

SECTION 7

Oil prices

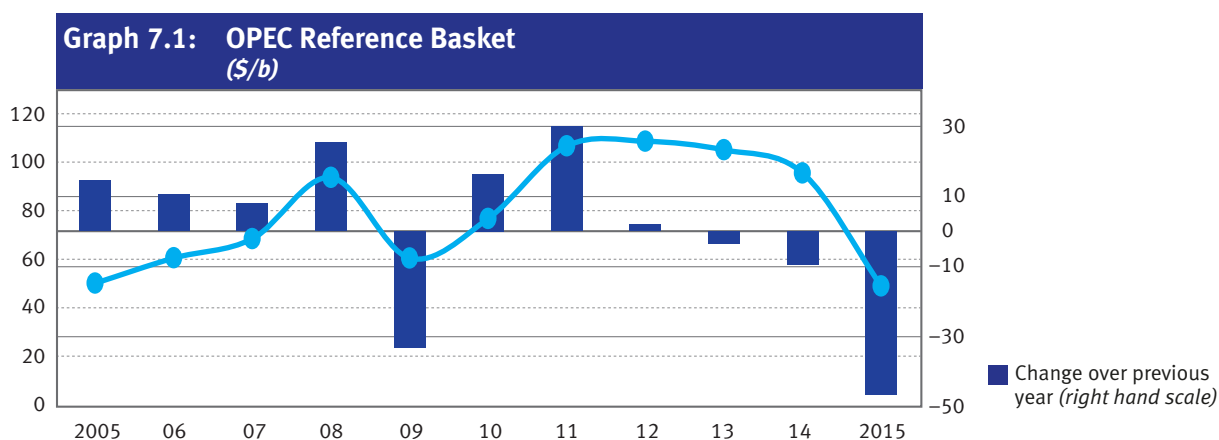
Table 7.1**Oil prices**

OPEC Reference Basket (ORB) and corresponding components spot prices (\$/b)

	Representative crude stream	2011	2012	2013	2014	2015
Algeria	Saharan Blend	112.92	111.49	109.38	99.68	52.79
Angola	Girassol	111.57	112.21	109.14	99.19	52.96
Ecuador	Oriente	101.03	102.76	97.74	87.31	44.94
Iran	Iran Heavy	106.11	109.06	105.73	96.18	48.80
Iraq	Basrah Light	106.17	107.96	103.60	94.45	47.87
Kuwait	Kuwait Export	105.63	108.93	105.04	95.32	48.13
Libya	Ess Sider	111.90	111.86	108.51	98.51	51.38
Nigeria	Bonny Light	114.15	113.66	111.36	100.85	52.95
Qatar	Marine	106.53	109.26	105.32	96.39	50.71
Saudi Arabia	Arab Light	107.82	110.22	106.53	97.18	49.85
United Arab Emirates	Murban	109.77	111.76	108.21	99.45	53.87
Venezuela	Merey	97.94	100.06	96.66	86.88	41.11
OPEC	ORB	107.46	109.45	105.87	96.29	49.49
ORB	Volatility ¹	6.50	7.96	3.93	14.56	8.50
ORB	Coefficient of variation ² , %	6.1	7.3	3.7	15.1	17.2

Notes:

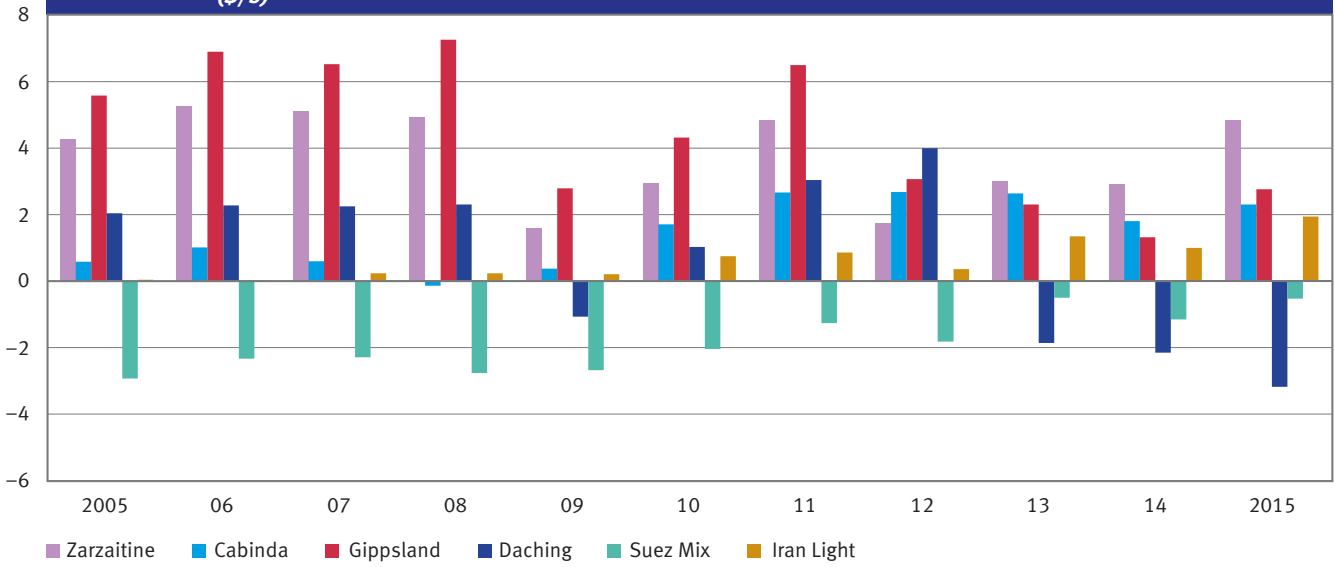
1. Standard deviation of daily prices.
2. Ratio of volatility to annual average price.



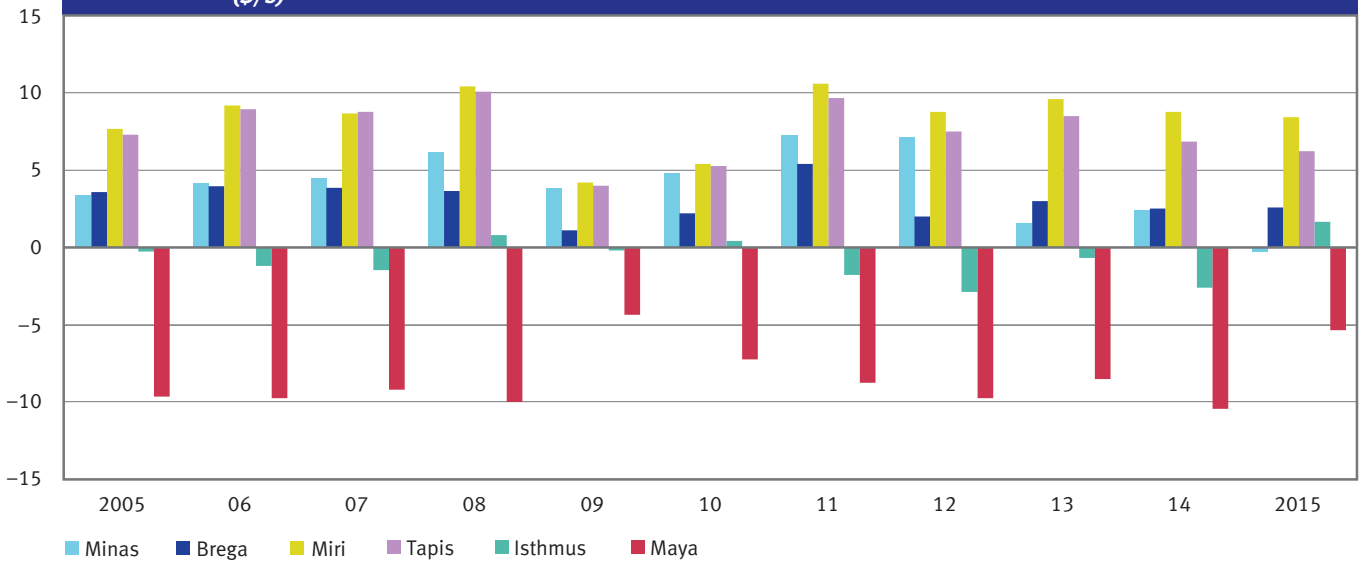
Selected spot crude oil prices (\$/b)

	Crude stream	2011	2012	2013	2014	2015
Algeria	Zarzaitine	112.26	111.18	108.85	99.19	54.30
Angola	Cabinda	110.09	112.10	108.47	98.07	51.77
Australia	Gippsland	113.91	112.49	108.14	97.58	52.22
China	Daching	110.46	113.41	104.00	94.13	46.31
Egypt	Suez Mix	106.18	107.62	105.35	95.13	48.94
IR Iran	Iran Light	108.29	109.79	107.19	97.26	51.40
Indonesia	Minas	114.79	116.60	107.41	98.68	49.17
Libya	Brega	112.89	111.45	108.88	98.79	52.08
Malaysia	Miri	118.08	118.25	115.51	105.10	57.93
Malaysia	Tapis	117.15	116.98	114.39	103.15	55.75
Mexico	Isthmus	105.64	106.55	105.16	93.65	51.14
Mexico	Maya	98.64	99.65	97.31	85.80	44.11
Nigeria	Forcados	113.65	114.21	111.95	101.35	54.41
Norway	Ekosfisk	112.74	112.76	109.88	99.72	53.12
Norway	Oseberg	112.98	112.98	110.04	99.99	53.61
Oman	Oman	106.63	109.35	105.51	97.04	51.21
Qatar	Dukhan	108.86	110.34	107.05	98.44	52.87
Russia	Urals	109.19	110.49	108.00	98.08	51.90
Saudi Arabia	Arab Heavy	104.06	108.32	103.89	93.68	47.01
United Kingdom	Brent Dated	111.36	111.62	108.62	99.08	52.41
United Kingdom	Forties	111.36	111.62	108.65	99.14	52.50
United States	WTI	94.99	94.10	97.96	93.26	48.73
United Arab Emirates	Dubai	106.21	109.07	105.45	96.71	50.94
Venezuela	Mesa 30	107.49	106.91	103.34	97.14	53.55

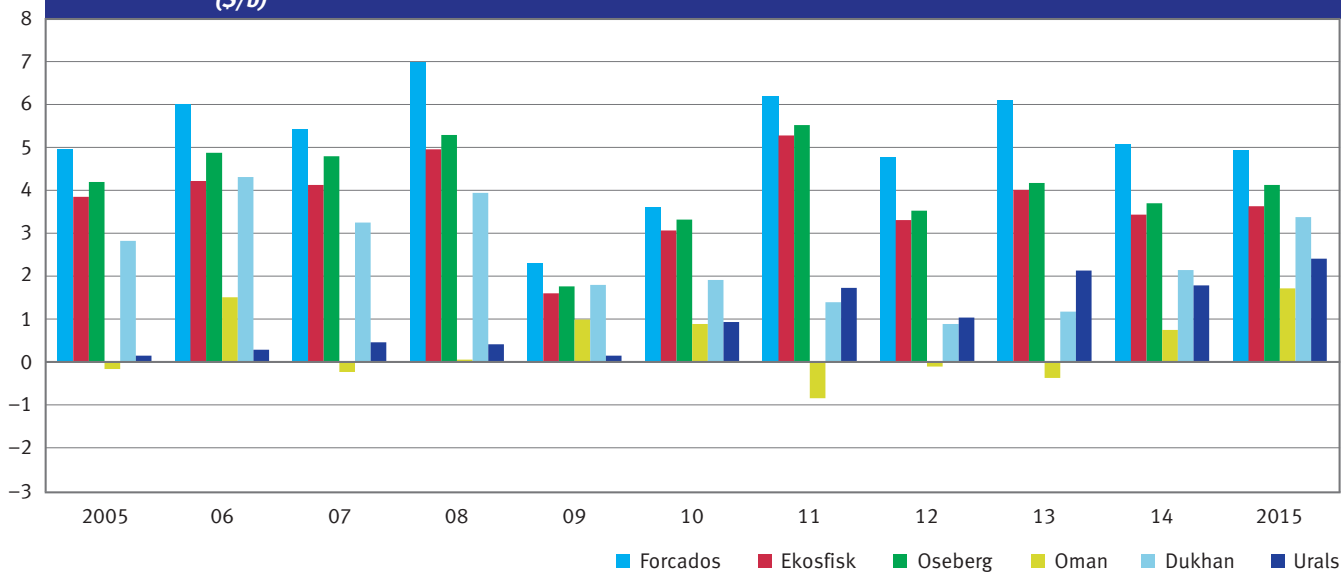
Graph 7.2: Differentials of selected spot crude oil prices to OPEC Reference Basket (1)
(\$/b)



Graph 7.3: Differentials of selected spot crude oil prices to OPEC Reference Basket (2)
(\$/b)



Graph 7.4: Differentials of selected spot crude oil prices to OPEC Reference Basket (3)
(\$/b)



Graph 7.5: Differentials of selected spot crude oil prices to OPEC Reference Basket (4)
(\$/b)

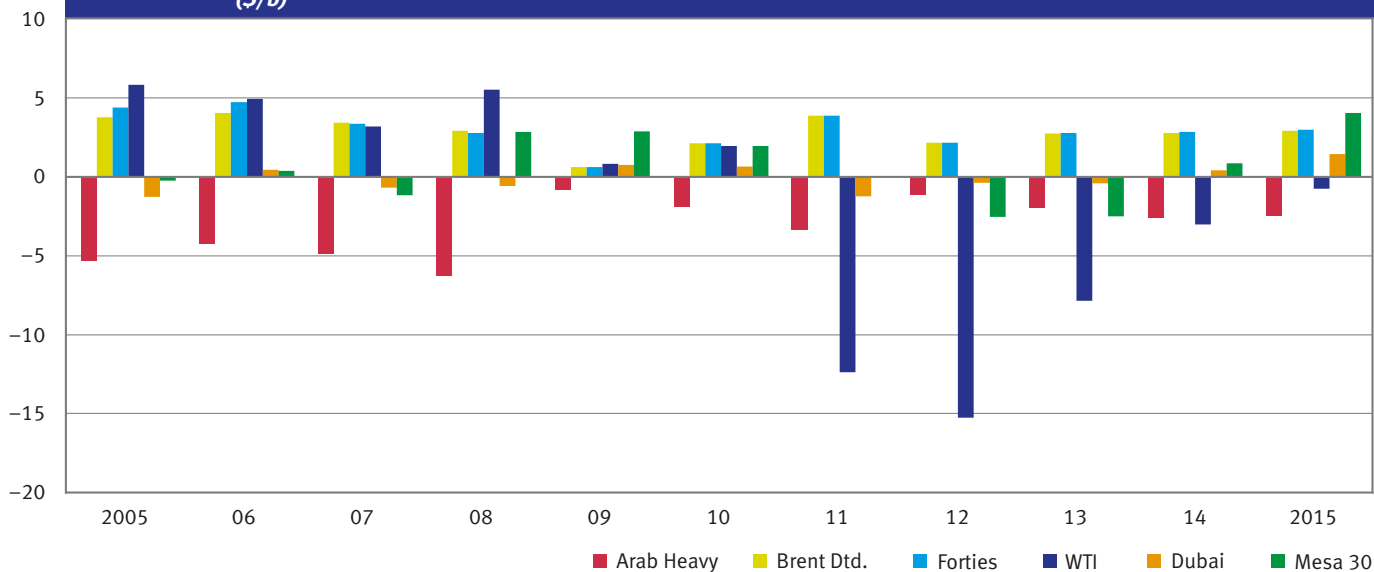


Table 7.3**Oil prices**ICE Brent, NYMEX WTI and DME Oman annual average of the 1st, 6th and 12th forward months (\$/b)

	2011	2012	2013	2014	2015
ICE Brent					
1 st forward month	110.91	111.69	108.69	99.45	53.60
6 th forward month	109.39	109.24	105.91	99.29	57.21
12 th forward month	108.12	106.68	103.02	98.30	60.18
NYMEX WTI					
1 st forward month	95.11	94.17	98.04	92.91	48.73
6 th forward month	97.23	95.99	96.33	90.23	52.56
12 th forward month	97.76	96.02	92.99	87.57	55.08
DME Oman					
1 st forward month	106.81	109.30	105.55	96.86	51.31
6 th forward month	105.53	106.97	103.07	96.61	54.48
12 th forward month	104.60	104.60	100.76	95.55	57.43

OPEC Reference Basket in nominal and real terms (\$/b)

	2011	2012	2013	2014	2015
Nominal oil price	107.46	109.45	105.87	96.29	49.49
Nominal price adjusted for:					
Exchange rates ¹	80.07	84.90	82.67	75.36	43.35
Inflation ²	89.59	89.42	85.32	76.77	39.40
Combined ³	66.75	69.36	66.62	60.09	34.52

Notes:

Base: 2001 = 100.

1. Based on weighted average index of currency exchange rates in the modified Geneva I Agreement (see Geneva I Agreement definition under 'General Notes').
2. Based on weighted average consumer price indices of modified Geneva I countries and the US.
3. Based on combined indices of exchange rates and inflation.

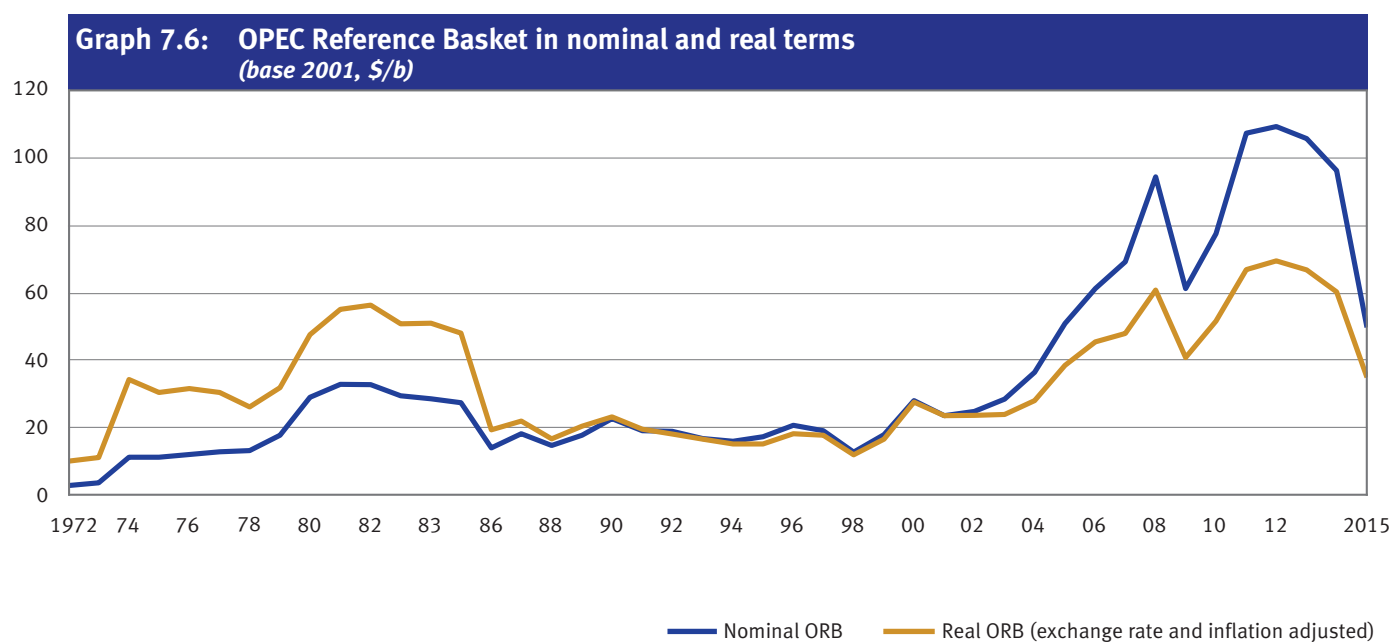


Table 7.5**Oil prices**

Annual average of premium factors for selected OPEC Reference Basket components (\$/b)

		2011	2012	2013	2014	2015
Europe						
Algeria	Saharan Blend	1.56	-0.11	0.75	0.61	0.38
IR Iran	Iran Heavy	-4.31	-3.68	-3.70	-4.60	-5.10
Iraq	Basrah Light	-4.35	-3.88	-4.20	-4.74	-4.83
Libya	Es Sider	0.54	0.25	-0.11	-0.56	-1.04
Nigeria	Bonny Light	2.79	2.05	2.73	1.77	0.54
Saudi Arabia	Arab Light	-2.71	-1.52	-1.52	-2.78	-3.54
Asia						
IR Iran	Iran Heavy	-0.43	0.50	0.48	-0.58	-2.26
Iraq	Basrah Light	0.20	0.72	-0.14	-1.02	-2.83
Kuwait	Kuwait Export	-0.68	0.34	0.33	-0.96	-2.74
Saudi Arabia	Arab Light	1.72	2.20	2.51	1.48	-0.86
US						
Iraq	Basrah Light	-1.67	-1.82	-1.87	0.06	-0.44
Saudi Arabia	Arab Light	0.17	0.42	0.64	2.43	1.06
	Arab Medium	-2.07	-1.85	-1.78	0.05	-0.54
	Arab Heavy	-3.96	-3.54	-3.45	-1.55	-1.14

Notes:

Premium factors are related to corresponding benchmark crudes.

Spot prices of petroleum products in major markets (\$/b)

	Specifications	2011	2012	2013	2014	2015
US Gulf						
Gasoline	Regular unleaded 87	117.70	121.73	116.55	107.90	67.58
Gasoil	0.2% sulphur	122.83	126.02	121.75	111.39	63.80
Fuel oil	3.0% sulphur	108.01	99.36	93.05	82.67	40.78
Singapore						
Gasoline	Premium unleaded 97	122.04	126.41	121.51	111.96	71.41
Gasoil	0.05% sulphur	126.29	128.15	123.38	112.67	64.57
Fuel oil	380 centistokes	99.87	103.17	95.67	86.58	44.27
Rotterdam						
Gasoline	Premium unleaded 98	120.35	127.29	122.57	115.10	75.53
Gasoil	10ppm sulphur	126.47	129.18	123.87	112.91	66.03
Fuel oil	3.5% sulphur	97.02	100.10	93.89	83.68	40.75

Notes:

US Gulf and Singapore prices apply to cargo. Rotterdam prices apply to barge size lots.

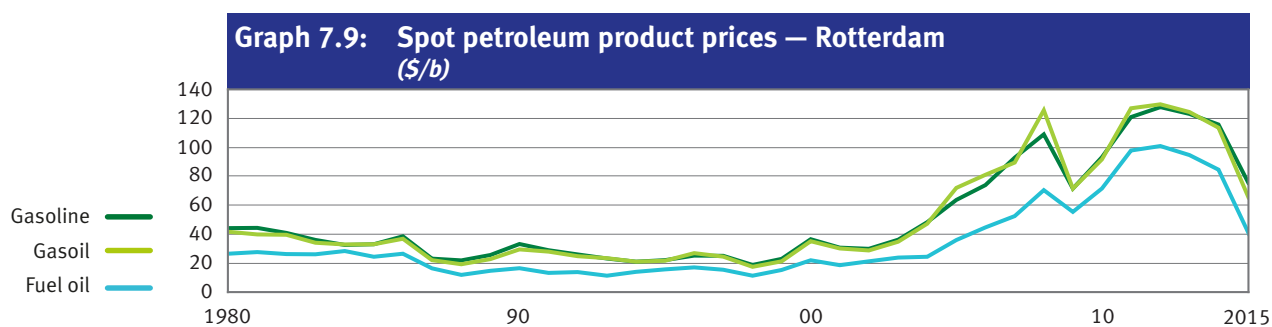
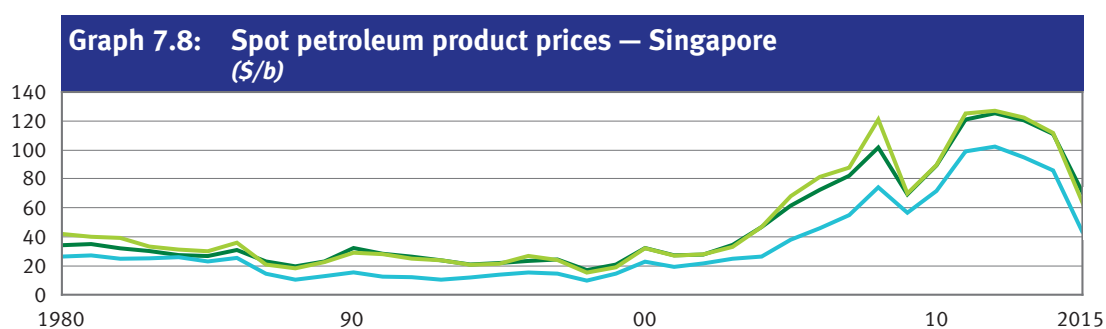
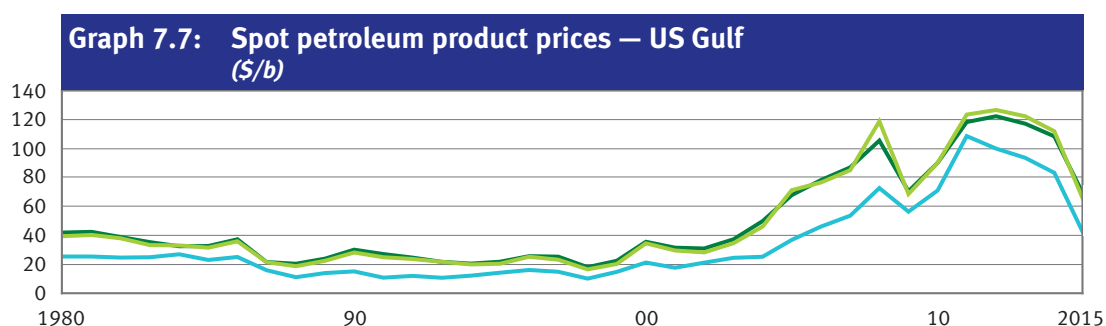


Table 7.7**Oil prices**Retail prices of petroleum products in OPEC Members (*units of national currency/b*)

	2011	2012	2013	2014	2015
Algeria					
Gasoline	2,226.67	2,226.67	2,227.00	2,227.00	2,227.00
Diesel oil	1,370.00	1,370.00	1,370.00	1,370.00	1,370.00
Kerosene	nap	nap	nap	nap	nap
Fuel oil	nap	nap	nap	nap	nap
Angola					
Gasoline	9,540.00	9,540.00	9,540.00	14,310.00	18,285.00
Diesel oil	6,360.00	6,360.00	6,360.00	9,540.00	11,925.00
Kerosene	3,339.00	3,339.00	3,339.00	5,565.00	7,155.00
Fuel oil	8,830.86	8,830.86	8,830.86	7,950.00	12,561.00
Ecuador					
Gasoline	62.79	62.79	63.42	62.79	62.79
Diesel oil	37.80	37.80	39.53	37.80	37.80
Kerosene	37.88	37.88	39.53	37.80	37.80
Fuel oil	23.65	23.65	19.99	19.99	9.10
Indonesia					
Gasoline	1,138,930.11	1,245,500.00	1,555,550.00	1,566,150.00	1,351,500.00
Diesel oil	1,064,670.63	1,176,600.00	1,415,100.00	1,494,600.00	1,323,675.00
Kerosene	nap	nap	nap	nap	nap
Fuel oil	nap	nap	nap	nap	nap
IR Iran					
Gasoline	755,250.00	1,192,500.00	1,192,500.00	1,192,500.00	1,749,000.00
Diesel oil	238,500.00	159,000.00	159,000.00	159,000.00	477,000.00
Kerosene	238,500.00	159,000.00	159,000.00	159,000.00	238,500.00
Fuel oil	318,000.00	318,000.00	318,000.00	318,000.00	477,000.00
Iraq					
Gasoline	71,550.00	71,550.00	71,550.00	71,550.00	na
Diesel oil	63,600.00	63,600.00	63,600.00	63,600.00	na
Kerosene	23,850.00	23,850.00	23,850.00	23,850.00	na
Fuel oil	15,900.00	15,900.00	15,900.00	15,900.00	na
Kuwait					
Gasoline	11.40	11.40	11.40	11.40	11.40
Diesel oil	8.75	8.75	8.75	8.75	24.05
Kerosene	8.75	8.75	8.75	8.75	24.05
Fuel oil	nap	nap	nap	nap	nap
Libya					
Gasoline	23.85	23.85	23.85	23.85	23.85
Diesel oil	27.03	27.03	27.03	27.03	27.03
Kerosene	12.72	12.72	12.72	12.72	12.72
Fuel oil	3.50	3.50	3.50	3.50	3.50
Nigeria					
Gasoline	10,335.00	15,423.00	15,423.00	15,423.00	14,628.00
Diesel oil	24,686.34	25,110.87	24,853.29	24,853.29	18,084.66
Kerosene	26,988.66	7,950.00	7,950.00	7,950.00	7,950.00
Fuel oil	9,978.84	18,585.51	18,394.87	18,394.87	10,654.63

Retail prices of petroleum products in OPEC Members (*units of national currency/b*)

	2011	2012	2013	2014	2015
Qatar					
Gasoline	143.10	143.10	147.08	147.08	194.78
Diesel oil	111.30	111.30	159.00	238.50	238.50
Kerosene	nap	nap	nap	nap	nap
Fuel oil	nap	nap	nap	nap	nap
Saudi Arabia					
Gasoline	83.48	83.48	83.48	83.48	107.33
Diesel oil	39.75	39.75	39.75	39.75	55.65
Kerosene	69.17	69.17	69.17	69.17	82.78
Fuel oil	nap	nap	nap	nap	nap
United Arab Emirates					
Gasoline	218.56	218.56	262.52	262.52	278.25
Diesel oil	300.74	300.74	361.27	361.27	354.57
Kerosene	nap	nap	nap	nap	nap
Fuel oil	nap	nap	nap	nap	nap
Venezuela					
Gasoline	13.28	13.28	13.28	13.28	13.28
Diesel oil	7.63	7.63	7.63	7.63	7.63
Kerosene	422.22	468.88	671.27	648.93	333.87
Fuel oil	9.62	9.62	9.62	9.62	9.62

Table 7.8

Crack spread in major markets (*\$/b*)

Specifications	2011	2012	2013	2014	2015
US Gulf crack spread vs WTI					
Gasoline Regular unleaded 87	24.77	33.13	21.26	20.56	18.73
Gasoil 0.2% sulphur	29.90	37.42	26.46	24.05	14.70
Fuel oil 3.0% sulphur	15.08	10.76	-2.24	-4.67	-8.27
Singapore crack spread vs Dubai					
Gasoline Premium unleaded 97	15.83	17.34	16.06	15.25	20.49
Gasoil 0.05% sulphur	20.08	19.08	17.93	15.96	13.54
Fuel oil 380 centistokes	-6.34	-5.90	-9.78	-10.13	-6.77
Rotterdam crack spread vs Brent					
Gasoline Premium unleaded 98	14.14	18.22	17.12	18.39	24.61
Gasoil 10ppm sulphur	20.26	20.11	18.42	16.20	14.98
Fuel oil 3.5% sulphur	-9.19	-8.97	-11.56	-13.03	-10.28

Notes:

US Gulf and Singapore prices apply to cargo. Rotterdam prices apply to barge size lots.

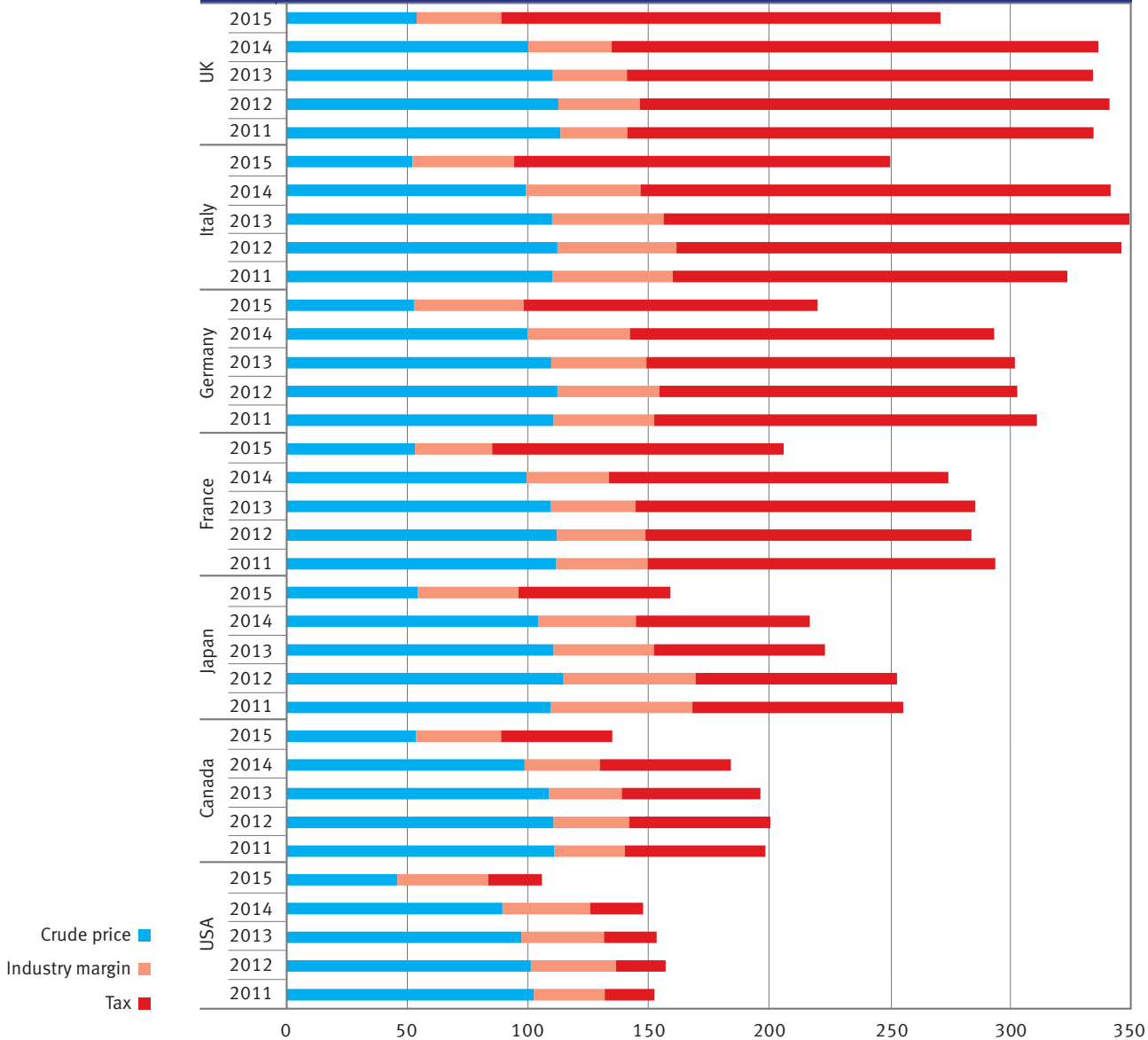
Table 7.9

Oil prices

Composite barrel and its components in major consuming countries (\$/b)

	2011			2012			2013			2014			2015		
	\$/b	% share	% change y-o-y	\$/b	% share	% change y-o-y	\$/b	% share	% change y-o-y	\$/b	% share	% change y-o-y	\$/b	% share	% change y-o-y
United States															
Composite barrel	152.40	67.2	27.8	157.09	64.4	3.1	153.34	63.4	-2.4	147.69	60.6	-3.7	105.72	43.3	-28.4
Crude cif price	102.43	13.5	34.7	101.16	13.1	-1.2	97.25	14.2	-3.9	89.43	14.8	-8.0	45.83	21.1	-48.8
Tax	20.56	19.3	0.8	20.65	22.5	0.5	21.81	22.4	5.6	21.88	24.6	0.3	22.28	35.6	1.8
Industry margin	29.42		29.0	35.28		19.9	34.28		-2.8	36.37		6.1	37.61		3.4
Canada															
Composite barrel	198.43	55.8	26.7	200.46	55.2	1.0	196.36	55.3	-2.0	184.16	53.5	-6.2	134.94	39.6	-26.7
Crude cif price	110.80	29.4	40.0	110.61	29.2	-0.2	108.60	29.2	-1.8	98.60	29.5	-9.2	53.48	34.1	-45.8
Tax	58.30	14.8	21.0	58.52	15.6	0.4	57.43	15.4	-1.9	54.38	16.9	-5.3	46.04	26.2	-15.3
Industry margin	29.32		0.3	31.33		6.8	30.33		-3.2	31.18		2.8	35.42		13.6
Japan															
Composite barrel	255.61	42.8	22.0	253.07	45.3	-1.0	223.12	49.6	-11.8	216.82	48.0	-2.8	159.06	34.1	-26.6
Crude cif price	109.30	34.2	37.6	114.75	33.0	5.0	110.61	31.8	-3.6	104.16	33.2	-5.8	54.20	39.7	-48.0
Tax	87.42	23.0	9.0	83.61	21.6	-4.4	70.91	18.6	-15.2	72.05	18.7	1.6	63.07	26.3	-12.5
Industry margin	58.89		18.2	54.71		-7.1	41.60		-24.0	40.62		-2.4	41.79		2.9
France															
Composite barrel	293.83	38.0	22.0	283.93	39.5	-3.4	285.54	38.4	0.6	274.32	36.2	-3.9	206.02	25.8	-24.9
Crude cif price	111.78	49.1	40.1	112.01	47.6	0.2	109.56	49.4	-2.2	99.40	51.3	-9.3	53.14	58.7	-46.5
Tax	144.21	12.9	11.2	135.23	12.9	-6.2	140.93	12.3	4.2	140.72	12.5	-0.2	120.90	15.5	-14.1
Industry margin	37.84		20.4	36.69		-3.1	35.05		-4.5	34.20		-2.4	31.98		-6.5
Germany															
Composite barrel	311.07	35.6	20.2	302.95	37.0	-2.6	301.96	36.3	-0.3	293.32	34.0	-2.9	220.13	23.9	-25.0
Crude cif price	110.63	51.0	40.9	112.21	49.0	1.4	109.62	50.6	-2.3	99.76	51.5	-9.0	52.65	55.4	-47.2
Tax	158.71	13.4	9.6	148.43	14.0	-6.5	152.84	13.1	3.0	151.09	14.5	-1.1	121.97	20.7	-19.3
Industry margin	41.72		17.4	42.31		1.4	39.50		-6.6	42.47		7.5	45.50		7.1
Italy															
Composite barrel	323.66	34.1	23.0	346.10	32.4	6.9	349.45	31.5	1.0	341.60	29.0	-2.2	250.19	20.8	-26.8
Crude cif price	110.23	50.5	39.0	112.18	53.3	1.8	109.98	55.3	-2.0	99.09	57.1	-9.9	52.06	62.3	-47.5
Tax	163.61	15.4	16.4	184.56	14.3	12.8	193.23	13.2	4.7	194.93	13.9	0.9	155.97	16.9	-20.0
Industry margin	49.82		15.0	49.35		-0.9	46.24		-6.3	47.58		2.9	42.17		-11.4
United Kingdom															
Composite barrel	334.53	33.9	20.3	341.20	33.0	2.0	334.30	33.0	-2.0	336.57	29.7	0.7	271.03	19.9	-19.5
Crude cif price	113.49	57.8	40.8	112.62	57.1	-0.8	110.27	57.8	-2.1	100.07	60.0	-9.3	53.81	67.2	-46.2
Tax	193.37	8.3	12.5	194.79	9.9	0.7	193.28	9.2	-0.8	201.89	10.3	4.5	182.10	13.0	-9.8
Industry margin	27.67		8.3	33.79		22.1	30.75		-9.0	34.61		12.5	35.12		1.5
G7															
Composite barrel	267.07	41.1	22.5	269.26	41.1	0.8	263.44	41.0	-2.2	256.35	38.5	-2.7	192.44	27.1	-24.9
Crude cif price	109.81	44.2	39.1	110.79	43.8	0.9	107.98	45.0	-2.5	98.64	46.6	-8.6	52.17	52.9	-47.1
Tax	118.03	14.7	12.3	117.97	15.0	0.0	118.63	14.0	0.6	119.56	14.9	0.8	101.76	20.0	-14.9
Industry margin	39.24		15.6	40.49		3.2	36.82		-9.1	38.15		3.6	38.51		1.0
OECD															
Composite barrel	269.30	41.0	19.5	271.24	40.9	0.7	272.21	39.9	0.4	264.10	37.6	-3.0	198.29	26.3	-24.9
Crude cif price	110.36	45.0	39.2	111.06	43.9	0.6	108.53	45.0	-2.3	99.25	45.4	-8.6	52.17	50.4	-47.4
Tax	121.29	14.0	9.4	119.19	15.1	-1.7	122.59	15.1	2.9	120.02	17.0	-2.1	99.97	23.3	-16.7
Industry margin	37.65		7.0	40.99		8.9	41.09		0.2	44.83		9.1	46.15		2.9

Graph 7.10: Composite barrel and its components in volume (\$/b)



Graph 7.11: Composite barrel and its components in percentage

