Deutsche Bank

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DBIQ Index Guide

DBLCI Optimum Yield Commodity Indices

Primer

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Deutsche Bank Liquid Commodities Indices Optimum Yield (DBLCI-OY) are designed to maximize potential roll returns by selecting, for each commodity, the futures contract with the highest implied roll yield

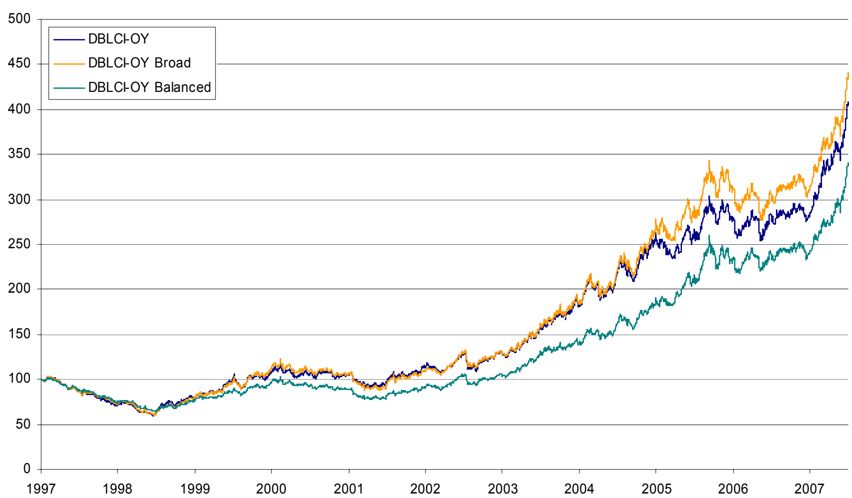
The DBLCI-OY indices are available for twenty-four commodities, drawn from the energy, precious metals, industrial metals, agriculture and livestock sectors.

A DBLCI-OY composite index based on the DBLCI Benchmark weights is also available.

DBLCI-OY Broad is based on 14 commodities drawn from the energy, precious metals, industrial metals and agriculture sectors. DBLCI-OY Balanced is based on the same 14 commodities with a reduced energy weight.

Energy, precious metals, industrial metals and agriculture sector indices are also calculated.

Figure 1: DBLCI-OY Excess Return Index Levels



Source: Deutsche Bank

DBLCI Optimum Yield Index

Summary

The Deutsche Bank Liquid Commodities Indices Optimum Yield (DBLCI-OY) employs a rule-based approach when it 'rolls' from one futures contract to another for each commodity in the index. Rather than select the new future based on a predefined schedule (e.g. monthly) the index rolls to that future (from the list of tradable futures which expire in the next thirteen months) which generates the maximum implied roll yield. The index aims to maximize the potential roll benefits in backwardated markets and minimize the loss from rolling down the curve in contago markets.

If the price of a future is greater than the spot price, the market is in contango. If the price of a future is below the spot price, the market is in backwardation. In a contango market, as the futures time to expiry decreases in general, the price will tend towards the spot price. Assuming a flat spot price, this results in the future price falling. The opposite is true for a market in backwardation. A contango market will tend to cause a drag on an index while a market in backwardation will tend to cause a push on an index.

The selected DBLCI-OY index future contract is rolled to a new contract, when the existing contract is close to expiry. For full details on the roll convention refer to Contract Selection on page 6.

The DBLCI-OY indices are available for twenty-four commodities drawn from the energy, precious metals, industrial metals, agriculture and livestock sectors. Exhibit 1 details all the DBLCI-OY commodities. Both excess return (unfunded) and total return (funded) index levels based in USD are available. Further to this, hedged and un-hedged levels are available in EUR, GBP and JPY.

DBLCI-OY basket indices reflect the performance of a set of the single commodity DBLCI-OY indices. Basket indices based on the DBLCI benchmark weights are available. DBLCI-OY Broad is comprised of 14 commodities from the energy, precious metals, industrial metals and agriculture sectors. The sector weights are based on the DBLCI benchmark weights. DBLCI-OY Balanced is based on the same 14 commodities. The energy sector weight is reduced from 55% for the broad index to 35% for the balanced index. The other sectors weights are precious metals 17%, industrial metals 18% and agriculture 30%. The DBLCI-OY Balanced index is designed to be UCITS III compliant. Energy, precious metals, industrial metals and agriculture sector indices are also calculated. Further to this, custom indices based on customer defined weights can be calculated. The DBLCI-OY benchmark and sector index weights are detailed in Figure 2.

Figure 2: DBLCI-OY Commodity Membership List

Index	Commodity	Symbol	Exchange	DBLCI-OY Weight	Broad Weight	Balanced Weight	Sector Weight	Inception Date	BBG Excess Return Ticker	BBG Total Return Ticker
DBLCI-OY	Overall							2-Dec-88	DBLCOYER	DBLCOYTR
DBLCI-OY Broad	Overall							3-Sep-97	DBLCBRER	DBLCBRTR
DBLCI-OY Balanced	Overall							3-Sep-97	DBLCBBER	DBLCBBTR
Energy										
DBLCI-OY Energy	Sector							4-Jun-90	DBLCYEEN	DBLCYTEN
DBLCI-OY CL	Light Crude	CL	NYMEX	35.00%	12.375%	7.875%	22.50%	2-Dec-88	DBLCOCLE	DBLCOCLT
DBLCI-OY HO	Heating Oil	HO	NYMEX	20.00%	12.375%	7.875%	22.50%	2-Dec-88	DBLCOHOE	DBLCOHOT
DBLCI-OY RB	RBOB Gasoline	RB	NYMEX	0.00%	12.375%	7.875%	22.50%	2-Dec-88	DBLCYERB	DBLCYTRB
DBLCI-OY NG	Natural Gas	NG	NYMEX	0.00%	5.500%	3.500%	10.00%	4-Jun-90	DBLCYENG	DBLCYTNG
DBLCI-OY LCO	Brent Crude	LCO	IPE	0.00%	12.375%	7.875%	22.50%	3-Jan-90	DBLCYECO	DBLCYTCO
DBLCI-OY LGO	Gasoil	LGO	IPE	0.00%	0.00%	0.000%	0.00%	5-Jul-89	DBLCYEGO	DBLCYTGO
Precious Metals										
DBLCI-OY Precious Metals	Sector							2-Dec-88	DBLCYEPM	DBLCYTPM
DBLCI-OY GC	Gold	GC	COMEX	10.00%	8.000%	13.600%	80.00%	2-Dec-88	DBLCOGCE	DBLCOGCT
DBLCI-OY SI	Silver	SI	COMEX	0.00%	2.000%	3.400%	20.00%	2-Dec-88	DBLCYESI	DBLCYTSI
Industrial Metals										
DBLCI-OY Industrial Metals	Sector							3-Sep-97	DBLCYEIM	DBLCYTIM
DBLCI-OY MAL	Aluminium	MAL	LME	12.50%	4.167%	6.000%	33.33%	3-Sep-97	DBLCOALE	DBLCOALT
DBLCI-OY MZN	Zinc	MZN	LME	0.00%	4.167%	6.000%	33.33%	4-Aug-97	DBLCYEZN	DBLCYTZN
DBLCI-OY MCU	Copper - Grade A	MCU	LME	0.00%	4.167%	6.000%	33.33%	4-Aug-97	DBLCYECU	DBLCYTCU
DBLCI-OY MNI	Primary Nickel	MNI	LME	0.00%	0.000%	0.00%	0.00%	4-Aug-97	DBLCYENI	DBLCYTNI
DBLCI-OY MPB	Standard Lead	MPB	LME	0.00%	0.000%	0.00%	0.00%	4-Aug-97	DBLCYEPB	DBLCYTPB
Agriculture										
DBLCI-OY Agriculture	Sector							2-Dec-88	DBLCYEAG	DBLCYTAG
DBLCI-OY C	Corn	C	CBOT	11.25%	5.625%	7.500%	25.00%	2-Dec-88	DBLCOCNE	DBLCOCNT
DBLCI-OY W	Wheat	W	CBOT	11.25%	5.625%	7.500%	25.00%	2-Dec-88	DBLCOWTE	DBLCOWTT
DBLCI-OY S	Soybeans	S	CBOT	0.00%	5.625%	7.500%	25.00%	2-Dec-88	DBLCYESS	DBLCYTSS
DBLCI-OY SB	Sugar # 11	SB	NYBOT	0.00%	5.625%	7.500%	25.00%	2-Dec-88	DBLCYESB	DBLCYTSB
DBLCI-OY KC	Coffee "C"	KC	NYBOT	0.00%	0.00%	0.00%	0.00%	2-Dec-88	DBLCYEKC	DBLCYTKC
DBLCI-OY CT	Cotton #2	CT	NYBOT	0.00%	0.00%	0.00%	0.00%	2-Dec-88	DBLCYECE	DBLCYTCT
DBLCI-OY CC	Cocoa	CC	NYBOT	0.00%	0.00%	0.00%	0.00%	2-Dec-88	DBLCYECC	DBLCYTCC
DBLCI-OY KW	Kansas Wheat	KW	KBOT	0.00%	0.00%	0.00%	0.00%	4-Jan-89	DBLCYEKW	DBLCYTKW
Livestock										
DBLCI-OY LC	Live Cattle	LC	CME	0.00%	0.00%	0.00%	0.00%	2-Dec-88	DBLCYELC	DBLCYTLC
DBLCI-OY LH	Lean Hogs	LH	CME	0.00%	0.00%	0.00%	0.00%	2-Dec-88	DBLCYELH	DBLCYTLH
DBLCI-OY FC	Feeder Cattle	FC	CME	0.00%	0.00%	0.00%	0.00%	2-Dec-88	DBLCYEFC	DBLCYTFC

Source: Deutsche Bank

The index is calculated on each index business day using the exchange closing prices. Index business days are weekdays when banks in NYC are open. If it is an exchange holiday but an index business day, the exchange close price from the previous index business day is used.

Historical Analysis

Historic daily index levels are available from the index inception date (see Exhibit 1). The index inception date was based on the availability of price data for the relevant contracts. For CL, HO, W, C, GC and MAL from March 2003, closing price data for the underlying commodities have been captured from the exchanges via Reuters. For all other commodities from June 2006, closing price data for the underlying commodities have been captured from the exchanges via Reuters. Prior to these dates, the sources LIM, Bloomberg, and Reuters were used to obtain close price data. For some contracts, incomplete price histories were available. In the event prices were missing for a contract on a contract selection day, the contract was excluded from the selection process. The index calculation methodology and commodity future selection are the same prior to and following March 2003 and June 2006 respectively.

Pricing for all MAL futures is not available prior to September 1997. Prior to this date the returns for the DBLCI MAL index were used as a proxy.

The DBLCI-OY RB index reflects the return of Gasoline. From the November 2005 roll period NYMEX RBOB Gasoline contracts are selected for the index. Prior to the November 2005 roll period NYMEX Unleaded Gasoline contracts were selected for the index.

The DBLCI-OY index has tended to outperform the DBLCI index historically. For an analysis of historical returns see Figure 3. The energy indices benefit most from the optimum yield technology. DBLCI-OY CL has an overall annual out performance over DBLCI CL of 4.16%. Further to this the DBLCI-OY CL index has exhibited a lower volatility when compared to the DBLCI CL index giving it a significantly higher Sharpe ratio.

Figure 3: DBLCI-OY and DBLCI Excess Return Index Statistics

	Historical Return Summary*			Monthly Return Analysis*			Annualised Return Data			
	Annualised Return	Volatility	Sharpe Ratio	Avg. Monthly Return	No. +ve Months	% of +ve Months	15 Years	10 Years	5 Years	3 Years
DBLCI-OY	10.62%	15.48%	0.69	0.94%	125	54.1%	12.03%	16.59%	25.94%	22.59%
DBLCI-OY Broad	15.07%	16.39%	0.92	1.29%	70	56.0%		17.42%	27.49%	25.44%
DBLCI-OY Balanced	12.27%	13.24%	0.93	1.05%	67	53.6%		14.27%	26.48%	27.42%
DBLCI	10.13%	18.91%	0.54	0.96%	123	53.2%	11.00%	14.59%	18.84%	17.86%
Energy										
DBLCI-OY Energy	15.07%	23.05%	0.65	1.42%	121	57.1%	15.88%	23.46%	28.20%	19.55%
DBLCI-OY CL	18.66%	25.29%	0.74	1.69%	134	58.0%	18.42%	25.78%	31.02%	18.05%
DBLCI CL	15.07%	31.26%	0.48	1.60%	134	58.0%	13.54%	18.86%	17.11%	6.94%
DBLCI-OY HO	13.92%	24.66%	0.56	1.31%	136	58.9%	14.42%	24.24%	30.41%	23.21%
DBLCI HO	10.04%	31.16%	0.32	1.22%	128	55.4%	9.12%	15.83%	13.96%	7.58%
DBLCI-OY RB	13.78%	26.13%	0.53	1.36%	132	57.1%	13.13%	21.31%	27.41%	20.01%
DBLCI-OY NG	10.41%	27.14%	0.38	1.19%	117	55.2%	11.74%	15.81%	8.06%	1.99%
DBLCI-OY LCO	14.29%	26.51%	0.54	1.46%	119	54.8%	16.58%	23.98%	31.99%	22.87%
DBLCI-OY LGO	12.80%	23.94%	0.53	1.27%	125	56.1%	12.69%	22.08%	29.27%	23.16%
Precious Metals										
DBLCI-OY Precious Metals	0.44%	14.28%	0.03	0.12%	103	44.6%	4.56%	8.69%	20.75%	25.95%
DBLCI-OY GC	-0.03%	13.24%	0.00	0.07%	103	44.6%	3.48%	8.49%	18.14%	23.85%
DBLCI GC	0.13%	13.24%	0.01	0.09%	104	45.0%	3.64%	8.55%	18.27%	23.88%
DBLCI-OY SI	1.61%	22.75%	0.07	0.36%	108	46.8%	8.19%	8.99%	30.21%	33.46%
Industrial Metals										
DBLCI-OY Industrial Metals	9.89%	17.37%	0.57	0.96%	64	51.2%		12.93%	34.48%	37.65%
DBLCI-OY MAL	6.39%	16.13%	0.40	0.61%	57	45.6%		7.64%	19.80%	20.75%
DBLCI MAL	6.27%	17.08%	0.37	0.59%	57	45.6%		7.59%	20.45%	23.11%
DBLCI-OY MZN	5.26%	21.78%	0.24	0.64%	61	48.4%		9.06%	30.29%	32.89%
DBLCI-OY MCU	14.69%	21.52%	0.68	1.41%	63	50.0%		19.31%	48.12%	51.01%
DBLCI-OY MNI	21.16%	32.30%	0.66	2.14%	71	56.3%		26.30%	42.80%	39.21%
DBLCI-OY MPB	17.49%	22.76%	0.77	1.58%	69	54.8%		20.34%	54.77%	58.01%
Agriculture										
DBLCI-OY Agriculture	1.76%	14.41%	0.12	0.23%	115	49.8%	3.17%	1.95%	15.41%	22.62%
DBLCI-OY C	-3.91%	18.68%	-0.21	-0.16%	117	50.6%	-2.93%	-5.62%	5.64%	17.70%
DBLCI C	-3.79%	19.01%	-0.20	-0.15%	116	50.2%	-2.21%	-5.42%	6.35%	17.70%
DBLCI-OY W	-0.10%	19.72%	0.00	0.15%	114	49.4%	1.21%	0.09%	18.78%	29.07%
DBLCI W	3.21%	20.85%	0.15	0.46%	122	52.8%	4.47%	2.84%	23.21%	40.59%
DBLCI-OY S	1.67%	18.47%	0.09	0.29%	114	49.4%	3.89%	5.54%	21.31%	25.55%
DBLCI-OY SB	5.98%	25.68%	0.23	0.77%	119	51.5%	7.09%	4.03%	9.48%	10.69%
DBLCI-OY KC	-4.10%	32.87%	-0.12	0.20%	102	44.2%	2.20%	-9.57%	8.04%	0.00%
DBLCI-OY CT	-3.59%	18.21%	-0.20	-0.14%	114	49.4%	-5.51%	-8.94%	-5.24%	1.26%
DBLCI-OY CC	-4.66%	26.61%	-0.17	-0.08%	107	46.3%	0.30%	0.43%	3.45%	10.08%
DBLCI-OY KW	3.75%	18.09%	0.21	0.44%	106	46.3%	6.21%	3.51%	23.52%	41.20%
Livestock										
DBLCI-OY LC	1.88%	9.54%	0.20	0.19%	124	53.7%	1.09%	2.20%	8.56%	3.31%
DBLCI-OY LH	4.65%	17.75%	0.26	0.54%	122	52.8%	3.50%	3.69%	14.54%	6.83%
DBLCI-OY FC	2.66%	10.31%	0.26	0.27%	126	54.5%	1.32%	3.76%	9.33%	5.76%

*Source: Deutsche Bank, As of 31-Dec-2006. * Data based on period from index inception to 29-Feb-2008. This data does not include transaction costs*

Index Calculation and Rules

DBLCI-OY Index Calculation

The excess return is equal to the percentage change of the underlying commodity futures market values. The indices have two contracts throughout roll periods and one contract on other days.

The excess return index level in USD is expressed as

$$ILer(t) = \frac{\sum_i PC(t,i) * N(t-1,i)}{\sum_i PC(t-1,i) * N(t-1,i)} * ILer(t-1)$$

Where:

ILer(t)	= Excess Return Index level on day t
ILer(t-1)	= Excess Return Index level on index calculation day t-1
PC(t,i)	= Close price of commodity future i on day t
PC(t-1,i)	= Close price of commodity future i on index calculation day t-1
N(t-1,i)	= Notional holding of commodity future i on index calculation day t-1

The total return index level in USD is expressed as

$$ILtr(t) = \left(\frac{ILer(t)}{ILer(t-1)} + Rt(t) \right) * \left(1 + Rt(t)\right)^{d(t,t-1)} * ILtr(t-1)$$

$$Rt(t) = \left(1 - \frac{91}{360} y(t-1) \right)^{-\left(\frac{1}{91}\right)} - 1$$

Where:

ILtr(t)	= Total Return Index level on day t
ILtr(t-1)	= Total Return Index level on index calculation day t-1
Rt(t)	= T-bill return on day t
d(t,t-1)	= Number of calendar days between day t and index calculation day t-1 excluding day t
y(t-1)	= 3-month benchmark T-bill yield on index calculation day t-1

Hedged and Un-Hedged Index Levels

The total return hedged and un-hedged index levels are calculated based on WM FX data. The hedged and un-hedged indices are calculated on a month-to-date basis.

The return from the FX hedge is accrued over the month on an ACT/ACT basis. The hedged index is expressed as

$$ILh(t) = \left[1 + \mathrm{Re}\,tIL(t) + \mathrm{Re}\,tIL(t) * FXr(t) + FXhr(t)\right] * ILh(r)$$

The un-hedged index is expressed as

$$ILuh(t) = \left(1 + \mathrm{Re}\,tIL(t)\right) * \left(1 + FXr(t)\right) * ILuh(r)$$

Where:

ILh(t)	= Hedged total return index level on day t
ILh(r)	= Hedged total return index level on last calendar day of last month r
ILuh(t)	= Un-hedged total return index level on day t
ILuh(r)	= Un-hedged total return index level on last calendar day of last month r

$$\mathrm{Re}\,tIL(t) = \frac{ILl(t)}{ILl(r)} - 1$$

ILl(t)	= Local total return index level on day t
ILl(r)	= Local total return index level on last calendar day of last month r

$$FXr(t) = \frac{FX(t)}{FX(r)} - 1$$

FX(t) = FX rate on day t quoted Index Currency: Hedge Currency
FX(r) = FX rate on last calendar day of last month r quoted Index Currency: Hedge Currency

$$FXhr(t) = \left(\frac{FXh(r)}{FX(r)} - 1\right) * \frac{dy(t)}{TD}$$

FXh(r) = One-month FX forward rate on last calendar day of last month r quoted Index Currency: Hedge Currency
dy(t) = Number of calendar days between t and last calendar day of last month r
TD = Number of calendar days in month

Excess return hedged index levels are calculated based on WM FX data. The excess return hedged index levels represent the returns of the USD excess returns converted into the target currency. Excess return un-hedged index levels are not calculated. The indices are calculated on a month-to-date basis. Prior to 11-Feb-2008 the excess return hedged levels were calculated using the same methodology as the total return indices.

The hedged index is expressed as

$$ILher(t) = (1 + \mathrm{Re}\,tIL(t) + \mathrm{Re}\,tILer(t) * FXr(t)) * ILher(r)$$

Where:

ILher(t) = Hedged excess return index level on day t
ILher(r) = Hedged excess return index level on last calendar day of last month r

$$\mathrm{Re}\,tILer(t) = \frac{ILler(t)}{ILler(r)} - 1$$

ILler(t) = Local excess return index level on day t
ILler(r) = Local excess return index level on last calendar day of last month r

$$FXr(t) = \frac{FX(t)}{FX(r)} - 1$$

FX(t) = FX rate on day t quoted Index Currency: Hedge Currency
FX(r) = FX rate on last calendar day of last month r quoted Index Currency: Hedge Currency

Contract Selection

On the first New York business day of each month (the "Verification Date") each commodity futures contract currently in the index is tested for continued inclusion in the index based on the month in which the contract delivery of the underlying commodity can start (the "Delivery Month"). If, on the Verification Date, the Delivery Month is the next month, a new contract is selected. For example, if the first New York business day is May 1, 2006, and the Delivery Month of a contract currently in the index is June 2006, a new contract with a later Delivery Month will be selected.

For each commodity in the index, the new commodity futures contract selected will be the contract with the maximum "implied roll yield" based on the closing price for each eligible contract. Eligible contracts are any contracts having a Delivery Month (i) no sooner than the month after the Delivery Month of the commodity future currently in the index, and (ii) no later than the 13th month after the Verification Date. For example, if the first New York business day is May 1, 2006 and the Delivery Month of the contract currently in the index is therefore June 2006, the Delivery Month of an eligible new contract must be between July 2006 and June 2007. The roll yield is expressed as:

$$Y(t,i) = \left(\frac{PC(t,b)}{PC(t,i)}\right)^{\left(\frac{1}{F(t,i,b)}\right)} - 1$$

Where

Y(t,i)	= On any day t, the implied roll yield for entering into the commodity futures contract with exchange expiration month i
PC(t,b)	= Closing price of the base commodity future b
PC(t,i)	= Closing price of any eligible futures contract i
F(t,i,b)	= Fraction of year between the base futures contract b and the futures contract with exchange expiration month i. Calculated as number of calendar days between dates divided by 365
b	= Base commodity future is the commodity future currently in the index

The contract with the maximum roll yield is selected. If two contracts have the same roll yield the contract with the minimum number of months to the exchange expiry month is selected.

Monthly Index Roll Period

If the current index holding no longer meets the inclusion criteria the monthly index roll unwinds the old contract holding and enters a position in the new contract. This takes place between the 2nd and 6th business day of the month.

On each day during the roll period the new notional holdings are calculated. The calculations for the old commodities that are leaving the index and the new commodities that are entering are different.

The notional of the old commodity i is expressed as:

$$N(t,i) = N(t-1,i) * \frac{6 - db(t)}{7 - db(t)}$$

The notional of the new commodity j is expressed as:

$$N(t,j) = N(t-1,j) + \frac{PC(t,i) * N(t-1,i)}{PC(t,j) * (7 - db(t))}$$

where

N(t-1,i)	= Notional holding of old commodity future i on index calculation day t-1
N(t,i)	= Notional holding of old commodity future i on index calculation day t
N(t-1,j)	= Notional holding of new commodity future j on index calculation day t-1
N(t,j)	= Notional holding of new commodity future j on index calculation day t
db(t)	= Number of index business days in the month up to and including day t

If the current index holding continues to meet the inclusion criteria, no roll occurs and the notional holding is kept constant.

$$N(t,i) = N(t-1,i)$$

On all days that are not monthly index roll days the notional holding of each commodity future remains constant.

$$N(t,i) = N(t-1,i)$$

DBLCI-OY Basket Index Calculation

The basket index is re-weighted on an annual basis on the 6th business day of November.

The index level calculation is the same for both excess and total returns in all currencies. It is expressed as the weighted average return of the underlying indices.

$$IL(t,c,rt) = \left(\sum_{cf} \frac{CIL(t,c,rt,cf)}{CIL(d,c,rt,cf)} * w(d,cf) \right) * IL(d,c,rt)$$

Where:

IL(t,c,rt)	= Index level on day t in currency c with return type rt
IL(d,c,rt)	= Index level on last rebalancing day d in currency c with return type rt
CIL(t,c,rt)	= Component index level for commodity cf on day t in currency c with return type rt
CIL(d,c,rt)	= Component index level for commodity cf on last rebalancing day d in currency c with return type rt
w(d,cf)	= Weight of commodity cf on last rebalancing day d

Appendix 1

Important Disclosures

Additional information available upon request

For disclosures pertaining to recommendations or estimates made on a security mentioned in this report, please see the most recently published company report or visit our global disclosure look-up page on our website at http://gm.db.com.

Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s). In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. Daniel J Arnold

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CreditBuy ("C-B"): The total return of the Reference Credit Instrument (bond or CDS) is expected to outperform the credit spread of bonds / CDS of other issuers operating in similar sectors or rating categories over the next six months.
CreditHold ("C-H"): The credit spread of the Reference Credit Instrument (bond or CDS) is expected to perform in line with the credit spread of bonds / CDS of other issuers operating in similar sectors or rating categories over the next six months.
CreditSell ("C-S"): The credit spread of the Reference Credit Instrument (bond or CDS) is expected to underperform the credit spread of bonds / CDS of other issuers operating in similar sectors or rating categories over the next six months.
CreditNoRec ("C-NR"): We have not assigned a recommendation to this issuer. Any references to valuation are based on an issuer's credit rating.

Reference Credit Instrument ("RCI"): The Reference Credit Instrument for each issuer is selected by the analyst as the most appropriate valuation benchmark (whether bonds or Credit Default Swaps) and is detailed in this report. Recommendations on other credit instruments of an issuer may differ from the recommendation on the Reference Credit Instrument based on an assessment of value relative to the Reference Credit Instrument which might take into account other factors such as differing covenant language, coupon steps, liquidity and maturity. The Reference Credit Instrument is subject to change, at the discretion of the analyst.

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