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THE WORLD BANK

Washington, D.C.

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**PUBLIC DISCLOSURE AUTHORIZED**

Wm. Clark

① Misc. Notes



The World Bank Group  
**Archives**



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William Clark Papers - Miscellaneous Notes - Memorandums

**DECLASSIFIED**  
WBG Archives

79.

DIARY.

1-115

Principarell.

Oct 18.

but I'll post in UK.

Dear Susan,

a page for one of my regular note books, but you don't need to type it up - that's something.

First business: could you send this order to Kimballs. I have put your address on the order, but you might find it easier to send to me c/o Mrs Alsop, as I hope to be in Washington just before Thanksgiving (I'll write about that on telex when I know the exact dates)

2. Could you put together for me when I arrive any longish memos on the Brandt Commission that were not included in my file of McNamara memos (which any way ended in 79, & I think I wrote some notes for the record after that e.g. about the lunch in the Bank with Lilly etc. when the report was being published. Also did I have copies of the speech Brandt made at Garmisch Castle in Dec '77, and did I speak then? Finally is there a copy of the memo I ~~sent~~ made on my meeting

with Brandt and Egon Bahr early in  
1977 when I thought Brandt finally  
agreed to go ahead.

As you can see I have been  
working on my memoirs, and in  
the past three weeks here in Biniparell  
I have outlined the 12 years at the  
Bank. Privately I may go ahead  
with a slim volume shortly after he  
leaves.

Which reminds me could you  
collect a set of the Development

Edna  
1/6/78

Committee annual reports which are  
not confidential I think. Or also a  
complete set of RSM's speeches, at least  
Nairobi & after (earlier are in the books).

After six months out of harness I  
am though enjoying life and  
beginning to get disciplined  
again so that I can work quite  
effectively (at first it seemed like  
a long lost weekend). But I do  
miss your calm presence and all  
the order you brought into my life

LV. 

to all.

2. IFC. This is of course an institutional division and there are many arguments both for and against keeping it as a part of the Information Department. I have slowly come to the conclusion that it might be best that this Division be transferred entirely to IFC. Although on many occasions there are obvious advantages to look upon the information and public image of the entire Bank Group as a whole and use some common services, one must recognize that IFC's approach, at least at present and probably by necessity, is somewhat different from that of the Bank/IDA; it tends to be more institutional and self-seeking. If it will not be found possible to integrate the unit more organically in the Department and liberate it from many of the duties that it now shoulders or assumes, I therefore now agree with O'Brien that our ways should part.

3. Publications. The Department has the responsibility for maintaining "relations with Johns Hopkins Press and other publishers regarding the production and distribution of books published for the World Bank Group, and supervise their production" and also for advising "the Publications Committee on the distribution of books published for the Bank by the Johns Hopkins Press and other publications of concern to the Committee".

This function has been with the Department for more than a decade, but no specific staffing arrangements have been made except for the distribution side, which is handled by Mrs. Eliason's unit. Experience has proven that the work involved is time-consuming and demands special competence. Mr. Graves and I have taken on much of this function ourselves, which might not be the best use of resources. It has also become evident to me for some time that more undivided attention must be given to this part of the work and that better coordination between the various departments involved is needed. In the summer of 1966 I made a proposal aiming at the establishment of an integrated publications service (attached). It is my understanding that John Williams' department is now looking into the matter. Action is needed in the near future.

I have no firm conviction as to the correct placement of such a service organization-wise, but my inclination would be for it to be part of the Information Department.

In this connection, you may recall that you were asked at the meeting of the Publications Committee on March 19 to prepare a paper on "the role of publications in the Bank's public relations policy". The problem goes of course much further than the Bank's "public relations policy"; it concerns basically the Bank's function (or lack of function) as a disseminator of knowledge.

4. Staff strength. The Department at present has 21 professional members (including Paris office) and one consultant. There is no vacancy. The following strengthenings would be worth considering:

- a) German specialist in Paris office. Dr. Sep Strobl has been approached.
- b) In order to strengthen area liaison: one specialist on the Arabic world and one assistant to Mr. Bravo for Latin America.
- c) Radio specialist, mainly for the developing countries.
- d) Publications staff depending on results of survey under 3 above.
- e) Special speech writer for the President.
- f) Corresponding non-professional staff.

5. An overhaul of the distribution system and existing mailing lists, which has been initiated, should be carried forward, most likely with the help of an outside consultant. I shall come back to this on Mrs. Eliason's return from leave. The overhaul should take into account the broadening of our audience to include the political world.

6. Untapped resources. The Bank Group is not really an important source of news for the information media. Our announcements are mainly limited to new loans, issues and personnel changes and we appear quite regularly on the financial pages of the leading newspapers, which of course is useful, although unnecessarily restrictive.

Very little has been done to exploit the mine of material available in some form in the Bank Group on:

a) The economies of our client countries, both in statistical form (for instance, in World Tables) and in assessment form in our economic reports. Quite apart from the wastefulness of devoting so much of the Bank's staff time and talent to thorough economic studies and reports without making them available to others, it would enhance the Bank's prestige if some way could be found to adopt a more liberal policy in using this documentation, which I think is unique in many ways.

b) Award of contracts. Release of information on contract awards would interest the trade press and draw attention of the industrial community to the benefits they reap from the Bank Group's operations. I doubt that even the big companies (such as Westinghouse) which have received considerable amounts of orders under Bank loans realize the extent to which the Bank Group has helped boost their exports.

c) Follow-up on projects. We normally "drop" a project the moment we have announced a loan; seeing the amount of work and care going into the appraisals, the calculation of economic and financial benefits, etc. one would think that simple curiosity would lead to second looks at some intervals after the project is completed. Under this heading, we should also consider effects stories of the type written by Information staff and published in Finance and Development. We should have at least one such story in each issue of our quarterly. We should also try to deploy some of our staff in the field for some periods - not only to "sell" the Bank Group in a given area but also to obtain good reportage.

7. Enlarging the audience. In the past we have had occasional briefing sessions at headquarters for invited North American financial writers, which have proved useful. I suggest that we continue this practice, but try to pick our men more among those who are influential on the editorial pages. If we arranged one such briefing this spring or early summer, we could count on high-level acceptances because of Mr. McNamara if nothing else. A similar information conference should be arranged for European journalists of the same type: my preference would be for such a briefing to be held in Europe with the participation of Mr. McNamara and others of the most senior level. These briefings should be business-like and frank; the UN round-table type should be avoided. We should also give thought to information conferences for leading information media personalities and public affairs leaders from the three developing continents. In our business, I think the spoken word will always be more effective than the written one.

8. Speaking program. I only wish to register my feeling that we should devote less time to speaking to every group asking for an appearance. The speaking program should be more planned and senior economists and generalists of the Bank Group staff should be drawn into the program - not only for ad hoc performances, but for extended tours. Recent experiences with John Adler and Bob de Vries are steps in the right direction. Here again, developing countries should not be forgotten.

9. Newsletter or backgrounders. I have given further thought to the idea of a newsletter and consulted some colleagues, in particular Dinesh Bahl, who will write you a note on the subject. The advantage of a newsletter - or information bulletin rather as we do not really deal in news on a two-months basis and slow mail - lies in regularity and the imposition of a certain production discipline. The disadvantage is that it has to be produced whether we have something to say or not and at a time governed by the periodicity of the letter rather than by topicality. Ad hoc backgrounders to our friends among information media and individuals interested in our affairs might be more productive.



For instance, a background note could be issued in connection with consultative group meetings, certain landmarks in the construction of a project, etc. For this approach to be successful, it will be necessary for our area and sector specialists to look out for pegs and events and originate material at not too distant intervals.

10. On news announcements, I think that the slightly changed style has found acceptance. Unless there is an emergency, let's also agree: "Never on a Friday".

Mr. Graves

June 2, 1966

Lars J. Lind

Documents and Publications

1. The volume of documents and to some extent also publications produced by the Bank Group has increased considerably in the short time I have been with the Bank. With a strong Economics Department, rising demand from member governments for language versions, new cooperative arrangements with other international organizations, and an increasing number of consultative groups, the paper flow can be assumed to rise even further.
2. There does not exist, as far as I can figure out, any specific organizational arrangements for the planning and execution of the entire documents and publications operation. Documents and publications originate in all departments. The bulk is sent directly to the internal print shop for reproduction; others are sent for design and printing to Mr. Slade's unit; many are handed over to the Information Department for printing by The Johns Hopkins or otherwise. Translations are requested from Mr. Rasmussen, often without warning and with very tight deadlines.
3. An example: the Bank is preparing a study for UNCTAD; the Economics Staff works against a deadline and completes a manuscript. There their responsibility ends, but the assigned task is only at an early stage. The manuscript needs some editing, some further work on graphs and tables. It has to be translated into French and Spanish. It has to be reproduced and submitted to UNCTAD in time to be circulated to member governments well ahead of a certain meeting. It has to be prepared for printing, typeset, proofed, paged, printed and distributed. This part of the operation is at present usually picked up as a rescue operation by the Information Department in cooperation with Mr. Slade.
4. It is my observation that there are many serious weaknesses in methods and staff capacity in the entire operation at present and I recommend that a study be made of present practices, the need for changes and strengthening of staff.
5. I think I am right in saying that organizations with a documents and publications program the size of that of the Bank Group normally has found it necessary to establish a central Documents and Publications Service. Such a Service would absorb the following functions:

June 2, 1966

1. Over-all planning
2. Scheduling (priorities, deadlines, seeing a document through from manuscript to finished product)
3. Translation
4. Copy-editing and preparation for the printer
5. Art work and typography
6. Arrangement for reproduction (inside and outside)
7. Inside reproduction
8. Proofreading and make-up
9. Distribution

Some of these functions are not performed at all at present, in particular 1. and 2.; others are performed on an ad hoc basis, notably 4. and 8.; and the staffing for functions 3. 5. and 7. seems to be inadequate.

LJL/jsw

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# Travel

William Clark

Travel 1968-1980

## 1968

June 11-16 Indonesia  
July 6-9 Turkey  
July 14 Egypt  
October 23-26 Brazil  
October Argentina  
November 12-14 Afghanistan  
November 14-17 Pakistan  
December 5-8 Mexico

## 1969

February 8-10 Senegal  
February 10-13 Ivory Coast  
February 16 Zaire  
May 20-22 Japan  
November 6-11 Iran  
November 12-16 Morocco  
December 2-5 Venezuela  
December 5 Guatemala  
December 5-8 Mexico

## 1970

January 7-11 Tanzania  
January 11-15 Uganda  
January 15-18 Kenya  
May 13-16 Korea  
May 16-19 Taiwan  
June 3-6 Colombia  
September/October Denmark  
October 18-21 Ethiopia

## 1971

January 13-15 Chad  
January 15-17 Cameroon  
January 17-19 Gabon  
January 19-21 Mauritania  
May 15-20 Nigeria  
May 20-21 Ghana  
November 8-12 Thailand  
November 12-15 Philippines  
November 15-16 Singapore  
November 16-18 Malaysia  
November 2-8 ~~Japan~~

## 1972

January Bangladesh  
January 21 Ceylon  
January Nepal  
January 29-30 Pakistan  
March 2-4 Peoples Republic  
of Congo  
March 4 Central African Rep.  
March 8 Mali  
March 5-6 Niger  
March 6-7 Upper Volta  
November 10-12 Sudan  
November 13-15 Somalia  
November 15-18 Zambia  
November 19-23 ~~Kenya~~

## 1973

January 10-12 Togo  
January 12-14 Dahomey  
January 14-15 Sierra Leone  
January 16-19 Liberia  
February 6-7 ? Lebanon  
July 3-5 Jamaica  
May 13-16 Tunisia  
? 1973 Egypt  
September Kenya  
October 1- Madagascar  
October 2 Mauritius  
July 5-7 Trinidad & Tobago

## 1974

February ~~Kenya~~  
February Fiji  
February 2-16 Australia  
February 16-19 ~~Indonesia~~  
February Papua New Guinea  
February New Zealand  
November 6-10 Turkey  
November 11-13 Syria  
November 14-17 Jordan

William Clark

Travel 1968-1979

1975

January 19-23	Romania
March 11-13	Spain
May 7-8	Bahamas
May	<del>Jamaica</del>
September 14-22	Yugoslavia
November 2-5	<del>Colombia</del>
November 5-8	Costa Rica

1976

March 2-7	Peru
March 7-9	Bolivia
March 10-11	Paraguay
November 2-3	Burma
November 3-6	<del>Bangladesh</del>
November 6-11	India
November 11-14	Pakistan
September/October	Philippines

1977

November 2-6	Nigeria
November 6-8	Ivory Coast
November 8-12	Guinea
November 12-13	The Gambia
November 14-16	Mali
November 13-15	<del>Senegal</del>

1978

January 18-	<del>Egypt</del>
April 9-15	<del>Turkey</del>
May 15	Singapore
May 15-30	Philippines
June 1	Hong Kong
June 6-9	Japan
June 9-13	Malaysia
October 1-12	India
October 12-13	Ceylon
October 15-18	Sierra Leone
October	Nigeria

1979

January 16-21	Mexico
May	Philippines
May 10-15	Indonesia
May 15-16	Singapore
May 16-20	Thailand
July 16-19	Yugoslavia
July 19-20	Romania
Sept. 28-Oct. 5	Yugoslavia
Nov. 6-13	Brazil
Nov. 13-16	Ecuador

1980

January 16-20	Kenya
January 20-22	Tanzania
January 22-23	Botswana
January 23-24	Swaziland
January 24-25	Lesotho

*Amij to Bank*

12th May 1985

MEMO: To Julian Grenfell  
c.c. Robert McNamara

The rough plan for the last part of the memoirs

1958

1. **India** - I learnt something about the strategy of Dev. It is for the mass of people, aimed at feeding selves - self-sufficiency, generally raise the standard of living and to abolish abject poverty. The task is for governments, and is their highest priority, higher than defence, because it is the only way of defending the whole community from a break up.

2. There will be obligations on the donors: historical (India - UK and indeed Amer.-UK); trade (if we are going to change our Imperial Preference System, for instance, we must protect the shorn lamb from the wind of international competitive trade, but LDC's must not be permanently sheltered, and India certainly does not need that).

Above all, the obligation of the rich to help is a moral obligation and that should be stated.

3. But how do governments indigenous or external, advance development? I had seen in India how little of India had understood the macro-economics of world trade, or the micro-economics of domestic pricing. I had seen in Britain the total lack of understanding about how to turn itself into an economic development partner from a colonial political master. (e.g. the intention of HMG to remove all CDC's working in Ghana at the moment of independence.)

So it seemed to me vital to achieve three objectives on my return to UK.

1. To get the British public to recognise their continuing responsibility to the ex-Empire; using the old colonial civil servant's loyalty to areas they and their family were very attached to. Eventually to spread this to a world-wide North-South obligation which recognised the One World aspect.

I was thinking of such people as Lord Hemingford, my brother-in-law, who had taught between 1926-52 at Budo College, Uganda (including as pupil the Head of State the Kabaka); and Achimote College, Gold Coast/Ghana. the first head of State of Ghana Kwame Nkrumah was a pupil of Dennis, and kept up correspondence with Dennis throughout his shaky rule and till his death in exile.

2. To learn by research in the colonies and in the metropolitan universities about tropical agriculture in order to pass it on to the new governments of Third World for their own use and not just for advancing cash crops as exports.

To examine on the ground what the British aid programme was independently of government, but with their goodwill. To see what changes were necessary to suit the new situation. This should use US experience which was often in advance of other countries, e.g. Rockefeller Foundation corn in Mexico, Ford F. on rice in Philippines and FF generally on development in India.

Imperative necessity to learn the skills of modern development.

3. To build a sense of the urgency - based largely on population explosion and dangers of famine and drought. This needs to reach politicians, senior bureaucrats, charities (e.g. Oxfam, Save the Children) and the development expertise of the UN, including IBRD/IMF. (ODI in common with A.D.K. Owen held some very high level meetings in London which introduced FAO, UNESCO, ILO, UNDP to the general public.

Looking at the international scene I saw that the first half of the "Development Decade" had been pretty unsuccessful. So tried to bring together my most influential development planners.

We held the meeting in Sir Edward Boyle's commodious country house with, amongst others, George Woods, PIBRD; Rene Meheu DG of UNESCO; Barbara Ward; Axel von de Bussche, headmaster of Salem School and the nearly successful assassin of Hitler in 1944.

We agreed to ask Oliver Franks, the founding chairman of the Marshall Plan's OEEC to examine why the Development Decade was running out of steam, as the Marshall Plan had never done.

I went to Washington to persuade George Woods to finance, support and launch from the World Bank this big proposal. He asked Barbara Ward to write him a speech for the bankers in Stockholm. He thus effectively called it the Grand Assize.

We failed to persuade Oliver F. and so fell back on the admirable choice of Mike Pearson.

This is how I came to the World Bank. There follows an account of that, and why I had some part in rebuilding the Bank. What I brought to the Bank was...



Cer!

united nations educational, scientific and cultural organization  
 organisation des nations unies pour l'éducation, la science et la culture

place de Fontenoy, Paris-7<sup>e</sup>

The Director-General

reference : ODG/DG/2939

9 December 1968

**DECLASSIFIED**

Personal

**Date:** 11/20/2010

My dear Clark,

I am at present giving much thought to various matters relating to my second term of office and especially to the composition of my team in the Directorate.

As I told you when we last met, Tor Gjesdal retires on 31 December 1969 and it is my earnest hope that you should succeed him in the post of Assistant Director-General for Communication, where I need a dynamic man like yourself, gifted with a lively imagination who, like you, enjoys my full confidence.

As you know, the Communication Sector comprises:

- The Department of Mass Communication (D-2)
- The Department of Documentation, Libraries and Archives (D-2)
- The Office of Free Flow of Information and International Exchanges (D-1)
- The Office of Public Information (D-1)
- The Office of Statistics (D-1).

In 1969, it will have 129 staff members in the professional category and above without counting field experts.

The remuneration attached to the grade of Assistant Director-General as of January 1969 is as follows:

Annual base salary net	\$ 22,722
Post adjustment	3,648
Representation allowance	2,100
Transportation allowance	1,000

29,470

Mr. William D. Clark  
 Director  
 Information and Public Affairs Department  
 International Bank for Reconstruction  
 and Development  
 1818 H Street, N.W.  
 Washington, D.C.

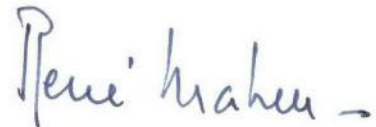
I should be grateful if you would let me know whether I may count on you in January 1970. As you are aware, I must consult the Executive Board; it is my intention to do so during its October session, but I want to prepare the ground.

If the idea interests you, I believe that in the first instance it would be preferable for you to mention it to Mr. MacNamara. I shall write to him in due course when you tell me that it is appropriate.

In renewing the hope that I shall have the benefit of your collaboration, I am,

With warm personal regards and best wishes,

Yours sincerely,

A handwritten signature in blue ink that reads "René Maheu" with a horizontal line extending to the right.

René Maheu



INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

# ROUTING SLIP

Date Feb. 9, 1968

To -	Name	Room No.
1	Mr. Lars Lind	453
2	<i>Mr. W. Clark</i>	
3		
4		

## FOR -

<input type="checkbox"/>	Action	<input type="checkbox"/>	Initialing
<input type="checkbox"/>	Approval	<input type="checkbox"/>	Preparing Reply
<input type="checkbox"/>	Comment	<input type="checkbox"/>	Previous Papers
<input type="checkbox"/>	Filing	<input type="checkbox"/>	Noting and Returning
<input type="checkbox"/>	Full Report	<input type="checkbox"/>	Recommendation
<input type="checkbox"/>	Information	<input type="checkbox"/>	Signature

REMARKS

WASHINGTON POUCH

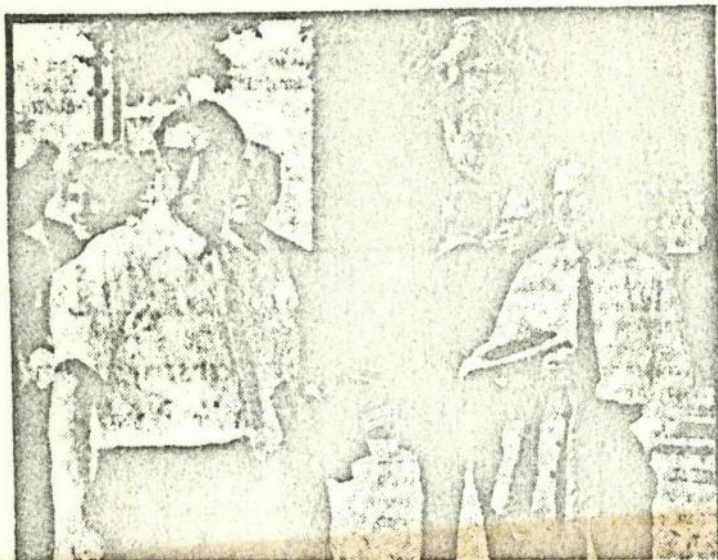
*Very nice!*

FROM -

Viggo A. Christensen

Portræt af  
en topmand

## VIRKELYST I VERDENSBANKEN



Verdensbanken i skjortestørmer...

Til venstre Verdensbankens nye Informationschef, englænderen William Clark, og til højre bankens presserepræsentant i Paris, danskeren Viggo A. Christensen. De deltog begge i en FN-konference i Warszawa sidste efterår.

En hengiven beundrer af Danmark og dansk presse, en hjælpsom ven af størsteparten af de danske bladfolk, der har tjent deres aviser som korrespondenter i London i efterkrigsårene. William Clark, har fået en topstilling i Washington. Han overtager fra april posten som chef for Verdensbankens informationsafdeling.

I de sidste 6-7 år har William Clark, der er en af Storbritanniens mest kendte og erfarne journalister, fungeret som direktør for det privat finansierede Overseas Development Institute, der støtter og informerer offentligheden om hjælpen til udviklingslandene.

William Clark vil sikkert i alt væsentligt betragte sin nye opgave som værende af samme slags som hans nuværende: at vække offentlighedens interesse for alle spørgsmål, som er forbundet med hjælp og udvikling. Men verdensbanken er den mest centrale og mest respekterede institution for hele hjælpearbejdet, og som talsmand for banken vil William Clark kæmpe videre for udviklingslandene med varme og virkelyst.

En særlig nær kontakt med de udenlandske korrespondenter i London havde William Clark i den periode, da Anthony Eden var britisk premierminister. Han var chef for Edens presseafdeling. På regelmæssige pressekonferencer gav han også de danske korrespondenter en glimrende og dybtgående orientering om løbende inden- og udenriiske begivenheder, og moderne fandt altid sted

forberedte Suez-eventyr, trådte William Clark tilbage fra sin post i Downing Street nr. 10. Han berejste først Afrika for BBC og blev derpå The Observers korrespondent i New Delhi. Jeg mødte ham igen for ikke så længe siden ved en »Editor's Round Table«-konference arrangeret af Forenede Nationer i Warszawa, og det var rart at konstatere, at den 50-årige britiske ungkarl stadig havde sin vitalitet i behold. Han tordnede løs for en gruppe FN-embedsmænd om betydningen af global strategi, og han slog i bordet og råbte, at personlige kontakter værdsættes høiere af journalister end dynger af papir og presmeddelelser.

Kort forinden havde han i London udgivet en politisk roman »Number Ten« om tilværelsen inden for murene af den berømte britiske premierministerbolig. Han fortalte mig, at romanen var blevet dramatiseret. Den var, sagde han, blevet en »moderat succes« i London og provinsen.

I Washington vil William Clark arbejde videre for at vinde den akademiske verden, industrien, forretningslivet og offentligheden i almindelighed for en eget interesse for hjælpen til udviklingslandene. Han tiltræder formelt sin post i Verdensbanken, samtidig med at USAs forhenværende forsvarsminister McNamara overtager præsidentposten. Clark og McNamara har allerede haft »en lang eftermiddag« sammen, og de har begge erklæret at de imødeser deres fremtidige samarbejde med store forventninger.

Med Clark som informationschef vil Verdensbankens papirdynger svinde ind, og en ny og kraftig stemme vil prøve at råbe os op tværs over Atlanterhavet.

G. H.

mark og dansk presse, en hjælpsom ven af størsteparten af de danske bladfolk, der har tjent deres aviser som korrespondenter i London i efterkrigsårene. William Clark, har fået en topstilling i Washington. Han overtager fra april posten som chef for Verdensbankens informationsafdeling.

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Den skønne gamle Nash-bygning, hvorfra der var enestående udsigt over parkerne omkring Buckingham Palace og den historiske ceremonielle boulevard, The Mall, havde den nuværende danske presse- og kultur-attaché ved vor ambassade i London, Harry Agerbak, overtalt Eden til at stille til rådighed for Foreign Press Association. Harry Agerbak var den gang, korrespondent til Socialdemokraten og præsident for den udenlandske presseforening. Mange udenlandske korrespondenter opslog deres hovedkvarter i bygningen, og den rummede i en lang periode også *Sydlænds-Postens* London-redaktion.

Da Anthony Eden ikke længere var i stand til at styre sin vrede mod Nassar og kastede sig ud i sit dårligt

William Clark tilbage fra sin post i Downing Street nr. 10. Han berejste først Afrika for BBC og blev derpå The Observers korrespondent i New Delhi. Jeg mødte ham igen for ikke så længe siden ved en »Editor's Round Table«-konference arrangeret af Forenede Nationer i Warszawa, og det var rart at konstatere, at den 50-årige britiske ungkarl stadig havde sin vitalitet i behold. Han tordnede løs for en gruppe FN-embedsmænd om betydningen af global strategi, og han slog i bordet og råbte, at personlige kontakter værdsættes høiere af journalister end dynger af papir og pressemødelser.

Kort forinden havde han i London udgivet en politisk roman »Number Ten« om tilværelsen inden for murene af den berømte britiske premierministerbolig. Han fortalte mig, at romanen var blevet dramatiseret. Den var, sagde han, blevet en »moderat succes« i London og provinsen.

I Washington vil William Clark arbejde videre for at vinde den akademiske verden, industrien, forretningslivet og offentligheden i almindelighed for en øget interesse for hjælpen til udviklingslandene. Han tiltræder formelt sin post i Verdensbanken, samtidig med at USAs forhenværende forsvarsminister McNamara overtager præsidentposten. Clark og McNamara har allerede haft »en lang eftermiddag« sammen, og de har begge erklæret at de imødeser deres fremtidige samarbejde med store forventninger.

Med Clark som informationschef vil Verdensbankens papirdynger svinde ind, og en ny og kraftig stemme vil prøve at råbe os op tværs over Atlanterhavet.

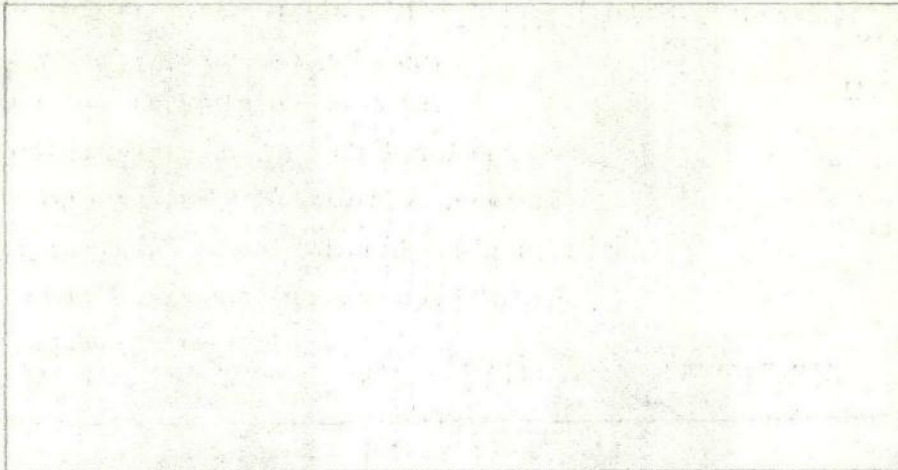
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COMMUNICATIONS

PORTRAIT OF A TOP MAN  
ACTIVITY - HAPPINESS  
IN THE WORLD BANK



The World Bank in shirtsleeves, left the World Bank's new Chief of Information the Englishman William Clark, and right, the Bank's Press Representative in Paris the Dane Viggo A. Christensen. Both participated in a UN Conference in Warsaw last autumn.

A faithful admirer of Denmark and the Danish press, a helpful friend of most of the Danish journalists who have served their newspapers as correspondents in London during the post-war years, William Clark has been given a top position in Washington. From April he takes over the job as Chief of the World Bank's Information Department.

During the last six to seven years William Clark, who is one of Great Britain's best known and experienced journalists, acted as Director of the privately financed Overseas Development Institute which informs the public about development aid.

William Clark will, no doubt, in general, look upon his new job as being rather of the same kind as his present: to create interest in the public for all questions connected with aid and development. The World Bank is the most central and most respected institution in development aid and as spokesman for the Bank, William Clark will continue to fight for the developing countries with warmth and activity.

William Clark had a particularly close contact with foreign correspondents in the period when Anthony Eden was British Prime Minister. He was Head of Eden's Press Department. At regular press conferences he also gave Danish correspondents an excellent and thorough orientation about current domestic and foreign events and the meetings always took place in Gladstone's old London residence in Carlton House Terrace.

The present Danish Press and Cultural Attaché in London, Harry Agerbak, had persuaded Eden to place the beautiful old Nash building at the disposal of the Foreign Press Association. At the time, Harry Agerbak was the correspondent of "Socialdemokraten" and President of the Foreign Press Association. Many foreign correspondents made their headquarters in the building and for a long time it also housed the London Office of "Jyllands-Posten".

When Anthony Eden was no longer able to control his anger against Nasser and threw himself into his badly prepared Suez adventure, William Clark retired from his post in No. 10 Downing Street. He first visited Africa for the B.B.C. and thereafter became the Observer's correspondent in New Delhi. I met him again not so long ago at an Editor's Round Table Conference in Warsaw arranged by the United Nations and it was a pleasure to note that this 50-year old British bachelor still possessed all his usual vitality. He told a group of UN Civil Servants about the significance of global strategy. He banged the table and said with a loud voice that personal contacts are appreciated much more by journalists than heaps of paper and press releases.

Shortly before this he had published in London a political novel "Number Ten" about the existence within the walls of the famous British Prime Minister's home. He told me that the novel had been dramatised. It had, he said, been a "moderate success" in London and the Provinces.

In Washington William Clark will continue to work to win over the academic world, industry, the business world and the public in general for increased interest in development aid. He will probably take over his post in the World Bank at the same time the US former Defence Minister McNamara takes over as President. Clark and McNamara have already had "a long afternoon" together and both have declared that they are looking forward to their coming co-operation with great expectations.

With Clark as Head of Information, the World Bank's paper heaps will be reduced and a new and forceful voice will try to call out to us on the other side of the Atlantic.

G.H.

Denmark

705

# MEN AND MATTERS

## William Clark special agent

When Mr. William Clark left the Overseas Development Institute to hover at Mr. Robert McNamara's right hand in the World Bank, he never thought he would turn into a specialist in counter-insurgency. McNamara too presumably expected life to be a bit quieter than it had been in the Pentagon. Yet these two are at the focus of a small urban guerilla action planned for next week's annual meeting of the World Bank in Copenhagen.

It all began in the spring, when Clark discovered that the Danish students were starting to mobilise themselves and their colleagues in Germany and elsewhere, the intention being to break up next week's meeting. They were partly out to "get McNamara," as Clark puts it—McNamara had, after all, been a central figure in LBJ's war cabinet—and partly to embarrass the international organisation itself. The Bank among other things lends money to Greece, Spain and other countries for whose Governments revolutionary students have a less than unbounded enthusiasm.

Clark set himself up as the Bank's chief counter-revolutionary. He opened lines of communications to the Danish students, held seminars to show them the Bank was not a monstrous institution, sent the youngest members of the Bank to speak to them, and so on.

Against this, at least two Marxist/Maoist magazines appearing in Copenhagen are busily attacking the Bank and all its works, and the enemy have formed themselves into a body called "the World Bank Group," dedicated to the overthrow of the actual World Bank. Clark's agents, he sadly told me

last night, have been unable to get a copy of this group's manifesto. Nevertheless, in an incident last week which went almost totally unreported, some fire-bombs were hurled into the very conference hall where the Bank and the IMF will be meeting.

Clark himself left London for Copenhagen last night, and oozed confidence, as always. "I don't like this idea of being mobbed," he said, but he didn't think the trouble would be too bad. He hopes that what is supposed to be a serious meeting doesn't turn into a television farce, à la Chicago, but is distressed that half the local papers have assigned their regular police reporters to it. "Your average Danish police reporter is not at his best discussing the balance of payments."

## The Baron's banquet

If it's fire-bombs for McNamara and his fellow World Bankers, their colleagues at the IMF have more genteel embarrassments to worry about. For the Finance Ministers of the industrial world, these embarrassments have already begun, as follows:

The proceedings open, as usual, with a Ministerial session of the Group of Ten—the richest countries in the world, who largely determine Fund policy. But instead of holding their get-together in Copenhagen, the Ministers have been forced to go to Brussels, where they will be meeting on Friday and Saturday. This is entirely the result of pressure from their Chairman, Baron Snoy et d'Oppuers, the Belgian Finance Minister, who is determined to entertain his colleagues to a sumptuous banquet at his neighbouring castle, where far-reaching decisions can be taken over the

70's

# LETTERS TO THE EDITOR

## Lending policies of the World Bank

From Mr William Clark

Sir, Since I have personally been responsible for drafting the World Bank's annual report during the past five years, I feel I should respond to your editorial charge (June 27) that if the books are not exactly cooked, they are certainly warmed over, in order to put the bank in the best light.

This annual report is a report to governments, not by the president but by what you call "a board of executive directors in which six wealthy and usually hard-headed countries have half the voting powers". In fact, we hardly ever have a vote, but we do spend long hours in board session drafting and re-drafting the report so that the bank's activities are placed in a clear light for hard-headed governments (there are rather more than six who qualify).

I have not found, nor have the executive directors, that bunching loans into the last quarter is due to "window dressing" the annual report, but rather to the need for some time discipline to bring lagging negotiations to the point of decision. After all, if some large loans slip over from 1971 to 1972 it only boosts the figures for 1972; and at the end of five years, as you state, we have fulfilled the goal set out in 1968 of doubling our lending.

Then the charge that we have tried to obscure the slow disbursements by concentrating public attention on the steadily rising commitments. Both commitments and disbursements are clearly recorded in the annual report and for the past three years I have always been questioned by the press, when giving out the report, about the rate of disbursement. Overall the disbursement pattern of bank and IDA lending is as good or better than that of other development institutions. I have tried to explain that we only disburse for work carried out; that a number of our new projects, particularly in agriculture, take longer to carry out than, for instance, factory building; therefore disbursement is a slower process and our increased commitments will only show as disbursements over three to five or more years. This indeed shows in

the figures for disbursement to developing countries (bank fiscal year begins July 1):

FY1968	FY1969	FY1970	FY1971	FY1972	FY1973 (preliminary)
\$944m	\$918m	\$895m	\$1,250m	\$1,443m	\$1,640m

All the funds committed will be disbursed and the recipients (however impatient they may have been), will have carefully planned and executed development projects to show for the money spent.

I am just not sure how to reply to the charge of "exaggerated claims made by the World Bank about the alleged shifts in the emphasis of lending that has occurred under Mr McNamara's leadership". What claims? In 1968 Mr McNamara made some promises, which have been fulfilled, viz:

- To double total bank/IDA lending in 1969-73 compared with 1964-68. It has increased by 128 per cent.
- To triple lending in Africa. It has increased by 223 per cent.
- To double lending in Latin America. It has increased by 128 per cent.
- To quadruple lending for agriculture. It has increased by 317 per cent.
- To triple lending for education. It has increased by 362 per cent.
- To lend more to the poorest countries of all. Lending to these has quadrupled.

Incidentally, Mr McNamara, in his speech to the governors last year, did not promise "a redistribution of income in the Third World", but a more equitable distribution of the fruits of development—a sufficiently different concept to draw praise from several "wealthy and hard-headed" governments.

Finally (at last, but it was a rather long editorial or indictment) I admit my office is comfortable, and when we move into the quarters vacated by the fund it may even seem luxurious compared with the quarters in Printing House Square which I used transiently to occupy on Saturdays a decade ago. But if we are to attract more non-Americans to work in Washington, we must offer some comforts.

Your obedient servant,  
WILLIAM CLARK,  
International Bank for Reconstruction and Development,  
181 H Street, NW,  
Washington, DC, USA.  
June 29.





Marriages

Marriages

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COMMUNICATIONS SECTION

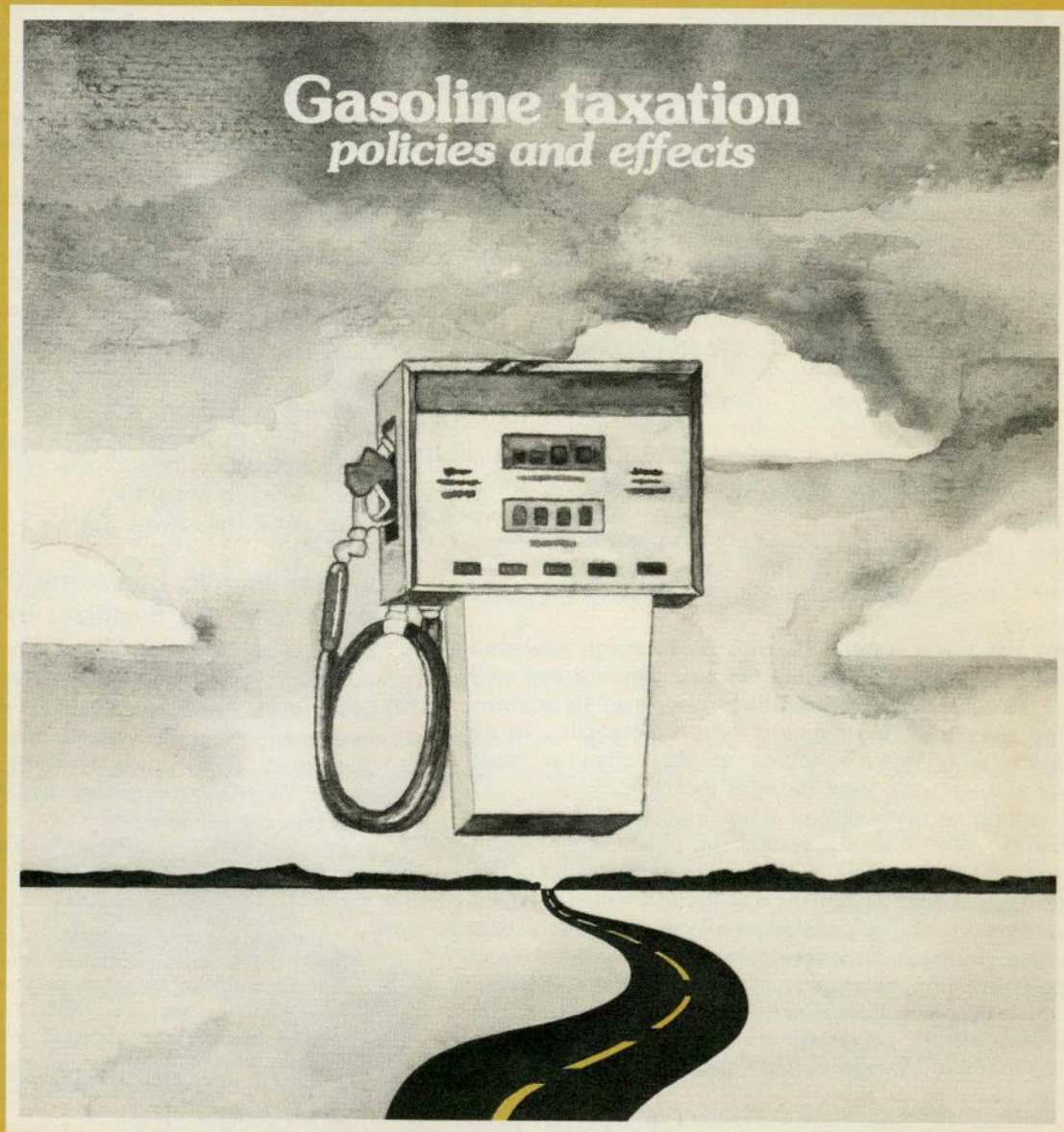
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June 1980 / Volume 17 / Number 2

# Finance & Development

A quarterly publication of the International Monetary Fund and the World Bank



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**Growth and basic needs: is there a tradeoff?**  
**Changing patterns of international production**  
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## The Planning of Investment Programs in the Fertilizer Industry

*Armeane M. Choksi, Alexander Meeraus, and Ardy J. Stoutjesdijk*

Deals with the formulation of sector-wide investment programs, using models and a case study of the Egyptian fertilizer sector; second volume in the series, *The Planning of Investment Programs*.

352 pages; map; index. Cloth \$16.95 (£10.25); paperback \$6.95 (£4.25).

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J. D. Scott

1917-1980

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**An annual index of articles and book reviews is carried in the December issue of *Finance & Development*.**

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# Fund activity

## Summary of Fund operations in the General Resources Account, January 1, 1977-March 31, 1980

(In millions of SDRs)

Transactions	1977	1978	1979	January 1-March 31	
				1979	1980
<b>Total purchases</b>	<b>3,424.6</b>	<b>3,744.3</b>	<b>1,842.8</b>	<b>224.7</b>	<b>741.6</b>
Reserve tranche	80.0	2,535.5	147.1	12.6	88.0
Credit tranche	2,895.3	421.0	853.1	130.7	287.4
Compensatory financing	240.5	577.7	572.0	15.9	350.3
Extended facility	208.8	174.0	233.0	54.0	16.0
Buffer stock	—	36.1	37.7	11.5	—
<b>Total repurchases</b>	<b>2,936.5</b>	<b>4,845.2</b>	<b>4,215.3</b>	<b>816.1</b>	<b>703.7</b>
<b>Fund borrowing</b>					
General Arrangements to Borrow <sup>1</sup>	1,730.0	777.3	—	—	—
Supplementary financing facility	—	—	306.9	—	120.2
<b>Repayment of loans</b>					
General Arrangements to Borrow <sup>1</sup>	—	1,142.1	587.9	—	—
Oil facility	261.8	1,422.6	2,218.3	663.5	223.2
Supplementary financing facility	—	—	—	—	—
<b>Gold sales</b>	<b>628.0</b>	<b>468.6</b>	<b>388.0</b>	<b>65.5</b>	<b>80.6</b>
In connection with auctions	211.1	207.1	181.8	49.4	55.7
(i) Replenishment up to May 31, 1978	(211.1)	(91.9)	(—)	(—)	(—)
(ii) Competitive bids	(—)	(115.2)	(181.8)	(49.4)	(55.7)
Noncompetitive bids	—	48.5	3.3	2.6	—
In distributions	416.9	213.0	202.9	13.5	24.9

Source: IMF, Treasurer's Department.

Note: Details may not add to totals due to rounding.

<sup>1</sup>Includes Swiss National Bank.

# Bank activity

## World Bank loans approved during third quarter of fiscal year 1980

(Ended March 31, 1980)

Country <sup>1</sup>	Purpose	Amount (In millions of U.S. dollars)
Algeria (3)	Water supply engineering, irrigation, education	100.0
Barbados	Development banking	10.0
Brazil (3)	Water supply, power, industrial pollution control	302.0
Cameroon	Rubber <sup>2</sup>	16.5
Colombia (2)	Power, telecommunications	131.0
Egypt	Development banking	50.0
Honduras	Power <sup>3</sup>	105.0
Indonesia	Irrigation	116.0
Ivory Coast	Rural development	9.4
Jordan	Development banking	10.0
Kenya (2)	Power, development banking	70.0
Korea	Education	100.0
Malaysia	Power	50.0
Mexico	Mining development	40.0
Peru (2)	Petroleum production rehabilitation, rural development	47.5
Philippines (4)	Irrigation, agricultural development, urban development, sewerage and sanitation	218.0
Portugal	Education	40.0
Romania (2)	Danube-Black Sea Canal, irrigation	190.0
Senegal	Highway <sup>4</sup>	10.0
Swaziland	Education	10.1
Thailand	Agricultural credit	19.0
Tunisia (2)	Irrigation, port	67.5
Turkey	Structural adjustment loan	200.0
Uruguay	Port	50.0
Yugoslavia (2)	Agricultural credit, highway	211.0
<b>Total</b>		<b>2,173.0</b>

<sup>1</sup>Figures in parentheses are the number of loans approved for the respective country. <sup>2</sup>With a \$15 million IDA credit. <sup>3</sup>With a \$20 million IDA credit. <sup>4</sup>With a \$28 million IDA credit.

## IDA credits approved during third quarter of fiscal year 1980

(Ended March 31, 1980)

Country <sup>1</sup>	Purpose	Amount (In millions of U.S. dollars)
Bangladesh (3)	Imports program, low lift pumps, water supply	107.0
Benin	Industrial development	10.0
Bolivia	Gas and oil engineering	16.0
Burundi	Education	15.0
Cameroon	Rubber <sup>2</sup>	15.0
Egypt	Agroindustries	45.0
Honduras	Power <sup>3</sup>	20.0
India	Population	46.0
Indonesia (3)	Rubber, irrigation, agricultural extension	132.0
Kenya	Structural adjustment credits	55.0
Lesotho	Development banking	4.0
Madagascar (2)	Power, development banking	15.0
Malawi	Rural development	13.8
Mali	Development banking	8.0
Pakistan	Highway	50.0
Senegal (2)	Rural development, highway <sup>4</sup>	39.0
Sri Lanka (2)	Technical assistance, road	56.0
Sudan	Agricultural rehabilitation program	65.0
Tanzania	Development banking	10.0
Uganda	Reconstruction credits	72.5
Upper Volta	Forestry	14.5
Yemen Arab Republic	Rural Development	5.5
Zaire	Development banking	18.5
<b>Total</b>		<b>832.8</b>

<sup>1</sup>Figures in parentheses are the number of credits approved for the respective country. <sup>2</sup>With a \$16.5 million World Bank loan. <sup>3</sup>With a \$105 million World Bank loan. <sup>4</sup>With a \$10 million World Bank loan.

## Bank will directly finance health projects

In a shift of policy, the World Bank recently decided to finance directly health projects in the developing countries. Under its old policy, formulated in 1974, health components providing basic health care for low-income people were incorporated into projects in other sectors, such as agriculture and rural development, urban development, and water supply and sewerage. Lending for such components will continue. The new policy, approved by the Executive Directors of the Bank, is outlined in a report entitled *Health Sector Policy Paper*.

After reviewing the World Bank's experience in financing health-related activities in 44 countries, the report recommends the adoption of a three-tier pyramidal structure for delivery of health services, adapted to local conditions. The first level comprises community health workers who can treat simple, common ailments and refer other cases to a health center or a district hospital. The second-level facility can be staffed by at least a medical assistant and midwife, and deal with accidental injuries, high-risk pregnancies, and the diagnosis and treatment

of complex and less common diseases. The third level can comprise the referral hospital attended by qualified physicians and other trained staff.

The Bank's new lending program for health will begin with one project in fiscal year 1981 (July 1, 1980 to June 30, 1981) and expand to four or five projects annually by fiscal year 1984. The projects will be designed to strengthen the primary health care systems of the countries being assisted in order to reduce mortality and morbidity, and to improve access to basic health services for the poor.

*Emmanuel D'Silva*

## Views & comments

### de Larosière on need for adjustment of policies

Following is a selection from the inaugural address of the 1980 Symposium on Monetary Theory and Policy in Africa delivered in Dakar on January 21, 1980 by Jacques de Larosière, Managing Director of the Fund. The symposium was organized by the African Center for Monetary Studies.

This symposium is being held at a vital moment in African economic history, when African countries are faced with accelerated inflation, slow growth, rising balance of payments deficits, and a relatively onerous external debt burden. These changes are taking place against the background of a harsh world economic situation, and in that context it is now being widely recognized that countries cannot continue to finance their deficits without adjustment in their policies. . . .

This adjustment effort will have to be comprehensive, encompassing not only the financial measures but also actions to improve the saving performance and the efficiency of investments. The immediate aim of such an effort will, of course, be the re-establishment of domestic and external financial balance. But let me stress that the ultimate objective of the adjustment policies is to increase real domestic savings and to improve the productive base of the economy. I propose today to concentrate on the role of financial policies, especially fiscal, monetary, and exchange policies.

It seems to me that, based on the experience of African countries, the primary role in the adjustment process must be ascribed to fiscal policies. These policies are required to perform two important functions, namely, (1) to manage aggregate demand, and (2) to promote development through raising resources to finance new investment. Although there could be an apparent conflict between these two objectives, I believe that the thrust of adjustment policy would be to make these two objectives mutually reinforcing. Countries have to re-examine their expenditure priorities, not only with a view to reducing the present large budget deficits, but also to generate public savings to finance productive investments. In many African countries, budget expenditures in relation to the size of their respective economies have reached an unsustainable level, and fiscal policy should aim at

restraining their growth. This will no doubt involve difficult social choices regarding education, housing, health, and even public employment. But these choices have to be made. I recognize that taxation policies could also reduce budget deficits, but in many countries, because the tax burden has reached a high level, the main orientation of taxation for the present should be toward reforming the tax structure, with a view to improving resource allocation and achieving a more equitable distribution of the tax burden, rather than to raising revenues.

I would also like to refer to the role of public enterprises. Whether to have public enterprises or not is a political decision, and in Africa their importance has been growing. But it is imperative that they operate efficiently, so as to avoid losses and not become a drain on the public exchequer and, in fact, to generate adequate returns on investments in them. There is a tendency for governments to make them an instrument of social policy, imposing on them stringent price controls and other cost burdens. As a result there is no lack of examples of countries where these enterprises are incurring losses which are financed by either treasury resources or bank borrowing.

As regards monetary policy, it is clear that its role must be complementary to that of fiscal policy. If fiscal policy continues to be expansionary, monetary policy could become counterproductive, if called upon to bear the sole burden of adjustment. For in that event an undue restriction of credit and other similar measures could adversely affect the productive base of the economy, including public enterprises. The same will be true if reliance is placed on direct administrative actions, such as price controls, consumer subsidies, or import controls to contain the adverse effects of expansionary policies on inflation and external trade.

Nevertheless, it is generally contended that the scope for operating monetary policy in less developed countries is limited in



view of the underdeveloped nature of their financial markets. However, judging by more recent evidence from countries across the continents of Asia, Africa, and Latin America, this belief does not seem to be well supported. It is no doubt true that the degree of financial intermediation in less developed countries in general, and in Africa in particular, is low, and the diversity of financial assets is limited. But this by itself should not imply that monetary policy is likely to be ineffective or that it has no role to play. In fact, experience has shown that some monetary actions can become more difficult to implement as financial intermediation becomes increasingly sophisticated. Thus the present stage of financial markets in Africa permits the pursuit of a vigorous and well articulated monetary policy. There is less demand for financial assets because of the low level of savings and because the real return on those assets is either low or negative. It is precisely in such situations that monetary policy can bring about a transformation in the financial system of countries by ensuring a stable monetary environment and by maintaining a realistic interest rate structure.

In my opinion, control of monetary aggregates is an essential aspect of monetary policy. If the monetary authorities do not have at their disposal, or choose not to utilize, effective policy instruments to control those aggregates, they could expect problems to emerge in the form of inflation and current account deficits. . . .

Two of the most effective policy instruments in less developed countries are interest rates and the exchange rate. I am aware of the concerns of policymakers in your countries regarding the relevance and effectiveness of both of these instruments. I think the reluctance to use these instruments is motivated by development considerations. It is felt that increasing interest rates, or depreciating the exchange rate, would increase the cost of development projects and adversely affect the financial outcome of existing enterprises, thereby stifling development and accelerating inflation. While appreciating these concerns, I believe that these instruments, if correctly used and supported by appropriate demand management policies, can in many cases add strength and flexibility to economic management and thereby favor the long-term pursuit of development objectives. Development is an ongoing process where everyday decisions are to be made as to the allocation of resources. These decisions are vitally influenced by relative prices and, if relative prices are wrong, then the ensuing allocation of resources is also likely to be less efficient and more costly. The exchange rate and interest rates are two of the most significant prices which directly affect the relative prices of domestic and imported products and factors, and saving and investment decisions.

Taking first interest rate policy, here the tendency has been to keep interest rates low and relatively unchanged. But you will agree with me that it is necessary to ensure that those who provide savings and hold financial assets of one kind or another are adequately rewarded. In an inflationary situation, and with low interest rates, the real yield on financial assets such as bank deposits or government bonds turns negative and tends to discourage private savings. Developing countries are generally characterized as having a shortage of capital, and an important bottleneck in the process of capital formation is the inadequate flow of monetary savings to finance investment projects, rather than the lack of profitable investment opportunities even at a high interest rate. Furthermore, when rates are kept artificially low, outflow of private capital may ensue, and domestic credit must be rationed in some way; if this is done in an arbitrary manner, it can also adversely affect investment. We must remember that a major portion of bank deposits belongs to the low-income earners. It should be clear then that a realistic interest rate policy—by which

I mean a policy guaranteeing remunerative yields to deposit holders—would, in fact benefit a large segment of low-income earners in your countries. I am not advocating that interest rates be fixed by the sole consideration of promoting savings. In addition, the authorities will also need to pay attention to the rate of return on capital so that new investment would not be discouraged but, on the contrary, would be helped by the availability of more real resources forthcoming from savers. There is little doubt in my mind that in the present inflationary context the balance is in favor of high rather than low interest rates.

What applies to interest rate policy also holds true for exchange rate policy, because the exchange rate, like the interest rate, is also a price which affects directly the relative prices of domestic and imported products and factors. If domestic costs of exports are out of alignment with those of competitors, countries with overvalued rates would lose export markets. Similarly, if the prices of imports are relatively low, consumers would prefer imported commodities to domestic products, and imported factors to domestic factors, thereby adding to the already acute unemployment problems. . . .

I should caution you that what I have said so far should not be interpreted as my advocacy of only an upward movement in interest rates and a downward movement in the exchange rate. Policies should be operated in a flexible manner, depending upon what the given developments in the economy warrant. . . .

We stand today on the threshold of a new decade, and the economic outlook is one of singular uncertainty. In facing the years immediately ahead, and in devising policies to meet the difficulties before us, we shall need two qualities above all: courage and imagination.

It will require courage to avoid the "easy solutions," which are no solution at all, and notably the temptation to finance unsustainable deficits by borrowing, without taking the necessary accompanying measures of economic adjustment. It is this important element that I have stressed today.

But we will also need greater imagination to resolve the problems we face, and nowhere is this more important than in the field of international financial arrangements, which is my particular concern. If we do not pursue imaginative solutions at the level of the monetary system itself, we shall fail individual countries which are making efforts to adjust, because resources will not be channeled to them in sufficient quantities and on realistic terms. The present financial system may need to be complemented by new arrangements.

One of the problems is to provide countries with adequate instruments in which to invest their reserves—instruments that are sufficiently attractive and secure.

One contribution to this aim is to create a substitution account in the Fund which would allow a significant amount of official reserves to be diversified into an SDR asset without passing through the exchange markets. This account would strengthen the role of the SDR in the international monetary system. . . .

Another essential problem relates to the financing of the deficits of less developed countries. There is a need for the recycling of a substantial volume of funds from the surplus countries to those countries which are adjusting adequately but require finance on appropriate terms in order to undertake the structural measures necessary to enhance the supply side of their economies and to address the problems of the current energy situation.

. . . I believe it is the Fund's responsibility to work for solutions to the problems of financing and adjustment. Only through international cooperation can we hope to achieve a set of arrangements which will underpin the efforts of individual countries to cope with the difficult problems which face them.

## The World Bank: image and reality

**Q. Why don't we start off by talking about the major aims of your information and external relations efforts?**

**A.** Well, what I've been trying to do in these 12 years is to create a sense of trust in the Bank amongst the rich countries that give money and lend money to the Bank, and amongst the developing member countries that borrow. We want to make everyone aware that our sole concern is with the real development of each of our borrowers. That is not easy. We also need to build trust that we are prudently and efficiently using the funds of which we are "trustees"; and that we are using them to create sustainable development as speedily as possible. And we need to persuade people that we are to be trusted for our knowledge about the development process; that our research, our analysis, and everything that goes with that is genuine and first class.

**Q. But of course there have been criticisms of the Bank, mainly along two lines. First, what do you say to the statement that the Bank is too much a Western rich man's club?**

**A.** The International Bank for Reconstruction and Development was founded in 1945 as part of the postwar economic and financial settlement, at the insistence of the poorer countries who wanted to ensure that there was one section of the rich countries' institutions which was partly devoted to improving the lot of the underdeveloped countries. That has now become the Bank's sole objective. It is true that the ultimate control of the money subscribed as capital remains with the subscribers of the majority of capital. But the very large sums, which are raised by Bank borrowing against that capital guarantee, are in effect allocated by the Bank management for the greatest benefit of the greatest number of our developing members.

**Q. Then, of course, there is the other view—that the Bank is an extravagant institution that wastes the resources intended to help the developing countries.**

**A.** That criticism comes mostly from people who just don't wish to devote any money to development assistance. Usually it can be ignored; but when it is in fact seriously put forward by those concerned with development, we need to respond to it. It was seriously put forward a few years ago in a report by a key committee of the United States Congress, and we responded to every single charge made by that committee, effectively bringing that report to a full stop, because the charges that were made were not true, or were not relevant. The one criticism that constantly comes up is that the Bank staff are well paid. We should note that these complaints come always from representatives of rich countries, who say the Bank is "wasting their taxpayers' money." We are not. If we are spending anyone's money, it is the money which we earn as interest on loans from the poorer countries. And I can tell you that the poorer countries do not wish to have poorly paid, inefficient, second-class advisers.

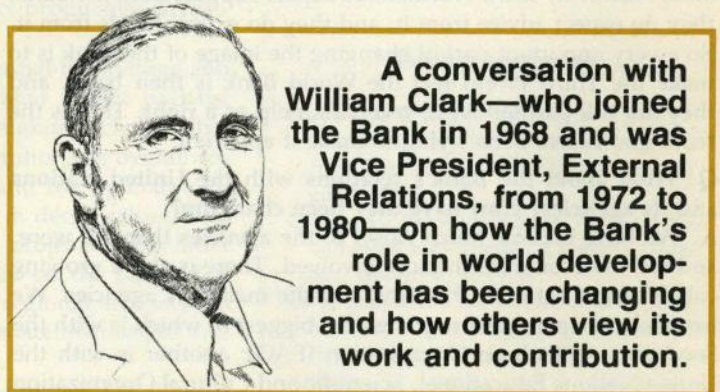
**Q. What are the main conclusions that you would draw from the Bank's experience in trying to get the rich and the poor countries to cooperate in a common development effort?**

**A.** I would say rather depressingly that the chasm in outlook separating the North and the South, the rich and the poor countries, is as wide as ever. But the World Bank—as a development institution which represents both rich and poor members equally—has grown in size and importance. Every week in this place rep-

resentatives of our 130 odd member countries, from the poorest to the richest, sit around our Board table and seek to find out what they have in common on practical measures to increase the productivity and so the wealth of the developing world. Our pragmatic, practical, active, project-oriented productivity efforts have been most effective in bringing together the rich and the poor countries.

**Q. What particularly contributes to the Bank's ability to bring the two sides together?**

**A.** To give an unpopular answer, I think the main reason for such success as we have had in bridging the chasm has been our growth in sheer size as a lending institution. In 1968 all the Western aid indicators were pointed down. On October 1, 1968, Mr. McNamara made his now famous first speech to the Governors of the Bank, saying he intended to double Bank lending in the next five years. In that same first year we visited each of the developing continents and carried the message that the Bank was going to bring more, much more, assistance. And I believe that effort stopped for the time being a real breach between the South and the industrialized world.



**A conversation with William Clark—who joined the Bank in 1968 and was Vice President, External Relations, from 1972 to 1980—on how the Bank's role in world development has been changing and how others view its work and contribution.**

Patti Slack Buckingham

**Q. Would you say that the outside institutions where North-South issues are being debated have been mostly concerned with principles and therefore have been bogged down, whereas the Bank's advantage has been that it is concerned with the practical aspects of development assistance?**

**A.** That is a very good point. In a way it is what I am driving at by my emphasis on the Bank's growth and size. The resources available by 1973 had reached a critical mass at which the Bank could take effective action. The record of successful projects in nearly 100 countries was by the end of Mr. McNamara's first five-year term concrete evidence of the Bank's real concern with development.

**Q. You speak about the first five years. What's happened since then?**

**A.** 1973 was the beginning of Mr. McNamara's second term and it was the beginning of a lot of changes. At the Annual Meeting, which was held in Nairobi that year, he outlined his plans for a major Bank program in rural development; this was a shift in sector policy, but much more important, it marked a fundamental change in Bank philosophy—a decision to lend for labor-intensive poverty-oriented projects aimed at almost half the population of many countries, who were to be found scratching a bare



living from the soil. The new program aimed at making the poorest villagers—the smallholders and tenant farmers—more productive, and thus at creating “wealth” at the point where it was most needed, rather than let it trickle down through layers of middlemen. That is now the key to Bank development strategy, and I believe we have spread the word around the whole developing world.

**Q. What do you see as the principal contribution that the Bank is making today to the international development effort?**

**A.** There are three very different ways in which the Bank contributes to the global development effort. First, a philosophic contribution that I mentioned earlier. We are trying, along with many others, to convince all our members that they have a real mutual interest in the rapid development of the less developed countries. Second, an intellectual and pragmatic contribution: to create an understanding that any real and lasting growth in the developing world must come from greater productivity amongst the low productive elements of society. Third, a wholly practical contribution: by investing upward of \$10 billion each year in development projects we do in fact make the poor world more productive, and more able to spread “wealth” widely amongst its people.

**Q. What about attitudes in the developing world toward the Bank?**

**A.** There is a lot of criticism of the World Bank from the Third World on the ground that it is too big; too powerful; in particular, that it has too much power over the Third World and not enough “Third Worlders” in its management helping to shape its outlook. However, Third Worlders do expect support from the Bank; they do expect advice from it; and they do expect funds from it. So a very important part of changing the image of the Bank is to make the Third World feel the World Bank is their bank, and they are full partners in it, receiving help as a right. That is the truth and I have been trying to make it apparent.

**Q. What about the Bank's relations with the United Nations and its agencies? How have they been changing?**

**A.** We have become much closer to the agencies than we were, and we've become much more involved. There is also a growing collaboration between the Bank and the main UN agencies. We have four cooperative programs, the biggest of which is with the Food and Agriculture Organization (FAO); another is with the United Nations Educational, Scientific and Cultural Organization (UNESCO). At this particular moment our policy planning staff is spending a lot of time working on the UN strategy for the 1980s; and the Bank's input into that strategy will, I hope, be quite considerable.

**Q. On the subject of international development, we've had attempts to identify the aims of global economic interests and strategies by international commissions such as the Pearson Commission in 1968-69 and the Brandt Commission in 1977-80. You personally have had experience with both Commissions. How would you say that these two Commissions differed in their aims?**

**A.** Yes, I feel very proud of my association with both Commissions. The idea of the Pearson Commission was conceived in the Overseas Development Institute when I was its Director before coming to the Bank. Its aim was simply to see why the very high hopes of *The Development Decade* proclaimed in 1961 were not being achieved by 1968-69. The Commission had a majority of members from the industrialized world, and its conclusions were primarily addressed to them. These conclusions were—briefly—that there were no gimmicks capable of producing instant development, but that there was an urgency that demanded considerably greater efforts by the donor countries.

When I went to Bonn in 1977 to talk over the formation of the Commission with Willy Brandt, he told me that he couldn't achieve his desired results unless he had a majority of members from the developing world—as he did. The Report reflects this; there is far more recognition of the views and aspirations of the Third World, and its criticisms of the present economic order. But ultimately Brandt like Pearson holds that there is no gimmick for instant development; that the industrialized world must increase with urgency their flow of resources primarily through existing methods and institutions; and that there are obligations on the developing countries to reform their national economic orders to ensure an equitable distribution of the fruits of development.

**Q. Let's move now toward your actual day-to-day work. What would you say about the world press? Do you think that it has been fair in covering Bank policies and operations?**

**A.** No, I don't. Not because it's been critical—if you would set a city on a hill as high as the World Bank is, it is going to be seen by men and criticized. Nor do I blame the press for being reluctant to concern itself with the nuts and bolts of development, which is what the Bank deals with from day to day. What I would blame them for is that they are neglecting the real theme of the Bank's work—the question of whether or not we can create a planetary system where increasing billions of people can live and have some sort of a decent life. Clearly this is a very interesting topic; but it is a topic that has proved terribly difficult to get into the minds of people who are worrying about five-year parliaments, four-year presidencies, seven-year headships of government, and so on. People ought not to be thinking about mere decades of development, but the half century of development. There are very few writers in the world press today who take the trouble to think in such long terms.

**Q. Let me end on a personal note and ask you to look back on your 12 years at the Bank. What would you say were the most significant lessons you've learned—the things that you think about as you reflect on your years at the Bank?**

**A.** The most interesting part of my experience here has been traveling throughout the Third World, visiting some 107 countries, with Robert McNamara. He is a man of genius who has educated himself in a subject he knew little about when he came here, and has made himself the leading expert on the problems of Third World development. I have been involved in those affairs for 30 years, and I shall continue to be after I leave the Bank; but one immense privilege of those travels was to meet all the leaders of the new world—the Third World. They are a remarkable set of people, who face gigantic problems in building their nations, and it makes me proud to have been associated in a small way with their efforts.

In fact, I am very proud to have been associated with the whole effort of the World Bank, and its staff drawn from the ablest in 100 nations: professionally skilled; personally dedicated to the ideal of producing a decent life for all people that on earth do dwell; increasingly aware of the urgency of our task, recognizing that if we do not provide for the rapidly increasing population, human society may be overwhelmed and destroyed by the extent of human misery.

It is that sense of urgency and purpose that pervades the Bank from top to bottom. In my opinion bringing the people of the world to recognize their mutual interest in development is the most vital task of world statesmanship. I believe the World Bank has given a lead that may be followed.

*William Clark has succeeded Barbara Ward as President of the International Institute for Environment and Development with offices in London and Washington D.C.*

# Energy and the role of gasoline taxation

Alan A. Tait and  
David R. Morgan

As governments of the major oil importing countries attempt to formulate policies for conserving energy and developing alternative sources of supply, attention has been drawn to gasoline taxation as a means of achieving these goals. Using the results of their recent study of such taxation in seven industrial countries, the authors discuss some misconceptions about the effects of increasing taxes on gasoline sales.

Since 1974, the major objective of energy policy in countries belonging to the Organization for Economic Cooperation and Development (OECD) has been to reduce their dependence on imported oil. In October 1977, in an unprecedented move, International Energy Agency (IEA) ministers adopted the so-called Group Objective of limiting oil imports to 25 million barrels a day by 1985. Higher gasoline taxation was one instrument advocated to help achieve this objective. However, the experience of seven major OECD countries for the period 1970-78 indicates that gasoline taxation has, in fact, generally declined in real terms. The IEA's report for 1978 stated that the Group Objective was unlikely to be met and that a major reason for this was the underutilization of gasoline taxation.

Reluctance to use this important tax seems to derive from skepticism regarding its potential to reduce demand for gasoline. Critics have also expressed concern that higher taxation would conflict with other macroeconomic objectives—that it would, in particular, exacerbate inflation, hinder efforts to achieve equity in the distribution of the costs of higher oil prices, retard economic growth, and upset external equilibrium. This article, which is based on a recent study of taxes on gasoline in seven OECD countries, tries to evaluate these concerns. The tentative conclusion is that their importance is often exaggerated and that, in general, excessive stress has been placed on the macroeconomic implications of an essentially microeconomic issue.

This conclusion should not convey the impression that higher gasoline taxation is costless but rather that at a macroeconomic level the costs—for example, those that will be associated with the adjustment to

Table 1  
Gasoline taxation in selected OECD countries

Country	Nature of tax	Level of government	Purpose
Belgium	Value added	Central	Not earmarked
	Excise	Central	To finance road infrastructure
Canada	Sales	Federal	Not earmarked
	Excise	Federal	Not earmarked
	Retail sales	Provincial	To finance highway maintenance and construction
Denmark	Value added	Central	Not earmarked
	Excise	Central	To make users pay for bridge and highway costs
France	Value added	Central	Not earmarked
	Internal consumption	Central	Not earmarked
	Levy for support fund for indigenous hydrocarbons	Central	For research
Germany, Fed. Rep. of	Value added	Federal	Not earmarked
Italy	Mineral oil	Federal	To help coal
	General turnover	Central	Not earmarked
	Excise	Central	Not earmarked
Japan	Gasoline	Federal	All taxes earmarked for highway and road construction and maintenance
	Local road	Federal	
	Liquefied petroleum	Federal	
Sweden	Value added	Central	Not earmarked
	Gasoline	Central	Used to defray road building costs
United Kingdom	Value added	Central	Not earmarked
	Excise	Central	Not earmarked
United States	Special	Federal	Both taxes earmarked for highway maintenance
	Special	State	

Source: Various country documents.

the July 1979 oil price hikes—appear to be more modest than suggested in most public debate. On the basis of the experience of the past six years, the OECD countries will regard this round of increases as rendering it more difficult to restore or increase the real value of gasoline taxes. However, the price hikes might also serve to emphasize that the lower gasoline taxes themselves helped to encourage such price increases.

Both oil consuming and oil producing nations should appreciate the need for establishing greater certainty about the direction and the timing of oil and oil product price changes. If oil exporting and oil importing groups of countries could agree on arrangements to make such changes in a more orderly fashion, it would reduce uncertainty; in time, it would make it easier for the oil importing countries to plan national structural changes to cope with increased energy costs.

### Role of gasoline taxation

Traditionally, gasoline taxes in the OECD countries have been levied by central or federal governments either to meet road construction and maintenance costs or as a source of general revenue (see Table 1).

The oil price increases of early 1973 and late 1974 created a new potential role for gasoline taxation—as an instrument to reduce dependence on imported oil. Such a

role ideally meant that the real value of gasoline taxation had to increase from October 1973 levels; at the very least, a real decline had to be avoided. (Gasoline taxation could also have been used to avoid any decline in real gasoline prices arising from temporary declines in crude oil prices or from particular currency appreciations vis-à-vis the U.S. dollar.)

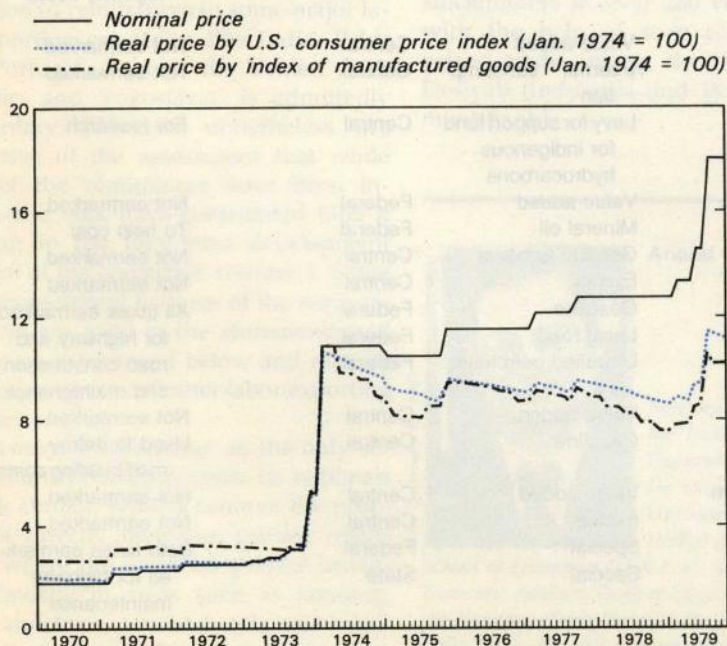
However, gasoline taxes were not used to reduce demand for oil, in fact they declined sharply in real terms between 1970 and 1979. During the 1970s, retail prices for gasoline primarily reflected crude oil prices and gasoline taxation. While prices for crude oil rose, gasoline prices barely increased in real terms up to June 1979, mainly because of the declining rate of taxation. Although the relationship between the price of crude oil and the price of gasoline varies—according to the refining process, the joint product nature of the numerous final products from crude oil, the degree of market monopoly, and the different qualities of crude oil—nevertheless, retail gasoline prices during the 1970s were largely determined by the two factors mentioned: crude oil prices and gasoline taxation.

As Chart 1 illustrates, the largest increases in both nominal and real crude prices occurred in January 1974. Since then, although the nominal price has increased in each year except 1974 and 1975, the real

price of crude oil between January 1974 and mid-1979 remained more or less constant in most countries. In fact, it was declining between 1974 and 1979, and the May 1979 price increases only re-established the real value of the cost of crude oil in January 1974. Thus, while increases in crude oil prices exerted considerable pressure on gasoline prices to rise in real terms immediately after the initial round of oil price increases in 1973–74, that pressure disappeared during the 1975–78 period and only re-emerged with the latest rises in crude oil prices in July 1979. Then by August 1979 the real price of Arabian light crude was just over five times the January 1970 price.

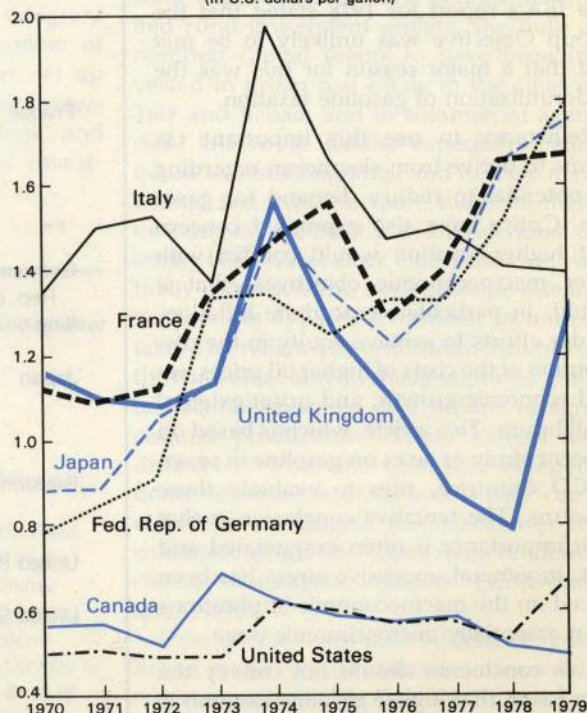
The doubling of real crude oil prices between 1970 and 1978 was not reflected in retail gasoline prices in most of the OECD countries (see Chart 2). The increase in the real price of gasoline over the period was less than 8 per cent in five out of the seven countries, and actually declined in Japan and the United Kingdom. Chart 2 shows that the major changes in real retail prices per gallon occurred immediately after the large increases in the world price of crude oil, with gasoline prices generally either remaining fairly constant or declining in real terms during the latter part of the 1970s until the further price increases in 1979. These increases pushed 1979 gasoline prices up to about 20 per cent more than 1970 lev-

Chart 1  
Nominal and real prices of Arabian light crude oil, 1970-79  
(In U.S. dollars per barrel, f.o.b.)



Source: U.S. Department of Energy, *International Petroleum Annual*; International Monetary Fund, *International Financial Statistics*; and data prepared by IMF staff.

Chart 2  
Real retail gasoline prices by country, 1970-79  
(In U.S. dollars per gallon)



Source: IMF, *International Financial Statistics*. Nominal prices deflated by consumer price index (July 1975 = 100)

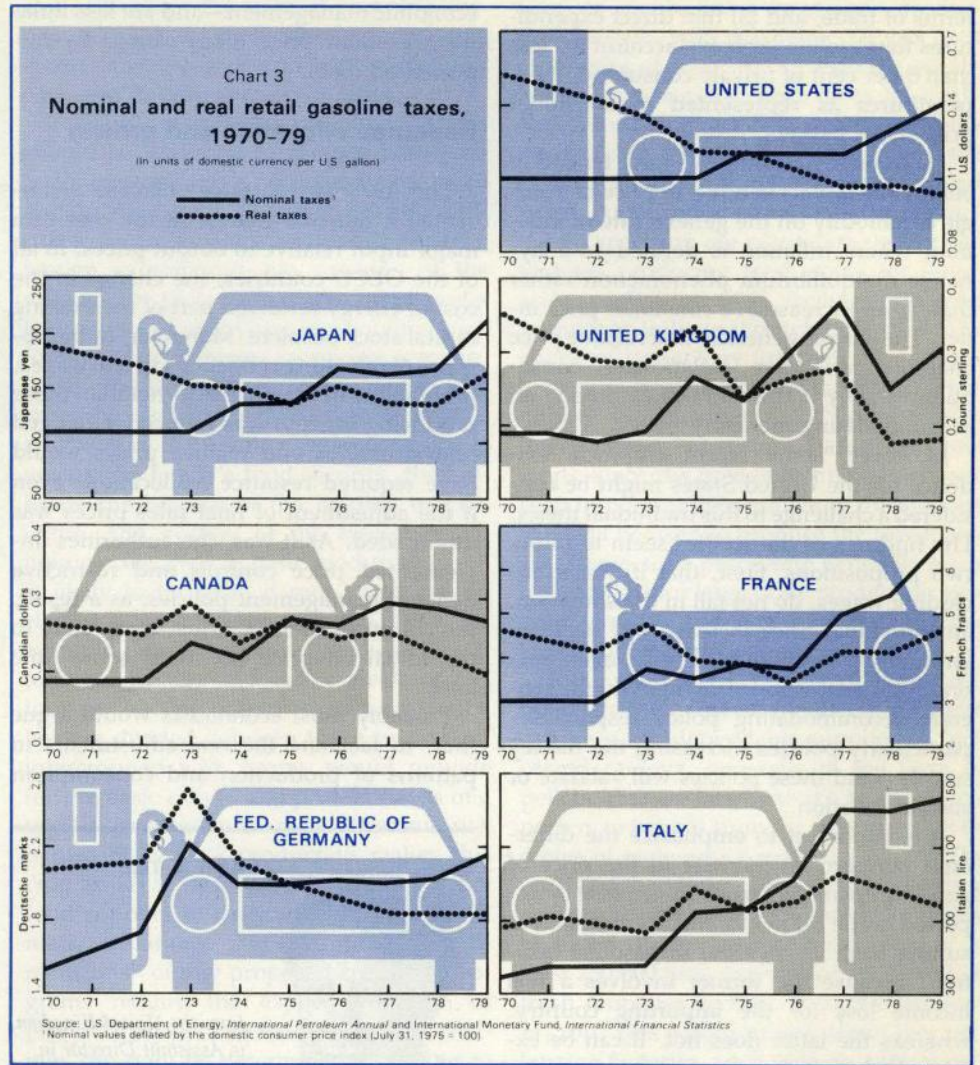
els, except in Italy and the United States. But the annual rate of increase in real gasoline prices, averaged over the seven countries for the period, was still only around 1.1 per cent up to 1978 and 2 per cent by 1979.

A major factor in this modest increase in real gasoline prices was that gasoline taxes were not adjusted upward sufficiently to match the general rising price level over the period. Gasoline taxation rates declined sharply between 1970 and 1979 in all seven countries considered here, with almost all of this decline occurring immediately after the increases in world crude oil prices in early 1974. As the net-of-tax price of gasoline increased due to higher costs of imported crude oil, per gallon taxes in nominal terms were not increased sufficiently to maintain the existing tax rates. The real value of gasoline taxation per gallon also declined, although the decline was less dramatic. (The effective rate of tax is calculated as the value of the gasoline tax per gallon divided by the net-of-tax price per gallon (see Chart 3).) Italy was the only country in which the value of real taxes per gallon rose between 1970 and 1979. In the United States such taxes on a per gallon basis remained virtually fixed in nominal terms between 1970 and 1978.

### Why not more taxation?

Several reasons could be given for the fact that gasoline taxation has not been widely adopted as a policy instrument to conserve energy. In many countries there was skepticism regarding the effectiveness of, or the necessity for, higher gasoline taxation as a way of reducing demand for energy. Higher gasoline taxation, too, was viewed by some as inconsistent with other government objectives, including the control of inflation and an equitable distribution of income. It was also thought that higher gasoline taxation could induce further oil price increases by the major oil exporting nations.

How valid are these fears about the effects of gasoline taxation? Regarding the argument that large increases in gasoline taxation would not yield significant energy savings, several empirical studies, particularly within the United States, have attempted to determine the relationship between the consumption and the price of gasoline. The general conclusion appears to be that, while in the short run the price of gasoline does not affect demand much, it does have a significant impact in the long run. Thus, while the initial response to a 10 per cent increase in gasoline prices (whether due to higher crude oil prices or to higher taxes) might only lead to a 2-6



per cent decline in per capita gasoline consumption within the first year, it would ultimately cause a drop of about 7-14 per cent when all adjustments have been made. It appears that these estimates apply both to the United States and to Europe; but, given the large number of American "guzzlers" with heavy consumption, there is greater potential in the United States than in Europe for major savings by using smaller, more fuel-efficient cars.

This leads to perhaps the most interesting implication of these estimates, particularly for North America, that the largest reduction in gasoline consumption for any given increase in price would be made by increasing the efficiency of the stock of vehicles rather than by reducing substantially the number of miles driven. This conclusion tends to contradict the arguments that gasoline prices and taxes may distort existing economic activity (by reducing tourist trade, for instance, or discriminating against suburban and low-income residents). If, in the long run, the primary response to higher gasoline prices is increased vehicle efficiency, then it is unreasonable to expect that conservation policies working through

higher gasoline taxes will have detrimental effects in the long run on those sectors of the economy that appear to be hardest hit in the short run.

### Effects on inflation

The possibility that higher gasoline taxation will raise prices in general seems to have been a major preoccupation of the authorities. However, experience shows that higher gasoline taxation would have very modest direct effects on the overall price level. Even these direct effects can be offset by using part or all of the proceeds to reduce other indirect taxes. The indirect effects of higher gasoline taxes on prices would depend on the subsequent wage, price, and monetary adjustments, which are by no means automatic and some of which may be under the control of government.

In this context, three points need to be kept clearly in mind: (1) the distinction between individual price changes and the general rate of inflation; (2) the distinction between a price increase resulting from an increase in a domestic tax and one resulting from a deterioration in the country's

terms of trade; and (3) that direct expenditures for gasoline probably account for less than 5 per cent of private consumption expenditures as represented in consumer price index baskets.

Traditionally, economists have tended to belittle the impact of a rise in price of a single commodity on the general rate of inflation, where inflation is defined as a dynamic disequilibrium phenomenon rather than as an increase in a consumer price index. They argue generally that relative price changes can have inflationary consequences only if the authorities pursue an accommodating monetary policy.

However, some recent empirical evidence for the United States might be considered a challenge to this traditional thesis. The findings of the studies seem to imply two propositions. First, that if prices, including wages, do not fall in the short run, an individual price increase will result in an increase in the overall price level. Second, that relative price changes might generate accommodating policy responses—particularly policies increasing the money supply—and these policies will validate or sustain inflation.

It is important to emphasize the difference between an increase in the price of gasoline emanating from an increase in imported crude oil prices and an increase resulting from an increase in gasoline taxation, because the former involves a real income loss for the importing country, whereas the latter does not. It can be expected that economic agents, namely, households and companies, will react more strongly to resist an import price increase, and thus the pressure for an accommodating policy response—generating inflation—might be greater. (Even so, economic agents may also often react to higher gasoline taxation as if it, too, involved a real income loss, ignoring the cuts in other taxes, or the increases in government expenditure that the higher gasoline taxation makes possible.)

This point also raises another obvious distinction between the two situations. Higher gasoline taxation provides the government with the revenue to offset any direct impact on the overall price level and any deflationary impact on aggregate demand, for example, by reducing other indirect taxes. Clearly, increases in imported oil prices will have similar cost and demand effects without at the same time providing government with the resources to counteract this effect.

Thus, while the consumer may regard the source of an increase in gasoline prices as irrelevant, gasoline price increases caused by higher gasoline taxation pose considerably fewer difficulties for macro-

economic management—and are less inflationary—than price hikes caused by imported oil costs.

### Resource allocation and growth

The 1973–74 oil price increase represented a massive change in the cost of a major input relative to output prices. In all of the OECD countries, the change in the cost of energy rendered part of the existing capital stock obsolete. Moreover, in the absence of offsetting reductions in real wages, profitability of enterprises (other than those producing energy) was reduced. Changed cost structures and relative prices would have required resource reallocations even if the adjustment of final sales prices was unimpeded. As it was, the authorities implemented price controls and restrictive demand management policies; as a result, the countries did not adjust completely to the initial oil price rise until some time later.

Probably most economists would argue that, to facilitate the real adjustments in patterns of production and consumption

needed to offset the rise in oil prices, final sales prices should be allowed to adjust without delay. But it might also be argued that the implementation of new technologies takes time and that adaptations to changed relative prices should be made as far as possible without undue disruption. Specifically in the case of gasoline prices, motor vehicle technology cannot be retooled rapidly to produce a substantially more fuel-efficient fleet (though a European alternative technology exists for use in North America), nor can public transportation systems be rapidly changed or expanded. It takes time, for instance, to introduce an underground rail system to replace, even partially, existing motor transport. Required rundowns in certain industries—such as parts of the tourist service industry heavily dependent on private motoring—may occur more smoothly if achieved over a longer period. It can, therefore, be argued that if the relative magnitude of future oil prices can be predicted, appropriate resource reallocations can be made more smoothly. However, real increases beyond a certain magnitude will, in the short run, have no discernible impact on resource reallocation but will create undue disruption.

The growing use of adjustment assistance schemes in OECD countries aimed at smoothing the transfer of resources gives ample precedent for a similar approach—working through gasoline taxation—to be used in the case of gasoline. However, the actual experience with such schemes—often established in response to lower levels of protection and the presence of more competitive goods on domestic markets—also suggests caution in endorsing them. Recent OECD studies of such schemes concluded that they often tend to delay rather than facilitate adjustment. While this delay is in part attributable to avoidable defects in the design of particular schemes, there are more general shortcomings that are relevant to efforts to smooth the path toward higher gasoline prices. Specifically, if the “smoothing” is too tentative, it can readily degenerate into price changes so modest that they bear no relation to the magnitude of the required adjustment.

The experience of most OECD countries with gasoline prices seems to illustrate this problem. Substantial help for adjustment to higher prices might have been justified in the period immediately following the initial round of price rises when there existed reasonably widespread expectations that the new higher relative price of oil could not be sustained. But once it became clear that prices were not only going to remain at that level but were likely to increase in real terms, prompt structural ad-



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Photos by Joseph J. Diana for F&D

justment to the higher levels was clearly needed.

### Distribution of income

Governments usually want to ensure that, at least, the impact of higher taxes does not fall on the poorer groups of society. To the extent that higher gasoline prices were found to have this effect, governments may have been (and remain) reluctant to compound higher gasoline prices with additional taxation, even though energy conservation and additional public revenue would result.

Studies for the United States indicate that additional increases in gasoline prices and taxes will, in fact, inflict a greater relative expenditure-based burden on lower-income groups than on higher-income groups. However, it may not be possible to generalize these results to other OECD countries, since Canada and the United States may be the only economies in which automobile ownership is virtually universal. In fact, recent evidence suggests that even in these countries the impact of higher gasoline taxes on low-income families has been overstated.

In general, the progressivity-regressivity issue may not be important enough to override other policy objectives, such as the attainment of an efficient allocation of resources or a reduction in foreign oil imports.

But there are issues concerning horizontal equity that may be more difficult for the authorities to balance against the need to achieve such objectives as conserving energy. An increase in gasoline taxation may, for instance, cause a shift in residential property values so that suburban homeowners incur a capital loss and inner-city homeowners reap a capital gain. Other possible gains and losses may occur between industrial sectors as share values and incomes decline in such industries as tourism and automobile manufacturing. Because such gains and losses are likely to transcend income classes, so that intraclass variation is just as likely as interclass variation, the maintenance of horizontal equity may be more difficult than the maintenance of vertical equity during a transitional period of adjustment.

It should be noted, however, that the more certainty there is about the direction of changes in both oil prices and gasoline

taxes, the less serious such horizontal inequities are, if prices are permitted to adjust to reflect the likelihood of such changes. For instance, house prices in more remote suburban areas could be expected to fall relative to prices for housing within a short commuting distance; certainty about the direction and speed of oil price changes will enable housing price changes to adjust more quickly and efficiently.

In the discussion of appropriate gasoline pricing and tax policies, it is important to distinguish between distribution and allocation issues. The fact that a policy such as higher taxes on gasoline consumption carries with it possible adverse distributional impacts does not constitute a sufficient reason for discarding it. Adjustments in the general tax-transfer system may be a more appropriate means of maintaining equity than a complete abandonment of gasoline tax policies.

### BOP considerations

What is the impact of higher gasoline taxation on industrial competitiveness between various OECD countries? From the experience so far, it is difficult to accept that gasoline taxation could have an important impact on industrial competitiveness. The major reason why competitiveness could be affected is presumably that higher taxation would have a once-and-for-all impact on the price level, leading to wage, price, and monetary expansion. This has been discussed earlier. A second argument may be that higher gasoline taxation might induce an appreciation of the exchange rate, through its impact on oil imports and hence on the trade balance. However, lower oil imports are also likely to be associated with lower autonomous capital inflows; the possible impact on the exchange rate depends on the effects on the overall balance of payments (BOP) not merely on the trade balance.

Another mechanism linking gasoline taxation and external competitiveness derives from the impact of gasoline prices on tourism. However, to state the obvious, this argument is only valid to the extent that the gasoline price affects the total basket of goods and services tourists consume, not merely gasoline.


Thus, the major impacts of higher gasoline taxation on the BOP are probably the

longer-term influence on the cohesion of the Organization of Petroleum Exporting Countries (OPEC) and the minimization of risks of further large increases in the relative price of imported oil. These factors would appear to be far more important than the somewhat tenuous arguments outlined above.

### Possible OPEC reaction

Another explanation advanced for the apparent underutilization of gasoline taxation is the chance that higher gasoline taxation would induce retaliatory action by the oil exporting nations in the form of higher oil prices. According to this view, higher gasoline taxation would be viewed as an attempt by the consuming nations to gain a larger share of the value generated by a barrel of crude oil, and oil exporting nations would respond by restricting output and increasing prices to restore their pretax profit margins. This view assumes that the major oil exporting nations (1) can be regarded as a monopolist or tight cartel; (2) are not presently maximizing their profits; and (3) have the market power required to at least restore their profit margins when faced with increased gasoline taxation.

This retaliation argument, however, does not necessarily make a valid case against higher taxation. Indeed, one argument is that higher taxation by the oil consuming governments will eventually lead to a situation in which consuming governments would have the power to pre-empt most or all of the profit of the oil exporting countries. In practice, this is most unlikely; but if, on the other hand, gasoline taxes are actually reduced in real terms to partly offset the increase in crude oil prices, consuming nations are forgoing part of the market value of this commodity. They are transferring potential revenue to the producing countries (and relieving the gasoline consumer at the expense of other taxpayers), thus at the same time inducing domestic budgetary difficulties, worsening their BOP, and sacrificing the objective of a reduced dependence on oil imports.

The message for oil consuming countries may be to establish the upward trend of prices, in part, through recourse to taxation as an instrument both of conservation and of fiscal redistribution of the real costs of the higher oil prices among their local population. Cooperation between oil exporting and oil importing countries could result in more certainty about the timing and direction of oil price changes and could help control the adverse inflationary effects as well as the uncertainty experienced thus far in the adjustment of oil importing countries to high energy prices. 

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# Poverty and progress - choices for the developing world

Two different concepts of progress lie at the heart of much of the controversy about development strategy. One is based on the objective of catching up to the industrialized countries, the other on securing greater equity and reducing poverty. Comparative studies of the experience of countries with different policy approaches can help to shift this argument from the ideological to the empirical level. The author surveys some recent results of Bank research in this field and proposes a pragmatic approach to poverty alleviation.

## Hollis B. Chenery

Concepts of progress in most developing countries are heavily conditioned by their colonial past. Many of them express their objectives in terms of "catching up" with the advanced industrial societies and pattern their economies on this model. This tendency is reinforced by political objectives in countries that wish to acquire military power and influence.

One drawback to the emphasis on growth is that its benefits have usually been concentrated on the modern sectors of the economy, and increasing inequality of incomes has often led to political tensions. An alternative view of progress focuses more on achieving an equitable society and reducing poverty, with growth regarded as a necessary but by no means sufficient condition.

The postwar experience of relatively rapid growth in developing countries has provided a rich body of data on this set of relations that is only now being analyzed. Since there is relatively little established theory to guide this analysis, the collection of data and the formulation of hypotheses have gone hand in hand. Although substantial progress has been made in understanding the economic forces at work, the results to date are largely speculative and

fall considerably short of the needs of policymakers. This article explores some of the implications of the prevalent views of progress in developing countries in the light of the information available on the results.

## Concepts of progress

**Catching up.** The material success of the industrialized West has been a powerful incentive to the rest of the world to adopt elements of Western experience that are conducive to accelerated growth. The success of countries with different historical backgrounds and economic and political systems has served to reinforce this objective.

The concept of catching up with the industrial leaders is a product of the industrial revolution and its outward spread from Western Europe. This concept both provides a goal for social action and suggests a means by which this goal can be achieved. The technology and forms of economic organization created by the advanced Western countries have provided the means for accelerated growth for countries in all parts of the world. Nations following this model have differed primarily in their choice of the economic and social elements to be incorporated in their societies.

The prototype of a successful process of catching up is Japan, whose economic structure and income level in 1910 were not significantly different from those of the poor countries of today. Econometric estimates of the sources of Japanese growth



suggest that the process of borrowing technology from more advanced countries is now virtually completed and that Japan is likely to attain the income level of the United States by 1990 (Jorgensen and Nishimizu, 1978).

The Japanese example has had a powerful effect on Taiwan, Korea, Singapore, Thailand, and other countries of East Asia. All of these economies are now growing considerably faster than those of the advanced countries, and some may be able to complete the transformation from a state of underdevelopment to one of maturity in less than the 60 years taken by Japan.

Several of these East Asian countries provide modern approximations to the earlier idea of progress as a process in which "good things come in clusters" (Keohane, 1979). Unlike most developing countries, the benefits of growth have been widely distributed in Japan, Taiwan, Singapore, and Korea, and the incomes

*This article is adapted from a paper to appear in G. Almond, M. Chodorow, and R. Pearce (editors), Progress and Its Discontents, Stanford University Press.*

of the poor have grown almost as fast as those of the rich. Postwar governments have been growth minded and authoritarian but not very repressive, and these countries have ranked high on most indicators of social progress. In more typical cases growth has been achieved at the expense of increasing the concentration of wealth and income, however, and the poor have benefited much less.

**Equity.** Although the more equitable sharing of income features prominently among the political objectives of virtually all governments, it is taken much less seriously in practice than is the objective of rapid growth. Even though widespread government intervention in production and income distribution is justified largely on the grounds of reducing poverty, in fact most studies show that on balance the effects of government revenue collection and expenditure in developing countries favor the upper-income groups rather than the poor.

A few developing countries have, however, gone beyond the endorsement of equitable growth and have adopted policies designed to achieve it. Notable examples include the People's Republic of China, Cuba, India, Israel, Sri Lanka, Tanzania, and Yugoslavia. Although their social goals vary with the form and extent of government control of the economy, there is a common emphasis on providing a minimum level of income to the poorest groups. In the more extreme socialist formulations, greater equality is considered a goal in itself, even if it is achieved with an adverse impact on efficiency—that is, lowering the incomes of the rich rather than raising those of the poor.

A pioneering attempt to reconcile the objectives of growth and the alleviation of poverty in an operational framework was made in 1962 by the Perspective Planning Division of the Indian Planning Commission (Srinivasan and Bardhan, 1974). This approach was based on a formulation in which the rate of poverty reduction in India was determined by the growth of the national income, while the extent of redistribution considered feasible was based on the experience of other countries. This approach has been refined in the concept of "Redistribution with growth" (Ahluwalia and Chenery, 1974), which forms the basis of the comparative analysis in the following section. If the idea of a feasible limit to the redistribution that can be achieved with a given set of institutions is accepted, the conflict between growth and distribution is reduced.

A further refinement in the concept of poverty alleviation has been achieved by shifting from the use of income as a meas-

ure of poverty to physical estimates of the inputs required to achieve minimum standards of nutrition, health, shelter, education, and other essentials. These indicators of basic needs provide a way of evaluating the effectiveness of any set of policies designed to reduce poverty (Streeten, 1979). The "basic needs" approach focuses particularly on the distribution of education, health, and other public services as a necessary element of policies designed to raise productivity and to alleviate poverty. This is an area in which some of the more effective socialist societies, such as the People's Republic of China, showed marked improvement.

**Formulating social objectives.** The social goals of developing countries—and of international bodies representing them—tend to be stated in political terms that confuse ends and means and ignore the different dimensions of progress. For example, the goal of catching up with more advanced countries is a poor proxy for improving welfare because it often leads to emphasis on heavy industry and other policies that concentrate growth in the modern sectors of the economy. Similarly, many of the goals announced by international agencies, such as the attainment of given levels of nutrition, education, shelter, or industry, are misleading because they ignore the need to achieve a balance among the several dimensions of social progress.

The economist's answer to this problem is to replace a set of separate objectives by a social welfare function that defines the goal of a society in utilitarian terms as the increase in a weighted average of income or consumption of its members over time. Although the national income is one such average, the typical income distribution gives a weight of over 50 per cent to the rich (the top 20 per cent) and less than 5 per cent to the poor (the bottom 20 per cent). If the growth of aggregate national income is used as a goal, it therefore implies giving 10 to 20 times as much weight to a 1 per cent increase in the incomes of the rich as to a 1 per cent increase in those of the poor (Ahluwalia and Chenery, 1974).

In principle, any set of weights could be applied to the income or consumption of different groups to remedy this bias. One possibility is to give equal weight to a given percentage increase in the income of each member of society, which is the equivalent of weighting by the population in each group. A more extreme welfare function, which corresponds to the announced goals of a few socialist societies, concentrates entirely on raising the incomes of the poor and gives social value to increasing other incomes only to the extent that they contribute to this objective.

Although there is no scientific way to determine the appropriate welfare function for any given society, the concept is useful in bringing out potential conflicts in the idea of progress and in deriving alternative measures of performance. It will be used for this purpose in the following section.

### Experience with distribution

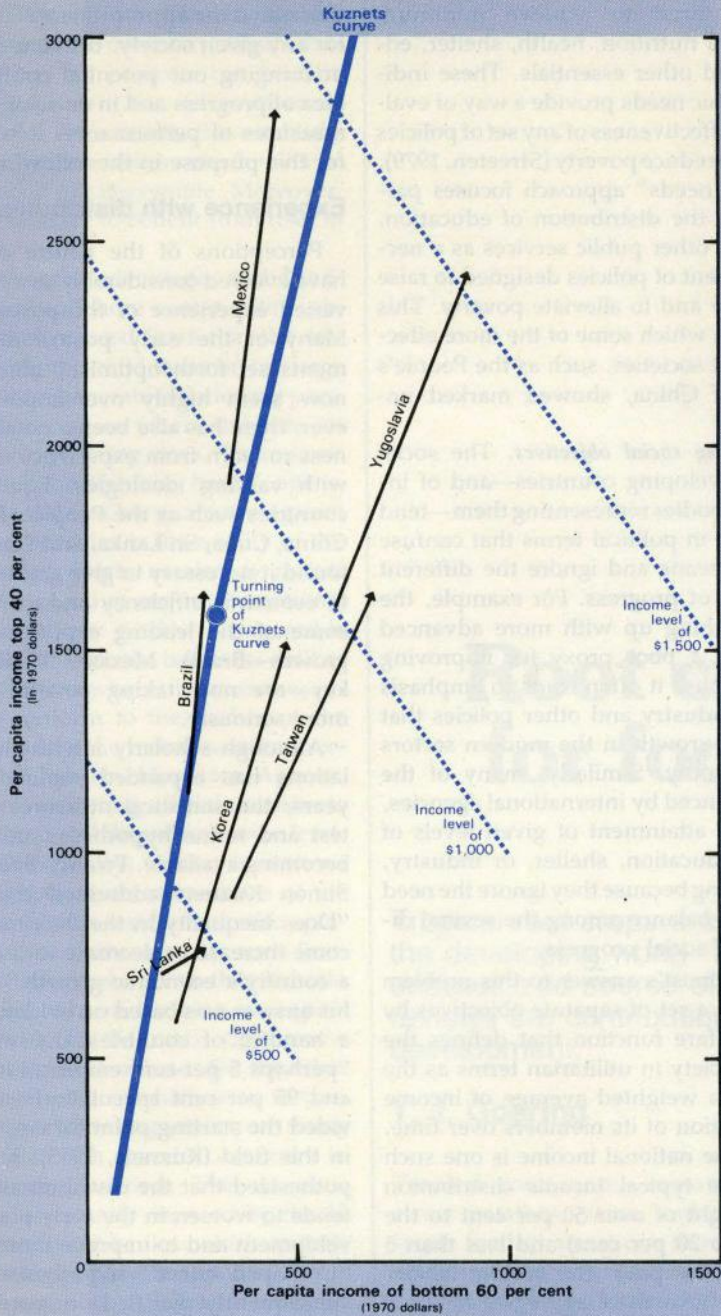
Perceptions of the nature of progress have evolved considerably as a result of the varied experience of the postwar period. Many of the early postcolonial governments set forth optimistic objectives that now seem highly oversimplified. However, there has also been a notable willingness to learn from experience in countries with varying ideologies. Equity-oriented countries such as the People's Republic of China, Cuba, Sri Lanka, and Tanzania have found it necessary to give greater attention to economic efficiency and growth, while some of the leading exponents of rapid growth—Brazil, Mexico, Thailand, Turkey—are now taking poverty alleviation more seriously.

Although scholarly interest in these relations has expanded rapidly in recent years, the statistical measures needed to test and refine hypotheses are only now becoming available. Twenty-five years ago, Simon Kuznets addressed the question: "Does inequality in the distribution of income increase or decrease in the course of a country's economic growth?" Although his answer was based on evidence for only a handful of countries and was labeled "perhaps 5 per cent empirical information and 95 per cent speculation," it has provided the starting point for empirical work in this field (Kuznets, 1955). Kuznets hypothesized that the distribution of income tends to worsen in the early phases of development and to improve thereafter. This "U-shaped curve" hypothesis has been subsequently verified in several cross-country studies based on samples of 50 or 60 developing countries (Ahluwalia, 1976).

There are several reasons for the earnings of middle-income and upper-income groups to rise more rapidly than those of the poor in the early stages of growth. Development involves a shift of population from the slow growing agricultural sector to the higher-income, more rapidly growing modern sector. In this process inequality is first accentuated by more rapid population growth in rural areas and ultimately reduced by rising wages produced by more rapid absorption of labor in the modern sector (Frank and Webb, 1977). The more capital-intensive type of development strategy followed by Mexico or Brazil absorbs less labor and produces greater concentration of income, while the more labor-



The Kuznets curve with country observations



Source: Ahluwalia, Carter, and Chenery (1979).  
 The units are 1970 U.S. dollars of constant purchasing power, which in the poorest countries are between 2.5 and 3 times the per capita income converted at official exchange rates.

intensive forms of Taiwan and Korea distribute the benefits of modernization more widely. A number of other factors, such as the greater demand for skilled than for unskilled labor and the concentration of public expenditure in urban areas, also contribute to growing inequality in many countries.

My present concern is with the broader aspects of the relations between growth and distribution. How universal is the tendency toward less equal distribution in developing countries? Does it lead to an absolute decline in welfare for some groups? What kinds of policies have served to offset

these tendencies? Is social conflict an inevitable concomitant of economic advance? Although none of these questions can be answered with great confidence, the average relationships and the variety of individual experience can be brought out by combining the available cross-country and time-series evidence for the postwar period.

The average relationship between rising income and its distribution is best shown by estimates of the Kuznets curve from data for all countries having comparable measures in some recent period (Ahluwalia, Carter, and Chenery, 1979). Although

the variation in income shares was computed separately for each quintile, the general phenomenon is depicted in the chart by considering only two groups: the rich (upper 40 per cent) and the poor (lower 60 per cent). As national income rises from the lowest observed level to that of the middle-income countries, the share received by the poor declines on average from 32 per cent to 23 per cent of the total. In a hypothetical country following this average relationship, 80 per cent of the increase in income would go to the top 40 per cent of recipients.

The relationship between the income growth of different groups and that of the whole society can be brought out more clearly by expressing it in terms of the per capita income of each group. This is done in the chart, which plots the per capita income of the poor against that of the rich. Since the income level "Y" of the society is a weighted average of the two groups "a and b" ( $Y = .4Y_a + .6Y_b$ ), the downward sloping straight lines define given levels of per capita income. Points on these lines indicate different distributions, and a growth process with a constant distribution is represented by a straight line through the origin, as in the case of Yugoslavia. A line deviating toward the vertical axis indicates growing inequality, as in the case of Mexico or Brazil. Growing equality is shown by Sri Lanka and Taiwan.

The Kuznets curve shown in this chart consists of two segments: a phase of worsening distribution up to an income level of about \$800 (of constant purchasing power) and a phase of improving distribution thereafter. In the first phase the per capita income of the rich grows from about \$300 to \$1,600 while that of the poor increases from about \$100 to \$300. For the poorest 20 per cent, the rate of growth is considerably less. Since an increase in national income of this magnitude may take 40 or 50 years even with the relatively rapid growth rates recently experienced in developing countries, in the typical country the very poor cannot look forward to an annual increase of much more than 1 per cent—even though the economy is growing at two or three times that rate. Furthermore, there is nothing automatic about the improvement in distribution above \$800, as shown by Mexico and Brazil.

**Tradeoff between growth, equity.** Although acceptable time-series data are only available for a dozen or so countries, they indicate a considerable variation around this average relation. The table gives selected measures of overall growth and of the share going to the lower 60 per cent for countries having observations for a decade or more.

## Changes in income and its distribution

Country	Income level <sup>1</sup>				Distribution			Growth rates		
	Initial year	Increments			Percentage share of bottom 60 per cent			(In per cent)		
		Total	Top 40 per cent	Bottom 60 per cent	Initial year	Final year	Increase incremental	Total	Bottom 60 per cent	Ratio of bottom 60 per cent to total
<b>Good performers</b>										
Taiwan (1964-74)	562	508	758	341	36.9	38.5	39.5	6.6	7.1	1.1
Yugoslavia (1963-73)	1,003	518	822	316	35.7	36.0	36.5	4.2	4.3	1.0
Sri Lanka (1963-73)	388	84	58	101	27.4	35.4	51.3	2.0	4.6	2.3
Korea (1965-76)	362	540	938	275	34.9	32.3	31.1	8.7	7.9	0.9
Costa Rica (1961-71)	825	311	459	212	23.7	28.4	33.6	3.2	5.1	1.6
<b>Intermediate performers</b>										
India (1954-64)	226	58	113	21	31.0	29.2	25.8	2.3	1.6	0.7
Philippines (1961-71)	336	83	155	35	24.7	24.8	25.0	2.2	2.3	1.0
Turkey (1963-73)	566	243	417	128	20.8	24.0	27.9	3.6	5.1	1.4
Colombia (1964-74)	648	232	422	106	19.0	21.2	24.0	3.1	4.3	1.4
<b>Poor performers</b>										
Brazil (1960-70)	615	214	490	31	24.8	20.6	15.5	3.1	1.2	0.4
Mexico (1963-75)	974	446	944	114	21.7	19.7	18.0	3.2	2.4	0.8
Peru (1961-71)	834	212	435	63	17.9	17.9	17.9	2.3	2.3	1.0

Source: Ahluwalia, Carter, and Chenery (1979), Table 5.

<sup>1</sup> Measured by per capita income expressed in 1970 U.S. dollars of constant purchasing power.

They are divided into three groups according to the share of the increment in income going to the poor. The five good performers show over 30 per cent of the increment going to the bottom 60 per cent, while the three poor performers show less than 20 per cent. Whether distribution is getting

better or worse is indicated by comparing these increments to the initial distribution and by the ratio of the growth of the per capita income of the poor to the national average in the last column.

This information, together with less complete data on other countries, provides a basis for describing the following patterns of growth and distribution observed in the developing world:

- *Growth-oriented pattern*, illustrated by Brazil and Mexico.
- *Equity-oriented, low growth*, illustrated by Sri Lanka.
- *Rapid growth with equity*, illustrated by Taiwan, Yugoslavia, and Korea.

These cases illustrate the main types of deviation from the average pattern that can be observed in the 12 countries of the table; India, Turkey, the Philippines, and Colombia follow the average relations of the Kuznets curve.

These examples suggest the following observations on the relationship between income growth and social welfare in developing countries. First, a small group of countries has achieved rapid growth with considerable equity. In addition to Taiwan, Korea, and Yugoslavia, this group includes Israel, Singapore, and perhaps the People's Republic of China. The policies underlying this successful performance vary from primary reliance on market forces in Taiwan, Korea, and Singapore to substantial income transfers and other forms of intervention in Yugoslavia and Israel. Second, substantial

tradeoffs between growth and equity are illustrated by the other cases. Although Sri Lanka has grown much less rapidly than Mexico or Brazil, the poor have done considerably better in the former case. Cuba presents an even more extreme trade-off, since the welfare of the poor has risen despite a continuous fall in the nation's per capita income since 1960 (Seers, 1974).

Only in the few cases where economic growth has been both rapid and fairly equitably distributed is it possible to make unambiguous comparisons among countries—or among different development strategies for a single country. In other cases it is necessary to define some properties of a social welfare function to make such comparisons. To take two extreme cases from the table, the incomes of the poor have grown nearly four times as fast over a decade in Sri Lanka as in Brazil, while the opposite is true of the incomes of the rich. Since the latter receive greater weight in the national income, per capita income has grown 50 per cent faster in Brazil; conversely a population-weighted index of welfare increases 50 per cent faster for Sri Lanka. Even this limited sample therefore demonstrates that judgments about economic progress cannot be separated from social and ethical postulates.

### Reducing world poverty

Attempts to extend the concept of material progress to a global scale run up against more acute problems of equity than the national issues described above. Although most governments recognize their national

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Giuseppe Franchini for F&D

income as one dimension of national welfare, no one has suggested that global income has much relevance to an assessment of global welfare. Instead political and economic efforts of international institutions are increasingly focused on the reduction of poverty and other aspects of equity as objectives that command the support of people of widely varying political views.

In recent years considerable efforts have been made to establish measures of poverty based on standards of nutrition, health, shelter, education, and other essentials. Conservative estimates set the proportion of the world's population that falls below a poverty line based on such minimum standards at between 20 and 25 per cent. Although this proportion has declined somewhat in the past 30 years, the overall increase in the world's population has meant that the absolute number of people below this poverty line has continued to grow and is currently of the order of 800 million.

In technical terms the reduction or even elimination of world poverty seems deceptively easy. If resources could be shifted to satisfying the needs of poverty groups efficiently, it would only require a reallocation of 2 to 3 per cent of the world's output per annum from 1980 onward to meet the identifiable costs of eliminating poverty by the year 2000 (Streeten and Burki, 1978). Since three fourths of the world's poor live in very poor countries, however, the annual cost of eliminating poverty in these countries is more meaningfully stated as equal to about 15 per cent of their gross national product (GNP), even if expenditures could be designed to serve only the target groups. In the light of the distributional experience outlined in the previous section, the problem is seen to be vastly more difficult.

Some of the principal constraints to a more realistic attempt to reduce global poverty include:

(1) The multiple objectives of nation states, among which the alleviation of poverty is usually subordinated to a variety of nationalistic goals.

(2) The limited scope for resource transfers in the existing international economic order. Official development assistance from the industrialized countries has declined from 0.50 per cent of their GNP in 1960 to 0.35 per cent or less since 1970. Transfers from the Organization of Petroleum Exporting Countries (OPEC), while substantial, do not offset the negative effects of higher oil prices on the growth of the oil importing developing countries.

(3) Rapid growth of population, which will double in the next 35 years even though the rate has started to decline.

What are the possibilities of more rapid progress in the face of these and other constraints? In an attempt to compare approaches to poverty alleviation, Ahluwalia, Carter, and Chenery have simulated income growth and the numbers of absolute poor over the next 20 years for a large sample of developing countries (Ahluwalia, Carter, and Chenery, 1979, Tables 3 and 9). If the trends of the past 20 years—a period of relatively rapid growth of income—continue, the number of absolute poor in 2000 would be at about the same level as in 1960. This represents rapid progress in one sense, since the proportion of the poor would fall from 50 per cent to 20 per cent of the population of developing countries. However, since this result would be achieved only by a reduction in absolute poverty in middle-income countries that offsets the rising numbers in the very poor countries, it is not a long-term solution.

The reduction in poverty will have to come from one of three sources: improved distribution, accelerated growth, or a more rapid decline in population growth. Improved distribution is particularly important in many middle-income countries, such as those in Latin America (where income is quite unequally distributed), but some acceleration of growth is essential in the poor countries of Africa and South Asia. Although there are some short-term tradeoffs between growth and distribution, in the longer term it is more likely that all three types of policy will be mutually reinforcing. Even within restrictive limits to capital transfers, the industrial countries can considerably improve the outcome by giving greater priority to poverty alleviation in allocating aid among countries (Edelman and Chenery, 1977).

These projections lead to the conclusion that although the elimination of poverty is much more difficult than is sometimes suggested, it remains a plausible goal for international policy. One of the principal means to this end would be accomplished if the tendency of the poor to lag behind the higher-income groups in the process of development could be eliminated. There is increasing acceptance of the idea that international efforts should be more directly focused on reducing poverty in order to offset this tendency of the international system. Enough examples of how this result can be accomplished have been cited in economic systems ranging from socialist to free enterprise to suggest that it is a feasible objective.

This conclusion leaves several fundamental issues unresolved. To what extent should poverty alleviation replace the principle of self-help as a guide to international action? To achieve this objective, will

it not be necessary to establish enforceable standards of performance to assure that the benefits actually reach the poverty groups? The new emphasis on poverty alleviation does not resolve these old dilemmas in the field of international economic cooperation. It may even accentuate them.



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# Is there a tradeoff between growth and basic needs?

It is often argued that policies aimed at providing the poor and neglected with basic goods and services imply a sacrifice of productive investments and economic growth. The author reviews theoretical and empirical arguments on the issue and uses evidence from 83 developing countries to indicate that providing for basic needs can improve growth performance.

## Norman L. Hicks

While the developing countries have had substantial increases in output during the past 25 years, it has been widely recognized that this growth has often failed to reduce the level of poverty in their countries. Various alternatives have been proposed to redress this problem—including strategies aimed at increasing employment, at developing rural areas, at redistributing the benefits of growth in favor of low income groups, and at meeting the basic needs of the poor. An approach that concentrates on meeting basic needs emphasizes improvements in health, nutrition, and basic education—especially through improved and redirected public services, such as rural water supplies, sanitation facilities, and primary schools. It has been argued that the direct provision of such goods and services affects poverty more immediately than those approaches that rely on raising the incomes and the productivity of the poor (see Paul Stree-

ten's article, "From growth to basic needs," in the September 1979 issue of *Finance & Development*).

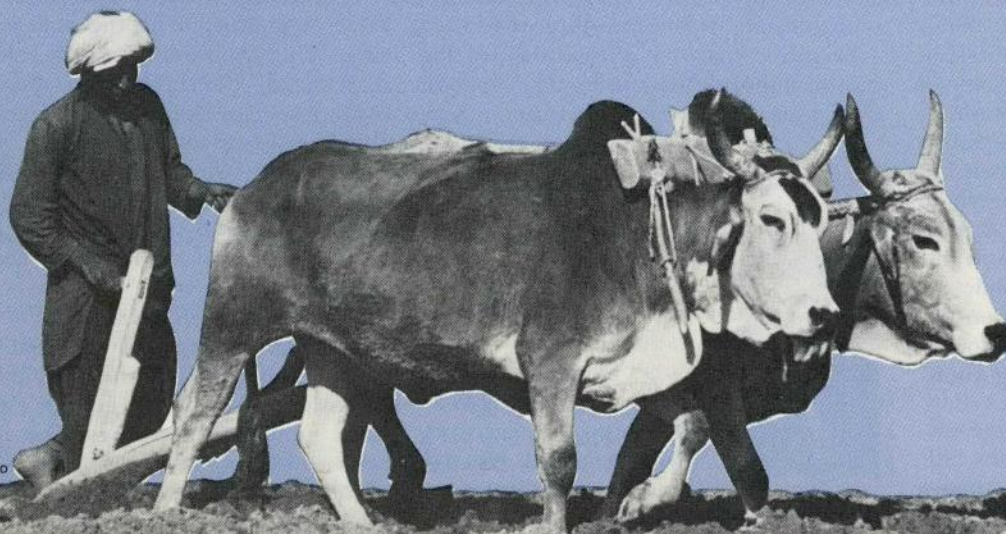
The critical question for the individual country is: will the provision of basic goods and services slow down a country's growth rate? In other words, is there a tradeoff between growth and basic needs? From a theoretical standpoint there may be no necessary reason for such a tradeoff; but the evidence is not conclusive. Countries which have emphasized basic needs, such as Burma, Cuba, Sri Lanka, and Tanzania, may be seen to have done so at the cost of lower growth rates of output. On the other hand, one can point to countries such as Taiwan, Korea, and Singapore, which have both grown relatively rapidly and made commendable progress in providing social services, reducing poverty, and improving the distribution of income. The issue is complicated by the many factors which affect growth other than the elements em-

phasized in theory: that is, the allocations of national resources between savings and consumption or between social services and other "productive" sectors. The true impact of an investment program oriented toward basic needs thus becomes very difficult to evaluate.

### The debate

Proponents of a basic needs approach argue that the direct provision of essential goods and services is a more efficient and more rapid way of eliminating poverty than an approach based on hopes that the benefits of increased national growth will eventually reach the poor. While supporting efforts to raise productivity and income, they emphasize that these alone may be neither sufficient nor efficient. Their case rests on their experience that:

- the poor tend not to spend incremental income wisely or efficiently, since they may not be good managers or are not suffi-



World Bank photo

ciently knowledgeable about health and nutrition;

- there is serious maldistribution of incomes within households which cannot be overcome by raising family incomes but which can be corrected by the direct provision of goods and services to the neglected members;
- some basic needs—such as water supplies and sanitation—can only be met efficiently through public services; and
- it is difficult to formulate policies or investment strategies to increase the productivity of all of the poor in a uniform way.

The argument against directly providing for basic needs is based on two main contentions. First, transfers of essential goods and services result in increasing the consumption level of the poor at the cost of eventually reducing the net level of investment and saving in the economy and therefore the welfare of everybody. Second, the poor would be better provided for in the long run through the higher incomes realized by greater overall investment under a more conventional, growth-oriented development strategy. Meeting basic needs is seen as a strategy providing for a temporary consumption transfer to the poor, and not as a transfer of capital resources that would result in a permanent improvement in their condition.

The concept that basic needs can be better met in the long run through increased output appears faulty for two important reasons. First, the basic needs of the poor can be met in ways that have little or no direct effect on national levels of investment and growth—by reducing the consumption expenditures on nonessentials of the poor and the rich or by redirecting the expenditures of the public sector from nonbasic to basic needs activities. Second, it seems quite likely that expenditures on basic needs improve the productivity of human resources, and can therefore be considered a form of long-term investment in human capital. The question then becomes one of identifying the degree to which expenditures on basic needs actually result in permanent improvements in human capital, and whether economic returns to this form of human investment are higher than those from other kinds of investments available to developing countries.

### Conflicting evidence

There is a considerable body of literature which attempts to identify the economic returns from improvements in human capital. In developed countries, considerable attention has been given to the concept of "growth accounting." In this approach, the growth of total output (measured by

gross national product (GNP)) is broken down into components relating to the growth of factor inputs (land, labor, and capital) and an unexplained "residual" which captures productivity changes of an unidentified origin. While the earliest efforts in growth accounting can be traced back to George Stigler (1947), the definitive work remains that of Edward Denison (1967, 1974, 1979).

Denison's latest estimates show that less than 60 per cent of the growth in GNP in the United States can be attributed to the increase in traditional factor inputs—labor and capital primarily—while the remainder is the result of economies of scale, improvements in resource allocation, and a large residual attributed to human capital, which is labeled "advances in knowledge." Education is considered by Denison to be a factor input which alone accounts for 14 per cent of the growth of GNP between 1929 and 1976. If education is combined with the residual advances in knowledge, then the contribution of human capital to growth would be about 38 per cent. Attempts to apply the same technique to developing countries (Krueger, 1968) tend to show similar results.

There is some question, however, whether the residual can be attributed to improvements in the stock of human capital. It could represent errors in the calculations of other variables, the omission of other important factors, or simply a faulty assumption about the nature of the underlying production function. While growth accounting attributes an important role to human capital in explaining growth, it does not necessarily *prove* that human capital is important. Thus it is not a completely reliable way to measure the contribution of human capital to the growth process.

An alternative way of assessing the impact of improvements in human capital is to measure the rate of return from educa-

tion. This can be done by estimating the lifetime earnings of people with various levels of education, compared to the private and social costs of education, which include earnings forgone while at school. In general, these kinds of studies have found high rates of return from investment in education particularly from primary education in developing countries. A survey of 17 developing countries by Psacharopoulos (1973) found an average return of 25 per cent for primary education. These returns range, however, from a low of 6.6 per cent (Singapore, 1966) to a high of 82 per cent (Venezuela, 1957).

There are considerable conceptual difficulties in measuring such rates of return on investments in human capital. The returns may be overstated because they capture the "screening" effect of higher education, which means that more highly educated people receive better paying jobs regardless of any true differentials in productivity. The high unemployment rate often found among highly educated people in some developing countries suggests that investments in education may not always raise productivity, particularly in those countries already possessing a large supply of educated persons. Several studies have questioned the utility of education investments in development. For instance, Correa (1970) found in a study of a group of Latin American countries that while health and nutrition were very important factors in GNP, improvements in education appeared to have no impact at all. Nadiri (1972) concluded from a survey of the published literature that education was not very useful in explaining differences in growth rates between developing countries, although it did seem to explain variations in productivity within countries over time. Thus, the evidence on the role of human capital, particularly education, in affecting the growth of output in developing countries is not definitive or measurable. Furthermore, the concept of human capital improvements covers areas (higher education is an example), which are not considered to be as relevant to a basic needs approach, and vice versa.

Another way of measuring the importance of human capital is to look at the statistical correlations between the provision of basic needs and the growth rates in a large number of countries. The problem with simple correlations is that they cannot identify the links between basic needs that have been met and growth. Better provision of basic goods and services is just as likely to be a result of higher incomes, as its cause. At the same time, growth in income is clearly going to be affected by factors other than those related to the provi-



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sion of basic needs. Thus, one has to isolate the meeting of basic needs from other factors which can be considered important determinants of growth, in order to avoid giving too much weight to the basic needs variables.

### Measurement problems

We have no easy measure, however, of progress in meeting basic needs. A variety of social indicators can be used, but using them often presents conceptual problems. Some indicators reflect results, while others—such as population per doctor and school enrollments—measure inputs. Some indicators measure the average level of social progress for the whole society, while others are based on a “have, have-not” principle. Thus, the percentage of households with access to clean water can accurately capture the numbers without such service. By contrast, an average of the calories consumed per capita as per cent of requirements is quite misleading, since it combines the overconsumption of the rich and the underconsumption of the poor. Likewise, figures on average life expectancy, or average infant mortality, do not give us any idea of the range between the rich and the poor. Two countries with identical average statistics for infant mortality, for instance, could have quite different infant mortality rates for their least favored groups. It would be more useful if social indicators provided data separately for different income groups within a population. There is no reason why we could not construct distribution statistics for social indicators similar to our measures of income distribution.

Until better indicators are produced, however, we are forced to use what we have readily available. It seems appropriate to use life expectancy at birth as one crude measure of the effectiveness of a country's success in providing for basic needs. This single measure can encompass the combined effects on mortality of health care, clean water, nutrition, and sanitation improvements, although it is admittedly an average of country experience with no feel for how well these have been provided for different groups within the population. Progress in meeting needs for primary education can be measured by adult literacy—a better indicator than primary school enrollment, since it is oriented toward effects rather than efforts. These two indicators—life expectancy and adult literacy—give crude but fairly useful measures of progress in meeting basic needs. Both indicators are generally available for most developing countries on a fairly reliable basis, which is not true for some alternative measures, such as infant mortality.

Table 1  
Economic growth, life expectancy, and literacy for selected countries

Country	Growth rate 1960-77 <sup>1</sup> (In per cent)	Life expectancy 1960 (In years)	Deviation from expected levels of life expectancy <sup>2</sup>	Adult literacy 1960 (In per cent)	Deviation from expected levels of literacy, 1960 <sup>3</sup>
Singapore	7.7	64.0	3.1	—	—
Korea	7.6	54.0	11.1	71.0	43.6
Taiwan	6.5	64.0	15.5	54.0	14.2
Hong Kong	6.3	65.0	6.5	70.0	6.4
Greece	6.1	68.0	5.7	81.0	7.5
Portugal	5.7	62.0	4.7	62.0	1.7
Spain	5.3	68.0	1.8	87.0	1.2
Yugoslavia	5.2	62.0	4.7	77.0	16.7
Brazil	4.9	57.0	3.0	61.0	8.6
Israel	4.6	69.0	2.0	—	—
Thailand	4.5	51.0	9.5	68.0	43.5
Tunisia	4.3	48.0	-0.5	16.0	-23.8
<i>Average top 12 countries</i>	5.7	61.0	5.6	64.7	12.0
<i>Average—all countries<sup>4</sup></i>	2.4	48.0	-0	37.6	-0

Source: World Bank, *World Development Indicators*, 1979.

<sup>1</sup> Growth rate of real per capita GNP.

<sup>2</sup> Deviations from estimated values derived from an equation where life expectancy in 1960 (LE) is related to per capita income in 1960 (Y) in the following way:  $LE = 34.29 + .07679 Y - .000043 Y^2$  ( $R^2 = .66$ ).

<sup>3</sup> Deviations from estimated values derived from an equation where literacy in 1960 (LIT) is related to per capita income in 1967 (Y) in the following way:  $LIT = 9.23 + .1595 Y - .0000658 Y^2$  ( $R^2 = .44$ ).

<sup>4</sup> Data for average growth rates and life expectancy refer to a sample of 83 countries, while that for literacy covers 63 countries.

But even if we use these selected social indicators to measure progress in meeting basic needs, the problem of identifying causality remains. Is the progress in meeting basic needs shown by these indicators a result of growth in output, or is it one of the causes? One way to overcome this problem is to look at the data for growth rates of different countries compared to the levels of basic needs at the beginning of a particular period. If past achievements in meeting basic needs now require high levels of consumption expenditures, the data then should show that good basic needs performance has been associated with low growth. On the other hand, if provision of basic needs leads to an improvement in people's productivity, the indicators should show that basic needs are related to higher growth.

### Comparative evidence

The simplest way of identifying the relationship between the provision of basic needs and growth is to examine the record of countries that have grown very rapidly in the past and to compare their basic needs performance—measured by life expectancy and adult literacy—with that of the average country. Table 1 presents data for the 12 fastest growing countries between 1960 and 1977 (excluding the oil exporting countries and those with populations of under one million). The average per capita growth rate of these countries—5.7 per cent per

annum—was substantially higher than the average of all 83 countries in our sample. Further, the populations of this group of countries clearly had above-average life expectancy at the beginning of this period: 61 years, compared with an overall average of 48 years in all 83 countries.

This would seem to demonstrate that improving the provision of basic needs can augment the rate of growth. While this may be true, the data in the table contain a considerable bias. The countries that grew the fastest in the 1960-77 period were also countries which already had above-average levels of income. Since levels of income and life expectancy tend to be closely (but not perfectly) correlated, it is not surprising to find that the statistics for our 12 countries show above-average life expectancy.

To overcome this bias, an equation was established to relate life expectancy to income and to establish the “expected” level of life expectancy for every country. Better than normal performance on life expectancy could then be measured by the deviation between the actual and the expected levels. In a sense, this formula adjusts the level of life expectancy for the level of income. These deviations are shown in the third column of Table 1. The 12 countries in the sample have life expectancies that are, on average, 5.6 years higher than what normally would have been expected on the basis of their relative income level. Con-

sequently, there does seem to be a positive association between life expectancy and growth, even when allowing for the fact that some of the more rapidly growing countries are also those at more advanced stages of development.

Adult literacy is another useful measure of a basic needs performance. Table 1 shows that in the rapidly growing countries, about 65 per cent of adults were literate in 1960, compared with about 38 per cent for the sample of 63 countries. Even when adjusted for income differences, literacy levels in the rapidly growing countries were about 12 percentage points higher than in the other countries at the beginning of the period.

**Table 2**  
**Growth and life expectancy, selected countries**

Country	Deviation from expected level of life expectancy (In years)	Growth rate, 1960-77 (In per cent)
Sri Lanka	22.5	1.9
Taiwan	15.5	6.5
Korea	11.1	7.6
Thailand	9.5	4.5
Malaysia	7.3	4.0
Paraguay	6.9	2.4
Philippines	6.8	2.1
Hong Kong	6.5	6.3
Panama	6.1	3.7
Burma	6.0	0.9
Greece	5.7	6.1
Kenya	5.5	2.4
<i>Average, 12 countries</i>	9.1	4.0
<i>Average, all countries</i>	0	2.4

Source: World Bank, *World Development Indicators*, 1979.  
Note: For explanation of variables, see Table 1.

The preceding analysis suggests that meeting basic needs may contribute significantly to growth, but it does not prove that the approach is a sufficient condition for high growth. In Table 2, we turn the question around and look at the 12 countries that have the highest deviation from expected levels of life expectancy. Many of the same countries shown in Table 1 appear here, namely, Taiwan, Korea, Thailand, Hong Kong, and Greece. In addition, there are a number of other countries which have done well in terms of life expectancy but have not had exceptionally high growth rates during the period, such as Sri Lanka, Paraguay, the Philippines, Burma, and Kenya. Nevertheless, the average growth rate for this sec-

ond group of 12 countries—4.0 per cent per annum—is still considerably higher than the average for the larger group.

One might argue, however, that the simple statistical analysis presented here is inadequate for drawing firm conclusions. The growth performance of countries is dependent on a variety of factors, such as the level of investment, export earnings and capital flows, and the general nature of development policies pursued.

The influence of these factors, as well as the emphasis on basic needs, can be combined and analyzed using multiple regression techniques on the cross-country data. This has been done for the period 1960-73 (see Hicks, 1979), regressing the growth rate of per capita GNP on the investment rate, the growth rate of imports, and the levels of either literacy or life expectancy in 1960. (The growth rate of imports combines the effects of export growth and capital flows.) This analysis concluded that the basic needs variables were significantly related to the growth rate, even after allowing for the influence of the other variables. It was found that countries which had life expectancies ten years higher than expected tended to have per capita growth rates 0.7 to 0.9 percentage points higher. Thus the more sophisticated techniques confirm the simpler ones shown here, which already concluded that those countries which do well in providing for basic needs tend to have better than average performance in terms of economic growth. This would also seem to suggest that a basic needs emphasis in development, far from reducing the rate of growth, can be instrumental in increasing it.

It would appear that economists who formerly focused on human capital may have concentrated too narrowly on one aspect of human capital, namely education. It seems possible that other aspects of a basic needs approach to development, which aim to improve the health and living conditions of the poor, should also be considered as building up a country's human capital. Exactly how health and related basic needs improvements help increase productivity and growth in the economy is difficult to pinpoint. The most obvious relationship is that healthy workers can produce more, work harder and longer, and so on. In addition, healthy students are apt to learn more. Improved health conditions reduce the waste of human and physical resources which results from the bearing and raising children who die before they reach productive ages. The prospect of a short life expectancy reduces the potential gain from long years of schooling. These kinds of gains in productivity from investments in health and education are now

being recognized as important as the returns from investments in the more standard forms of physical capital. In other words, investing in people may be a good way to both eliminate the worst aspects of poverty and to increase the growth rate of output.

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# Adjustment to the changing international structure of production

The industrialization of developing countries is transforming patterns of production and trade throughout the world. The authors outline the national and international policy implications embodied in these changes.

**Helen Hughes and Goran Ohlin**

The more rapidly industrializing developing countries began to compete noticeably with industrialized countries through trade in manufactured goods in the 1960s. During the decade, their exports of manufactures grew by about 15 per cent a year, and the number of developing countries exporting more than \$100 million worth of manufactured products annually grew from a handful to more than 30. The flow of private capital from industrial to developing countries also accelerated, and there was a movement of migrants in the other direction to meet the labor needs of industrialized countries.

However, the importance of the structural changes in international production, and of trade, capital, and labor movements, only came to the fore in the 1970s when the rise in the price of petroleum, and the prolonged recession and slowing down of growth in the industrialized countries made adjustment to changes in international trade more difficult. It then became more widely evident that a broad range of the manufactured goods produced in developing countries had become highly competitive in the markets in industrialized countries.

## **Benefits and costs of trade**

Participation in world trade in manufactured goods has great economic advantages, particularly for medium-size and

small countries. All countries need to trade to obtain resources they do not possess, and all but very large countries have to trade if they are to benefit from specialization, economies of scale, and competitiveness. The development needs of rapidly growing developing countries lead to a high propensity to import. They therefore need to export in order to pay for their rising imports. Provided that takes place at competitive market prices that reflect long-run cost, trade will in the long run benefit both exporting and importing countries.

Trade, capital, and labor movements among countries are both competitive and complementary. Direct foreign investment brings jobs to workers in developing countries, and trade can bring the finished products to the industrialized countries at low cost. Where local entrepreneurship and technical skills are available—and this is increasingly the case in industrializing developing countries—the capital can be borrowed from financial institutions. Technology and technical and management skills can then also be obtained separately if they

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are not available locally. Such a separation of the capital flows is increasingly preferred by developing countries because trade and banking flows are thought to have lower social and political costs than—and are therefore preferable to—the inflows of direct investment and labor.

But trade and capital flows, and the ensuing changes in the production structure, also have costs in industrialized countries. If the long-term benefits of trade and capital flows are to be reaped, there are short-term adjustment costs to be met.

Entrepreneurs, capital, and labor have to shift out of declining and uncompetitive industries into competitive and rapidly growing ones. Such shifts are typical of the manufacturing sector, where they tend to occur more frequently and more rapidly than in other sectors. Changes within manufacturing follow from technological change, market saturation, and variations in taste, market structure, and trade patterns. The shifting structure of manufacturing is responsive to relatively wide variations in demand for manufactured products, and it contributes to the wide variations in the supply of manufactured goods. These characteristics make manufacturing in some ways the riskiest or at least the most dynamic of the production sectors, thus making entrepreneurship an important factor of production. The ebb and flow of industrial production has institutional implications for capital markets, industrial organization, employment, and trade unions. It is sometimes accompanied and sometimes caused by population movements and other geographic shifts. Where industries are particularly concentrated geographically, or where the workers affected are at a disadvantage (because they are overspecialized, for instance), mobility is difficult even in high-income countries with full employment.

The faster the rate of an economy's growth, the more rapid, and the easier, are adjustments likely to be. Entrepreneurs and workers are more easily absorbed in new activities, while relatively high profitability and capital accumulation make up for premature obsolescence of capital equipment. Workers and entrepreneurs are more willing to take risks in periods of economic growth than in periods of stagnation and high unemployment.

The market-economy industrialized countries thus made very considerable structural adjustments in the 1950s, 1960s, and early 1970s without major problems. In marked contrast, the recession of the mid-1970s saw an increased attention to adjustment difficulties with a concomitant growth of protectionist sentiment. Some protectionist action through subsidies to

local production and nontariff barriers has followed, mostly directed against imports from other industrialized countries, but hurting some developing countries badly. Despite the fall in growth rates in the industrialized countries, their imports of manufactures from developing countries have continued to grow at more than 12 per cent a year since the mid-1970s—more than twice the rate of growth of imports of manufactures from other industrialized countries. This raised a new issue in protectionism against the manufactured exports of the developing world.

### The new protectionism

Protection against imports of manufactured goods from developing countries has some special features. In contrast to the strong liberalization trends of the 1950s and 1960s, even small volumes of exports of manufactures by developing countries became subject to protectionist action almost as soon as they entered industrialized country markets. Thus quotas were imposed on imports of clothing, textiles, and footwear, and tariffs were not reduced in line with other tariff reductions in multilateral trade negotiations.

Protectionism against developing countries' products tends to be particularly strong because the workers who are displaced by labor-intensive imports from de-

veloping countries tend to be the least trained and mobile. A high proportion are women with very restricted opportunities for moving into more skilled employment, and often with limited ability to move geographically because they are a family's second income earner. It is true that increased import opportunities open up new export markets, but semiskilled women textile workers cannot readily be transformed into electronics workers in another part of the country. Consumers are likely to benefit from a flexible and mobile manufacturing sector, but they are usually not well organized and to the extent that they are both workers and consumers, they consider that their jobs come first.

The impact of labor-intensive exports from developing countries has other characteristics relevant to the political economy of protectionism. Developing countries tend to come in at the bottom of the market with very low-cost products, reflecting their very low wages. Once production and marketing problems are overcome by developing country (or transnational corporation) entrepreneurs, their exports can be increased very rapidly because labor supplies are ample. Although the impact of exports on economic growth eventually increases per capita incomes and forces a move into other, less labor-intensive products, still other poor developing countries then come in, again with low costs and prices.

The impact of trade between the industrialized and developing countries is often different from that of trade among countries at similar levels of development as the effect on the importing country is generally industry-wide. Adjustment may be relatively easy within industry groups, such as metal working, which produce a very broad range of products using broadly similar skills. It can often be carried out within a transnational corporation. When an industry as a whole is being phased out, however, small, financially weak and less efficient firms either disappear or are absorbed by others. When the turn of the least efficient firms comes, political resistance to adjustment is usually very strong. Geographical concentration, defense arguments, and prolonged slow overall growth exacerbate the difficulties of adjustment, adding to the more conventional protectionist arguments.

While the increase of employment in developing countries that accompanies export growth is generally regarded as a strong welfare argument, the proportion of benefits accruing to the poorer groups in developing countries is becoming an issue. Manufacturers may cream off a large proportion of the benefits through profits, and such profits can be very high if the workers

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Table 1  
Distribution of world merchandise exports, 1960-77

(In per cent)

	1960	1970	1977	Real growth 1960-77
Industrial market economies	66.8	71.5	64.7	7.7
Developing market economies	19.9	15.4	18.9	5.8
Capital surplus petroleum exporters	1.6	2.5	6.8	9.0
Centrally planned economies	11.7	10.7	9.6	6.4
of which Asian <sup>1</sup>	(1.6)	(0.8)	(0.8)	(...)
Total	100.0	100.0	100.0	7.2
Value in billions of U.S. dollars	128.3	314.5	1,127.2	

Source: UNCTAD, 1979 Handbook of International Trade and Development Statistics.

... Indicates that data are not available.

<sup>1</sup> Including People's Republic of China.

are repressed. But even low-paid workers may be among the relatively high-income earners in developing countries, because employment in manufacturing is "elite" employment. Thus the transfer of incomes that occurs may be from the least privileged and lowest-paid workers in the industrialized countries to relatively highly paid workers in the developing countries. Again this is usually not a characteristic associated with trade among countries at similar levels of development.

### Adjustment policies

It is clearly not in the interest of the industrialized countries to cling to labor-intensive production when it is no longer economic. Some production of this type may be retained for minimal self-sufficiency, and some areas of production that are design-intensive or fashion-intensive retain their competitiveness in high-in-

come countries though they appear to be labor intensive.

However, it is in their interest for industrial countries to move out of uncompetitive production. This requires adjustment policies that include retraining facilities, relocation allowances, and, in some instances capital grants to firms and regions affected by industrial decline. But specific adjustment policies can only be palliatives. Trade policy is only part of overall macroeconomic policy and cannot substitute for manpower, monetary, and other macroeconomic policies. Countries need a commitment to full employment and growth in a meaningful sense if adjustment policies are to be able to play their transitional role.

The developing countries' domestic policies are also relevant to the ability of the industrialized countries to adjust to their growing imports. The case for limiting the rate of growth of labor-intensive exports

and diversifying the exports of manufactures is well understood in the more industrialized developing countries. To provide market access to new developing country exporters, and to ensure equity between exporters and importers, the characteristics and pace of trade expansion in sensitive products have become the subject of international negotiation.

Industrialized countries have recently taken further steps to reduce tariffs, and they have agreed on international action in the Tokyo Round of Multilateral Trade Negotiations. Their levels of protection are now far below those of most developing countries. It is now the developing countries' turn to review their trade policies to diversify their exports, and to trade more with each other. If such an expansion of trade takes place as a result of a reduction of barriers against all countries, the industrialized countries will be able to adjust more rapidly to growing imports from developing countries by exporting more.

The difficulties of adjustment to lower levels of protection in developing countries must not be underestimated. Developing countries do not have the social security cushions available to displaced workers in industrialized countries, and they are loath to abandon any investment already in place because of their scarcity of capital. However, it is likely that even substantial reductions in protection in the semi-industrialized developing countries would affect only a relatively small number of workers employed by marginal firms. The ensuing disruption therefore would not be as costly as is often feared, and the benefits would be rapid and substantial. Some of the semi-industrialized countries have therefore begun such restructuring unilaterally. Others, however, will require a great deal of encouragement and in some cases, balance of payments and long-term restructuring assistance to be able to do so.

### International trade issues

In international terms the costs of trade and other economic relations take the form of having to abide by the international rules of the game. Such rules are partly implicit and partly codified and institutionalized in such international institutions as the General Agreement on Tariffs and Trade (GATT) and the International Monetary Fund. These rules necessarily impinge on a country's sovereignty and limit its policy options in international relations and sometimes in related domestic policies. Nevertheless, participation is, on balance, worthwhile; in contrast to the colonial era, it is voluntary and by negotiation. Most centrally planned economies have not cho-

Table 2  
Merchandise exports of developing countries

(In per cent)

	Total exports			Share of world exports	
	Composition		Average annual growth rate	1960	1976
	1960	1976			
<b>Fuels and energy</b>	38	38	6.3	44	41
<b>Other primary products</b>	51	35	3.7	37	34
Food and beverages	34	22	3.5	40	35
Nonfood agricultural products	9	6	3.4	39	30
Mineral and nonferrous metals	8	7	4.7	29	33
<b>Manufactures</b>	11	27	12.7	6	10
Machinery and transport equipment	1	6	17.5	2	5
Other manufactures	10	21	11.8	9	14
Total	100	100	6.3	24	21

Source: World Bank data.

sen to join the international institutions, although they have developed their own in the Council for Mutual Economic Assistance. However, by and large they honor the principles implicit in international rules and seek the benefit of such explicit ones as most favored nation treatment in trade.

Developing countries have for the most part argued on grounds of poverty and protection of infant industry that they should have special privileges in international trade conventions. They have been exempted from GATT rules against export subsidies on nonprimary products, and have negotiated the Generalized System of Preferences with major industrialized countries to reduce the level of protection facing them. In the past, they attached little importance to international trade negotiations. They have benefited from the trade liberalization that took place, but they would have gained much more if they had actively participated.

The rapid industrialization of the more advanced countries suggests that a re-examination of the developing countries' trade negotiating postures is overdue. The value of the Generalized System of Preferences has been eroded by tariff reductions. It is, moreover, clear that industrialized countries are no longer willing to exempt the higher-income and more industrialized developing countries from countervailing action against export incentives.

The principle of reciprocity in international trade relations is not well understood. It appears on the surface to indicate that each participant in a negotiation will give up an apparent benefit, such as a high tariff, so that a partner country may do so too, in a process designed to reduce tariffs overall. But, given floating exchange rates, the participants in such negotiations know

that it would be in their interest to lower tariffs unilaterally, even without agreement by partner countries. They usually cannot do so because of the opposition of their own manufacturers who profit from existing protectionist measures. The principle of reciprocity was introduced into GATT negotiations to give the negotiators a weapon against such vested interests. The government can argue at home that only with reciprocity, and the concessions it makes, will domestic producers be able to obtain entry into other markets. The main value of reciprocity is thus to overcome local opposition. Many developing countries, recognizing the costs of high protectionism and export incentives, now face precisely the problem of overcoming the opposition of their own vested interests, just as the industrialized countries do. Engaging in international negotiations on a reciprocal basis can thus become as important a policy instrument for developing countries as it has been for industrialized countries in improving domestic productivity while seeking access to foreign markets.

Given the characteristics of labor-intensive exports from developing to industrialized countries, it seems likely that agreements governing the pace of market penetration into industrialized countries of these products will continue to be necessary to avoid even greater protection. The industrialized countries' concerns with equitable wages in export industries of developing countries are not simply, as is sometimes alleged, protectionism in disguise. They do not intend to impose unrealistic minimum wages and working conditions derived from practices in high-income countries that would cripple the developing countries' export capacity. Rather, they

propose to ensure that the gains from trade reach the poorer groups in developing countries. Developing countries will have to become increasingly involved in negotiations on such issues if they wish to influence their outcome.

The evolution of codes of conduct that have emerged from the Tokyo Round of trade negotiations to control nontariff trade barriers will be governed by the attitudes of the participants. The codes have the potential of reducing nontariff barriers against developing countries, but the potential will be fulfilled only if the developing countries participate as full members in the system that is being established by GATT. Similar initiatives are required in rules governing international transport and other trade-linked services.

Questions of equity among developing countries are becoming ever more sensitive in view of the range of income and industrial development between the nonindustrial and semi-industrialized countries. The Generalized System of Preferences were essentially product-oriented preferential programs, with country considerations brought in by quotas through the back door. With the Tokyo Round tariff reductions, these preferences will become of trivial value. An international graduation approach that would accord privileges among countries according to their level of income and industrial maturity is beginning to emerge. Privileges are likely to be phased out with rising levels of income and industrialization, or disappear altogether, as the rapidly industrializing countries merge into the industrialized countries' liberal trade community with all its obligations as well as its benefits. Preferential treatment is being given to the poorest countries which need it the most. **FD**



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# Pegging to a currency basket in a world of floating rates

In an attempt to minimize fluctuations in their exchange rates, many countries, particularly in the developing world, peg their exchange rates either to a single currency or to a basket of the currencies of their major trading partners. The authors discuss, and then test, a method of deriving an "optimal basket," based on relative price and exchange rate movements.

**Leslie Lipschitz and V. Sundararajan**

In a world of generalized floating exchange rates, many countries have sought to peg their currencies to some relatively stable standard. By December 31, 1979, 94 out of the 140 Fund members were classified as having pegged rates; of these, 60 were pegged to a single currency; the rest were pegged to a basket of currencies. In 14 cases, the basket chosen was the special drawing right (SDR) which consists of 16 currencies. In the case of the SDR, the currency composition of the basket is determined by the Fund, is widely known, and is not likely to be changed suddenly. Moreover, the value of the SDR against major currencies is calculated every day, and this information is readily available. The developing countries as a group have generally preferred some form of pegging arrangement, and an increasing number of them have abandoned single currency pegs and have fixed their exchange rates against currency baskets.

There are various reasons for countries to peg the value of their currencies to some standard. Exchange rates are determined in an asset market—a market for different monies—and even in a relatively stable world, asset market prices tend to fluctuate sharply. It is widely believed that real economic costs are associated with such fluctuations; they inhibit trade, harm domestic price stability, increase uncertainty, and serve generally to frustrate economic decision-making. If there is not much interna-

tional trading of a particular currency, so that occasional large transactions dominate the market, fluctuations of its exchange rate are likely to be even more volatile. Most developing countries fall into this category. In addition, these countries generally do not have well-developed forward exchange markets to allow transactors to protect themselves against future exchange rate changes. In this situation, the risks associated with international transactions are likely to discourage foreign trade. Also, as prices of traded goods are linked to the exchange rate, changes in the relative price of traded goods to home goods are likely to distort the allocation of investment within the local economy, and may lead to investment in less productive sectors.

These factors are sufficient to induce many countries to peg their exchange rates. An additional, though less often discussed, argument for fixing the exchange rate is that a fixed rate system has a built-in cushioning effect that tends to reduce the impact of short-term real shocks. For example, in bad years when there are harvest shortfalls, the authorities will have to sell foreign reserves in the market to support the exchange rate. These reserves will be used to finance imports to make up the shortfall. In good years of bountiful supplies, the authorities will have to buy foreign exchange to prevent an appreciation of the exchange rate, and reserves will be built up against future needs. This cush-

ioning mechanism is particularly important for stability in those developing countries in which domestic consumption and investment are extremely sensitive to output and market conditions for the few primary commodities that are produced and exported.

While for many countries there are good reasons to fix the value of the currency, in most cases the appropriate standard is not apparent. Moreover, there are costs involved in adopting the wrong one. In a world where the major currencies are floating independently, a fixed exchange rate with any particular currency implies a joint float with that currency against all others. If the value of a currency is fixed for a sustained period to some inappropriate standard, periodic adjustments of the exchange rate vis-à-vis the standard would probably be necessary to avoid or deal with the inevitable balance of payments crises. The timing and extent of these adjustments would not necessarily be ideal, but they would be subject to the discretion of the authorities and would, therefore, be influenced by domestic political considerations.

It may be possible, however, to find a standard against which to peg the value of a currency that might itself embody a rule for the automatic adjustment of bilateral exchange rates whenever necessary. With this object in mind, many economists in different countries have advocated fixing the exchange rate in terms of a basket of currencies.

The shares of the various currencies in the basket have usually been determined on the basis of trade elasticities or the currency composition of the country's international trade. It is argued in this article that while such trade-based weights are suitable for combining data on different trading partners into aggregate exchange rate indices, they are generally not the best weights for constructing a currency basket. The assumed objective of the currency basket in this exercise is to reduce the effects of exchange rate fluctuations on the domestic economy. This can be achieved by minimizing unwarranted variations of the real (price-adjusted) exchange rate—that is, distortions in purchasing power parity—over the future period for which the basket peg is being chosen. The problem becomes one of finding a practical rule for determining the relative shares of the various currencies in the basket that best serves this end.

*This article is based on "The Optimal Basket in a World of Generalized Floating," by the same authors in IMF Staff Papers, March 1980.*

The first step toward arriving at such a rule is to measure the real exchange rate and to make some judgment about its long-run equilibrium value. In principle, of course, it is possible to adjust the nominal exchange rate frequently for changes in relative prices among countries—the so-called crawling peg—and thereby avoid large deviations from the equilibrium value. In practice, while data on exchange rates are almost continuously available to policymakers, price data are available only sporadically and after a considerable delay. In addition, it may be unwise to adjust the nominal exchange rate for every transitory, and possibly reversible, change in relative prices.

This article shows how these difficulties can be overcome in the following fashion. It is possible to construct a basket that takes into account, in the weights allocated to different currencies, all the information available on past relationships between each relative price and the corresponding exchange rate. Provided these relationships are stable, by fixing the nominal exchange rate to this basket there should be automatic adjustment of the exchange rate such that, on average, distortions of purchasing power parity are minimized. While the particular optimal basket will differ for each country, the general discussion of the problem that follows arrives at some practical rules of thumb.

## Objectives

The currencies of the basket are generally selected to minimize the effects of exchange rate fluctuations on the domestic economy. Some changes in flexible exchange rates may simply reflect the adjustment toward purchasing power parity among currencies of economies with different domestic financial policies and hence different inflation rates. Such changes are stabilizing in character—by offsetting different domestic inflation rates they prevent temporary shifts in trading competitiveness. Exchange rate changes that are systematically smaller or larger than those necessary to maintain purchasing power parity, and which, at the same time, do not reflect structural changes in the economies involved, are destabilizing and may induce temporary shifts in competitiveness among countries.

The composition of the basket ought therefore to be chosen to minimize the real—that is, the price-adjusted—exchange rate changes that occur as a result of nominal exchange rate fluctuations among trading partners that are not warranted either by changes in the purchasing power of their respective currencies or by structural changes in their economies. In other

words, a reasonable objective for a basket peg is to minimize the fluctuations of the real exchange rate index over some future reference period, rather than to focus on nominal exchange rates.

Because it is impossible—given delays in obtaining price data—and often inadvisable to adjust the nominal exchange rate continuously to compensate for price changes among countries, it is useful to find a rule, based on nominal exchange rate data alone, that serves, on average, to minimize fluctuations of the real exchange rate. This rule should use all the available past information on the relationship between prices and exchange rates to compensate for the unavailability of relevant current price data. A currency basket that is designed to obviate the need for current price data and discretionary exchange rate adjustments provides such a rule and, in this article, is termed the optimal currency basket. It is optimal only in terms of the specific objective of the peg—in this case, to minimize variations in some real exchange rate index.

While this is the principal objective of the peg, another important consideration is that the level of the real exchange rate should not move too far from its long-run equilibrium. There is no reason to alter the nominal exchange rate for every transitory deviation, but sustained deviations from equilibrium are likely to produce effects on

the balance of payments (BOP) that will eventually require adjustments. Consequently, an additional consideration in choosing the weights for the optimal basket is that the expected value of the real exchange rate index over the reference period should be within some acceptable range around its equilibrium value. It will be shown that, under identifiable conditions, such a basket is feasible and can be computed.

## Definitions

The real exchange rate index can be defined as a weighted average of relative prices between the home country and each of its trading partners, where trading partner prices have been expressed in domestic currency units by multiplying the foreign price level by the corresponding bilateral nominal exchange rate. The weights assigned to the relative prices and exchange rates comprising the real exchange rate index should reflect the fact that certain bilateral real exchange rate changes are more important than others to a particular country in their effects on the target of the stabilization policy. These weights are elasticities that must be derived from a model of trade; they are real world parameters that must be estimated and cannot be known a priori. In the present exercise, they are taken as given. In practice, however, such elasticity weights are often approximated by weights based on the geographic concentration of trade or on the currency composition of BOP settlements. Because we are concerned with variations of the real exchange rate index around its “equilibrium” value, it is convenient to base the relative price and exchange rate indices on unit values in some equilibrium year—that is, a year during which the external accounts of the country were in reasonable balance.

Pegging to a currency basket can be defined as follows. If the home currency is pegged to a basket of currencies—with weights that are distinct from the elasticity weights—the percentage change in the exchange rate of the home currency against some numéraire currency will be the weighted average of exchange rate changes of each of the trading partner currencies against the same numéraire. It is possible then to derive an expression for the index of the real exchange rate of the home currency that embodies the assumptions that the home currency is fixed to a basket of currencies with one set of weights, and that the real exchange rate index is constructed on the basis of a separate set of relevant elasticity weights. This formulation makes it clear that the set of weights used in the currency basket that minimizes



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Photos by Joseph J. Diana for F&D

## How will the optimal basket work?

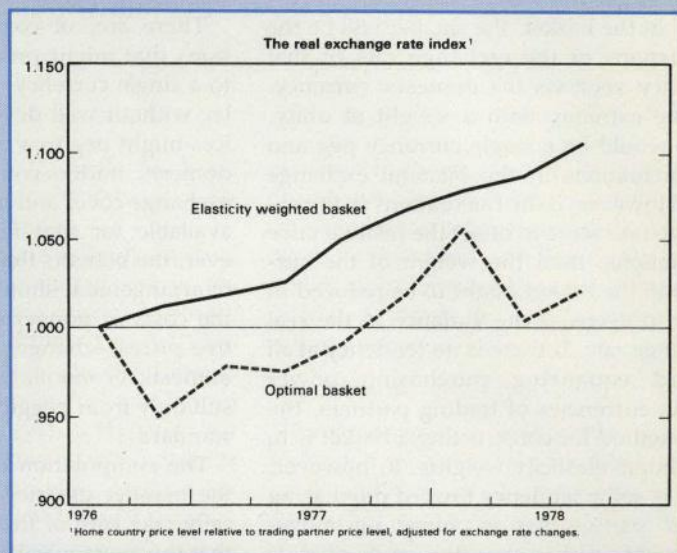
The proposition developed in this article is that an optimal set of weights can be derived to provide greater real exchange stability than most commonly used weighting schemes. To illustrate this, some *ex ante* tests were done for a hypothetical country that sought to peg its currency to a composite of the currencies of its major trading partners—the United Kingdom, the United States, the Federal Republic of Germany, and Japan.

The period for the pegging arrangement was from the third quarter of 1976 until the third quarter of 1978, at which time the authorities planned to review their exchange rate policy. The authorities considered the relative prices that prevailed in the third quarter of 1976 to be consistent with BOP equilibrium. Moreover, they were expecting a steady 2.3 per cent domestic price inflation per quarter, which was the elasticity-weighted average of inflation rates in the trading partner countries during 1974–76. Their objective was to choose a currency basket for the reference period which would minimize the deviations of the country's real exchange rate from equilibrium. They also wanted to ensure that the real exchange rate remained in equilibrium with respect to the average prices and exchange rates that they expected to prevail during the reference period. The relative importance of movements in each of the bilateral relative prices was known to the authorities and was reflected in the weighting scheme used in the computation of the real exchange rate index. For our illustration, these (arbitrarily chosen) elasticity weights were set at 0.50 for the United States, 0.25 for Japan, 0.20 for the Federal Republic of Germany, and 0.05 for the United Kingdom.

The parameters required to compute the optimal basket were estimated from historical data for the two-year period preceding the third quarter of 1976, when the basket peg was assumed to begin. These parameters are regression coefficients, that were obtained from the linear regression equations relating relative prices (between each country and the United Kingdom) to corresponding exchange rates for the historical period. The derived optimal weights were 0.15 for the United States and 0.85 for the United Kingdom.

Two types of tests are conceivable in this numerical experiment. First, it is possible to apply formal statistical tests to each of the estimated parameters to determine whether they exhibit any instability between the pre-peg period and the basket-peg period. If the parameters remain stable, then the weights based on parameters estimated from data of the pre-peg period should definitely yield optimal weights for the actual pe-

riod of the peg. Second, it is possible that the first test might yield mixed results—some stable and some unstable parameters—and it is consequently worthwhile to construct an “optimal” basket on the basis of the parameters estimated from historical data and to check whether the basket as a whole leads to a smaller variance of the real exchange rate about the equilibrium than does a basket based solely on elasticity weights.



The first test, not unexpectedly, produced mixed results. While there was no instability in the relationships between the pound sterling (the numéraire) and either the deutsche mark or the Japanese yen, there was instability between the pound and the U.S. dollar. The second test was more conclusive. As is clear from the chart, the real exchange rate index based on the derived basket remained closer to unity than the index based on the elasticity-weighted basket for most of the reference period. The latter index increased (appreciated) steadily during most of the reference period, while the former index fluctuated around the value in the base period. The basket based on the derived weights led, on average, to substantially less deviation from the equilibrium real exchange rate than the basket based simply on the elasticity weights, mainly because of the stability of the relationships (between the pound sterling and both the deutsche mark and the Japanese yen) used in deriving the weights.

the variance of the real exchange rate may be different from the set of weights used in measuring the real exchange rate index.

### Criteria for basket weights

The problem of minimizing the variance of the real exchange rate over some reference period is a fairly straightforward mathematical exercise. Although the precise quantitative solution will be different for each specific situation, convenient general rules of thumb can be provided for the selection of the basket weights.

The general rule for choosing optimal basket weights requires that the available elasticity weights be adjusted to take account of the fact that the relative prices and exchange rates of trading partners are, in general, systematically related. The common procedure of using unadjusted elasticity weights, or some trade shares as proxies for these elasticities, in determining the currency basket is not usually ideal. Simple elasticities will help to eliminate only the fluctuations in the elasticity-weighted nominal exchange rate and thus

limit the variations of the real exchange rate index to those arising from relative price variations alone. However, in general, a different set of weights—called here the optimal weights—can be chosen so that the nominal exchange rate is allowed to fluctuate together with prices in an offsetting fashion and thereby further reduce the real exchange rate variance. This is possible because relative prices and exchange rates among trading partners often tend to move, at least partly, to offset one another. Insofar as these offsetting movements—the

so-called purchasing power parity relationships—can be expected to remain stable over the reference period, they constitute important information that should be used in determining the basket weights. Thus, using such information, it is possible to eliminate some of the variation in the real exchange rate arising from price fluctuations by taking advantage of the extent to which purchasing power parity holds among trading partners.

The larger the weight assigned to a currency in the basket, the smaller will be the fluctuations of the exchange rate of that currency vis-à-vis the domestic currency. At one extreme, with a weight of unity, there would be a single currency peg and no fluctuations in the bilateral exchange rate. However, if the fluctuations in the exchange rate serve to offset the relative price fluctuations, then the weight of the currency in the basket ought to be reduced in order to decrease the variance of the real exchange rate. If there is no tendency at all toward equalizing purchasing power among currencies of trading partners, the best method for constructing a basket is to use simple elasticity weights. If, however, there is some tendency toward purchasing power parity—that is, offsetting movements of exchange rates and relative prices—between the numéraire currency and each of the currencies of the other trading partners, then to obtain optimal basket weights the elasticity weights for each of these other currencies should be adjusted downward according to a simple formula. As the weights have to add up to 1, the weight for the numéraire currency is derived as a residual.

The formula employed involves a parameter representing the relationship between the exchange rate and the relative price at the margin, which can be computed from historical data. If this parameter is zero for a specific trading partner, then purchasing power parity holds exactly, and the weight for the currency of that trading partner should be set at zero. If it is 1, then purchasing power parity does not hold, and the weight for that currency should be just the elasticity weight. If it is greater than zero but less than 1, then the optimal basket weight will simply be the product of the elasticity weight and the parameter. If relative price fluctuations are much larger than the corresponding exchange rate fluctuations (so that the exchange rate variations, while in the right direction, are inadequate to offset these relative price changes), then the weight of the currency should be as small as possible, so as to maximize the offsetting exchange rate movements. Given the constraint that weights be either zero or

positive, the weight for the currency should be set at zero in this case.

Thus, pegging to a single currency is best either when purchasing power parity holds among trading partners, or when relative price fluctuations are very large for all trading partners. The former conclusion is consistent with the common perception that it is best to peg to the currency of a country with a rate of inflation similar to one's own if purchasing power parity holds among trading partners.

There are, of course, other considerations that might prompt a country to peg to a single currency. For example, a country without well-developed financial services might peg to a major currency so that domestic traders could utilize the forward exchange cover and other financial services available for that major currency. However, the benefits that derive from this sort of arrangement should be weighed against the costs of nongermane changes in relative prices—changes that are unrelated to domestic economic considerations and result only from pegging to an inappropriate standard.

The computation of optimal weights in the manner described does not automatically take care of the problem of ensuring that the average value of the real exchange rate remains within an acceptable range around its equilibrium value. If the value of the real exchange rate deviated from the equilibrium value, the weights would have to be recalculated in order to ensure that such deviations did not persist over the period of the peg. This recalculation would require projections of exchange rates, domestic prices, and prices of trading partners and would involve a more complicated formula for devising the weights. The weights based on such projections might, of course, need to be altered with changes in the outlook. It is quite conceivable that given the economic outlook at a particular time, there is no basket against which to peg the home currency which could reasonably be expected to maintain the real exchange rate; in this case a basic change in the value of the currency vis-à-vis the basket would be required before pegging began anew.

These complications do not weaken the general approach to deriving optimal basket weights: as long as there is some known relationship between relative prices and the corresponding exchange rates, this information should be used in formulating a rule for exchange rate management. Of course, it is essential that the information be reliable—that is, that the relationships relied upon be stable.

It is worth sounding a note of caution about the reliance of the foregoing analysis

on appropriate elasticity weights and appropriate price indices. Both are needed to define the real exchange rate index that is basic to the exercise. Deriving the correct set of elasticities is likely to pose the most difficult problem. However, this is a crucial step; as already noted, where there are no stable purchasing power parity relationships among trading partners or where the relationships are very weak, the elasticity weights themselves constitute the appropriate basket weights. The models of multilateral trade such as the multilateral exchange rate model (MERM) and its later extensions to developing countries, all developed at the Fund, are helpful in finding elasticities that are appropriate to a given stabilization objective. The choice of price indices for the real exchange rate computation should prove less difficult—many indices are usually available—but equally important. It should depend upon the objective of exchange rate policy as well as on various other specific considerations, such as the degree of monopoly power of the particular country over its exports and imports.

In essence, the foregoing analysis provides a basis for exchange rate policy in the face of uncertainty about future relative price movements among countries. No policymaker would hazard a guess about future rates of inflation in his own country and its principal trading partners and then proceed to base policy solely on that guess. But, despite uncertainty, exchange rate policy must be made, and frequent changes in exchange rates or in the standards against which they are fixed might prove costly. This article argues that for a country that seeks to peg its currency to a currency basket, all the relevant information, including that derived from the recent history of exchange rates and relative prices, should be incorporated into the determination of the basket weights. Clearly, trade elasticities, the share of each major trading partner in total trade, and the currency composition of settlements are all important bits of information in this context. But another piece of relevant information, that is frequently ignored, is the historical relationship between the exchange rate and the corresponding relative price level against each of the major trading partners. If systematic relationships of this sort exist—and economic theory leads one to expect they do—there is then a firmer basis for deriving a set of basket weights able to deal with future price level uncertainties. This means that more attention should be given to the choice of weights; simply resorting to some proxy for elasticity weights—most commonly, trade weights of one sort or another—might well lead to suboptimal results. **ED**

During the last five years, Bahrain, traditionally an oil producing state, has built up an offshore banking center which has become one of the largest in the developing world. The authors explain this center's impressive growth and describe its effects on the economy of Bahrain as well as on the money and exchange markets in the Gulf region. They also discuss the main policy implications of this successful experiment.

A. S. Gerakis and O. Roncesvalles



## Bahrain's offshore banking center

In October 1975 the Bahraini authorities invited international banks to establish offshore banks in their country. (These banks, also referred to as offshore banking units, were authorized to do business abroad but restricted in their transactions with the domestic economy for reasons explained later in this article.) The response exceeded the most optimistic expectations. Within four months, 32 applications had been approved, all from multinational banks with the highest standing. At the latest count, this number had gone up to 53; indeed, it appeared that a temporary saturation point had been reached and the authorities were debating whether additional licenses should be issued. As indicated in the table, by the end of 1978 the assets of these banks had risen to US\$23 billion, to make Bahrain the second largest offshore center in the developing world after Singapore, where the

corresponding total was US\$27 billion. (This ranking does not take into account the much bigger asset total of the Bahamas, a "paper" center serving as a location of record rather than a place in which banking transactions are actually carried out.) The growth of Bahrain's offshore banking slowed down in 1979 due to political difficulties in the Gulf area, but it has been on the whole remarkable.

Bahrain proved attractive to the international banks for several reasons. First, after the increases in oil prices in 1973 and 1974, a number of countries in the area were accumulating massive balance of payments (BOP) surpluses and the banks hoped they would be able to tap this money. Second, working conditions in Bahrain were satisfactory. Local transportation and communications facilities, as well as the supply of skilled labor, were adequate; moreover,

after an initial period of shortages, the supply of office space and housing increased considerably and rents declined to reasonable levels. Few, if any, rules were applied to limit private enterprise and, in particular, foreign exchange and trade transactions were entirely free of restrictions. Regulatory and fiscal incentives were provided: offshore banks were exempted from the obligations to maintain reserves with the central bank and to observe liquidity ratios; no withholding tax was applied on the interest income of depositors; and no income tax is levied in Bahrain.

A third factor favorable to the development of Bahrain as a financial center resulted from its time zone. A large part of its business day, which extends from the closing of the workday in Tokyo to the opening in New York, coincides with office hours in London and Western Europe.

Geographical distribution of the assets and liabilities of offshore banking units in Bahrain

(In millions of U.S. dollars)

	1976	1977	1978			1979		
	Dec.	Dec.	March	June	Sept.	Dec.	March	June
<b>Assets</b>								
Arab countries	2,487	7,065	8,216	9,663	10,672	11,688	12,288	12,953
North America	13	468	110	171	136	277	209	353
Western Europe	1,129	3,904	4,190	4,990	5,525	5,301	4,426	4,852
Other offshore centers <sup>1</sup>	1,241	1,888	1,981	2,365	2,399	2,971	2,268	1,739
Other	1,344	2,376	3,077	3,036	3,438	3,204	3,077	3,576
<b>Assets = Liabilities</b>	<b>6,214</b>	<b>15,701</b>	<b>17,574</b>	<b>20,225</b>	<b>22,171</b>	<b>23,441</b>	<b>22,268</b>	<b>23,473</b>
<b>Liabilities</b>								
Arab countries	2,578	8,255	9,503	11,063	12,209	11,666	12,051	12,902
North America	214	419	996	1,954	1,627	1,891	1,282	1,290
Western Europe	2,277	4,995	5,166	4,913	5,832	7,018	6,314	6,840
Other offshore centers <sup>1</sup>	923	1,539	1,276	1,039	1,392	1,850	1,479	1,488
Other	222	493	633	1,256	1,111	1,016	1,142	953

Source: Bahrain Monetary Agency.

<sup>1</sup> Bahamas, Hong Kong, Singapore, and Lebanon.



Transactions are thus facilitated with these areas. Furthermore, transactions between parties in Bahrain and the surrounding region can be based on rates prevailing at the same time in the major international markets; uncertainties on this score are thereby eliminated. There is also the convenience of an overlap with the business day in Singapore's market in which the offshore banks of Bahrain purchase and sell Asian currencies.

Finally, while the demand for banking services had increased in the Middle East, there was no serious competition from other cities in the area. Beirut had declined as a banking center, owing to Lebanon's internal troubles. Amman had stated an intention of developing a center, but never tried hard to do so; the Jordanians did not really need to diversify their economy in this way, given that their BOP was strong and that they had attained full employment. Kuwait had developed along different lines, as the Middle East's long-term capital market. The United Arab Emirates had made a bid to become an offshore center, but it proved abortive owing to political, economic, and banking difficulties.

Reflecting the above advantages, the offshore banks have done well in Bahrain. It has been reported that on the average they have realized profits of US\$1 million annually on a balance sheet of US\$450 million and expenditures of US\$1 million per annum. Their operations are said to have become profitable after a stay of only 12 months or even less. Encouraged by this experience, the banks have hired more staff and are otherwise expanding their activities.

### Impact on Bahrain

Bahrain is a small country with a population of 340,000 (including immigrant workers) and a gross national product (GNP) of US\$1.5 billion, of which net oil exports account for about 70 per cent. It was first in its geographical area to produce oil, but it is also likely to be among the first whose production will run out, indeed in the not too distant future. That is why the Bahrainis attach considerable importance to diversifying their economy. Among other things, they have taken the necessary steps to modernize agricultural production, have built some large industrial plants, and are now trying to develop related light industries. However, given the paucity of its natural resources, Bahrain's future does not seem to lie in the commodity sectors.

For this reason, the country has set for itself the goal of becoming one of the major service centers in the Middle East. It is therefore striving to maintain its position as a gold market and transportation hub of

the region. The authorities are building hotels and otherwise trying to attract tourism. Furthermore, legislation has been passed for the purpose of encouraging foreign companies to establish their regional headquarters in Bahrain. With the same objectives in mind, the Bahrainis are working to develop money, capital, and exchange markets. They have brought in six internationally known foreign exchange and money brokers, have licensed four investment banks, and have approved several issues of securities, including government bonds and promissory notes of the existing Bahraini aluminum company. Thought was given to starting a local stock market, but the idea was abandoned as impractical in view of the small size of the domestic company sector in Bahrain and of the experience in Kuwait, where a sharp decline in share prices toward the end of 1977 forced the authorities to support the market on a large scale.

The offshore banking center is, of course, one of the most important elements in the diversification plans of the Bahraini authorities, and its impact on the economy has already been substantial. The Bahrain Monetary Agency estimates that the country's gross foreign exchange receipts from the center are equal to US\$50 million, or to 13 per cent of non-oil exports and 4 per cent of non-oil imports. These receipts consist of salaries of the local staff, rent

paid for office and residential accommodation, payments of the municipal tax on rents, employer contributions to the social insurance scheme, charges for the use of telecommunications facilities, and the annual license fee of US\$25,000 levied on each bank. As regards the contribution of the offshore banks to national income, it is reported to be of the order of US\$80 million, or 5 per cent of GNP. Parallel to the direct benefits from the activities of the offshore banks, there are several indirect effects, such as the on-the-job training received by their local employees, and the stimulus their operations have provided to tourism through visits by foreign businessmen, customers of the banks, and bankers attending the numerous conferences given for them in Bahrain.

In establishing its offshore center, the country has not only reaped benefits but has also incurred costs. For instance, the expenditures to build up the communications and transportation facilities and to create the machinery for the supervision of the banks should be properly considered as attributable to the center in whole or in part. Although relevant statistics are not available, these costs appear to be much less than the corresponding gains.

### Regional impact

The offshore banking units have helped to improve banking and exchange market conditions in their region, but, on the other hand, they have also been accused of causing friction between Bahrain and neighboring countries. About 55 per cent of the offshore banks' business represents deposits mainly from banks in Gulf states and loans to governments and transnational companies in the wider Middle Eastern area; as a result there has been a sizable recycling of funds from the surplus Arab nations to those incurring BOP deficits. The banks give short-term credits for imports and exports, issue letters of credit, and arrange for performance and other bonds needed in connection with bids or contracts in Middle East countries, particularly Saudi Arabia and Kuwait. In the field of medium-term and long-term finance, they have participated in bond issues—some denominated in Gulf currencies, including Bahraini dinars. It should be mentioned in this connection that the authorities of Bahrain wanted to see their currency used in the bond markets, partly for reasons of prestige. They hoped that the dinar would, in fact, prove attractive in the role of such an international unit of account as a compromise between a strong currency with a low interest rate and a weak one bearing a high rate of interest.



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Photos by Joseph J. Diana for F&D

One of the most noteworthy achievements of the offshore banks is that they established money and interbank markets in Bahrain, linking their counterparts throughout the Gulf area. This made it possible for, say, a Saudi Arabian bank to deposit funds in Bahrain, if interest rates were higher there, or borrow if they were lower. Interest rate differentials have therefore diminished in the region. Furthermore, owing to the increased banking competition introduced by the offshore banking units, spreads between deposit rates (bid and offer) have narrowed considerably and are presently in line with margins in international markets. There has similarly been a decrease in the spreads between deposit and lending rates.

In addition to money market operations, the offshore banks have been active in spot exchange transactions and are increasingly satisfying the commercial demands of the Gulf area, especially for non-dollar currencies paid for by the holders in dollars purchased from central banks. As noted earlier, there is also some trading in Asian currencies. A unique feature of Bahrain's foreign exchange market, indicative perhaps of a large volume of transactions, is that trading is now possible every day of the week, including Saturdays and Sundays. According to an estimate published in *Euromoney* (April 1979, pp. 14-15), the daily turnover in Bahrain's foreign exchange market is US\$2 billion, about as much as in Singapore and Tokyo. The same source estimated the turnover in London as US\$50 billion, in New York as US\$40 billion, and in Frankfurt as US\$10 billion.

The offshore banking center is further credited with the creation of a much-needed forward market for Middle Eastern currencies, particularly Saudi Arabian riyals and Kuwaiti dinars. The supply of exchange in this market has come largely from German, Japanese, and Swiss contractors paid in local currency as required by existing Saudi Arabian and Kuwaiti regulations. In addition, since October 1977—given the policy of the Saudi Arabian authorities to maintain their exchange rate close to their declared parity in terms of the special drawing right (SDR) and, therefore, to move it frequently vis-à-vis the U.S. dollar—there have been substantial sales and purchases of Saudi Arabian riyals against dollars by both contractors and speculators. As is normally the case in exchange markets, forward rates reflect interest rate differentials. For example, if in the offshore market the three-month deposit rate for Eurodollars is 10 per cent per annum and for Saudi Arabian riyals is 5 per cent, there would be a premium of 5 per cent per annum on the three-month forward riyal.

Forward facilities are still not available on any significant scale in the Gulf countries around Bahrain. There, interested parties cover themselves by using the familiar combinations of spot exchange and money market transactions. For example, a Swiss contractor due to receive Saudi Arabian riyals one year from today will borrow riyals, buy Swiss francs spot, and use the scheduled riyal receipts to repay his loan. Hedgers are thus given a choice. When interest rates on, say, Saudi Arabian riyals are lower in Saudi Arabia than in Bahrain, it pays to borrow riyals in the former country rather than sell riyals in Bahrain's forward market.

From a very modest beginning, the forward market in Bahrain has grown by leaps and bounds; at the end of December 1978 the outstanding forward purchases (or sales) of the offshore banks amounted to the equivalent of US\$3.8 billion. The forward market has, in addition, been able to improve the facilities it offers which are now competitive with those in Western countries. Thus, in Bahrain one can sell or purchase Saudi Arabian riyals forward for periods of up to five years, Kuwaiti dinars for three years, U.A.E. dirhams for 18 months, and other Gulf currencies for 12 months.

### Unfavorable aspect

A negative effect of the activities of Bahrain's offshore banks is that vested interests have been antagonized in a number of the neighboring countries. The existing friction has been widely reported and is admitted, though understandably downplayed, by the Bahraini authorities. Several reasons have been given for these difficulties. According to one explanation, the Saudi Arabians, who are opposed to the internationalization of their currency, are unhappy to see in Bahrain a large pool of riyals outside their borders and beyond their control. Second, fears have been expressed that the lending operations of the offshore banking units undermine economic stability in the Gulf states. Third, it has been asserted that speculation by offshore banks has intensified exchange rate fluctuations and, in particular, that it was responsible for the U.A.E. dirham crisis in early 1977. Last, it is argued that the offshore banking units borrow funds at low rates from the surrounding countries and use these funds, together with aggressive competitive techniques, to take business away from the local banks.

This friction creates problems for Bahrain, complicating its relations with neighboring states, in particular with Saudi Arabia, on which the Bahraini economy heavily

depends. There is also a cost from the standpoint of the offshore banking center. The countries which felt that their interests were being hurt have at times obstructed the flow of their currencies to the offshore banks. This has contributed to sharp fluctuations in the short-term rates for deposits, especially the overnight rates. The restrictive measures of Bahrain's neighbors have usually been implemented indirectly by commercial banks rather than by the monetary authorities. An exception occurred some time ago when Kuwait modified its definition of bank liquid assets so as to exclude from that concept deposits in Kuwaiti dinars with the offshore banks. Thus, Kuwaiti banks not satisfying their liquidity ratio were forced to repatriate dinar deposits from Bahrain.

### Policy issues


The above analysis shows that Bahrain's offshore banking center has done quite well in several ways. In less than five years, it has attracted the elite of the multinational banks, has grown at an exceptional rate, and has provided extensive financial services. For the Eurocurrency market as a whole, it has supplied a missing geographical link in a time zone and location bordering on the surplus oil producing countries. The Gulf region has benefited from the increased competition among banks, which has led to improved conditions in the area's money, capital, and foreign exchange markets. Bahrain itself has profited, since it has gained a new source of income of significant proportions, given the dimensions of its economy.

A note of caution should be sounded here. Other countries wondering whether it would be worthwhile to try to become offshore banking centers should bear in mind that Bahrain's commendable performance was initially due to a unique set of circumstances. First, a number of fortuitous events created an ideal opportunity for Bahrain. These included the substantial increase in the demand for banking services associated with the accumulation of oil wealth after 1973, as well as the lack of competition from any other financial capital in the region. Second, Bahrain had the leadership and expertise in the banking field to capitalize on these developments. Under this leadership the Bahrain Monetary Agency not only took the imaginative step of going ahead but subsequently also ran the center effectively, paying due attention to the attitudes of the foreign bankers and local sensitivities.

At the present time, despite the temporary slowdown in the growth of the offshore banks, the situation continues to be

favorable and the outlook is for considerable further expansion. Bahrain has already developed the necessary administrative machinery; its position has become entrenched because it has achieved economies of scale. As a result, the establishment of competitive centers nearby will be very difficult, if not impossible. Moreover, the country is likely to benefit from rises in oil prices.

In discussing the advantages and disadvantages of an offshore center, some observers have expressed fears that the foreign banks might extend loans on too large a scale and thus generate inflationary pressures in the countries where they are located or in neighboring ones. There is no evidence that the Bahraini banks' operations actually did so. One guarantee against destabilizing activities is the quality of the offshore banks, which, as already noted, belong to the group of major international banking institutions. Another safeguard is that, once in Bahrain, the banks (as well as their branches elsewhere) have strong incentives to conform to the wishes of the authorities and to the moral suasion exercised by the Bahrain Monetary Agency. Nevertheless, reflecting official uneasiness regarding the possibility of excessive lending inside the country, various limitations have been imposed on transactions of the offshore banks with residents. In the opinion of the writers, the case for such limitations appears weak, given that Bahrain does not maintain restrictions on capital movements so that Bahrainis can borrow freely from any bank abroad. On the other hand, the restrictions which seek to prevent the offshore banking units from doing retail business with private customers in Bahrain appear justified. The domestic economy is adequately serviced by the 19 existing commercial banks, which include some of the biggest multinationals.

The performance of Bahrain's offshore banks has been marred only by the friction which has emerged because they have introduced aggressive competitive practices in certain other Gulf states, particularly in Kuwait and Saudi Arabia. Yet this should not be a very serious difficulty. The offshore banking units are said to have captured about 5 per cent of the business of banks in the neighboring countries. For a problem of such small dimensions, remedial measures could be easily devised, especially if it is agreed, as it should be, that Bahrain's offshore center is performing a useful task for all the parties concerned. Among other things, moral suasion by the Bahrain Monetary Agency should be able to play an effective part in restraining the activities of the offshore banks in the surrounding areas. 

## Root crops: potential for food and energy

Tropical root crops are a staple food for many of the very poor in the developing world. They are also a relatively unfamiliar and underutilized source of both animal feed and energy. This article reviews the contribution these crops could make to rural development.

**T. J. Goering**

Tropical root crops—cassava, potatoes, sweet potatoes, yams, and aroids—are a staple food of about one third of the population of tropical countries—generally the rural poor. An estimated 170 million tons of these crops, equivalent in calorie content to 50 million tons of grain, are produced annually. Typically, calories from root crops cost less than half as much as calories from traditional grains and pulses. Cassava accounts for nearly two thirds of production of all root crops and is a major source of calories for some 300 million people in the developing world. Occupying some 20 million hectares of cropland globally, this group of crops is worth more to the farmers producing them than either cocoa, rubber, tea, or coarse grains.

Root crops are widely cultivated in Southeast Asia (especially in Indonesia and Thailand), in South Asia (mainly in India), and in Western Africa and Latin America (particularly in Brazil and Colombia). About 95 per cent of production is directly con-

sumed by the producers. Although these crops do not by themselves provide adequate nutrients, since most are high in starch and low in protein, they can frequently be combined with other local foods to provide nutritionally balanced diets. A particular advantage of cassava is that it can be grown successfully in a wide range of agricultural and climatic conditions. It is able to withstand drought and to thrive in relatively primitive farming systems, frequently under conditions of poor crop management and with few purchased inputs.

Despite the importance of these crops to the rural poor, they have not received much attention until recently, either from the agricultural research community or from development planners. Over the past few years, however, there has been a sharp increase in research work on root crops at national and international research centers, such as the International Center for Tropical Agriculture (CIAT) in Cali, Col-

ombia and the International Institute for Tropical Agriculture in Ibadan, Nigeria. This research concentrates mainly on how to increase production and on how to expand the potential of such crops as sources of food, animal feed, or energy. Good progress is being made. At CIAT, for example, cassava yields have been tripled by using better varieties and improved, low-cost agricultural practices.

One opportunity for the expanded use of root crops, as efficient converters of solar energy into carbohydrates, lies in meeting the consumption needs of low-income people. However, the evidence shows that human consumption of these crops is unlikely to expand more quickly than population, mostly because as their incomes rise, people generally prefer less bulky, less perishable, and more nutritious food, such as wheat, rice, or maize. Thus, the substantial increase in yields that now appears possible will bring down the costs of producing these crops and make them potentially attractive for other purposes. There is, for instance, a growing market for root crops, especially for cassava, as feed for meat and poultry production—some five million tons of cassava were imported for feed by the European Community (EC) in 1978. These crops may also provide an attractive source of energy. Countries such as Brazil, for example, have begun to use cassava in the production of ethyl alcohol as a substitute for gasoline. The possibilities for using these crops also increase as fossil fuel costs rise and as population pressures push agricultural frontiers to lands that have increasingly limited potential to sustain production of traditional food crops. Expansion of root crop production depends crucially on combining the results of research aimed at increasing crop yields with greater efforts, at both national and international levels, to utilize these crops in a wide range of development projects.

### Root crops as food

Consumption data on root crops tend to be unreliable, but it cannot be disputed that tropical root crops are an important and efficient source of calories in many of the poorest countries. The Food and Agriculture Organization (FAO) estimates that in recent years root crops have provided a substantial proportion of total calorie intake in several African countries, supplying as much as 60 per cent in Zaïre (see Table 1). Moreover, these crops are basic calorie sources in poor regions of other countries such as Brazil and Indonesia.

Root crops generally compare poorly with grains in terms of protein, carbohydrates, iron, and thiamine, but they are good

sources of calcium and, in the case of sweet potatoes, an exceptional source of vitamin A. This lack of protein in most root crops is a concern. However, there may be a greater role for root crops in the alleviation of nutritional deficiencies than is commonly believed. Nutritionists have frequently observed that food consumption by most adults in many developing countries tends to be roughly balanced in nutritional terms. (If calorie intake is adequate, so is the intake of most other nutrients.) If this is so—and case studies in Kerala (India), Northeast Brazil, and northwest Zambia, where root crops are important in the diet, suggest that it is—then the most useful way to improve nutrition may be to increase the quantity of root crops available for consumption and promote the use of other, nutritionally complementary local foods. This would seem to be more efficient and more likely to be acceptable than changing the composition of the diet radically, particularly if the latter required greater use of nonlocal foods. Small-farm cropping systems which include, for example, root crops and groundnuts or beans would be valuable parts of a food and nutrition program in these circumstances.

But some dietary problems are likely to remain. The nutritional deficiencies of the young and of pregnant and lactating women who depend on root crops for their food tend to be widespread and, in many cases, serious. It is demonstrably true that if a child eats mainly cassava or other high-calorie, low-protein root crops, he is almost certain to suffer from protein deficiency. (Despite this, experience in some developing countries suggests that even where root crops provide an important part of the diet, child mortality—one measure of nutritional adequacy—may still be low if other protein-rich foods are also consumed.) An appropriate course of action to

counter the nutritional deficiencies of these particular groups would be to concentrate on improving existing diets by supplementing them with other protein-rich indigenous foods. Thus, the addition of a handful of groundnuts to the daily diet of children over six months of age in nutritionally-deficient areas of Africa could solve a large portion of their nutritional problems.

Experience in some countries has also shown that root crops can be used to improve nutrition when they are combined with other crops in the production of composite flours. In parts of Africa, for instance, it has been suggested that a mixture of 70 per cent cassava flour and 30 per cent groundnut flour would contain more protein, calorie density, and niacin than the maize flour frequently used as the food staple. The use of these composite flours may help to reduce foreign exchange expenditure on wheat imports, by substituting flour components derived from local sources. This also may have the effect of stimulating local agricultural production, processing, and employment. Careful examination of typical diets for particular socioeconomic groups or geographic regions is needed before unequivocal recommendations can be made about how the root crops can be produced and utilized so as to contribute to nutritional improvement. Further research is also needed to determine the extent to which heavy intake of cassava may restrict the intake of iodine by the human body, a possibility supported by some studies done in West Africa.

### Use as feed and starch

Thus far, the export of cassava pellets to the EC for use in the manufacture of livestock feed is the most dynamic element in the expanding global use of root crop products. The shipment of five million tons

Table 1  
Tropical root crops as a source of calories in selected countries, 1974

Country	Population (Mid-1977, in millions)	Daily per capita calorie consumption <sup>1</sup>	Calories from TRCs <sup>1</sup>	Per cent of total calories from TRCs
Zaire	24.7	1,925	1,150	60
Ghana	9.9	2,319	1,053	45
Ivory Coast	6.7	2,721	1,068	39
Mozambique	9.2	1,774	676	38
Nigeria	5.0	2,097	741	35
Togo	2.2	1,968	665	34
Paraguay	2.6	2,748	518	19
Bolivia	5.6	1,804	332	18
Indonesia	132.1	2,052	262	13
Brazil	107.0	2,638	229	9

Source: UN Food and Agriculture Organization.  
<sup>1</sup> Figures rounded to nearest 10.

in 1978 reflects an annual growth rate in recent years of nearly 20 per cent. Exports are dominated by Thailand and, to a much smaller extent, Indonesia. Because Thailand has extensive lands well suited to cassava production and because the Thai Government assists farmers by providing a good physical infrastructure, cassava has become one of the country's most important export commodities.

Thus, in general, cassava products can be substituted for alternative sources of nutrients to feed different species of livestock in both tropical and temperate countries, although research work is not sufficiently advanced to permit precise specification of rations under particular circumstances. Continued research is required if these possibilities are to be brought into practical commercial use.

cause of higher freight costs, erratic supplies, and the increased availability of locally produced corn starch that can be modified to meet particular needs. This decline seems likely to continue. Prospects of starch imports into Japan may be somewhat brighter, because of Japan's proximity to the major source of supply, Thailand, which accounts for about one half of the world's cassava and sago starch exports and has large excess production capacity.

In contrast to the export market, local starch industries which supply domestic needs could be expanded in some countries which produce root crops. The range of starch production technologies here is wide, and there seem to be some economies of scale in starch manufacture. Where small-farm production and the creation of rural nonfarm employment are important development objectives, deliberate government policy to support investment and research in these processing technologies is likely to be required to improve the quality and efficiency (and thus the viability) of small-scale starch plants in rural areas.

Table 2  
Production of root crops in developing countries, 1978  
(In millions of metric tons)

	Cassava	Potato	Yam	Sweet potato	Other root crops <sup>1</sup>	Total
Africa	44.0	2.7	20.7	4.7	5.7	77.8
Latin America	31.8	11.1	0.5	2.8	0.7	46.9
Near East <sup>2</sup>	0.1	5.2	0.1	0.1	0.1	5.6
Far East	38.1	10.3	—	7.9	0.7	57.0
Asia, centrally planned	9.3	14.5	—	85.8	1.8	111.5
Others	0.2	—	0.2	0.6	0.4	1.4
Total	123.5	43.8	21.5	102.0	9.4	300.2
(Per cent of total)	41	15	7	34	3	100

Source: UN Food and Agriculture Organization.

—Indicates data are insignificant.

<sup>1</sup> Includes taro, minor roots, and tubers.

<sup>2</sup> Includes Egypt, Libya, and the Sudan.

The size of exports of root crops to the EC has been determined by several factors, particularly by their quality and price competitiveness compared with alternatives. As a general rule, cassava prices must be at least 20 per cent less than cereal and soybean meal prices if cassava is to represent an economic substitute in the preparation of livestock feeds. But assuming that cassava will continue to be cheaper than its alternatives as a source of feed, its share of the EC market will be heavily influenced by political factors. Growing pressures by some EC members to grant increased protection to community grain producers has already led to some limitations on cassava imports.

The use of root crops as animal feed in developing countries appears to have considerable potential. The carbohydrates in cassava roots, for example, are highly digestible and could provide a valuable complementary source of energy to the typical tropical forages, which tend to be fibrous, bulky, and not very palatable. If tropical forages are supplemented with cassava products, therefore, the resulting feed generally has a marked positive impact on livestock performance. Recent work in Venezuela has also demonstrated that good quality protein is obtainable at reasonable cost from cassava leaves, and can be used to feed livestock. Cassava leaves have been utilized too, in Thailand, for export as commercial feed supplements.

Industrial starches derived from root crops differ only slightly from those derived from grains; their share of the market is therefore determined largely by their price. Starch imports in the two largest markets, Japan and the United States, have been in the range of 100,000 tons annually in each in recent years, with cassava starch accounting for three quarters of this amount. (Other starch imports include potato, arrowroot, and sago.)

Prospects for international trade in cassava starch, however, appear to be limited. Imports of cassava starch into the United States have declined in recent years be-

## Other industrial processing

One of the possibilities for making use of root crops in industry is as a base for fermentation processes involved in the manufacture of high-value products, such as single-cell protein (SCP) and ethyl alcohol. Research on these processes has expanded in recent years in response to sharply higher relative prices for petroleum—the usual base for the manufacture of these products. Production of glucose sugar from cassava or other root crops is as technically feasible as the more common practice of using corn or wheat starch. The major consideration is the relative price of starch from these various sources. A doubling or tripling of cassava yields would make the use of cassava starch economically attractive.

An interesting question for food planners is the potential role of root crops in meeting future protein requirements of humans through traditional sources, such as meat, or through nontraditional protein. Production of single-cell protein, now used largely for animal feed, exceeds one million tons annually. Single-cell protein is generally produced from a petroleum base, but the technology used is equally suited to a base of organic materials such as root crops, provided they are sufficiently cheap and supplies are adequate. Typically, raw materials costs make up at least 60 per cent of total production costs and are therefore critical in determining the economic viability of the process. And because production costs per unit of output decline sharply as plant size increases, a basic question is



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whether efficient, smaller-scale SCP plants are technically and economically feasible. Research at CIAT, with support from Canada's International Development Research Center, is underway to provide answers to these questions.

Several root crops, and cassava in particular, have been used at various times and places for more than 50 years in the production of ethyl alcohol. Each ton of fresh roots can produce up to 160 liters of alcohol. The product can substitute for up to 20 per cent of gasoline by volume without needing a change in the carburetion systems of most engines. Much of the research on the alcohol production process in recent years has been underwritten by the Brazilian Government as part of its National Alcohol Program, which aims to produce alcohol for blending with gasoline or for use in all-alcohol powered engines. Although most of the installed production capacity in Brazil's alcohol industry is based on the use of sugar cane, greater use of cassava is expected in the future because of its wider adaptability to soil and climatic conditions. Japan has long derived much of its industrial alcohol from the sweet potato.

### Policy issues

Root crops have a potential role in a considerable range of agricultural and rural development projects. Opportunities for commercial development are exemplified by the growing volume of cassava exports from Thailand that will be used as animal feed. A strategy which uses these crops to improve the conditions of the rural poor should reflect several factors: the need for low development costs per beneficiary, the relative abundance of labor during much of the year, the limited access of the poor to good land, and their negligible cash reserves. A sound strategy should also address the frequent calorie shortages of this group, and should recognize that many of the future poor must seek livelihoods on lands of limited natural fertility in a socio-political environment where support services for agriculture are frequently deficient.

If the welfare of low-income people is to be improved, relatively simple, low-risk technologies are needed to provide greater returns from the limited resources under their control. Root crops, by virtue of their importance to smallholders throughout the world, are well suited both to improving agricultural growth and to increasing the income opportunities of the poor. But if these benefits are to be fully realized, deliberate efforts must be made by governments and donor agencies to influence several factors—including the emphasis on research concerning root crop production

and utilization, the type of cropping system utilized in rural development programs, and the scale and type of technology used in processing root crops.

In many small farms, cropping systems should be designed to provide both adequate incomes and a nutritionally balanced diet for the family. This is frequently difficult to achieve. Many small-scale farmers, having experienced the vagaries of the markets for their cash crops, often prefer the security of producing most of their own food, even if it means sacrificing some income. The first priority in the design of a cropping system for low-income families may well be to provide a variety of crops to ensure the family's food security, then allocate the balance of the holding to cash crops. The portion of the typical smallholding allocated to basic food production is likely to be small if root crops are included in the cropping program. With, for example, annual cassava yields of 10–20 tons per hectare and maize yields of 1–2 tons per hectare, approximately one half a hectare divided between these two crops, intercropped with beans, would provide for the basic calorie and protein needs of a typical smallholder family. The low-risk nature of cassava production makes this crop an ideal "safety net" to ensure some food supplies in risky agricultural and climatic situations. These "nutritional dimensions" of any proposed cropping programs require the explicit attention of project analysts. Precise cropping possibilities can only be determined according to the characteristics of specific locations.

Because the direct consumption of root crops by producers is likely to expand only slightly more rapidly than their increase in numbers, improved technologies will be needed to increase other forms of utilization. This requires technologies to make these crops more widely available for urban consumption as well as to make industrial processing of these crops more efficient. Since root crops are bulky, their marketing and transport costs are now relatively high compared with other food groups. However, these costs can be reduced through drying processes and improved market infrastructure and transport. Improved storage technologies already exist that can slow post-harvest deterioration of the fresh product. Further research on the use of root crops in composite or fortified flours is a necessary part of this overall effort to reduce the cost of calories and to increase the availability of food nutrients to low-income consumers.

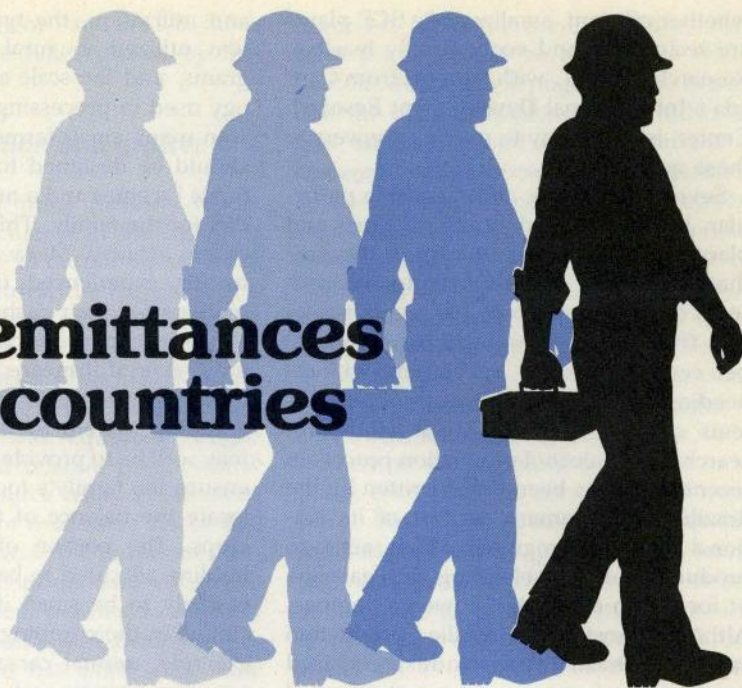
Using root crops for some nonfood purposes may require a choice at the national level between promoting small-scale technology, which will directly benefit the local

area, or emphasizing large-scale production, which will maximize returns and economies of scale. At one extreme, smallholders can supply fresh roots to small-scale processing facilities, as is done in the cassava/chip industry in Thailand and the cassava flour/starch industry in Northeast Brazil. At the other extreme of the technological spectrum are plantation production systems producing fresh roots for large-scale, capital-intensive facilities designed to produce industrial starch or alcohol. The choice of technology for processing is perhaps the most important factor in determining the distribution of benefits from development programs based on root crops, since the type of technology chosen is an important determinant of the systems that will be used to produce the raw material. Large-scale processing generally leads to pressures for large-scale production systems and to reduced opportunities for small-holder participation.

The export market for root crops depends on their cost competitiveness. There is a need for dependable supplies of processed cassava, generally in the form of pellets, that are large enough to enable exporters to benefit from the important economies of scale which exist in shipping (by sea) and handling. Therefore, individual country export programs should probably be based on annual root production of at least 250,000 tons, equivalent, at 20 tons of fresh roots per hectare, to 12,500 hectares of crop. This would require about two pelletizing factories, each with an annual pellet production capacity of 60,000 tons. Total establishment costs for a factory of this size using imported machinery are in the range of US\$750,000, although locally fabricated machinery is available in some countries and might result in considerable cost savings. In a number of countries where root crops are staple food items, higher yields, more production and lower prices would be required to compete in the international market with cassava supplies from traditional exporters.

Existing production technology, effectively applied, already provides a sound basis on which to build rural development projects which incorporate the use of root crops. But realization of the full potential of these crops as sources of food nutrients and industrial raw materials rests upon the achievement of reduced unit costs of the energy produced from them and improved returns per unit of land and labor. These goals can only be realized when farm yields more closely approach those promised in experimental work. The need for continued research into increasing production and the uses of these crops and for effective agricultural extension services is clear.

# Use of migrants' remittances in labor-exporting countries



Migrant workers' remittances, which have grown dramatically in the last decade, offer many developing countries a means to add to their aggregate savings and investment. The author shows how labor exporting countries need to dovetail policies to attract remittances from migrant workers with a comprehensive and coherent set of policies to ensure that these revenues make the optimal contribution to their growth and development.

## Anand G. Chandavarkar

The implications of the large and growing numbers of skilled and unskilled labor migrating from the less developed countries to the industrial countries in Europe and North America and the oil producing countries in the Middle East have to date been studied largely in terms of their macroeconomic effects on growth, employment, and balance of payments (BOP) of the labor exporting and importing countries. For the labor exporting countries, the question is not only how best to maximize remittances but also, given their transitory character, how best to use these remittances so that they make an appropriate contribution to the growth of their economies.

Labor exporting countries have generally exhibited resourcefulness in designing policies to attract flows of remittances from their migrant workers, but they have given little attention to the utilization of these remittances, a crucial factor in determining their impact upon a country's growth and development. This article will look at the policies which labor exporting countries have employed to attract remittances and will then give particular attention to the type and scope of measures needed to ensure their optimal use in domestic savings

and investment. The article does not, however, attempt an evaluation of the costs and benefits of international migration for the countries of origin and the host countries.

For many developing countries, foreign remittances constitute a substantial proportion, and one of the fastest growing components, of foreign exchange earnings (see Tables 1 and 2). But the magnitude of foreign remittances is, if anything, understated in these figures. First, the figures cover only cash remittances through official channels. Several labor exporting countries (like India, Pakistan, and Somalia) permit merchandise remittances, including not only consumer durables but also capital goods such as commercial vehicles, tractors, and so on. Although there are no separate data on merchandise remittances, they are estimated to be fairly

Table 1  
Remittances to selected countries by migrant workers  
(In millions of U.S. dollars)

Country	1973	1974	1975	1976	1977
Afghanistan	...	...	...	...	200
Bangladesh <sup>1</sup>	...	18	43	53	75
Egypt	87	189	340	615	1,025
India	235	297	535	713	1,000
Jordan	45	75	167	411	425
Korea	154	154	158	195	172
Pakistan <sup>1</sup>	151	230	353	590	1,110
Philippines	...	104	128	112	130
Sri Lanka	...	...	3	7	12
Sudan	...	...	...	12	40
Yemen Arab Republic	129	156	307	796	1,000
Yemen, People's Dem. Rep. of	33	41	56	115	179

Source: Andreas S. Gerakis and S. Thayarthy, "Wave of Middle East Migration Raises Questions of Policy in Many Countries" *IMF Survey*, September 4, 1978.

... Indicate data are not available.

<sup>1</sup> Fiscal year beginning July 1.

substantial (about 17 per cent of total migrants' remittances to Pakistan). Second, in many countries cash remittances below specified limits (for example, 10,000 rupees and below in India) need not be reported. For these and other reasons there are unavoidable errors and omissions in the BOP data on private remittances.

The easing of the traditional foreign exchange constraint on growth and development constitutes the primary economic rationale for the special incentives given by some countries to migrants' remittances, such as the privilege of importing consumer goods. On the other hand, labor exporting countries may have to be equally vigilant to ensure that excessive incentives for migrants do not create the nucleus of a new, privileged class in these already highly

of savings abroad for emergency expenditure; the length of stay abroad; the ease of access to remittance facilities at the place of work; and even the educational level of migrants. For instance, Pakistani migrants' remittances appear to be inversely related to their level of education—the more educated an emigrant is, the less he tends to remit home (Perwaiz, 1979). In the case of Turkish workers abroad, it was estimated that mean savings amounted to about 36 per cent, mean remittances to about 11 per cent of mean income abroad, and that nonbasic expenditure totaled about 10 per cent of earnings abroad (Paine, 1974). The portion of remittances made for family maintenance generally tends to be relatively stable, and consequently less responsive to incentives. It tends to decline

is to wholly exempt migrants from such requirements, as Egypt does. Another alternative is to permit returning emigrants, as in India, to use their foreign currency balances for imports of equipment for new industrial units or even for specified non-essential imports.

In addition to liberal transfer facilities, at either end, a material consideration in sustaining the flow of remittances is the confidence felt in the safety and liquidity of financial assets in the labor exporting countries. The importance of this factor is exemplified by the experience of the People's Democratic Republic of Yemen, where, contrary to the pattern elsewhere in the region, remittances declined following nationalization measures. This decline was, however, reversed after government assurances and after meetings of high officials (Gerakis and Thyanithy, 1978).

Given a congenial legal and political milieu, clearly the most important macroeconomic requisite for inducing remittances through official channels is a realistic unitary (single) rate of exchange for the currency of the labor exporting country. Remittances are notably sensitive to any indications of currency overvaluation and are prone to slow down in such cases, leading to widespread resort to unofficial channels to transfer funds. Such multiple currency practices are indeed contrary to the obligations of member countries of the International Monetary Fund and are, at best, purely temporary expedients. In any event it is difficult to monitor such special rates, which offer scope for leakages through declaration of other categories of receipts as remittances, and so on. Some countries, like Sudan and Turkey, which have had special rates for workers' remittances, recently abolished them; others, such as Algeria and Morocco, still retain them.

Concomitantly, with realistic rates of exchange, convenient facilities for holding remittances in approved foreign currency accounts with banks in the countries of origin are another useful incentive that has been widely adopted for attracting migrants' funds. For instance, in November 1975 India introduced a Foreign Currency (nonresident) Accounts Scheme, which allows both nonresident Indians, as well as persons of Indian origin resident abroad, to maintain pound sterling and U.S. dollar accounts in India in tax-free interest-bearing term deposits for periods ranging from 91 days to 61 months. These accounts, including accrued interest, are repatriable in the same designated foreign currency. Account-holders are, in addition, eligible for priority allotment of specified items, such

Table 2  
Workers' remittances and their share in relation to total export of goods in selected labor exporting countries

Country	1973		1974		1975		1976	
	Remittances <sup>1</sup>	As per cent of exports	Remittances <sup>1</sup>	As per cent of exports	Remittances <sup>1</sup>	As per cent of exports	Remittances <sup>1</sup>	As per cent of exports
Algeria	371	20	390	9	466	11	245	5
Greece	730	59	651	37	754	39	778	35
Morocco	249	27	356	21	533	35	548	43
Syrian Arab Republic	51	14	62	8	55	6	51 <sup>2</sup>	5
Tunisia	98	24	118	13	146 <sup>2</sup>	17	135	17
Turkey	1,183	90	1,425	93	1,312	94	982	50
Yugoslavia	1,390	49	1,621	43	1,695	42	1,728	35

Source: This table has been adapted from Table 4 in Z. Ecevit and K. C. Zachariah, "International Labor Migration," *Finance & Development*, December 1978, p. 36. The original table is based on IMF consolidated balance of payments statements and World Bank reports.

<sup>1</sup> In current prices, in millions of U.S. dollars.

<sup>2</sup> Estimated.

stratified societies and generate resentment in the economically active nonmigrant population. Some countries have even raised the possibility of taxing the income of migrants. Affirmative action in support of relatively affluent groups does, after all, require very special justification, and there is, therefore, a delicate trade-off involved in this policy area between economic efficiency, equity, and expediency. But subject to this caveat, it is useful to examine the scope and limitations of measures to maximize remittances and to allocate them to the most productive uses within the labor exporting countries. The typical policy package, while comprising several common basic elements, has to be tailored to the specific requirements of each labor exporting country as well as to the institutional framework of the host country.

The remittances of migrants are subject to a variety of socioeconomic factors: the usually higher costs of settlement and living abroad; the need to keep a "nest egg"

sharply when migrants bring their immediate families over to live with them.

The fact that host countries usually have liberal policies for transfers abroad allows labor exporting countries to maximize remittances from their respective nationals. The question arises whether to make the repatriation of remittances compulsory, or whether to offer incentives. Some governments have required some nonresident nationals to repatriate a specified proportion of their earnings. The Philippines, for example, requires construction workers and seamen to remit 70 per cent of their earnings and other workers to send back 30 per cent. In other cases, returning workers are required to surrender part or all of their foreign exchange earnings. In general, however, labor exporting countries have largely relied on incentives rather than on controls to encourage remittances.

To some extent incentives to repatriate are also affected by the requirement in some countries that foreign assets be paid in by returning migrants. One option, of course,



as motor scooters and tractors. These accounts may also be used for investment in shares in the Unit Trust of India, and in specified industrial undertakings—with the option to repatriate a specified percentage of investment. Such accounts do pose problems particularly since the rates of interest have to be reasonably competitive with overseas rates on comparable assets. Such schemes have nonetheless evoked a satisfactory response.

On the whole, the macroeconomic policy framework in the labor exporting countries seems adequate to induce large flows of private remittances as an alternative to their being spent or saved abroad. Appropriate macroeconomic policies and measures are, however, necessary but not sufficient conditions for an optimal policy framework for remittances. Their ultimate net impact on the economies of the labor exporting countries depends on their utilization.

It is difficult to determine how revenues from remittances are used, largely because of the paucity of systematic empirical evidence. Clearly, positive and coherent policies need to be formulated to ensure the optimal use, sectoral and regional, of cash remittances. It is this area that presents a choice between consumption, saving, and investment; in the case of merchandise remittances their use in consumption (consumer goods) or in investment (commercial vehicles, tractors, and so on) is largely predetermined. The subsequent discussion, therefore, focuses on the desirable and feasible utilization of cash remittances.

### Uses of remittances: the evidence

The available empirical evidence on the utilization of remittances in some major labor exporting countries, like India, Pakistan, Portugal, Turkey, the Yemen Arab Republic, and Yugoslavia, is admittedly fragmentary. The data, nonetheless, are supportive of the assessment that while some of the remittances have been invested, the bulk have contributed little if anything to the long-term development potential of the respective countries. Some of the more salient features of the ways remittances are used in the aforementioned countries are reviewed below and may be regarded as typical of other labor exporting countries as well.

Yugoslavia's experience, as the only socialist country which permits its nationals to work abroad, typifies some of the problems of directly investing private remittances where the scope for private investment (mostly in areas such as housing, trucks and taxis, tourist hotels and catering, and small-scale farming), is very limited because of official policy. The limited investment outlets were very quickly satu-

rated; thus, for example, the very success of private road haulage led to restrictions on it in order to protect socialized transportation. While the investment of migrants' remittances in small farms, especially in the plains, helped to improve their productivity, it also resulted in uneconomic overmechanization of farms, which are subject to a ceiling of ten hectares. It has therefore been argued that "only a change of the present policy which discouraged emigrant workers from investing their savings in economic activities" outside the range of permitted uses can widen the scope for productive investment (Baučić, 1972).

In Turkey, official attempts to channel migrants' savings into investment in agriculture through special loans (for example, through the Halk Bank) and concessions for imported machinery are said to have been hampered by, among other things, the lack of management experience among returned migrants, as well as their reluctance to put savings into cooperatives or community projects (Paine, 1974). Financed by workers abroad, the Turkish Village Cooperatives Scheme was launched in 1963; it failed, however, largely because "it was not effectively integrated into a nationwide system of regional planning" (OECD, 1978). Nevertheless, Turkey, which was the first labor exporting country to try using migrants' remittances for productive investment, seems to have been relatively more successful in channeling migrants' savings into investment than other labor exporting countries (see Table 3). According to one estimate, emigrant workers form nearly half the number of stockholders in over 200 ventures set up with the help of state economic enterprises, trade unions, the Halk Bank, and Desiyab (Industrial and Workers' Investment Bank).

Interestingly, in Portugal, while remittances have stimulated the banking habit under the impetus of fierce competition between banking networks, there is no evidence of investment in industry, trade, or services. However, these savings accounts with the banks are soon withdrawn

Table 3  
Turkey: use of migrants' savings, 1970  
(In per cent)

Housing	49
Small factories and shops	23
Family businesses	6
Land	9
Car or bus	5
Farm machinery	2
Education	5
Shares	1
	100

Source: Interviews by N. Abadan, cited by Bernard Kayser, *Cyclically-Determined Homeward Flows of Migrant Workers*, OECD, Paris, 1972, p. 43.

to finance consumer purchases. As one survey showed, about 38 per cent of migrants' remittances was spent on land and housing; 32 per cent on consumer items, including appliances; and 24 per cent on education (Kayser, 1972).

Historically, the Yemen Arab Republic has one of the longest traditions of migration among developing countries. Likewise migrants' remittances account for a much larger share of foreign exchange earnings and of the national economy than in other labor exporting countries. Because of limited rural investment outlets, the bulk of remitted capital seems to have been invested in urban real estate in the cities of Taiz and Sanaa, and in commercial agencies, known as *wakils*, especially established to assist migrants, and in retail marketing, and road transport. But even these investments are mostly on an individual or family basis. Joint stock enterprises are virtually unknown and large-scale private investment is apparently difficult to undertake. The reliance on remittance incomes in the rural areas and on cheap imported grain has actually resulted in a decline of agricultural production. "Thus, Yemen has drifted . . . from the economic independence she once enjoyed and is now committed to exchanging her manpower for consumer goods and foods in an economic climate of rampant inflation" (see Swanson, 1979).

One of the very few systematic published studies on the utilization of overseas remittances in South Asia was undertaken in India by the Commerce Research Bureau (Commerce, 1978). It is based on a sample survey of 402 emigrant households in the



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Malabar subregion of Kerala, which is believed to be the largest single recipient of overseas remittances among Indian states. This survey revealed that about 60 per cent of the emigrants were in debt and unemployed at the time of migration. Once the debt commitments, including fees and levies paid to migration agents and sponsors, were liquidated and the requirements of current consumption met, the assets most preferred by emigrant households were land, buildings, and jewelry. Consequently, land prices in the region doubled or even tripled. On the other hand, investment in shares and securities was reported to be almost nil. Although the survey showed that most remittances had not been used "for productive purposes," it also noted that a poor region takes time to step up its marginal propensity to save. Even so, it is significant that a backward district (Malappuram) recorded a fourfold increase in bank deposits in the six years ended June 1976. Such experiences aptly exemplify the role of remittances in promoting the banking habit and thereby enlarging the sphere of institutional finance.

A study of migrants' remittances into Pakistan—based on a five-year survey of the local press and interviews with emigrants, overseas employment promoters, and migration experts—found that the Pakistani emigrant typically consumed about 40 per cent of his income abroad leaving the balance for savings abroad or remittances home (Perwaiz, 1979). Most of the cash remittances, however, were reported to have been "frittered away in personal consumption, social ceremonies, real estate and price escalating trading" and likewise the merchandise remittances comprised mostly "status-oriented consumer goods."

### Toward more productive use

In evaluating the impact of remittances on domestic savings and investment in labor exporting countries, it is important to guard against the fallacy of treating all "consumption" as necessarily unproductive. Although family maintenance (including housing and education) represents consumption, this does not make it any the less desirable than "investment" in low-income countries. To the extent that it improves the health and efficiency of the recipients, it is productive in the same way as investment in physical capital. Since a considerable proportion of migrants originate in depressed areas with high unemployment, low per capita incomes, and heavy indebtedness, the use of remittances in essential consumption will be seen to be eminently in consonance with the current "basic needs approach" to development.

Also, considering the generally low-import content and high-labor content of housing, the domestic multiplier effects of housing expenditure on growth and employment may be substantial in most less developed countries.

But the more pertinent policy issue is the disposal of the surplus after liquidating past indebtedness and meeting essential consumption requirements. Remittances, undoubtedly, represent a considerable potential source for saving and investment, since they are a very high multiple of the per capita income and average wealth of emigrant households. For instance, in 1977 the average Portuguese emigrant remitted home US\$2,700 (Portugal's per capita income was US\$1,890); the average Yugoslav emigrant sent home US\$3,400 (Yugoslavia's per capita income was US\$1,960); and the average Indian emigrant remitted US\$1,500 (India's per capita income was US\$150). Consequently, the available evidence on uses of remittances in labor exporting countries is perhaps disquieting not so much because such data indicate that consumption absorbs the bulk of remittances but because they reflect the lack of a coherent policy to mobilize the savings from remittances into productive investment.

It is, therefore, essential to envisage and implement an integrated policy package covering the entire "migratory chain," that is, the process of migration, its overall socioeconomic effects, and the optimal allocation of remittances in decentralized employment-generating projects. The latter can be predicated only on the basis of at least some indicative regional and sectoral planning with appropriate institutions and incentives.

There are a number of possible lines of action within such a framework. First and foremost, given the lack of financial and managerial skills and know-how of many of the migrant households, the creation of a specialized institution, or of specialized units within existing banks, is imperative. A variety of proposals have been mooted: in India, for example, to start a multipurpose Kerala International Development Bank to mobilize savings from remittances, underwrite the issue of shares, provide consultancy services for emigrant entrepreneurs, and to issue special bonds in the Gulf countries for specific projects in Kerala; and in Pakistan to create an Overseas Investment and Management Corporation, Emigrants' Foundation, and an Emigrants' Welfare Fund. Similarly, given the transitoriness of remittances, it is important to ensure that they are utilized to inculcate an enduring savings psychology among the recipients. This can be achieved

through the creation of contractual savings schemes like provident fund schemes and annuities for the rural and self-employed sectors and through the linkages of savings to credit facilities in rural post office and savings banks. All such measures, however, are contingent, among others, on an adequate spread of banking facilities in rural areas, concomitantly with the development of an appropriate intermediate financial technology in the labor exporting countries. To be successful, institutional banking will have to adapt lending procedures to the viability of projects rather than to the availability of collateral. Likewise, conscious measures, such as advantageous interest rates in rural areas (as in India and Bangladesh), are necessary to redress the traditional urban bias of the financial system in developing countries, which otherwise leads to the habitual leakage of rural savings into urban credit.

To conclude, labor exporting countries need to supplement their macroeconomic policies to maximize migrants' remittances by policies to ensure their optimal use in enlarging their income and employment potential. **ED**

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# Exchange rate indicators

The accompanying charts represent a selection from material assembled periodically by the Fund's Research Department to facilitate analysis of changes in exchange rates for major currencies. The data presented relate to the seven largest industrial countries, which account for more than half of the world's exports of goods and services. Although no coverage is given to certain important facets of exchange rate determination, such as changes in official reserves or forward exchange rates, the six charts selected here provide useful insights into the behavior of exchange rates for major currencies during the past several years.

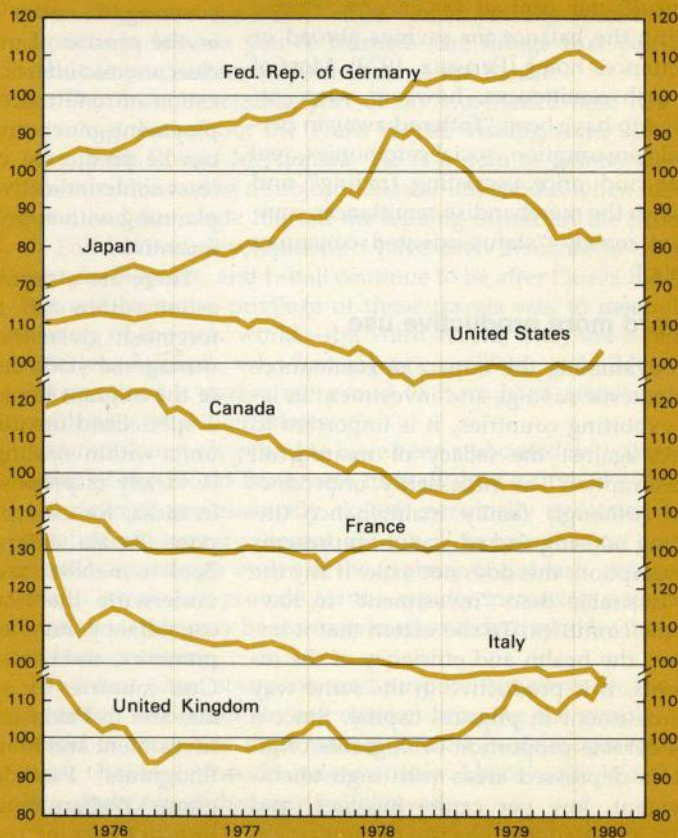
1

Developments in the foreign exchange markets for most of the major currencies over the 18 months ending in March 1980 were quite different from those of the preceding two years. Chart 1 shows how the change in the tone of exchange markets, while closely related to developments involving the U.S. dollar, also involved important shifts in relationships among other major currencies. Each index plotted in the chart provides a composite measurement of the value of the specified currency in terms of the other major currencies.

The U.S. dollar, which depreciated by roughly 15 per cent in effective terms from September 1977 to October 1978, recouped about half of that decline over the ensuing 18 months. Broadly parallel depreciations of the Canadian dollar and the Italian lira were also arrested in late 1978, although neither of these two currencies has appreciated as much as the U.S. dollar since that time. A much more marked break with earlier trends is evident for the Japanese yen, for which three fourths of an appreciation of some 40 percentage points from late 1976 to October 1978 was reversed over the ensuing year and a half, despite large-scale intervention by the Bank of Japan in support of the yen. One of the significant factors in the depreciation of the yen—the latest round of oil price increases—had the opposite effect on the pound sterling. That currency, after a fairly steady development during 1977 and 1978, appreciated strongly during 1979 and early 1980, despite a very high domestic inflation rate in the United Kingdom. Only in the cases of the French franc and the deutsche mark can it be said that earlier trends—roughly flat for the French franc and moderately rising for the deutsche mark—were sustained over the later period as well.

1

Effective exchange rates  
(Indexes, 1978 = 100)



## 2

Shifts in the pattern of external current account balances among the major industrial countries are shown in Chart 2. Broadly speaking, balances of countries in that group, except the United States, shifted toward reduced deficits or increased surpluses from 1976 to mid-1978. These shifts had as their principal counterpart a large deterioration in the U.S.

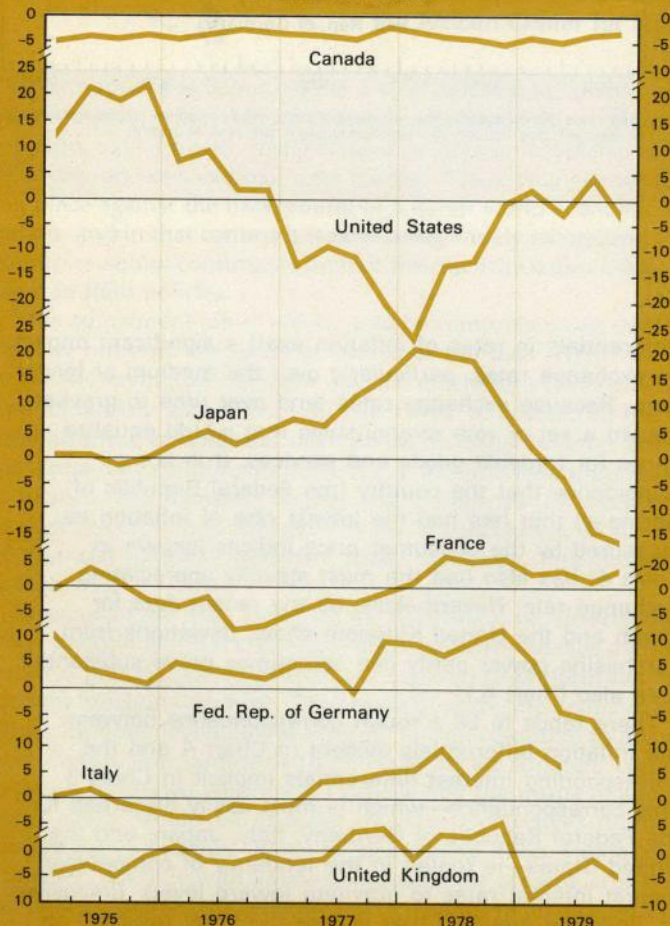
current account balance, and the result was a pattern of marked imbalances by early 1978. In the latter part of 1978 and 1979, however, partly because of the reversion of the U.S. current account toward balance and partly because of the increase in oil import bills, the external accounts of most major industrial countries shifted toward balance or, in the cases of the Federal Republic of Germany, Japan, and the United Kingdom, into significant deficits. The only exception to this pattern was Canada, where the current account balance has remained steadily in deficit by amounts equivalent to roughly 2 per cent of gross national product (GNP).

The improvement in the pattern of current account balances, which began in 1978 and continued in 1979, is partly attributable to the exchange rate changes— notably the depreciation of the dollar and the appreciation of the yen evident in Chart 1—set in motion by the earlier deterioration in the pattern of current account balance. At least equally important, however, were concurrent changes among the various countries in relative rates of expansion of domestic demand in real terms. Whereas the growth of real domestic demand in the United States had been some 4 percentage points higher than the average for other major industrial countries during 1977, the opposite was true during 1979. This succession of contrasts in the respective growth rates of domestic demand was a major factor behind both the initial widening of imbalances in the current accounts of these countries and the subsequent improvement in the pattern of balances.

Other, more specific, factors also played a role. For Japan, the degree of both the initial increase in the surplus and the later swing into substantial deficit was due partly to the initially perverse "J-curve" effects of exchange rate changes. For the United Kingdom, on the other hand, the current account balance moved into deficit from 1978 to 1979, despite a substantial improvement in the balance on oil transactions, depressed economic conditions, and the appreciation of the pound sterling. This appreciation, which was linked primarily to the prospects for North Sea oil and to the restrictive financial policies of the authorities, has led to a significant deterioration in the balance on non-oil transactions.

## 2

Payments balances on current account, including official transfers<sup>1</sup>  
(In billions of U.S. dollars)



<sup>1</sup>Seasonally adjusted, annual rates.

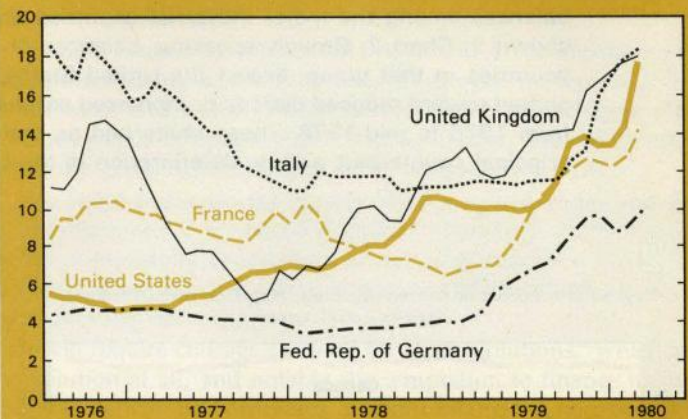
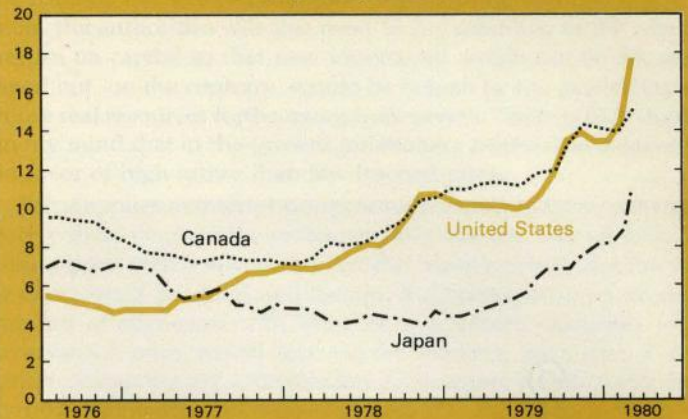
3

Exchange rate developments are significantly influenced by capital account transactions; these, in turn, are critically affected by interest rates. The gradual escalation of interest rates from the low levels of 1977 or early 1978 to the new peaks reached in virtually every country in March of this year is evident in the data in Chart 3. Also evident is the impact of the measures announced by the U.S. monetary authorities in late October 1978, early October 1979, and mid-March 1980.

Exchange rate relationships are affected most directly, at least in the short run, by the relative yields obtainable on various types of money-market paper in each country. Careful comparison of Charts 1 and 3 points up the following key relationships: (1) the turnaround in the U.S. dollar in November 1978, as well as its strengthening in late 1979 and early 1980, coincided with sharp advances in yields on U.S. dollar-denominated assets; (2) conversely, the weakness of the yen and the capital outflows experienced by Japan during 1979 and early 1980 went hand in hand with an unusually wide yield spread against yen-denominated assets; and (3) the appreciation of the pound sterling since the beginning of 1978, while a composite reflection of many factors, has coincided with a widening interest-rate spread, which averaged 4 to 5 percentage points against other major industrial countries during 1979, in favor of sterling-denominated assets.

3

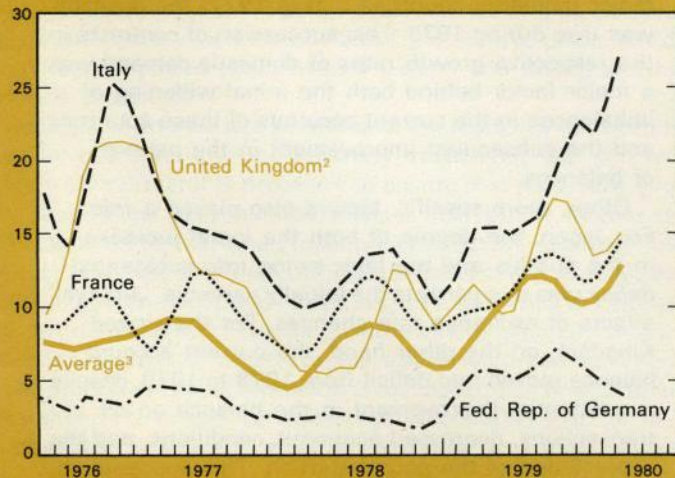
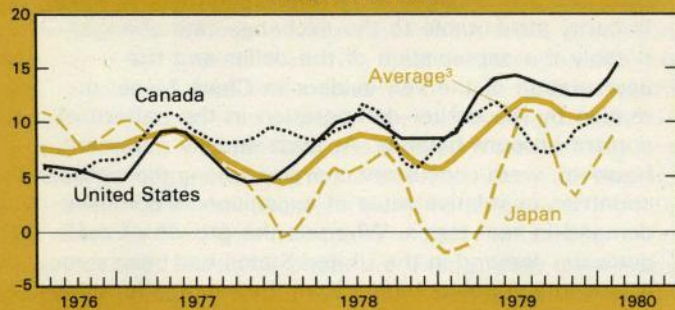
Short-term interest rates<sup>1</sup>  
(In per cent per annum)



<sup>1</sup>The rates shown are monthly averages of daily rates on money market instruments of about 90 days' maturity (the call money rate in the case of Japan).

4

Consumer prices  
(Changes, in per cent)<sup>1</sup>



<sup>1</sup>Average of three months ending in the month indicated over the preceding three months, seasonally adjusted, annual rates.

<sup>2</sup>Excluded from the figures plotted is the estimated increase in U.K. consumer prices associated with the increase approximately 33/4 per cent in value added tax (VAT) rates in that country effective June 18, 1979.

<sup>3</sup>Average for the seven major industrial countries.

4

Differentials in rates of inflation exert a significant impact on exchange rates, particularly over the medium or longer term. Because exchange rates tend over time to gravitate toward a set of rate relationships that would equalize prices for tradable goods and services, it is not a coincidence that the country (the Federal Republic of Germany) that has had the lowest rate of inflation as measured by the consumer price indices (shown in Chart 4) has also had the most steadily appreciating exchange rate. Nevertheless, as the recent data for Japan and the United Kingdom show, deviations from purchasing power parity can sometimes prove substantial. (See also Chart 6.)

There tends to be a rough correspondence between the inflation differentials evident in Chart 4 and the corresponding interest differentials implicit in Chart 3. This correspondence—which is most easily discerned for the Federal Republic of Germany, Italy, Japan, and the United States—is rooted in the tendency of competitive market interest rates to gravitate toward levels (inclusive of "inflation premia") that equate the "real returns" on corresponding types of investments in different countries.

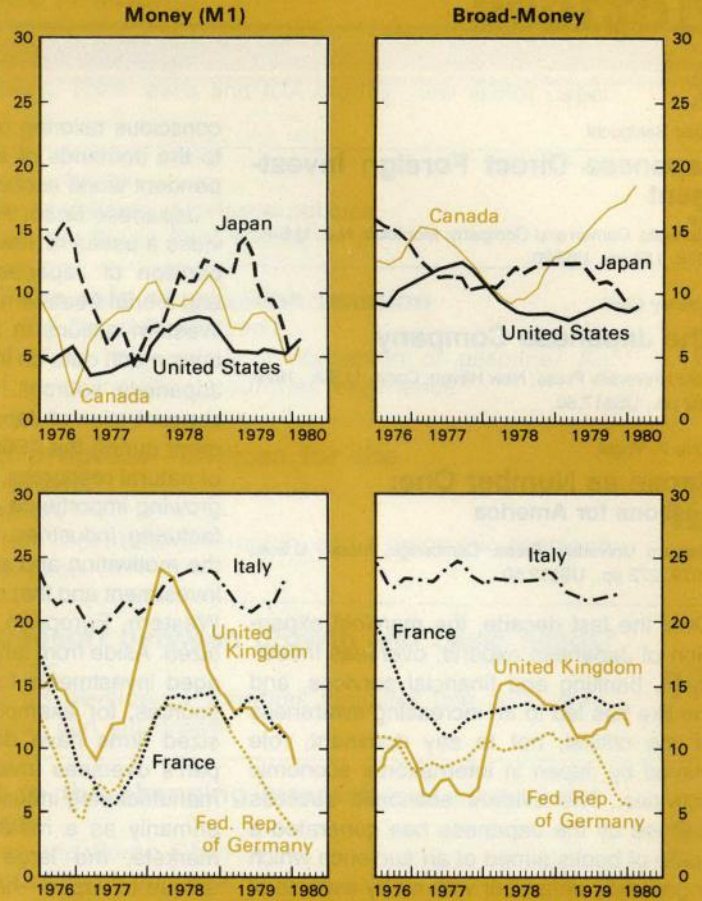
# 5

In the past several years there has been an increasing public interest in rates of monetary expansion as independent determinants of exchange rates. However, the effects of differential rates of monetary expansion (or contraction) are evident not directly in spot exchange rate changes but through a complex chain of intermediate transmission mechanisms, which involve such factors as changes in the income velocity of money, interest rate differentials, and price expectations.

There are a few instances, such as the recent Japanese experience, in which relative rates of monetary expansion appear to have been closely followed by major changes in effective exchange rates. Even in these instances, however, other factors have influenced changes in exchange rates. A notable feature of Chart 5 is the number of countries reporting an acceleration of growth in narrowly-defined stocks of money (M-1) in 1978 and subsequent deceleration during 1979. The general shift toward slower monetary expansion during 1979 was indicative of a widespread emphasis on monetary policy as the key tool used in the major industrial countries to combat inflation.

# 5

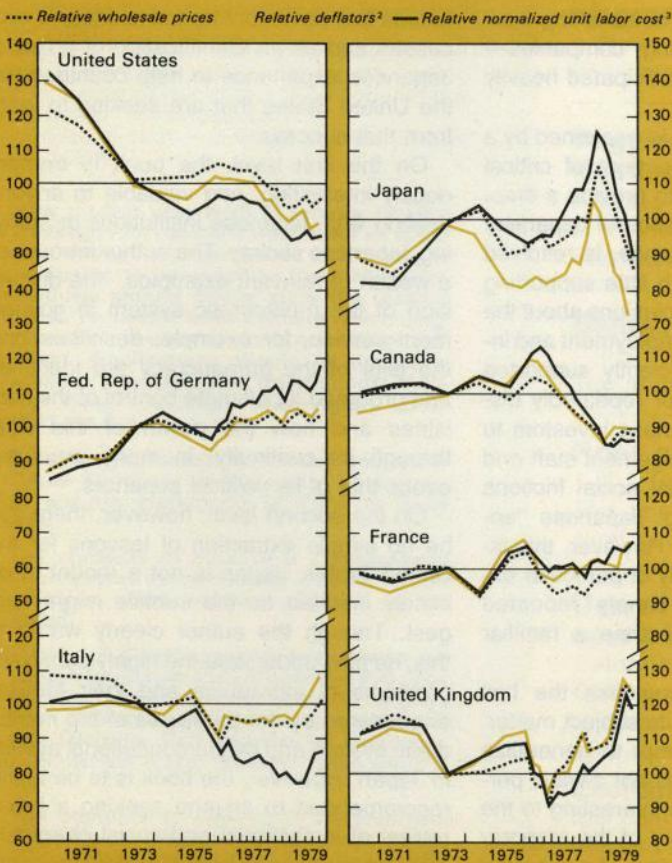
## Monetary aggregates (Changes, in per cent)<sup>1</sup>



<sup>1</sup> Average of three months ending in the month indicated over corresponding three months a year earlier.

# 6

## Major industrial countries: relative costs and prices of manufactures, adjusted for exchange rate changes<sup>1</sup> (Indexes, 1973 = 100)



<sup>1</sup> Indexes of the type shown here are frequently referred to as indicators of real effective exchange rates.  
<sup>2</sup> Annual deflators for gross domestic product originating in manufacturing with quarterly interpolation and extrapolations (beyond the latest available data) based on wholesale price data for raw materials and manufactures.  
<sup>3</sup> Hourly compensation divided by potential "output per manhour."

# 6

The indices plotted in Chart 6 are indices of relative costs and prices adjusted for exchange rate changes; they can be regarded as indices of "real exchange rates." These series relate only to the manufacturing sector, where competition among industrial countries is most direct and pervasive. A rise in one of these indices denotes a loss of competitiveness; a decrease denotes an improvement.

Indices of the type shown in Chart 6 are particularly useful in assessments of the impact of past exchange rate changes and domestic price changes on a country's competitive position vis-à-vis its trading partners. Key points to note are (1) changes in real exchange rates over the 1970s have often been large, in some cases— notably the United States—they have been quite persistent; (2) large recent changes in real exchange rates for the United Kingdom and Japan reflect changes in nominal effective exchange rates that exacerbate the effect of inflation on the competitive positions of these two countries (Charts 1 and 3); and (3) at the end of 1970s the competitive position of the United States and Canada was stronger, and that of the United Kingdom and, to a lesser extent, the Federal Republic of Germany was weaker than at any time during the decade.

# Book notices

Sueo Sekiguchi

## Japanese Direct Foreign Investment

Allanheld, Osmun and Company, Montclair, N.J., U.S.A., 1979, 153 pp., US\$20.

Rodney Clark

## The Japanese Company

Yale University Press, New Haven, Conn., U.S.A., 1979, 282 pp., US\$17.50.

Ezra F. Vogel

## Japan as Number One: Lessons for America

Harvard University Press, Cambridge, Mass., U.S.A., 1979, 272 pp., US\$12.50.

Over the last decade, the manifold expansion of Japanese exports, overseas investment, banking and financial services, and the like has led to an increasing awareness of the critical, not to say dominant, role played by Japan in international economic activities. The evident economic success enjoyed by the Japanese has generated a spate of books aimed at an audience which is generally unfamiliar with many aspects of Japanese society, culture, and business practices, but who more and more frequently must deal with individuals and institutions in Japan. These three books are directed primarily at this audience.

The first book, *Japanese Direct Foreign Investment*, while dealing primarily with the pattern of Japanese investment overseas, seeks to explain the economic and/or organizational motivation for this investment and to identify problems which arise with host governments, foreign employees, and local residents as a result of different cultural and managerial styles of the Japanese investor. The second book, *The Japanese Company*, is based on the personal experience of the author working within a Japanese company. Besides describing the adjustments required of a non-Japanese to understand the management and operations of a Japanese enterprise, the author examines many aspects of the Japanese labor market, including the "lifetime employment" system.

The third book, the best written of the three, attempts to view the success of Japan as an experience from which Western nations—and, in particular, the United States—can learn. Its theme is a simple one: Japan's success in many areas is by no means an accident or a passive result of cultural heritage. Rather it derives, in large part, from a

conscious tailoring of Japanese institutions to the demands of a dynamic and interdependent world economy.

*Japanese Direct Foreign Investment* provides a useful review of the recent rapid expansion of Japanese investment abroad, and a brief treatment of direct investment by Western nations in Japan. The book contains much data on investment derived from Japanese sources. The author notes the concentration of Japanese overseas investment during the 1960s on the development of natural resources, and more recently, the growing importance of investment in manufacturing industries. The contrast between the motivation and style of Japanese direct investment and that of the United States and Western European countries is emphasized. Aside from large government-encouraged investments for exploiting natural resources, for example, small and medium-sized firms have dominated much of Japan's overseas investment—particularly in manufacturing industries. At the same time, primarily as a means of establishing new markets, the large trading companies—unique to Japan—have participated heavily in direct investment.

Unfortunately, this book is weakened by a sometimes superficial treatment of critical issues. The brief attempt to provide a theoretical basis for the motivation of Japanese direct investment, for instance, is resolved primarily by assertion, with little supporting evidence offered. The conclusions about the impact of investment on employment and income are likewise insufficiently supported by data. Finally, the author repeatedly discusses the need for Japanese investors to internationalize their management staff and to be sensitive to potential social frictions caused by the creation of Japanese "enclaves" in host countries. However, this issue requires detailed study of particular experiences, rather than simply repeated warnings of what has become a familiar problem.

*The Japanese Company*, like the first book, is rather specific in its subject matter. Though the author's attempt to generalize from his own experience is not always persuasive, the book may be interesting to the general reader as a history of the corporation in Japan and as a review of a personal experience of working in a cultural and managerial environment that is very different from that of the West. There is useful questioning in this book of certain "received

truths" about Japanese society. As one example, the author contends that the "lifetime employment" system exists in Japan more as an ideal than in practice and is relevant only to a small segment of the labor force. He claims that it is not offered by smaller companies—the predominant employers—and does not apply to temporary workers or to women. Further, the current demographic changes in Japan—an aging of the population—are diluting the system still further. This view leads to interesting speculations on the evolving nature of authority in Japanese companies and on the company-community relationship in Japan—speculations which suggest some evolution to more Western forms in Japanese institutions.

In *Japan as Number One* Professor Vogel deals with more general issues and focuses his examination of Japanese institutions on elements of their organization and operation which may be worth emulating, particularly by U.S. institutions. His point of departure is that Japan's well-known economic success is complementary to its success in many other areas—a low crime rate, long life expectancy, high participation rates in education, the success of its students in international competitions, and so on. This book may be read on two levels: as an analysis of the elements and forms of Japanese institutions that have contributed to Japan's successes and as an identification of areas of Japanese experience to help countries like the United States that are seeking to learn from that success.

On the first level, the book is tremendously interesting, and valuable to anyone dealing with Japanese institutions or studying Japanese society. The author introduces a wealth of relevant examples. The discussion of the meritocratic system in government service, for example, describes how the elite of the bureaucracy are identified and groomed for ultimate control of the ministries and how the power of this elite, through its continuity, in many ways exceeds that of its political superiors.

On the second level, however, there can be no simple extraction of lessons for the United States. Japan is not a model to be blindly imitated as the subtitle might suggest. Though the author clearly warns of this, he may understate the highly publicized problems of individuals and their families engendered by the pressures of the meritocratic system and by the educational system in Japan. However, the book is to be highly recommended to anyone seeking a broad review of institutional and social characteristics which have helped in Japan's success and must be understood in business, diplomatic, and other dealings with the Japanese.

John Boorman

John W. Mellor (Editor)

## India: A Rising Middle Power

Westview Press, Boulder, Col., U.S.A., 1979, xv + 374 pp., US\$20.00.

Wayne G. Broehl, Jr.

## The Village Entrepreneur: Change Agents in India's Rural Development

Harvard University Press, Cambridge, Mass., U.S.A., 1978, vi + 228 pp., US\$18.50.

India has been going through a period of political crisis and change since the early 1970s. Nevertheless, due both to some far-sighted policies and to fortuitous circumstances, the economy recovered quite rapidly from the oil crisis in 1973 and now has a capability for accelerated growth. Thus, in these two important respects, India is ripe for change.

Each of these books has something different to say about the problems of social or economic change. *India: A Rising Middle Power* is a collection of scholarly essays on various economic and political issues originally commissioned for a conference organized by the United States Agency for International Development (USAID), which took place in 1977. The papers cover a wide range of political and economic developments apart from aid—foreign trade, research and development in India, regional power in South Asia, and the issue of non-proliferation of nuclear technology. By and large, this is a group of authoritative, well-

written papers and comments that provide a useful survey of India's current political economy.

Myron Weiner's essay on India's political evolution is one of the most interesting for a development economist. He analyzes the relations between the center and states, the dominance of national politics by the Congress Party until the end of the emergency, the way the power base of the Congress gradually eroded, and the constraints such factors put on economic policy. It is useful to point out, for example, that the Indian Government, like any other, is not a free agent and that it has adopted economic policies, such as the nationalization of the banks in the late 1960s or the increased emphasis on limiting the expansion of the large houses soon after, partly to preempt moves of political opposition.

By contrast, *The Village Entrepreneur* is a piece of original research. It is largely concerned with two topics: a survey of fertilizer distributors in the state of Tamil Nadu in the South and a seminar on "entrepreneurship" held for some of them. The survey results suggest entrepreneurs fall into two distinct groups: a modern, risk-taking, profit-maximizing group and a more traditional risk-averse, sales-maximizing group. The former are generally more "entrepreneurial" in the sense that they use as much information as they can from a variety of sources to conduct their business. They are planners, are optimistic, have leadership ability, and tend

to expand and develop in new lines of business. The aim of the seminar, which brought U.S. business school techniques to bear on the problem, was to provide for a discussion of these entrepreneurial characteristics for the benefit of the participants.

This book is poorly structured, jumping somewhat erratically between the particular and the general, and there is much jargon. The statistical techniques employed to test hypotheses are not discussed fully; in at least one case, the argument behind its statistical sophistication appears to be tautological. The claim that the week-long seminar significantly changed attitudes and behavior is not convincingly demonstrated.

Despite these faults, it remains clear that both the subject matter and the approach are important. Because some of the most important innovators and wealth-creators are to be found among entrepreneurs, a micro-level study of what constitutes entrepreneurial characteristics in rural India is a step toward understanding how to alleviate rural poverty there. Entrepreneurs are catalysts for the development of new attitudes in their societies; for better or worse, this is the stuff of social change and economic development.

Both of these books shed light on the present situation in India, and each for different reasons underlines the fact that the problems are internal, that the main forces at play are internal, and that the solution, whatever form it takes, will also have to be largely internal.

Charles Taylor

Sir Jeremy Morse and others

## The Financing of Long-Term Development

The Institute of Bankers, London, England, 1979, xi + 206 pp., £7.50 (plus 50 p postage).

The 32nd International Banking Summer School organized by the U.K. Institute of Bankers at St. John's College, Cambridge, was devoted to the financing of long-term development. The volume includes eight keynote papers prepared by leading international bankers and economists and a brief synopsis of each of ten group discussions.

Homa Motamen

## Expenditure of Oil Revenue:

### An Optimal Control Approach with Application to the Iranian Economy

St. Martin's Press, New York, N.Y., U.S.A., 1980, xii + 189 pp., US\$27.50.

Iran presents a typical case of an oil based economy. Motamen's model is an attempt to identify the appropriate investments of revenue from a nonrenewable resource. It provides a guideline for making rational expenditures and favoring the accumulation of non-oil capital. It also indicates the maximum level of such capital that could be accumulated before the oil runs out, and in view of the limited absorptive capacity of the Iranian economy at this time, the time when it would become more profitable to invest abroad.

Edward F. Denison

## Accounting for Slower Economic Growth:

### The United States in the 1970s

The Brookings Institution, Washington, D.C., U.S.A., 1979, xiv + 212 pp., US\$16.95 (cloth), US\$7.95 (paperback).

This volume, the third in the author's pioneering studies on the sources of economic growth, is a major contribution to economic literature, distinguished by the quantitative techniques of growth accounting he has developed and applied to experiences in the United States, Western Europe, and Japan. The study focuses on the sudden retardation of growth in the United States which became apparent in 1974 and which could not be attributed to the transient or the inevitable factors that had accounted for a decline in the rate of productivity increase in the late 1960s. Of advanced technical and academic interest.

W. Keddeman (Editor)

## Experience and Issues in Rural Development

Royal Tropical Institute, Amsterdam, the Netherlands, 1979, 56 pp.

This slim volume is based on papers presented at a seminar sponsored by the World Bank and the Royal Tropical Institute in May 1979. It offers a succinct review of experience with rural development in the post-1973 period, especially efforts to alleviate poverty. Background reading.

Pierre Dhonte

## Clockwork Debt

Lexington Books, D.C. Heath and Company, Lexington, Mass., U.S.A., 1979, xiv + 124 pp., US\$15.95.

## La Dette des Pays en Développement

Notes et Etudes Documentaires, La Documentation Française, 1979.

A worthy addition to the growing literature on the debt problems of developing countries with the theme that LDCs cannot manage their debt unless their exports expand, and the volume of world trade cannot expand unless the LDCs can handle their debt burdens. The discussion thus focuses on the borrowing capacity of the LDCs. Available in English and French.

Frank A. Southard, Jr.

## The Evolution of the International Monetary Fund

Essays in International Finance, No. 135, International Finance Section, Department of Economics, Princeton University, Princeton, N.J., U.S.A., 1979, 50 pp., US\$1.50.

This essay, prepared by the former Deputy Managing Director of the International Monetary Fund, describes its evolution into an international institution at the center of world monetary problems, primarily from an operational and policy point of view.



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