#### Commodities as an asset class



# Commodity-Supercycle?!

Industrialisation

**Urbanization** 

Private consumption

Rising demand for commodities



Energy



Metals

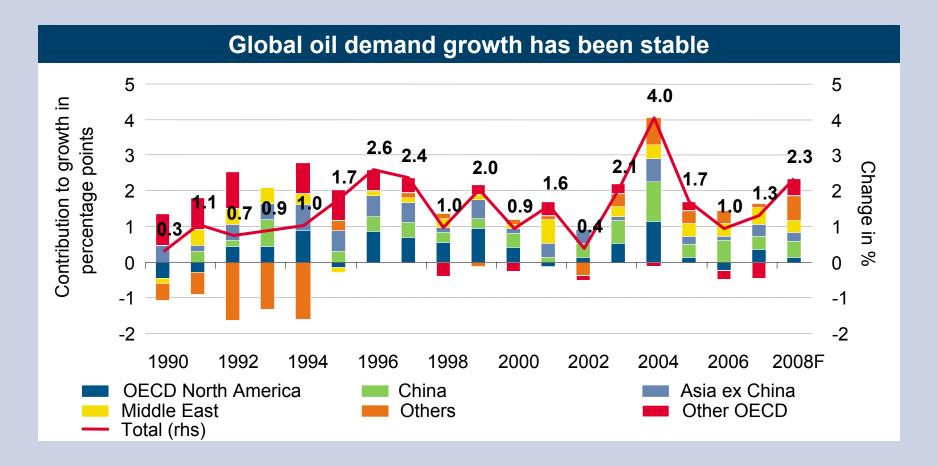


Agriculture





#### Energy – Mainly driven by supply-side issues



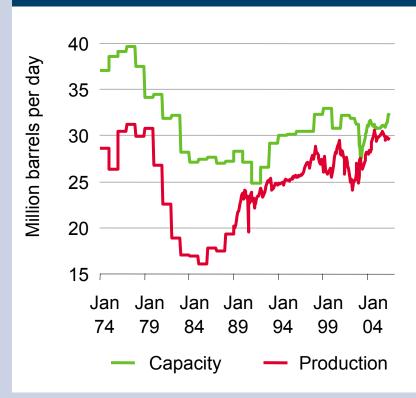
Source: Deka Investment, IEA



#### Energy – Mainly driven by supply-side issues

#### Supplies are getting tight

# Lack of spare capacities in the oil sector



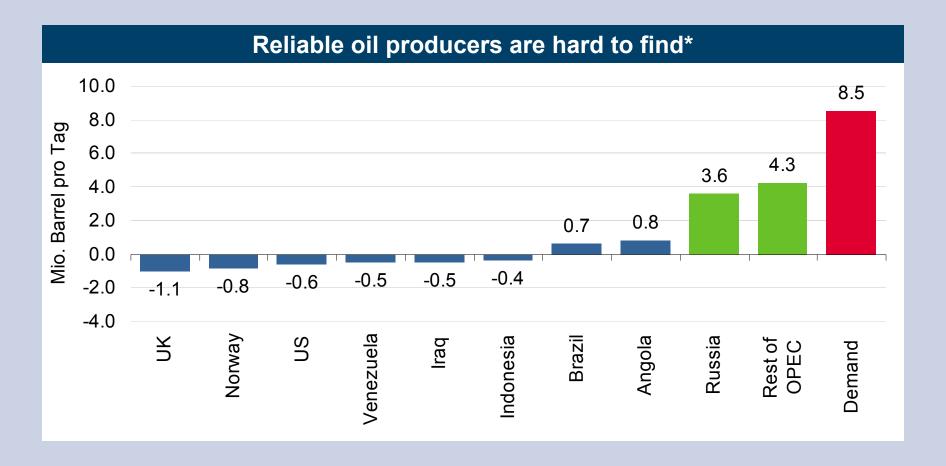
# Below-average growth on the supply side

- **\*\*Long-term price assumptions remain** extremely conservative
- **\*\***Access to new reserves and resource areas is getting harder
- **\*\***Material costs are rising
- ★Acute shortage of qualified staff
- **#**Extreme weather conditions are causing production to be lost

Sources: Deka Investment, International Energy Agency, OPEC



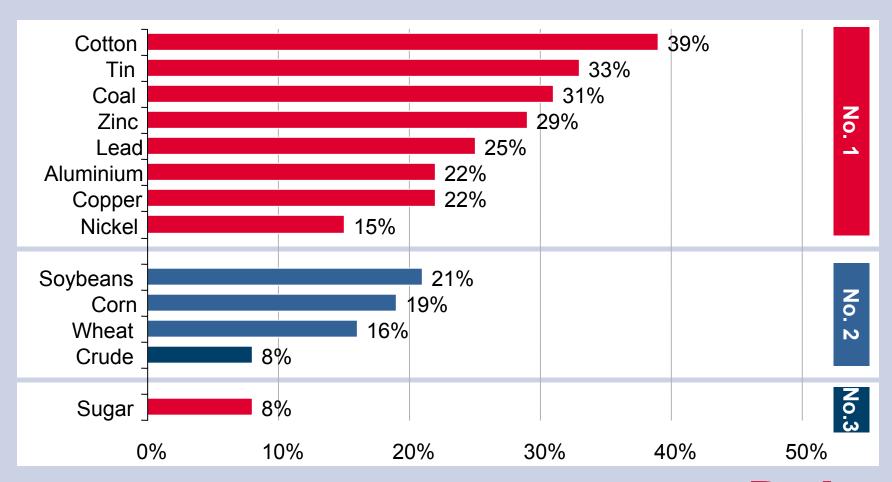
#### Energy – Mainly driven by supply-side issues



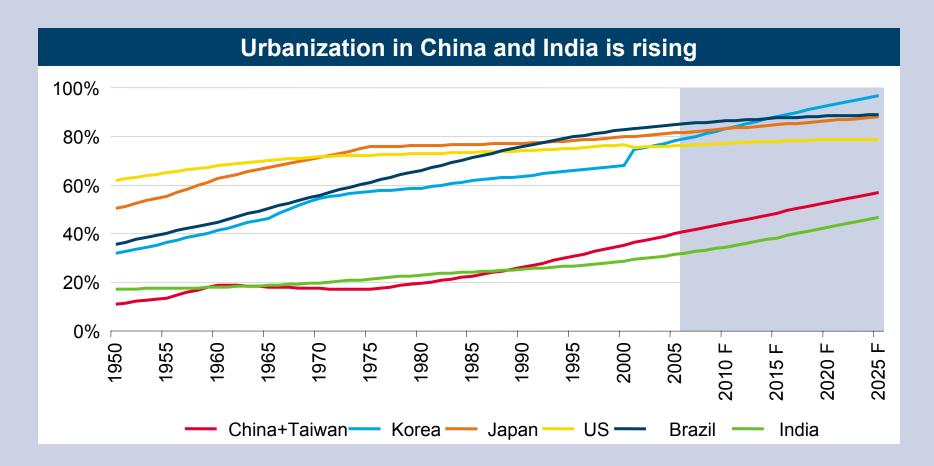
Sources: Deka Investment, IEA



<sup>\*</sup> Change in oil production 2000 vs. 2007



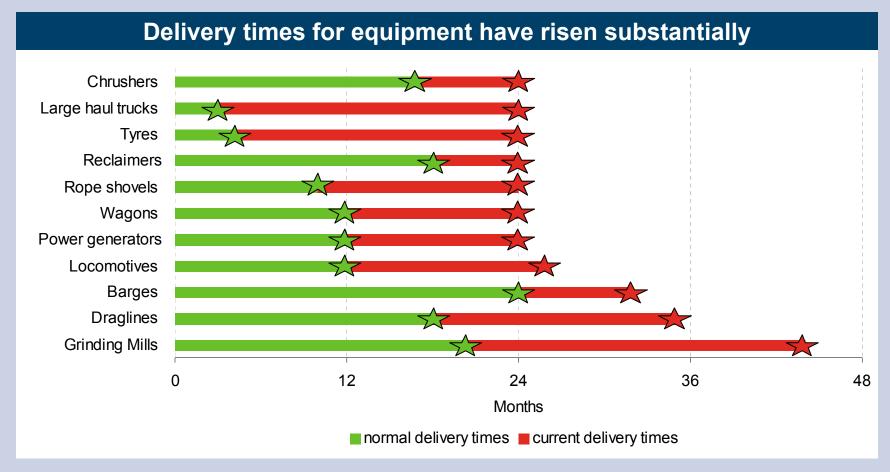




Sources: Deka Investment, United Nations



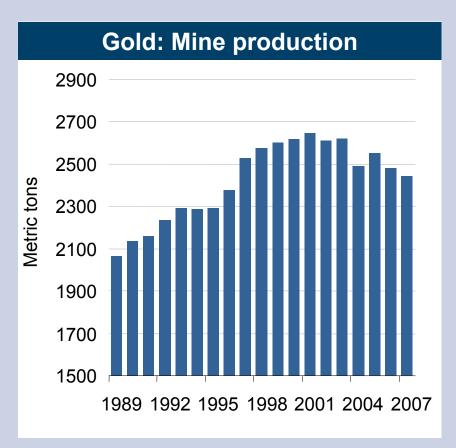
#### New investment encounters obstacles

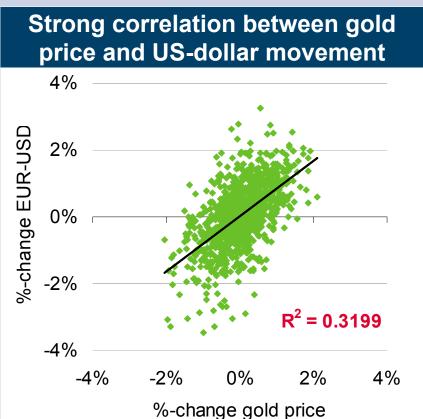


Sources: Deka Investment, Rio Tinto



#### Gold – falling mine production and a weak dollar



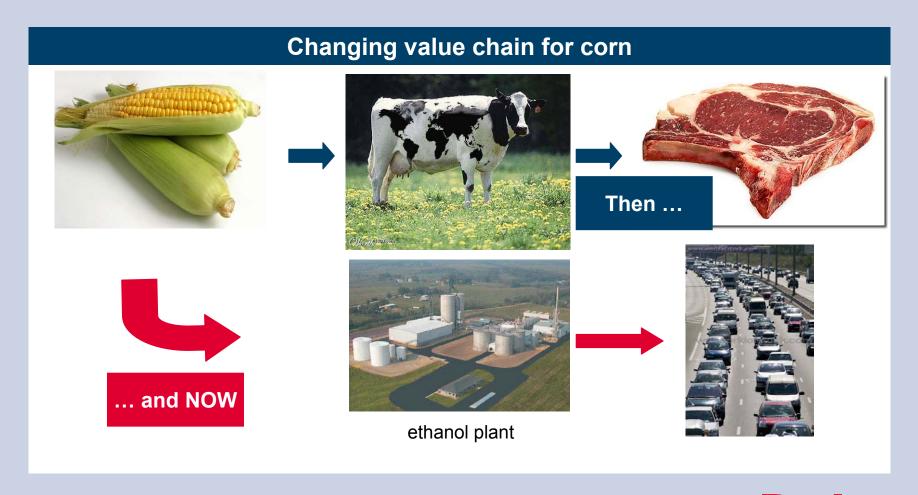


Sources: Deka Investment, World Gold Council



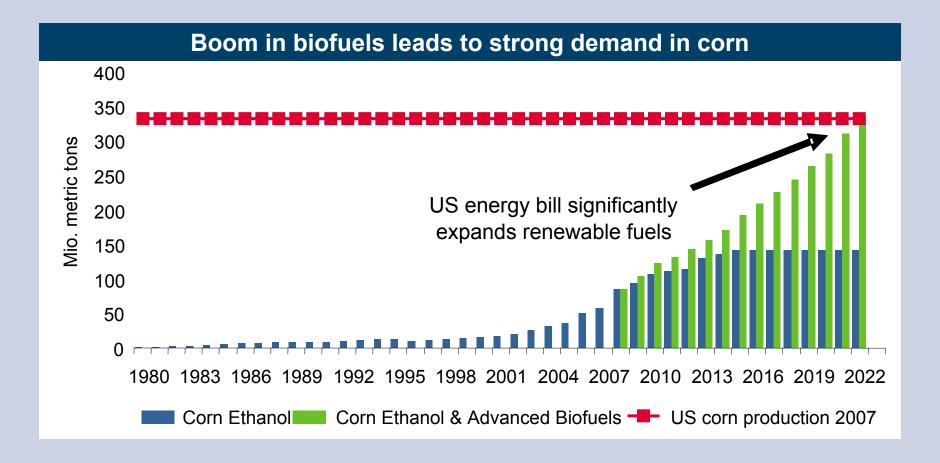
#### Agriculture a substitute for energy

Increase in biofuel production has strong implications for grains





# Agriculture a substitute for energy

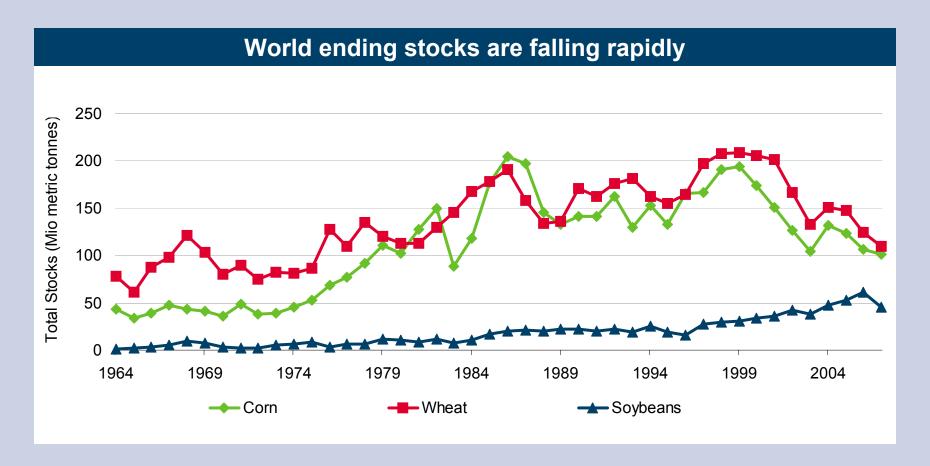


Sources: Deka Investment, USDA, White House

As per: 2007



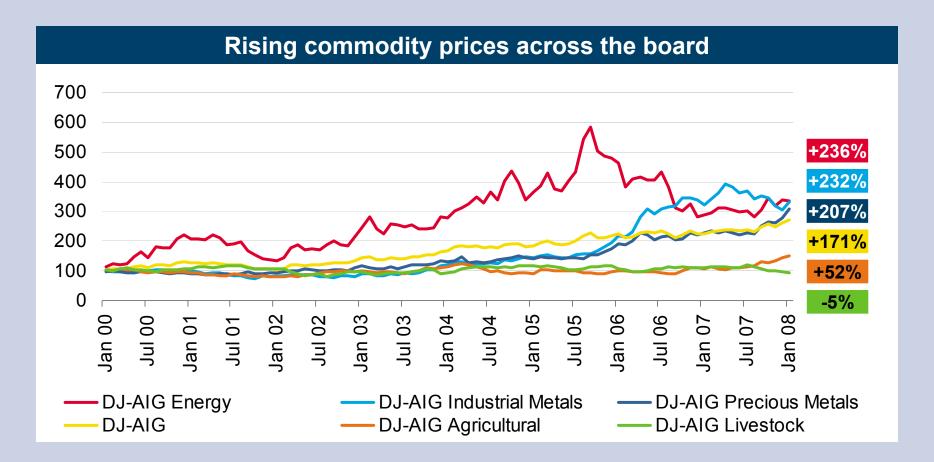
## Agriculture a substitute for energy



Sources: Deka Investment, USDA



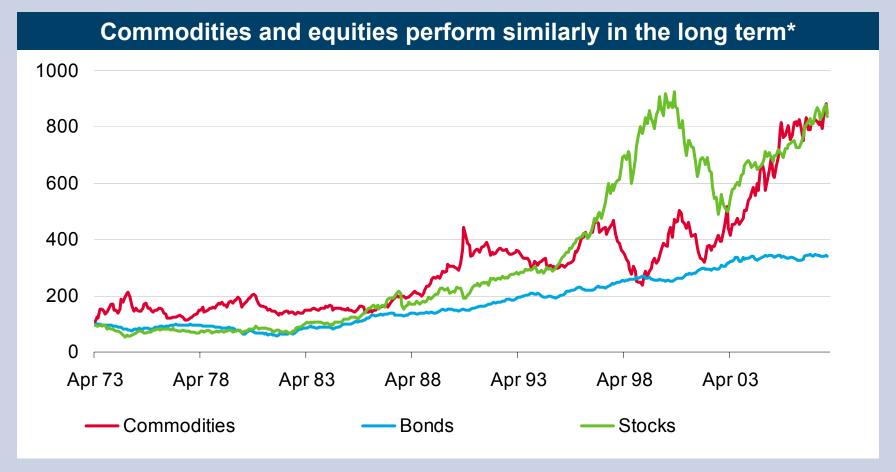
#### Summary



Sources: Bloomberg, Deka Investment

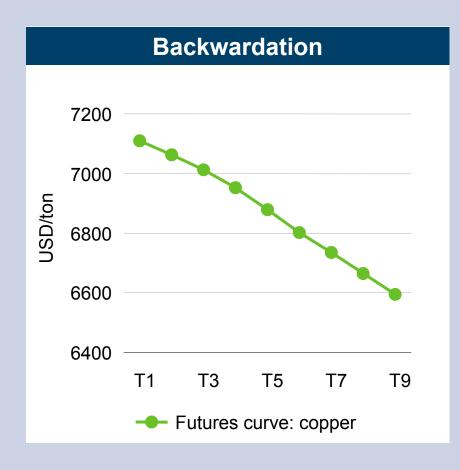
As per: January 2008

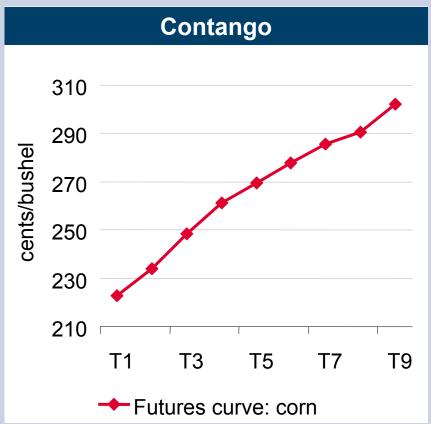




Sources: Bloomberg, Deka Investment; Period: March 1973 – December 2007 \*Adjusted for inflation; Based on: Commodities = Goldman Sachs Commodity Index ® and DJ-AIG Commodity Index ®, Stocks = S&P 500 TR, Bonds = ML Corporate Bond TR ®



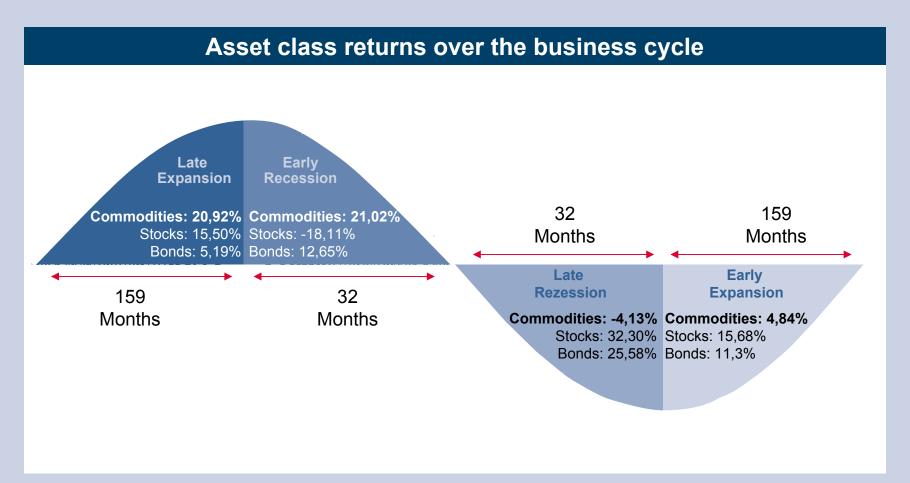




Sources: Bloomberg, Deka Investment



Stocks and bonds correlate inversely with commodities



Sources: Bloomberg, DekaBank, Goldman Sachs, Merrill Lynch; economic cycle phases established by the National Bureau of Economic Research (NBER, USA); Based on: Average monthly performance (ann.) of total return indices S&P GSCI ®, S&P 500 ®, Merrill Lynch Corporate Bond Index ®; Period: Jan 1970 - Nov 2001

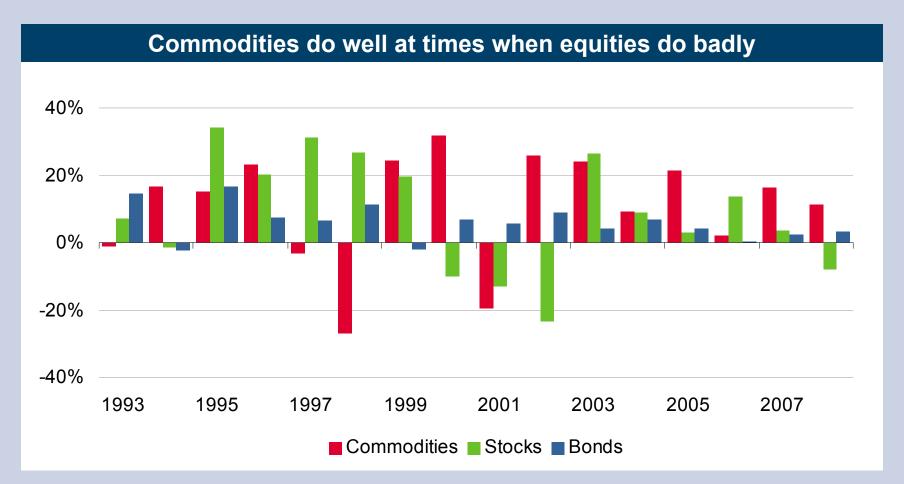


	ML Govt Bond ®	S&P 500 ®	Inflation	DJ AIG CI ®	
ML Govt Bond	1	0,16	-0,12	0,00	
S&P 500 ®	0,16	1	-0,07	0,09	
Inflation	-0,12	-0,07	1	0,57	
DJ AIG CI ®	0,00	0,09	0,57	1	

Period Jan 1992 – Dec 2007
Data: Equities (S&P 500 ®), Bonds (ML Government Bonds ®), Commodities (DJ-AIG Commodity Index ®);
Inflation (US CPI; lagged)



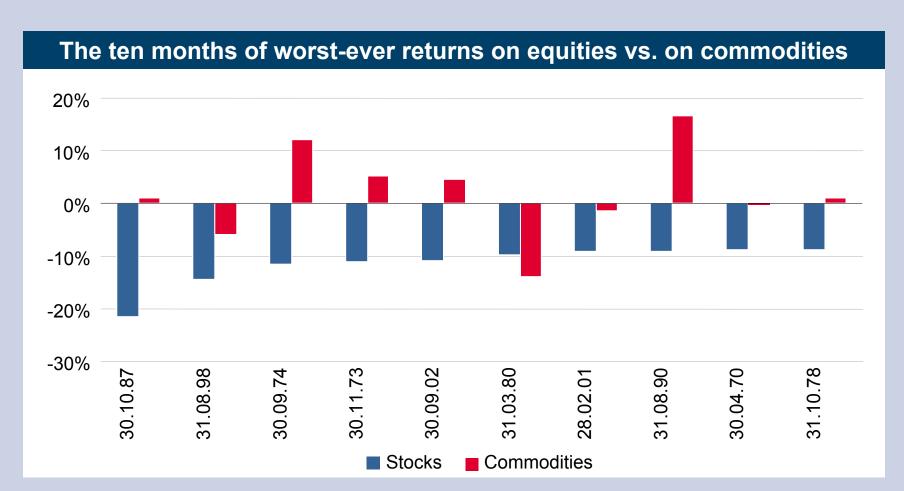
Stocks and bonds vary inversely with commodities



Sources: own calculations, Bloomberg, Deka Investment Based on: Stocks = S&P 500 @, Bonds = REXP @, Commodities = DJ-AIG Commodity Index @ As of 20.02.2008



#### Commodities conventionally do well in times of crisis

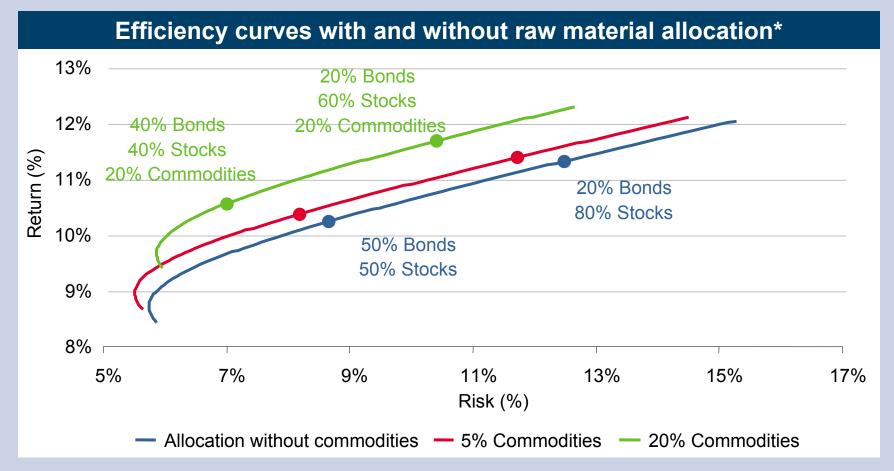


Sources: own calculations, Bloomberg, Deka Investment, Goldman Sachs

Data series: 1970 - 2006

Based on: Stocks = S&P 500 ®, Commodities = S&P GSCI ®





Sources: own calculations, Bloomberg, Deka Investment, Goldman Sachs, Merrill Lynch Based on: Commodities S&P GSCI TR ®, S&P 500 TR ®, Merrill Lynch Corporate Bond Index TR ®; Data series: 1978 – 2006



#### Investment vehicles

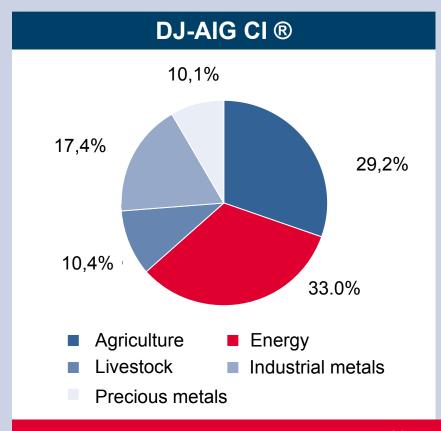
#### Resource Stocks do not offer similar diversification properties

Correlation Matrix									
10 years	Euro Stoxx 50 ®	DJ-AIG TR ®	REXP®	MSCI World Energy ®	MSCI World Materials ®	MSCI World ®			
Euro Stoxx 50 ®	1,00	-0,01	-0,33	0,32	0,57	0,83			
DJ-AIG TR ®	-0,01	1,00	-0,04	0,53	0,33	0,18			
REXP®	-0,33	-0,04	1,00	-0,14	-0,26	-0,27			
MSCI World Energy ®	0,32	0,53	-0,14	1,00	0,67	0,55			
MSCI World Materials ®	0,57	0,33	-0,26	0,67	1,00	0,77			
MSCI World ®	0,83	0,18	-0,27	0,55	0,77	1,00			

Sources: Bloomberg, Deka Investment



#### Investment vehicles



Weighted in	dividu	al commo	dities
Crude	13.16%	Gasoline	3.78%
Natural Gas	12.24%	Heating Oil	3.82%
Soybeans	7.63%	Cotton	2.48%
Aluminium	7.11%	Sugar	3.19%
Gold	7.40%	Coffee	3.00%
Live Cattle	4.89%	Soybean Oil	2.81%
Copper	7.04%	Zinc	3.03%
Corn	5.66%	Nickel	2.79%
Wheat	4.70%	Silver	2.72%
Lean Hogs	2.55%		

Return: 10.8% p.a./risk: 15.0% p.a.\*

Sources: Deka Investment, Dow Jones Indexes Weighting as at January 2007 (weighting varies over the year, reflecting changes in market prices)

\* Data series: 1998 – 2007



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# Many thanks for your attention!

