FINANCING A SYNTHETIC FUELS PLANT

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Today a national consensus exists for serious efforts to improve the position of the United States with respect to inflation and national security. In achieving this goal, the reduction of our dependence on imported crude oil is critical to both our economic and political security.

Many of the current optimistic forecasts of future long term price stability for imported crude oil ignore at least three factors:

1. That we had a 50 percent price increase from 1979 to 1980.

2. That in order to return to the relationship between oil prices and prices for other goods and services that prevailed in 1972, oil prices would have to remain at current levels for the next ten years.

3. That the current price stability is due not only to the reduced demand of low economic activity but includes many political factors.

We seem to have all the elements necessary for moving forward to develop a synthetic fuels industry as a part of reducing our dependence on imported oil.

It is critical to reducing the inflation problem.

It is paramount to national security.

We have legislation already in place.

The Energy Security Act, which established the Synthetic Fuels Corporation, represents a creative approach for government and business to cooperate in achieving a long term strategic goal.

The Energy Security Act was drafted to provide a market basket of incentives which could be tailored to satisfy specific projects.

To illustrate the need for these incentives and their impact on the ability to finance synthetic fuels projects, I have prepared a graphical presentation of a typical project.

These charts represent economics for a typical project which

1. Requires six years to complete.

2. In which the ratio of equity to debt is 30/70.

3. Which is eligible for the 10 percent investment tax credit and 10 percent energy tax credit and which incorporates the current provisions of H.R. 3849, which has a 15/5/3 schedule of write-offs and which would allow depreciation to be taken only when the plant is put in service.

Slide 1 - Project Gross Cash Flow

The first slide represents the gross (pre-tax) cash flow going into the project.

The green dashed line is the cumulative equity--this peaks at about 900 million dollars.

The portion funded by debt is represented by the space between the green dashed line and yellow solid line.

The total funds going into the project are represented by the solid line, peak at about $2.3 billion.

Slide 2 - Cash Flow from Tax Effects

The equity partners receive cash flow which partially offsets cash contributions to the project both during construction and operation. These tax effects are shown on this slide.

The investment tax credit and energy tax credit amount to 190 million. The tax benefits of interest, depreciation and operating losses when added to ITC and ETC increase the total tax benefits (dashed line) to a maximum of $1.1 billion.

Slide 3 - Equity Gross Cash Flow Less Cash Flow from Tax Effects Cumulative Net after Tax Equity Cash Flow

If we subtract the cash flow to the partners from the gross equity cash flow invested in the project, we can see the net cash flow required by the equity partners.

If everything went according to plan, this project would be at a breakeven for the equity partners between years 7 and 8.

But, what if everything does not go according to plan?

What are the underlying liabilities for the equity partners?

Let's assume that some event triggers project abandonment.

Slide 4 - Additional Exposure in the Event of Abandonment

This chart represents the losses the equity partners would experience due to ITC and ETC recapture and tax liability on the forgiveness of indebtedness. This peaks at approximately 550 million in the 10th project year, and falls off sharply after year 14.

Slide 5 - True Equity at Risk

This slide adds the net cash invested by the equity partners through year 7 and subtracts the dividends taken out after year 7 to illustrate net cumulative liability in the event of abandonment at any point in time.

In this case this ranges around 300 million dollars through the 13th year. This slide shows that the partners will still have enormous sums at risk even with a 70 percent loan guarantee. These economics are presented as the worst case; i.e., abandonment.

The probability of abandonment can be reduced by provisions provided in the Security Act such as price guarantees.

These will be required especially during the period when maximum exposure occurs as we have shown on these charts. OPEC crude oil suppliers could well trigger temporary price reductions timed to correspond with the period of maximum exposure for synthetic fuels plants. The public sale of stock in South Africa's synthetic fuels plants demonstrates the economic viability of synfuels plants once the critical financing period is passed.

The provisions of loan and/or price guarantees will be the result of a negotiation which should assign all risk to equity sponsors in matters over which they have control, but not require them to take risk in areas over which they have no control.

Examples of areas equity sponsors should be responsible for include:

Achieving designed plant capacity

Raw material consumption per unit of output

Labor productivity

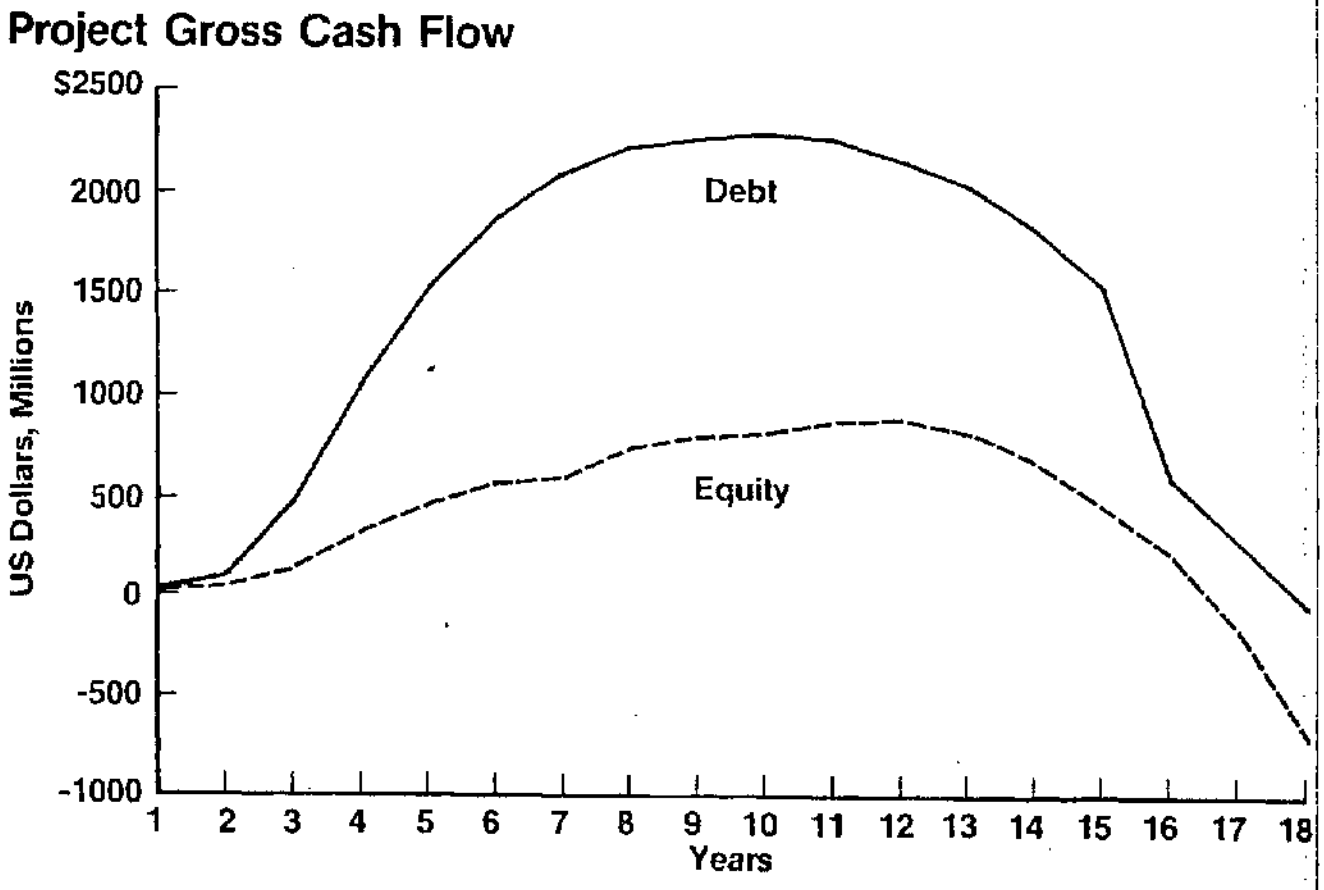
They should not be required to accept risk in areas such as:

1. The inflation rate

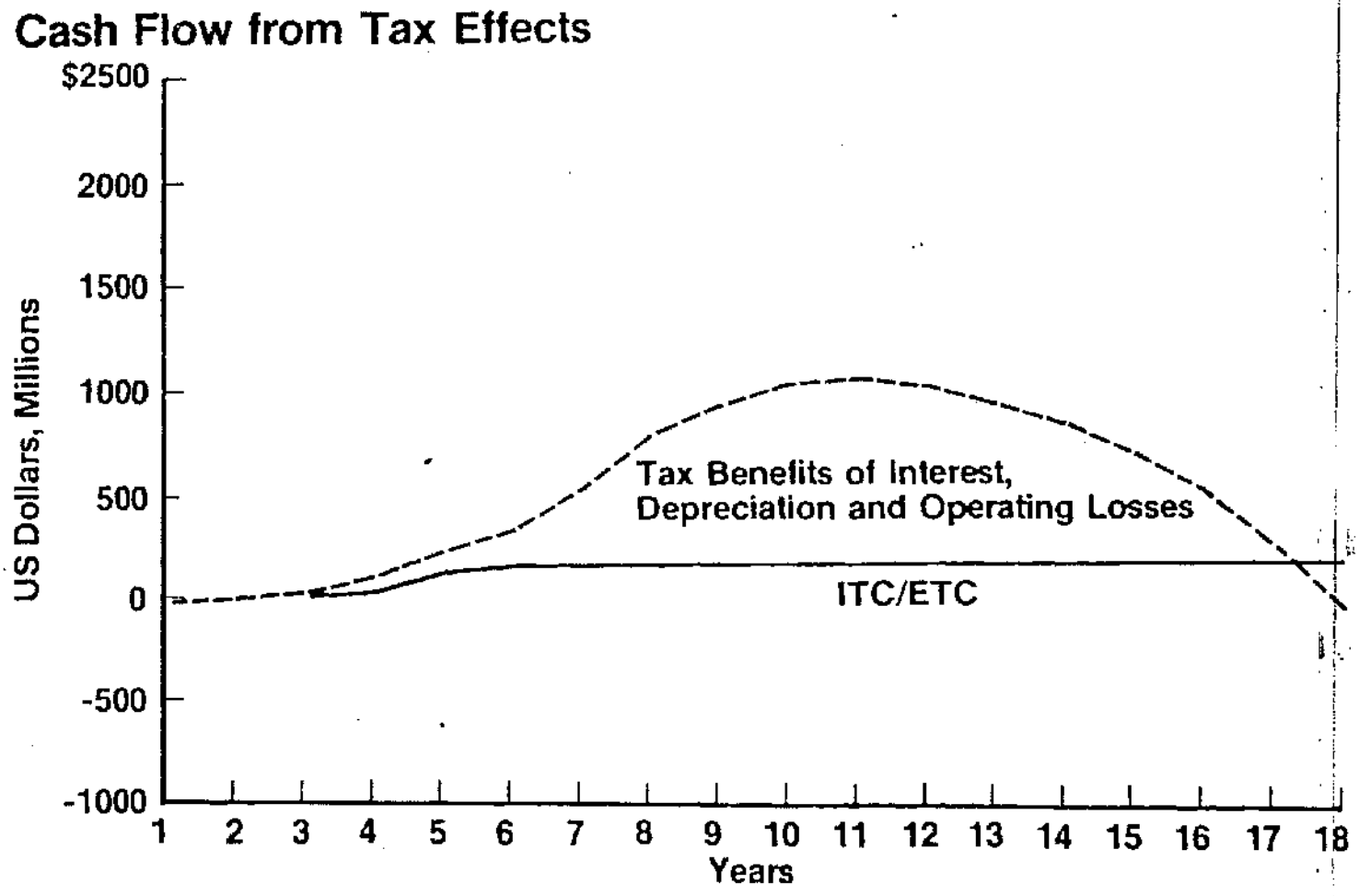
2. Price changes on the part of OPEC designated to kill synfuels projects.

Koppers' commitment to this important task of synthetic fuels development includes a commercially proven gasification process and equity participation in three projects. We are convinced it is time to reduce our dependence on OPEC.

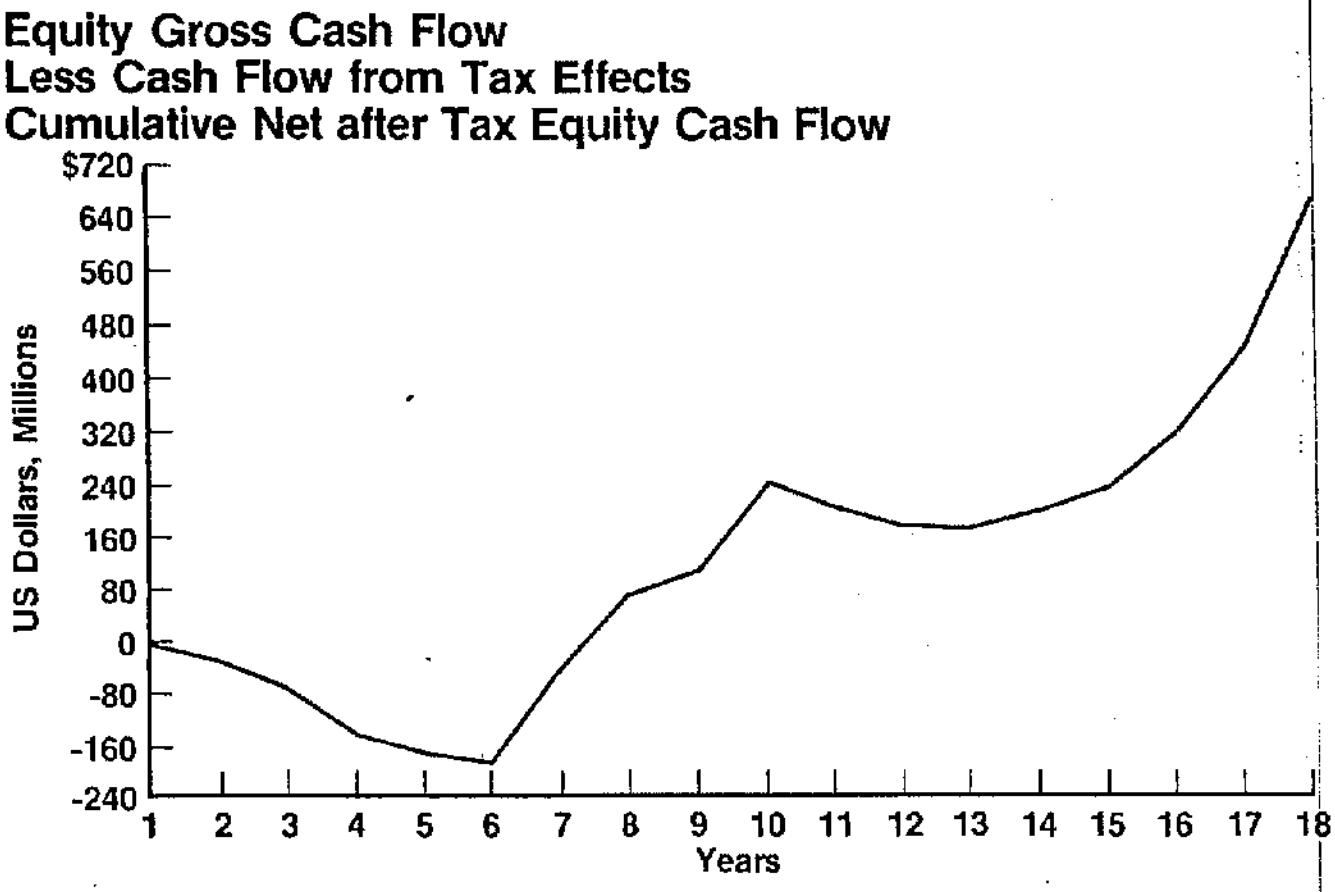
SLIDE 1


Project Gross Cash Flow
$2500
2000
1500
1000
500
0
-500
-1000
US Dollars, Millions
Debt
Equity
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
Years

SLIDE 2

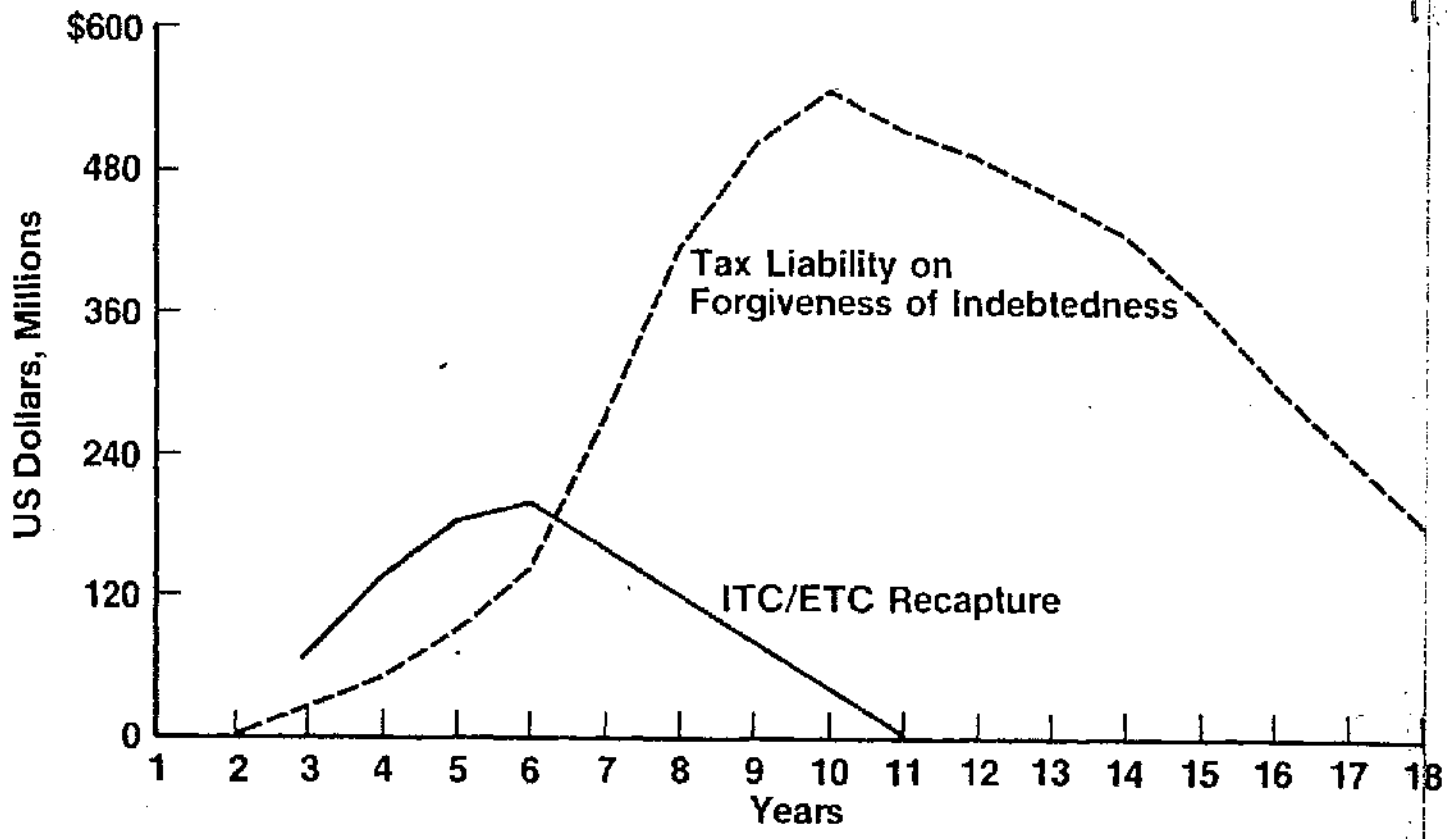

Cash Flow from Tax Effects
$2500
2000
1500
1000
500
0
-500
-1000
US Dollars, Millions
Tax Benefits of Interest,
Depreciation and Operating Losses
ITC/ETC
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Years

SLIDE 3

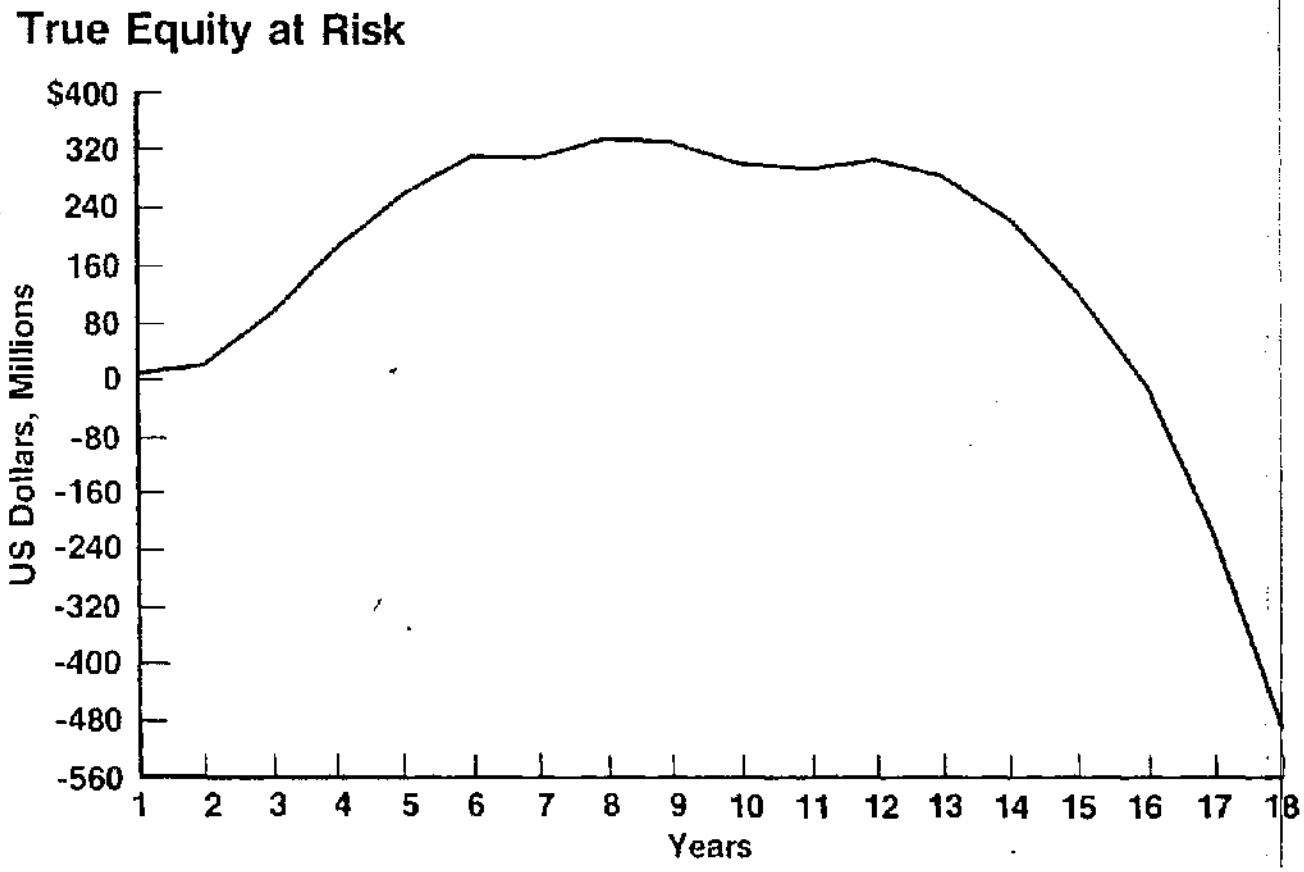

Equity Gross Cash Flow
Less Cash Flow from Tax Effects
Cumulative Net after Tax Equity Cash Flow
US Dollars, Millions
$720
640
560
480
400
320
240
160
80
0
-80
-160
-240
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Years

SLIDE 4

Additional Exposure in the Event of Abandonment



SLIDE 5


True Equity at Risk
$400
320
240
160
80
0
-80
-160
-240
-320
-400
-480
-560
US Dollars, Millions
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Years