



***World markets trends
&
Iran's Petroleum Investment Plans***

***By
H. Ghanimi Fard, Ph. D.***

Vice President for Investment Affairs - NIOC

***&
Faculty Member of Petroleum University of Technology
To***

Enhancing Global Energy Security through Cooperation and Partnership

Kuwait City , Kuwait

March 30-31 , 2009

Introduction

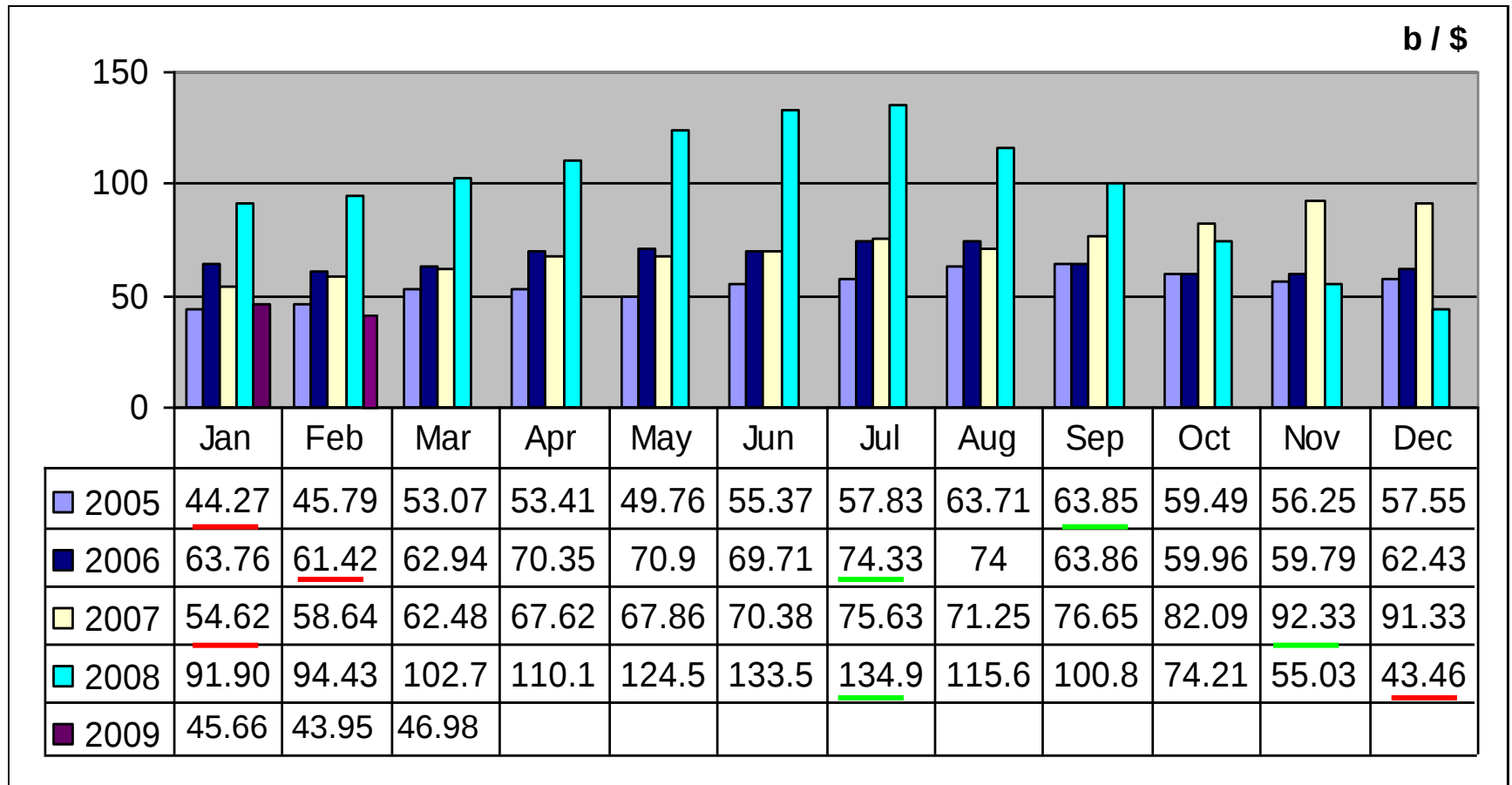
- *World financial Crises are indigenous factors of free market economies*
- *Liberalizations in financial market in 1980,s and 1990,s were the main causes for recent world financial problems*
- *Regulated markets have hidden and delayed the existence and appearance of the recent crisis*

Results of World Financial Crises

On some Markets

- ***Crude Oil***
- ***Petroleum Products***
- ***Natural Gas***
- ***Transportation***
- ***Foreign Exchange***
- ***Interest Rate***
- ***Metals***
- ***Agricultural Products***
- ***Stock Exchange Indices***

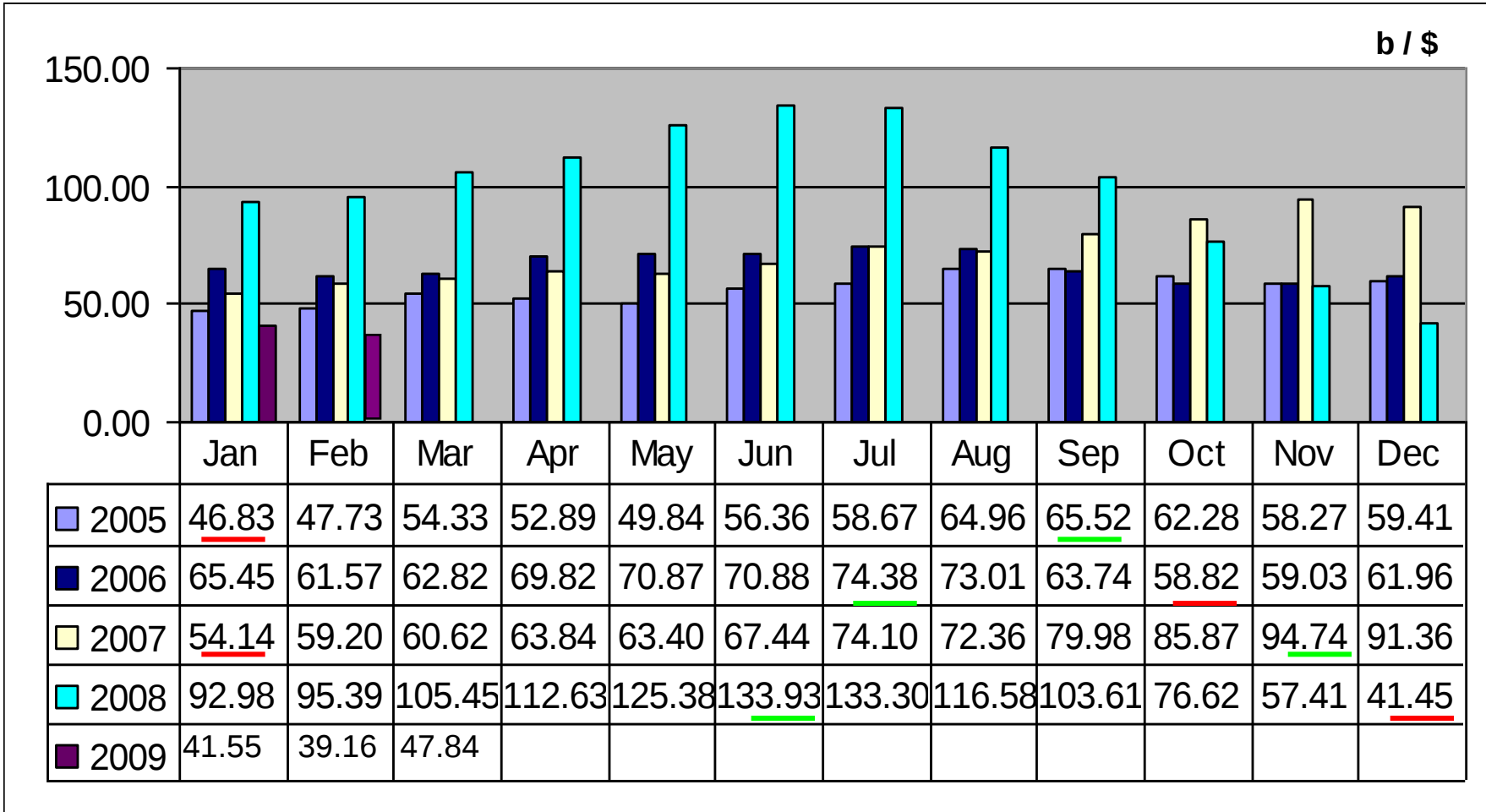
ICE-BWAVE (2005 -2009)



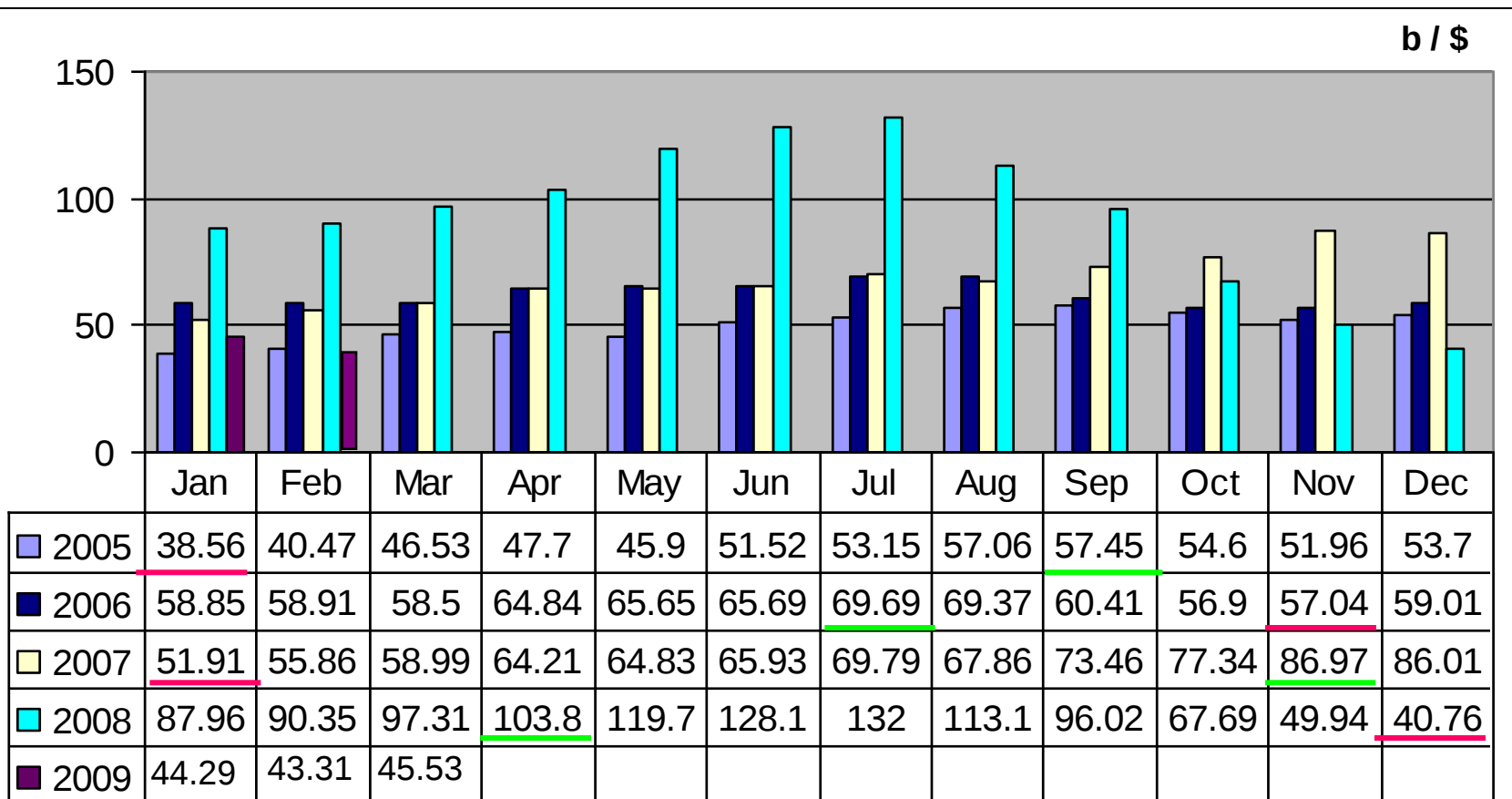
— Min

— Max

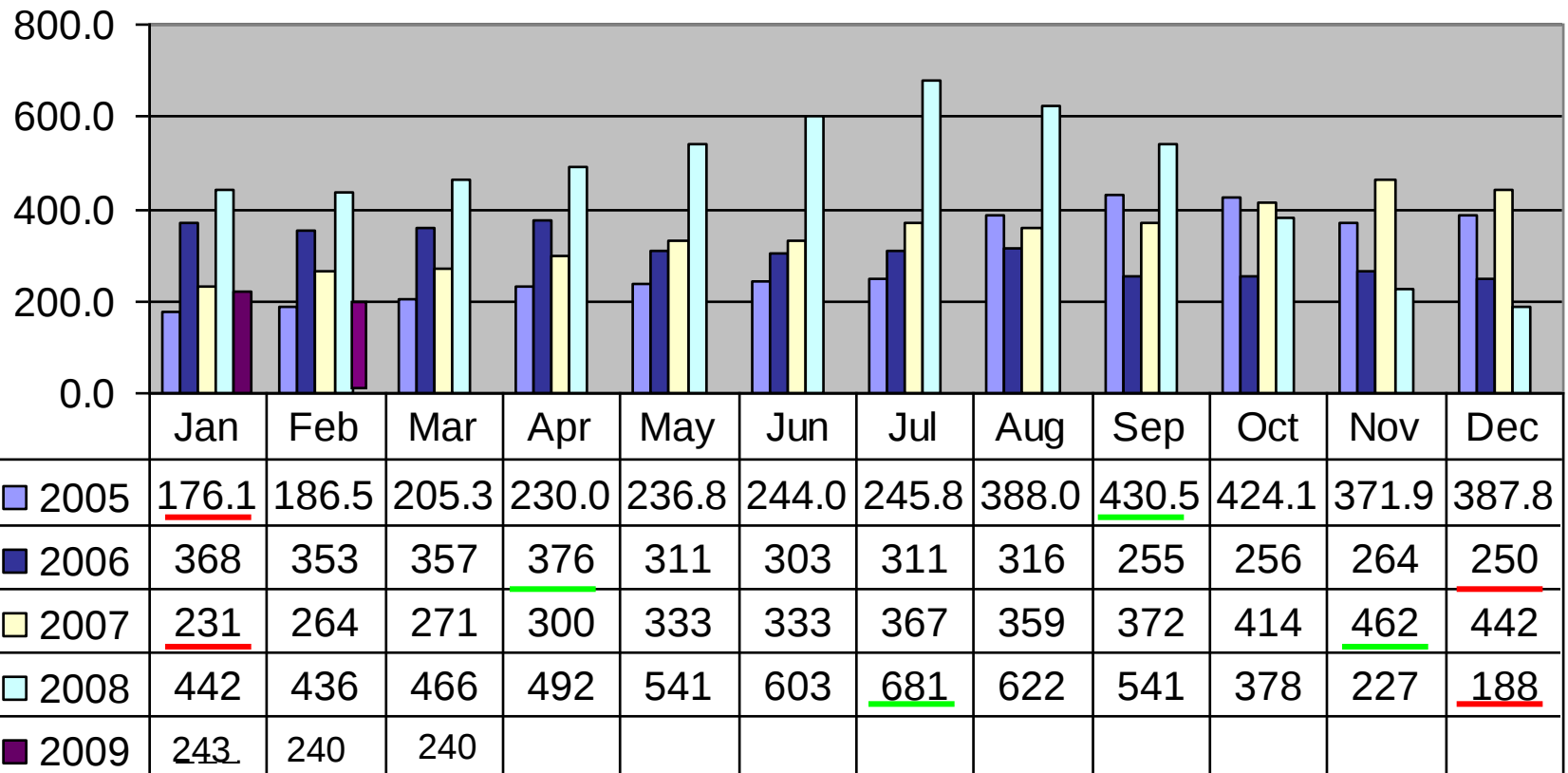
WTI (2005- 2009)



(OMAN + DUBAI) / 2
(2005- 2009)



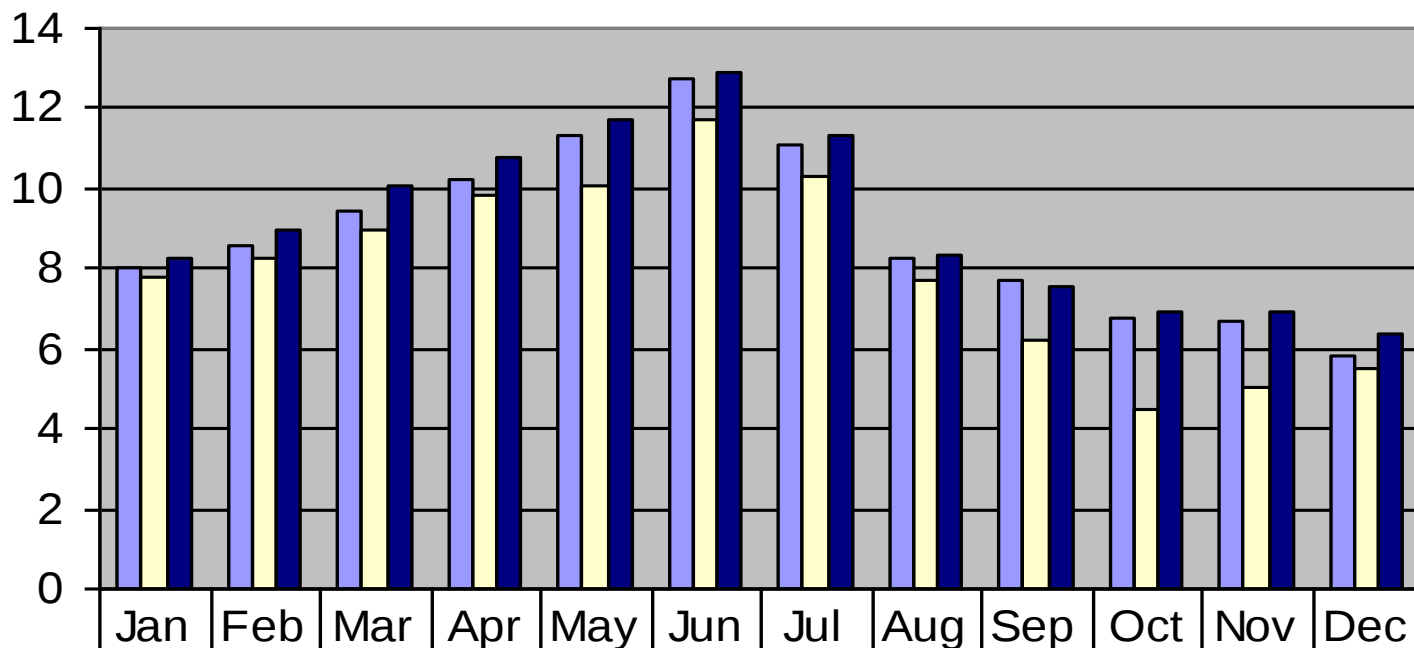
Fuel Oil Prices in USA (2005- 2009)



Natural Gas Prices in 2008

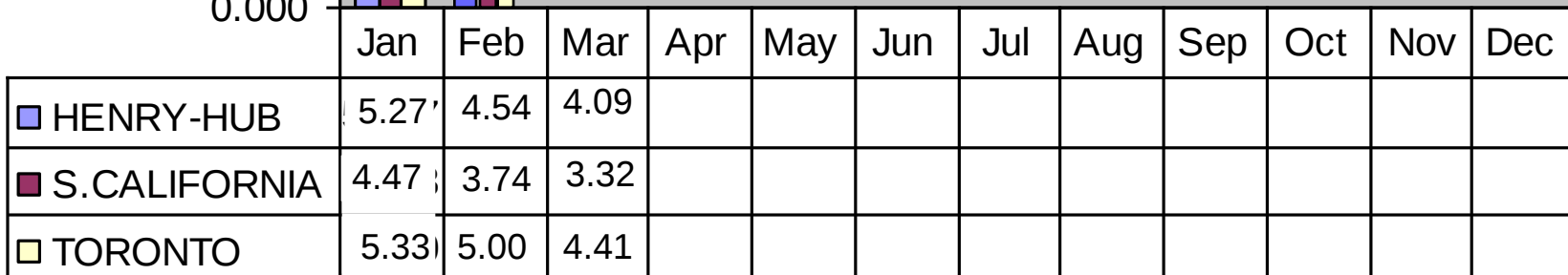
Henry-Hub, South California and Toronto

USD/MBTU



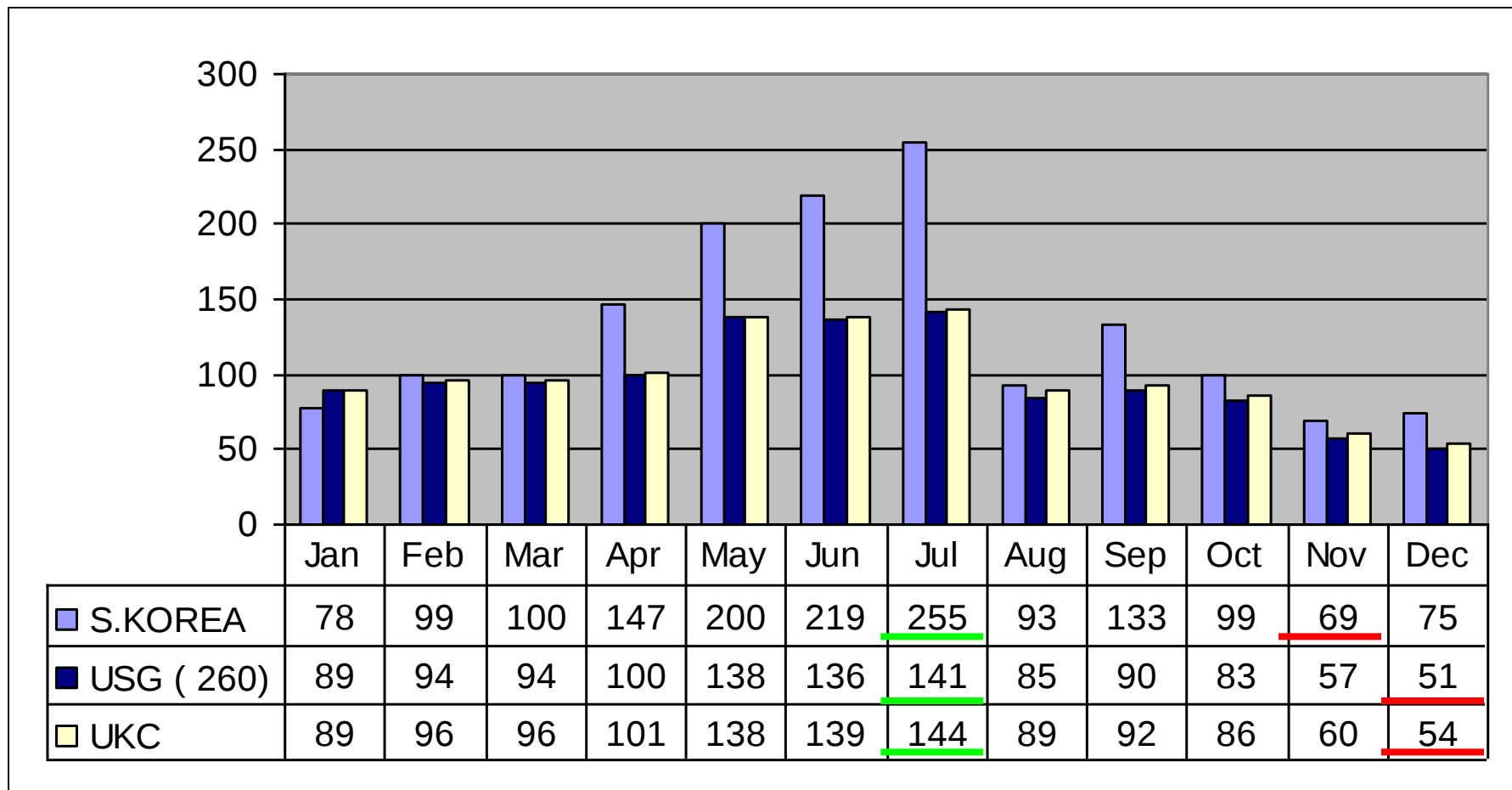
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
■ HENRY-HUB	8.01	8.56	9.43	10.2	11.3	12.7	11.1	8.28	7.7	6.76	6.72	5.85
■ S.CALIFORNIA	7.75	8.26	8.96	9.85	10	11.7	10.3	7.68	6.19	4.51	5.04	5.49
■ TORONTO	8.25	8.99	10.1	10.8	11.8	12.9	11.3	8.36	7.55	6.93	6.93	6.35

Henry-Hub, South California and Toronto



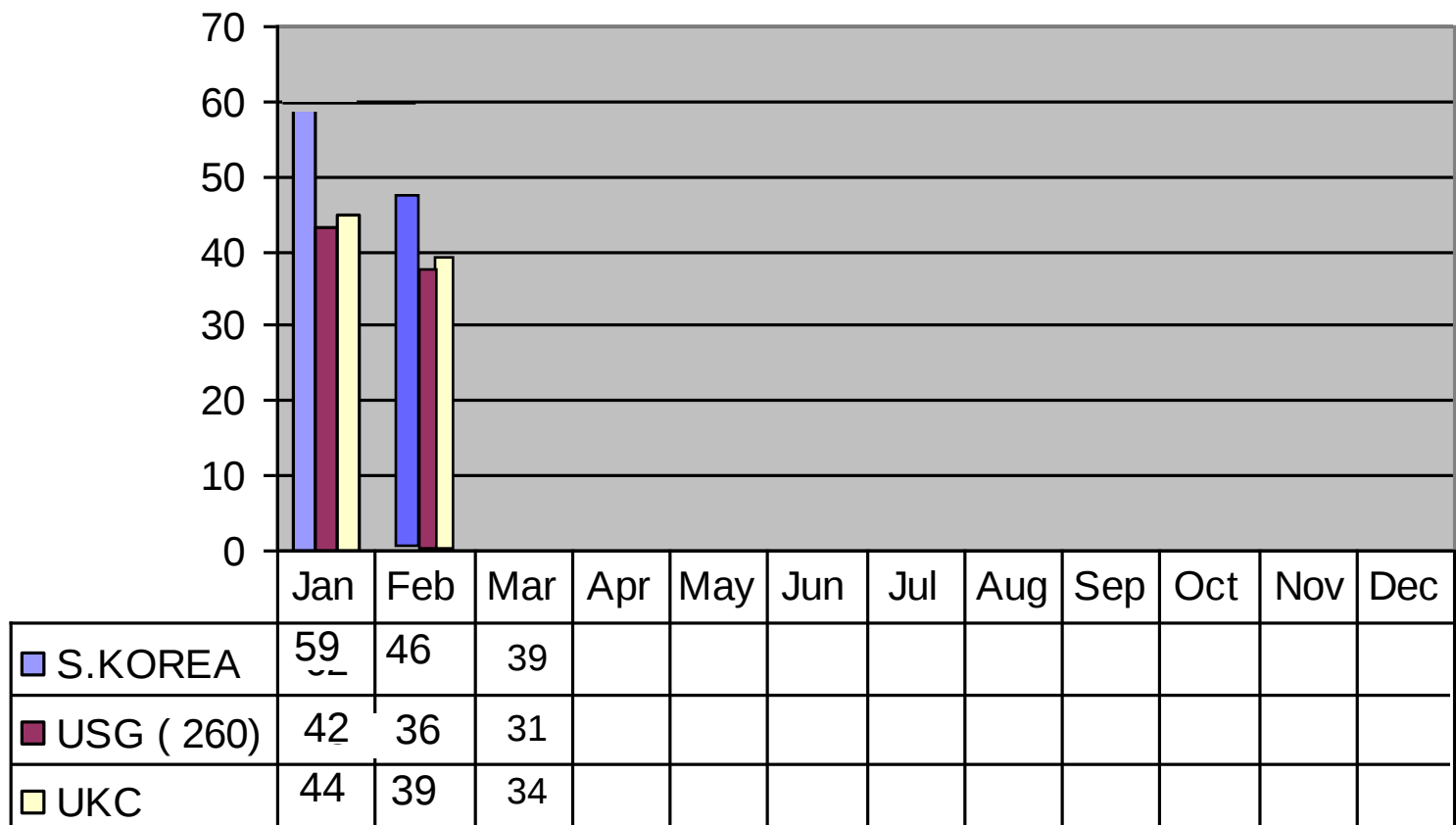
Tanker Rate in 2008

260 KT from PG to:

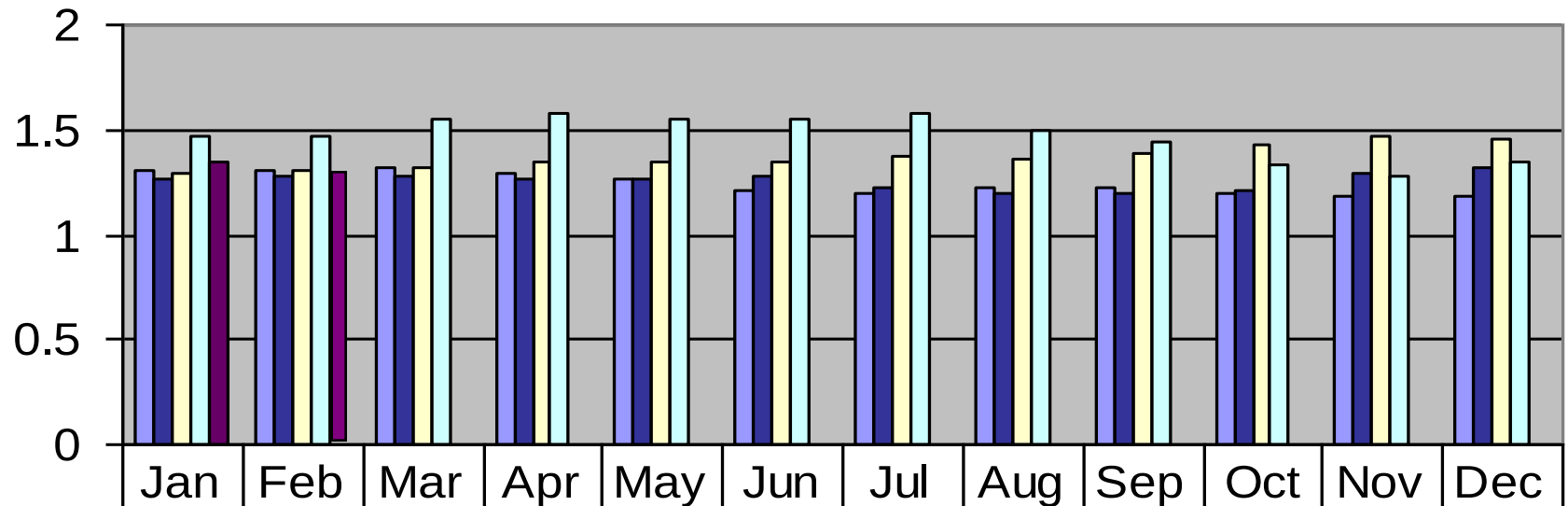


Tanker Rate in 2009

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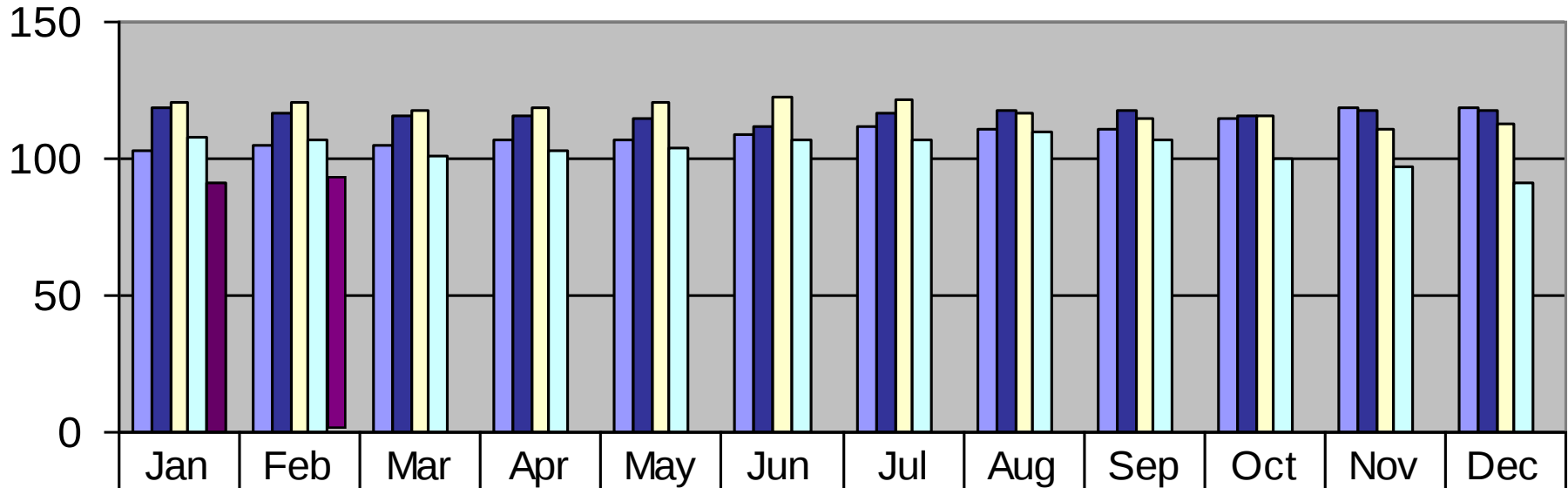


EUR / DLR(2005-2009)

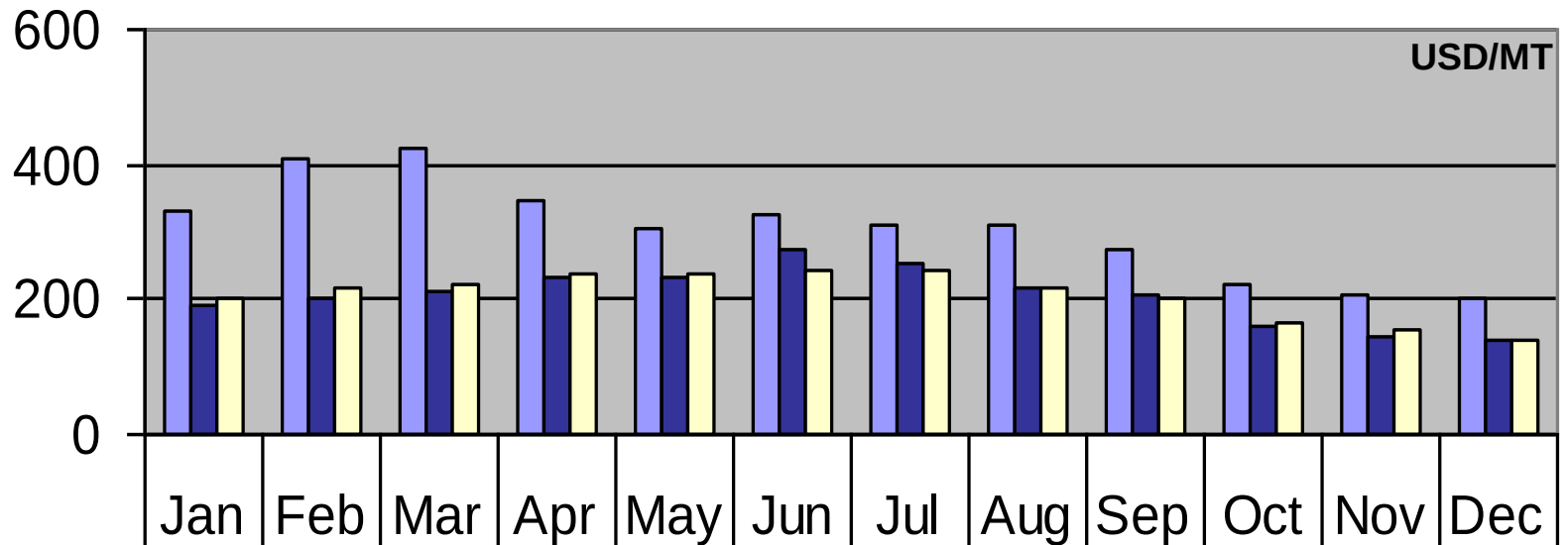


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005	1.31	1.3	1.32	1.29	1.27	1.22	1.2	1.23	1.23	1.2	1.18	1.19
2006	1.26	1.27	1.28	1.27	1.27	1.27	1.23	1.2	1.19	1.21	1.29	1.32
2007	1.3	1.31	1.32	1.35	1.35	1.34	1.37	1.36	1.39	1.42	1.47	1.46
2008	1.47	1.48	1.55	1.58	1.56	1.56	1.58	1.5	1.44	1.33	1.27	1.35
2009	1.32	1.28	1.30									

DLR / YEN(2005-2009)

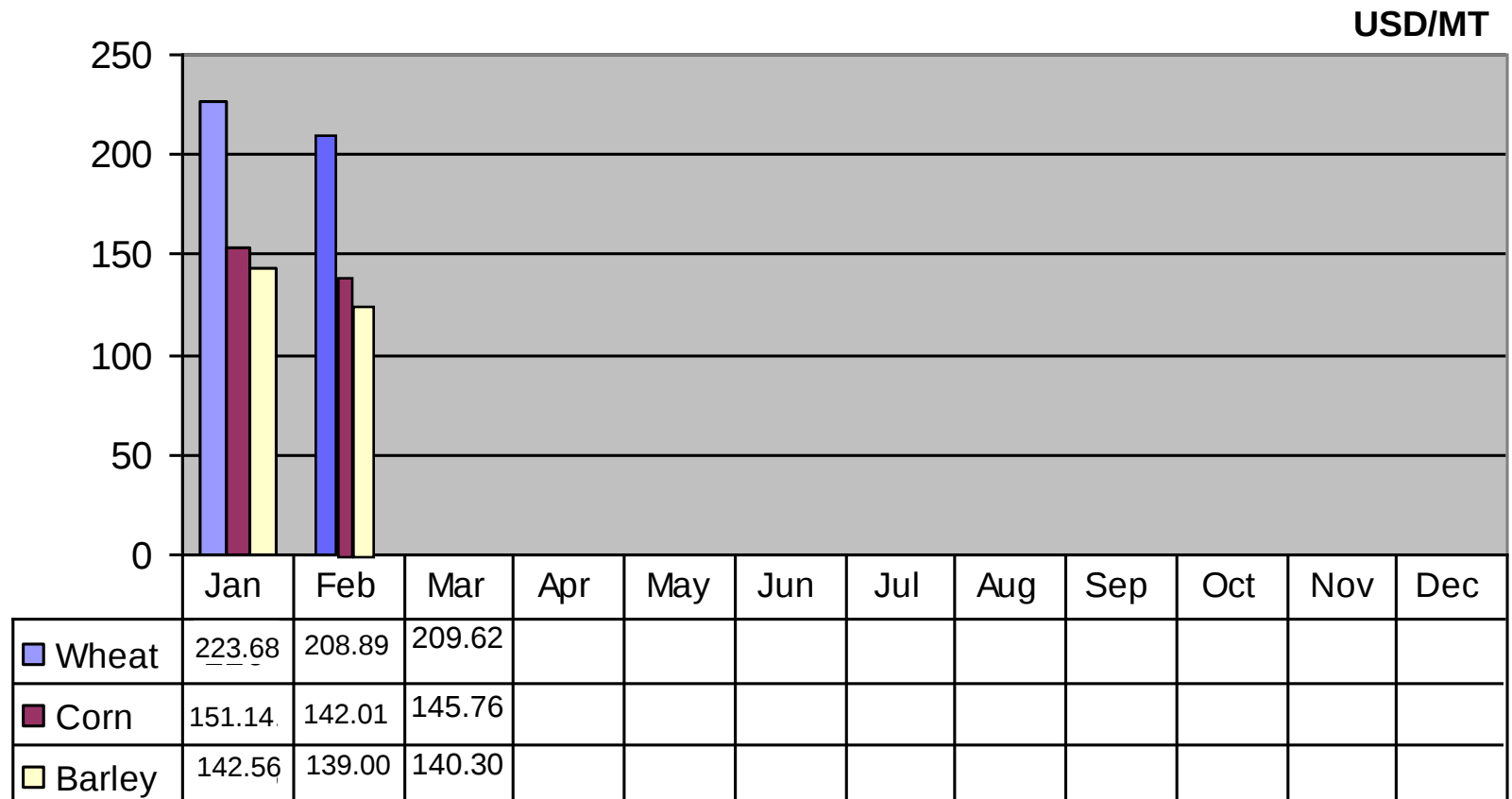
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Grain prices 2008

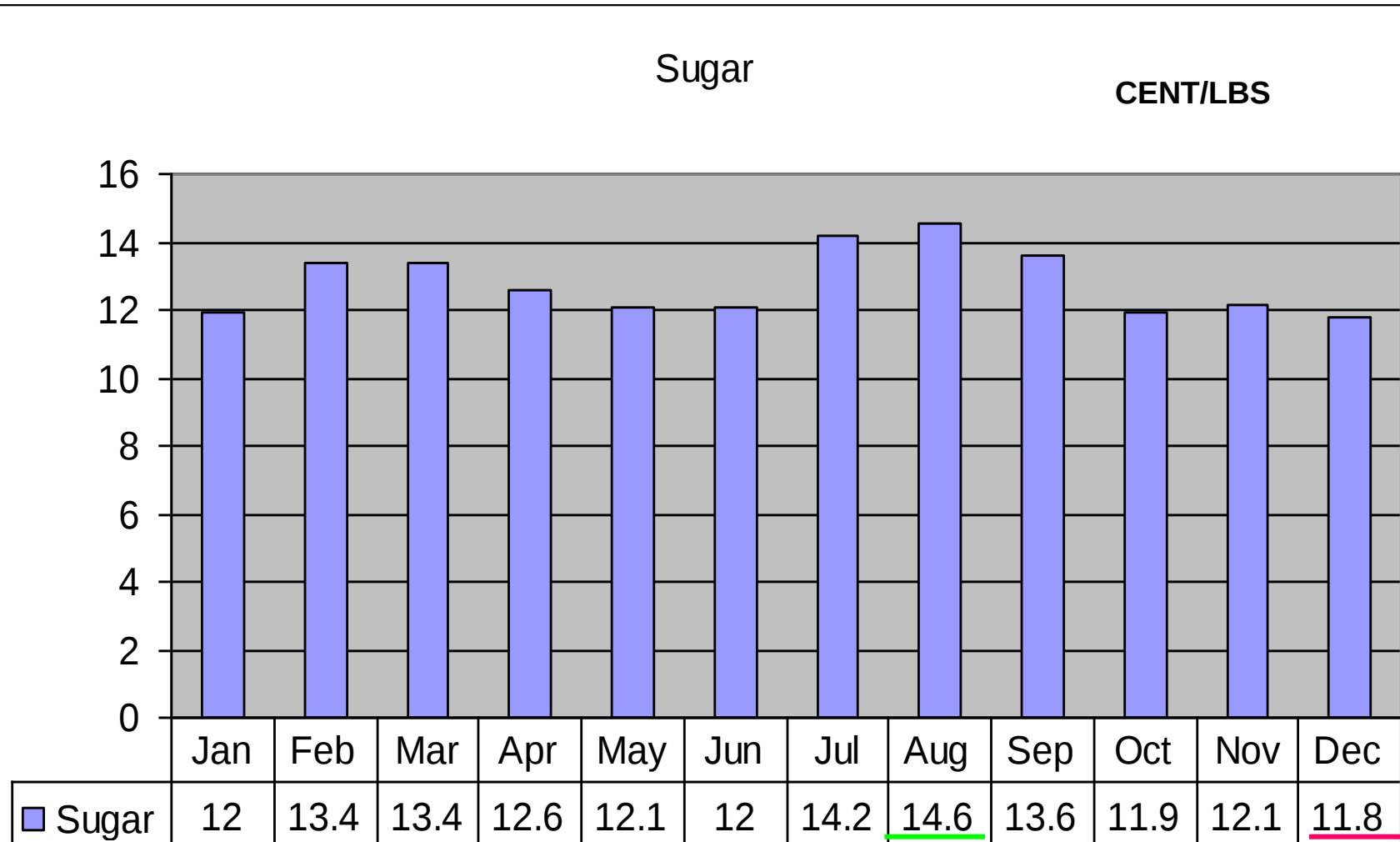


■ Wheat	333	409	426	345	306	325	308	312	276	221	208	202
■ Corn	189	200	213	232	234	275	253	215	209	160	146	139
■ Barley	199	215	222	239	236	245	243	215	200	168	158	138

Grain prices 2009



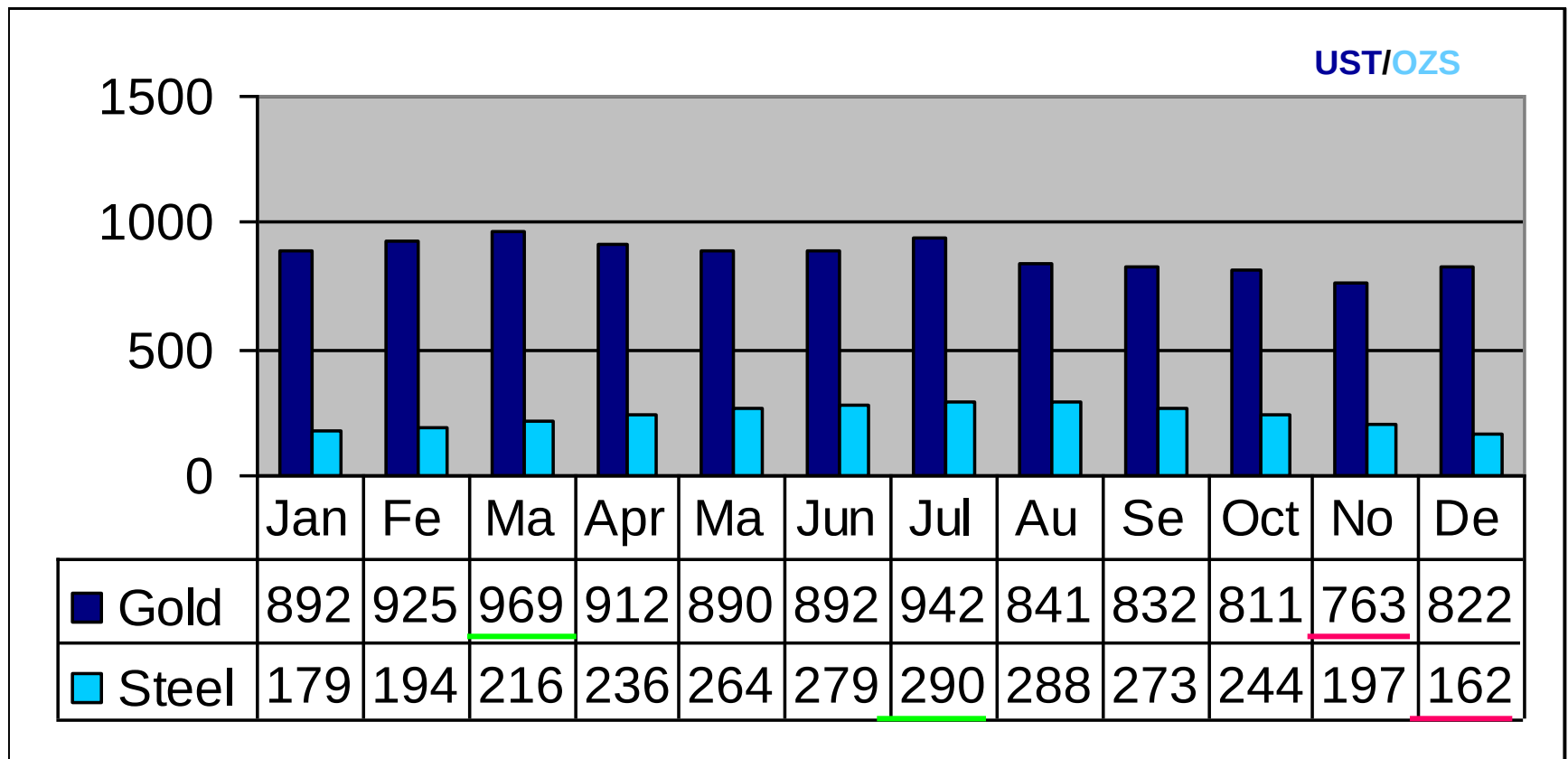
Sugar Prices 2008



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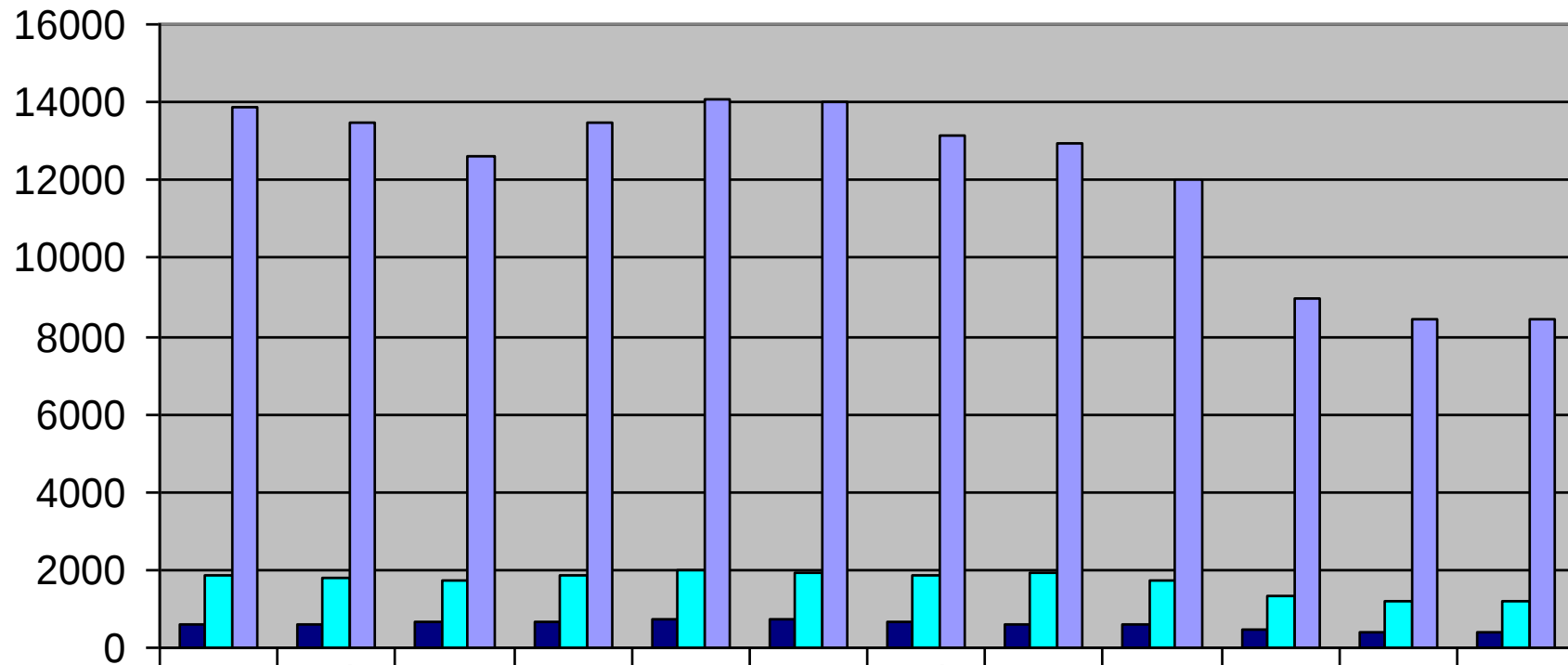
■ Sugar	12.51	13.25	13.42								
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Gold and Steel Prices 2008



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DOW-JONES & NASDAQ & NIKKIE (2008)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
■ DOW_JONES	628.9	626.1	634.9	688.4	728	735	678.7	625.4	582	437.3	428.5	417.6
■ NASDAQ	1884	1785	1748	1867	1990	1942	1829	1902	1714	1328	1200	1185
■ NIKKIE	13865	13504	12608	13448	14044	14039	13113	12963	12048	8971	8427	8428

GDP Growth 2002-2009

(%)

2002	2003	2004	2005	2006	2007	2008	2009
2.9	3.9	5.1	4.8	5.4	4.9	3.6	0.4

Oil Demand Trend 2002-2009

Mmb/d

2002	2003	2004	2005	2006	2007	2008	2009
77.8	79.4	82.5	83.9	84.9	85.9	85.9	85.2

OPEC Supply Trend 2002-2009

Mmb/d

2002	2003	2004	2005	2006	2007	2008	2009
26.2	28.3	30.6	31.6	31.4	31	31.9	29

*Investment Opportunities
in
Iranian Petroleum Industry*

Investment priorities in oil and gas upstream projects

➤ **Joint oil & gas fields with the neighbors**

➤ **Brown oil & gas fields:**

- **Production capacity maintenance**

- **Enhanced development**

- **Secondary oil recovery (gas &/ water injection)**

➤ **Green oil & gas fields**

NIOC Oil and Gas Investment Plans (2009-2014)

Buy Back oil projects	\$ 34.58 B
Buy Back gas projects & consumption optimization	\$ 47.92 B
Finance	\$ 18.40 B
Sub total	\$ 100.9 B
Internal financial sources (NIOC own investment)	\$ 130.77 B
Grand total	\$ 231.68 B

Development Plans of Oil and Gas

(2005 – 2024)(1)

Exploration:

- *Exploration of new oil fields : 500 million barrels/year*
- *Exploration of new gas fields : 150 BCM/year*
- * *exploration and development of 17 new blocks (12 onshore and 5 offshore)*

Production of Oil and Gas:

Onshore Fields:

Oil

- *Development of 28 oil fields*
- *Development of possible gas fields from new exploration activities (onshore)*

Gas

- *Development of 14 gas fields*
- *Development of gas formations of more than 10 oil fields*
- *Development of possible gas fields from new exploration activities (onshore)*

Development Plans of Oil and Gas (2005 – 2024)(2)

Production of Oil and Gas

Offshore Fields:

Oil

- ❖ *Development of 7 oil fields*
- ❖ *Development of possible oil fields from exploration blocks*
- ❖ *Development and gas injection in two oil field*

Gas

- ❖ *Development of 15 gas fields*
- ❖ *Development of at least 16 new standard phases of South Pars gas field*
- ❖ *Development of possible gas fields from exploration activities (offshore)*

Technological Challenges in Oil & Gas Upstream

- **Deep – water oil fields (e.g. Caspian Sea)**
- **Non- conventional oil fields (e.g. Ferdowsi oil field)**
- **Very heavy oil fields (e.g. Yadavaran)**
- **Transfer of new technologies**

Gas Export Projects by Pipeline (2005 – 2024) (1)

<i>Country</i>	<i>Max. Delivery (mmcm/d)</i>	<i>Start Year</i>
Turkey	27.4	2001
Armenia	4	2007
United Arab Emirates	12.3	-
Kuwait	8.6	2011
Oman	28	2011
Bahrain	28	2012

Gas Export Projects by Pipeline *(2009 - 2024) (2)*

<i>Country</i>	<i>Max. Delivery (mmcm/d)</i>	<i>Start Year</i>
Pakistan	30	2014
India	30	
Syria	2.3	2010
Europe	50	2010

Liquefied Natural Gas projects (2009-2024)

- *IRAN-LNG: Capacity 10.7 MMt/y(54 mmcm/d)*
 - *Persian-LNG: Capacity 16.2 MMt/y(78 mmcm/d)*
 - *Pars-LNG : Capacity 10 MMt/y (54 mmcm/d)*
 - *Chinese: Capacity 20 MMt/y(113 mmcm/d)*
 - *Malaysia: Capacity 10 MMt/y(57 mmcm/d)*
- Total: Capacity 66.9MMt/y(356mmcm/d)***

Conclusion

- **Ample of Oil and Gas Reserves in Iran**
- **Low Cost of Oil and Gas Production in Iran**
- **Long Experience of IOC,s and Reputable Service Companies in Iran**
- **No Risk for secured rate of return on investment**

Conclusion

- **Profitability for export of Materials, Facilities , Technical Services and Technologies to Oil and Gas Industry of Iran**
- **Decreasing Unemployment and Increasing Added Value in the Exporting Countries of Materials, Services and Technologies to Iran**
- **Assured Security of Oil and Gas Supply in the International Market for the Future through IOCs and NOCs Cooperation with NIOC in a Depoliticized Energy Environment and Free of any Unfair Sanction.**

Thank You