

Management's Discussion and Analysis (MD&A) and operating results for the three-month and six-month period ended June 30, 2009 compared with the same period of the year 2008

1. PTT and its subsidiaries' performance

International Monetary Fund (IMF) expected the global economy in the second quarter of 2009 (2Q/2009) to show a 2.0% expansion led by the emerging economies which have shown signs of recovery, especially, China economy which grew by 7.9% in 2Q/2009, compared with 6.1% in 1Q/2009. The US economy has also shown sign of upturn recovery. In addition, International Energy Agency (IEA) raised forecast for global oil demand in 2Q/2009 to 83.08 million barrel per day from the previous forecast of 82.58 million barrel per day.

For Thailand, The Bank of Thailand expected Thai economy to continue to contract by 5.4% in 2Q/2009, worse than an increase of 5.3% in 2Q/2008 but better than the contraction of 7.1% in 1Q/2009, driven by global economy upturns, thus reflected the less contraction in export sector. In addition, domestic consumption has also recovered resulted mainly from the government stimulus packages both Phase 1 and Phase 2. However, the negative factors to the Thai economy recovery are the economies contraction of major customers, the slow recovery of private expenditure as well as the severe drop of private investment reflecting on the increase in unemployment rate as well as the decline in household income. In addition, the political unrest and the spread of new influenza strains 2009 (A H1N1) also affected the deep decline in number of tourists.

As a result of the factors mentioned above, PTT and its subsidiaries' financial performance comparison of 2Q/2009 with 2Q/2008 and 1Q/2009 as well as comparison of 1H/2009 with 1H/2008 are as follows:

Unit: Million Baht

	2Q/2008	1Q/2009 (Reclassification)	2Q/2009	% Inc.(Dec.)		1H/2008	1H/2009	% Inc.(Dec.)
				YoY	QoQ			
Sales & services	589,451	303,509	387,056	(34.3%)	27.5%	1,082,559	690,565	(36.2%)
: Exploration and production	37,798	26,018	28,567	(24.4%)	9.8%	64,969	54,585	(16.0%)
: Natural gas ^{1/}	76,897	72,472	78,648	2.3%	8.5%	146,630	151,120	3.1%
: Oil ^{2/}	517,587	234,176	303,109	(41.4%)	29.4%	941,065	537,285	(42.9%)
: Petrochemical ^{3/}	10,554	6,783	7,952	(24.7%)	17.2%	19,400	14,735	(24.0%)
: Others ^{4/}	-	208	190	n.m.	(8.7%)	-	398	n.m.
: Coal ^{5/}	-	-	4,823	n.m.	n.m.	-	4,823	n.m.
: Elimination	(53,385)	(36,148)	(36,233)	32.1%	0.2%	(89,505)	(72,381)	19.1%
EBITDA	45,661	26,361	35,056	(23.2%)	33.0%	82,293	61,417	(25.4%)
: Exploration and production	28,915	18,069	20,375	(29.5%)	12.8%	48,799	38,444	(21.2%)
: Natural gas ^{1/}	16,070	5,594	9,215	(42.7%)	64.7%	29,572	14,809	(49.9%)
: Oil ^{2/}	972	2,753	4,121	324.0%	49.7%	4,450	6,874	54.5%
: Petrochemical ^{3/}	245	248	365	49.0%	47.2%	582	613	5.3%
: Others ^{4/}	(523)	(316)	(567)	(8.4%)	(79.4%)	(1,022)	(883)	13.6%
: Coal ^{5/}	-	-	1,515	n.m.	n.m.	-	1,515	n.m.
: Elimination	(18)	13	32	277.8%	146.2%	(88)	45	151.1%

	2Q/2008	1Q/2009 (Reclassification)	2Q/2009	% Inc.(Dec.)		1H/2008	1H/2009	% Inc.(Dec.)
				YoY	QoQ			
EBIT	37,617	17,244	24,578	(34.7%)	42.5%	67,666	41,822	(38.2%)
: Exploration and production	22,955	11,575	13,181	(42.6%)	13.9%	38,307	24,756	(35.4%)
: Natural gas ^{1/}	14,715	3,699	7,044	(52.1%)	90.4%	26,879	10,743	(60.0%)
: Oil ^{2/}	357	2,147	3,326	831.7%	54.9%	3,237	5,473	69.1%
: Petrochemical ^{3/}	209	209	325	55.5%	55.5%	510	534	4.7%
: Others ^{4/}	(601)	(398)	(653)	(8.7%)	(64.1%)	(1,179)	(1,051)	10.9%
: Coal ^{5/}	-	-	1,320	n.m.	n.m.	-	1,320	n.m.
: Elimination	(18)	12	35	294.4%	191.7%	(88)	47	153.4%
Net income	29,885	7,449	19,895	(33.4%)	167.1%	56,017	27,344	(51.2%)
Earnings per share (Baht/share)^{6/}	10.60	2.64	7.04	(33.6%)	166.7%	19.88	9.68	(51.3%)

- Note: 1/ Including the proportionate consolidation of Trans Thai-Malaysia (Thailand) Co., Ltd.(TTM (T)), Trans Thai-Malaysia (Malaysia) Co., Ltd. (TTM (M)) and District Cooling System and Power Plant Co., Ltd. (DCAP) and consolidation of PTT Natural Gas Distribution Co., Ltd. (PTT NGD) and PTT LNG Co., Ltd (PTT LNG), Combined Heat and Power Producing Company Limited (CHPP) and PTT International Company Limited (PTT INTER) for the investment in East Mediterranean Gas (S.A.E.) (EMG) in Egypt at 25% shareholding (EMG conducts natural gas business including natural gas pipeline transmission and procurement of natural gas from Egypt to sell to power plants and industrial customers in Israel).
- 2/ Including the consolidation of oil business, international trading business and the consolidation of PTT International Trading Pte., Ltd. (PTTT), PTT (Cambodia) Co., Ltd. (PTTCL), Retail Business Alliance Co., Ltd. (RBA), Subic Bay Energy Co., Ltd. (SBECL), PTT Retail Business Co., Ltd. (PTTRB) and PTT Green Energy Pte. Ltd. (PTTGE).
- 3/ Including the consolidation of PTT Polymer Marketing Co., Ltd. (PTTPM), PTT Polymer Logistics Co., Ltd. (PTTPL) and proportionate consolidation of PTT Asahi Chemical Co., Ltd. (PTTAC), HMC Polymers Co., Ltd. (HMC) while consolidated PTT Tank Terminal Co., Ltd. (PTT TANK) since March 6, 2009.
- 4/ Including the consolidation of Energy Complex Co., Ltd. (EnCo) while consolidated Business Services Alliance Co., Ltd. (BSA) since December 12, 2008.
- 5/ Including PTT Asia Pacific Mining Pty Ltd. (PTTAPM) (formerly Straits Bulk and Industrial Pty Ltd.) which Lints Limited, Hong Kong (Lints), a subsidiary of PTT INTER, has 60% shareholding. PTTAPM is a holding company which has interests in many coal companies/assets.
- 6/ Basic earnings per share is calculated by dividing net income attributable to ordinary shareholders by the weighted average number of ordinary shares which are held by third parties during the period.

Second quarter of 2009 compared with second quarter of 2008

In 2Q/2009, Sales and services of PTT and its subsidiaries was Baht 387,056 million, decreased by Baht 202,394 million or 34.3% from 2Q/2008. Earning before finance costs, income taxes, depreciation and amortization including other non-operating income and expense (EBITDA) was Baht 35,056 million, decreased by Baht 10,605 million or 23.2% from 2Q/2008. This was due mainly to the decrease in sales prices in relation to the decrease in global market prices. In addition, share of net income from investments in associates also decreased from Baht 13,355 million in 2Q/2008 to Baht 8,025 million in 2Q/2009. This was resulted mainly from the decrease in the Market Gross Refining Margin (GRM) and Stock Gain of refining associates and the lower product-to-feed (P2F) margins of petrochemical associates, especially the MEG's P2F margin due to the new additional supply from Saudi Arabia to the market starting from mid of 2008. However, there was gain on foreign exchange amounting to Baht 2,840 million in

2Q/2009 while there was loss on foreign exchange amounting to Baht 2,962 million in 2Q/2008. As a result, the net income of PTT and its subsidiaries was Baht 19,895 million, decreased from 2Q/2008 by Baht 9,989 million or 33.4%.

Second quarter of 2009 compared with first quarter of 2009

In 2Q/2009, Sales and services was Baht 387,056 million, increased by Baht 83,548 million or 27.5% from 1Q/2009. EBITDA was Baht 35,056 million, increased by Baht 8,696 million or 33.0% from 1Q/2009. This was due mainly to the increase in sales prices in relation to the increase in global market prices and the increase in sales volume as the Thai economy has shown sign of recovery. In addition, share of net income from investments in associates also increased from Baht 2,407 million in 1Q/2009 to Baht 8,025 million in 2Q/2009. This was resulted mainly from the increase in refining associates' GRM from Stock Gain in 2Q/2009 while there was Stock Loss in 1Q/2009 despite the lower Market GRM in 2Q/2009 when compared to 1Q/2009. P2F margin of olefins and aromatics petrochemical associates was also increased, especially HDPE which had a high P2F margin driven by the higher demand. P2F margin of Paraxylene and benzene also increased due to the increase demand from China, the major market of aromatics products, and the shortage of supply. In addition, there was gain on foreign exchange amounting to Baht 2,840 million in 2Q/2009 while there was loss on foreign exchange amounting to Baht 615 million in 1Q/2009. As a result, PTT and its subsidiaries had net income of Baht 19,895 million, increased from 1Q/2009 by Baht 12,446 million or 167.1%.

First half of 2009 compared with first half of 2008

Sales and services in 1H/2009 was Baht 690,565 million, decreased by Baht 391,994 million or 36.2% from 1H/2008. EBITDA was Baht 61,417 million, decreased by Baht 20,877 million or 25.4% from 1H/2008. This was due mainly to the decrease in sales prices in relation to the decrease in global market prices. In addition, share of net income from investments in associates also decreased by Baht 10,661 million or 50.5% from Baht 21,093 million in 1H/2008 to Baht 10,432 million in 1H/2009. This was resulted mainly from the decrease in both Market GRM and Stock Gain of refining associates and the lower P2F margins of olefins petrochemical associates especially the MEG margin which had a significantly decrease due to the new supply from Saudi Arabia. However, gain on foreign exchange in 1H/2009 increased by Baht 998 million. As a result, the net income of PTT and its subsidiaries in 1H/2009 was Baht 27,344 million, decreased from 1H/2008 by Baht 28,673 million or 51.2%.

□ Upstream Petroleum and Natural Gas Group

- **Petroleum Exploration and Production Business : PTT Exploration and Production Public Co., Ltd.(PTTEP)**

Second quarter of 2009 compared with second quarter of 2008

In 2Q/2009, sales revenue of PTTEP, a subsidiary of PTT, was Baht 28,567 million, decreased by Baht 9,231 million or 24.4% from the same period of last year due mainly to the decrease in average selling price by 31.4% from US\$ 54.23 per barrel of oil equivalent in 2Q/2008 to US\$ 37.21 per barrel of oil equivalent in 2Q/2009 in relation to the lower global oil price despite the increase in sales volume from 232,634 barrels of oil equivalent per day (BOED) in 2Q/2008 to 232,957 BOED in 2Q/2009. The higher sales volume mainly came from natural gas and condensate from the Arthit project as well as natural gas and crude oil from Vietnam 9-2 Project and from increased sales volume of the projects which started sales in this quarter e.g. crude oil sales volume of PTTEP Australasia project and natural gas sales volume of Arthit North project. However, there were decrease in natural gas and condensate sales volume from the Bongkot and Pailin projects in 2Q/2009.

EBITDA in 2Q/2009 was Baht 20,375 million, decreased by Baht 8,540 million or 29.5% from 2Q/2008 due to the decrease in average selling price as mentioned. In addition, the exploration expenses in this period was Baht 1,051 million, increased by Baht 300 million due to the write-off of dry wells under Oman 58 project (Wassa-1) and Sidi Abd El Rahman Offshore project (SAER Offshore-1X) in Egypt, while in 2Q/2008, there was the write off cost under Algeria 433a&416b and B13/38 projects which was lower than write off cost in 2Q/2009. However, petroleum royalties and remuneration in 2Q/2009 decreased resulting from decreased sales revenue of Bongkot, S1, B8/32&9A, and Pailin projects.

EBIT in this quarter was Baht 13,181 million, decreased by Baht 9,774 million or 42.6% from 2Q/2008 due to the higher depreciation and amortization, mainly from the Arthit project as a result of its additional completed oil and gas properties and increased production volume as well as from the Vietnam 9-2 and PTTEP Australasia projects due to the increased production volume, and from the Arthit North project which started production in this quarter. However, the lower depreciation from the Bongkot project was a result of decreased production volume.

Second quarter of 2009 compared with first quarter of 2009

Sales revenue in 2Q/2009 increased by Baht 2,549 million or 9.8%. This was due mainly to the higher average selling price by 0.5% from US\$ 37.04 per barrel of oil equivalent in 1Q/2009 to US\$ 37.21 per barrel of oil equivalent in 2Q/2009 in relation to the increased global oil price. In addition, sales volume also increased from 217,194 BOED in 1Q/2009 to 232,957 BOED in 2Q/2009. The higher sales volume mainly came from the projects which started sales in this quarter e.g. crude oil sales volume from the PTTEP Australasia project and natural gas sales volume from Arthit North project. In addition, there was increased natural gas and condensate sales volume from Pailin project, increased natural gas sales volume from Yadana Project, and increased natural gas and crude oil sales volume from B8/32&9A Project.

EBITDA in 2Q/2009 increased by Baht 2,306 million or 12.8% from the previous quarter, due to the increase in sales volume and an average selling price as mentioned above. In addition, the exploration expenses in this period decreased by Baht 893 million while there were higher write-off expenses in the previous quarter. Petroleum royalties and remuneration also increased resulting from increased sales revenue. Moreover, operating expenses in 2Q/2009 increased, mainly due to the operating expenses and well repair and maintenance cost of the PTTEP Australasia project and maintenance cost of Bongkot Project as well as an increase in operating and maintenance cost of the Arthit project.

EBIT in this quarter increased by Baht 1,606 million or 13.9% from 1Q/2009 due mainly to the increase in EBITDA as mention above while depreciation and amortization increased by Baht 700 million, mainly from the Arthit project as a result of its additional completed oil and gas properties as well as from Arthit North project which started production in this quarter.

First half of 2009 compared with first half of 2008

Sales revenue in 1H/2009 was Baht 54,585 million, decreased by Baht 10,384 million or 16.0% from 1H/2008 due mainly to the lower average selling price by 28.0% from US\$ 51.60 per barrel of oil equivalent in 1H/2008 to US\$ 37.13 per barrel of oil equivalent in 1H/2009 in relation to the decreased global oil price despite the higher sales volume from 207,533 BOED in 1H/2008 to 225,119 BOED in 1H/2009. The higher sales volume mainly came from natural gas and condensate sales volume from the Arthit project as well as natural gas and crude oil sales volume from Vietnam 9-2 Project which started production last year and the increased crude oil sales volume from PTTEP Australasia project and natural gas sales volume from Arthit North project which started production this year whereas natural gas and

condensate sales volume of Bongkot and Pailin projects as well as natural gas sales volume of Yadana product decreased.

EBITDA and EBIT in 1H/2009 decreased by Baht 10,355 million and Baht 13,551 million, respectively due to the decrease in average selling price as mentioned. In addition, the depreciation and amortization in this period increased by Baht 3,195 million mainly from depreciation of the Arthit project as a result of its additional completed oil and gas properties and increased production volume, as well as from the Vietnam 9-2 project due to increased production volume, however, the lower depreciation from the Bongkot project was a result of the decreased production volume. Moreover, the exploration expenses was Baht 2,995 million, increased by Baht 1,285 million in this period due to the write-off of dry wells under Australia AC/P36 project, Oman 58 and Sidi Abd El Rahman Offshore projects in Egypt while the Geology and Geophysics study costs from L21, 28 & 29/48 project, Oman 44 project and projects in Myanmar and new Zealand decreased in 1H/2009. The operating expenses also increased due mainly to the operating expenses and well repair and maintenance costs of the PTTEP Australasia project as well as increased operating expenses of the Arthit project as a result of its increased operating activities.

- **Natural Gas Business Group**

Second quarter of 2009 compared with second quarter of 2008

Sales revenue in 2Q/2009 was Baht 78,648 million, increased from Baht 76,897 million in 2Q/2008 by Baht 1,751 million or 2.3% due to the followings :

- The increase in both average natural gas selling price and average natural gas sales volume (including natural gasoline derived from Dew Point Control Units) by 52 million cubic feet per day (mmcf) or 1.5% from 3,554 mmcf in 2Q/2008 to 3,606 mmcf in 2Q/2009 (calculated at heating value 1,000 BTU per cubic feet) which resulted from the higher gas demand from all customer groups except the Independent Power Producers (IPPs) and the Small Power Producers (SPPs) due to scheduled shut down.

- The GSPs' products sales volume decreased by 1.9% from 1,100,668 tons in 2Q/2008 to 1,080,152 tons in 2Q/2009 (excluded LPG purchased from petrochemical producers for resale in an approximate volume of 42,163 tons in 2Q/2008 and 19,917 tons in 2Q/2009). This resulted from the decrease in sales volume of NGL and LPG. The average utilization rate of GSPs' decreased from 96.93% in 2Q/2008 to 93.4% in 2Q/2009.

- The GSPs' product prices decreased in accordance with the decreased global petrochemical product prices being used for GSP's product prices calculation. The details of reference petrochemical prices for calculation of GSP's products sales prices are shown in the below table.

EBITDA of Natural Gas Business in 2Q/2009 decreased by Baht 6,855 million or 42.7% from 2Q/2008 due mainly to the decrease in GSP's sales prices as mentioned. The lower EBITDA also resulted from the decrease in natural gas sales price to industrial customers in relation to the decreased fuel oil price despite the higher natural gas cost. In addition, PTT shouldered a higher loss from NGV sales caused by the higher sales volume at loss of approximately Baht 5-6 per kilogram since the government has controlled the retail price at Baht 8.50 per kilogram.

EBIT in 2Q/2009 was Baht 7,044 million, decreased by Baht 7,671 million or 52.1% due to the decrease in EBITDA and the increase in depreciation due mainly to the higher depreciation from NGV service stations and the gas transmission pipeline from JDA to Arthit gas field.

Second quarter of 2009 compared with first quarter of 2009

Sales revenue in 2Q/2009 was Baht 78,648 million, increased from Baht 72,472 million in 1Q/2009 by Baht 6,176 million or 8.5% due to the followings :

- The considerably increase in average natural gas sales volume (including natural gasoline derived from Dew Point Control Units) by 326 mmcf/d or 9.9% from 3,280 mmcf/d in 1Q/2009 to 3,606 mmcf/d in 2Q/2009 due to the higher gas demand from all customers although the average natural gas selling price to all customers decreased.

- The higher GSPs' products selling price in relation to the increased global petrochemical product prices. GSPs' products sales volume also increased by 4.9% from 1,029,677 tons in 1Q/2009 to 1,080,152 tons in 2Q/2009 (excluded LPG purchased from petrochemical producers for resale in an approximate volume of 45,792 tons in 1Q/2009 and 19,917 tons in 2Q/2009) due to the increase in NGL and Ethane sales volume. The average utilization rate of GSP's slightly decreased from 94.7% in 1Q/2009 to 93.4% in 2Q/2009.

EBITDA of Natural Gas Business in 2Q/2009 increased by Baht 3,621 million or 64.7% due mainly to the better performance of GSPs caused by the increase in selling prices, the decrease in natural gas price which is used as feedstock for GSP's and the slightly increase in sales volume of GSPs. In addition, the transmission pipeline performance also increased due to the higher natural gas sales volume by 9.9% and the receipt of natural gas transmission pipeline tariff adjustment, being approved by the Energy Regulatory Commission, by Baht 2.0218 per MMBTU starting from April 1, 2009. EBIT in 2Q/2009 increased by Baht 3,345 million due to the increase in EBITDA and the increase in depreciation by Baht 1,290 million or 57% from NGV service stations and gas transmission pipeline from JDA to Arthit gas field.

First half of 2009 compared with first half of 2008

Sales revenue increased by Baht 4,490 million or 3.1% from Baht 146,630 million in 1H/2008 to Baht 151,120 in 1H/2009 due to the followings :

- The increase in average natural gas selling price, mainly to the power producers and GSPs, although the average natural gas sales volume (including natural gasoline derived from Dew Point Control Units) slightly decreased by 7 mmcf/d or 0.2% from 3,450 mmcf/d in 1H/2008 to 3,443 mmcf/d in 1H/2009 resulted from the decrease in sales volume to IPPs due to the shutdown of Yadana gas field for the installation of Compressor in early 2009 and SPPs.

- The significantly decrease in GSPs' products selling price in accordance with the decreased global petrochemical prices and the decrease in sales volume due to the slowdown of global economy. The details of reference products prices for calculation of GSP's products sales prices are shown in the below table. In addition, the GSPs' products sales volume also decreased by 0.9% from 2,218,859 tons in 1H/2008 to 2,109,829 tons in 1H/2009 (excluded LPG purchased from petrochemical producers for resale in an approximate volume of 97,765 tons in 1H/2008 and 65,708 tons in 1H/2009) in all products except propane due to the higher demand from PTTCH, the major customer. The utilization rate of GSPs decreased from 95.9% in 1H/2008 to 94.0% in 1H/2009.

The details of all products sales volume from gas separation plants are as follows:

Unit : Tons	2Q/2008	1Q/2009	2Q/2009	% Inc.(Dec.)		1H/2008	1H/2009	% Inc.(Dec.)
				YoY	QoQ			
LPG	649,085	590,928	605,277	(6.7%)	2.4%	1,230,599	1,196,205	(2.8%)
Ethane	265,638	245,222	274,931	3.5%	12.1%	530,959	520,153	(2.0%)
Propane	38,583	69,446	64,955	68.4%	(6.5%)	87,686	134,401	53.3%
NGL	147,362	124,081	134,989	(8.4%)	8.8%	279,615	259,070	(7.4%)
Total	1,100,668	1,029,677	1,080,153	(1.9%)	4.9%	2,128,859	2,109,829	(0.9%)

The details of reference products prices for calculation of gas separation plants' products sales prices are as follows:

Unit : \$/Ton	2Q/2008	1Q/2009	2Q/2009	% Inc.(Dec.)		1H/2008	1H/2009	% Inc.(Dec.)
				YoY	QoQ			
LPG ^{1/}	887	448	405	(52.7%)	(9.6%)	845	426	(49.5%)
Ethylene ^{2/}	1,385	627	743	(46.3%)	18.5%	1,311	685	(47.7%)
Propylene ^{2/}	1,522	672	797	(47.6%)	18.6%	1,408	734	(47.9%)
High Density Polyethylene ^{2/}	1,679	934	1,144	(31.9%)	22.5%	1,643	1,039	(36.8%)
Polypropylene ^{2/}	1,738	887	1,116	(35.8%)	25.8%	1,624	1,001	(38.4%)
Naphtha ^{3/}	948	375	470	(50.4%)	25.3%	871	423	(51.5%)

Note: 1/ Contract price (CP) However, domestic LPG price at the refinery is fixed at 10.996 Baht/kg. which is still controlled by government with the Board of Directors of Energy Policy.

2/ South East Asia Spot Price

3/ MOP Singapore (MOP'S)

EBITDA of Natural Gas Business in 1H/2009 decreased by Baht 14,763 million or 49.9% due mainly to the decrease in lower performance of GSPs caused by the decrease in selling prices in relation to the declined reference petrochemical product prices and the increased natural gas cost. Contribution from natural gas sales also decreased due mainly to the decrease in natural gas selling price to industrial customers in relation to the lower fuel oil price. Moreover, PTT shouldered a higher loss from higher NGV sales volume. However, the transmission pipeline performance improved slightly due to the natural gas transmission pipeline tariff adjustment of Baht 2.0218 per MMBTU according to the Energy Regulatory Commission's approval starting from April 1, 2009. EBIT in 1H/2009 decreased due to the decrease in EBITDA and the increase in depreciation from NGV service stations and gas transmission pipeline from JDA to Arthit gas field.

□ **Downstream Petroleum Business Group**

• **Oil Business Group and International Trading Business Group**

Second quarter of 2009 compared with second quarter of 2008

Sales revenue in 2Q/2009 decreased by Baht 214,478 million or 41.4% due to the decrease in average sales prices (the average Dubai crude oil price decreased by 49.1% from US\$ 116.5 per barrel in 2Q/2008 to US\$ 59.3 per barrel in 2Q/2009) although sales volume increased by 1,108 million liters or 6.0% from 18,490 million liters or equivalent to 1,278,051 barrels per day in 2Q/2008 to 19,598 million liters or equivalent to 1,354,651 barrels per day in 2Q/2009, mainly from the increased sales volume of crude oil and condensate under International Trading Business while sales volume of diesel, jet fuel and fuel oil under Oil Business Group decreased.

EBITDA in 2Q/2009 increased by Baht 3,149 million or 324% due mainly to the increase in the average gross margin per unit while margin from crude oil and condensate sales of International Trading Business decreased in relation to the decrease in global crude oil price. EBIT in 2Q/2009 increased by Baht 2,969 million due to the increase in EBITDA while depreciation also increased due to the transfer of the Construction in progress of gas stations and depot to assets.

Second quarter of 2009 compared with first quarter of 2009

Sales revenue in 2Q/2009 increased by Baht 68,927 million or 29.4% due to the increase in both sales volume and sales prices. The average Dubai crude oil price increased by 34.3% from US\$ 44.1 per barrel in 1Q/2009 to US\$ 59.3 per barrel in 2Q/2009 while sales volume increased by 1,165 million liters or 6.3% from 18,433 million liters or equivalent to 1,288,238 barrels per day in 1Q/2009 to 19,598 million liters or equivalent to 1,354,651 barrels per day in 2Q/2009, mainly from the increase in sales volume of crude oil and condensate under International Trading Business. For Oil Business Group, sales volume decreased in all kind of products except LPG.

EBITDA in 2Q/2009 increased by Baht 1,368 million or 49.7% due to the increase in average gross margin per unit which partly resulted from Stock Gain. However, margin from crude oil and condensate sales of International Trading Business decreased because of the adjustment of sales price structure. EBIT in 2Q/2009 increased Baht 1,179 million due to the increase in EBITDA while depreciation also increased due to the transfer of the Construction in progress of gas stations and depot to assets.

First half of 2009 compared with first half of 2008

Sales revenue in 1H/2009 decreased by Baht 403,780 million or 42.9% due to the decrease in average sales prices in relation to the significantly decrease in world market price. The average Dubai crude oil price was US\$ 51.1 per barrel in 1H/2009, decreased by 50.8% from US\$ 103.8 per barrel in 1H/2008 although sales volume increased by 343 million liters or 0.9% from 37,688 million liters or equivalent to 1,302,485 barrels per day in 1H/2008 to 38,031 million liters or equivalent to 1,321,612 barrels per day in 1H/2009, mainly from the increase in sales volume of crude oil, condensate and refined products under International Trading Business while sales volume under Oil Business Group decreased.

EBITDA in 1H/2009 increased by Baht 2,424 million due mainly to the increase in average gross margin per unit. For International Trading Business, earnings decreased due mainly to the lower margin from crude oil and condensate sales in relation to the decrease in global crude oil price. EBIT in 1H/2009 increased by Baht 2,236 million due to the increase in EBITDA while depreciation slightly increased.

- **Petrochemical Business Group**

Second quarter of 2009 compared with second quarter of 2008

In 2Q/2009, sales revenue of petrochemical subsidiaries and jointly controlled entities was Baht 7,952 million decreased from 2Q/2008 by Baht 2,602 million or 24.7% due mainly to the lower average selling price of PTTPM, PTT's subsidiary in polymer marketing business, by 27.6% despite sales volume increased by 2.2%.

EBITDA in 2Q/2009 increased by Baht 120 million or 49.0% from Baht 245 million in 2Q/2008 to Baht 365 million in 2Q/2009 while EBIT increased by Baht 116 million or 55.5% from Baht 209 million in 2Q/2008 to Baht 325 million in 2Q/2009.

Second quarter of 2009 compared with first quarter of 2009

In 2Q/2009, sales revenue was Baht 7,952 million, increased from 1Q/2009 by Baht 1,169 million or 17.2% due mainly to the higher average selling price of PTTPM by 20.7% despite sales volume decreased by 4.8%.

EBITDA increased by Baht 117 million or 47.2% from Baht 248 million in 1Q/2009 to Baht 365 million in 2Q/2009 while EBIT increased by Baht 116 million or 55.5% from Baht 209 million in 1Q/2009 to Baht 325 million in 2Q/2009.

First half of 2009 compared with first half of 2008

In 1H/2009, sales revenue was Baht 14,735 million decreased from 1H/2008 by Baht 4,665 million or 24.0% due mainly to the decrease in average selling price of PTTPM by 33.3% despite sales volume increased by 15.5%.

EBITDA increased by Baht 31 million or 5.3% while EBIT increased by Baht 24 million or 4.7%.

Net Income

Second quarter of 2009 compared with second quarter of 2008

Net income of PTT and its subsidiaries in 2Q/2009 was Baht 19,895 million or Baht 7.04 per share, decreased from 2Q/2008 by Baht 9,989 million or 33.4% due to the performance of each business group as mentioned, including the following reasons;

: Share of net income from investments in associates in 2Q/2009 decreased by Baht 5,330 million or 39.9% from Baht 13,355 million in 2Q/2008 to Baht 8,025 million in 2Q/2009 due mainly to;

- The declined performance of refining business resulted from the decrease in GRM due to the global economy slowdown which led to the decelerated oil demand and the subdued situation of tourism, partly due to the new influenza strains 2009 (A H1N1). Moreover, there was the new additional capacity entered into the market, especially from China and India. As a result, the GRM of PTT's complex refineries group, (including inventory gain/(loss) and hedging gain/(loss)) decreased from US\$ 21.43 per barrel in 2Q/2008 to US\$ 8.81 per barrel in 2Q/2009. PTTAR's capacity has been increased after its commercial operation start-up of the Upgrading Complex project phase#1 (Condensate Residue Splitter and Merosene Merox Unit) in March 2009. As a result, PTTAR's average total intake of its refining business increased from 131 KBD in 2Q/2008 to 159 KBD in 2Q/2009. This also resulted from the planned maintenance shutdown for 32 days in 2Q/2008 compared with the shutdown of the Hydrocracking unit for 7 days in 2Q/2009. For TOP, the utilization in 2Q/2009 was 98%, decreased by 7% from 105% in 2Q/2008 due to the shutdown at Hydrosulfurization unit (HDS-3) for catalyst replacement during May 16-30, 2009.

- The declined performance of olefins petrochemical associates resulted from the significant drop in P2F margins, especially MEG and olefins products although there was 42 days shutdown of olefins plant for maintenance in 2Q/2008.

- In 2Q/2009, PTT and its subsidiaries has gain on foreign exchange of Baht 2,840 million whereas there was loss on foreign exchange of Baht 2,962 million in 2Q/2008.

- The corporate income tax in 2Q/2009 decreased by Baht 1,563 million or 13.3% resulted from the decrease in operating income.

Second quarter of 2009 compared with first quarter of 2009

Net income of PTT and its' subsidiaries in 2Q/2009 was Baht 19,895 million or Baht 7.04 per share, increased from 1Q/2009 by Baht 12,446 million or 167.1% due to the performance of each business group as mentioned, including the following reasons;

: Share of net income from investments in associates in 2Q/2009 was Baht 8,025 million increased by Baht 5,617 million or 233.4% from share of gain amounting to Baht 2,407 million in 1Q/2009 due mainly to;

- The better performance of refining business resulted from the increase in GRM. The GRM of PTT's complex refineries group (including inventory gain/(loss) and hedging gain/(loss)) increased from US\$ 2.24 per barrel in 1Q/2009 to US\$ 8.81 per barrel in 2Q/2009 due to the risen crude oil and refined products prices in 2Q/2009. However, TOP's utilization decreased from 103% in 1Q/2009 to 98% in 2Q/2009 resulted from the HDS-3 shutdown for 15 days in 2Q/2009 as mentioned above. Aromatics business's earnings also improved resulted from the higher products prices, especially benzene price which rose significantly by 70% due to supplies shortage affected by arbitrage cargoes from Asia to Europe and America for the higher prices resulted from the supply shortage situation in Europe. Benzene demand also increased, mainly from the new styrene monomer plants in China and the increased utilization of many styrene monomer producers. Paraxylene (PX) price also increased by 25%, driven by the increase in feedstock prices and Purified Terephthalic Acid (PTA) prices. PX shortage situation continues since PX producers could not increase their production due to the feedstock (reformat) shortage in addition with the planned shutdown of many aromatics plants for maintenance.

- The better performance of olefins petrochemical associates resulted from the increase in P2F margin, especially HDPE margin.

- In 2Q/2009, PTT and its subsidiaries had gain on foreign exchange of Baht 2,840 million while there was loss on foreign exchange of Baht 615 million in 1Q/2009.

- The corporate income tax in 2Q/2009 increased by Baht 3,198 million or 46.0% resulted from the increase in operating income.

First half of 2009 compared with first half of 2008

Net income of PTT and its' subsidiaries in 1H/2009 was Baht 27,344 million or Baht 9.68 per share, decreased from 1H/2008 by Baht 28,673 million or 51.2% due to the performance of each business group as mentioned, including the following reasons;

: Share of net income from investments in associates in 1H/2009 was Baht 10,432 million, decreased by Baht 10,661 million or 50.5% from Baht 21,093 million in 1H/2008 due mainly to;

- The declined earnings of refining business resulted from the lower GRM due to the global economy downturn. The GRM of PTT's complex refineries group (including inventory gain/(loss) and hedging gain/(loss)) decreased from US\$ 14.10 per barrel in 1H/2008 to US\$ 5.51 per barrel in 1H/2009. Although in 1H/2008 PTTAR plants was shutdown for 32 days for maintenance whereas in 1H/2009 the Hydrocracking unit was shutdown for 7 days. However, Aromatics P2F margins improved significantly despite lower products selling prices in 1H/2009. This was because feedstock cost decreased more than the decrease in products selling prices.

- The declined earnings of olefins petrochemical associates resulted from the decrease in P2F margin, especially MEG margin due to the new additional supply from Saudi Arabia, although olefins plant I4-1 was shutdown for production capacity expansion and scheduled maintenance for 12 days as well as the Oleflex production unit was shutdown for 42 days for maintenance.

- In 1H/2009, PTT and its subsidiaries had gain on foreign exchange of Baht 2,225 million increased from 1H/2008 by Baht 998 million or 81.5%.

- The corporate income tax in 1H/2009 was Baht 17,110 million decreased from 1H/2008 by Baht 5,696 million or 25.0% resulted from the decrease in operating income.

Details of net income from investments in associates are as follows;

Unit: million Baht	2Q/2008	1Q/2009	2Q/2009	% Inc.(Dec.)		1H/2008	1H/2009	% Inc.(Dec.)
				YoY	QoQ			
Refining associates	10,404	2,649	7,348	(29.4%)	177.4%	15,094	9,997	(33.8%)
Petrochemical associates	2,860	(177)	1,019	(64.4%)	675.7%	5,673	842	(85.2%)
Oil associates	99	126	115	16.2%	(8.7%)	210	241	14.8%
Gas associates	11	(297)	(576)	(5,336.4%)	(93.9%)	11	(873)	(8,036.4%)
Other associates	(19)	106	119	726.3%	12.3%	105	225	114.3%
Total	13,355	2,407	8,025	(39.9%)	233%	21,093	10,432	(50.5%)

2.The Analysis of PTT and its subsidiaries' consolidated Financial status as at June 30, 2009, compared with December 31, 2008.

Financial status of PTT and its subsidiaries as at June 30, 2009, compared with December 31, 2008, is as follows:

Unit: million Baht

Items	Consolidated financial statements			
	Jun 30, 2009	Dec 31, 2008	Inc(Dec)	%
Assets				
Current assets	294,983	243,414	51,569	21.2
Investments in associates and other long-term investment	197,368	187,072	10,296	5.5
Property, plant and equipment, net	453,962	374,614	79,348	21.2
Non-current assets	96,167	80,093	16,074	20.1
Total assets	1,042,480	885,193	157,287	17.8
Liabilities				
Current liabilities	203,888	169,271	34,617	20.5
Long-term loans (including current portion)	323,765	239,125	84,640	35.4
Non-current liabilities	54,592	46,261	8,331	18.0
Total liabilities	582,245	454,657	127,588	28.1
Shareholders' equity				
PTT shareholders' equity	406,117	383,579	22,538	5.9
Minority interests	54,118	46,957	7,161	15.3
Total shareholders' equity	460,235	430,536	29,699	6.9
Total liabilities and shareholders' equity	1,042,480	885,193	157,287	17.8

Assets

Total assets as at June 30, 2009, was Baht 1,042,480 million, increased by Baht 157,287 million or 17.8% from the end of 2008. Due mainly to the followings :

: Current assets increased by Baht 51,569 million or 21.2% resulted mainly from the increase in trade accounts and notes receivable by Baht 38,759 million, mostly from crude oil receivables, and the increase in cash and cash equivalents as well as short-term investments by Baht 7,693 million. In addition, inventories and supplies increased by Baht 3,691 million.

: Investments in associates and other long-term investments increased by Baht 10,296 million or 5.5% resulted from share of net income from investments in associates for 1H/2009 by Baht 10,432 million.

: Property, plant and equipment increased by Baht 79,348 million or 21.2%, mainly from the increase in oil and gas properties by Baht 30,087 million, mainly from construction of Montara area under PTTEP Australasia project which PTTEP acquired 100% of the ordinary shares of Coogee Resources Limited or CRL (which was later changed to PTTEP Australasia Pty Limited or PTTEP AA) on February 4, 2009. In addition, the increase in Property, plant and equipment was resulted from PTT International Company Limited (PTT INTER) (a wholly owned subsidiary of PTT) via its wholly owned subsidiary Lints Limited (Lints), acquired a 60% interest in Straits Bulk & Industrial Pty Ltd (SBI) which was later changed to PTT Asia Pacific Mining Pty. Ltd. (PTTAPM) and PTTAPM is a holding company which has share holding in many coal companies/assets. Most of its assets are mining assets with the total value of Baht 21,100 million. In addition, the increase in Property, plant and equipment was also resulted from the Gas Separation Plant Unit#6 project, the Ethane Separation Plant project, the Arthit North Gas Transmission Pipeline project, and the Natural Gas for Vehicle (NGV) project such as assets under construction of NGV stations, NGV transportation truck, NGV cylinders and equipments for NGV transportation truck, etc.

: Non-current assets increased by Baht 16,074 million or 20.1% due mainly to an increase in legal reserved inventories amounting to Baht 4,762 million resulted from the higher global oil market prices, as well as an increase in goodwill amounting to Baht 4,697 million due mainly to acquisition of PTTAPM as mentioned above. In addition, PTTEP's probable reserve included in intangible assets and deferred tax asset increased by Baht 3,383 million and Baht 2,670 million, respectively, which resulted from 100% acquisition in PTTEP AA.

Liabilities

Total liabilities were Baht 582,245 million, increased by Baht 127,588 million or 28.1% from the end of 2008, resulted from the increase in current liabilities by Baht 34,617 million or 20.5% due mainly to the increase in trade accounts payable by Baht 30,529 million, mainly from refined products purchasing from refineries. In addition, other short-term loans increased by Baht 11,878 million resulted mainly from the issuance of PTTEP's Bills of Exchange via Public Offering to institutional investors and high net-worth investors whereas accrued corporate income tax decreased by Baht 12,790 million resulted from the payment of corporate income tax for the year 2008.

Long-term Loans including the current portion increased by Baht 84,640 million or 35.4% due mainly to the issuance of PTT's debenture in an amount of Baht 15,000 million and PTTEP's debenture in an amount of Baht 40,000 million and long-term loans of PTT, PTTAC, ENCO, HMC and PTTAPM in the total amount of Baht 22,227 million. The maturities of loans are as follows:

Unit: million Baht

Maturity (Since June 30, 2009)	PTT	PTTEP	DCAP	TTM(T)	TTM(M)	HMC	PTTAC	PTTI	ENCO	Total
within 1 year (June 30, 2010)	10,321.84	9,497.23	75.25	597.87	29.00	-	-	9,177.33	-	29,698.52
over 1 year, but not over 2 years	17,919.95	-	77.00	597.97	29.00	208.46	-	-	-	18,832.38
over 2 year, but not over 5 years	71,361.33	38,454.70	231.00	2,306.46	174.02	1,146.57	432.71	-	-	114,106.79
over 5 years	126,203.38	10,489.97	290.50	4,869.18	324.15	2,814.30	1,123.79	-	5,000.00	151,115.27
Total	225,806.50	58,441.90	673.75	8,371.48	556.17	4,169.33	1,556.50	9,177.33	5,000.00	313,752.96

Note: Liabilities from finance leases are excluded.

The loans outstanding (including long-term loans and bonds due within 1 year and later than 1 year) as at June 30, 2009 consisted of loans in Baht currency and foreign currencies, details of which are as follows:

Unit: million Baht

Long-term loans	PTT	PTTEP	DCAP	TTM(T)	TTM(M)	HMC	PTTAC	PTTI	ENCO	Total
Baht currency	160,722.46	58,441.90	673.75	-	-	1,450.49	-	-	5,000.00	226,288.60
Foreign currencies	65,084.04	-	-	8,371.48	556.17	2,718.84	1,556.50	9,177.33	-	87,464.36
Total	225,806.50	58,441.90	673.75	8,371.48	556.17	4,169.33	1,556.50	9,177.33	5,000.00	313,752.96
Portion of long-term foreign currency loans to total long-term loans (%)	28.82%	0.00%	0.00%	100.00%	100.00%	65.21%	100.00%	100.00%	0.00%	27.88%

As at June 30, 2009, loans amounting to Baht 30,260 million is guaranteed by the Ministry of Finance.

Non-current liabilities increased by Baht 8,331 million or 18.0% due mainly to the increase in the estimation in decommissioning cost of production equipment by Baht 3,694 million and deferred tax liability increased by Baht 3,032 million.

Shareholders' Equity

Total shareholders' equity as at June 30, 2009 was Baht 460,235 million, increased from the end of 2008 by Baht 29,699 million or 6.9%, resulted from un-appropriated retained earnings which increased by Baht 21,696 million due to the increase in PTT and its subsidiaries' net income for 1H/2009 by Baht 27,344 million while there was dividends paid for the 2H/2008 performance by Baht 5,648 million. In addition, unrealized gain on available-for-sale securities increased by Baht 1,009 million and the currency translation differences increased by Baht 290 million.

In 1H/2009, PTT increased its paid-up capital resulted from the exercise of PTT warrants under ESOP issued to its President, executives and employees, including the employees of PTT's affiliates holding the permanent office in PTT, in February, March, May and June. As a result, paid-up capital increased by Baht 6.571 million (657,100 shares) and premium on ordinary shares increased by Baht 115.97 million. As at June 30, 2009, there were unexercised warrants of 32.54 million units which consisted of PTT-W1, issued and offered on September 1, 2005, 15.93 million units (the last exercise date is on August 31,

2010) and PTT-W2, issued and offered on September 29, 2006, 16.61 million units (the last exercise date is on September 28, 2011).

Minority interests increased by Baht 7,161 million or 15.3% due mainly to 40% minority interests of PTTAPM (resulted from 60% acquisition by Lints as mentioned above) amounting to Baht 5,848 million. In addition, net income of minority interests for 1H/2009 was Baht 4,618 million despite PTTEP's dividends payments of Baht 2,918 million.

Liquidity

For six-month period ended June 30, 2009, net increase in cash and cash equivalents of PTT and its subsidiaries was Baht 5,615 million while cash and cash equivalents at the beginning of the period was Baht 90,819 million. As a result, cash and cash equivalents as at the end of the period was Baht 96,434 million. Details of cash flow by activities are as follows:

	Amount (Million Baht)
Net cash provided by operating activities	14,497
Net cash used in investing activities	(71,296)
Net cash provided by financing activities	62,969
Effects of exchange rates on cash and cash equivalents	(200)
Currency translation differences	(355)
Net increase in cash and cash equivalents during the period	5,615
Cash and cash equivalents at beginning of the period	90,819
Cash and cash equivalents at end of the period	96,434

Net cash provided by operating activities of Baht 14,497 million was derived from net income of Baht 27,344 million and adjustments of net income to net cash provided comprising mainly of depreciation, depletion and amortization amounting to Baht 19,595 million, income tax amounting to Baht 17,110 million, interest expenses amounting to Baht 6,976 million, net income of minority interests amounting to Baht 4,105 million and the exploration expensed amounting to Baht 2,361 million. The decrease in working capital resulted mainly from share of net income from investments in associates amounting to Baht 10,432 million, gain on foreign exchange amounting to Baht 2,810 million, interest income amounting to Baht 1,704 million, and reversal of provision for loss on decline in value of inventories amounting to Baht 806 million. In addition, there were change in operating assets, net increased by Baht 18,389 million.

Net cash used in investing activities was Baht 71,296 million resulted mainly from;

: investments in property, plant and equipment amounting to Baht 64,669 million due mainly to the construction of the Gas Separation Plant Unit#6 project, the Arthit North Gas Transmission Pipeline project, the Natural Gas for Vehicle (NGV) project and the Ethane Separation Plant project in an approximate amount of Baht 22,084 million, the purchase of PTTEP's Petroleum exploration and production assets (oil and gas properties for production) from an acquisition of total shares in PTTEP AA in an approximate amount of Baht 32,903 million, as well as PTTLNG's jetty construction and LNG station project in an approximate amount of Baht 1,759 million, PTTAC's construction of the Acrylonitrile (AN) and Methyl Methacrylate (MMA) Production Plant project in an approximate amount of Baht 1,695 million.

: cash paid for probable reserves, as an intangible asset, amounting to Baht 4,406 million due to the acquisition of PTTEP AA by PTTEP.

: cash paid for short-term investments amounting to Baht 1,108 million.

: dividends receipt from investments in associates amounting to Baht 3,350 million, mainly from TOP, PTTCH, PTTAR and IRPC

: cash received from interest income amounting to Baht 1,343 million.

Net cash provided by financing activities was Baht 62,969 million, resulted mainly from the issuance of PTT's debenture amounting to Baht 15,000 million and PTTEP's debenture amounting to Baht 40,000 million, totaling Baht 55,000 million, long-term loans of PTT, PTTAC, ENCO, HMC and PTTAPM totaling Baht 22,227 million and the issuance of PTTEP's Bills of Exchange including other PTT's short-term loans totaling Baht 12,296 million while there were dividends payment amounting to Baht 9,385 million, interest payment amounting to Baht 7,896 million, PTT's bonds repayment amounting to Baht 7,400 million and PTT and its subsidiaries' short-term and long-term loans repayment amounting to Baht 1,721 million.

Financial ratios and earnings per share of PTT and its subsidiaries for 2Q/2009 and 1H/2009 calculated in accordance with the Office of the Securities and Exchange Commission's formulae are as follows:

Financial Ratios and earnings per share	Unit	2Q/2008	1Q/2009	2Q/2009	1H/2008	1H/2009
<u>Liquidity Ratios</u>						
Current Ratio	Time	1.35	1.22	1.26	1.35	1.26
Quick Ratio	Time	1.06	0.94	1.01	1.06	1.01
<u>Profitability Ratios</u>						
Gross Profit Margin	%	8.25	9.19	9.18	8.10	9.18
Net Profit Margin	%	4.92	2.40	5.00	5.04	3.87
<u>Financial Ratios</u>						
Total Debt to Equity Ratio	Time	1.06	1.16	1.27	1.06	1.27
Interest Coverage Ratio	Time	5.64	6.20	5.83	13.60	6.01
<u>Earnings per share (EPS)</u>						
EPS	Baht/share	10.60	2.64	7.04	19.88	9.68

3. Economic Outlook in the third quarter of 2009 (3Q/2009)

IMF (in July 2009) projected that the world economy in 3Q/2009 will recover and expand by 2.5% after consecutively contracted from 4Q/2008 to 1Q/2009. For Thailand, the Bank of Thailand (in July 2009) projected Thai economy in 3Q/2009 to continue to contract but at the slower pace after viewing that the economy was bottom out since 2Q/2009 and starting to expand in 4Q/2009 causing by the world economy recovery and the massive government spending according to its stimulus packages. For the year 2009, the world economy is expected to contract by 1.4% while Thai economy is expected to contract by 3.0% to 4.5%. Thai energy consumption is expected to grow in relation to the economic growth. However, the un-sustained world economy recovery and unstable political situation may cause energy demand to decline in the second half of the year.

For 2H/2009, crude oil price is expected to move in the US\$ 60 – US\$ 70/bbl range (average price for the whole year is expected to be US\$ 55 - US\$ 60/bbl). with enormous uncertainty surrounding ; pace of global economic recovery, OPEC's production, countries' inventory levels etc. The economic recovery will be the key driver to boost the global oil demand, especially, the demand from China and India, two major Asian countries which is expected to recover faster than other countries. In addition, the OPEC production, seasonal demand, climate condition, the increase/decrease in world refineries utilization including the speculation of hedge funds will impact oil price. IEA projected that world oil demand will increase from 83.08 million barrel per day in 2Q/2009 to 83.6 and 83.9 million barrel per day in 3Q/2009 and 4Q/2009 respectively and increase to 85.2 million barrel per day in 2010.