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Hollis B. Cheney papers - McNamara Discussions 1979 (Jan-Aug)

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Hollis B. Cheney Papers - McNamara discussions / notebooks / memoranda - 1979
(January - August)

Mr. Robert S. McNamara

August 6, 1979
(typed from HBC draft 8/5/79)

Hollis B. Chenery

Governors' Speech (8/4/79 draft)

In general the speech is much improved from the last draft. Most of my comments are in the margins. A few general points follow.

Section II: Lessons from DD II

The growth analysis is misleading because it is based on a rather mechanical decade comparison that ignores the cyclical performance of the world economy. In fact the growth target for DD II was approximately the same as what had already been achieved in the 1960s; the shortfall is mainly in 1976-1980 as a result of the OECD recession and slow recovery.

Table II exaggerates the difference in income levels by using official exchange rates. Since we printed the more correct purchasing power comparisons in the World Bank Atlas for 1978 (p.31), we should give a footnote to the effect that the gap in purchasing power is less than half what is shown in Table.

Section III:

pp. 16-17 (housing). This section is very negative in comparison to the recent CPS basic needs paper on shelter. There is material there for a more positive conclusion.

p.20. We should stick to the concept of absolute poverty used in WDR I and II, which applies the same standard to all countries. On this basis the present number of absolute poor is about 800 million (WDR I, p.33; used for projections in WDR II, p.19).

Section IV: Approaches to Strategy

Table V (p.24) makes a number of minor changes in the WDR II projections (pp. 17,18) in order to round off the LDC growth rates from 5.6% and 6.6% to 5.5% and 6.5%. Since these are essentially meaningless and confusing to the reader of both documents, I suggest that you reproduce the WDR figures in Table V but refer to them as "about 5.5%" and "about 6.5%". It would also be useful to put in the figures for 1960-1970, which show that case II came much closer to being achieved in the sixties under conditions of more stable growth.

August 6, 1979

p.27. The reference to "industry" is confusing in a speech because most people will think of it as manufacturing (in WDR it also includes mining, construction and utilities). Either delete reference or use manufacturing.

p.29. ODA is necessary for the growth of the poor countries, not the overall target of 6.5%.

Section V: World Bank

This now reads quite well.

cc - Messrs. E. Stern
E. B. Waide
J. Burki (w/attachment)

HBC:jm

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

DATE: July 6, 1979

FROM: Hollis B. Chenery *HBC*SUBJECT: Coordination of Statistical Work in the Bank

1. It was agreed that I report back to you every few months on what we are doing to coordinate statistical work in the Bank.

Country Economic Data

2. As you know, a task force on country economic data has been constituted under Mr. Cheetham's chairmanship and it has developed simplified economic data attachments for CPPs and President's Reports. An important objective of this work is to ensure that the statistics and projections presented in these reports are consistent over time and across countries and are up-dated systematically. New instructions, including detailed definitions and concepts to be used in preparing the attachments, will be issued shortly. EPD is also working on a more comprehensive manual which will provide staff with guidance on statistical concepts, definitions and procedures followed within the Bank.

Social Indicators and Population Data

3. Considerable progress has been made in standardising data in this area and eliminating inconsistencies. Thus, we have used internationally comparable sources whenever possible in compiling the data for World Development Indicators, and the same figures have been used in up-dating the Social Indicator Data Sheets. We have also put together a consistent set of population estimates and related demographic variables based on data supplied by the UN Population Division. However, there are still significant differences between some of the data obtained from international sources and the country data produced by the Regions, and we shall discuss with the relevant international agencies in order to reconcile these in the coming months.

Trade Data

4. We are working on an improved trade data system which should be in place by the end of the summer. This should give us the capacity to produce detailed commodity information at the five-digit SITC level for about 100 countries covering the period 1962-77. We have also started on the systematic collection of information on non-tariff barriers faced by developing country exporters, which will supplement the information that the GATT is collecting on tariffs. A study of the penetration of markets in 11 industrialized countries by manufactured exports from developing countries is under way.

Income Distribution Data

5. A new initiative in this field was the subject of proposals recently endorsed by the President's Council. We are following this up with P&B.

Publication and Dissemination

6. An informal working group has been examining ways of improving the dissemination to outside users of the large amount of economic and social data which the Bank produces each year. A draft policy statement on this subject has been submitted to the Publications Committee. Meanwhile, EPD is in the process of editing the second edition of World Tables for publication at the end of this year.

Cooperation with Other International Agencies

7. We continue to maintain close contacts with other international agencies concerned with the production of economic and social data. The Bank took an active part in the recent meeting of the UN Statistical Commission and in the Consultative Group meeting convened to consider the proposed UN National Household Survey Capability Programme. We have also been holding discussions with the ILO on up-dating work force projections, with the GATT on trade data and price indices and with the UNCTAD on trade matrices.

8. The joint Bank/UN International Comparison Project (ICP) is now approaching the end of the research stage and is being transformed into a long-term UN statistical program. When the research is completed later this year, benchmark and time series data will be available for 34 countries, over half of them developing countries. We are making special efforts to bring more developing countries into the system as soon as possible and we are looking into less expensive and time-consuming ways of expanding the coverage.

cc: Mr. E. Stern, VPO
Mrs. H. Hughes, EPD
Mr. R. Cheetham, EPD (o/r)
Mr. R. Chander, EPD

OFFICE MEMORANDUM *Hughes*

TO: Mr. Robert S. McNamara
FROM: Hollis B. Chenery, VPD *HBC*
SUBJECT: Board Paper on Price Prospects

DATE: July 6, 1979

We have revised the 1979 Price Prospects report in accordance with your recent comments. The revisions have been essentially to incorporate the OPEC developments in June and are in line with our technical note to you on petroleum price prospects. The relevant pages in the main text (with the revisions underlined in red), and the revised petroleum annex are attached.

Your clearance is requested.

CChung/HHughes

cc: Helen Hughes
Shamsher Singh

7/7
Approved (annex '79#)
Jugene on 7/4)
LRW

the early 1980s. The only clear exception is timber, where prices are expected to show a continuous upward trend, as they have done in the past. The recovery of prices for agricultural products is expected to be relatively small. Prices of metals and minerals which have experienced their worst slump since the 1980s are expected to recover strongly.

5. Petroleum prices (in constant dollars) declined continuously from 1955-70, increased moderately through 1973, and then tripled in 1974. Since that year, real prices have declined somewhat. However the series of price increases concluded in June 1979 again raised real prices slightly above the 1974 peak. The outlook for the 1980s is clouded. A constant level of prices has been assumed for the base projections, but it is of course impossible to predict the events which will ultimately determine the actual price trajectory. Additional supplies, efficacy of conservation measures in reducing demand, technological changes in both energy production and usage, and political developments will all have an impact. Presently available evidence suggests that, even with a restoration of Iranian flows, there would be an emerging petroleum shortage in the second half of the 1980s if the price were indeed to remain constant. If true, or if perceived as true, the relative price of petroleum would rise faster, by about 2% per annum in the 1980s.

6. The price outlook for non-fuel commodity groups can be summarized as follows (all prices are expressed in constant US dollars):

- a) The prices of food products other than beverages are expected to improve steadily from their 1977 levels. This applies particularly to cereals and beef. The prices of beverages are expected to continue their downward adjustment before reverting to their long-term historical values. Sugar prices have been depressed for some years, and they are expected to remain so through 1981. This is expected to lead to stagnation, or even a decline in production, precipitating a new cyclical upswing in prices towards the mid-1980s.

- b) The real annual growth of GDP in developing countries (excluding capital surplus oil-exporting countries) was assumed to be 4.7% between 1976 and 1980 and 5.7% between 1980 and 1990.
- c) No changes in exchange rates were assumed, except insofar as they offset differential rates of inflation in national currencies.
- d) Inflation, in US dollar terms, as measured by the Index of International Inflation, was assumed to average 6% a year between 1979 and 1985, and 5% a year between 1985 and 1990.
- e) Petroleum prices, in 1977 constant dollars, were assumed to remain at \$12.70 per barrel ^(from 1979 onwards) from the mid-1980s onwards. An alternative scenario assuming a 20% higher level of petroleum prices by 1990 was also given.
- f) World population was projected to increase at 1.7% a year between 1976 and 1990, with an annual growth of 0.8% in industrialized countries, 2.3% in developing countries and 1.2% in centrally planned economies.
- g) It was assumed that the market structure would either remain more or less unchanged, or that the envisaged changes would not affect the long-term trend projections significantly.

In December 1978, OPEC announced a set of phased price increases for 1979 with the intention of achieving a 14.5% higher price at the end of the year. However, the tight supply-demand balance that followed the interruption of Iranian supplies caused OPEC to raise the price of Saudi Arabian light crude to \$14.54 as of April 1, an increase of 14.5% over its fourth quarter 1978 level. Other crude prices rose somewhat more. Overall, the price of OPEC petroleum on April 1 (weighted by OPEC output) increased by about 24% over the fourth quarter.

The OPEC meeting of June 26-28, 1979 failed to establish a more uniform price structure. It resulted in the formal establishment of two "tier" prices (based on Saudi Arabian light)--the lower being \$18 a barrel and the upper being at least \$20 a barrel with allowance for quality and transportation cost adjustments. Compared with the fourth quarter 1978 level, the overall 1979 price for petroleum (weighted by OPEC output) is expected to increase by about 40%. Saudi Arabian light is likely to average about \$16.00 a barrel (a 26% increase over its level of \$12.70 per barrel in 1978).

may have some price depressing effect. Nickel prices are recovering as the high stocks accumulated mainly during 1975-78 have begun to decline because of the closedown of major mines in Canada since September 1978 due to labor disputes. The recovery is expected to gain momentum toward the mid-1980s. Lead and zinc prices, already on the rise, are expected to show long-term gains. Supplies are low, stocks are tight and long-term demand prospects are bright, particularly for zinc.

18. Since a rather tight supply/demand situation is foreseen in the early 1980s, aluminum prices are expected to increase steadily. Bauxite prices are expected to increase in line with aluminum prices. Iron ore and manganese ore prices have tended historically to decline as lower cost, higher quality sources of supply were brought on stream. This trend is expected to change for iron ore; the price decline will not only be stemmed but may even reverse itself, although the increase will be small. In addition, a spurt in steel making is expected to develop in the early 1980s. The declining trend in manganese ore prices is expected to persist.

19. Petroleum. It has been assumed that petroleum prices in constant dollars will recover to slightly above their 1974 levels in 1979, and then remain stable (Case I). An alternative scenario--that a supply-demand imbalance will develop in the mid-1980s causing prices to rise more strongly (Case II)--is examined in Part II of this report.

PETROLEUM

Summary

1. In 1978 the official price of Saudi Arabian light crude, FOB Ras Tanura, averaged \$12.70/barrel, virtually the same as in 1977. ^{1/} For the second year in a row, it failed to keep up with global inflation, falling by about 10% in purchasing power. In December 1978, OPEC announced a set of phased price increases for 1979 averaging 10% for the year, with the aim of achieving a 14.5% price increase (in US dollars) at the end of the year. Prompted by the tightening of the supply-demand balance that followed the interruption of Iranian supplies, the price of Saudi Arabian light crude was raised to \$14.54 as of April 1; but other producers added on temporary surcharges in accordance with market conditions leading to the emergence of different prices for crudes of comparable characteristics. The price of Saudi Arabian light is likely to average about \$16.00 per barrel in 1979 (a 26% increase over its level of \$12.70 per barrel in 1978). In 1977 constant dollars terms it is estimated to reach \$12.80 per barrel, that is 1.5% above its 1974 peak level.

2. In the base case for this report, the price of Saudi Arabian light crude is assumed to rise slowly in the next years, reaching a level of \$12.70 (in 1977 constant dollars) by the mid-1980s and remaining there until 1990. This long-run price would be about the same as the historic high reached in 1974 (see Table 2). Present indications, are, however, that this outcome is not likely. The base case assumes that conservation measures will be effective in markedly reducing demand, that new technologies leading to energy use reduction will come into place during the forecast period, that new supplies will be forthcoming on a fairly ample scale from Mexico and other producers, and that there will be no political disruptions to supplies. It is of course impossible to predict the events which will ultimately determine prices in the 1980s, but currently available evidence suggests that even with the restoration of the Iranian flows, there would be an emerging petroleum shortage in the second half of the 1980s if the price were to remain constant. Thus a rise of about 2% per annum of relative energy prices in the 1980s does not seem unlikely.

Market and Prices

3. The 1978 fall, in real terms, of the price of crudes was the outcome of both market and institutional forces. Petroleum supplies did not adjust adequately to restrained demand in developed countries in 1977 and early 1978, resulting in the relative weakening of prices. As exports from Iran declined in the fourth quarter of 1978, the balance shifted to

^{1/} Throughout this report, units of measurement are barrels and barrels/day with non-petroleum energy sources converted to these units using standard conversion factors. These units are used in conformity with the most common practice in the industry and elsewhere.

one of excess demand. At its annual meeting in December in Abu Dhabi, OPEC announced a series of price increases for 1979 which were to average 10% for the year. The first quarterly installment took effect in January, with the price of Saudi Arabian light, used by OPEC as a reference price, rising to \$13.34.

4. Iranian exports were already greatly reduced by December, but later developments witnessed a further deterioration of the situation. Production was increased in other OPEC countries so that the total shortfall from the loss of Iranian exports was less than 2.5 million barrels/day, but this accounted for about 5% of supplies in the OECD economies. In response to the emerging market tightness, OPEC rescheduled its price increases. The prices planned for later in 1979 were brought forward to April 1 raising the reference price to \$14.54, an increase of 14.5% over its fourth quarter 1978 level.

5. Other crude prices, however, were raised substantially above the marker price. The price of Iranian light, a comparable crude to Saudi Arabian light, was raised by almost 30%. The price of Kuwait, a lower quality crude than the marker, was also raised by about 30%. African crude prices increased by over 30%. Overall, the price of OPEC petroleum at April first (weighted by OPEC output) increased by more than 20% over the fourth quarter 1978 level. 1/

6. The increase in contract prices was preceded by sharp increases in spot prices from the end of 1978. The narrowing of availabilities in spot trading that accompanied the decline in Iranian production led to limited transactions in the first quarter at prices in the \$18-20 per barrel range. Spot crude oil transactions normally account for 3-5% of world trade, but they were sharply reduced for most of the first quarter of 1979.

7. To minimize the upward pressure on prices and avoid supply shortages, the member countries of the International Energy Agency agreed in early March to reduce their consumption in 1979 by 5% on a voluntary basis. The market tightness has continued despite the announcement, and it seems unlikely that the announced reduction will be accomplished in the second half of the year, unless there is some weakening in economic activity.

8. With the exception of Saudi Arabia, additional price increases over the April 1 levels were introduced by OPEC and non-OPEC exporters in the second quarter widening the gap between the upper and lower tiers of OPEC prices.

1/ Non-OPEC petroleum export prices were raised to the levels of comparable OPEC crudes. North Sea crude prices which had risen significantly more than comparable petroleum prices in January, were brought into line with the rest in April.

9. The OPEC meeting of June 26-28, 1979 resulted in the formalization of two tier prices. The lower tier based on Saudi Arabian light at \$18 a barrel for the second half of this year is expected to be adopted by the United Arab Emirates, Qatar and Saudi Arabia. The remaining OPEC countries will set their prices on the basis of a higher tier, at least two dollars per barrel above Saudi Arabian light. The producers of the lighter, low sulphur crudes would add quality and transportation differentials to the base higher tier. 1/ Overall, our preliminary estimates indicate that average 1979 petroleum prices (weighted by OPEC output) will be 40% higher than the fourth quarter 1978 level. Saudi Arabian light is likely to average about \$16.00 a barrel (a 26% increase over its level of \$12.70 per barrel in 1978). If deflated by the International Inflation Index, the 1979 price is estimated to reach \$12.80 per barrel (in 1977 dollars), that is 1.5% above its 1974 peak level. If the projected inflation of 9% for 1979 proves conservative (either because inflation is higher or because the US dollar is devalued), the Saudi Arabian marker price will fail to recover to 1974 levels in real terms.

10. Looking further ahead, world energy and petroleum price prospects are clouded by a number of uncertainties and are, therefore, open to a wide range of outcomes. Key factors underlying the basic assumptions used in this report and an alternative scenario are discussed below.

11. A long-term economic growth assumption of 4.2% per annum in industrialized countries has been adopted in this section as a basis for examining the likely long-term path of petroleum prices. Despite expected increases in energy production, supplies, particularly of petroleum are regarded as having low price elasticities. The adjustments are thus seen as coming from the consumers' rather than producers' reaction to the likelihood of an emerging energy shortage at the postulated economic growth rates.

12. Under the assumption that petroleum prices will reach a level of \$12.70 (in 1977 constant dollars) and remain constant thereafter (Case I), demand is projected to exceed petroleum supplies by about 8% in 1990. 2/ Underlying such a notion is the strong influence of recent performance extrapolated to the long term: the stagnation of primary energy production in industrialized countries despite the three-fold increase (in real terms) in energy prices of 1974, insignificant substitution among fuels, dependence on petroleum imports despite considerable public concern about import levels, and no major discoveries resulting from stronger exploratory activity worldwide.

1/ Premium crude prices were eroded relative to the Saudi Arabian marker price from 1974 to 1978: the larger price increases anticipated merely brings them back to the 1974 relative levels.

2/ The International Energy Agency has recently predicted a gap of 2 million b/d in petroleum supplies in 1985 rising to 10.6 million b/d in 1990.

13. The impact of the price increases of 1973-74 on supply and demand is still difficult to assess some five years later. In its World Energy Outlook, 1977, the OECD Secretariat estimated that the industrialized countries could save about 4 million b/d of oil annually by 1985 if the accelerated conservation policies set out in that report were followed. Since the report was published, the projected gains in energy use resulting from conservation efforts have been revised downwards although with the proven technology considered economic under present prices, the conservation potential could amount to 15-18 million b/d of oil equivalent in 1985.

14. The current level of energy prices -- largely determined by the price of petroleum -- is also seen to provide a sufficient incentive for considerable increases in energy production. Several non-economic factors, however, affect the climate of investment and the current projections of nuclear power and coal production increase in industrialized countries (6.5% per annum) could turn out to be excessively optimistic.

15. Recent developments in coal and nuclear power have been dominated by environmental issues affecting demand levels as well as production costs. In both Canada and the US, an important unresolved issue is how to bring low-sulphur Western coal to the Eastern states. In the UK and Germany, the fuel switching problem is compounded by high coal production costs. The industrialized countries' nuclear programs have been undergoing continual downward revision. There are public concerns about the operating safety of nuclear power plants, and problems of radioactive waste management and disposal throughout the entire nuclear fuel cycle have come to the fore. Future nuclear programs are likely to suffer further delays unless a satisfactory solution to these problems is found; indeed, there have been few new orders for nuclear plants in recent years.

16. Finally, the assumption of constant prices requires that OPEC surplus countries hold their supplies at their maximum technical capabilities. Aside from the uncertainty that surrounds current estimates of OPEC production capacity, political as well as internal economic factors do not permit an indefinite projection of OPEC supply on the basis of technical capacity. In summary, at national income growth of around 4% per annum, the plausibility of the constant price assumption depends on the importing countries' reaction to the likelihood of an emerging energy shortage.

17. A faster increase in prices (Case II) emerges as necessary for clearing the petroleum market should current uncertainties dominate the investment decisions of the main importing countries.

18. Even with timely investments in energy conservation and production, supplies are likely to tighten in the mid-1980s as demand approaches the limits of energy producing capacity. In anticipation of such a situation, it can be expected that price increases will gradually

phase in to check further demand growth while pushing forward additional investments on production.

19. The effect of the anticipated supply-demand imbalance on petroleum prices is uncertain. The increase in prices required to clear the market has been estimated at the level of the final user. Crude oil costs represent only a fraction of the price of petroleum products (about one-third of the final price of a composite barrel of products in European markets), and increases in product prices might induce a more than proportional increase in petroleum export prices.

20. Preliminary analysis indicates that the economic growth assumptions in this report imply a price trajectory in which users prices might have to rise by about 20% in real terms by 1990 to clear market. This is equivalent to a gradual increase of about 2% per annum from the early 1980s. A gradual price escalation is seen as preferable to the 1973-74 type as it would allow adjustments that would be unlikely to affect overall economic performance significantly. Large increases are difficult to absorb by consumers and generate circular feedbacks of higher inflation, lower growth and erosion of producer prices that lead to new rounds of price increases. The introduction of gradual increases, however, would require much closer cooperation between producers and consumers than has been evident thus far. No attempt is made to project the intervening price trajectory prior to 1990.

Supply Outlook

21. The world supply of primary energy is projected to increase from 127 million b/d (barrels per day) in 1976 to 214 million b/d in 1990, an annual growth rate of somewhat less than 4% (Case I). World petroleum production is expected to grow 2% annually, from 60 million b/d in 1976 to 79 million b/d in 1990 (see Table 1).

22. The bulk of the 19 million b/d of additional petroleum supplies expected by 1990, is likely to come from the capital-surplus petroleum exporting countries and other developing countries, the former accounting for about five and the latter about eight million b/d. The incremental petroleum supplies from the industrialized countries are expected to be about two million b/d, and from the centrally planned economies less than 4 million b/d. A faster increase in prices than assumed in the base case is postulated to accelerate investments in petroleum production in the early to mid-1980s and add over six million b/d petroleum to the production levels of 1990 (Case II). Most of the increase is projected to come from capacity expansions in the capital surplus developing and industrialized countries. Higher prices would increase the profitability of enhanced recovery and development of marginal fields. The effect on the other developing countries' supplies is likely to be marginal, and the centrally planned economies are unlikely to respond to such incentives.

23. Of the incremental 68 million b/d of non-petroleum energy supplies during the 1976-90 period, the industrialized countries are projected to account for 25 million b/d, mostly with larger supplies of coal and nuclear power. In capital-surplus OPEC countries, the projected increases in non-petroleum energy supplies of four million b/d would consist entirely of natural gas. The centrally planned economies are expected to increase non-petroleum energy supplies by the equivalent of 25 million b/d during the period, with coal and natural gas accounting for 13 and 9 million b/d respectively. The developing countries are projected to increase non-petroleum energy supplies rapidly, by 14 million b/d. For the developing countries as a whole this increase is expected to be divided about evenly between coal, natural gas, and hydroelectric power.

24. The industrialized countries produce more energy than any other country group, but in the aggregate, very modest production growth in the OECD countries, averaging less than 3% per annum, is projected. At least for the first half of the decade, these projections are based largely on projects already in the pipeline. Even in the late 1980s, major changes are unlikely; major new supplies will only be a factor in the 1990s, because investment lags are long and adjustments slow. The principal supply issues in the 1980s will concern the investments which will determine the outlook for the 1990s.

25. Developing countries are well-endowed with energy resources. About two-thirds of global proven crude petroleum reserves and at least 60% of estimated ultimate reserves are located in developing countries. They possess about 40% of the natural gas reserves, half of global hydroelectric potential, a third of the uranium reserves, and at least a tenth of total coal resources. Furthermore, exploration is likely to raise coal reserves appreciably. Non-OPEC developing countries currently produce about 5% of global crude petroleum, and also account for about 5% of the export market. The proportion will go up somewhat during the 1980s as Mexico becomes a major producer, perhaps on the scale of Iraq or Iran. Total production in non-OPEC developing countries is expected to increase by at least 6% a year with Mexico accounting for most of the growth in non-OPEC exports.

26. The crude petroleum production capacity of the capital surplus countries by 1990 is likely to grow by only 5-8 million b/d.

Demand Outlook

27. Should petroleum prices remain constant through the 1980s, world consumption (excluding bunkers) of primary energy is projected to almost double between 1976 and 1990 with a projected average annual growth rate of just over 4%. World inland consumption of petroleum would increase from 55 million b/d in 1976 to 86 million b/d in 1990, an average growth of about 3%. Consumption of petroleum for bunkers is projected to rise from about 3 million b/d to 6 million b/d in 1990 (see Table 1).

28. Demand for energy and petroleum is expected to increase fastest in the capital surplus OPEC countries, at an annual average rate in excess of 8% during 1976-90. Energy consumption in the developing countries is projected to increase at somewhat less than 7% per annum during the period. For the centrally planned economies, the projected annual consumption growth rates are about 4.5% for energy and 3.5% for petroleum. The projected growth rates are even lower for the industrialized countries -- averaging about 3-3.5% per annum for energy and 2.5% for petroleum.

29. A faster increase in prices (Case II) than assumed above, is estimated to have a significant impact on the consumption of oil products in the industrialized countries. Our analysis indicates that an annual increase in prices of about 2% could reduce their aggregate petroleum consumption by five million b/d in 1990 over the level projected at lower price levels (Case I). Under the higher price assumptions, however, the consumption of petroleum is not seen to be significantly affected in the rest of the world.

30. The demand projections explicitly take account of prices as well as GDP as determinants of energy demand. Given GDP growth and the energy price assumptions, the projections of total energy demand are derived from estimated elasticities. ^{1/} The elasticities were adjusted to account for the likely substitution between energy and other inputs -- that is, energy conservation -- that is being induced by the delayed impact of the energy price increase in 1973/74 and by non-price measures. The estimation of the share of petroleum in total demand takes into consideration likely substitution among alternative sources of energy. However, such substitution is likely to be limited during the 1980s.

31. Prior to the OPEC price increase, primary energy consumption in industrialized countries increased at about the same rate as aggregate economic growth. Since then this pattern has changed. Primary energy consumption in 1976 was virtually unchanged from 1973, while aggregate income was 4-5% higher. The situation, however, varied greatly among countries. Preliminary estimates for 1977-78 also indicate a less than proportional growth in energy usage. However, there has been less success at reducing dependence on petroleum and imported fuels, despite considerable official concern about import levels, which had led to energy plans and fuel substitution policies in virtually all industrialized countries.

32. Future industrialized energy demand has been studied extensively, using a variety of methodologies and assumptions. The petroleum projections summarized in Table 1 were derived by combining estimates of future energy-to-GNP ratios derived by the International Energy Agency with World Bank economic growth assumptions. These estimates of demand for total primary energy are a few percentage points higher than those of other studies, owing to relatively optimistic income growth assumptions.

^{1/} Income elasticity of demand estimates of 1.3 for developing countries and unity for industrialized countries and price elasticity of demand estimates of -0.3 and -0.6 respectively were used.

33. About one-eighth of global primary commercial energy is used in developing countries. Although this is only a small share, the importance of developing countries rests on the prospect that their energy requirements are expected to increase at much faster rates than the rest of the world. There are several factors behind this expectation: (a) developing countries are expected to maintain higher economic growth rates than the rest of the world; (b) rapid economic growth is likely to be accompanied by increased industrial production and urbanization, which are generally energy-intensive; (c) as income levels increase, demand for various energy-consuming amenities (automobiles, electric appliances, etc.) could rise dramatically from present low levels; and (d) substitution of commercial for non-commercial energy is likely to continue.

34. In contrast to the industrialized countries, there have been few independent studies of overall energy demand in developing countries. Data limitations impose severe restrictions on econometric analysis. However, the estimates reported here are based on data collected for a number of countries on aggregate energy use and user prices of energy. Demand levels are projected on the basis of assumed rates of income growth and changes in the relative price of energy. To account at least partially for the wide diversity in developing economies, separate estimates in income and price elasticities were derived for four different country groupings: low income Africa, low income Asia, primary exporters and semi-industrialized economies.

35. The estimates suggest that commercial energy demand in developing countries is likely to at least double during the 1980s. This is largely a natural implication of relatively high economic growth combined with relatively high income elasticity. While it is expected that this elasticity will eventually fall to unity or below, it is unlikely that this fall will occur in most developing countries until the transition to commercial energy is more complete. While there is as yet no way of accurately gauging the growth in demand for specific fuels, petroleum use is likely to remain cost competitive as a fuel for power generation in many countries when capital costs and scale economies are considered. As elsewhere, appropriate technology for effective fuel-switching is lacking.

World Trade Outlook 1/

36. The industrialized countries' projected energy and petroleum deficits are expected to increase in the 1980s. The net petroleum import demand of industrialized countries, which is only marginally below their net energy import demand, is expected to rise from 25 million b/d in 1976 to 30 million b/d in 1990. Capital-surplus OPEC countries could raise their

1/ The figure cited in this section are derived from Case II in which supply and demand are adjusted to ensure year-by-year trade balance.

petroleum supplies by 1990 by eight million b/d of which one million b/d will be required to meet increasing domestic demand, leaving about seven million b/d of incremental exportable surplus. Accelerated development of petroleum supplies in some of the non-OPEC developing countries is geared to exports. These are the countries which are relatively well-endowed with petroleum resources. Net petroleum exports of the 13 1/ petroleum-exporting non-OPEC developing countries are expected approximately to triple between 1975 and 1990, with Mexico and Egypt accounting for the bulk of the increase. With the developing countries' petroleum consumption projected to grow at 6% annually, net petroleum exports would be declining from the late 1980s onward. With rapidly rising petroleum consumption and the difficulties being encountered by the USSR in increasing petroleum supply, the centrally planned economies are likely to reduce net petroleum exports to an insignificant level by 1990.

1/ Angola Bahrain, Bolivia, Brunei, Congo, Egypt, Malaysia, Mexico, Oman, Syria, Trinidad & Tobago, Tunisia, Zaire.

Table 1: PETROLEUM - SUMMARY OF WORLD PRODUCTION, CONSUMPTION AND TRADE, BY ECONOMIC REGIONS

	Actual					Est. 1978	Projected Case I			Projected Case II			Case I					Case II				
	1960	1965	1970	1974/76 Average	1976		1977	1980	1985	1990	1980	1985	1990	1960-77	1977-80	1980-85	1985-90	1974/76-90	1977-80	1980-85	1985-90	1974/76-90
	------(million b/d of crude oil equivalent)-----												------(% per annum)-----									
Production																						
Developed Countries	8.8	10.4	13.4	13.0	12.7	13.2	14.0	15.7	16.1	14.9	15.7	16.3	17.4	3.1	6.5	0.5	-1.6	0.9	6.5	0.8	1.3	2.0
Capital Surplus CPEC ^{/a}	3.2	6.3	11.7	14.8	15.8	16.3	15.3	14.7	20.1	20.6	14.7	20.1	23.5	11.2	-3.4	6.5	0.5	2.2	-3.4	6.5	3.2	3.1
Developing Countries	6.7	9.7	15.0	18.8	19.3	18.9	19.0	21.2	24.5	27.2	21.2	24.8	28.3	7.4	3.9	2.9	2.1	2.5	3.9	3.2	2.7	2.8
Centrally Planned Economies	3.4	5.4	7.7	11.9	12.6	13.4	13.6	13.4	14.7	16.4	13.4	14.7	16.4	8.8	0.0	1.9	2.2	2.2	0.0	1.9	2.2	2.2
WORLD TOTAL	22.1	31.8	47.8	58.5	60.3	61.8	61.9	65.0	75.4	79.1	65.0	75.9	85.6	7.1	1.7	3.0	1.0	2.0	1.7	3.2	2.4	2.6
Consumption																						
Developed Countries	14.9	21.4	31.7	36.1	37.3	39.8 ^{/b}	40.5	40.1	46.2	51.8	40.1	45.2	46.4	6.6	0.3	2.9	2.4	2.5	0.3	2.4	0.5	1.7
Capital Surplus CPEC ^{/a}	0.1	0.1	0.2	0.4	0.6	0.6 ^{/b}	0.6	0.7	1.0	1.5	0.7	1.0	1.5	11.4	5.3	7.4	8.4	9.2	5.3	7.4	8.4	9.2
Developing Countries	2.7	3.6	5.3	7.2	7.6	8.3 ^{/b}	8.5	8.6	11.5	16.7	8.6	11.5	16.7	7.3	1.2	6.0	7.7	5.8	1.2	6.0	7.7	5.8
Centrally Planned Economies	2.6	4.1	6.4	9.1	9.6	10.0 ^{/b}	10.4	11.3	13.7	15.5	11.3	13.7	15.5	9.0	4.2	3.8	2.8	2.5	4.2	3.8	2.8	2.5
WORLD TOTAL	20.3	29.2	43.6	52.8	55.1	58.7 ^{/b}	60.0	60.7	72.4	85.5	60.7	71.4	80.1	7.1	1.1	3.6	3.4	3.3	1.1	3.3	2.3	2.8
Exports /c																						
Developed Countries	1.2	1.7	3.0	3.2	3.0	3.7	3.7		3.8	4.3	4.9			7.7					0.9	2.5	2.6	2.9
Capital Surplus CPEC ^{/a}	3.0	6.0	11.2	14.2	15.0	15.6	14.5		14.1	18.4	22.7			11.3					-3.3	5.5	4.3	3.2
Developing Countries	6.5	9.3	14.4	17.4	17.7	16.7 ^{/b}	16.3		20.4	24.5	27.4			7.0					6.9	3.7	2.3	3.1
Centrally Planned Economies	0.8	1.5	2.0	2.9	3.3	3.5 ^{/b}	3.8		4.3	4.4	4.5			9.1					7.1	0.5	0.5	3.0
WORLD TOTAL	11.5	18.5	30.6	37.6	39.0	39.5 ^{/b}	38.3		42.6	51.6	59.5			8.6					2.6	3.9	2.9	3.1
Imports /c																						
Developed Countries	8.0	13.8	23.2	28.2	29.1	30.6	29.5		31.8	37.6	40.8			9.2					1.3	3.4	1.6	2.5
Capital Surplus CPEC ^{/a}	--	--	--	0.1	0.1	0.1	0.1		0.1	0.1	0.1								0.0	0.0	0.0	0.0
Developing Countries	2.8	3.6	5.4	6.6	6.9	7.0 ^{/b}	7.2		7.5	10.3	14.1			6.3					2.3	6.6	6.5	5.2
Centrally Planned Economies	0.5	0.7	1.3	1.9	2.1	2.2 ^{/b}	2.3		2.5	2.9	3.5			10.3					4.5	3.0	3.8	4.2
WORLD TOTAL	11.3	18.1	29.9	36.8	38.2	39.9 ^{/b}	39.1		41.9	50.9	58.5			8.7					1.7	4.0	2.8	3.1
Bankers & Others	1.5	2.1	2.9	3.0	2.6	2.8	3.1	3.6	4.5	5.5	3.6	4.5	5.5									

^{/a} Oman, Saudi Arabia, Libyan Arab Republic, United Arab Emirates, Qatar and Kuwait. ^{/b} Estimate

^{/c} Total projected exports may not match total projected imports due to rounding differences.

-- = less than 0.05 b/d. - = not applicable

Note: Figures may not add because of rounding

Source: UN Series "J" World Energy Supplies (actual); Energy Economics Research Limited, Oil & Energy Trends, January 1979 (estimate); Shell Briefing Service, Oil and Gas in 1978 (actual and estimate); World Bank, Economic Analysis and Projections Department (estimate and projected).

EPDCB
May 1979

Table 2: PETROLEUM - PRICES 1960-78 (ACTUAL) AND 1979-90 (PROJECTED)

(US\$/barrel)

Actual	Saudi Arabian (realized price) /a		Comparison of Sales Prices (current US\$/barrel, FOB)						
	Current \$	1977 constant \$	Iranian Light (34°)	Kuwait (31°)	Algeria Saharan Blend (44°)	Indonesia Minas (35°)	Venezuela Tia Juana Light (31°)		
	CASE I	CASE II	CASE I	CASE II					
1960	1.5		3.9						
1961	1.5		3.9						
1962	1.4		3.7						
1963	1.4		3.7						
1964	1.3		3.4						
1965	1.3		3.2						
1966	1.3		3.2						
1967	1.3		3.2						
1968	1.3		3.4						
1969	1.3		3.4						
1970	1.3		3.0						
1971	1.7		3.6						
1972	1.9		3.7						
1973	2.7		4.3						
1974	9.8		12.6		11.1	10.8	13.3	11.9	
1975	10.7		11.9		10.9	10.6	12.1	12.6	
1976	11.5		12.6		11.6	11.3	13.0	12.8	12.3
1977	12.4		12.4		12.8	12.4	14.4	13.6	13.5
1978	12.7		11.0		12.8	12.2	14.1	13.6	13.5
1979 (Jan-May) (average)	13.8								
	16.0	16.0	12.8	12.8					
<u>Projected</u>									
1990	28.8	34.5	12.7	15.2					

/a Light crude oil, 34° - 34.9° API gravity, FOB Ras Tanura.

/b There were no exports of crude oil in the first two months of 1979 and no official selling prices were actually in force.

/c During the first quarter of 1979, 1.3 million additional b/d of Saudi crude oil (excluding Berri) were sold at April prices.

Note: API gravity is used in comparison prices.

Source: International Crude Oil and Product Prices January 1979, Energy Economics Research Ltd., Lebanon; Oil Industry Developments, Petroleum Economics Ltd. (actual); World Bank, Economic Analysis and Projections Department (actual and projected)

EPDCE
July 1979

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

DATE: July 6, 1979

FROM: Hollis B. Chenery, VPD *ABC*

SUBJECT: The Impact of Petroleum Price Increases

Petroleum Price Increases

1. The June 26-28 OPEC meeting agreed on two price levels: \$18 a barrel for Saudi Arabia (and UAE) and at least two dollars higher for other OPEC countries. On this basis it appears that average petroleum prices for 1979 will increase about 40% over the fourth quarter 1978 level. Saudi Arabian marker light would average about \$16 a barrel, a 26% increase over the level of \$12.70 in the last quarter of 1978. In constant 1977 dollars it is estimated to reach \$12.80 per barrel, which is 2% above its 1974 peak. The OPEC average would be about 10% above 1974 unless inflation is higher than the 9% predicted. (Details are given in the attached Technical Note.)

2. The industrialized countries' Tokyo summit pledge to keep imports to 1985 at about 1978 levels should help bring about the 5% reduction in petroleum demand that the IEA agreement of early March has failed to accomplish. If the anticipated slow-down in growth in the United States materializes, petroleum demand and prices should soften somewhat. A continuation of these trends into 1980 would be likely to leave unchanged the lower tiers of OPEC prices, but to erode the price differentials gained by the upper tiers.

Impact on Developing Countries

3. This year's price rises are predicted to lead to an additional \$6.5 billion oil import bill for 1979 for the petroleum importing developing countries. The net effect on the current account is difficult to estimate. Some of this amount will be passed on in exports by countries such as Korea and Brazil. Some of the petroleum importing countries will benefit from expanded markets in petroleum exporting countries. Thus some feedback is expected although it will of course be much less than the increase in petroleum cost. The current account deficit of all developing countries (WDR definition) was expected to rise marginally from the \$45 billion 1978 level because of unfavorable trade developments in some regions, particularly Southern Europe. It is now expected to rise to about \$47 billion. While this is still in line with pre-1973 current account deficits in real terms, a larger number of countries now have a high level of indebtedness. Some of them have serious debt management problems and will require special assistance.

4. Repercussions in the longer term will depend much more on the reactions of industrialized countries than on petroleum prices as such. If the industrialized countries follow restrictive policies as they did in 1974 and precipitate another recession, the developing countries will be hard hit, and the current account deficit will increase further in 1980. However, if they avoid the mistakes of 1974, the oil importing developing countries' current account balance might improve in 1980.

Long Run Petroleum Price Prospects

5. It is of course impossible to predict the events which will determine the actual price trajectory of petroleum during the 1980s. Efficacy of conservation measures in reducing demand, additional supplies, technological changes in both energy production and usage, and political developments will all have an impact. A large number of studies of the world energy situation in recent years has led to a greatly improved understanding of long-term demand and supply trends. It has been clear for some time that an actual petroleum shortage would emerge in the second half of the 1980s if prices were to remain constant.

6. Such an outcome, of course, is unlikely. As soon as the prospects of a "gap" began to be perceived, the pressure on the relative price of petroleum increased. It is now estimated that given moderate industrialized country growth of about 4%, modest conservation and current supply trends, an increase of about 20% in the real price of petroleum would be needed by 1990 to eliminate the gap. The timing and hence the rate of increase needed to achieve such a real rise in price depend on economic and political factors that may accelerate the starting date. The principal determinants are the industrialized countries' energy policies, as they dominate demand and alternative energy supply creation, and political developments in the Middle East. The latter are clearly dominant, particularly in the short run. The industrialized countries as a group have, moreover, failed to take adequate conservation measures in the past and to resolve the largely political barriers to stimulating alternative energy supplies so that investment is lagging. This gives OPEC a strong hand. The revolution in Iran thus precipitated the price increases that enabled the suppliers to catch up with the price erosion of the last 5 years.

7. The WDR Base Case is consistent with a long term forecast of a 2% real price increase per annum during the 1980s leading to a total real price increase of 20% by 1990. Given sensible policies by the major consumers and producers this would clear the market. If existing price holds and real prices continue to increase in the early 1980s, moderation in the mid-1980s is likely. A total increase beyond 20% for the 1980s is

July 6, 1979

not, of course, impossible if conservation and energy investment lag. (A more detailed analysis based on a survey of 80 energy studies as well as the Bank's own work is given in the attached Technical Note.)

8. Currently there is a danger of exaggerating the potential for a price increase. But large, sharp increases will cut demand and create serious growth difficulties for consuming countries that will subsequently be reflected in further demand cuts. Alternative sources of supply will become more economical even with full costs of environmental protection taken into account. Such trends would not be in many of the smaller petroleum producers' interest although the capital surplus petroleum exporters would not be greatly affected.

9. Providing the industrialized countries pursue appropriate demand conserving and supply stimulating policies, there is a strong possibility that moderate price increases may close the energy gap and yet not impede world growth. The impact of slow steady price increases on the growth of both the industrialized and developing countries would be minimal. The ratio of energy prices to petroleum prices is usually less than 1:1, so that the real cost of energy would increase less than 2% a year. Much more will depend on reactions of the industrialized countries to price increases than on the price increases themselves.

Attachment

HBChenery/HHughes:lt

cc: President's Council
Mrs. H. Hughes, EPD
Mr. S. Singh/Mr. A. Lambertini, EPDCE

A Technical Note on Short-Term and Long-Term Petroleum Prices
and Their Impact on Developing Countries

This note assesses the impact of current OPEC pricing decisions on petroleum prices through 1979 in Part I. Part II discusses long-term petroleum price prospects, and Part III the likely impact on developing country financing requirements.

I. SHORT-TERM DEVELOPMENTS

In 1978 the official price of Saudi Arabian light crude, FOB Ras Tanura, averaged \$12.70/barrel, virtually the same as in 1977. For the second year in a row, it failed to keep up with global inflation, falling by about 10% in purchasing power. In December 1978, OPEC announced a set of phased price increases for 1979 averaging 10% for the year, aimed to leave prices at the end of 1979, 14.5% (in US dollars) above those of December 1978. Prompted by the tightening of the supply-demand balance that followed the interruption of Iranian supplies, the price of Saudi Arabian light crude was raised to \$14.54 as of April 1, an increase of 14.5% over its fourth quarter 1978 level. Other crude prices rose somewhat more. Thus Iranian light, a comparable crude to Saudi Arabian light, was raised by almost 30%. The price of Kuwait, a lower quality crude than the marker, was also raised by about 30%. African crude prices increased by over 30%. (Premium crude prices were eroded relatively to the Saudi Arabian marker price from 1974 to 1978: their larger price increases are merely bringing them back to relative 1974 levels.) Overall, the price of OPEC petroleum on April 1 (weighted by OPEC output) increased by about 24% over the fourth quarter 1978 level. 1/

1/ Non-OPEC petroleum export prices were raised to the levels of comparable OPEC crudes. North Sea crude prices which had risen significantly more than comparable petroleum prices in January, were brought into line with the rest in April.

With the exception of Saudi Arabia, additional increases over the April 1 levels were introduced by OPEC and non-OPEC exporters in the second quarter.

The OPEC meeting of June 26-28, 1979 concluded in the settlement of two price tiers, the low one being based on Saudi Arabian light which was set at \$18 a barrel for the second half of this year. The United Arab Emirates, Qatar and Saudi Arabia are reported to be adopting the lower tier. The remaining OPEC countries will set their prices on the basis of a higher level at least two dollars per barrel over Saudi Arabian light. The producers of the lighter, low sulphur crudes would add quality and transportation differentials to the higher base.

Overall, preliminary estimates indicate that petroleum prices (weighted by OPEC output) will increase about 40% for the average of 1979, over the fourth quarter 1978 level. Saudi Arabian light is likely to average about \$16.00 a barrel (a 26% increase over its level of \$12.70 per barrel in 1978).

II. LONG-TERM PROSPECTS

Table 1 summarizes a survey of 80 of the most important energy studies undertaken in recent years.

Table 1: COMPARISON OF PETROLEUM BALANCE PROJECTIONS TO 1985

	23 Projections			World Bank
	High	Low	Mean	EPD
Growth of industrialized country real GNP/GDP (annual average % p.a.)	5.5 <u>/a</u>	3.0 <u>/a</u>	4.17 <u>/a</u>	4.2
Long-run Energy/GNP elasticity	1.06	0.75	0.86	0.85
World demand for OPEC petroleum <u>/b</u> (million b/d in 1985)	49.0	30.3	39.4	37.9

/a 1970-85

/b Including OPEC consumption

Source: Annex Table 1.

The projections of world demand for OPEC petroleum in 1985 range from a high of 49.0 million b/d to a low of 30.3 million b/d, with a mean of 39.4 million b/d. Table 2 shows that probable OPEC petroleum production projections in 1985 range from a low estimate of 33.3 million b/d to a high of 41.9

with a mean of 38.5 million b/d

Table 2: PROJECTED OPEC PROBABLE PRODUCTION /a

1985		OECD/IEA		World Bank	Other
	Low	Mean	High	(EWT)	(mean)
	33.3	38.5	41.9	36.4	39.1
1990		OECD/IEA		World Bank	
	Low	Mean	High	(EWT)	
	30.4	37.9	41.4	37.3	

/a See Annex Tables 2, 3, 4 and 5 for details.

Source: OECD/IEA, "An Assessment of the Probable Availability of OPEC Supplies to 1990", February 8, 1978, and World Bank(EWT) series.

The combination of the mean demand and production values points to a tightening of the petroleum market in the early 1980s, even with assumptions about Iranian production which are likely to be over optimistic in the light of current developments (see Annex Tables 2, 3 and 5).

The view that energy consumption would outpace production growth in the 1980s should petroleum prices remain unchanged in real terms, was quantified by EPD in February, 1978. 1/ An updating of the analysis prepared for WDR II and the 1979 "Price Prospects for Primary Commodities" 2/ did not alter the conclusions substantially. Assuming moderately optimistic OPEC production, a gap of 1.5 million b/d in petroleum supplies is projected to emerge in 1985, widening to over 11 million b/d in 1990. The International Energy Agency has recently predicted a gap of 2 million b/d in petroleum

1/ EPD, "World Energy and Petroleum: Supply and Demand Prospects to 1990", Feb.1978.

2/ EPD, "Energy in the 1980s: Global Supply and Demand Analysis", January 1979.

supplies in 1985 rising to 10.6 million b/d in 1990 if petroleum prices did not rise.

Industrialized Country Growth and Energy-Elasticity Assumption

The underlying assumptions about industrialized country real GNP/GDP growth, energy/GDP elasticity and price elasticity of energy demand are critical to the projections. Twenty three of 80 studies surveyed have comparable energy GDP elasticity estimates. Those vary from a high of 1.06 to a low of 0.75, with a mean of 0.86. The energy/GDP elasticities used in the Bank projections for the industrialized countries are in the neighborhood of 0.85 for the 1976-85 period, and slightly lower than that (by 0.02 to 0.03) for the 1985-90 period).

There is less consensus on the price elasticity of total energy demand, and the available estimates vary considerably. The OECD Secretariat used price elasticities ranging between -0.3 to -0.4 in their earlier projections of the OECD energy prospects to 1985. From the US manufacturing time series data, Berndt and Wood obtained estimates of the price elasticity of energy demand in the neighborhood of -0.5 for the medium-term. 1/ Using the cross-section data of industrial consumption of energy, Griffin 2/ obtained substantially higher price elasticities ranging between -0.7 to -0.8. Griffin argues that this is more representative of long-run responsiveness to prices than time-series results. 3/ For the purpose of projections

1/ Berndt, E.R. and D.O. Wood, "Technology, Prices and the Derived Demand for Energy," The Review of Economics and Statistics, August 1975.

2/ J. Griffin, forthcoming book on OECD energy demand.

3/ Griffin's cross-section results for the residential and transportation sectors show a higher range of between -0.8 to -1.3 than the industrial sector.

to 1990, Griffin's cross-section estimates may be on the high side, whereas time-series estimates may be on the low side. Estimates between -0.4 and -0.7 were thus used for Bank energy projections.

The Bank's projection of industrialized country energy demand used the World Development Report II base case economic growth assumption, (steady growth at 4.2% per annum in the period 1980-90). The growth rates assumed in the 23 studies analyzed range from a high of 5.5% per annum to a low of 3.0% per annum, with a mean of 4.17% over 1970-85.

In summary, the Bank assumptions on income growth and energy elasticities fall into the middle of the range of available econometric estimates. 1/ The Bank's projection assumes modest conservation that would save about 2 million b/d of oil equivalent annually by 1985. 2/ On the supply side this scenario assumes that OPEC surplus countries make supplies available at their maximum technical capabilities. Aside from the uncertainty that surrounds current estimates of OPEC production capacity, this is unlikely to eventuate for political as well as internal economic factors. The supply assumptions also postulate an increase in nuclear power and coal production of 6.5% per annum in industrialized countries. Given current environmental policies this could be an excessively optimistic assumption; on the other hand, with unfavorable petroleum developments it could prove to be pessimistic.

1/ Differences in projections largely result from base year and country coverage differences among the studies. For example, the IEA review does not include France but includes Turkey. The latter is included as a developing country in EPD's projection.

2/ c.f. OECD World Energy Outlook, 1977 estimated that industrialized countries could save about 4 million b/d of petroleum annually by 1986 if the accelerated conservation policies set out in that report were followed. While the Tokyo declarations limiting imports to 1978 levels make the achievement of conservation targets more likely, the OECD/IEA estimate of what could be done is more of an upper limit than an actual projection.

The argument that a 20% increase in petroleum products prices is required to stabilize the market to 1990 assumes that consumption has to be reduced by some 10%, and that the effective price elasticity of petroleum demand is about -0.5.

The effect of the anticipated supply-demand imbalances on petroleum prices is uncertain. The increase in crude petroleum prices required to clear the market has been estimated at the level of the final user. Crude petroleum costs represent only a fraction of the price of petroleum products (about one-third of the final price of composite barrel of products in European markets), and increases in product prices might induce a more than proportional increase in petroleum export prices. The share of the increased prices that will accrue to the petroleum producers, distributors and refiners, and governments in the form of taxes will depend both on OPEC and consuming (mainly industrialized) country policies.

Policy Implications

The somewhat optimistic assumptions about supply expansion and conservation underlying the projections make it extremely unlikely that the petroleum gap has been overestimated: indeed it may well have been underestimated. Shortfalls in supply could raise the estimated gap by over 12 million b/d by 1990. If in addition high growth or weak conservation efforts should increase demand faster than expected, the gap could widen. Political disruption can not be ruled out.

For policy purposes it is important to realize that the gap could be significantly larger, and that the social cost of doing too little by underestimating a potential gap will be much higher than that of doing too much

By overestimating it. If shortages arise, prices will increase abruptly, stimulate inflation, worsen the balance of payments of energy importing countries, and hamper growth. If there should be an over-supply of energy some investment will be wasted, but prices would stabilize. In most cases output can be adjusted easily with stocks playing a cushioning role. To allow a smooth adjustment of supply and demand, petroleum and energy prices should increase gradually instead of increasing in "jumps" as in 1973 and 1979. This requires long-term energy price policy formulation by producers and consumers in an atmosphere of cooperation rather than confrontation.

In economies which primarily rely on the market mechanism, the main emphasis has to be on price policies. Experience of the last 5 years clearly indicates that if the impending undersupply of energy is not reflected in higher prices, there is no incentive to increase investment into energy production or to economize in energy consumption, whatever non-price measures may have been taken. But a number of other measures also have to be taken or enforced to prevent a further widening of the gap or to reduce it. It is important that conservation policies become effective, at least to the point being assumed in the demand projections. Secondly, investment in exploration and production of energy resources has to be made secure and attractive in terms of returns. Making conditions attractive for investment involves not only potential petroleum production, but also includes a streamlining of legal regulations and administrative procedures which apply to the production of such energy sources of coal and nuclear energy. The tuning and combination of the various measures will vary from country to country.

III. THE LIKELY IMPACT OF PETROLEUM PRICE INCREASES ON DEVELOPING
COUNTRY FINANCING REQUIREMENTS

The principal objective of this analysis was to determine the impact of petroleum price rises on the financing needs of the petroleum importing developing countries if petroleum prices rose by some 20% during the 1980s. It was assumed that the price rises would be slow and steady and that the industrialized countries would accordingly not react by contractionary policies as they did in 1974-5, but adjust by higher energy prices and conservation measures, so that a prolonged recession would not ensue. Developing countries would similarly adjust through price and conservation policies. These assumptions meant that other key variables were not adjusted.

In the regional models that were used for the analysis, the immediate impact of an oil price increase is on a region's terms of trade, positive or negative, depending on whether the region is a net oil exporter or importer. This will raise or lower the region's imports, with a lagged effect on GDP growth. Table 3 compares the rates of GDP growth of the various regions in the case of an increasing energy price with the corresponding "Base Case" rates for the period 1980-90. Initial, that is projected 1980 net energy exports, are also shown in Table 3 for each region. The table shows that for the developing countries as a group, the rate of GDP growth remains largely unchanged; this is hardly surprising given the fact that in the WDR definition the developing countries as a whole are net energy exporters. However, there are significant differences between the impact of higher energy prices on the various regions, in accordance with their initial energy balance. Positive impacts of higher

energy prices can be found for lower and upper middle income North Africa-Middle East, and upper middle income Latin America, which include important oil producers.

Table 3: GDP GROWTH RATES:
BASE CASE AND HIGH ENERGY PRICE CASE, 1980-90

	Projected Net Exports in 1980 (US\$ billion at 1975 prices)	1980-90	
		Base Case (Percent per annum)	High Energy Price Case
All Developing Countries	<u>43.3</u>	<u>5.6</u>	<u>5.7</u>
All Low Income Countries	<u>3.8</u>	<u>4.9</u>	<u>4.9</u>
Region 1 - Africa	-1.0	3.9	3.7
Region 7 - Asia	4.8	5.0	5.0
All Middle Income Countries	<u>39.5</u>	<u>5.8</u>	<u>5.8</u>
Region 2 - Lower Africa South of Sahara	7.1	4.1	4.1
Region 3 - Upper Africa South of Sahara	.4	5.0	4.9
Region 4 - Lower North Africa and Middle East	6.1	5.7	6.2
Region 5 - Upper North Africa and Middle East	31.0	5.4	6.2
Region 8 - Lower Asia	-4.7	7.6	7.5
Region 9 - Upper Asia	-.4	7.6	7.3
Region 10 - Lower Latin America	-1.9	5.0	4.9
Region 11 - Upper Latin America	10.8	5.9	6.0
Region 12 - Southern Europe	-8.8	5.4	5.3

Table 4 shows that in order to restore the rates of growth for all developing countries to levels specified in the Base Case, net flows of medium and long term loans would have to increase by about \$18 billion in

1990. It has been assumed that these inflows are available to each region on approximately the same average terms as in the Base Case. As is true of the impact on GDP growth rates, 7 regions would require additional capital while those regions which contain important oil producers would have a net improvement in their current account balances. However, there would be no change in the debt service ratios in 1990 for developing countries as a group.

Table 4: MEDIUM AND LONG TERM LOANS NET DISBURSEMENTS:
BASE CASE AND HIGHER ENERGY PRICE CASE
(\$ billions at current prices)

	1990		Difference
	Base Case	High Energy Price Case	
All developing countries	132.8	150.7	17.9
All low income countries	18.8	22.3	3.5
All middle income countries	113.9	128.4	14.5

EPD

HHughes/ALambertini/ASchwartz

July 6, 1979

ANNEX TABLES

- Table 1: Comparison of Petroleum Balance Projections to 1985
- Table 2: Estimated Range of OPEC Installed Capacity and Supply
In 1985
- Table 3: Estimated Range of OPEC Installed Capacity and Supply
In 1990
- Table 4: OPEC Probable Production in 1985
- Table 5: OPEC - Crude Oil Reserves, Production Capacities and
Estimated Maximum Sustainable Oil Production to 1990

* * *

COMPARISON OF PETROLEUM BALANCE PROJECTIONS TO 1985

Title/Author	Date of Projection	OECD real GNP Growth 1970-85	Energy/GNP Elasticity 1970-85	World Demand for OPEC Oil	Notes
1 IEA, 1977 Review	June '78	4.0	.81	42.9	Country reviews
2 Pirinc - EPRI	May '78	3.7	.76	36.6	Case B/C
3 US, DOE/EIA	April '78	3.8	.79	44.5	Case C
4 Exxon Corp.	April '78	3.6	.75	40.0	
5 Petrocan - Petroven	Feb. '78	3.9	.85	44.6	
6 US, CRS	Nov. '77	4.0	.82	42.8	Inc. 95 MTOE stock pile
7 Exxon Corp.	April '77	3.6	.81	42.0	
8 US, CIA	April '77	3.8	.81	49.0	
9 WAES	March '77	3.0	.95	34.2	Case D7
10 OECD	Jan. '77	4.1	.82	39.3	
11 Morgan Stanley	Nov. '76	3.6	.83	33.9	
12 Econ. Res. Institute for Middle East	Oct. '76	4.1	.85	41.1	
13 EEC	April '76	3.9	1.00	-	
14. EEC	Jan. '76	3.4	.92	-	EEC only
15 Exxon	Dec. '75	3.9	.87	37.5	
16 Midkashi et al. (1)	Dec. '75	4.4	1.0	46.4	
17 Midkoshi et al. (2)		4.1	.8	36.1	
18 IPI, 1985 (1)	1975	4.6	.88	-	
19 IPI, 1985 (2)	1972	5.0	1.06	-	
20 OECD "Base"	Dec. '74	4.9	.99	-	
21 OECD "9"		4.9	.78	30.3	
Yager at Steinburg	July '74	5.0	.80	35.5	
Damstadter & Schun	1974	5.5	1.00	-	
World Bank - EPD	July '74	4.7	.85	40.0	Case I
	July '76	4.0	.86	36.3	
	Jan. '79	4.2	.85	37.9	

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ESTIMATED RANGE OF OPEC INSTALLED CAPACITY AND SUPPLY IN 1985

(millions of barrels per day)

Country	Low Estimate			High Estimate		
	Installed Productive Capacity	Maximum Sustainable Supply	Projected Actual Production	Installed Productive Capacity	Maximum Sustainable Supply	Projected Actual Production
Saudi Arabia*	14.0	12.6	10.0	17.0	15.3	14.0
Iran	6.5	6.0	6.0	7.0	6.3	6.3
Iraq	4.4	4.0	4.0	5.0	4.5	4.5
Kuwait*	3.0	2.7	1.8	4.0	3.6	2.2
UAE*	2.5	2.2	1.9	3.7	3.3	2.5
Venezuela	2.0	1.8	1.8	2.7	2.4	2.4
Nigeria	1.8	1.6	1.6	2.7	2.4	2.4
Algeria	1.2	1.1	1.1	1.5	1.3	1.3
Libya	2.6	2.4	2.4	3.2	2.9	2.9
Indonesia	1.5	1.4	1.4	2.1	1.9	1.9
Qatar	0.7	0.7	0.7	0.7	0.7	0.7
Ecuador	0.3	0.3	0.3	0.4	0.4	0.4
Gabon	0.3	0.3	0.3	0.3	0.3	0.3
TOTALS	40.8	37.1	33.3	50.3	45.4	41.9

* Absorptive capacity and conservation considerations are expected to play an important role in influencing these countries' decisions on actual output levels.

SUMMARY 1985

(mbd)

	Low Estimate	Mean Estimate	High Estimate
Installed Capacity	40.8	46.0	50.3
Maximum Sustainable Supply	37.1	41.7	45.4
Projected Actual Production	33.3	38.5	41.9
OPEC Requirements	3.5	3.5	3.5
Available for Export	29.8	35.0	38.4

Source: OECD/IEA, An Assessment of the Probable Availability of OPEC Supplies to 1990, February 8, 1978.

ESTIMATED RANGE OF OPEC INSTALLED CAPACITY AND SUPPLY IN 1990

(millions of barrels per day)

Country	Low Estimate			High Estimate		
	Installed Productive Capacity	Maximum Sustainable Supply	Projected Actual Production	Installed Productive Capacity	Maximum Sustainable Supply	Projected Actual Production
Saudi Arabia*	14.0	12.6	11.0	18.0	16.2	14.0
Iran	3.9	3.5	3.5	6.0	5.4	5.4
Iraq	4.4	4.0	4.0	6.0	5.4	5.4
Kuwait *	3.0	2.7	1.8	4.5	4.0	2.2
UAE *	2.7	2.4	1.9	3.9	3.5	2.4
Venezuela	1.5	1.3	1.3	2.5	2.3	2.3
Nigeria	1.6	1.4	1.4	2.6	2.4	2.4
Algeria	1.2	1.1	1.1	1.5	1.3	1.3
Libya	2.1	1.9	1.9	3.0	2.7	2.7
Indonesia	1.4	1.3	1.3	2.1	1.9	1.9
Qatar	0.6	0.6	0.6	0.7	0.7	0.7
Ecuador	0.3	0.3	0.3	0.4	0.4	0.4
Gabon	0.3	0.3	0.3	0.3	0.3	0.3
TOTALS	37.0	33.4	30.4	51.5	46.5	41.4

* Absorptive capacity and conservation considerations are expected to play an important role in influencing these countries' decisions on actual output levels.

SUMMARY 1990

(mbd)

	Low Estimate	Mean Estimate	High Estimate
Installed Capacity	37.0	44.8	51.5
Maximum Sustainable Supply	33.4	40.8	46.5
Projected Actual Production	30.4	37.9	41.4
OPEC Requirements	4.4	4.4	4.4
Available for Export	26.0	33.5	37.0

Source: OECD/IEA, An Assessment of the Probable Availability of OPEC and Supplies to 1990, February 8, 1978.

OPEC PROBABLE PRODUCTION IN 1985

Author	Production (million b/d)	Date
Petroleum Economics Ltd.	36.5	Nov. 1977
Congressional Research Service	42.8	Nov. 1977
Federal Energy Administration	43.0	Jan. 1977
CIA	36.4	1978
Energy Information Agency	36.8-38.8	1978
Mobil	38.3	1978

Source: EPD

OPEC

CRUDE OIL RESERVES, PRODUCTION CAPACITIES^{1/} AND ESTIMATED MAXIMUM SUSTAINABLE OIL PRODUCTION TO 1990

COUNTRIES	Reserves as on 1-1-78 10 ⁹ barrels	Production Capacities Tech. Capacity		Maximum Sustainable Capacity		Govt. Ceiling as of 1-1-78	Production in 1977 10 ⁶ barrels/day oil equivalent	1980	1985	1990
		1978	1990	1978	1990					
<u>GROUP I</u>	<u>248.0</u>	<u>18.0</u>	<u>20.5</u>	<u>15.8</u>	<u>19.0</u>	-	<u>13.4</u>	<u>15.4</u>	<u>17.0</u>	<u>18.0</u>
Saudi Arabia	150.0	11.8 2/	14.0	10.5	13.0	8.5	9.0	10.6	12.0	13.0
UAE	32.4	2.5	2.5	2.2	2.4	2.0	2.0	2.1	2.2	2.2
Kuwait	60.0	3.0 2/	3.3	2.5	3.0	2.2	2.0	2.2	2.2	2.2
Qatar	5.6	0.7	0.7	0.6	0.6	nil	0.4	0.5	0.6	0.6
<u>GROUP II</u>	<u>178.3</u>	<u>21.6</u>	<u>23.5</u>	<u>19.2</u>	<u>20.5</u>	nil	<u>17.6</u>	<u>17.6</u>	<u>19.0</u>	<u>20.0</u>
Iran	62.0	7.0	7.0	6.2	6.5	nil	5.7	5.0	5.6	6.5
Iraq	34.5	3.3	5.0	2.9	4.0	nil	2.3	3.2	3.5	4.1
Algeria	6.6	1.3	1.5	1.2	1.2	nil	1.1	1.2	1.2	1.1
Libya	25.0	2.4	2.5	2.2	2.3	nil	2.1	2.2	2.3	2.3
Nigeria	18.7	2.4	2.4	2.2	2.2	nil	2.1	2.2	2.3	2.0
Gabon	2.0	0.3	0.3	0.2	0.2	nil	0.2	0.2	0.2	0.1
Indonesia	10.0	1.9	1.9	1.7	1.7	nil	1.7	1.6	1.6	1.6
Venezuela	18.2	2.7	2.7	2.4	2.3	2.2	2.2	2.2	2.2	2.2
Ecuador	1.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1
Total OPEC	426.3			35.0	39.5		31.0	33.0	36.0	38.0

1/ Includes natural gas liquids.

2/ Includes neutral zone capacity.

Source: Energy, Water and Telecommunications Department.

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

DATE: July 6, 1979

FROM: Hollis B. Chenery *HBC*SUBJECT: Coordination of Statistical Work in the Bank

1. It was agreed that I report back to you every few months on what we are doing to coordinate statistical work in the Bank.

Country Economic Data

2. As you know, a task force on country economic data has been constituted under Mr. Cheetham's chairmanship and it has developed simplified economic data attachments for CPPs and President's Reports. An important objective of this work is to ensure that the statistics and projections presented in these reports are consistent over time and across countries and are up-dated systematically. New instructions, including detailed definitions and concepts to be used in preparing the attachments, will be issued shortly. EPD is also working on a more comprehensive manual which will provide staff with guidance on statistical concepts, definitions and procedures followed within the Bank.

Social Indicators and Population Data

3. Considerable progress has been made in standardising data in this area and eliminating inconsistencies. Thus, we have used internationally comparable sources whenever possible in compiling the data for World Development Indicators, and the same figures have been used in up-dating the Social Indicator Data Sheets. We have also put together a consistent set of population estimates and related demographic variables based on data supplied by the UN Population Division. However, there are still significant differences between some of the data obtained from international sources and the country data produced by the Regions, and we shall discuss with the relevant international agencies in order to reconcile these in the coming months.

Trade Data

4. We are working on an improved trade data system which should be in place by the end of the summer. This should give us the capacity to produce detailed commodity information at the five-digit SITC level for about 100 countries covering the period 1962-77. We have also started on the systematic collection of information on non-tariff barriers faced by developing country exporters, which will supplement the information that the GATT is collecting on tariffs. A study of the penetration of markets in 11 industrialized countries by manufactured exports from developing countries is under way.

Income Distribution Data

5. A new initiative in this field was the subject of proposals recently endorsed by the President's Council. We are following this up with P&B.

Publication and Dissemination

6. An informal working group has been examining ways of improving the dissemination to outside users of the large amount of economic and social data which the Bank produces each year. A draft policy statement on this subject has been submitted to the Publications Committee. Meanwhile, EPD is in the process of editing the second edition of World Tables for publication at the end of this year.

Cooperation with Other International Agencies

7. We continue to maintain close contacts with other international agencies concerned with the production of economic and social data. The Bank took an active part in the recent meeting of the UN Statistical Commission and in the Consultative Group meeting convened to consider the proposed UN National Household Survey Capability Programme. We have also been holding discussions with the ILO on up-dating work force projections, with the GATT on trade data and price indices and with the UNCTAD on trade matrices.

8. The joint Bank/UN International Comparison Project (ICP) is now approaching the end of the research stage and is being transformed into a long-term UN statistical program. When the research is completed later this year, benchmark and time series data will be available for 34 countries, over half of them developing countries. We are making special efforts to bring more developing countries into the system as soon as possible and we are looking into less expensive and time-consuming ways of expanding the coverage.

cc: Mr. E. Stern, VPO
Mrs. H. Hughes, EPD
Mr. R. Cheetham, EPD (o/r)
Mr. R. Chander, EPD

Mr. Robert S. McNamara

July 5, 1979

Hollis B. Chenery, VPD

Draft for ECOSOC

I have reviewed Mrs. Boskey's draft. My only suggestion is to change the section on energy to include the revisions that we are proposing for the WDR itself. These should reach you by c.o.b. today.

HBChenery:jtg

cc: Mr. Clark
Mrs. Boskey

Mr. Robert S. McNamara

June 28, 1979

Shirley Boskey, Director, IRD

Draft ECOSOC Statement

Attached is a draft of a statement to ECOSOC.

2. As we agreed (or at least as I understood), the statement is almost exclusively a report on WDR II. It therefore differs from your Annual Meeting speeches in that (a) it includes relatively little exhortation to governments and (b) it does not announce a Bank program to deal with the problems or help to forestall any adverse developments foreseen. I think this is right, given the occasion. Moreover, I have been conscious of the desirability of not pre-empting your '79 Annual Meeting speech, which does build on analysis developed in the WDR, which does call for governments to act, and which does say something about a Bank program.

3. It is nevertheless important to relate the statement to the circumstance that a new development strategy is in process of formulation... if only because agency heads have been asked to do so. I have tried to provide that link in the opening and closing paragraphs. And I have also put in a reference or two to U.N. resolutions, to make it plain that, so to speak, you know where you are when you make the statement.

4. I believe the length is about right. It took me just under 30 minutes to read the draft aloud. It ought not to take longer than half an hour, but not less than 25 minutes.

5. I am leaving several copies with William, who has not yet seen it, sending one to Hollis, and taking a copy to Geneva to test it on Julian. If you find the draft generally acceptable, I shall be pleased. In any case, I shall be back in the office on Monday, July 8, so there will be time to work on it further, if you want me (as distinguished from someone else) to do so. Clearly some revision will have to be made in the bit on energy, depending on what is added to the WDR text after the Board seminar; I have simply put in a "holding" reference to the optimism of the no-rise-in-real-terms assumption.

cc: Mr. W. Clark, VPE, with attachment
Mr. H. Chenery, VPD, with attachment ✓

Attachment

SBoskey:di

STATEMENT BY
MR. ROBERT S. MCNAMARA, PRESIDENT OF THE WORLD BANK
TO THE
ECONOMIC AND SOCIAL COUNCIL
JULY 23, 1979

Mr. President:

I am grateful to you and to the Council for this opportunity to meet with you during the Council's Second Regular Session of 1979. During the past three weeks the Council has focussed its attention on a number of major global issues. It has done ^{both} so/within the framework of a general discussion of international and social policy, and in the course of considering individual agenda items concerned with issues such as natural resources, industrial development and food problems. All these discussions take on a new significance and urgency as the time approaches when the global community must agree on a new development strategy for the 1980s and beyond.

It is, of course, for governments to decide upon that strategy. [I expect to speak to this subject at the World Bank's Annual Meeting in October.] The role and the responsibility of the U.N. system is to provide governments with the analytical infrastructure on which they can base a coherent, sound and achievable set of goals, and to put forward policy options for appropriate and feasible measures which will help governments to reach those goals.

The World Bank's principal contribution to that essential analytical work will be the World Development Report 1979. This report is the second in a series of comprehensive annual analyses of economic and social progress in the developing world. Their purpose is to help governments to assess the alternatives and take necessary decisions at the national and international level on issues of major development policy.

Last year's Report reviewed the development record of the preceding 25 years. It gave particular attention to problems confronting the low income countries of Asia and sub-Saharan Africa, and accordingly it focussed on agricultural development and poverty alleviation.

This year's Report reassesses growth prospects in the light of the past year's events and extends the time horizon from 1985 out to 1990. It gives greater attention to middle-income countries. It provides a fuller treatment of their development experience, distinguishing three categories of countries in this broader grouping: the semi-industrialized, the mineral economies, and the predominantly agricultural. This effort at disaggregation is a response to commentary on last year's report. The Report addresses the problems of coping with an expanding labor force, a challenge which all developing countries now face, and then considers two aspects of structural transformation which pose especially urgent policy choices for middle-income countries. These are the issues of industrialization and urbanization. And finally, the Report discusses three areas of international concern--trade, capital flows and energy.

The 1979 Report was discussed by the Bank's Executive Directors just two weeks ago. It will not be published until mid-August, but I would like to share its highlights with you today. [Copies should be available for distribution to delegates in about a week.]

Specifically, what I want to do this morning is to

- tell you how we now assess the growth prospects of the developing countries;
- refer to the major international policy issues which both underlie and are raised by the Report's projections;
- review briefly the domestic policy issues and options confronted by the developing countries as their economies grow.

*Why not
now?*

Prospects for Development

What is our present assessment of the growth prospects of the developing countries?

This year, as last year, the Report offers three scenarios. The "basic" scenario projects the way we believe the world environment is most likely to evolve—not the most desirable course, not the necessary or inevitable course, but what, from this year's vantage point, seems most realistic. The "low" scenario suggests the consequences were the slow post-1973 growth of world output and trade to continue to 1990. And the "high" scenario reflects the assumption that trade output will recover to the level of the 1960s. I emphasize that none of these scenarios is intended to be or should be seen to be a forecast or a target. There are too many uncertainties for that. They simply serve as frames of reference for the issues discussed in the Report.

We have slightly modified the expectations of last year. Last year's "basic" scenario projected 5.7% annual growth in developing countries' GNP to 1985. But somewhat slower growth in industrialized countries and world trade, a drop in external concessional assistance and a change in the course of commercial lending since then has led us to revise the annual growth projection downward, to 5.2%. The middle-income countries, whose prospects are particularly sensitive to conditions in the world economy, are most affected, and within that group, African countries in particular. The outlook for the low-income countries of Africa continues rather bleak: the Report projects only 3.7% annual growth. Income per capita for sub-Saharan countries, middle- and low-income, is projected to increase less than 1.5% a year during the next decade.

A key determinant in the growth prospects of developing countries is the economic health of the industrialized countries. The "basic" scenario assumes that these countries will grow at an average annual rate of 4.2% in the 1980s,

which would enable the developing countries' annual growth to average 5.6%. The "high" scenario assumes annual growth averaging 4.9%; this would fuel an expansion of world trade by better than 7% a year, and official development assistance might then reach 0.45% of DAC countries' GNP by 1990. Developing countries could grow an average of 6.6% in the decade of the '80s. Yet even under this most optimistic projection, developing countries' per capita GDP would rise an average of only 4.3% a year, and average per capita income in 1990 would be less than one-twelfth of that in the industrialized countries. Under the "low" scenario, the industrialized economies would grow at an average annual rate of 3.5%, no faster than they did in the decade of the '70s; world trade would grow only 5% a year; and the slower growth of GNP would mean a slower rise in ODA. This would condemn the developing countries to an average annual growth rate of only 4.8%.

The indications are that the massive disparities of living standards across the world will continue. So will the present diversity in income levels among the developing countries: under all three scenarios the gap between the average incomes of low and middle income countries will widen. The "basic" scenario of last year's Report projected the shocking figure of 600 million absolute poor at the end of the century. By "absolute poor", we mean persons whose income is so low that they cannot afford to buy a nutritionally adequate diet and other basic necessities. If the economies of the developing countries were to grow only at the rates now projected in the "low" scenario, less than 5% per annum in the next 10 years, the year 2000 might see, not 600 million, but more than 700 million persons living in absolute poverty. Under the "high" scenario that number could fall to perhaps 470 million, and it might be still further reduced through better income distribution and reduced fertility.

But to achieve this progress would require heroic measures. And it takes little imagination, nor would it be wholly unrealistic, to envisage a deterioration of the elements of the international environment, perhaps through refusal or failure to take the necessary action or institute requisite reforms, which would make the "low" scenario, unacceptable as it is, appear optimistic.

It is obvious and imperative that we avoid the "low" scenario and aim at the results projected by the "high" scenario.

If this is the objective, what policies and actions are called for at the international and national levels?

Mr. President, a recurring theme at recent international meetings--UNCTAD V offers the most recent example--has been the mutuality of interest between developed and developing countries, and the interdependence of issues. The Report considers three principal areas of international concern: the environment for world trade, the prospects for capital flows, and energy. In each, mutuality of interest is both strong and long-term, and their interdependence is clear. For example, a more liberal trade environment improves the export and growth prospects of developing countries, enhancing their debt servicing capacity and helping to strengthen the structure of international capital flows. It is significant that on the list of objectives proposed for the New International Development Strategy by General Assembly Resolution 33/193, improvement in the terms of trade of the developing countries, and a substantial increase in real terms in the flow of resources to those countries, rank high. Informed policy choices must be made by the international community if these mutual interests are to be protected and their potential realized.

I turn now to a brief discussion of these three policy issues.

First, trade.

Trade

Mr. President, in my address to UNCTAD V, I drew on the Report's analysis of the environment for world trade and outlined a program of action. I shall not abuse the Council's patience by repeating that program here.

Our projections for manufactured exports from the developing countries assume, as I have already noted, that growth in the industrialized countries will average somewhat better than 4% a year in the 1980s. They also assume that further increases in protection will be contained through improved economic policies and resistance to protectionist pressures, and that the industrialized countries will facilitate access to their markets for developing country exports. These special efforts by the industrialized countries are in their long term interest, since they stand to gain from low-cost imports and a rapid expansion of markets for their exports. Moreover, these efforts are essential if the developing countries are to make the projected progress in their economic growth. Attainment of the export growth rates projected by the Report also assumes policy reforms and sustained effort on the part of the developing countries: structural adjustments favoring new export sectors, a liberalization by the more industrialized of the developing countries of their own import policies, and more active participation by these countries in future multilateral trade negotiations. Moreover, the projections assume continued expansion of South/South trade--trade among developing countries. In this connection, I will repeat here something I said at UNCTAD: that I am prepared to recommend to the Bank's Executive Directors that the Bank consider requests for assistance to developing countries which undertake the requisite structural adjustments for export promotion, and that it provide program loans in appropriate cases.

I come now to capital requirements.

Capital Requirements

The domestic investment needed to support the growth projected by the "basic" scenario will be provided mainly by the savings of the developing countries. But if those rates of growth are to be achieved, a staggering \$469 billion (\$165 billion at 1975 prices) will have to be met from external

sources in 1990. For the low-income and some of the poorer middle-income countries this means primarily official development assistance; they rely on concessional resource transfers for about 70% of net inflows of medium- and long-term capital. Other middle-income countries will look mainly to market loans.

The principal assumption we have made about ODA from the DAC countries is that it will rise a little less than 5% annually in real terms, to reach 0.35% of GNP by 1985, where it would remain through 1990. Such an increase in real terms would be only marginally faster than output projected. It seems modest enough. Indeed, the 1978 aggregate ODA from DAC donors rose by 7% in real terms above the 1977 level. But we are well aware that we are projecting a reversal of recent trends. Perhaps the 0.7% of GNP target for ODA set by the General Assembly at the start of the decade was unrealistically high. Yet four industrialized countries have reached it or exceeded it. It is the performance of the three largest economies which has fallen strikingly short; it has, rather, deteriorated. The plain fact is, Mr. President, that unless early and sizeable increases in ODA commitments are made--if there is nothing more than expressions of intention--if the record of the past few years is not turned around--even the modest gains projected for the low-income countries by the "basic" scenario will not--cannot--be achieved.

As for the middle-income developing countries, the "basic" scenario projects a need for a total of ⁷⁰~~\$419~~ billion (\$147 billion at 1975 prices) of external capital in 1990. Of this total, \$309 billion is assumed to be

provided through medium- and long-term loans on market terms. Net private lending is projected to grow at an annual average of almost 4% in real terms during the 1980s. Despite the increase in aggregate debt, debt service ratios for broad country groupings are not unacceptably high and do not point to a general debt problem. But liquidity crises may confront individual countries from time to time. These may occur less often to the extent that international action succeeds in improving the maturity structure of aggregate capital flows and debt and in adopting improved arrangements for dealing with crises when they do occur.

The Report also notes the need of developing countries for more stable and longer-term flows of development capital. Here I might recall that last December the General Assembly adopted Resolution 33/145 on the Sixth Replenishment of the International Development Association and the recapitalization of the World Bank, urging early and favorable action with respect to both. I would wish, Mr. President, to place on record here our appreciation of the General Assembly's continuing interest in and support of the World Bank and IDA. We have also welcomed the resolution, in a similar vein, which was adopted at UNCTAD V. ~~I~~ I am glad to be able to say that last month the Executive Directors of the Bank unanimously recommended to the Board of Governors a \$40 billion general increase in the Bank's capital. ~~I~~ [Negotiations for the replenishment of IDA, while not concluded, have been proceeding satisfactorily. I am hopeful that agreement will be reached at the next meeting of deputies, scheduled to be held immediately after the Bank's Annual Meeting in October.]

Finally, our projections on energy.

Energy

The balance in world demand and supply of energy will depend on what happens in a few key oil exporting countries. If prolonged production setbacks

Insert revised paragraph from WDR.

Notes

in these countries can be avoided, if major consuming countries adopt and implement strong conservation measures, and if sustained efforts are made to find and develop new sources of energy, we have assumed that the global demand for energy in the next decade can be met without significant and continuing increases in the real price of internationally traded energy above the 1975 level. But events since the analytical work on the Report was completed have already demonstrated that this assumption was too optimistic. This makes it all the more important to assure that the economies of the industrialized countries recover from the level of the '70s, and that the developing countries grow at better than the "basic" scenario projections. As I have already noted, these developments are interdependent. It also makes it imperative that the industrialized countries face and deal promptly and effectively with such issues as conservation of demand, safety of nuclear power, pricing of domestic energy supplies and development of synthetic fuels. Non-oil-exporting developing countries must consider how to explore and develop their own commercial energy resources-- an undertaking for which the Bank has offered financial and technical assistance-- how to use non-commercial and non-conventional energy sources more efficiently, and how to adjust to higher energy prices. Oil-exporting developing countries must decide how fast to exploit their non-renewable resource and how to ease the transition to a post-oil future, however distant.

I come now, Mr. President, to consideration of two issues particularly important for middle-income countries. These are:

- how to create employment opportunities for the additional one-half billion persons who will join the labor force in developing countries by the end of the century;

- how to provide the one billion persons who will be added to the urban population of developing countries by the year 2000 with decent accommodations and adequate public services.

Employment and Industrialization

Between 1975 and the year 2000, the labor force in the developing countries is projected to increase by over 550 million, twice the growth realized in the previous 25 years. How can productive and gainful employment opportunities be found for anything like this number, especially given existing levels of underemployment and poverty?

We have tried, in the Report, to sketch a variety of policy measures which could go some long way--obviously not as far as would be desirable--toward meeting the challenge. The Report emphasizes promotion of appropriate agricultural and industrial development strategies and measures to improve education and skills. These should be supplemented by labor market policies that make it easier for workers to move both geographically and from one occupation to another. And for the longer term, Mr. President, we emphasize the role of population policies in bringing the labor force in developing countries to a more manageable size.

In the low-income countries, the Report's prescription for expanding productive employment and income opportunities is for improved performance in the rural economy. Specifically, it sees the need, as a first priority, to reverse investment, pricing and trade policies which discriminate against agriculture. Within agriculture, there must be sustained programs of support for small farmers. The conclusion that promoting agricultural growth and encouraging the efficient use of rural labor are the most important means of reducing underemployment applies with almost equal force to middle-income

countries, many of which have half or more of their labor force in agriculture. Most middle-income countries must implement industrial and trade policies that promote a rapid expansion of production and employment in industry, and adopt policies giving greater inducements to manufactured exports.

The level of industrialization is a key index of structural transformation. The problems implicit in industrialization are particularly difficult in the early stages when critical choices must be made in respect of sector, scale and timing of investments. Perhaps the most difficult of these problems is how to support industrialization without prejudice to agricultural development. Later in the industrializing process, developing countries must give increased attention to acquiring and learning to use or to adapt technological processes, to institution-building--creation of export credit agencies, for example--and to developing new kinds of manufactured exports.

Another pressing structural problem concerns urbanization.

Urbanization

In 1950, only one city in the developing countries had a population over 5 million; by the year 2000, it is estimated that there will be 40. The estimate for the industrialized countries is only 12. Moreover, we estimate that 18 cities in the developing world will have over 10 million inhabitants, and one may have three times that number. In the last 25 years of this century, one billion persons will be added to the urban populations of developing countries.

We address, in this year's Report, the policy issues related to problems implicit in this urban concentration and also those associated with the growth of individual cities: lack of remunerative employment, housing and public services, and the existence of congestion and pollution. Cities will continue to grow even in the face of vigorous decentralization measures

and policies designed directly and indirectly to slow migration out of rural areas. The task is therefore to devise and carry out policies which will help assure that the inevitable growth is efficient and equitable: urban investment and regulation should facilitate expansion of transportation, housing, sanitation and other services and facilities which meet the needs of the urban majority at low cost.

* * *

Mr. President:

I have outlined today for the Council the main findings and conclusions in the second in the World Bank series of annual reports aimed at providing a comprehensive assessment of global development issues. You will appreciate that there has not been time to do more than touch the high points. Again, as last year, we have not attempted to address every major question, but I believe the questions we have addressed are fundamental to the formulation of a well-designed, balanced and workable development strategy. I would emphasize, in particular, the interdependence in the world economy, and how critically action, failure to act, and policy choices can affect, for better or worse, the course of economic development.

I do not doubt that agreement can be reached on what should be the strategy's overall objectives. Nor is there doubt that the means to achieve those objectives are at our disposal. The question is whether the international community can summon up the political will to do what is both obvious and necessary.

For too long, despite the remarkable economic progress achieved in the developing world over the last 25 years, gross inequities in the structure of international economic relations have confronted us, and for too long there has been reluctance to implement the policies which could help redress those

inequities. As a result, the international community is condemning hundreds of millions of people to a continued condition of life which must be totally unacceptable in a world committed to the upholding of human dignity and decency.

The Bank's purpose, then, in presenting its continuing global assessment of development issues is twofold:

- to help provide the sound underpinning for formulating and implementing those policies which we know must be adopted;
- to help ensure that inaction cannot fairly be excused on grounds of a lack of understanding of the problems we are facing.

~~We attach great importance to the work we have done to produce these Reports.~~ But that does not mean we believe that any single source of analysis and projections can alone provide the indispensable data base. Nor do we expect universal agreement with our perspective on the world economy. The component parts of the system must illuminate the options as each identifies them in the light of its competence, expertise and capacities. I hope that the Bank's contribution to the Council's deliberations will be found constructive.

Thank you, Mr. President.

OFFICE MEMORANDUM

*McNamara
Stables*

TO: Mr. Robert S. McNamara

FROM: Hollis B. Chenery, VPD *HBZ*

SUBJECT: Bank Image in Europe

DATE: June 29, 1979

Mr. Clark has asked me to comment on Mr. Steckhan's comments on European reactions to Bank economic work (paragraph 5 of the attached). So far as I know, neither 5c nor 5d is correct. The only decrease in DPS senior staff from Europe consists of Tims (Holland), which was offset by the promotion of Stoutjesdijk (Holland) to Senior Advisor in Development Economics. Professor Benard (France) has replaced Professor Waelbroeck (Belgium) in EPD.

7/2

Links to our research work are clearly increasing. We have a substantial research contract with Professor Waelbroeck to study LDC exports to Europe, which involves a number of European researchers in different countries. Senior DPS staff are regular participants in European conferences and seminars on trade and development (Hughes, Balassa, Stoutjesdijk, Streeten, Westphal, Chenery, etc.). Karaosmanoglu and I probably gave a dozen seminars in Europe in connection with WDR II. In addition, we regularly invite European economists to the Bank, and a number of them were members of the six panels reviewing our research program.

As to the Anglo-Saxon heritage, it is probably even more characteristic of the economics profession as a whole than of Bank economics, which is more eclectic. The only significant alternative trend in the profession is Marxism, in which we maintain some competence in order to deal with our socialist members.

Attachment

HBChenery:jg

cc: Mr. W. Clark
Mr. Steckhan (Paris)

OFFICE MEMORANDUM

TO : Mr. William Clark

FROM : Rainer B. Steckhan *Steckhan*

SUBJECT : Image of the Bank in Europe

DATE : June 14, 1979

1. In line with what we discussed last winter in Washington, we have kept an eye on the image of the Bank in Europe over the last six months, as reflected in press reports and comments from officials. The purpose of this note is to provide you with a summary of our impressions.

2. During his recent visit to France and Germany, Mr. McNamara has had occasion to learn first hand of the views of French and German officials of the World Bank. My introductory trips to a number of European countries over the last several months have confirmed my own impression that the Bank continues to enjoy in Europe a solid reputation of high technical competence and unrivalled experience in the Third World. In addition, World Bank publications - and especially the World Development Report - are frequently quoted as authority when political leaders, bankers, businessmen, professors and writers speak up on development issues.

3. Except for the Collins/Moore Lappe article in the June edition of Le Monde Diplomatique^{1/} I do not recall an article in a paper of any importance in the last six months which was clearly critical of the Bank. Criticism of the Bank from the extreme left has recently been less noticeable in the mass media. Some of the critics, particularly in Scandinavia, may have taken a more positive view of the Bank because of their growing awareness of the Bank's poverty orientation. But in the more ideologically determined groups on the political left, anti-Bank views are as firmly held as ever,^{2/} although they have been less successful in reaching the mass media.^{2/}

^{1/} "La Banque Mondiale et le 'Développement' Agricole du Tiers-Monde" which is a translation of an earlier article in US newspapers.

^{2/} It should be noted, though, that Art van de Laar's forthcoming book on the Bank's rural development strategy is bound to be highly critical. In Switzerland, Neue Zürcher Zeitung reports that reprints of its series of development articles of last fall are being ordered at high rates. This series contained a number of articles with violent attacks on the Bank.

6/40 To Mr. Clark
Please discuss
with Hollis
Lover
(see next page)

Mr. William Clark

page 2.

4. When aid is criticized by the political right and in the established press, the World Bank is usually exempt. Thus, when Der Spiegel ran a series of articles highly critical of Minister Offergeld and German bilateral aid, the World Bank was not mentioned at all. Similarly, a recent editorial in Neue Zurcher Zeitung criticized Unctad-5 and LDC attitudes in general but defended the World Bank and the IMF against Third World attacks. In contrast to the US, stories on conditions of work and unrest among the staff of the World Bank were rare in Europe (I recall two articles only, one in FAZ and the other in the Financial Times).

5. Nevertheless, when one talks individually with Government officials, academics and the odd knowledgeable reporter about the World Bank people express certain recurrent themes:

- a) The Anglo-Saxon heritage of the Bank which seems to them still dominant in the way we conduct our business
- b) The appearance of "knuckling under" to the pressure of the US, as dominant shareholder of the Bank
- c) The decreasing number of European continental economists among the senior DPS people and chief economists in the Region gives concern to continental aid officials
- d) The difficulties continental research institutions encounter in establishing links with DPS and the Bank's research work.

6. Obviously, a good deal of the work of the European Office is aimed at dispelling these impressions and providing stronger links between the continental European aid and research community and Headquarters. In these endeavours we have had strong support from many quarters of the Bank.

7. Looking into the future, I can see several areas which may expose the Bank to more scrutiny. With the further expansion of the Bank, it will become more visible and hence more vulnerable. European Parliament will probe more deeply into our affairs and the press may

pick up more "juicy" stories. In addition, the work of the Secretariat of the Brandt Commission is beginning to leak into the press. At the public hearing of the Development Committee of the German Bundestag, Professor Ohlin supported by Professor Jolly of JDS (Sussex) considered IBRD as an unsuitable instrument for a massive transfer of resources. These comments hurt us. In the present protectionist climate the Bank tends to be sometimes seen as the bogeyman which helps build up LDC manufacturing/technical capacity and makes them competitive. This "trade" area is one where we may be in for more trouble, not less. Finally, questions of absorptive capacity of developing countries are increasingly being raised, especially in the German press, and with our lagging disbursements these may spill over into questions on expanded World Bank lending.

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cc: Mr. John E. Merriam

RBS/mcl/br

OFFICE MEMORANDUM

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1/20/79
11/21*

199

TO: Mr. Robert S. McNamara

FROM: Hollis B. Chenery, VPD *HBC*

SUBJECT: Board Paper on Price Prospects

DATE: June 25, 1979

Comments p. 3

I attach the 1979 edition of the annual Board paper on "Price Prospects for Major Primary Commodities". The coverage remains the same as in last year's report (Report No. 814, June 1978) although the presentation in Part I of the report has been reorganized somewhat.

6/25

The main conclusions of the paper also remain the same as last year. In real terms non-fuel commodity prices are expected to average close to their low levels of 1975-78 in the next two to three years. A recovery is projected thereafter, and commodity prices are expected to be 15% higher in 1985-90 than those projected for the early 1980s. Recovery in agricultural prices is expected to be comparatively small, timber prices are expected to show a continuous upward trend, and prices of metals and minerals are expected to recover strongly. In particular, copper prices may reach a cyclical peak toward the mid-1980s.

Petroleum prices have been assumed to remain unchanged at \$12.7 per barrel in 1977 constant dollars as in last year's report although further price increases may occur in the near term. The report, however, points out that trend increases of one to three percent per annum in real terms, particularly toward the end of the 1980s, are considered possible.

The contents of this paper are consistent with those of the World Development Report.

The forecasts were reviewed at inter-departmental meetings in April, attended by CPS, Regional and IFC staff members. This year, for the first time, we solicited and obtained detailed comments from the secretariats of the specialized international commodity bodies and the FAO. IMF staff were consulted as usual. The report incorporates these comments and thus represents a broad consensus among Bank staff and commodity economists in the international organizations.

A note on comparison of forecasts for 1985 and 1990 is attached. Important changes (10% or more) pertain to cocoa, sugar, soybean meal, and fertilizers.

The main changes in the assumptions reflect the World Development Report assumption of higher inflation rates and lower growth in the developing countries.

In response to various requests you had asked that we declassify this report. We propose to issue the first public version early in 1980. The principal reason for delay is that the country classification for this report does not correspond to the country classification in the World Development Report because it is still based on classifications in general use by commodity analysts. We are now undertaking the detailed analysis that will enable us to move to the World Development country classification. We also think it necessary to include in the first public issue an analysis of the historical behavior of commodity prices over the past quarter century, together with an evaluation of the accuracy of our past forecasts, to give readers an idea of the limitations of such forecasts. We then propose to issue the main paper every two years, with updating tables issued in alternate years.

Your clearance is requested.

Attachment

HHughes/SSingh:nfj

cc: Mr. E. Stern, VPO
Mrs. Hughes, EPD
Mr. S. Singh, EPD

6/26

1. Please make no reference to possible public distribution
2. Release for printing but before distribution let me see on!
page a comparison of critical elements of this years forecast with last years projections for the same items & same periods
3. Dependent on action this week by DTCC some reference should be made to the availability of the petroleum program

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

DATE: June 8, 1979

FROM: Hollis B. Chenery, VPD *HBC*SUBJECT: Income Distribution Data

1. You asked us to consider what the Bank might do, in cooperation with the UN Statistical Office, to develop internationally comparable time series data on income distribution. It is important here to distinguish between (a) continuing to improve existing national data, which are fragmentary and only to a very limited extent comparable, and (b) creating a new system of income distribution data. The latter would require workable standards and concepts to be developed first, as has been done in the past for national accounts and balance of payments statistics by the UN Statistical Office, OEEC and IMF, beginning in the early 1950s.

6/7
2. The attached paper sets out our recommendations and proposals. As indicated there, we are proceeding with the first of the above tasks. Our work program for the next two years visualizes close collaboration with the ILO, which is initiating a new project in this field in January 1980. Our objective is to produce a limited range of reasonably reliable statistics for some 20 or more developing countries over a two year period, using data from surveys that have already been completed. To achieve this we need an additional professional position for the Economic and Social Data Division, as requested in our FY80 budget submission.

3. The second task of developing a new and better data system is a much more difficult one and poses a number of problems. A feasibility study, estimated to cost \$1.3 to \$1.5 million over a period of two to three years, would be required to work out standards, concepts and procedures which could be recommended to national statistical authorities as a basis for the collection of data on living standards and income distribution. Work on some of the issues is already underway in the UN Statistical Office. But it lacks resources and the stimulus of the policy perspective and research base which the Bank could contribute. We therefore propose to conduct this study in close collaboration with the UN Statistical Office, perhaps within the framework of their National Household Survey Capability Program (UNNHSCP). It is likely that the Bank would have to direct the work and bear the costs.

4. On completion of the feasibility study, the Bank would have to persuade national authorities to incorporate the collection and analysis of the relevant data in their regular statistical programs. A reasonable objective might be the institution of benchmark household surveys using the new approach in, say, 10-12 major developing countries which already have some capability in this area, starting about three years from now. We should expect to have to provide assistance in meeting the costs of undertaking the necessary surveys and processing the results according to our proposed specifications. The first results would become available in the mid-1980s and would build up from there, depending partly on the progress of the UNNHSCP, which is designed eventually to equip most developing countries with a capability for survey work of this kind.

5. There is the related question of the Bank's involvement in the UNNHSCP itself. As you know, we have already made an initial contribution of \$100,000 to this program. As one of its co-sponsors we should be prepared to make further annual contributions of this amount for two additional years to cover the period during which the UNNHSCP is being established. The total cost of the program is estimated at around \$1.6 million per country, of which between one-third to one-half would be provided by external donors, plus about \$2 million per annum for central and regional costs. If 85 countries are to be covered over a ten year period, as the UN proposes, approximately \$80 million of external funding will be required. However, this may well be an overly ambitious target. Meanwhile, it should be noted that the provisional list of 85 countries to be covered by the UNNHSCP excludes a number of major Bank borrowers. The countries provisionally excluded from UNNHSCP are listed in Annex B of the paper.

6. The UN Statistical Office welcomes our proposal for a feasibility study and has indicated a willingness to collaborate in this exercise and to contribute their accumulated expertise. The results of this study will be of benefit to countries which are included in the UNNHSCP and those which are not. By working closely with the UN Statistical Office, the recommendations of the study would have the best chance of being endorsed by the UN Statistical Commission as standards to be adopted internationally. This achieved, we would be in a strong position to encourage the implementation of these standards (a) through a major contribution to the UNNHSCP, and (b) by direct support both of countries which are not to be covered by it and those which have graduated from the program but remain in need of supplementary assistance. Details of how this might best

June 8, 1979

be done will have to be worked out in the course of the feasibility study and in the light of its findings.

7. The institution of the UNNHSCP is an encouraging development from this longer-term perspective, and the Bank will have to consider a major contribution to it, over and above the \$100,000 per annum we are subscribing for an initial period as co-sponsors. A contribution of \$1 million per annum for 10 years has been suggested. We are not able to recommend such a large contribution at this stage, (a) because its effective disbursement would require the prior establishment of concepts and methods, and (b) because the Bank will want to develop a program covering countries which are outside the scope of the UNNHSCP as well as those within it. Both aspects can be developed in the course of the feasibility study over the next three years. Meanwhile, it would support the proposed feasibility study and be welcomed by the UN Statistical Office if the Bank were to express its intent to continue financing the collection of data on income distribution and living standards on completion of the feasibility study.

Recommendations

8. I propose that we continue work on improving the existing national data on income distribution and ask that an additional position be authorized for this purpose in FY80.

9. To lay foundations for a permanent flow of better data in future from a growing number of countries, we need (a) to support the UNNHSCP by continuing our current contribution of \$100,000 for two more years; and (b) to implement the feasibility study described in the attached paper. It is estimated that the latter will cost up to \$1.5 million over a three year period. The Bank should expect to meet this cost in full. We request your comments on this approach. If you agree, a detailed work program for the feasibility study will be developed in association with the UN Statistical Office, to be submitted with a request for funding by the end of this calendar year.

10. The UN Statistical Office is calling a consultative meeting of potential donors to UNNHSCP on June 20. It would therefore be helpful to know your reactions on this aspect before then.

11. We are conscious that our proposals do not guarantee success. But our view is that the potential gains from realizing our hopes far outweigh the costs to which our proposals would commit the Bank.

Attachment - *in Inc. Dist Data Policy File*

cc: Messrs. Stern and Gabriel

HBChenery:GPyatt:di

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

DATE June 7, 1979

OM: Hollis B. Chenery, VPD *WBC*SUBJECT: Your Meeting with Research Advisory Group (5:45 pm today)

The Lewis Committee is in the midst of revising its report (attached). Sir Arthur would like to summarize their main findings in 4 or 5 minutes and then solicit your reactions to some of the more controversial questions, such as the size of the increase in Bank research and dissemination efforts being proposed, support for LDC research institutions (on which the Committee is quite divided), and the recommendation on income distribution data (pp. 25-26).

I think you would be interested in hearing the comments of several members of the group (e.g., Bell, Giersch, Massad, Aboyade) to get some flavor of the arguments.

HBChenery:nfj

Attachments:

1. List of Panel Members
2. Draft Report

General Research Advisory Panel

Sir Arthur Lewis
Professor Economics
Princeton University

Mr. A. Aboyade
Vice- Chancellor
University of Ife
Oyo State, Nigeria

Mr. David Bell
Executive Vice President
Ford Foundation
New York

Prof. Herbert Giersch
Direktor des Instituts fur Weltwirtschaft
University of Kiel
West Germany

Mr. Nurul Islam
Assistant Director General
Economic and Social Data Department
UN Food and Agriculture Organization
Rome

Dr. Mahn Je Kim *(Absent)*
President
Korea Development Institute
Seoul

Mr. E. Malinvaud
Director General
Institute National de la Statistique
et des Etudes Economiques
Paris

Mr. Carlos Massad
Senior Advisor to the UN Economic
Commission for Latin America
Santiago, Chile



Record Removal Notice



File Title Hollis B. Chenery Papers - McNamara discussions / notebooks / memoranda - 1979 (January - August)		Barcode No. 30211203		
Document Date May 3, 1979	Document Type Memorandum			
Correspondents / Participants From: Hollis Chenery To: Cargill, Stern, Clarke				
Subject / Title Offer to John Holsen as Research Adviser				
Exception(s) Personal Information				
Additional Comments		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information. This Policy can be found on the World Bank Access to Information website.		
		<table border="1"><tr><td>Withdrawn by Ann May</td><td>Date 13-Jan-17</td></tr></table>	Withdrawn by Ann May	Date 13-Jan-17
Withdrawn by Ann May	Date 13-Jan-17			

HBC copy

ROUTING SLIP

DATE:

Apr. 16, 1979

NAME

ROOM NO.

Copy each to:

new Notebook

Mr. Karaosmanoglu

Mr. Wright

Mrs. Cleave

Mrs. Hughes

APPROPRIATE DISPOSITION

NOTE AND RETURN

APPROVAL

NOTE AND SEND ON

CLEARANCE

PER OUR CONVERSATION

COMMENT

PER YOUR REQUEST

FOR ACTION

PREPARE REPLY

INFORMATION

RECOMMENDATION

INITIAL

SIGNATURE

NOTE AND FILE

URGENT

REMARKS:

Mr. McNamara's note:

"I will reconsider the need for the "Income" specialist after receiving the "revised proposal for such work" and if the position is justified, I will authorize it from the contingency."

FROM:

Hollis Chenery

ROOM NO.:

E1239

EXTENSION:

73665

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

FROM: Hollis B. Chenery, VPD *HBC*

SUBJECT: DPS Budget for FY80

4/13 To Dr. Chenery *pic of 4/13*
 I will reconsider
 the need for the "Income
 Specialist" after
 receiving the "revised
 proposal for such work" +
 if the position is justified I
 will authorize it from the
 contingency fund.
 cc Gabriel

DATE: April 12, 1979

For several years DPS has taken on additional assignments and improved the quality of its output with an unchanging level of staff resources. We have now reached the limits of what can be done by shifting resources around to meet new priorities, and this year asked for three additional professional positions to cope with the increased demands that DPS is expected to meet.

The two most urgent positions are for the Economic Analysis and Projections Department, one for a systems analyst to support the WDR projections work and the other to develop and improve data availability in the area of income distribution. The PAB recommendation to you endorsed the request for a systems analyst and found that the income distribution specialist merited support, but could not be recommended in view of the overall budgetary constraints.

I would ask you to reconsider the case for this second position, which is set out in paragraphs 8-12 of the attached memorandum from Mrs. Hughes. You have on several occasions emphasized the importance which you attach to getting improved income distribution data, and we will be sending you shortly a revised proposal for such work. This is the minimum staff required even to make a start in this field.

HBChenery/EPWright:nfj

Attachment

cc: Mr. Gabriel, PAB

OFFICE MEMORANDUM

DATE February 11, 1979

TO: Mrs. Laura Cleave, VPD

FROM: Helen Hughes, EPD

SUBJECT: Request for Additional Staff for 1980

1. We made no case for increased professional staff for FY1978 and FY1979 although during this period:

- (i) The Department developed a much more sophisticated global consistency/modelling structure for WDR than had been used previously.
- (ii) Data coverage was increased in debt and social indicators, and the data base continued to grow at about 10% a year.^{1/}
- (iii) The Department increased its analytical capacity appreciably both for short run trends (Quarterly Survey of Economic Trends) and in basic analysis, particularly in capital flows and debt.

2. These gains were made by improving the Department's organization, upgrading the quality of staff, and cutting out—not without cost—the less essential tasks in each Division. This process has however reached its limit, particularly in systems and data analysis. The Department's staff has been working excessive hours of overtime, which are eroding their capacity to maintain their professional expertise and to live reasonable lives.

3. The Department has now been asked to undertake additional responsibilities in the improvement of Bank data quality and consistency. This will require a major input into the CPP and President's Reports systems, including the development (with CAD) and maintenance of new Bank wide data systems and output facilities, the running of 60 to 80 "base case" projection models for developing countries annually, and improvements in social indicators. The Department has had to step up its contacts with international statistical agencies very considerably.

4. Before we decided to ask for two additional professional staff members and three additional research assistants, we considered moving slots among the Divisions, but each Division is extended to its limit, and

^{1/} The data base under active management in the Department currently contains about 10 million numbers. These figures will continue to increase, if only because each year about 250,000 numbers must be added to the data base merely to cover the calendar year just completed. A large proportion of the data already contained in the data base does not remain unaltered; data revisions may affect some 10-15% of the entire accumulated data base each year. In addition, new series are being added.

so, in running the WDR, is the Front Office. Noting the long hours of overtime by professional staff in FY1978, we began to record professional staff overtime carefully in FY1979 as Table I indicates.

Table 1: EPD PROFESSIONAL STAFF OVERTIME FY1979
(Number of Hours)

	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Jan.</u>
Office of Director	63	67	28	149	192	239	279
Int'l. Trade & Cap.Flows	66	81	127	116	127	106	194
Comp. Anal. & Proj.	46	10	15	36	5	1	7
Econ. & Social Data	65	35	38	59	28	10	90
External Debt	94	30	43	51]	66	42	5
Com. & Exp. Proj.	108	107	110	58	67	85	115
Total	<u>442</u>	<u>330</u>	<u>361</u>	<u>469</u>	<u>485</u>	<u>483</u>	<u>690</u>

These figures have been monitored to ensure that the overtime is justifiable. They do not include work on research, let alone reading in economics. It is clear that with the overtime hours being worked, there is little of the latter! Overtime is concentrated among the more skillful and experienced staff and their working week has clearly become excessive.

5. We have improved the organization of research assistants' work in keeping with overall organizational improvements, but we have not been able to upgrade staff because it was already of high quality. Indeed the Department's role in training staff at the research assistant level was recognized when 6 research assistants left the Department during the summer for the Regions. It should be noted that in part at least they were attracted by less onerous work loads. As you know, the Department's research assistants worked excessive hours of overtime in mid-FY78, with the WDR accounting for 1,001.75 of 1765.25 overtime hours worked during that year (see my memorandum of May 31, 1978, attached). We had hoped to reduce overtime substantially during FY1979, but in spite of major systems gains, moving research assistants among the Divisions as needed, and the employment of temporary staff, we have had even higher excessive overtime loads for research assistants in FY1979. Table 2 shows that the Research Assistants worked 1,432 hours of overtime in the first 7 months of FY1979, compared 1,077.75 during the first 7 months of FY1978. It is neither proper nor feasible to continue to work overtime at such levels.

Table II: EPD RESEARCH ASSISTANTS OVERTIME FY79
(Number of Hours)

	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Jan.</u>
Office of Director	20	12	18	20	67	65	50
Int'l. Trade & Cap. Flows	8	17	27	14	59	39	111
Comp. Anal. & Proj.	29	0	0	0	33	53	47
Econ. & Soc. Data	4	15	143	6	12	57	15
External Debt	210	24	22	18	61	44	31
Com. & Exp. Proj.	25	7	15	18	0	1	15
Total	<u>296</u>	<u>75</u>	<u>225</u>	<u>76</u>	<u>232</u>	<u>259</u>	<u>269</u>

REQUEST FOR TWO PROFESSIONAL STAFF POSITIONS

A. Systems Analyst

6. There has been a growing imbalance between demands on the Systems Group and its capacity. This imbalance has resulted from the systems work generated by the increasing demand for data analysis and service support on the Department. The efficient absorption of increased data and analytical demands depends critically on the ability to develop more sophisticated systems, in collaboration with CAD. At present the absence of such a system is keeping the Systems Group preoccupied with meeting day-to-day needs. Thus although the Divisions have improved their computing capabilities in the last two years, the Systems Group, because of the weakness of existing systems, is spending more than 50% of its time assisting Divisions to meet deadlines. Less than 1 man year is available for systems development with CAD. We have thus fallen badly behind in our basic data work program, and in the work on graphing and other facilities which could greatly facilitate analysis for the WDR and other policy papers. If this situation continues, the ratio of time devoted to "fighting fires" will have to increase as data and analytical demands continue to increase, and systems improvement will be slowed even further.

7. The addition of an additional systems analyst, who would devote his/her time entirely to system development with CAD is thus essential. New formats for the CPP system have been approved by management, and the new formats for the President's Reports are expected to be approved shortly. Bank wide implementation that will ensure high data quality and consistency will require a major systems input. The Systems Group is working closely with CAD to ensure that effective planning will minimize design and running costs. The computing implications are considerable, and will be included in the computing budget.

Ms. Laura Clea e February 11, 1975

B. Income Distribution

8. The Economic and Social Data Division has expanded its social data coverage considerably in the past year. It has been able to respond to such requests as that for the "Atlas of the Child". Any work that is not strictly related to national accounts, trade, social indicators and quarterly statistics has been cut. Mission support has been cut although it is in many cases essential to the maintenance, let alone improvement of standards in these areas.

9. At the Division's work program review, it was decided that the most urgent Bank need was the development of a trade system. This would be followed by a compatible industrial data system. Some of the inputs necessary for the latter would be submitted to the Research Committee to ease resource constraints, but there would, nevertheless, not be any spare resources for other developmental tasks.

10. It was also noted that the review, updating and expansion of Shail Jain's "Size Distribution of Income" (1975), which is still the only source of comparable income distribution and quality of life data is of high priority for the Bank. This task would assist in the evolution of income distribution data standards that would ensure:

- a) the reliability of income data vis-a-vis GNP, wages and salary statistics, etc.,
- b) consistency with regard to coverage, definition and concepts such as households, economically active populations, urban/rural populations, and money and other incomes, and
- c) continuity of data over time and space through adjustment procedures linking various censuses and surveys.

11. The updating and revisions of data would require monitoring census and survey reports, in some cases, working together with member countries to compile statistics, and applying the standards evolved to revise and produce internationally comparable income distribution data. Close relationships would of course have to be maintained, not only with DRC, but also with ILO and other interested international organizations.

12. Such a work program cannot be accommodated in the Division's current strength. The improvement of income distribution data is thus dependent on an increase in staff, and such additional staff will be necessary to maintain the system, given the steadily increasing volume of other maintenance work which the Division has to undertake. We estimate that adding two staff members would enable the basic work to be undertaken within a year. If one were added, it would be more spread over time, but a significant start could at least be made.

REQUEST FOR THREE RESEARCH ASSISTANT POSITIONS

13. In FY1978, when work on WDR started, the Department was given 3 additional research assistants. In FY1979, although the WDR's scope and the Department's responsibilities were again expanded, the number of additional research assistants was cut to one and we have had to make up the deficiency through two temporary appointments which are costly in terms of productivity because of high turnover.

14. WDR demands on this Department are not going to be decreased in the future, and data is growing, as already noted by some 10% per year. Perhaps it is not appreciated that however rapid systems improvement, the data being placed in the Bank's data bank has to be examined and verified, and this of course, is only the data maintenance part of the Department's data work. The addition of responsibility for Bank wide data consistency will increase the need for research assistants substantially.

15. We are therefore requesting that the 3 additional research assistants provided for the Department in FY1979 be made into permanent slots. They would be placed in the following divisions:

A. Economic & Social Data

15. This is where one of the additional research assistants employed under the WDR aegis is currently working on the WDI component of WDR. This task is growing annually with the expansion of the WDI.

B. International Trade and Capital Flows

16. On the basis of the time reporting system, it is estimated that by the end of FY1979, the Division will have undertaken 6 research assistant years' of work, compared to the 4 authorized positions. This has been done by borrowing research assistants from other Divisions (where other research assistants have had to work overtime), using temporary research assistants, and overtime. The core group of research assistants in the Division put in an unjustifiably high amount of overtime in FY1978, and it will do so again in FY1979. In some cases, this is beginning to affect their health and efficiency. Furthermore, to the extent that there have been uncertainties about the availability of temporary research assistants, the professional staff has been required to devote its time to statistical computations rather than to economic analysis and to work unreasonably long hours. An additional research assistant to handle the Division's work on a regular basis is needed.

C. Comparative Analysis & Projections

17. This Division's work load is being increased by the addition of 5 "Global Model" type country models for WDR, and their number is expected to increase to 10 or 12 in FY1980. The 5 models eroded the time of the Division's research assistants in spite of the use of some temporary staff. In addition this Division will be responsible for running "base case" models for the CPP system and President's Reports. This means cleaning data for and running some 60 to 70 country models (including the 10 or 12 expanded country WDR models) annually with WDR assumptions. The Division's professional staff will be almost entirely occupied with these requirements for the next two years at some cost to other modelling. The addition of a research assistant is essential to the preparation and maintenance of up to date data.

REPORTING CHANGES

18. I would like to draw your attention to two reporting changes in the accompanying tables.

- a) the capital markets work was moved to P & B during FY78;
- b) commodity reporting was improved with a consequent shift of commodity work from Categories B and D to Category F between FY77 and FY78.

Attachement

cc: Mr. Chenery
Mr. Karaosmanoglu
Mr. Wright
Mr. Muller
DPS Directors
EPD Front Office
EPD Division Chiefs

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

FROM: Hollis B. Chenery, VPD *HB*

SUBJECT: Management of WDR III

DATE: April 13, 1979

I have consulted further with Bevan Waide and Attila as to the best procedure for managing the preparation of WDR III within the DPS front office. I propose that Bevan take over the management function performed by Attila this year, and that I participate more extensively in the design and review of the report.

4/13

You will recall that in our last meeting there was no strong preference as between Basil Kavalsky and Paul Isenman to be the head of the core group. I refrained from approaching Kavalsky after I learned of Attila's expected transfer so that his successor could have a voice in making the selection. It happens that Waide has worked extensively with both candidates and has a definite preference for Isenman as being a better economist and particularly effective in working with others. Since this preference agrees with my own, I request your concurrence in the selection of Isenman to head the core group. If you agree we will proceed immediately to recruit the rest of the group and to initiate discussion of next year's work program.

Please let me know whether you would like to discuss either of these questions. I would hope that Waide's transfer can take place on the same date as Attila's (early June) so that this process will not be delayed.

HBChenery:nfj

cc: Mr. E. Stern, VPO
Mr. Karaosmanoglu, VPD
Mr. Waide, ASNVP

4/16
Approved, subject
to assurance of
high-quality "writing"
Shul

Copied to those who need
original.

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara
THRU: Mr. Hollis B. Chenery, Vice President, DPS
FROM: Mahbub ul Haq, Director, PPRQ, *ML*

DATE March 15, 1979

SUBJECT: Basic Health Needs in Mali

1. The attached paper, "Basic Health Needs in Mali" is the fourth of the seven country studies being prepared in the basic needs program. It was prepared by the Projects Department, West Africa Regional Office, and was reviewed by the PRC staff on January 26, 1979 under my chairmanship. The minutes of that meeting are also attached.

The Health Situation

2. In Mali practically every indicator of well-being points to a high degree of poverty: a high incidence of calorie and protein deficiency, especially among children; a crude death rate of 30 per thousand; infant mortality of 120 per thousand; and life expectancy of only 37 years, one of the lowest in the world and well below the average of 44 years for low-income countries. Only 10 percent of the adult population is literate, and only 25 percent of the population seems to have access to safe water; excreta disposal facilities are almost non-existent. Because of this, water borne and fecally-related diseases affect an alarmingly high proportion of the population, especially the young.

A Possible Strategy

3. The strategy for meeting basic health needs which emerges from the analysis of the Mali situation should emphasize the following three points:

- the necessity to upgrade the current curative health system to make it more effective through administrative and managerial reforms;
- the importance of improving public services in associated areas of water supply, nutrition, sanitation and education; and
- the need to improve agricultural productivity.

4. The paper estimates that the costs of implementing such a strategy would require capital expenditures of about \$61 million per year through the year 2000, and annual recurrent expenditures rising to approximately \$91 million per year by the year 2000. Even with fairly rapid growth in output, and a substantially expanded level of external assistance, the financing of such a program appears well beyond the present means of the Government.

March 15, 1979

5. It seems clear that in very poor countries, such as Mali, the financial and administrative burdens of programs designed to meet all basic needs are simply enormous. It is also clear that there are diminishing returns from an over-concentration in a single sector. The Somalian basic needs paper analyzed the impact of concentrating government attention and resources on education; the Mali paper does the same for the health sector. In both cases, a better distribution of resources among the several basic needs sectors might have been more productive.

6. The findings of this paper - which may be indicative of the situation in other Sahelian countries - as well as of other country papers will be incorporated into our final overview paper on basic needs.

Attachments - *BN policy file*

cc: President's Council

Natashah

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara
FROM: Hollis B. Chenery, VPD *HBC*
SUBJECT: World Petroleum Situation

DATE: March 9, 1979

1. In the past five months, following the temporary loss of Iranian supplies, the world petroleum market appears to have successfully passed the test of a major supply disruption. Although there is little immediate danger of shortages developing, selective price increases over and above those announced by OPEC in December have taken place. The announcement last week of voluntary demand restraint in IEA countries should help avert major consequences from the current market tightness.

Producers and Consumers Actions

2. Beginning in October 1978, Iran's petroleum production started to decline rapidly from just over 6 million b/d to about 450 thousand b/d in January. This implied a swing from an export surplus of around 5.2 million b/d in September to a deficit of over 300 thousand b/d in January/February.

3. The reduction in export availabilities that followed the withdrawal of Iranian supplies was partly offset by stepped up output in other oil producing countries. Between September and mid-January Saudi Arabia increased its petroleum production by over 2 million b/d. The response of other Middle Eastern producers in the same period was mixed and, overall, the net output of the region--including Iran--declined by about 3 million b/d. Other OPEC producers were able to add 400 thousand b/d to their combined output of September, whereas non-OPEC oil producers added some smaller net amounts.

4. As supplies shrank further, oil companies started to apply force majeure cutbacks as a means of reallocating reduced supplies to third party and affiliated customers. The cutbacks have helped to prevent regional imbalances, discouraged a disorderly chase for supplies, and slowed down spot transactions.

5. Thus far, the consuming countries have not found it necessary to make use of the Emergency Oil Demand Restraint and Supplies Allocation Program as the supply shortage projected for 1979 does not reach the minimum required to trigger the system (see attachment). The governing Board of IEA met last week, however, and agreed to voluntary measures to reduce the group's consumption by 2 million b/d in 1979.

Price

6. As you are aware, the first quarterly increase (5%) of petroleum prices went into effect in January, as a follow-up to OPEC's Abu Dhabi decision to phase in a series of increases in 1979. Three further increases (3.8%, 2.3%, 2.7%) are expected in the subsequent quarters, averaging to a 10% annual increase over 1978.

7. In addition, Abu Dhabi, Libya and Qatar (which together account for 13% of OPEC exports) have announced surcharges of 5 to 7% over the January 1st official prices. There are unconfirmed reports that Algeria, Kuwait, Nigeria and Venezuela have also raised prices selectively.

8. Production of Saudi Arabia's crudes up to 8.5 million b/d (the ceiling imposed last year) is selling at January 1st prices; the rest is being sold at a fourth quarter price (9% premium). At current output, the weighted average price of Saudi Arabian light (the marker crude) results about 1.5% above its January 1st level.

9. The rationale behind Saudi Arabia's pricing mechanism is understood to be that production in excess of 8.5 million b/d is being "borrowed" from fourth quarter supplies. Saudi Arabia is thus technically honoring the Abu Dhabi announcements by the use of this formula.

10. Price increases in spot sales (any origin) have been rather sharp. But the bulk of the world transactions (95-97%) are handled on a contractual basis.

Prospects

11. Technical problems have been cited as preventing Saudi Arabia from maintaining the average level of production above 9.5 million b/d for an extended period. A downward readjustment in Saudi supplies puts the weight of holding the market stable largely on the demand side. Leaving the outcome to market forces alone could result in significant price increases as oil consumption is recognized to have a low price elasticity in the short term. The decision by IEA may help avert them.

12. The situation can be expected to remain in a tight balance anyway as--except for some short lived surpluses--petroleum suppliers have operated at near full capacity since 1974. The behaviour of the industry is critical at this point.

Mr. McNamara

- 3 -

March 9, 1979

Although some relief can be expected from IEA's decision and the start of the season of lower overall oil consumption (oil consumption in the second and third quarters is historically lower than the annual average) this could be offset by a high rate of stock-piling.

Attachment

cc: Vice Presidents, Department Directors, Chief Economists

SSingh:ALambertini:di

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Attachment

THE INTERNATIONAL ENERGY PROGRAM; IEA's STAFF PROJECTIONS FOR 1979

1. According to the International Energy Program, "allocation of oil and mandatory demand restraint measures will take effect when (IEA) as a whole sustains or can be reasonably expected to sustain a 7% reduction in its oil supplies (...) calculated using average final consumption of oil during a base period which is defined as the most recent four quarters with a delay of one quarter necessary to collect information." The Program can also be activated if at least one country is affected by a 7% reduction in supplies.

2. In their assessment of the impact of the reduction in Iranian supplies the staff of IEA presented a prospective scenario of 1979 rather than an estimate based on past consumption as the Program provides. IEA's scenario of the oil balance (see attached table) assumes 3% economic growth in 1979 for the aggregate of OECD with oil consumption growing 2.5% over the 1978 level. Stocks are planned to grow at a rate of .8 million b/d and supplies are projected to average 51.1 million b/d. As presented, the scenario shows a gap of 2.3 million b/d of oil between world supplies and demand. This is equivalent to 4.4% of the world's consumption--still below the minimum of 7% required to activate the Program (the staff of IEA has referred to world supplies rather than IEA's or OECD's). The reduction of consumption by 2 million b/d would thus allow stocks to grow at a rate of .5 million b/d bringing total demand down to the level of projected supplies.

March 9, 1979

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PROJECTED OIL BALANCE FOR 1979
 (million b/d)

Consumption	
OECD	41.9
Other /a	10.7
Total /a	<u>52.6</u>
Stock build-up	.8
Demand	<u>53.4</u>
Supplies	
IEA	14.2
OPEC /b	29.7
Other non-OPEC, CPE's	
Processing gains, etc.	7.2
Total Supply	51.1
Balance	<u>2.3</u>
(Balance as % of total consumption:	4.4

a/ Excluding CPE's

b/ Assumes Saudi Arabia will produce an average of 9.5 million b/d over 1979; Iran, .7 million b/d in the 1st half and 2.7 in the second half.

Source: Private communication with IEA staff.

OFFICE MEMORANDUM

DATE: February 27, 1979

TO: Mr. S. Shahid Husain, AENVP

FROM: Hollis B. Chenery, VPD *HBZ*SUBJECT: Bank Strategy in Thailand

1. Thailand is faced with an extremely difficult problem in the high concentration of growth in the Central region, which includes Bangkok. While regional inequalities are found in most of the larger developing countries (Brazil, Mexico, Yugoslavia, Turkey, Indonesia), they are most acute in Thailand. Although the laissez-faire development policies of the Thai Government have been quite effective in many respects, they have been notably ineffective in dealing with this problem. Future growth is likely to be even more concentrated in the Central region, despite the Bank's reorientation of its own program toward development of the poorer rural areas. The question, then, is whether there is anything more we can do.

2. Current trends and prospects are well presented in the recent Basic Economic Report on Thailand. Despite favorable agricultural conditions and earlier U.S. military expenditures, per capita GNP in the poorest region, the Northeast, has grown less rapidly than the national average. Since 1960 its share has declined from 17% to 14.8% of GNP, compared to a population share of 35%. On the other hand, income in the Center (including Bangkok), which has 31% of the population, grew considerably more rapidly than the national average of 4.8% per capita; the Center's share of the total GNP grew from 53% to 60%.

3. Government development activities under the first four plans have contributed to worsening income distribution rather than helping to offset it. Although a regional breakdown of public investment is not yet available, it is clear that per capita public expenditures by region rise with the level of income and with the activity of local authorities to prepare and implement investment projects. In the latter respect, the Northeast is handicapped by the lack of a regional development agency, since the separate activities of existing agencies are far from constituting a coherent program.

4. While the Bank is playing an innovative role in the present situation, it is not clear that the shift in our lending toward rural development will have any effect on the total allocation of development funds. Although some new activities will be undertaken for the poor regions, they cannot be expected to do much to offset the overall trend.

5. Since the prospective slowdown of agricultural growth will probably affect the Northeast more than the other parts of the country, the net effect is likely to be a more rapid widening of income gaps. By the year 1990, a rough calculation suggests that with present trends there may be a developed Center with a per capita GNP of \$1400-1500, an underdeveloped Northeast with per capita GNP in the range of \$200-250 and accompanying political tensions.

6. The question that I would raise is whether, given this prospect, the Bank should not adopt more of a "Yugoslav Approach" under which a high and rising proportion of our expenditures would be explicitly linked to larger and more effective government programs in the Northeast. To have more of an impact on overall resource allocation, and to improve the efficiency of the planning-budgeting process, the Government should consider the establishment of a regional development authority for the Northeast which could receive external loans from the Bank and other sources.

7. This proposal has just been made by the Regional Mission, now that the Cabinet has decided to establish an "Eastern Seaboard Development Committee" under the Chairmanship of the Deputy Prime Minister. Such a group could well develop into a Regional Development Committee and become a model for regional development. Van der Heijden and I discussed the idea that a Northeastern institution be established which could, with outside help, plan and implement the development of the Northeast with Dr. Snoh Unakul, Governor of the Bank of Thailand, Khun Suphat Sutatum, Minister of Finance, and others. My impression is that there is the beginning of acceptance of this idea. You will doubtless receive more detailed comments on this matter from van der Heijden.

cc: Messrs. McNamara, President
E. Stern, VPO
S. Please, AEA
van der Heijden, Bangkok, Thailand
P. Hasan, AENVP

HBChenery:tr

McN Notes

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

DATE: February 8, 1979

FROM: Attila Karaosmanoglu, VPD *AK*SUBJECT: Coordination of Statistical Work in the Bank

1. The Economic Analysis and Projections Department has designated Russ Cheetham to be responsible for implementing the decisions about statistical work in the Bank that were taken at the President's Council on January 22. He will be assisted by Ramesh Chander.

2. You asked that I report back to you in six months on our progress in improving the coordination of statistical work within the Bank. In view of the fact that both staff members are heavily involved with work on the World Development Report, and that they are both due for home leave this summer, we would prefer to have a report available for your consideration in October. In the meantime, however, we will provide you with a brief report at the end of each quarter on the status of the work that is being undertaken. The first such report will be submitted to you in early April.

3. A number of specific steps designed to improve the quality and consistency of statistics within the Bank are already being taken. Measures have been adopted to ensure consistency between the data in the forthcoming issue of the World Development Indicators (WDI) and the March edition of the Social Indicators Data Sheets. Most of these data will be obtained from internationally comparable sources. In the case of population data, for example, we will provide Regional staff and the CPS with a complete set of the data being developed from UN Population Division and other sources for the WDI. These should be ready in late March. Instructions about the use of these population data in all official Bank work will be issued at that time.

4. In the year ahead we are planning a major effort to improve the quality and consistency of economic data in the CPPs and President's Reports. As a first step, the economic data attachments to CPPs have been redesigned. These should become operational as soon as discussions with Regional offices about the new OMS on CPPs are completed. In improving the quality and consistency of data in these documents it is essential that the computer-based CPP system is redesigned. This will require a substantial investment of manpower in systems development, proposals for which will be included in the FY80 budget.

5. We are taking steps to intensify our contacts with other international bodies on statistical matters of mutual interest. The Bank will be represented at the forthcoming ACC Subcommittee on Statistical Activities and at the 20th Session of the Statistical Commission. We have started a dialogue with the IMF about further improvements to the government finance statistics which they publish, with the expectation that these data could be adopted for use throughout the Bank. We have also convened an informal meeting among international agencies to discuss technical index number problems associated with making price projections in a world of floating exchange rates.

6. We are also establishing a system for the continuous monitoring of trends in protectionism. When operational, the system would cover both industrial and agricultural commodities, and the major developed and developing countries. A first stage report, that deals with recent trends in industrial protectionism in the US, the EEC countries and Japan, and with conceptual and operational issues, will be given wide circulation within the Bank next week. Later this month, we will engage in discussions with the GATT, IMF, the Office of the Special Trade Representative of the US, and others, to attempt to establish joint international efforts in this area.

RJCheetham:nfj

cc: Mr. Chenery, VPD
Mr. Stern, VPO
Mrs. Hughes, EPD
Mr. Chander, EPD
Mr. Cheetham, EPD

1. McNamara
2. HCN book

THROUGH:

Mr. Robert S. McNamara, President
Messrs. Warren C. Baum, VP, CPS and Hollis B. Chenery, VP, DPS
Edward V. K. Jaycox, Chairman, Urban Poverty Task Group

January 16, 1979

A Progress Report on Research on Urban Poverty

1. The attached report, prepared by Mr. Stoutjesdijk, was assigned as a result of the President's Council meeting on May 8, which discussed the paper "Leading for Poverty Oriented Employment Generation". The report deals in general with research aspects of the Urban Poverty Program focussing on employment issues. The report describes ongoing research, presents an overall evaluation of the program and recommends next steps.

2. There are three general issues raised by the report, namely the type of research required, organizing this research and its resource implications.

- (a) Operationally relevant research, or project related research which yields operationally useful results in the short term, receives too little attention at present. Ongoing research is generally responsive to identified needs, but cannot be characterized as a "program" of research on urban poverty in the Bank; rather it is a number of individual undertakings being performed by a number of different units without management as a program.
- (b) To remedy these situations, the paper recommends the formation of a Bankwide steering group, such as already exists in the Trade and Industry Steering Group, to guide and harmonize research on employment and urban poverty issues. This could be very important: both because of the cross sectoral nature of the issues involved and because the Bank lacks a formal focus for discussing these subjects elsewhere. Representation in the steering group should be wide and include the regions. In addition, it is recommended that a small CPS/DPS task force be set up to engender more operational or project related research. I support this recommendation but think the task force should work generally on non-farm employment issues in both urban and IDF projects rather than in just one sector as apparently suggested. The idea that this research should be closely linked to ongoing projects and that we could start by testing the various implicit assumptions of employment oriented projects is very attractive.

(c) Research resources available for urban poverty research are, not unexpectedly, already being fully utilized. Therefore, shorter term payoff type of research will require additional resources or will have to wait until resources are freed from existing longer term undertakings two to three years from now.

cc: President's Council
Regional Directors
GPS Directors
Regional Urban Poverty Program Coordinators
Chief Economists

Messrs: Stoutjesdijk (DED)
Stone (URB).

NLethbridge:bb

November 15, 1978

A PROGRESS REPORT ON RESEARCH ON URBAN POVERTY

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A PROGRESS REPORT ON RESEARCH ON URBAN POVERTY

Summary and Conclusions

This report represents a progress report on Bank research in the area of urban poverty. This area is difficult to delineate, and the summary and conclusions refer primarily to those issues that are most directly linked to urban poverty and unemployment.

The ongoing research effort on urban poverty is generally responsive to the research needs that have been identified in several recent reports prepared by or for the Bank, namely the Action Program of the Urban Poverty Task Group, the subsequent Agenda for Urban Research, RAPIDE, and the Functional Review of Employment. The major components of this research program are research on trends and structure of wages and employment, in-depth analysis of urban labor markets, small-scale enterprise and industrial technology research, the city study of Bogota, and the monitoring and evaluation research related to urban projects. The common characteristic of these research projects is that they address themselves to sets of issues that require a sustained research effort. In contrast, research on issues that can be expected to yield operationally useful results in the short term receives little or no attention.

Available resources currently restrict the scope of the research program. Annually, about 14 man-years of higher-level staff are associated with the program, and ongoing research will take one to two more years to complete. Unless resources are expanded, or the ongoing work program is modified, therefore, it is research with an early operational pay-off that will continue to receive short shrift. The paper recommends two courses of action. First, to assess whether research priorities have been correctly selected, a Steering Group consisting of operational and research staff should review and monitor, on an ongoing basis, the current research program on urban poverty. Secondly, in anticipation of greater attention in the future to shorter-term research within the program, a small task force should be established of DPS and CPS staff, to identify the nature of and scope for research that takes advantage of the Bank's project experience. Initially, such a task force would be limited to urban projects; however, if successful, similar task forces for other sectors might be contemplated.

1. Introduction ^{1/}

A truism that needs restatement from time to time is that research in economic development is directly or indirectly concerned with poverty. Poverty of the dimension found in the urban areas of most developing nations can be alleviated in the longer run only by improved access to productive employment opportunities. A progress report on research on urban poverty could therefore be interpreted to cover a wide field. However, it is clear that a much narrower interpretation is desired in this context, namely the extent to which the Bank's research efforts is responsive to and supportive of identified needs following the Action Program and Interim Report of the Urban Poverty Task Group (October 1975), and subsequent statements on the subject of poverty in general, and urban poverty in particular.^{2/}

The timing for such a progress report appears unusually fortunate, for several reasons. First, the Action Program called for a statement of a research strategy that was directly linked to its immediate and longer term operational requirements; such a statement was prepared in mid-1976.^{3/} A two-year period should be considered as a reasonable time-span to assess whether this generally approved research strategy has found a satisfactory degree of implementation. Secondly, the Bank's research program in the area of income distribution and employment was recently evaluated by an external panel of experts, namely the Research Advisory Panel on Income Distribution and Employment (RAPIDE); its report^{4/} contains an assessment of both the quality and scope of the ongoing research effort in these areas in the Bank; perhaps more importantly, it contains a number of suggestions for future research that appear of relevance in the present context.^{5/}

At approximately the same time that the RAPIDE report was issued, an internal report was produced that provided an assessment of the quality and scope of treatment of employment issues in the Bank's country economic analysis.^{6/} In the sense that this report represents an assessment of the operational state-of-the-art in the analysis of employment issues--with some attention to resource constraints--it provides lessons for the establishment of research priorities that have so far not been drawn explicitly.

^{1/} This paper was prepared by Ardy Stoutjesdijk, DED. Earlier drafts of this paper were discussed at a meeting attended by Messrs. Karaosmanoglu, Gordon, Jaycox, B.B. King, Stone and Stoutjesdijk. Furthermore, the paper has benefitted from comments by Messrs. Chenery, Leiserson, Linn and Selowsky.

^{2/} The term "urban" used in this context is in fact short for "non-agricultural".

^{3/} Ardy Stoutjesdijk, "An Agenda for Urban Research", May 1976 (mimeo).

^{4/} "Report of the Research Advisory Panel on Income Distribution and Employment", May 1, 1978 (mimeo).

^{5/} A similar panel has been set up to review research on industry and trade; its report is not yet available.

^{6/} "Employment in the Bank's Country Economic Work: A Review", ECDER/PPRPRD, April 21, 1978.

The present report will attempt to summarize briefly what suggestions are contained in the above-mentioned analyses with regard to the desirable research portfolio of the Bank, to the extent it relates to urban poverty.

1. The Demand for Research

As stated above, the demand for research connected with urban poverty is articulated in a number of recent papers. In spite of considerable overlap among them, we shall summarize the recommendations contained in each separately.

a. The Action Program

Although the Action Program identifies the formulation of a coherent urban research program as one among several specific tasks to be undertaken following its acceptance by Bank management, it does provide an indication of the desirable features and scope of such a work program.

An understandably heavy emphasis is placed on a research program with a strong operational orientation. Specifically, the need to develop a consistent definitional and information system to improve the identification and understanding of the target group is earmarked as a short term priority task. At the same time, however, it is realized that our scant understanding of the underlying causes of urban poverty, and of appropriate remedies toward its alleviation (as well as the Bank's potential role) necessitate a major, longer term research effort. While requesting that such an effort aims at an early operational pay-off, the Program gives the broad outlines of a possible work program.

Research should be designed to provide information on ways of creating productive employment for the urban poor; improving their access to basic services; and establishing the links between increases in access to these services and increases in productivity. Research should proceed on the improvement of the broad analytic framework for urban areas, and the development of a policy model to examine options for absorbing large numbers of poor more efficiently and equitably in LDC cities. Furthermore, it was suggested that research should be undertaken focusing on project experience in promoting small-scale enterprises, as well as toward the development of methodology to trace and quantify the indirect employment effects of industrial lending.

Complementary to research focusing more or less explicitly on urban unemployment, research should be undertaken toward a better understanding of the factors limiting access of the poor to basic urban services. This should entail research on lower cost means of delivering known technology in water

supply and in the layout of urban neighborhoods, and the development of more appropriate technology for water supply, sewerage and solid waste removal, and electricity distribution. Finally, research should be conducted focusing on the links between increases in access to basic services and increases in productivity.

b. An Agenda for Urban Research ^{1/}

Following the acceptance of the Action Program by Bank management, a detailed research agenda was drawn up that was to serve as an overall framework for the formulation of individual research undertakings in the area of urban poverty. Naturally, the research agenda took the broad outlines for a Bank-sponsored research program described in the Action Program as its starting point. On the basis of a reasonably comprehensive statement on research needs in the area of urban poverty, as perceived at that time, a specific research strategy was proposed that took likely resource constraints for urban research into account. The proposed research program was generally accepted as a basis for deciding future priorities.

High priority is given in the research program to what is referred to as "implementation research", that is research directly related and supportive of the implementation of an urban lending program. Not only would this effort require more research in connection with the monitoring and evaluation of urban projects; it also prescribed a systematic attempt to learn from experience around the world and specific projects and policies that were designed to alleviate poverty.

At the same time, emphasis was placed upon the need to learn more about the way cities function, and, in particular, high priority was given to the study of a specific city. Although the ultimate objective of such a study should be to provide a better understanding of important interdependencies in the context of a city--to aid project and program design--the recommended research approach was to focus on important components of the urban system separately, and to attempt to combine these at a later stage into a comprehensive systems study of the urban economy.

An important consideration in the establishment of research priorities on a geographic basis is that the nature and scope of urban poverty varies by country. The research agenda illustrates this point by reference to a simple typology of countries, taken from a recent Bank Staff Working Paper.^{2/}

^{1/} Op. cit. p. 1.

^{2/} The Task Ahead for the Cities of the Developing Countries, World Bank Staff Working Paper, No. 209, July 1975.

c. RAPIDE ^{1/}

The report of the Research Advisory Panel on Income Distribution and Employment covers a far wider field than the one to be covered in this report. However, it includes a number of observations and recommendations that are of direct relevance to the subject of urban poverty.

A dominating concern of RAPIDE is the Bank's role in the collection and dissemination of reliable, consistent and continuous data on income distribution and employment. Specifically, RAPIDE recommends "A decisive Bank contribution to the design and execution of the 1980 census for a representative panel of countries." This exercise is supposed to throw light on the distribution of income as well as the pattern of wage rates and earnings.^{2/}

Although the Panel's recommendations on research in income distribution and employment are placed in an economy-wide context, they can be given a clear urban interpretation. In the income-distributional context the Panel endorses the basic needs approach, especially in the areas of measurement, linkages among components, and characteristics of delivery systems. A research effort with this focus would obviously correspond closely to that identified in the Action Program, and its concomitant research agenda, addressed to the measurement and scope of urban poverty, and the provision of basic urban services.

On the employment side, emphasis is placed upon analysis of labor markets, and the relationship between wage rates, earnings and employment in different institutional settings and for different sectors. Importance is attached to the measurement of employment and underemployment, and a systematic study of those who are and may remain in these groups. Finally, the recommendation is made that the Bank's researchers should make more extensive use of its opportunity to conduct project-related research.

d. Employment Analysis Review ^{3/}

In April 1978, a report was produced in the Bank that reviewed the treatment of employment issues in the Bank's country economic work. The report was fairly critical of the scope and quality of coverage of employment-

^{1/} Op. cit. p. 1, footnote 4.

^{2/} In this context, it may be useful to note that in connection with a UN request for support for a National Household Survey Capability Programme, Mr. Chenery suggested to Mr. McNamara, in a memorandum dated October 25, 1978, that the Bank not only provide \$100,000 in financial support, but also may participate in a benchmark survey along the lines of the World Fertility Survey.

^{3/} Op. cit. p. 1, footnote 6.

related issues in country-economic work. Criticism was expressed with regard to the preoccupation with descriptive detail based on statistical tables, and the lack of emphasis on analytic issues. In particular, insufficient analysis of the functioning of the labor market was noted, although it was recognized that such analysis may be time-consuming.

It may be argued that our understanding of the functioning of labor markets in developing countries is not sufficiently advanced to permit adequate coverage under the circumstances under which routine country-economic reports are produced. At best, the special employment reports may be expected to provide the level of coverage that more or less reflects the state-of-the-art, but even most of these are criticized on various grounds.

Although the Report contains many sensible suggestions as to how one might improve the analysis of employment related issues in the Bank's country-economic reports, it is not obvious to what extent its recommendations take adequate account of the resource and time constraints. Under the circumstances, it would appear more prudent to argue that in-depth analysis of the functioning of labor markets in developing countries is still in the research phase. It is not until the stage is reached that substantive generalizations in this field appear justified that qualitative improvements in routine coverage can be expected. This applies as much to economy-wide, as to specifically urban coverage.

e. Recapitulation: The Demand for Research

While covering a very wide range of topics for research, the foregoing brief summaries of recently articulated needs for research in the area of urban poverty reveal that several major themes predominate. First, there appears a widely-felt need for the Bank to be more deeply involved in descriptive-analytic work related to urban poverty. Such research would entail both measurement and conceptual aspects, and be designed to be directly helpful in the formulation of appropriate programs and projects.

A second main area of concern is that of the creation of productive employment opportunities. Here, research needs range from a better understanding of the functioning of urban labor markets, to an improved framework for economy-wide analysis of policy options for employment creation, to project-related research of employment impacts. Research focused explicitly on the structure of industry, and in particular on the potential role of small and medium scale enterprises in enhancing the employment impact of industrial investment, is generally given high priority.

A third main concern is with our lack of understanding as to how cities function. In particular, the Action Program and the urban research agenda attach high priority to a research effort focused on a single city, with as ultimate objective an analytic framework to test alternative policy options for poverty alleviation, but also as a basis for the design of coherent investment programs for the provision of basic urban services.

Although several other topical areas for research were identified, the three areas mentioned above constitute the main themes, under which virtually all research needs can be classified.

3. The Supply of Research

We shall discuss the supply of research in correspondence with the three main themes identified above.

Research on measurement and conceptual aspects of urban poverty has so far mainly taken place in the framework of the Bank's research program on income distribution, and was mostly organized independently of the Urban Poverty Program. Nevertheless, several undertakings have a clear relevance here. In particular, a project on urban income distribution in Latin America was designed to develop criteria for identifying poverty groups and compares the empirical results by using alternative criteria, such as income, consumption and estimated permanent income. Similarly, a project focused on an evaluation of Latin American and Asian data on income distribution was primarily designed to improve the data base for systematic analysis of distributional problems. Other than these research undertakings, most ongoing work on the measurement of urban poverty takes place in the framework of country-economic reporting, and in connection with specific projects.

A major research effort is being developed focused on the trends and structure of wages and employment in developing countries. This research effort, which will be fairly aggregate in nature and emphasizes comparative country experience, has several components. First, the research would seek to establish a better and more comprehensive empirical assessment of aggregative trends in employment, unemployment, real wages and labor income in developing countries. A second component would be a comparative investigation of wage relationships between major economic sectors and their changes over time. While these first two objectives are primarily concerned with improving our empirical knowledge, the underlying objective is to improve upon available techniques for incorporating employment related concerns into the Bank's economic, sector, and project work. This would require research that leads to a better analytic and empirical understanding of wage determination and labor allocation processes in developing countries which can be applied in the formulation of proto-type models of the labor market; to this end, several detailed country studies are planned. Finally, a fourth component is the analysis of the variety of wage and employment policies, legislative regulations and labor market institutions which exist or have been proposed in developing countries as means of achieving employment and income distribution. As ongoing research is being completed, this program of work is expected to gradually absorb one-half of the staff of the Employment and Rural Development Division of DED. The collaboration of ILO and of counterparts in developing countries will be sought.

A considerable amount of research is focused on the functioning of labor markets, and to a large extent is responsive to identified research needs. A study of the labor market in Malaysia has just been completed; measured rates of unemployment in that country are the highest in Asia.

The study explored the nature and cause of unemployment, and analyzed other aspects of labor market behavior such as income differentials and participation rates. The final report is presently being prepared for publication. Another project has focused on the structure of urban labor markets in Latin America using Peru and Colombia as case studies. This project attempts to identify the structural and behavioral features that underlie wage differentials and employment changes. The procedure combines the analysis of aggregate employment and wage data with informal interviewing in particular labor markets. Field work has been completed and final reports are expected by the end of 1978. Proposals for further work on labor markets in Latin America will be embedded in the broad-based research program outlined above.

The articulated need for more research focused on industrial structure, usually taking the form of requests for research on small and medium scale enterprises, has led to the organization of a comparative study of the development of small-scale enterprise in selected countries--the Philippines, Colombia, India, Korea, Taiwan, Japan, and two African countries (still to be identified). The broad aim is to improve our understanding of the patterns of output, employment and earnings opportunities in small enterprises, and of how these are affected by a range of policies--credit, technical assistance, infrastructural and tax, pricing and interest rate policies. How output, employment and earnings are (or might) be affected by increased labor intensity in the "modern" industrial sector and by export promotion efforts are also issues to be considered.

Closely connected to this research project, but carried out as a separate undertaking, is research focused on capital market imperfections in developing countries, with specific emphasis on the discriminatory effect of current credit and interest policies in many developing countries on small scale enterprise development.

Several research projects in the industrial field are directly relevant to the urban employment problem. A substantial proportion of the Bank's industrial research effort is focused on technology issues. One study is concerned with the scope for capital-labor substitution in the mechanical engineering sector. The central question in this project is the design of employment intensive development strategies, viz. the degree of substitution that is technologically possible in the production of individually specified products. The project also examines the impact of government policies on technological choice.

Another project concerned with appropriate technology is a piece of survey research intended to determine what is now concretely known about the scope for increasing employment through the choice of appropriate techniques embodied in currently manufactured equipment, to identify the producers of such equipment and to evaluate policy options for stimulating the greater use of more appropriate equipment.

Research on industrial technology is beginning to have an operational pay-off. In response to a request to review the technology component of a proposed integrated textile factory to be located at Morogoro, Tanzania, DED staff entered into a useful dialogue with staff of the Industrial Projects Department. The major issues raised were the following. (1) Whether a search for different vendors of equipment could result in a reduction of the cost of equipment per job created. (2) Are the engineering specifications about probable performance likely to be useful guides to actual performance in the context of a country such as Tanzania. If not, how does operating inefficiency that does occur alter the evaluation of appropriate equipment. (3) Would it be possible to alter the organization of the textile sector so that a larger number of companies could undertake efficient production. These smaller companies might be able to affect economies in the non-hardware costs which loom so large in many projects in the poorest countries.

To address these problems systematically an economist and two textile engineers are currently examining the range of textile equipment currently available on the world market, including that produced by such countries as India and S. Korea, as well as its economic efficiency in a variety of country contexts; the sources of operating inefficiency and its magnitude in a number of the poorest LDCs; and, various options as to the organization of the textile sector and its implications for the cost of creating jobs as well as economic efficiency.

Also, in direct response to the Action Program, a study was begun of a specific city, i.e., Bogota, Colombia, with the objective of improving our understanding of how a city economy functions. The principal objective of the study is to develop tools that can be used to estimate the spatial and economic impacts of policy interventions in the planning, development and evaluation of projects. To this end, the study intends to test existing tools, designed primarily in developed countries, in cities of the developing world and, if necessary, to develop new ones. Five components of the urban economy are identified: housing, transportation, employment location, labor markets, and the public sector. Within each of the five categories, three major research tasks will be carried out. First, the study will provide a systematic description of the current state and recent changes in the city economy and its spatial patterns. A very large survey is being carried out with the Government's Statistical Office, DANE, that places heavy emphasis on employment. Second, it will provide estimates of behavioral parameters that will permit simple policy impact analysis. Finally, these parameter estimates will be incorporated into sectoral and cross-sectoral models that will be used to carry out hypothetical analyses of policy impacts. It is hoped that the project will provide transferable tools of analysis for urban project work in other LDC cities.

The project is scheduled to be completed by June 1979, and is proceeding according to schedule. It involves research staff at headquarters as well as a large counterpart research team in Colombia. Progress on the project is not only monitored by a Steering Committee in the Bank, but also by a high-level Colombian Advisory Group.

Finally, it may be appropriate to refer in this context to the monitoring and evaluation effort in which research staff is currently involved with respect to basic urbanization projects. Specifically in El Salvador, Senegal, and Zambia attempts are being made to measure the impact of various project components, such as credit provision, and self help programs, on urban population groups. Comparison of actual impact with original project objectives provides insights that can be expected to have an immediate pay-off in terms of project design and appraisal.

4. Evaluation

All statements relating to the urban research needs of the Bank stress the desirability of a research program that is "operationally relevant" or has the promise of an "early operational pay-off". At the same time, it is not always clear what the precise meaning of these terms is. In the case of urban research, it would appear that the Bank's current research program is reasonably responsive to the articulated requirements of the Urban Poverty Program, and in that sense can be qualified as operationally relevant. Unfortunately, many of the issues that have been identified as important concerns to the Bank as well as to the developing countries require a rather sustained research effort before a desirable level of understanding is reached. It may therefore be more appropriate to make a distinction between research which can be expected to yield useful results in the short-run as opposed to research that is likely to do so in the medium to long term only, and to evaluate the research program in terms of the proper mix between short term and long term research. However, it should be realized that such an evaluation focuses on the choice of issues to be researched rather than on the mode of research.

Against this background, it may be argued that the Bank's urban research needs are dominated by issues and problem areas that require rather longer term research efforts. This is reflected in the research program. Most of the major themes under investigation are programmed to involve 2-3 man-years over several years, as follows:

Labor markets, wages and employment	3	man-years
Small scale enterprises	3	" "
Credit mechanisms and policies	2	" "
Industrial technology	2	" "
City Study	3	" "

In addition, about one man-year per year of research staff is devoted to the monitoring and evaluation of urban projects.

For all practical purposes, the numbers represent a minimum critical mass of internal staff associated with the first five themes - invariably, considerable financial resources for outside support by individuals and institutions is needed. For example, the City Study of Bogota involves more than 20 part-time and full-time consultants, half of them Colombians, and two local institutions. In the case of the monitoring and evaluation effort, it would appear that a good case can be made for an expansion of the research effort,

Although several research themes have been part of the research program for some time, most of the research projects discussed here were undertaken in response to recent changes in the lending program of the Bank. As most of the research projects will take two to three years for completion, the implication is that in the short run, given resource constraints, the flexibility of the program is very limited. Unless particular themes are considered to be of relatively low priority, it would not appear possible to change the coverage of the research program in the near future. It is only as ongoing research is completed that new areas of work can be accommodated.

This is unfortunate, as it should be noted that several areas of research do not now receive adequate attention, or, in some cases, any at all. To the extent possible, outside consultants are used to produce papers on specific subjects. For example, two papers were produced on the direct and indirect employment effects of industrial investments, by a consultant. Similarly, research on the role of informal credit markets is conducted in this manner. However, there are a number of important areas where this mode of research is unlikely to be effective--for example, where the need is felt to take greater advantage of the possibilities for research that is directly related to the Bank's project work.

The suggestion that the research program of the Bank should have a major component that takes advantage of the possibilities for research offered by the Bank's project experience has only had limited response. One example is the work on textile technology mentioned earlier. Also, in connection with a companion paper to the present one--on the use of the capital/labor ratio in project identification and classification--temporary staff is being employed to investigate this concept's usefulness on the basis of a sample of recent Bank projects. The research project on small-scale enterprises, particularly the component dealing with the Philippines, is directly concerned with Bank projects. Finally, the monitoring and evaluation effort of sites and services projects has a research content that should lead to improved project formulation.

Although, therefore, a certain amount of project-related research is carried out in the Bank (and the above statement is not exhaustive), it would appear that the total effort is modest, and rather ad hoc. A more systematic examination of the scope for project-related research is clearly desirable. A possible approach to designing such a research program might be the organization, on an experimental basis, of a small task force composed of staff from DPS as well as CPS, to look into the scope for project-related

research. Initially, such a task force might deal with one specific sector such as urban projects; if successful, however, a similar effort may be warranted for other sectors as well.

Finally, and probably most importantly, the research staff in the Bank has not so far taken up the suggestion to formulate a systematic research program that is explicitly designed to provide the analytic framework that permits the testing of alternative sets of policy options, at an economy-wide as well as at the sectoral level, to enhance productive employment creation. There may, however, be good reason for this lack of responsiveness. Given our current state of knowledge, there is a strict limit to what can be said on this subject at the macro-level, and whatever can be said usefully is being repeated many times over. What is lacking is a detailed appreciation of the issues bearing on this subject at the micro-level. This applies to research on small-scale enterprises, industrial technology, labor markets, as well as to the urban research program. While this research orientation may make sense, it leads to problems on the demand side as the case studies do not often produce directly usable results, for two reasons. First, the research may in the first instance not be directly concerned with policy. Second, the generalizability of the case study results may yet have to be demonstrated. As the current research program is progressing, it will be necessary to monitor carefully to what extent the research results can eventually be expected to be generalizable, and to lead to insights that will permit improvements in policy formulation.

5. Next Steps

Given resource constraints, there is little that can be done in the short run to fill the gaps that have been identified. Research staff associated with urban poverty related research has generally been responsive to the longer term research needs identified in a variety of relevant reports. Although these research efforts will yield operationally useful insights as the work progresses, in all cases completion of the projects is at least 1-2 years away.

Unless research resources are diverted from other areas of concern^{1/}, it is primarily the research on issues with a likely short term operational pay-off that receives inadequate attention. It is suggested that a task force

^{1/} With several external research reviews underway, relative priorities in the research program being a major concern, the timing for such a recommendation would not be particularly fortunate.

be organized of CPS/DPS staff to identify researchable issues, to begin with in the urban area, but with the possibility of an extension to other areas in the future.

Thought may also be given to the establishment of a Bank-wide Steering Group for urban poverty related research, along the lines of the Trade and Industry Steering Group. The present report may give the impression that there is a "program" of research on urban poverty in the Bank. This, however, is not the case. What has been described here is a number of individual research undertakings, each involving several researchers; few of these have a good overview of the entire effort. The most important task of the Steering Group would be to monitor progress, establish priorities, and ensure coordination among individual research undertakings.

Mr. Robert S. McNamara

January 16, 1979

Hollis B. Chenery, VPD

Work on Trade Issues

1. This is in response to your request for information on work which is underway on trade issues.

2. The Economic Analysis and Projections Department is developing a computerized system for monitoring trends in protectionism on a continuing basis. This system will also include the results of the Tokyo Round of MTN trade negotiations. Information available from the system will be disseminated through periodic reports, the first of which is scheduled for this spring.

3. The Department has updated its examination of the benefits (in terms of expanded exports) to the developing countries of liberalization of primary commodity imports by the developed countries for WDR II. This paper covers tariff as well as non-tariff barriers.

4. We have also started monitoring the effects of trade barriers in processed primary products. A background paper for WDR II has been prepared, and a select group of products will be studied jointly with the Commonwealth Secretariat in 1979.

5. We have initiated a project (with Research Committee funding) to study the penetration of developed country markets by imports of manufactures from developing countries. The objectives are to determine the extent of market penetration of developed country markets by imports of manufactures from developing countries and to analyze the factors that lead to protectionist actions. The United States, EEC and Sweden, Japan and Canada will be covered. The market penetration data will become available in November 1979. The information will be incorporated in the Bank's data systems so that it can be updated on a regular basis.

6. A number of policy papers on international trade issues have been prepared as background papers for WDR II. These include the analysis of issues related to trade among developing countries as well as work on north-south trade.

Mr. R. S. McNamara

- 2 -

January 16, 1979

7. The Development Economics Department and the Development Research Center have several research projects under way which will, together with the more routine work, give us more insight into some of the institutional and policy factors affecting the growth of the developing countries' manufactured exports.

Attachment (incoming)

Cleared with and cc: Messrs. Duloy, DRC
Keesing, WDR
B. King, DED

cc: Mr. Karaosmanoglu, VPD
Mrs. Hughes, EPD

FColaco/HHughes/SSingh/nfj

Mr. Keating to
Mr. Benjamin B. King

cc: B. King

1/5 to Dr. Keating

August 21, 1978

HP's this work appears to me to be essential.

Is it
relevant
show

2. Let me cite examples of work that may be needed.

--In regard to protection, where our WDR I discussions have been well received and have raised expectations for more in the future, we would fill a big gap if we would analyze carefully the impact of major protective measures--such as EEC and/or U.S. textile quotas, the new orderly marketing agreements in footwear, restrictions and minimum price schemes in steel--on the growth prospects of individual developing countries or groups of countries. Here, of course, my textile and clothing paper (when it finally gets finished) helps to give us a start, as do our WDR background papers and EPD's efforts to get together data on protection, but much more may be needed.

--There is a need to analyze, more than we have yet done, what policies the developing countries would be wise to follow in the face of mounting protectionism in developed countries.

--Related to this, more work is needed on trade in manufactures among developing countries: the nuts-and-bolts details and trends, the potential benefits, possible measures to promote this trade, and surrounding policy issues, some of which involve basic questions as to the extent to which developing countries should design their own technologies and consumption styles. There seems to be much interest in our doing a technically-sound analysis here. Even if we are not very optimistic about the possibilities, we are likely to be asked to spell out our reasoning and evidence.

--We must not neglect our bread-and-butter questions regarding trade and industrial policies that developing countries should follow. Here we are likely to find that with the added stimulus of WDR work we will have new things to say, leading to publishable papers. For example, there may be new things to be said regarding policies in countries with special characteristics--least developed, very small, very large, mineral-rich, etc. Certainly we need more work, including studies of Bank experience, on industrialization and trade outside the main semi-industrial countries in which past research has been concentrated. As a result of WDR work, and/or the Robinson-Dervis work on Turkey, we might also find new things to say regarding such matters as distributive and poverty-alleviating affects of alternative trade policies, and lessons of experience in regard to transitions to more desirable trade policies. Hopefully our new research projects will derive lessons on how to promote marketing of manufactures. Insight in this general area has been one of our aims all along, but WDR work gives us new perspectives and new readerships.

--A subject of enormous international interest, where our past work and WDR I presage much more in future, is the future progress to be expected from developing countries in their manufactured exports. Here, for example, there is much concern over how rapidly the leading developing countries (and others after them) will be able to diversify into capital

McN Noted

DRAFT
HBChenery:nf
January 11, 1979

*(Committee)
only only*

To: Mr. Robert S. McNamara
From: Hollis B. Chenery
Subject: Publication of the Romania Report

Attached is Peter Wright's assessment of the Basic Report on Romania. Given the unique circumstances that surround Bank economic work on Romania, I think that his recommendation of publication in red cover as a working document is the best that can be done. The alternative of regular publication would probably require extensive editing to meet the criticisms that have been raised and another lengthy clearance by the Romanian Government. If Mr. Benjenk prefers to pursue this route, however, I think that the Publications Committee should not stand in his way.

Despite the imperfections, this ^{report} request is clearly valuable to outside readers. Its release without further editing would meet the needs of this audience better than a delayed publication in hard cover.

To reduce future debates of this kind, I will recommend to the Publications Committee that it clarify the standards required for publication of country reports in either form.

(Cleared by Benjenk)

Mr. E. Stern, OVP

January 8, 1979

Hollis B. Chenery, VPD

Report on Country Economic and Sector Work

Since McNamara has returned this paper without comment, I suggest that you proceed to schedule it for discussion with the Regional Vice Presidents.

cc: Mr. Baum

HBChenery:di

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

DATE: January 4, 1979

FROM: Warren Baum and Hollis Chenery

SUBJECT: Report on Country Economic and Sector Work

1. We have made a special effort this year to assess the utility and cost-effectiveness of the Bank's country economic and sector work. It is clear from the attached report that this work is making a major contribution to the development process, both through its impact on Bank operations and through the analysis and policy advice provided to member governments. While the quality of the work obviously varies, depending primarily on the quality of the staff engaged in it and the attention given to improving their skills, we can find no evidence of any large amount of slack in the system or of resources being wasted on low-priority tasks.

2. On the contrary, economists in the Regions are generally working under considerable pressure, intensified by Bank-wide monitoring and programming exercises, and they do not have enough time for many of the things they should be doing -- keeping abreast of the literature, participating in seminars, informing themselves of changes in the "state-of-the-art" in specialized fields, applying the results of research and communicating with academics and research institutions in their countries. This kind of activity does not have readily identifiable output and is not easily programmable. It tends therefore to be squeezed out, with results that could prove damaging in the long run to the quality of the Bank's work.

3. We are impressed with the progress which the Regions have made in shifting the emphasis away from routine and superficial work towards more focussed in-depth study of long-term development issues. Nevertheless, there may still be some scope for reducing the time spent on updating work and being more selective in the coverage of basic reports. With this end in view, the guidelines on reporting (OMS 1.11 and 1.13) should be clarified and made more flexible, so that work can be tailored to the varying circumstances of individual countries. The number of reports produced is not a significant measure of the utility of the work done. The main test is the contributions the work makes to the effectiveness of the lending program and to policy improvements in the developing countries, but these cannot be quantified in a meaningful way.

4. Over the past three years, while the demands for country economic and sector work have been steadily increasing with the growth of Bank lending, the expansion of membership and the heightened concern with complex issues of poverty, income distribution and employment, the number of staff engaged in carrying out the work has hardly increased at all. In consequence, large areas of important work have not yet received the attention they should -- urbanization in India, income distribution and employment in Mexico and small-scale enterprise in Africa are just a few examples among many. More

generally, work on poverty issues has barely scratched the surface of the problem in most countries. At the same time there is a tendency in the Regions for the study of sectoral policy issues to be subordinated to lending work. At present, practically no one has sector work as his first priority.

5. If additional resources can be allocated to country economic and sector work, as we believe they should be, we would give first priority to strengthening the Regions' capabilities to carry out in-depth work on poverty-related questions and key sectoral policy problems. There would be merit in assigning additional Regional staff to positions under the direct supervision of the Chief Economists or Regional Projects Directors in order to shield them from operational pressures, and to permit greater flexibility in their work assignments within the Region. There is also a strong case for expanding staff in specialty areas such as population, employment, industrial development and fiscal analysis -- all fields where there has been demand for much greater mission support than CPS and DPS have been able to provide.

6. Experience has demonstrated the value of careful advance preparation for major economic and sector missions. Circulation of an issues paper for Bank-wide review well ahead of a mission's departure should be made standard practice. It is at this stage, and not after the mission's return, that CPS and DPS are usually in the best position to make constructive contributions.

7. The links between country work and Bank research need to be strengthened. We intend to encourage more active Regional participation in the planning and implementation of research projects of special interest to their countries, and to give greater attention to the dissemination of research results, both within the Bank and at the country level. However, specific proposals should await the outcome of the on-going panel reviews.

8. It is evident that in most developing countries the Bank's economic work now reaches a very restricted audience. Readership of country reports is commonly limited to a small group of officials, little is done to cultivate contacts with the academic community, and there is widespread ignorance of what the Bank is saying on important development issues. If the Bank's economic work, including the World Development Report and related studies, is to be effectively disseminated at the country level, additional staff time will be required for extending the range of mission contacts, holding seminars to discuss particular aspects of the work and securing wider distribution of Bank reports.

Conclusions

9. This review has identified various things that can be done without any increase in staff to improve the effectiveness of the Bank's country economic work. However, our main conclusion is that more staff will be needed if the range of the work is to be adequately extended, and its dissemination improved, without a decline in professional standards. Furthermore, we consider it important that additional economists be assigned to positions, whether in the Regions or in the functional divisions of CPS and DPS, where they can concentrate on serious analytical work. We accordingly recommend that you address these needs in preparation of the administrative budget for FY80.

EPW:cbk

cc: Messrs. Cargill and Stern
Regional Vice Presidents
Messrs. Chadenet and Gabriel