
Hebei	➢ Dongping Gold Mine
Heilongjiang	➢ Duobaoshan Copper Mine
Henan	➢ Shangcheng Tangjiaping ➢ Molybdenum Mine ➢ Luoning Luyuangou Gold Mine ➢ Luoyang Yinhui Gold Refinery
Inner Mongolia	➢ Wulate Houqi Zinc Mine ➢ Bayannaoer Aobao Gold Mine ➢ Bayannaoer Zinc Processing Plant
Jilin	➢ Yangjingou Wolfram Mine ➢ Hunchun Shuguang Gold/Copper Mine
Qinghai	➢ Deerni Copper Mine
Shandong	➢ Longkou Gold Mine
Shanxi	➢ Yixingzhai Gold Mine
Xinjiang	➢ Ashele Copper-Zinc Mine ➢ Ulagen Zinc and Lead Mine ➢ Mengkulron Mine ➢ Qitai Coal Mine
Yunnan	➢ Malipo Wolfram Mine ➢ Huaxi Yuanyang Gold Mine ➢ Shangri-la Copper Mine

Source: Company data, CCBIS

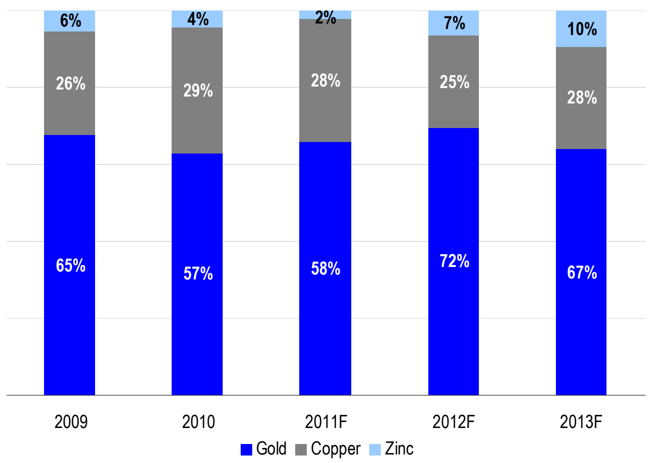
CCB International Securities Ltd
(A Wholly Owned Subsidiary of China Construction Bank)

Revenue breakdown



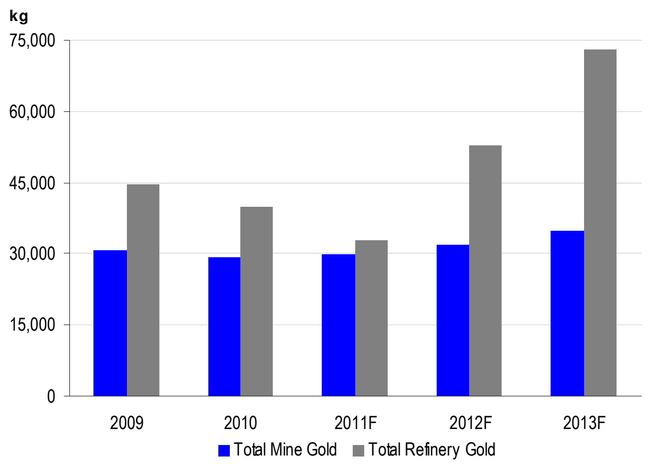
Source: Company data, CCBIS estimates

Gross profit breakdown



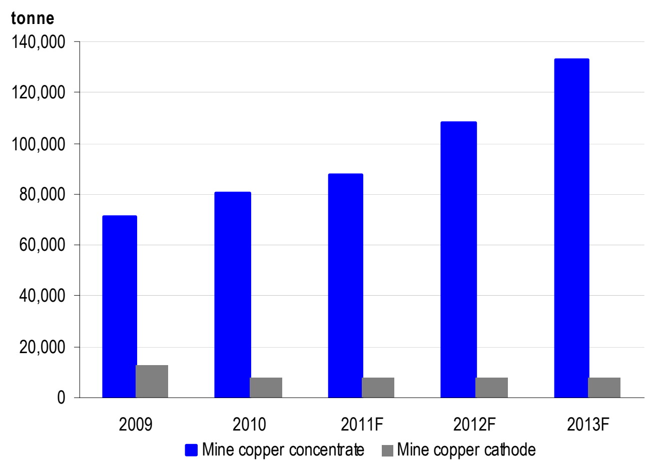
Source: Company data, CCBIS estimates

Gold output (kg)



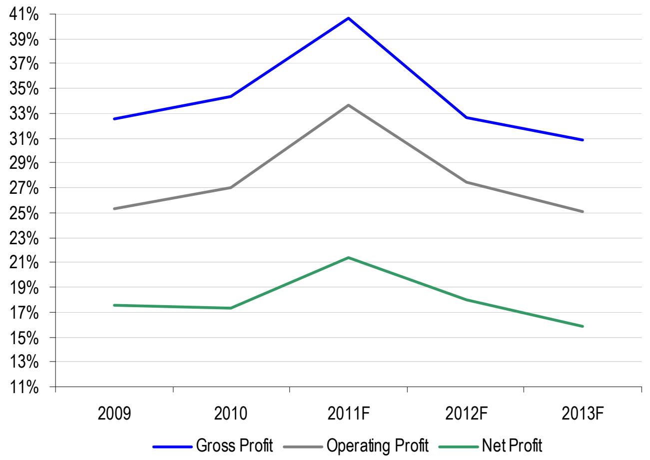
Source: Company data, CCBIS estimates

Copper output (tonne)



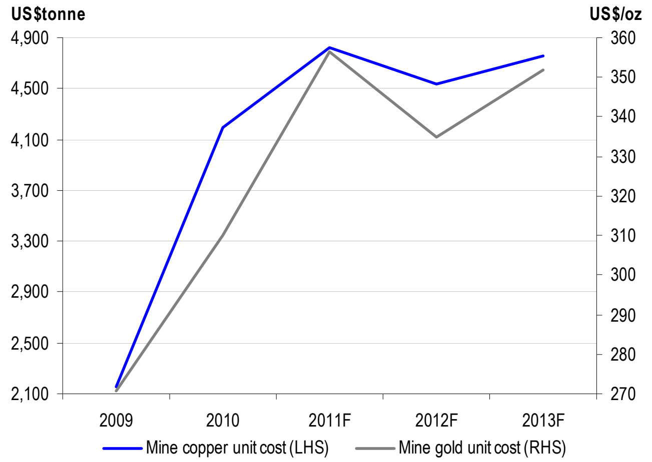
Source: Company data, CCBIS estimates

Margin (Gross profit, Operating profit and Net profit)



Source: Company data, CCBIS estimates

Copper and gold unit cost (US$)



Source: Company data, CCBIS estimates

Profit and loss

End-Dec (RMB m)	2009	2010	2011F	2012F	2013F
Revenue	**20,215**	**27,769**	**29,217**	**38,397**	**52,546**
Cost of sales	(13,642)	(18,240)	(17,353)	(25,870)	(36,360)
Gross profit	**6,573**	**9,529**	**11,864**	**12,527**	**16,186**
Other gains/(losses)	609	535	563	960	1,051
SG&A	(1,095)	(1,550)	(1,516)	(1,800)	(2,463)
Other expenses	(969)	(1,010)	(1,062)	(1,152)	(1,576)
EBIT	5,118	7,504	9,849	10,535	13,197
EBITDA	6111	8691	10448	11310	14128
Finance cost	(168)	(324)	(671)	(805)	(966)
Profit/(loss) from associates	96	137	145	190	260
Pretax profit	**5,045**	**7,318**	**9,323**	**9,920**	**12,490**
Income tax	(968)	(1,576)	(2,008)	(2,136)	(3,123)
Minorities	(525)	(929)	(1,184)	(1,012)	(1,218)
Net profit	**3,552**	**4,813**	**6,131**	**6,772**	**8,150**
EPS – basic (RMB)	0.28	0.39	0.34	0.36	0.43
DPS – (RMB)	0.24	0.33	0.08	0.09	0.11
Dividend payout (%)	41	30	30	30	30

Balance sheet

End-Dec (RMB m)	2009	2010	2011F	2012F	2013F
PP&E	10,051	12,557	18,259	22,484	26,553
Intangible	5,252	5,316	5,316	5,316	5,316
Others	5,381	9,467	8,467	8,657	8,917
Inventories	2,590	3,483	3,065	4,569	6,422
Accounts receivables	1,379	2,538	2,477	2,771	3,224
Others	1,993	1,248	1,248	1,248	1,248
Cash & equivalent	2,999	3,791	9,750	12,267	16,147
Current assets	8,961	11,061	16,540	20,856	27,040
Total assets	**29,646**	**38,401**	**48,582**	**57,313**	**67,826**
Accounts payables	3,344	4,354	4,455	5,008	5,688
Short-term debt	3,458	5,280	6,336	7,603	9,124
Others	366	2	2	2	2
Current liabilities	7,168	9,636	10,793	12,613	14,814
Long-term debt	407	2,303	5,864	7,036	8,444
Others	457	433	433	433	433
Total liabilities	**8,033**	**12,373**	**17,090**	**20,083**	**23,691**
Shareholders' equity	18,170	21,832	26,111	30,837	36,524
Minority interest	3,443	4,197	5,381	6,393	7,611
Total liabilities & equity	**29,646**	**38,401**	**48,582**	**57,313**	**67,826**
BVPS (RMB)	1.25	1.50	1.20	1.41	1.67

Cash flow statement

End-Dec (RMB m)	2009	2010	2011F	2012F	2013F
Pretax profit	5,045	7,318	9,323	9,920	12,490
D&A	993	1,187	599	775	931
Chg in working capital	(485)	(1,571)	580	(1,245)	(1,625)
Others	(1,063)	(1,279)	(2,044)	(2,481)	(3,467)
CFO	4,491	5,655	8,458	6,969	8,329
Capex	(2,732)	(3,175)	(5,155)	(5,000)	(5,000)
Acquisitions	(637)	(1,063)	–	–	–
Others	187	(1,789)	563	960	1,051
CFI	(3,183)	(6,026)	(4,592)	(4,040)	(3,949)
Dividend paid	(1,454)	(1,454)	(1,852)	(2,046)	(2,462)
Change in debt	600	3,192	4,617	2,440	2,928
Share issuance	–	–	–	–	–
Others	(188)	(553)	(671)	(805)	(966)
CFF	(1,042)	1,185	2,093	(411)	(501)
Net cash flow	266	814	5,959	2,517	3,879
Cash at start of year	2,720	2,999	3,791	9,750	12,267
FOREX	14	(21)	–	–	–
Cash at end of year	**2,999**	**3,791**	**9,750**	**12,267**	**16,147**

Source: Company data, CCBIS

Growth & margins

End-Dec (%)	2009	2010	2011F	2012F	2013F
Revenue growth	23.8	37.4	5.2	31.4	36.9
EBIT growth	8.0	46.6	31.2	7.0	25.3
EBITDA growth	12.3	42.2	20.2	8.3	24.9
Net profit growth	15.9	35.5	27.4	10.5	20.4
EPS growth	1.3	40.8	(15.1)	6.4	20.4
Gross margin	32.5	34.3	40.6	32.6	30.8
EBITDA margin	30.2	31.3	35.8	29.5	26.9
EBIT margin	25.3	27.0	33.7	27.4	25.1
Pretax margin	25.0	26.4	31.9	25.8	23.8
Net margin	17.6	17.3	21.0	17.6	15.5

Ratios & valuation

End-Dec (%)	2009	2010	2011F	2012F	2013F
ROA	12.0	12.5	12.6	11.8	12.0
ROE	19.6	22.0	23.5	22.0	22.3
Total debt/total assets	13.0	19.7	25.1	25.5	25.9
Total debt/equity	21.3	34.7	46.7	47.5	48.1
Net debt (cash)/equity	4.8	17.4	9.4	7.7	3.9
Interest coverage (x)	30.4	23.2	14.7	13.1	13.7
P/E (x)	10.4	7.4	8.7	8.2	6.8
P/B (x)	2.3	1.9	2.4	2.1	1.7
EV/EBITDA (x)	14.8	10.8	9.0	8.4	6.7
Dividend yield	8.2	11.3	2.9	3.2	3.9
P/E – analyst (x)	14.5	10.3	12.2	11.4	9.5
P/B – analyst (x)	3.3	2.7	3.4	2.9	2.4

Key assumptions

End-Dec	2009	2010	2011F	2012F	2013F
Gold output (kg)	75,373	69,071	62,570	84,570	107,570
– mine gold	30,653	29,177	29,760	31,760	34,760
– processing gold	44,720	39,894	32,810	52,810	72,810
Gold output (oz)	2,344,354	2,148,354	1,946,146	2,630,423	3,345,803
– mine gold	953,403	907,508	925,640	987,847	1,081,158
– processing gold	1,390,951	1,240,846	1,020,506	1,642,576	2,264,646
Copper output (tonnes)	84,826	90,287	97,875	117,875	142,875
Mine gold unit cost (US$/oz)	271	310	356	335	352
Mine copper unit cost (US$/t)	2,155	4,193	4,821	4,532	4,758
Mine gold ASP (RMB/g)	212	264	326	369	399
Mine gold ASP (US$/oz))	966	1,215	1,566	1,851	2,001
Mine copper ASP (RMB/t)	35,672	48,105	54,668	43,930	49,787
Mine copper ASP (US$/t)	4,452	6,376	7,605	6,382	7,233

Net profit sensitivity

End-Dec (%)	2009	2010	2011F	2012F	2013F
Gold ASP 1% increase	–	–	0.7	0.9	0.8
Copper ASP 1% increase	–	–	0.5	0.4	0.5
Gold cost rate 1% increase	–	–	(0.4)	(0.5)	(0.4)
Copper cost 1% increase	–	–	(0.1)	(0.2)	(0.2)
Gold output 1% increase	–	–	0.7	0.7	0.6
Copper output 1% increase	–	–	0.4	0.3	0.4

Zhaojin Mining Industry (1818 HK)

Gold leverage play

- **Initiate with Outperform.** Zhaojin is the fourth-largest gold mining company in China, with 2011 mine gold output estimated at 15.9 tonnes (510k oz) and reserves at 252 tonnes (or 8.1m oz). It offers un-hedged and pure gold exposure, with gold accounting for over 90% of its revenue. An aggressive production growth profile and value accretive acquisitions make Zhaojin one of the best gold-leverage plays in Asia. Our DCF-based target price of HK$16.60 points to 15.6x 2012F P/E.
- **Pure gold play.** Zhaojin is a well-known pure gold play, offering the most gold exposure, with gold generating over 93% of its revenue, compared with 79% for Zijin and 65% for China Gold in 2012F. By our calculation, a 1.0% change in gold price would move Zhaojin's 2011F-2013F net profit by 2.0%, 1.9% and 1.9%, respectively.
- **Proven execution record.** The company has a compelling production growth profile, with mine gold output at a 15% CAGR and strong potential for mine additions through value-accretive acquisitions and ongoing exploration. Since listing in 2005, Zhaojin has grown its gold reserves (JORC-compliant) by 93% to 252 tonnes as at end-2010.
- **An efficient gold miner.** Unit cash cost was US$415/oz in 2010 while average gold ore grade was around 2-3g/t. We forecast 2011F-2013F unit cash cost will fall in the range of US$502-628/oz.
- **Initiate with Outperform.** Our life-of-mine DCF valuation, based on our long-term gold price assumption of US$1,250/oz and 2.5x P/NPV, generates a target price of HK$16.60.
- **Risks** to our recommendation include lower realized gold prices, higher cost pressure and production delays.

Financial forecast

Year to 31 Dec	2009	2010	2011F	2012F	2013F
Revenue (RMB m)	2,797	4,098	5,976	7,856	9,624
Net profit (RMB m)	754	1,202	1,880	2,581	3,223
EPS (RMB)	0.52	0.82	0.65	0.89	1.11
YoY change (%)	41.8	59.4	(21.8)	37.2	24.9
DPS (RMB)	0.22	0.30	0.26	0.35	0.44
Yield (%)	1.9	2.6	2.2	3.0	3.8
PER (x)	22.7	14.3	18.2	13.3	10.6
PBR (x)	7.5	6.4	5.0	4.0	3.2
EV/EBITDA (x)	28.7	17.3	11.3	8.5	7.0
ROE (%)	16.5	22.3	27.5	29.8	29.7

Source: CCBIS estimates (Consensus net profit estimates: 2011F: RMB1,812m; 2012F RMB 2,384m)

Company Rating: Outperform (initiation)

Price: HK$14.10

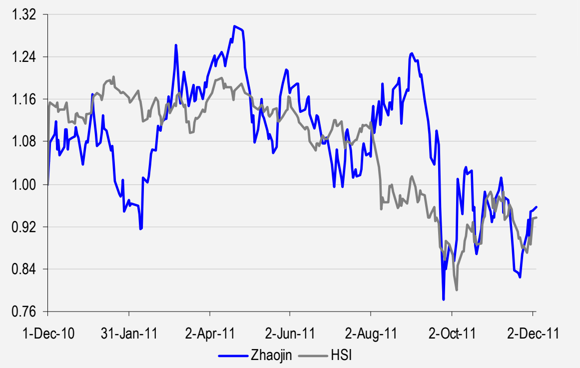
Target: HK$16.60 (initiation)

Trading data

52-week range	HK$19.17-9.94
Market capitalization (m)	HK$41,100/US$5,269
Shares outstanding (m)	2,915
Free float (%)	30%
3M average daily T/O (m share)	0.32
3M average daily T/O (US$m)	0.57
Expected return (%) – 1 year	18

Closing price on 5 December 2011

Stock price and HSI (rebased)



Source: Bloomberg

Karen Li, CFA
(852) 2532 6748
karenli@ccbintl.com

Kin Li
(852) 2533 2410
likinchung@ccbintl.com

Valuation

We value Zhaojin based on life-of-mine DCF valuation, by which the discount of free cash flow ends when gold reserves fully deplete. Our DCF-based target price for Zhaojin is HK$16.60 after modeling a long-term gold price assumption of US$1,250/oz (against a spot price of US$1,720/oz), WACC of 8.8% and 2.5x P/NPV.

We applied a higher P/NPV because: (1) Zhaojin is a mid-tier gold miner with an excellent execution record and prudent acquisitions; and (2) it offers a strong production growth profile and has good potential to make mine additions through value-accretive acquisitions. Our target price translates to 15.6x P/E, 4.7x P/B and 10.0x EV/EBITDA, based on 2012F estimates.

Key catalysts are heightened global economic uncertainty resulting from the European debt crisis and stalling economic growth in the US, as well as resurgent expectations of inflation in the medium term.

Share price (HK$) sensitivity vs. long-term gold price assumptions

		Long term gold price (US$/oz)							
		1,100	1,200	**1,250**	1,350	1,450	1,550	1,650	1,750
WACC (%)	7.80	17.82	18.14	18.29	18.61	18.92	19.23	19.55	19.86
	8.80	16.15	16.45	**16.60**	16.90	17.20	17.51	17.81	18.11
	10.80	13.49	13.77	13.91	14.19	14.47	14.75	15.03	15.31
	11.80	12.43	12.70	12.84	13.11	13.38	13.65	13.92	14.19
	12.80	11.50	11.76	11.89	12.15	12.41	12.68	12.94	13.20

Source: CCBIS

Earnings outlook

We forecast earnings will rise by a 39% CAGR in 2011F-2013F on three-year revenue CAGR of 33%. 2010 ROE stood at 22.3%. We expect ROE to improve further to 27.5% in 2011F and 29.8% in 2012F. The rapid increase in earnings is based on our assumption that Zhaojin will increase its mine gold production.

By guiding 15% p.a. growth in mine gold output, management suggested they can achieve this growth via mergers and acquisition, exploration and expansion. In our model, we conducted a sensitivity analysis which indicated if there is 1% changes in mine gold output there would be only 1% effect on Zhaojin net profit.

Further, out of the three companies that we cover Zhaojin can benefit from gold price rally most significantly. With 1% change in gold price we expect to see a 1.9% change in Zhaojin's 2012F net profit, against 0.9% for Zijin and 1.5% for China Gold. Thus, Zhaojin offers best leverage on gold price rally.

Investment case

Pure gold play. Zhaojin is China's fourth-largest gold mining company, with gold reserves (JORC-compliant) of 252 tonnes (or 8.1m oz). Zhaojin's "pure and unhedged gold" strategy differentiates the company from its peers insofar as it entails investment in gold-bearing mines and focuses on local M&A. Mine gold output was 13.8 tonnes (443k oz) in 2010, 80% of which came from its five underground gold mines in Shandong, best known as the Chinese gold city.

The best gold-leverage play. The stock is one of the best gold-leverage plays, with gold contributing to 90% of its revenue, compared with 79% for Zijin and 65% for China Gold International. We estimate mine gold output at 15% CAGR to 15.9 tonnes, 18.3 tonnes and 20.8 tonnes in 2011F-2013F, respectively, fueled by headquarter gold mine growth of 7% p.a, and gold mines ex-Shandong growth at 38%. By our estimate, a 1% change in the price of gold would move Zhaojin's earnings by 2.0% in 2011F, by 1.9% in 2012F and by 1.9% in 2013F.

Proven track record. The company has a proven record of gold resources expansion, through ongoing exploration and value-accretive acquisitions. Since listing in December 2006, Zhaojin has grown its gold reserves by 93% to 252 tonnes as at end-2010. The company has committed capital expenditure of RMB250m for exploration and RMB500m for M&A each year to support exploration and acquisitions.

Efficient cost profile. Zhaojin has efficient gold production, with 2011F unit cash cost estimated at US$502/oz from turning its average gold ore grade deposits of around 2-4g/tonne to gold bullion. China's gold market is undergoing a period of consolidation. Nevertheless, we believe sound gold fundamentals will support a three-year earnings CAGR for Zhaojin of 39% in 2011F-2013F, compared with 20% for Zijin and 67% for China Gold.

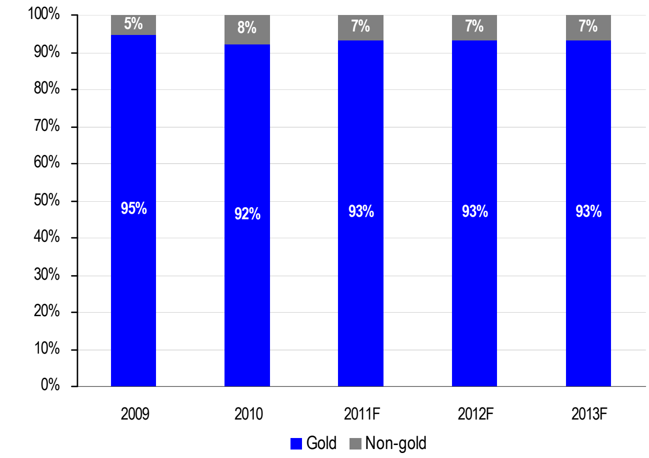
Risks

- Decline in gold price
- Production and operating cost inflation
- Setbacks in mine acquisitions, and hence, less-than-expected self sufficient gold concentrate versus tolling treatment

Zhaojin's gold mine footprint

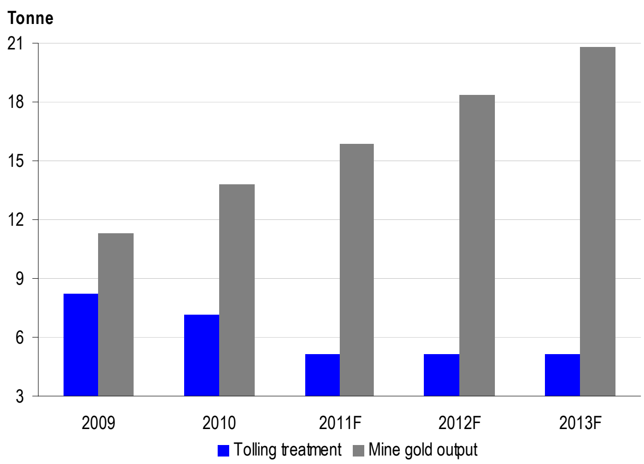
Source: Company data, CCBIS

Revenue breakdown



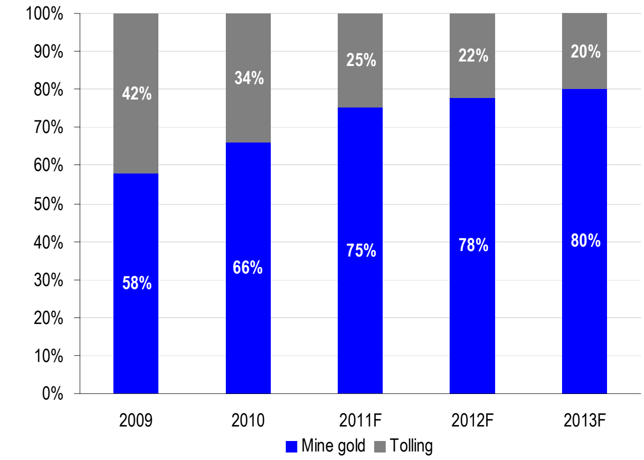
Source: Company data, CCBIS estimates

Gold output



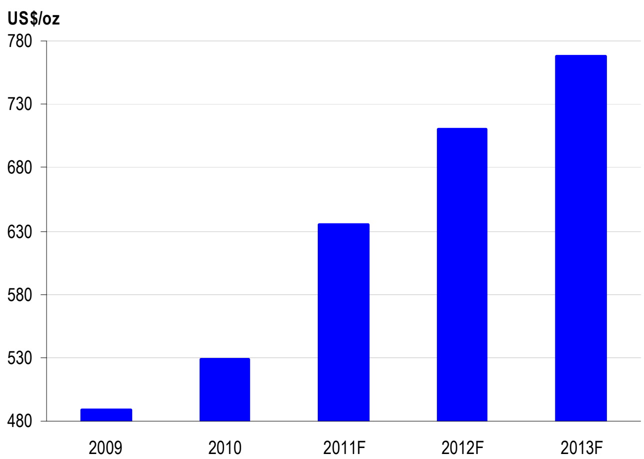
Source: Company data, CCBIS estimates

Mine gold output vs. tolling gold output



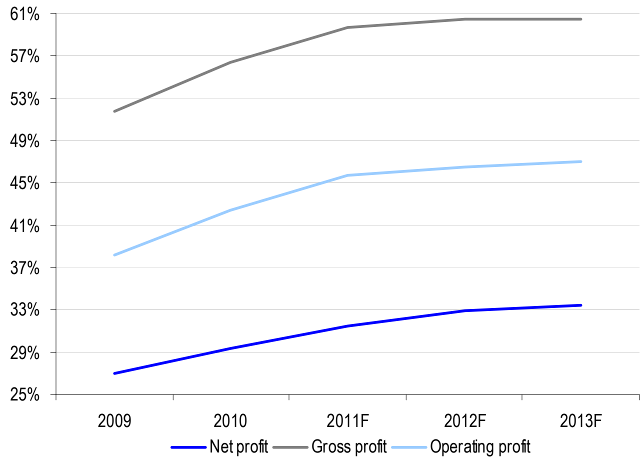
Source: Company data, CCBIS estimates

Gold production cost



Source: Company data, CCBIS estimates

Margin (gross profit, operating profit and net profit)



Source: Company data, CCBIS estimates

Profit and loss

End-Dec (RMB m)	2009	2010	2011F	2012F	2013F
Revenue	**2,797**	**4,098**	**5,976**	**7,856**	**9,624**
Cost of sales	(1,348)	(1,787)	(2,406)	(3,110)	(3,806)
Gross profit	**1,449**	**2,311**	**3,570**	**4,746**	**5,818**
Other gains/(losses)	99	123	185	243	298
SG&A	(420)	(585)	(832)	(1,089)	(1,286)
Other expenses	(62)	(109)	(188)	(247)	(303)
EBIT	**1,066**	**1,740**	**2,735**	**3,653**	**4,527**
EBITDA	1,239	2,019	3,117	4,136	5,097
Finance cost	(23)	(92)	(162)	(125)	(123)
Pretax profit	**1,045**	**1,652**	**2,579**	**3,535**	**4,413**
Income tax	(264)	(410)	(640)	(877)	(1,095)
Minorities	3	(40)	(59)	(78)	(95)
Net profit	**754**	**1,202**	**1,880**	**2,581**	**3,223**
EPS – basic (RMB)	0.52	0.82	0.65	0.89	1.11
EPS – diluted (RMB)	0.52	0.82	0.65	0.89	1.11
DPS (RMB)	0.22	0.30	0.26	0.35	0.44
Dividend payout (%)	43	36	40	40	40

Balance sheet

End-Dec (RMB m)	2009	2010	2011F	2012F	2013F
PP&E	2,763	3,691	5,609	7,029	8,094
Intangible	2,365	2,933	2,833	2,736	2,642
Others	436	608	608	611	615
Inventories	475	779	1,049	1,356	1,659
Accounts receivables	11	199	290	382	468
Others	322	423	423	423	423
Cash & equivalent	2,209	782	1,025	709	1,830
Current assets	3,018	2,183	2,788	2,869	4,381
Total assets	**8,582**	**9,415**	**11,838**	**13,245**	**15,732**
Accounts payables	834	930	1,084	1,260	1,434
Short-term debt	611	370	426	447	469
Others	106	186	186	186	186
Current liabilities	1,551	1,485	1,695	1,893	2,089
Long-term debt	2,271	1,575	1,579	1,584	1,588
Others	517	594	594	594	594
Total liabilities	**4,339**	**3,654**	**3,868**	**4,070**	**4,271**
Shareholders' equity	4,567	5,387	6,830	8,659	10,850
Minority interest	400	388	447	525	620
Total liabilities & equity	**9,307**	**9,430**	**11,146**	**13,254**	**15,741**
BVPS (RMB)	1.57	1.85	2.34	2.97	3.72

Cash flow statement

End-Dec (RMB m)	2009	2010	2011F	2012F	2013F
Pretax profit	1,045	1,652	2,579	3,535	4,413
D&A	173	278	382	483	571
Change in working capital	16	(680)	(207)	(222)	(216)
Others	(282)	(166)	(378)	(657)	(882)
CFO	**952**	**1,084**	**2,376**	**3,139**	**3,886**
Capex	(540)	(1,341)	(2,300)	(1,904)	(1,636)
Acquisitions	–	–	–	–	–
Others	(283)	(533)	–	–	–
CFI	**(823)**	**(1,873)**	**(2,300)**	**(1,904)**	**(1,636)**
Dividend paid	(321)	(437)	(752)	(1,032)	(1,289)
Change in debt	170	(241)	66	25	27
Share issuance	-	-	-	-	-
Others	1,548	40	853	(545)	134
CFF	**1,397**	**(639)**	**167**	**(1,552)**	**(1,129)**
Net cash flow	1,526	(1,428)	243	(317)	1,122
Cash at start of year	689	2,209	782	1,025	709
FOREX	(5)	0	–	–	–
Cash at end of year	**2,209**	**782**	**1,025**	**709**	**1,830**

Source: CCBIS

Growth & margins

End-Dec (%)	2009	2010	2011F	2012F	2013F
Revenue growth	29.9	46.5	45.8	31.5	22.5
EBIT growth	47.5	63.2	57.2	33.5	23.9
EBITDA growth	27.4	62.9	54.4	32.7	23.2
Net profit growth	41.8	59.4	56.5	37.2	24.9
EPS growth	41.8	59.4	(21.8)	37.2	24.9
Gross margin	51.8	56.4	59.7	60.4	60.5
EBITDA margin	44.3	49.3	52.2	52.7	53.0
EBIT margin	38.1	42.5	45.8	46.5	47.0
Pretax margin	37.3	40.3	43.2	45.0	45.9
Net margin	27.0	29.3	31.5	32.9	33.5

Ratios & valuation

End-Dec (%)	2009	2010	2011F	2012F	2013F
ROA	8.8	12.8	15.9	19.5	20.5
ROE	16.5	22.3	27.5	29.8	29.7
Total debt/total assets	33.6	20.7	16.9	15.3	13.1
Total debt/equity	63.1	36.1	29.3	23.4	19.0
Net debt (cash)/equity	14.7	21.6	14.3	15.3	2.1
Interest coverage (x)	46.1	18.8	16.9	29.1	36.8
P/E (x)	22.7	14.3	18.2	13.3	10.6
P/B (x)	7.5	6.4	5.0	4.0	3.2
EV/EBITDA (x)	28.7	17.3	11.3	8.5	7.0
Dividend yield	1.9	2.6	2.2	3.0	3.8
P/E – analyst (x)	26.7	16.8	21.4	15.6	12.5
P/B – analyst (x)	8.8	7.5	5.9	4.7	3.7

Key assumptions

End-Dec	2009	2010	2011F	2012F	2013F
Gold output (kg)	19,486	20,927	21,039	23,492	25,940
– mine gold	11,306	13,785	15,876	18,329	20,777
– processing gold	8,180	7,141	5,163	5,163	5,163
Mine gold unit cost (US$/oz)	404	415	502	572	628
Mine gold ASP (RMB/g)	223	263	339	387	418
Mine gold ASP (US$/oz)	1,015	1,206	1,624	1,850	2,000

Net profit sensitivity

End-Dec (%)	2009	2010	2011F	2012F	2013F
Gold output 1% increase	–	–	1.1	1.0	1.0
Product output 1% increase	–	–	(0.8)	(0.8)	(0.8)
Gold ASP 1% increase	–	–	2.0	1.9	1.9

China Gold International (2099 HK)

Junior gold miner

We initiate coverage on China Gold with an Outperform rating and DCF-based target price of HK$28.50. China Gold is a junior gold miner, but offers significant exploration and expansion through advanced exploration and acquisition support from its parent company, China National Gold Group, the only central state-owned gold producer in China. China Gold's capacity to turn its huge gold resources into operating mines has the potential to be a key driver of production growth.

- **Junior gold miner.** China Gold owns two operating mines (CSH and Jiama), each in the early stages of development. We forecast gold will account for 60% of revenue, and mine gold production will increase from 108k oz in 2010 to 121k oz in 2013F. Mine copper is expected to increase from 225 tonnes in 2010 to 11,340 tonnes in 2013F.
- **Copper polymetallic mine.** Jiama is a copper-bearing polymetallic mine, with secondary minerals gold, silver, zinc, and lead. We estimate copper cash cost of US$1.8/lb after taking into account by-product credits. A phase II expansion plan is expected to increase copper output from the 11kt of our base case to over 50kt per annum by 2014. A feasibility study report could serve as near-term catalyst.
- **Undervalued gold play.** China Gold has fallen 50% since its IPO listing. China Gold trades at 0.8x 2012F P/B. The market has overly discounted its execution risk. Our DCF-based target price of HK$28.50 places the counter at 14.0x P/E and 1.1x P/B, based on our 2012F forecast.
- **Risks** include a decline in gold and copper prices, unfavorable exploration results, geological challenges causing production delay and higher-than-expected cost pressure.

Financial forecast

Year to 31 Dec	2009	2010	2011F	2012F	2013F
Revenue (US$m)	81	133	319	352	385
Net profit (US$m)	(9)	26	86	104	124
EPS (US$)	(5.60)	0.14	0.22	0.26	0.31
YoY change (%)	–	–	56.5	21.6	18.7
DPS (US$)	–	–	–	–	–
Yield (%)	–	–	–	–	–
PER (x)	–	20.5	13.1	10.8	9.1
PBR (x)	12.9	0.4	0.9	0.8	0.7
EV/EBITDA (x)	121.3	17.6	6.8	5.3	4.1
ROE (%)	(25.4)	2.2	6.7	7.5	8.2

Source: CCBIS estimates (Consensus net profit estimates: 2011F: US$101m; 2012F US$126m)

Company Rating: Outperform (initiation)

Price: HK$22.00

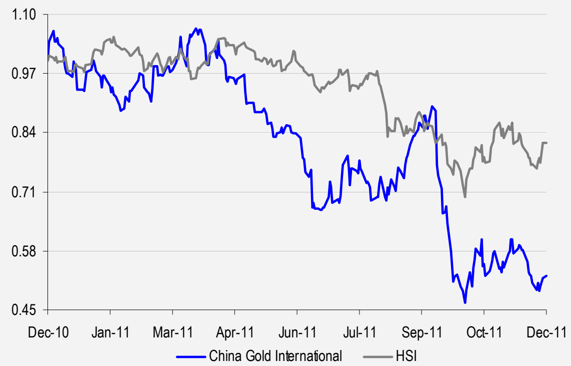
Target: HK$28.50 (initiation)

Trading data

52-week range	HK$19.6-46.8
Market capitalization (m)	HK$8,684/US$1,118
Shares outstanding (m)	396
Free float (%)	61%
3M average daily T/O (share)	4,897
3M average daily/O (HK$)	125,019
Expected return (%) – 1 year	30%

Closing price on 5 December 2011

Stock price and HSI (rebased)



Source: Bloomberg

Karen Li, CFA
(852) 2532 6748
karenli@ccbintl.com

Kin Li
(852) 2533 2410
likinchung@ccbintl.com

Valuation

We set our DCF-based target price for China Gold International at HK$28.50, incorporating a WACC of 10.9%, a long-term gold price assumption of US$1,250/oz (against the spot of US$1,720/oz) and 1.8x P/NPV.

We employ a lower P/NPV multiple for China Gold, against 2.0x for Zijin and 2.5x for Zhaojin owing to its short track record of production growth. Our target price puts the counter at 14.0x P/E, 1.1x P/B and 5.5x EV/EBITDA, based on our 2012F forecast. This compares with a mid-cycle valuation of 22.1x P/E and 2.8x P/B for global gold companies.

Gold is likely to rise on increased global economic uncertainty and the European debt crisis, two factors that, in our view, improve the multiples.

Earnings outlook

We forecast earnings to rise by a 67% CAGR in 2011F-2013F on the back of three-year revenue CAGR of 43%. 2010 ROE was a mere 2.2%, but is expected to increase to 6.7% in 2011F and 7.5% in 2012F. Our earnings forecasts are relatively conservative, and take into account the company's challenging operating environment and the fact that its mines are in the early stages of development. Phase II expansion of both its CSH and Jiama mines could lead to earnings upside.

Although the company's current growth prospects are low, we could see significant upside once the company's feasibility report is released. If the current CSH phase II development goes as planned, management suggests processing capacity could double from 30k/day to 60k/day, leading to significantly more gold output.

We also take into account continuous exploration and expansion plans at the Jiama mine, which could increase its gold reserves significantly, with the result that China Gold International could see net asset value upside. In addition, the phase II expansion plan is expected to increase copper output from 11kt to over 50kt per year by 2014F.

Even though gold is expected to account for only 65% of China Gold's revenue in 2012F, the company will do well as it is well positioned to benefit from higher gold prices. Consider that a 1.0% change in our gold price assumption would move China Gold's 2012F earnings by 1.5%, compared with 1.9% for Zhaojin and 0.9% for Zijin.

Share price (HK$) sensitivity versus long-term gold price assumption

		Long term gold price (US$/oz)							
		1,100	1,200	1,250	1,350	1,450	1,550	1,650	1,750
WACC (%)	8.90	27.40	30.58	32.17	35.36	38.55	41.75	44.94	48.14
	9.90	25.94	28.85	30.31	33.23	36.14	39.06	41.99	44.91
	10.90	24.56	27.20	28.53	31.18	33.83	36.49	39.15	41.81
	11.90	23.56	26.02	27.25	29.71	32.17	34.63	37.10	39.56
	12.90	22.59	24.85	25.98	28.25	30.52	32.79	35.06	37.34

Source: CCBIS

Investment case

A junior miner offers huge potential production upside. China Gold International is an overseas investment vehicle of China National Gold Group, the only central state-owned gold mining company in China. It operates two operating mines, namely the CSH gold mine in Inner Mongolia and the Jiama polymetallic copper mine in Tibet, which is in the early-production stage. While focusing on late exploration (feasibility study stage), China Gold offers significant production upside should it develop mines to tap its massive gold and copper deposits.

Strong support from parent company. China Gold will focus primarily on volume growth through expansion in CSH and Jiama, as well as on improving its mining recovery ratio by upgrading existing processing facilities and installing new ones. Meanwhile, it can leverage its parent company's extensive mining experience, technical know-how and financing capability to obtain additional assets at attractive valuations, thereby improving operating performance.

Gold and copper exposure. In 2010, gold contributed 100% of the company's revenue. Once the Jiama mine reaches full capacity, we expect the contribution from gold to come down to 58% in 2011F and 65% in 2012F. Robust gold and copper fundamentals will drive 67% earnings CAGR in 2011F-2013F. We expect net profit margin to increase from 20% in 2010, to 27% in 2011F, 30% in 2012F and 32% in 2013F.

Strong management incentive. The company has issued stock options as incentives to directors and key employees. Each outstanding option has a vesting period between 2011 and 2015, with exercise price of CAD1.05-6.09, against the last closing price of CAD2.82.

Challenging environment. China Gold's two mines are located in very challenging environments which pose downside risk to our production forecast. The CSH gold mine is located in Inner Mongolia, where the extremely cold winter could affect the heap leaching rate of gold processing. Then there's the Jiama mine, located at 5,000m above sea level, with all the problems normally associated with high altitudes, particularly the thin oxygen level which can affect mine operations.

Attractive valuation. China Gold has fallen 50% since its IPO listing in December 2010. It now trades at 0.8x 2012F P/B. In our view, investors have overly discounted the company's execution risk. Positive results from the feasibility study of both the CSH and Jiama mines could provide a near-term share price catalyst. Our DCF-based target price of HK$28.50 places the counter at 14.0x P/E and 1.1x P/B, based on our 2012F forecast.

Risks

- Decline in gold and copper prices
- Unfavorable exploration results.
- Geological challenges, such as extreme cold weather and poor infrastructure due to the remote locations of both the CSH and Jiama mines could lead to production setbacks and higher-than-expected cost pressure.

Mine overview

Changshanhao gold mine (CSH). CSH is located in Inner Mongolia. It is an open pit mine with low ore grades (0.67g/tonne). The company holds a 96.5% equity interest in the mine. CSH mine has 13 years of remaining mining life, with a gold reserves of 2.7m oz. Gold ore is crushed and processed by heap leaching, then refined to produce gold dore bar, which has a 90% gold concentrate.

Jiama Copper Polymetallic mine. The Lhasa, Tibet-based Jiama copper polymetallic mine is one of the largest open pit copper mines in China. Jiama has reserves of 886Kt of copper and 32 tonnes of gold. Jiama has high copper grades and polymetallic content of gold, silver, molybdenum lead and zinc. The final product is a concentrate which contains Cu (%) 22.5, Au (g/t) 6.5, Ag (g/t) 550, Pb (%)<6, Zn (%) < 6. The company is planning to expand its mining area underground with a view to increase daily processing capacity from 6k to 50k by 2012.

Snapshot from our recent site visit

Copper polymetallic ore

Source: CCBIS

Heap leaching pad CSH

Source: CCBIS

Jiama open-pit polymetallic copper mine in Tibet

Source: CCBIS

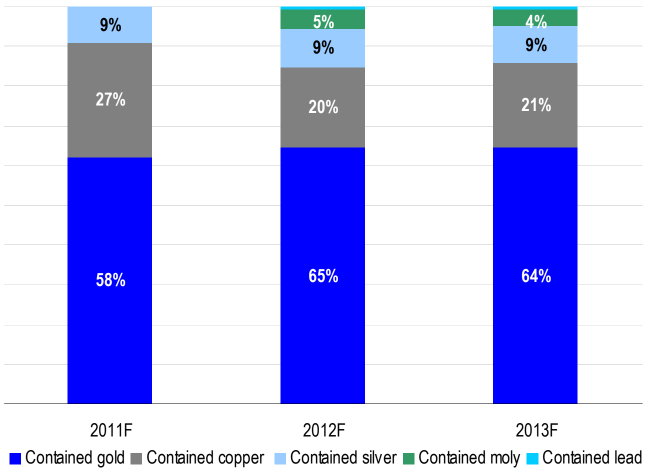
CSH open-pit gold mine

Source: CCBIS

Mine locations

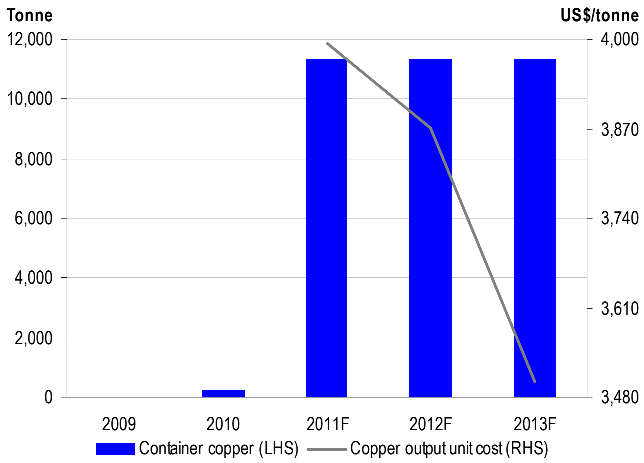
Source: Company data, CCBIS

Revenue breakdown by product



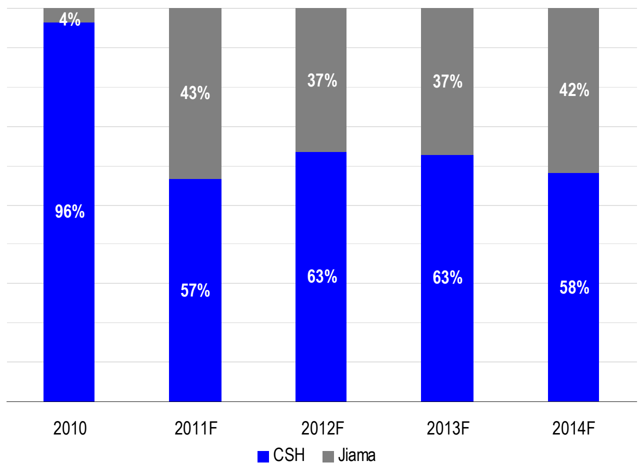
Source: Company data, CCBIS estimates

Copper output



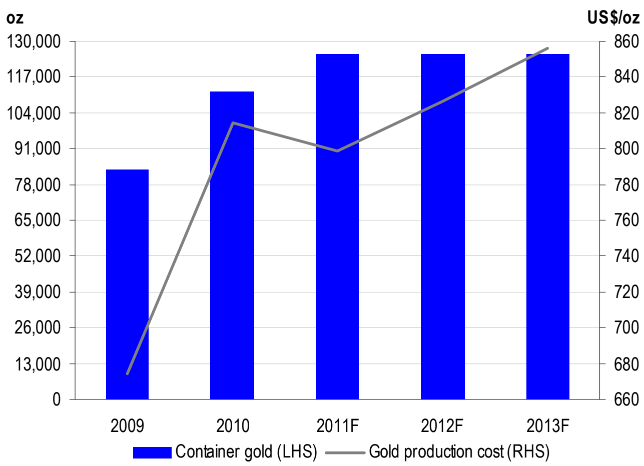
Source: Company data, CCBIS estimates

Revenue breakdown by mine



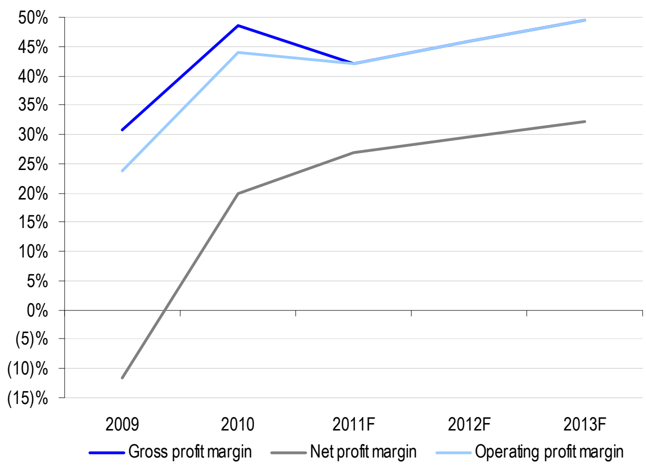
Source: Company data, CCBIS estimates

Gold output



Source: Company data, CCBIS estimates

Margin (gross profit, operating profit and net profit)



Source: Company data, CCBIS estimates

CCB International Securities Ltd
(A Wholly Owned Subsidiary of China Construction Bank)

Profit and loss

End-Dec (US$m)	2009	2010	2011F	2012F	2013F
Revenue	**81**	**133**	**319**	**352**	**385**
Cost of sales	(56)	(69)	(185)	(190)	(195)
Gross profit	**25**	**65**	**134**	**161**	**190**
SG&A	(6)	(6)	–	–	–
Other expenses	(15)	(11)	–	–	–
EBIT	4	48	134	161	190
EBITDA	10	59	149	178	210
Finance cost	(6)	(6)	(12)	(14)	(15)
Pretax profit	**(2)**	**42**	**122**	**148**	**175**
Income tax	(6)	(15)	(30)	(37)	(44)
Minorities	(1)	(1)	(5)	(7)	(8)
Net profit	**(9)**	**26**	**86**	**104**	**124**
EPS – basic (US$)	(5.58)	0.14	0.22	0.26	0.31
EPS – diluted (US$)	(5.58)	0.14	0.22	0.26	0.31
DPS (US$)	–	–	–	–	–
Dividend payout (%)	–	–	–	–	–

Balance sheet

End-Dec (US$m)	2009	2010	2011F	2012F	2013F
PP&E	118	298	333	366	397
Intangible	–	975	975	975	975
Others	19	27	27	27	27
Inventories	10	34	62	63	65
Accounts receivables	2	9	22	24	26
Others	2	10	3	3	3
Cash & equivalent	24	302	389	493	623
Current assets	38	355	476	584	717
Total assets	**175**	**1,656**	**1,811**	**1,952**	**2,117**
Accounts payables	35	91	92	95	97
Short-term debt	12	32	41	46	50
Others	0	8	8	8	8
Current liabilities	47	130	141	148	155
Long-term debt	81	181	235	259	284
Others	8	141	140	140	140
Total liabilities	**136**	**452**	**517**	**547**	**580**
Shareholders' equity	37	1,200	1,286	1,390	1,514
Minority interest	1	3	9	15	23
Total liabilities & equity	**175**	**1,656**	**1,811**	**1,952**	**2,117**
BVPS (US$)	0.22	6.32	3.25	3.51	3.82

Cash flow statement

End-Dec (US$m)	2009	2010	2011F	2012F	2013F
Pretax profit	(2)	42	122	148	175
D&A	6	11	15	17	19
Change in working capital	7	(29)	4	(44)	(39)
Others	1	(13)	(73)	6	(6)
CFO	**11**	**11**	**67**	**126**	**149**
Capex	(60)	(23)	(50)	(50)	(50)
Acquisitions	–	14	–	–	–
Others	29	16	0	–	–
CFI	**(31)**	**7**	**(50)**	**(50)**	**(50)**
Dividend paid	–	–	–	–	–
Change in debt	94	(32)	64	28	30
Share issuance	5	305	–	–	–
Others	(67)	(13)	7	–	–
CFF	**32**	**260**	**71**	**28**	**30**
Net cash flow	12	278	88	104	130
Cash at start of year	12	24	302	389	493
FOREX	0	0	–	–	–
Cash at end of year	**24**	**302**	**389**	**493**	**623**

Source: CCBIS

Growth & margins

End-Dec (%)	2009	2010	2011F	2012F	2013F
Revenue growth	175.9	64.3	139.1	10.4	9.5
EBIT growth	(78)	1,087.4	180.0	20.5	17.9
EBITDA growth	(53)	499.0	153.6	19.9	17.4
Net profit growth	(164)	(383)	223.8	21.6	18.7
EPS growth	–	(102)	56.5	21.6	18.7
Gross margin	30.7	48.5	42.1	45.9	49.4
EBITDA margin	12.1	44.0	46.7	50.7	54.4
EBIT margin	5.0	35.9	42.1	45.9	49.4
Pretax margin	(3)	31.5	38.2	42.0	45.5
Net margin	(12)	19.9	26.9	29.6	32.1

Ratios & valuation

End-Dec (%)	2009	2010	2011F	2012F	2013F
ROA	(5.4)	1.6	4.7	5.3	5.8
ROE	(25.4)	2.2	6.7	7.5	8.2
Total debt/total assets	53.2	12.8	15.3	15.6	15.8
Total debt/equity	252.3	17.7	21.5	21.9	22.1
Net debt (cash)/equity	187.16	(7.4)	(8.8)	(13.6)	(19.1)
Interest coverage (x)	0.6	8.2	10.8	11.8	12.7
P/E (x)	-	20.5	13.1	10.8	9.1
P/B (x)	12.9	0.4	0.9	0.8	0.7
EV/EBITDA (x)	121.3	17.6	6.8	5.3	4.1
Dividend yield	–	–	–	–	–
P/E – analyst (x)	(0.7)	26.6	17.0	14.0	11.8
P/B – analyst (x)	16.7	0.6	1.1	1.1	1.0

Key assumptions

End-Dec	2009	2010	2011F	2012F	2013F
Gold output (kg)	2,599	3,466	3,894	3,894	3,894
Gold output (oz)	80,848	107,804	121,124	121,124	121,124
Copper output (tonnes)	–	225	11,340	11,340	11,340
CSH mine gold unit cost (US$/oz)	660	814	798	826	856
Jiama mine copper unit cost (US$/oz)	–	3,994	3,870	3,503	4,232
Mine gold ASP (RMB/g)	221	273	324	392	424
Mine gold ASP (US$/oz)	972	1,239	1,487	1,832	1,980
Mine copper ASP (RMB/t)	–	–	8,848	7,425	8,415
Mine copper ASP (US$/t)	–	8,848	7,425	8,415	8,712

Net profit sensitivity

End-Dec (%)	2009	2010	2011F	2012F	2013F
Gold output 1% increase	–	–	1.5	1.6	1.4
Product output 1% increase	–	–	(0.3)	(0.3)	(0.3)
Gold ASP 1% increase	–	–	1.2	1.5	1.5

CCB International Securities Ltd
(A Wholly Owned Subsidiary of China Construction Bank)

Appendix 1: Global gold supply

The annual supply of gold comes from three sources: mine production, mobilization of central bank reserves and the recycling of above-ground stocks. In the past five years, the annual supply of gold averaged 4,118 tonnes, 61% of which came from mine production, 6% from official sector 33% from the recycling of jewellery.

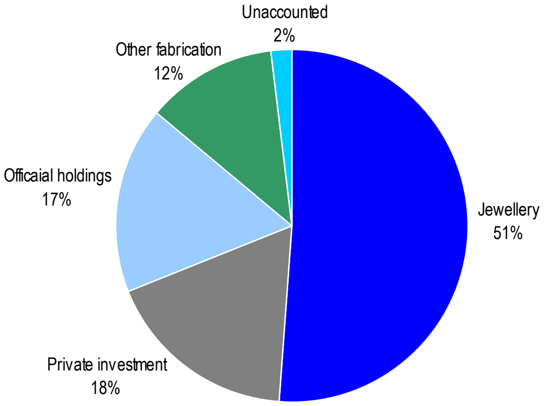
Global gold supply (2011-2010)

Supply	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	5-year average
Mine production	2,646	2,619	2,624	2,496	2,550	2,482	2,476	2,408	2,589	2,693	2,530
Official sector sales	520	547	620	479	663	365	484	235	42	–	225
Old gold scrap	749	874	991	881	902	1,133	982	1,316	1,695	1,651	1,355
Dis-investment	–	–	–	18	–	–	–	37	–	–	7
Total supply	**3,915**	**4,039**	**4,234**	**3,874**	**4,116**	**3,980**	**3,942**	**3,996**	**4,326**	**4,344**	**4,118**

Source: World Gold Council, CCBIS

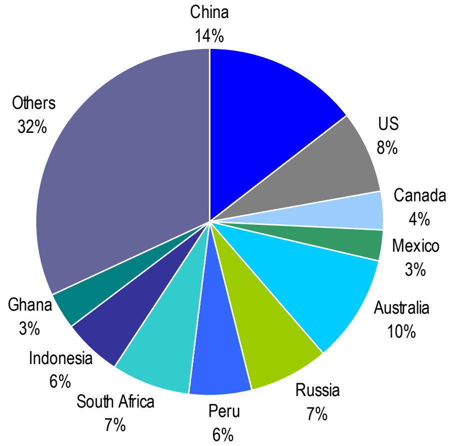
As at end-2009, GFMS estimated 165,600 tonnes (2010F: 166,600 tonnes) of gold above ground, of which, 51% was in the form of jewellery, 18% was owned by official sectors, 17% was with investors, 12% was used in industrial products and 2% was unaccounted for.

Above-ground gold stocks as at end-2009



Source: GFMS, CCBIS

Global mine gold supply by country (2010)



Source: WBMS, CCBIS

Mine production has increased modestly by 1% p.a. over the past five years. Output is much more geographically diverse, making gold price less volatile than any other commodities to economic, political or execution disruptions in a specific country or region. China is currently the world's biggest gold producer, mining 330 tonnes of gold in 2010, followed by Australia (223 tonnes), South Africa (222 tonnes). Collectively, these three countries account for 29% of global gold supply.

The cash costs of gold mine production have been rising, with a weighted cash cost of US$451/oz in 2010, against US$213/oz in 2004 for major gold producers, who together produced 34% of global supply. In its *2010 Gold Survey*, GFMS estimated that the "true, fully-loaded sustainable long-term cost of gold mine production stood between US$925 and US$950/oz in 2009."

Global gold miners cash cost comparison

US$/oz	2005	2006	2007	2008	2009	2010
Senior gold miners average	246	280	297	395	398	407
Mid-tier average	328	283	380	497	484	634
Zijin Mining	–	–	184	231	168	205
Zhaojin Mining	–	–	281	362	343	412
China Gold International	–	–	–	–	–	299

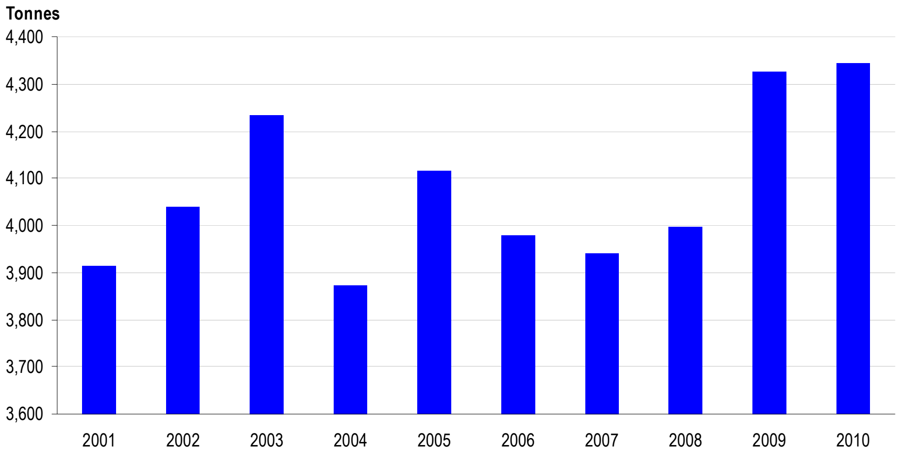
Source: GFMS, CCBIS, Bloomberg

Many factors affect gold supply. For instance, in the late 1900s and again in 2001-2005, there were considerable cutbacks in exploration spending for gold. This caused the global supply of gold to decline. Mines take a long time to develop, which constitutes a major factor in slowdown in supply, as we saw in 2006-2008. Recycled gold is affected by price and general economic conditions, while net official transactions depend on central bank reserve decisions.

Appendix 2: Global gold demand

Global gold demand comes from three sources: fabrication (mostly jewellery), industry (including electronics and medical applications), and investment. Fabrication accounts for about 64% of demand in 2010. Gold bar hoarding accounts for 20% while industry accounts for 2%.

World total gold demand 2001-2010



Source: GFMS, CCBIS, Bloomberg

Although jewellery was typically the largest single component of demand, its share has decreased over the past 10 years. Jewellery demand reacts negatively to economic outlook as consumers liquidated gold necklaces or rings in face of unemployment or fall in asset prices, as evident in 2008 and 2009. India is a major gold buyer, typically buying up to a quarter of the worlds' gold each year. Indian demand appears seasonal, with 4Q strongest ahead of Hindu festival – the main Indian wedding season and Christmas. China is expected to become an increasingly important buyer as the country becomes more affluent.

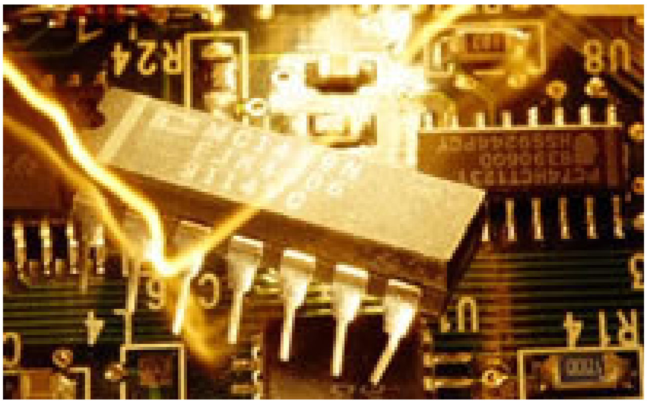
Jewellery demand breakdown by country (2010)

Country	2010	2009	YoY change (%)
India	746	442	69
China	428	377	14
United States	129	150	(14)
Turkey	74	75	(1)
Saudi Arabia	73	78	(6)
Russia	68	60	12
United Arab Emirates	63	68	(6)
Egypt	53	57	(6)
Indonesia	33	41	(20)
United Kingdom	27	32	(14)
Others	366	381	(4)
Total	**2,060**	**1,760**	**17**

Source: World Gold Council "Gold Demand Trends Report, Full Year 2010", CCBIS

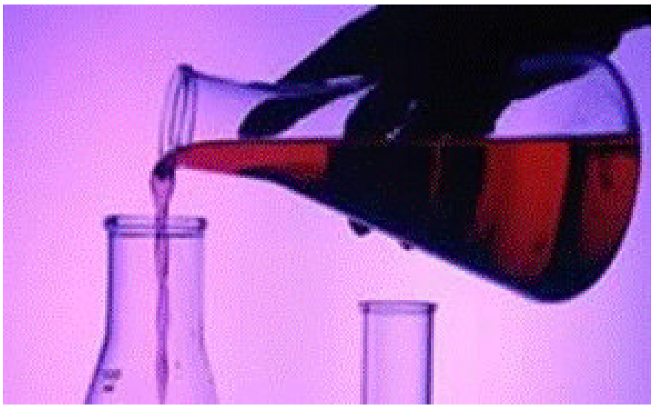
From 2001 to 2010, in reaction to robust demand for gold ETFs and related products, total investment demand for gold climbed steadily, reaching 1,375 tonnes in 2010, from 281 tonnes in 2001. In contrast to jewellery demand, investment demand soared in 2008 and 2009 as investors sought "safe havens" from the unfolding financial crisis.

Industrial demand represents a tiny portion of gold demand largely on cost concerns, yet it is worth noting that gold has the better thermal/electrical conductivity and corrosive resistance than any other base metal. Over half of the gold industrial usage is used in premium electronic components; the remainder goes to medical use, especially dentistry, and gold plating/coating for decorative purposes. There are a few new applications for gold, including fuel cells, solar cells, LCD displays, mobile phones and laptops.



Gold wire continues to be used to complete the interconnections within semiconductor chips, ensuring the reliability of today's consumer electronics

Source: World Gold Council



Nanopartlcles of gold in solution are a deep crimson colour and are used in modern medical diagnostics like pregnancy testing

Source: World Gold Council

Appendix 3: The history of gold

From gold standard to fiat currency, 1934-1970s

After the Second World War, a system similar to the Gold Standard, sometimes described as the "gold exchange standard", was established through the Bretton Woods agreements. Under this system, most countries pegged their exchange rates relative to the US dollar. In return, the US promised to fix its currency to gold at approximately US$35/oz. The agreement was good while it lasted, which was from 1934 till 1961, a relatively stable period in monetary terms. But the slow burn of the escalating war in Vietnam but great strain on the gold exchange standard. The situation reached a breaking point when in the 1970s the administration of French President Charles de Gaulle began trading its dollar reserves for gold from the US government, thereby diluting US economic influence abroad(over supply of the USD). This, along with the fiscal strain of federal expenditures for the Vietnam War, persistent balance of payment deficits, inflation and unemployment, prompted President Richard Nixon to end the direct convertibility of the dollar into gold on 15 August 1971, resulting in a collapse of the system, the so-called “Nixon Shock”.

Gold fever, 1970-1980

The breakdown of the Bretton Woods agreement coincided with high US inflation, the 1979 Iranian revolution and the end to the US ban on the individual ownership of gold. The result was predictable: the price of gold shot from US$42/oz in 1971 to US$$850/oz by 1982. Whether correct or not, it was assumed at the time that people had become convinced that paper money would lose its value. Meanwhile, people everywhere were scrambling to find gold, and every year the shiny metal was over supplied. With this as the backdrop, the US increased its interest rate, which led to a stronger US currency, whereupon the price of gold plummeted 70%.

Gold in hibernation, 1990-2000

From 1990 to 2000, gold price remained relatively stable, hovering around US$344/oz. The major event that occurred was 15 largest central banks sign the Central Bank Gold Agreement (CBGA) which limits their combined gold sales of 400 tonnes per annum. This agreement will be renewed every five years. However, with this agreement we did not see any major effects on gold price.

Re-awakening, 2000-2011

Between 2000 and 2011 a number of factors coalesced to drive the price of gold to its peak US$1,900/oz peak in 2011 (a 17% CAGR for the period). First were the dot-com crisis, followed by 9/11 and the first Iraq war. Then in 2008 markets were rocked by the subprime mortgage crisis. Shell shocked investors became much more cautious and intent on diversifying their assets. Meanwhile the Chinese economy was continuing to grow rapidly, and in 2008, Chinese citizens were permitted to purchase physical gold for the first time, with predictable results for demand. Looking back we can say that gold price hikes were driven by highly uncertain geopolitical situations, China’s wealth effect, scarcity of gold supplies and falling ore grades. These led to significant growth on the demand side while gold supplies were scarce.

Appendix 4: Oxford Economics gold pricing model

Highlighted below are the key features of the Oxford Economics' equation for deriving the price of gold at a significant level of 10%:

- The speed at which the price of gold responds to economic changes is comparatively slow compared with most financial products including equities. Deviations from gold's long-run equilibrium can be significant, long-lasting and take years to correct.

- In the short run, gold price momentum is a fairly reliable predictor of future gold price, especially the relationship between price movements in the two previous quarters and the price in the current quarter. For example, if the price of gold has risen 10.0% in the two previous quarters, it will probably rise 3.3% in the current quarter, all other things equal.

- Within the Oxford Economics model, the effective exchange rate was found to have the strongest contemporaneous statistical relationship with gold. A rise in the value of the US dollar tends to push down the US dollar price of gold. A 10.0% appreciation in the US dollar tends to bring down the price of gold by about 8.4%, broadly in line with the elasticity estimated by the IMF, whereby 40-50% of gold price volatility since 2002 is dollar-related, with a 1% change in the effective external value of the dollar leading to a more than 1% change in the gold price).

- The real interest rate captures the opportunity cost of holding gold relative to other risk-free assets which pay a return. As expected, a rise in the real interest rate reduces the price of gold; the equation suggests that a 100bp fall in the real interest rate will result in an initial 1.5% rise in the price of gold.

- The credit default premium captures the risk environment within the financial system. As a result, this variable is relatively unimportant in normal times (as the risk premium does not move very much). However, in times of crisis, the credit default premium is a significant driver of the price of gold. A 100bp rise in the premium increases the price of gold by 4.4% in the following quarter.

- Like the credit default premium, the US monetary base is a relatively unimportant determinant of gold price movements under normal economic conditions. Recently, however, it has taken on new significance as a gold price driver. According to the Oxford Economics model, a 10% increase in the growth rate of the monetary base results in a 1.4% rise in the price of gold in the current period.

Econometric model

Oxford Economics' gold price equation

$\%$ Ch. $PG_t = \alpha + \beta_1$(% Ch. PG_{t-1}) + β_2(% Ch. PG_{t-2}) + β_3(US Inflation) + β_4(% Ch. Ex $Rate_t$) + β_5(Ch. Real $Rate_t$) + β_6(Ch. Default $Premium_{t-1}$) + β_7(Ch in growth rate of US monetary $base_t$) + γECM_{t-1} + Time Dummies

Where PG is the price of gold (US$/troy ounce):

- α is the constant term;
- β_1.....β_7 are coefficients capturing the impact on the price of gold of a 1% change in the variable;
- γ represents the speed of adjustment to the long-run equilibrium;
- **US inflation** is the annual rate of CPI inflation in the US;
- **Ex Rate** is the US nominal effective exchange rate;
- **Real Rate** is the estimated real interest rate (calculated as the five-year bond yield minus 5-year ahead inflation expectations reported by the University of Michigan Consumer survey, i.e. an ex ante measure of inflation expectations);
- **Default Premium** is the yield spread between BBB-rated corporate bonds and AAA-rated bonds;
- **US Monetary Base** is the seasonally adjusted US monetary base, (US$m).

Source: Oxford Economics "The impact of inflation and deflation on the case for gold", July 2011, CCBIS

An estimated equation for gold

Sample (adjusted): 1976Q2 2010Q3

Included observations: 138

Dependent variable: Change Ln (Gold price)

	Coefficient	Std error	t-statistic	p-value
EC term/speed of adjustment	(0.024)	0.016	(1.506)	0.135
Long run coefficients				
Constant	0.542	0.016	0.804	0.423
Ln (US price level)	1.000	–	–	–
Short run coefficients				
Δ Ln (gold price (-1))	0.172	0.076	2.276	0.025
Δ Ln (gold price (-2))	0.156	0.069	2.266	0.025
US inflation	0.004	0.002	1.875	0.063
Δ (US broad exchange rate)	(0.837)	0.169	(4.957)	0.000
Δ (US real interest rate)	(0.015)	0.008	(1.942)	0.054
Δ (credit default premium(-1))	0.044	0.021	2.078	0.040
Δ (growth rate of Fed balance sheet)	0.140	0.117	1.204	0.231
Time Dummies				
R-squared	0.541			0.016
Adjusted R-squared	0.500			0.079
S.E. of regression	0.056			(2.842)
Sum squared resid	0.396			(2.587)
Log likelihood	208.073			(2.738)
Durbin-Watson statistic	1.884			

Gold price	Price of gold, US$/troy ounce
US price Level	Level of US consumer price index
US inflation	Annual percentage change in US CPI
US broad exchange rate	US nominal broad exchange rate
US real interest rate	US medium-term real interest rate
Credit default premium	Interest rate spread between AAA and BBB bonds
Fed balance sheet	Level of Federal Reserve balance sheet

Source: Oxford Econmics "The impact of inflation and deflation on the case for gold" dated July 2011, CCBIS

Rating definitions

Outperform **(O)** – expected return >10% over the next twelve months

Neutral **(N)** – expected return between -10% to 10% over the next twelve months

Underperform **(U)** – expected return < -10% over the next twelve months

Analyst Certification:

The authors of this report, hereby declare that: (i) all of the views expressed in this report accurately reflect their personal views about any and all of the subject securities or issuers; and (ii) no part of any of their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this report; and (iii) they receive no insider information/non-public price-sensitive information in relation to the subject securities or issuers which may influence the recommendations made by them. The authors of this report further confirm that (i) neither they nor their respective associate(s) (as defined in the Code of Conduct issued by the Hong Kong Securities and Futures Commission) has dealt in or traded in the securities covered in this research report within 30 calendar days prior to the date of issue of the report; (ii) neither they nor their respective associate(s) serves as an officer of any of the Hong Kong listed companies covered in this report; and (iii) neither they nor their respective associate(s) has any financial interests in the securities covered in this report.

Disclaimers:

This report is prepared by CCB International Securities Limited. CCB International Securities Limited is a wholly owned subsidiary of CCB International (Holdings) Limited ("CCBIH") and China Construction Bank Corporation ("CCB"). Information herein has been obtained from sources believed to be reliable but CCB International Securities Limited, its affiliates and/or subsidiaries (collectively "CCBIS") do not warrant its completeness or accuracy or appropriateness for any purpose or any person whatsoever. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Investment involves risk and past performance is not indicative of future results. Information in this report is not intended to constitute or be construed as legal, financial, business, tax or any professional advice for any prospective investors and should not be relied upon in that regard. This report is for informational purposes only and should not be treated as an offer or solicitation for the purchase or sale of any products, investments, securities, trading strategies or financial instruments of any kind. Neither CCBIS nor any other persons accept any liability whatsoever for any loss arising from any use of this report or its contents or otherwise arising in connection therewith. Securities, financial instruments or strategies mentioned herein may not be suitable for all investors. The opinions and recommendations herein do not take into account prospective investors circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to any prospective investors. The recipients of this report shall be solely responsible for making their own independent investigation of the business, financial condition and prospects of companies referred to in this report. Readers are cautioned that actual results may differ materially from those set forth in any forward-looking statements herein. While all reasonable care has been taken to ensure that the facts stated herein are accurate and that the forward-looking statements, opinions and expectations contained herein are based on fair and reasonable assumptions, CCBIS has not been able to verify independently such facts or assumptions and CCBIS shall not be liable for the accuracy, completeness or correctness thereof and no representation or warranty is made, express or implied, in this regard. The recipients must make their own assessments of the relevance, accuracy and adequacy of the information contained in this report and make such independent investigation as they may consider necessary or appropriate for such purpose. Recipients should seek independent legal, financial, business and/or tax advice if they have any doubt about the contents of this report and satisfy themselves prior to making any investment decision that such investment is in line with their own investment objectives and horizons.

The recipients should be aware that CCBIS may do business with the issuer(s) of the securities covered in this report or may hold interest in such securities for itself and/or on behalf of its clients from time to time. As a result, investors should be aware that CCBIS may have a conflict of interest that could affect the objectivity of this report and CCBIS will not assume any responsibility in respect thereof. Where applicable and required, any relationship CCBIS may have with the issuers(s) of the securities or interests in such stocks(s) will be disclosed in this section of the report. The information contained herein may differ or be contrary to opinions expressed by other associates of CCBIS or other members of the CCBIH group of companies.

This report is for distribution only under such circumstances as may be permitted by applicable law. The securities described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. This report is not directed at you if CCBIS is prohibited or restricted by any legislation or regulation in any jurisdiction from making it available to you. You should satisfy yourself before reading it that CCBIS is permitted to provide research material concerning investments to you under relevant legislation and regulations. In particular, this report is only distributed to certain US Persons to whom CCBIS is permitted to distribute according to US securities laws, but cannot otherwise be distributed or transmitted, whether directly or indirectly, into the US or to any US person. This report also cannot be distributed or transmitted, whether directly or indirectly, into Japan and Canada and not to the general public in the People's Republic of China (for the purpose of this report, excluding Hong Kong, Macau and Taiwan).

Any unauthorized redistribution by any means to any persons, in whole or in part of this research report is strictly prohibited and CCBIS accepts no liability whatsoever for the actions of third parties in distributing this research report.

Copyright 2011 CCBIS. The signs, logos and insignia used in this research report and company name "CCB International Securities Limited" are the trademarks of CCB and/or CCBIS. All rights are hereby reserved.

CCB International Securities Limited

34/F, Two Pacific Place, 88 Queensway, Admiralty, Hong Kong

Tel: (852) 2532 6100 / Fax: (852) 2537 0097