

OIL SUPPLY/DEMAND PRICING TRENDS

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OIL SUPPLY/DEMAND PRICING TRENDS
COAL CONFERENCE - AUGUST 3, 1982
PRESENTATION OF JAMES E. BARNES

FILE

GOOD MORNING! I WELCOME THIS OPPORTUNITY TO DISCUSS A TOPIC OF SEEMINGLY NEVER ENDING SPECULATION - OIL SUPPLY/DEMAND AND PRICING TRENDS. I WILL FIRST REVIEW SOME OF THE PROMINENT TRENDS OF THE LAST SEVERAL YEARS AND SPECULATE ON WHAT'S IN STORE FOR THE PETROLEUM INDUSTRY IN THE NEAR TERM FUTURE. THEN I'LL HAZARD A GUESS AT WHAT MIGHT BE THE PROSPECTS FOR THE LONGER TERM. AND FINALLY, I'LL TRY TO RELATE THE PETROLEUM INDUSTRY OUTLOOK TO THE COAL AND SYNTHETIC FUELS ENVIRONMENT WITH PARTICULAR EMPHASIS ON THE LIKELY ECONOMICS OF SUBSTITUTION.

CRYSTAL BALL GAZING, WHICH HAS NEVER BEEN PARTICULARLY EASY IN THE OIL BUSINESS, HAS BEEN ESPECIALLY TRYING THUS FAR IN 1982, AS VISIONS OF A PROLONGED OIL GLUT HAVE APPEARED RATHER SUDDENLY ONLY TO SEEM TO DISAPPEAR AS QUICKLY IN THE FOLLOWING WEEKS. NEVERTHELESS, THAT'S THE ASSIGNMENT I'VE DRAWN TODAY AND I'LL TRY TO READ THE CARDS AS CONOCO SEES THEM.

PERHAPS THE BEST WAY TO COVER THE NEAR TERM PETROLEUM
OUTLOOK IS TO ADDRESS THE PROMINENT QUESTIONS BEING ASKED
FOLLOWING THE LAST TUMULTUOUS OPEC MEETING IN EARLY JULY.
THESE KEY QUESTIONS ARE:

WHAT DOES THE DEMAND PICTURE REALLY LOOK LIKE?

WHAT IS HAPPENING WITH INVENTORIES AND HOW FAR CAN THEY
DECLINE?

WHAT LEVEL OF OPEC SUPPLY WILL BE REQUIRED IN THE COMING
MONTHS?

AND, FINALLY, WILL OPEC MAINTAIN CONTROL OF PRICES?

TURNING FIRST TO THE DEMAND PICTURE, WE ARE NOW PROJECTING
1982 FREE WORLD OIL DEMAND OF ABOUT 46 MMBD OR A 3% DECLINE
FROM 1981 LEVELS. THIS REDUCTION COMPARES TO DECREASES OF
ROUGHLY 5% AND 4% IN 1980 AND 1981 RESPECTIVELY. FIRST
QUARTER 1982 FREE WORLD DEMAND PROBABLY DECLINED AT ABOUT A
6% RATE. FOR THE U.S., THE FIRST QUARTER DEMAND DROP WAS
EVEN GREATER AT 8%. WHILE THOSE RATES OF DECLINE MAY
INCLUDE SOME REDUCTIONS IN SECONDARY STOCK LEVELS RATHER

THAN BEING TOTALLY A DROP IN CONSUMPTION, THE PROLONGED SLACK DEMAND SURPRISED US AS IT DID MOST INDUSTRY ANALYSTS. THIS WEAKER DEMAND CAN PRINCIPALLY BE ATTRIBUTED TO THE CONTINUED ECONOMIC RECESSION, PARTICULARLY IN THE U.S., AND THE ONGOING EFFECTS OF CONSERVATION AND SUBSTITUTION OF NON-OIL ENERGY SOURCES.

I WOULD LIKE TO STRESS THAT DEMAND STATISTICS CAN BE DIFFICULT TO INTERPRET. AS I JUST MENTIONED, THE DEMAND OR APPARENT CONSUMPTION DECLINES OF THE FIRST QUARTER WERE LIKELY OVERSTATED AS SECONDARY STOCKS WERE DRAWN DOWN. THE TRUE CONSUMPTION FALLOFF WAS LESS SEVERE. SIMILARLY, IF PERCEPTIONS CHANGE IN THE MARKETPLACE, THIRD OR FOURTH QUARTER APPARENT CONSUMPTION COULD BE EASILY STIMULATED BY A REBUILDING OF SECONDARY STOCKS TO PROVIDE A CUSHION AGAINST FUTURE SHORTAGES. THIS PHENOMENON PROBABLY ACCOUNTED FOR THE SURPRISING STRENGTH IN APPARENT U.S. PETROLEUM PRODUCT DEMAND AS SHOWN BY PRIMARY STOCK CHANGES IMMEDIATELY FOLLOWING THE MARCH ANNOUNCEMENT OF OPEC PRODUCTION CEILINGS.

THIS SLIDE VIVIDLY ILLUSTRATES HOW THE DECLINING DEMAND OF THE LAST THREE YEARS HAS BEEN ACCOMPANIED BY A CHANGING WORLD OIL PRODUCTION PATTERN. NON-OPEC PRODUCTION HAS BEEN RISING STEADILY WITH MEXICAN AND NORTH SEA SUPPLIES SHOWING THE LARGEST INCREASES AND THE U.S. ARRESTING ITS PREVIOUS DECLINE TREND. THIS INCREASE HAS FORCED THE OPEC COUNTRIES TO SHARPLY REDUCE THEIR PRODUCTION TO MEET THE BURDEN OF FALLING DEMAND. THE IRAN-IRAQ WAR HAS RELIEVED SOME OF THE PRESSURE FROM OTHER OPEC PRODUCERS; BUT THEY HAVE NEVERTHELESS SEEN A SIGNIFICANT EROSION IN THEIR PRODUCTION, AS HIGH PRICES HAVE INDUCED CUSTOMERS TO CURTAIL THEIR LIFTINGS. COMPARED TO THE SECOND QUARTER OF 1979 WHEN OPEC CRUDE PRODUCTION WAS 31.1 MMBD, IT AVERAGED ROUGHLY 17.0 MMBD IN THE SECOND QUARTER OF 1982. A SUBSTANTIAL UPTURN IN OPEC PRODUCTION IS NOW ANTICIPATED FOR THE SECOND HALF OF 1982. THIS TURNAROUND WILL BE ADDRESSED IN MORE DETAIL IN A FEW MINUTES.

BY COMBINING THE PRECEDING SUPPLY AND DEMAND ANALYSES, WE CAN CONSTRUCT THE INVENTORY PICTURE THAT IS SUCH AN IMPORTANT INFLUENCE ON MARKET PRICES. TRADITIONALLY, PETROLEUM INVENTORIES HAVE BEEN ACCUMULATED IN THE SECOND AND THIRD QUARTERS AND DEPLETED IN THE FIRST AND FOURTH QUARTERS. THIS CYCLICAL PROCESS REFLECTS THE NEED TO BUILD STOCKS FOR HIGH WINTER-TIME HOME HEATING FUEL REQUIREMENTS. THIS SLIDE INDICATES, HOWEVER, THAT IN 1979 AND 1980 THE WIDESPREAD CONCERN FOR SECURITY OF SUPPLIES LED TO A NEARLY CONTINUOUS BUILD-UP OF STOCKS UNTIL LATE 1980. STOCKS INCREASED AGAIN IN EARLY 1981 AS THE INDUSTRY WAS SLOW IN ADJUSTING TO THE SECOND CONSECUTIVE YEAR OF REDUCED DEMAND. THE INVENTORY ADJUSTMENT PROCESS - HELPED ALONG BY DECLINING PROFITABILITY AND HIGH INTEREST RATES - FINALLY BEGAN TO DRAW STOCKS DOWN IN THE THIRD QUARTER. THE DESTOCKING ACCELERATED AT THE BEGINNING OF THIS YEAR AS SUPPLY SHORTAGE FEARS WERE REPLACED BY REALIZATIONS OF AN OVERSUPPLY

RELATIVE TO THE NEWLY REDUCED LEVELS OF DEMAND. IF SECONDARY STOCKS COULD BE INCLUDED IN THIS PICTURE, THE DESTOCKING WOULD HAVE APPEARED EVEN MORE PRECIPITOUS. WE EXPECT THAT PRIMARY INVENTORIES WILL TREND DOWNWARD THIS YEAR WITHOUT THE NORMAL MID-YEAR BUILDUP. SOME TIME IN THE FOURTH QUARTER, INVENTORIES MEASURED IN DAYS OF SALES SHOULD REACH A THREE-YEAR LOW OF UNDER 75 DAYS SALES, AND THE INDUSTRY WILL FINALLY HAVE ELIMINATED THE 1979-1981 STOCK BUILDUP. THIS REDUCTION IS ESSENTIAL IN RESTORING STABILITY TO THE PETROLEUM MARKETS.

I THINK IT'S WORTH TAKING A CLOSER LOOK AT U.S. AND EUROPEAN INVENTORIES TO FULLY APPRECIATE HOW LITTLE ROOM IS LEFT FOR FURTHER INVENTORY DEPLETIONS. THIS SLIDE INDICATES THAT U.S. PETROLEUM STOCKS DECLINED 142 MILLION BARRELS IN THE FIRST HALF OF 1982, ALMOST ENTIRELY IN THE VARIOUS PRODUCT CATEGORIES. IN THE SECOND HALF OF THE YEAR, NO SIGNIFICANT FURTHER DECLINE IS FEASIBLE SINCE GASOLINE, RESID, AND OTHER

PRODUCTS ARE ALREADY NEAR LIKELY MINIMUM OPERATING LEVELS AND DISTILLATE STOCKS MUST BE REPLENISHED TO MEET SEASONAL DEMAND REQUIREMENTS. THE SMALL SURPLUS IN CRUDE STOCKS CAN BE CONVERTED TO MEET THE INCREASED DISTILLATE DEMAND, LEAVING COMBINED U.S. CRUDE AND PRODUCT INVENTORIES ESSENTIALLY UNCHANGED FROM JUNE TO DECEMBER.

IN WESTERN EUROPE, SOME FURTHER DESTOCKING IS POSSIBLE BUT AT A SLOWER RATE THAN WAS EXPERIENCED IN THE FIRST HALF OF 1982. EUROPEAN INVENTORIES ENTERED 1982 AT EVEN HIGHER RELATIVE LEVELS THAN THE U.S. AND, THUS, ARE TAKING LONGER TO BE REDUCED TO MINIMUM LEVELS. EVEN WITH THE FORECASTED SECOND HALF DECLINE, YEAR END 1982 EUROPEAN STOCKS, INCLUDING STRICT MANDATORY STORAGE OBLIGATIONS, WILL REPRESENT A HIGHER NUMBER OF DAYS SUPPLY THAN THE U.S.

NOW THAT WE'VE COVERED THE DEMAND AND INVENTORY FORECASTS, THE SUPPLY SIDE SHOULD FALL RIGHT INTO PLACE. WELL, FOR

TOTAL SUPPLY THE MATHEMATICS ARE EASY; IT'S ALLOCATING THE TOTAL THAT HAS CAUSED ALL THE RECENT COMMOTION WITHIN OPEC. THIS NEXT SLIDE INDICATES THAT THE FOURTH QUARTER OPEC CRUDE SUPPLY REQUIREMENTS SHOULD BE ABOUT 3.0 MILLION BD HIGHER THAN THE THIRD QUARTER. THESE REQUIREMENTS RESULT FROM HIGHER SEASONAL DEMAND WHICH CANNOT BE FULLY SATISFIED BY FURTHER DESTOCKING.

THE HIGHER PRODUCTION TOTAL OF 21.4 MILLION BD COULD ALLOW OPEC MEMBERS TO PRODUCE VERY CLOSE TO THEIR PUBLICLY EXPRESSED SHORT-TERM DESIRED PRODUCTION LEVELS. IT WOULD THUS SEEM THAT OPEC IS IN A RELATIVELY GOOD POSITION TO BRING ABOUT AND SUSTAIN MARKET BALANCE. AS USUAL, SAUDI ARABIA IS THE KEY TO THE RESOLUTION OF OPEC'S INTERNAL SUPPLY BALANCE.

THIS SLIDE SHOWS HOW SAUDI ARABIA HAS HISTORICALLY ADJUSTED ITS PRODUCTION LEVELS RELATIVE TO TOTAL OPEC REQUIREMENTS. SAUDI ARABIA PURPOSEFULLY INCREASED ITS PRODUCTION AT A TIME

WHEN OPEC WAS FACING THE NEED TO DECREASE SUPPLIES DUE TO DECLINING DEMAND. WE BELIEVE THIS ACTION WAS INTENDED TO BRING THE PRICE HAWKS WITHIN OPEC INTO LINE. THE OPEC PRODUCERS WHO MAINTAINED HIGHER PRICES SAW THEIR VOLUMES DECLINE. AS THESE VOLUME DECLINES BECAME MORE SEVERE AND THE SPOT PRICES OF CRUDE FELL EARLIER THIS YEAR TO \$7-8/BBL BELOW OFFICIAL PRICES, SAUDI ARABIA DECIDED TO CUT BACK ITS PRODUCTION TO HELP BALANCE THE MARKET. THE INCREASE IN SPOT PRICES IN APRIL AND MAY REFLECTED THE INITIAL IMPACT OF SAUDI ARABIA REDUCING ITS PRODUCTION.

YOU MIGHT NOTE FROM THIS SLIDE THAT EVEN AT TODAY'S ESTIMATED 6.5 MMBD, SAUDI PRODUCTION, AS A PERCENT OF TOTAL OPEC PRODUCTION, IS SUBSTANTIALLY HIGHER THAN HISTORICAL LEVELS. THE SAUDI FLEXIBILITY IN PRODUCTION LEVELS -- FROM A SUSTAINED CAPACITY APPROACHING 11 MMBD TO A LEVEL OF ABOUT 6 MMBD, WHICH IS SUFFICIENT TO GENERATE MINIMUM CURRENT REVENUE REQUIREMENTS -- PROVIDES A CONSIDERABLE BUFFER FOR OPEC. HOWEVER, THE USE OF THIS FLEXIBILITY DEPENDS ON THE

SAUDIS' POLITICAL AND ECONOMIC MOTIVATIONS AND IS ALSO THE KEY TO WHETHER OPEC CAN HOLD ONTO CURRENT PRICE LEVELS.

THE SAUDIS NOW APPEAR TO BE FIRMLY RESOLVED TO MAINTAIN THEIR PRODUCTION AT WHATEVER LEVEL IS NECESSARY TO SUPPORT THEIR PRICING CONCEPTS. WE BELIEVE SAUDI ARABIA WILL STRIVE TO MAINTAIN THE \$34 MARKER PRICE FOR THE REMAINDER OF 1982 AND LIKELY 1983 AS WELL, ADJUSTING ITS PRODUCTION AS NECESSARY. SUCH ADJUSTMENTS WILL BE DESIGNED TO PREVENT SPOT PRICES AND OTHER OFFICIAL PRICES FROM MOVING VERY FAR OUT OF LINE WITH THE MARKER CRUDE. HOWEVER, OPEC HAS HISTORICALLY BEEN RATHER INEFFECTIVE IN FINE TUNING ITS PRODUCTION TO BALANCE DEMAND, AND THUS PERIODIC DEVIATIONS IN SPOT PRICES HAVE BEEN AND SHOULD CONTINUE TO BE EXPERIENCED.

OTHER OPEC MEMBERS, INCLUDING LIBYA, IRAN AND NIGERIA, SHOULD BE CONTENT WITH CURRENT PRICE LEVELS PROVIDED THEY CAN MARKET PRODUCTION CLOSE TO THEIR DESIRED REVENUE LEVELS.

ANY LACK OF SUCH MARKETABILITY WILL CONTINUE TO LEAD TO BEHIND THE SCENES PRICE CUTTING AS HAS RECENTLY BEEN PREVALENT. IF SAUDI ARABIA SHOULD INSIST ON PRODUCING AT SUCH A LEVEL WHEREBY TOTAL OPEC PRODUCTION IS IN EXCESS OF MARKET REQUIREMENTS, THIS WOULD LEAD TO SPOT PRICES FALLING BELOW OFFICIAL PRICE LEVELS AND MIGHT EVENTUALLY RESULT IN OFFICIAL PRICE REDUCTIONS. AS PREVIOUSLY STATED THOUGH, WE BELIEVE THE SAUDIS ARE MORE LIKELY TO ALLOW THEIR PRODUCTION TO DRIFT DOWNWARD, WITHIN LIMITS, SO AS TO PROTECT THE \$34 PER BARREL PRICE.

BUT WHAT OF THE LONGER TERM SURVIVAL OF OPEC? WILL ITS POSITION BE TOTALLY ERODED BY THE END OF THE EIGHTIES? WE THINK NOT. FREE WORLD OIL DEMAND IS FORECAST TO GROW TO A LEVEL OF ABOUT 51.7 MMBD BY 1990. AS THE SLIDE SHOWS, THE STRONGER GROWTH RATES ARE IN OPEC AND LESSER DEVELOPED COUNTRIES. BY MOST ANY STANDARD, THIS GROWTH WOULD BE CONSIDERED QUITE MODEST AND INCLUDES DEMAND THAT COULD BE MET BY SYNTHETIC FUELS PRODUCTION.

DURING THE SAME PERIOD, NON-OPEC SUPPLY IS PROJECTED TO INCREASE 4.6 MMBD TO 28.5 MMBD. RECENT DELAYS IN NEW PRODUCTION DEVELOPMENT PROGRAMS AS WELL AS THE TABLING OF MAJOR SYNTHETIC FUELS PROJECTS WOULD SUGGEST A LOWER FIGURE MIGHT BE LIKELY.

OPEC WOULD THUS BE LEFT WITH REQUIREMENTS OF AT LEAST 23 MMBD -- CERTAINLY A LEVEL WITH WHICH OPEC CAN LIVE, EVEN WITH A RESOLUTION OF THE IRAN-IRAQ CONFLICT. OPEC, THUS, SHOULD BE ABLE TO SUPPORT ITS PRICING OVER THE NEXT SEVERAL YEARS EVEN IF IT HAS LOST SOME OF ITS ABILITY TO RAISE PRICES. WITH ITS PROVEN FLEXIBILITY, SAUDI ARABIA CAN ADJUST ITS PRODUCTION TO KEEP SUPPLY AND DEMAND ROUGHLY IN BALANCE.

GIL PRICES SHOULD DECLINE SOMEWHAT IN REAL TERMS THROUGH THE END OF NEXT YEAR UNLESS SOME POLITICAL EVENT SIGNIFICANTLY ALTERS THE SUPPLY SIDE OF THE PETROLEUM PRICING EQUATION. PRICE INCREASES FOR THE REST OF THE DECADE SHOULD RANGE FROM MATCHING INFLATION TRENDS TO PERHAPS 1-1½% ABOVE INFLATION.

OBVIOUSLY THERE WILL BE PERIODIC SPURTS WHERE OIL PRICE INCREASES JUMP AHEAD OF THE INFLATION TREND LINE DUE TO DISRUPTIONS TO SUPPLY/DEMAND BALANCES. BUT THESE PERIODS SHOULD BE FOLLOWED BY MARKET INDUCED REALIGNMENT PERIODS SUCH AS WE ARE EXPERIENCING NOW AND ALSO ENCOUNTERED IN THE MID-70'S AFTER THE INITIAL OIL PRICE SHOCK.

THE ABOVE PRICING SCENARIO HAS SOME DIRECT IMPLICATIONS FOR THE COAL AND SYNTHETIC FUELS INDUSTRIES. PETROLEUM PRICE INCREASES WILL PROVIDE LESS INCENTIVE FOR ALTERNATIVE FUEL DEVELOPMENT THAN PREVIOUSLY THOUGHT. THERE WILL, OF COURSE, BE SOME SPECIFIC AREAS, SUCH AS NATURAL GAS, WHERE SUBSTITUTION WILL STILL BE PRACTICAL, BUT THE WIDESPREAD BELIEF OF JUST A FEW YEARS AGO THAT SKYROCKETING PETROLEUM PRICES WOULD PROVIDE UNLIMITED OPPORTUNITIES FOR COAL AND SYNTHETIC FUELS SUBSTITUTION IS NO LONGER VALID. THE ECONOMICS HAVE BEEN DIMINISHED NOT ONLY FOR COAL SYNTHETICS OR EXXON'S COLONY OIL AND OTHER SHALE OIL AND TAR SANDS PROJECTS, BUT ALSO FOR DEVELOPMENT OF SOME RATHER LARGE

PETROLEUM DISCOVERIES. SAUDI ARABIA AND OTHER WELL ENDOWED OPEC MEMBERS AS WELL AS MEXICO ARE QUITE AWARE THAT THEIR LONG-TERM PRICING STRATEGY SHOULD BE SET SO AS TO MAKE PETROLEUM THE MOST COMPETITIVE FUEL SOURCE AND, THUS, ENSURE THE MARKETABILITY OF THEIR VAST RESOURCES. ANY EXAGGERATED INCREASES IN THE PRICE OF OIL THAT WOULD PROVIDE INCENTIVES FOR ALTERNATIVE FUEL SUBSTITUTION WOULD AT THE SAME TIME THREATEN THESE COUNTRIES' ABILITY TO MARKET VOLUMES SUFFICIENT TO GENERATE REQUIRED REVENUES.

ONE OTHER SIGNIFICANT CONCLUSION THAT CAN BE DRAWN FROM THE EVENTS OF THE PAST YEAR OR SO IS THAT MARKET FORCES DO WORK EVEN IN THE FACE OF AN OLIGOPOLISTIC CARTEL. THESE FORCES SOMETIMES DON'T WORK AS FAST AS WE'D LIKE AND OTHER TIMES PERHAPS TOO FAST, BUT THE IMPORTANT THING IS THAT THE MARKETPLACE DOES EVENTUALLY ATTAIN EQUILIBRIUM. OPEC WAS NOT ABLE TO MAINTAIN EXCESSIVE PRICE INCREASES BECAUSE LONGER TERM DEMAND FOR PETROLEUM PRODUCTS DID NOT JUSTIFY CONTINUING THESE INCREASES. SIMILARLY, THE CONSUMING

NATIONS WERE NOT ABLE TO BREAK OPEC EARLIER THIS YEAR WHEN THERE WAS MUCH TALK OF \$20/BBL OIL. EXCEPT IN THE VERY SHORT RUN, SUPPLY/DEMAND INTERACTION KEEPS EITHER SIDE FROM ASSUMING TOTAL DOMINATION.

IN SUMMARY, THE PETROLEUM MARKET SHOULD CONTINUE TO BE SLOPPY FOR THE NEXT YEAR TO YEAR AND A HALF, FOLLOWED BY A SOMEWHAT TIGHTER BALANCE FOR THE REST OF THE EIGHTIES. THIS SCENARIO IS UNLIKELY TO RESULT IN PRICE INCREASES SUFFICIENT TO JUSTIFY MOST MAJOR INVESTMENTS IN COAL OR SYNTHETIC FUELS SUBSTITUTION.

AGAIN, I APPRECIATE HAVING HAD THE OPPORTUNITY TO PARTICIPATE IN THIS CONFERENCE AND I'M PREPARED NOW TO DISCUSS ANY QUESTIONS YOU MIGHT HAVE AT THIS TIME.

JAS/CAN:8-16-82 (AS GIVEN)

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Topics of discussion

- * Recent Supply/Demand Trends
- * Near Term Petroleum Outlook
- * Longer Term Petroleum Outlook
- * Implications For Coal And Synthetic Fuels

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Key questions

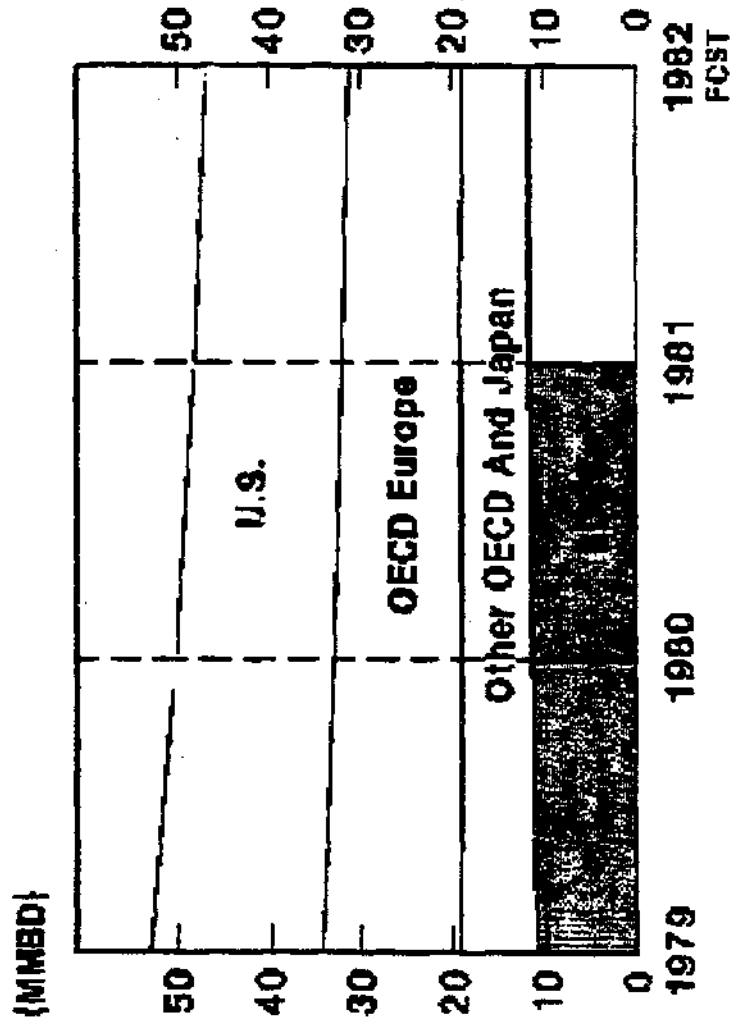
- * **What Is Happening With Petroleum Demand?**
- * **What Is Happening With Inventories?**
- * **What Is Required OPEC Production?**
- * **Will OPEC Maintain Control Of Pricing?**

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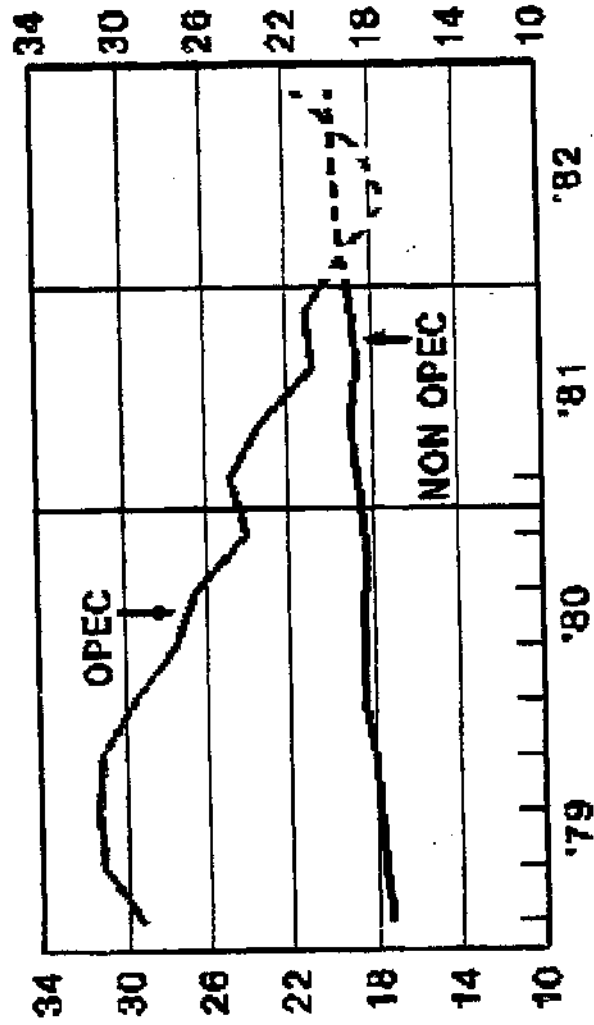
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Free World oil demand



Free World crude production

(MMBD)



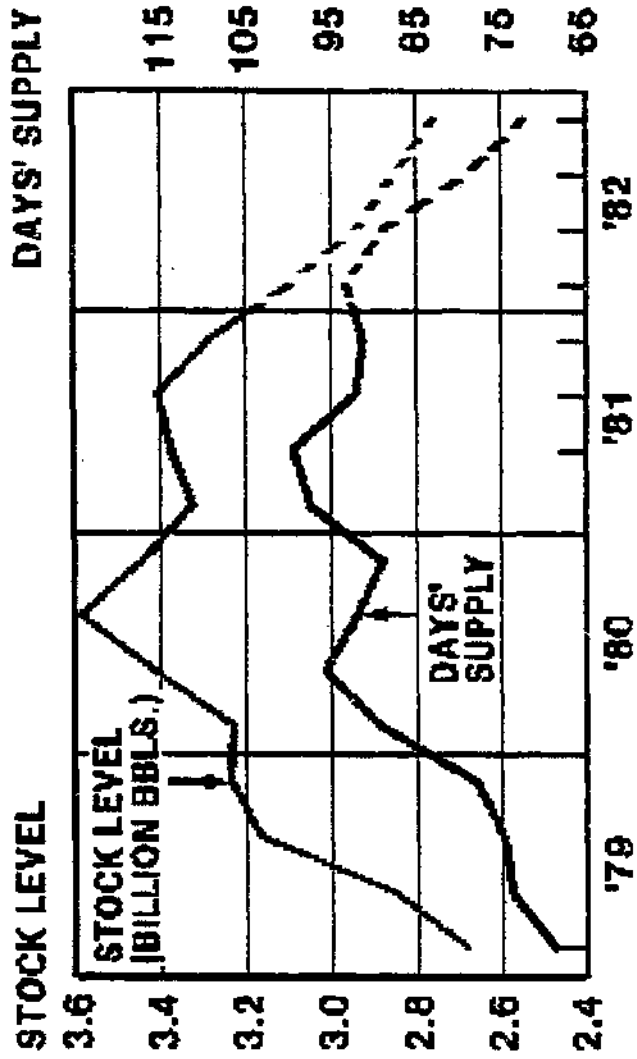
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OECD oil stocks

(EX. U.S. SPR)



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United States petroleum stocks

MILLION BARRELS

	12/31/ 81		6/30/ 82		12/31/ 82		BUILD-UP/ (DRAWDOWN)	
					1ST HALF	2ND HALF		
Gasoline	251	217	230		(34)	13		
Distillate	190	119	160		(71)	41		
Resid	78	56	60		(22)	4		
Other	370	363	340		(7)	(23)		
Subtotal Products	889	755	790		(134)	35		
Crude Oil	369	361	310		(8)	(51)		
Total Stocks	1,258	1,116	1,100		(142)	(16)		

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OECD Europe petroleum stocks**MILLION BARRELS**

	12/31/ 81	6/30/ 82	12/31/ 82	BUILD-UP/ (DRAWDOWN)	
				1ST HALF	2ND HALF
Gasoline	153	145	128	(8)	(17)
Distillate*	367	292	292	(75)	-
Resid	246	213	186	(33)	(27)
Other	114	106	98	(8)	(8)
Subtotal Products	880	756	704	(124)	(52)
Crude Oil	467	423	360	(44)	(73)
Total Stocks	1,347	1,179	1,064	(168)	(125)

* Kerosene/Diesel

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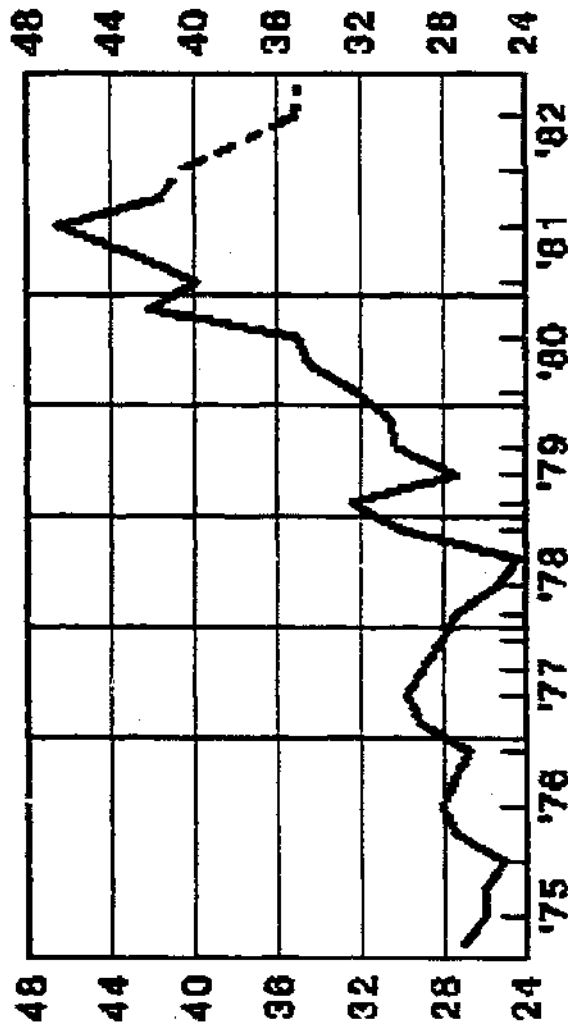
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Required OPEC crude production

MMBD

	1981	1982				AVE
	AVE	I	II	III	IV	
Free World Demand	47.5	47.6	44.8	44.7	47.7	46.2
Non OPEC Supply	{24.5}	{24.8}	{25.3}	{25.2}	{25.3}	{25.2}
Stock Drawdown	{0.6}	{3.4}	{2.3}	{1.0}	{1.0}	{1.9}
OPEC Production	22.5	19.4	17.2	18.5	21.4	19.1

Saudi crude oil production as a percentage of OPEC

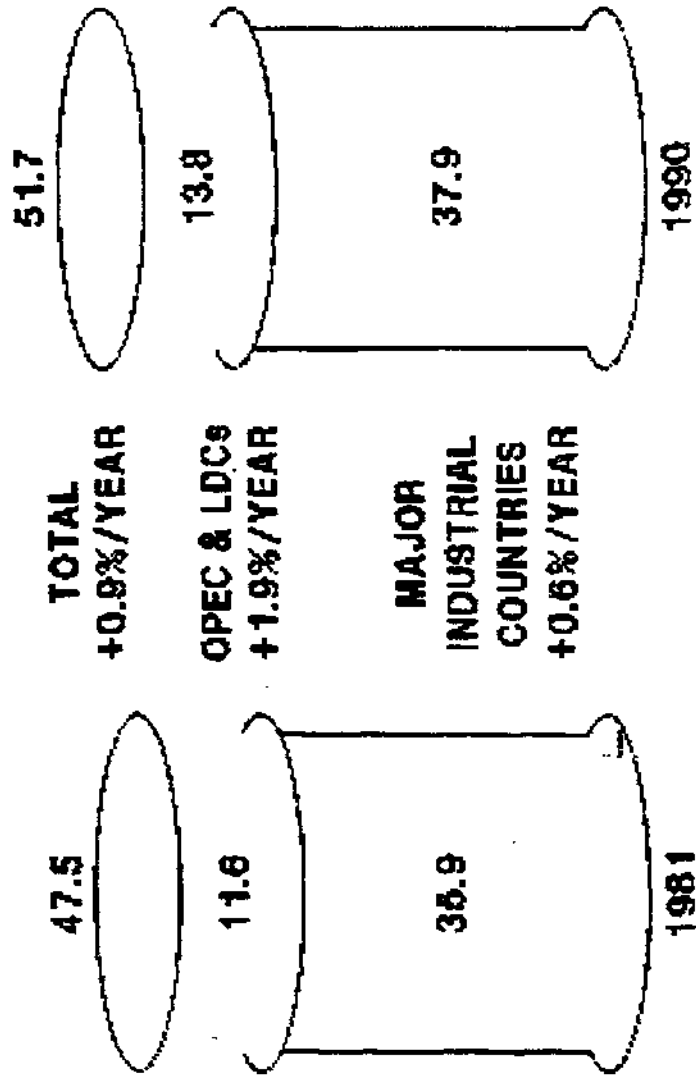


Near term crude pricing outlook

- * Saudi's Resolved To Maintain Prices**
- * Other Producers Price To Achieve
Desired Production**
- * Periodic Deviations In Spot Prices**

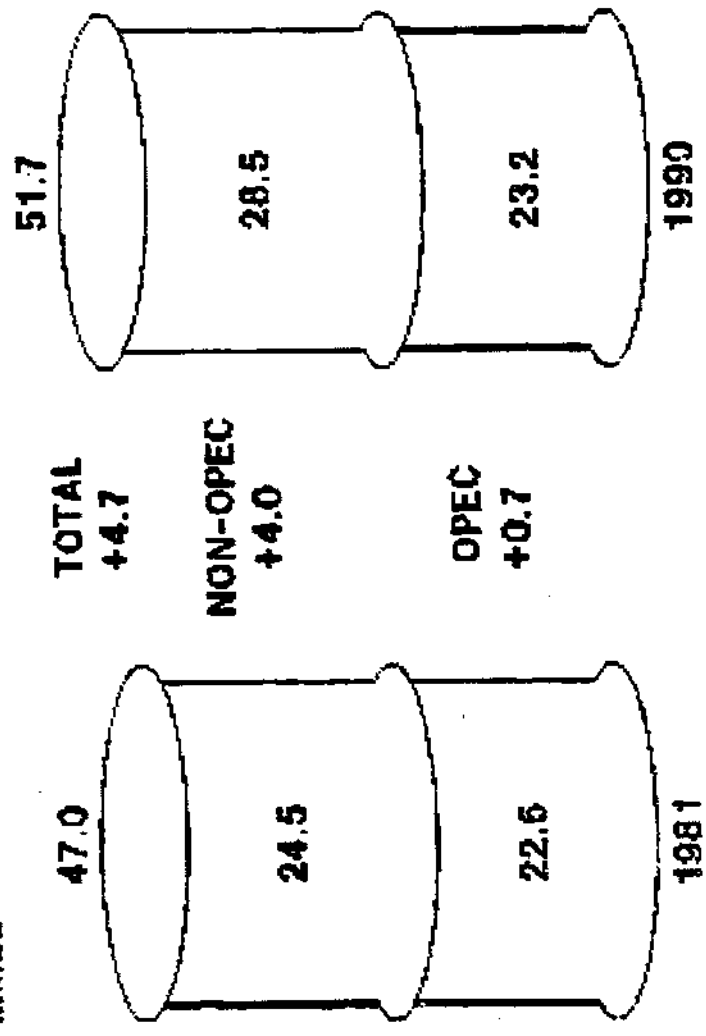
Free World oil demand

MMBD



Free World oil supply

MMBD



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Longer term crude pricing outlook

- * Through 1983: Decline In Real Terms
- * Rest Of Decade: Price Increases To Match
Inflation Or Slightly Higher
- * Periodic Spurts Due To Supply Disruptions -
Followed By Realignment Periods

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Implications for coal and synthetic fuels

- * Lower Petroleum Prices Reduce Incentive For
Alternative Fuels Development**
- * Some Limited Areas For Further Substitution**
- * Major Producing Nations Must Maintain
Marketability Of Vast Oil Resources**