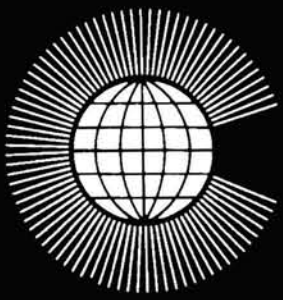
Some Policy and Legal issues affecting Mining Legislation and Agreements in African Commonwealth Countries



Commonwealth Secretariat

SOME POLICY AND LEGAL ISSUES AFFECTING MINING LEGISLATION AND AGREEMENTS IN AFRICAN COMMONWEALTH COUNTRIES

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These essays have been written as a companion to a broader and much more detailed study, prepared by the Commonwealth Fund for Technical Cooperation for use by Commonwealth Governments, of the legislative framework, agreements and scheme of financial impositions affecting the mining industry in African Commonwealth countries. References in these essays to 'the survey' or 'the compendium' are references to this broader study. The survey purports to be entirely factual and contains neither analysis of nor comment upon its own contents. The essays on the other hand discuss the legal and economic rationale underlying the more traditional form of arrangements, draw out certain policy issues for consideration, and seek to identify trends. Despite their original purpose, the authors, in preparing the essays for separate publication, have tried to make them as self contained as practicable. Much of the initial work on the survey and on the essays was done at a time when Roland Brown was a Research Fellow of the Institute of Development Studies financed by a grant from the Ford Foundation. The opinions expressed are those of the writers and should not necessarily be taken to represent the views of the Commonwealth Secretariat or the Institute of Development Studies on the matters of policy considered.

The factual information in these essays should be taken as being accurate as of 1st July 1974, except where specific references make it clear that changes subsequent to that date have been taken account of in the text.

London Market rates in July 1974 for the currencies of countries covered in this study were (subject to daily fluctuations) as follows:-

COUNTRY		
Sierra Leone	2 Leone	per £ 1
Ghana	2.71 New Cedis	per £ 1
Nigeria	1.46 Naira	per £ 1
Kenya	17.1 K.Shillings	per £ 1
Uganda	17.1 U.Shillings	per £ 1
Tanzania		
Zambia	1.54 Kwachas	per £ 1
Botswana)		
Lesotho)	1.59 Rand	per £ 1
Swaziland)		

£ 1 = U.S. $ 2.40

PART I : THE LEGISLATIVE FRAMEWORK
by Roland Brown

The legislation relating to minerals covered by this Survey in most cases has its origin in a period when the countries in question were still under colonial administration.[1] Amendments have of course been made from time to time both before and since the coming of independence, but generally speaking the basic framework of the principal act has remained unchanged. The colonial governments plainly treated prospecting for, and mining of, minerals as a subject of considerable importance which required careful, and in some respects meticulous, regulation by statute. The laws which were enacted naturally reflect certain assumptions about the development of mineral resources which at the time were no doubt taken largely for granted. Looking at this body of legislation as a whole it is possible to identify two such assumptions which appear to have had an important influence in determining the broad scheme of the legislative instruments.

(i) Subject to appropriate controls it was seen as desirable that a colonial territory should, so far as possible, be open for prospecting and mining. Provision was generally made for the preservation of customary rights sanctioned by long user,[2] but subject to that, the legislation does not normally distinguish between the indigenous entrepreneur and the foreign or expatriate operator. Nor does the legislation proceed on the assumption that the foreign or expatriate operator will be a large concern with substantial resources and wide experience of mining. On the contrary the regulatory provisions included in most of the statutes clearly envisage that prospecting and mining may be carried out by individuals or small companies without access to advanced technology and of limited or dubious financial standing.[3]

(ii) The role of the state in the development of mineral resources was seen almost exclusively in regulatory terms. The legislation provides for the government and its officers to exercise control over the activities of others, but does not envisage that the state itself may wish to participate in the exploitation of minerals or to initiate a strategy for their

development in terms of its overall planning objectives.

Neither of these two assumptions will necessarily accord with contemporary thinking in developing countries about an appropriate policy for prospecting and mining. In the post-colonial period an "open" policy, even if it were modified to take account of the increasing cost and complexity of mining technology, is unlikely to have much appeal. Most developing countries either directly or indirectly have been influenced in their thinking by the work of the United Nations Permanent Commission On Sovereignty Over Natural Resources which eventually found expression in the now famous General Assembly Resolution 1803 of 1962.[4] The countries whose legislation is covered by this survey do not belong to a single ideological bloc and their governments have widely differing views about the role which the State should play in the economy and about the rights and obligations of the owners of private property. However it would be safe to say that in connection with the exploitation of mineral resources there would be a wide measure of agreement in rejecting a role for the State which was purely regulatory, i.e. a matter of controlling actual or potential abuses in the context of a free competitive system. The desire of the developing countries to play a more active part, to be participants in the development of major projects,is now an established feature of the climate of business and is no longer seen by the mining companies as something likely to threaten the integrity of their investments. Commenting on this situation the Chairman of the Anglo American Corporation, Mr. Harry Oppenheimer, has given some indication of the thinking in his group. In the course of his statement to shareholders at the 1974 Annual General Meeting he said "No government likes its basic industries to be entirely foreign owned and yet in many developing countries individual members of the public either do not have the resources to invest in industry or, for ideological reasons are prevented from doing so. The only alternative in such cases to full foreign ownership is for government to take a direct interest. In these circumstances we willingly accept a partnership between the government as owners of the mineral rights and private companies that can provide the necessary financial resources and technical knowhow."

Most developing countries which have inherited legislation on mining from the Colonial period are conscious of the need, at the appropriate time to make substantial changes. However there would appear to be considerable uncertainty about the direction which such changes should take. It may therefore be useful to examine some of the salient features of the existing

legislation in the context of changed or changing assumptions about the exploitation of natural resources.

I Title to Minerals in the Ground

All the legislative instruments covered by the Survey assert in one form or another the basic principle that the State has title to minerals in the ground.[5] The title asserted on behalf of the state takes effect irrespective of the existence of private rights over the surface whether freehold, leasehold or customary.

It should, however, be noted that this principle was not established as one of universal application until the latter part of the Colonial period. In the earlier period particularly in Southern Africa the Chartered Companies obtained valuable concessions from traditional rulers sometimes in circumstances which must now appear dubious. These concessions gave them title to minerals in the ground and enabled them to licence others to prospect for and exploit deposits in return for the payment of royalties.[6]

In some cases these rights still continue in favour of the successors in title of the original grantee and in certain of the enactments covered by this Survey it has been necessary to qualify the title of the State by a saving provision in respect of privately owned mineral rights subsisting at the time the legislation was enacted.[7] It should however be noted that where this situation still exists it is open to the State to levy taxes on these rights and in this connection attention is drawn to the Mineral Rights Tax Act 1972 of Botswana a summary of which is included in the Survey.[8]

Generally speaking privately owned mineral rights may now be regarded as an anachronism, and where they still exist it is reasonable to anticipate that Governments will seek in one way or another to extinguish them. However there may continue to be issues in some countries concerned with the extent to which traditional tribal authorities or regional subdivisions should share in the control over minerals or be entitled to receive in whole or in part royalty payments.

II The Grant of Prospecting and Mining Rights

Although title to minerals in the ground is now usually vested in the State very few of the developing countries have at

present either the financial resources or the technical knowledge to conduct large scale prospecting or mining operations. If mineral resources are to be developed prospecting and mining rights must generally be granted to foreign or foreign controlled companies, acting either alone, or in partnership with Government in a joint enterprise.

The various laws covered by this Survey make statutory provision for the grant of such rights. There are many differences in point of detail between one country and another, and basic similarities where they exist are sometimes concealed by arbitrary differences in terminology. However it is possible to discern in most of these statutes the elements of a common scheme which may be taken to reflect the basic requirements of mining practice. Broadly speaking the legislation envisages the grant of rights in three stages.

(i) An initial grant of the right to "prospect" or "explore" for minerals. A wide area may be covered in a grant of this type particularly if the licence is not "exclusive". There may be no statutory limitation on the extent of the area which may be covered by such a grant and no statutory provision for the imposition of minimum work obligations.[9]

(ii) A second grant of prospecting rights on an exclusive basis over a smaller area within the scope of the original grant. Normally there would be a statutory limitation on the extent of the area which could be covered by a licence of this type and at least in general terms some provision relating to work obligations.[10]

(iii) The grant of mining rights. In the legislation which originated in the colonial period there is generally a distinction between long term rights conferred by the grant of a lease and more informal arrangements where the right to mine can be obtained by pegging claims or by some analogous procedure.[11]

The Mines and Minerals Act of Zambia, which reached the statute book in 1969 some five years after independence, follows the general scheme set out above. However it is largely free from distortions present in the Colonial statutes which derive from the "open" policy concept previously referred to. In this respect the scheme of the Zambian Act is as follows:

(a) The initial grant is called a "prospecting licence" and prospecting means "intentionally to search for minerals".

It should be noted:-

(i) There is no limit on the area which may be covered by a prospecting licence, but a prospecting licence confers exclusive rights in respect of the minerals to which it relates;

(ii) The maximum duration is four years;

(iii) The applicant is required by the Act to describe in his application a programme of intended prospecting operations and their estimated cost, and if he obtains a licence to carry out that programme;

(iv) There is a minimum expenditure requirement i.e. not less than the amount which would result if a sum of twenty five Kwacha per square mile, or part thereof, of the prospecting area were expended annually during the currency of the licence;

(v) The grant of a prospecting licence may be made subject to conditions and an application for a prospecting right must be refused if the applicant does not have adequate financial resources or the technical competence and experience to carry on effective prospecting operations.[12]

(b) The second grant in the Zambian scheme is called an "exploration licence" and explore means "to define the extent and determine the economic value of a mineral deposit". It should be noted:-

(i) An exploration licence cannot be granted to any person unless he is the holder of a prospecting licence covering the area. However the holder of a prospecting licence is entitled to an exploration licence unless it is refused on specified grounds set out in the statute;

(ii) The maximum area is 10 square miles and the duration is three years with limited provision for renewal;

(iii) An applicant for an exploration licence must describe a programme of intended exploration operations and if his application is granted must carry out that programme;

(iv) There are minimum expenditure provisions i.e. during the initial period of the grant for each square mile not

less than amounts of two thousand Kwacha in the first year, four thousand in the second, and six thousand in the last. During any period of renewal the minimum is not less than the amount which would result if a sum of ten thousand Kwacha per square mile of the exploration area were expended annually.

(v) An application for an exploration licence must be rejected if the Government Mining Engineer considers that the programme of intended exploration is inadequate or if he is not satisfied that the mineralization which the proposed exploration licence would cover exists in the area.[13]

(c) The third stage in the Zambian scheme is the grant of a "mining licence". No mining other than in the course of prospecting and exploration can take place unless a mining licence has been granted. Except in respect of building and industrial minerals a single set of provisions governs all applications. It should be noted:-

(i) A mining licence may only be granted to a person who is the holder of a prospecting licence or an exploration licence. However the holder of a prospecting licence or an exploration licence is entitled to the grant of a mining licence unless it is refused on specified grounds set out in the statute;

(ii) The maximum period of a mining licence is twenty five years but there is statutory provision giving a limited right of renewal;

(iii) The applicant for a mining licence must describe a programme of intended development and mining operations and provide a technological report on mining and treatment possibilities and the intention of the applicant in relation to these;

(iv) The Minister (who is responsible for the grant of mining licences) must reject an application if he considers that the programme of intended development and mining operations will not ensure the proper conservation and use of the mineral resources of the proposed mining area.[14]

From the foregoing account it will be seen that the Zambian scheme follows a three stage concept which in one form or another

is a feature of the colonial statutes. However the provisions of the Act are designed to ensure that the Government remains in substantial control of the situation at each stage. The right to prospect, explore and mine is granted in return for specific obligations which can be quantified, assessed and monitored. In a recent study describing the scheme of the Zambian Act the former Director of the Geological Survey, Lusaka, has underlined the significance of these provisions: "Strong emphasis is placed on the requirement that any applicant for any form of licence shall submit a programme of his intended operations. This programme is one of the more important criteria used in assessing applications and in effect the issue of licences means that the programme is approved. The licence holder must then proceed to prospect or mine in accordance with his programme or any approved amendments; if he fails to do so, he will be in default and liable to forfeiture."[15]

Any developing country concerned to bring about a rapid development of its mineral resources will want to ensure that the companies licensed to prospect do not hold rights over extensive areas which they do not require, and do not hold their rights for longer than is necessary to carry out effective prospecting operations. In a three stage system where at the second stage the statute lays down a maximum area over which rights may be granted there is a built-in concept of relinquishment. A similar result in practice may also be achieved by providing either at the first or second stage for the grant of rights which are initially of comparatively short duration, but subject to renewal where Government is satisfied that effective prospecting operations are being carried out. It will be noted that under the Zambian scheme exploration licences (the second stage) are limited to 10 square miles but in the case of prospecting licences (the first stage) there is no limit. However in practice the size of the area over which a company will seek to have prospecting rights will be limited by the existence of minimum expenditure obligations and, of course, by the requirement that an applicant for prospecting rights must satisfy the Government Mining Engineer that he has the financial resources and technical staff to carry out his proposed programme of prospecting operations.

In general it may well be the case that minimum expenditure provisions written into legislation are more effective in limiting the size of the area over which rights are sought than as a method of ensuring that licensees carry out intensive operations. If minimum expenditure obligations are part of a statutory scheme they must necessarily be set at fairly modest levels if an appropriate degree of flexibility is to be maintained.

It is evident that in the Zambian scheme it is the requirement that a programme of prospecting or exploration must be submitted for approval that guarantees for Government a genuine quid pro quo in return for the grant of licences.

III The Concept of Vested Rights

A concept of vested rights is a characteristic feature of the Zambian legislation and to a greater or lesser extent of most of the statutes which originated in the Colonial period. It will be noted that under the Zambian scheme the holder of a prospecting licence who has fulfilled the statutory requirements is entitled as of right to the grant of an exploration licence. Again the holder of an exploration licence who has fulfilled the statutory requirements is entitled as of right to the grant of a mining licence. If an exploration licence or a mining licence is refused on grounds other than those set out in the relevant sections of the Act a justiciable issue arises between the applicant and the Government which falls within the jurisdiction of the Mining Affairs Appeal Tribunal.[16] In this way the Government has limited its discretion in the grant or withholding of exploration and mining licences. In the older statutes the extent to which the concept of vested rights is incorporated in specific provisions varies from case to case. For example in the Botswana legislation the holder of prospecting rights is not entitled as of right to the grant of a mining lease. However, he is entitled as of right to peg claims, and having pegged claims, has a statutory right to carry on mining operations. Similar distinctions can be found in other statutes.[17] However in one form or another a concept of vested rights is present in all of the laws originating in the Colonial period.

The rationale behind the concept of vested rights is clear enough. Developing countries which do not have the financial resources or technical knowledge to do their own prospecting must invite or permit others to to do it for them. No mining company will be prepared to spend substantial sums on exploration or prospecting unless in the event of a significant discovery being made it has some assurance that it will be able to undertake or at least to participate in profitable mining operations. Legislative provisions embodying the concept of vested rights are an attempt to meet this requirement. Logically of course where legislation relating to exploration or prospecting imposes on licensees substantial obligations the need to provide adequate assurances is correspondingly increased.

While the logic of vested rights is therefore largely a matter of commonsense, it is open to question whether in practice appropriate assurances either can, or should, be provided by legislative provisions. Two interrelated factors come into play here. First, important mining ventures are capital intensive and involve the investment of very large sums of money for prospecting and mining and for related infrastructure. The Selebi Pikwe copper nickel mine in Botswana (the Shashe Project) is a good example. Investment in mining amounted to Rand 120 million, of which Rand 54.6 million was borrowed from a consortium of banks in the Federal Republic of Germany. Infrastructure amounted to a further Rand 55.102 million. In this case the provision of the basic infrastructure was the responsibility of Government but finance borrowed for this purpose from International lending agencies was guaranteed by the private investors. Secondly modern Governments concerned with the management of the economy deploy a wide range of weapons in order to secure the objectives of their policy. In this respect taxation and exchange control are clearly of critical importance for the foreign investor, but other areas in which the Governments may choose to intervene must also be considered by the prospective investor - e.g. dividend limitation, quantitative restrictions on exports or imports, price control and manpower planning. It is clear that a government of radical disposition or a government facing an imminent economic crisis, if not constrained by contractual obligations, may use any or all of these weapons in a way which could severely restrict profits, inhibit loan repayments or reduce the capital value of assets. It follows that a foreign investor contemplating a major mining project will seek to negotiate a complex set of guarantees going far beyond the limited assurances provided in any of the laws covered by this Survey. In the case of the Shashe Project the relationships between the various parties was governed by a Master Agreement of some 46 clauses and in addition no less than forty "Scheduled Agreements". In the context of a complex transaction of this kind the fact that the operating company B.C.L. had a statutory right to peg claims in the event that the grant of a mining lease was refused was not a matter to which any of the parties can have attached the least significance. The Shashe Project may perhaps be regarded as an extreme case, but where any major investment is under consideration the mining company, and its financial backers in the capital market, will seek to negotiate contractual assurances transcending in importance the concept of vested rights in whatever form it may be embodied in the legislative instruments of general application.

Although falling largely outside the scope of the legislative framework this situation raises for developing countries a difficult issue of timing. If a major project is in contemplation it may be evident that the end result must be a somewhat complex agreement or set of agreements which define in connection with a number of separate issues the respective rights and obligations of the Government and the private investor. At what stage should the terms of this package be worked out. From the point of view of the mining company there may well be a reluctance to spend substantial sums on exploration or prospecting without first having reached agreement on the fiscal regime which could determine the profitability of mining operations. On the other hand there must be a measure of uncertainty in the Government's bargaining position particularly in connection with the fiscal regime until the size, character and precise location of the ore body have been determined by prospecting operations.

It is doubtful whether there can be any simple answer to this problem which is inherent in the nature of mining business. However it would appear that in recent years there has been an increased willingness on the part of some of the major companies to recognise the reluctance of governments to commit themselves to a final package in the absence of the information necessary to make a proper assessment of the project. In one of the countries covered by this Survey an agreement has recently been concluded with a major oil company granting prospecting rights for coal. Under the terms of the licence the Company has accepted substantial work obligations, but there is no undertaking by the Government to grant a mining lease and no agreement on a fiscal regime should mining operations result. Instead the Company has the right on expiration of the licence to negotiate on an exclusive basis with the Government for a period of one year. Ideally, of course, developing countries should be in a position to finance their own prospecting operations and in this connection it is encouraging to note that the United Nations has established a Revolving Fund for this purpose to which the developing countries now have access.[18]

IV. The Duration of Mining Leases and their Termination

Where a foreign investor is contemplating a major capital investment in new mining operations the duration of the company's title under a lease or licence to mine will inevitably be a matter of considerable significance. The foreign investor will generally seek rights which will subsist during the estimated life of the mine, or where this cannot be achieved will attach importance to the terms on which a lease or mining licence may be renewed.

Broadly speaking the realities of this situation are reflected in the laws covered by this Survey. The Zambian Act provides for the grant of mining licences which in the first instance have a maximum duration of 25 years.[19] There is a right of renewal for a period not exceeding a further 25 years. However the statute provides that the Minister must reject an application for renewal if he considers that:-

(i) development of the mining area has not proceeded with reasonable diligence,

(ii) minerals in workable quantities do not remain to be produced, or

(iii) the programme of intended mining operations will not ensure the proper conservation and use of the mineral resources of the mining area.[20]

A number of the statutes provide for the grant of a lease for an initial period of 21 years with a right of renewal for a further 21 years.[21] The most generous provisions are those contained in the Sierra Leone Act - an initial grant for a maximum period of 99 years.[22] However it should be noted that in contrast with the Zambian Act all these provisions establish the maximum duration of a lease but retain for the Government a discretion to grant a lease for a shorter period. In the Zambian case an applicant for a mining licence who has fulfilled the requirements of the statute is entitled if he applies for it to obtain the maximum (25 years) both in respect of the initial grant and on renewal.

While it is no doubt perfectly reasonable for mining companies contemplating heavy expenditure on mining operations, much of it in fixed assets, to seek a secure title over an extended period it does not necessarily follow that the entire package agreed between the investor and the Government of the host country should be established in immutable provisions coterminous with the lease.

Government may be willing in the case of a significant deposit to grant a lease with an initial duration of say 25 years, but reluctant to commit itself to a fiscal regime, exchange control guarantees and other collateral matters over such an extended period. Ideally where wide ranging contractual obligations are assumed by the Government there should be a corresponding willingness on the part of the foreign investor to agree to a periodical review of specific provisions, either

generally or by reference to particular criteria set out in the contractual documents. Unfortunately such provisions for renegotiation are the exception rather than the rule. The "Group of Eminent Persons" appointed by the United Nations to study the impact of multinational Corporations on development have adverted to this issue in the following passage in their Report:-

> "While a clear understanding on various issues at the time of entry is vital, it has to be recognised that conditions change, and what may seem to have been adequate and fair at the time of entry may prove unsatisfactory to either party over time.
>
> A large number of agreements made in the past lack comprehensiveness and contain no provision for renegotiation. Developing countries have, of course, the power, through legislation, to modify the terms of agreements. But sometimes such actions, if carried out unilaterally, entail disproportionally high costs in terms of the future flow of investments. A willingness on both sides to renegotiate agreements which have been in force for more than, say, 10 years could help to avoid recourse to extreme measures. The Group recommends that in the initial agreement with multinational corporations host countries should consider making provision for the review, at the request of either side, after suitable intervals, of various clauses of the agreement."[23]

Express provision in contractual documents for periodical renegotiation must generally entail some understanding between the parties about what should happen in the event that agreement cannot be reached on an appropriate modification of existing obligations. Where the host country is willing to submit disputes to international arbitration a solution to this difficulty might be found by making provision for reference to arbitration where renegotiation had led to a disagreement. In contrast with the situation in Latin America where the jurisprudence associated with the "Calvo Clause"[24] is an important factor, most of the countries covered by this Survey appear to be willing in principle to accept international arbitration as a reasonable method of settling disputes with foreign investors. If reference is made to the Survey it will be seen that in a number of agreements recently concluded the parties have undertaken to submit their differences to arbitration by the International Centre for the Settlement of Investment Disputes set up under the auspices of the World Bank.[25] If in the context of contractual provisions

for periodical renegotiation, arbitration by ICSID were able to attract a sufficient measure of confidence amongst both foreign investors and host countries in the developing world, a major difficulty in implementing the recommendation of the Group of Eminent Persons would be overcome.[26]

The circumstances in which a right to mine may be terminated at the instance of Government determines in effect the nature of the title conferred by a lease or licence and is as much a matter of consequence to a potential investor as the duration of the rights which he seeks to obtain. It may also be of significance to his financial backers. Where a mining company has raised loan finance which is secured by a charge on fixed assets located within the area of the mining lease or licence the security would be dubious, if not worthless, unless the circumstances in which the title of the company was defeasible were limited by statute or contract. Even where loan finance is secured otherwise than by a charge on fixed assets the title of the mining company is likely to be a matter of critical importance.

The laws covered by the Survey to a large extent follow a common scheme in dealing with the issue of termination. The circumstances in which a mining lease (or licence) may be terminated or forfeited at the instance of Government are set out in the statutes. Although there are minor differences in the content of these provisions the Uganda Act may be taken as typical of the older statutes. It provides for revocation of a lease at the discretion of the Minister if the lessee: -

(a) contravenes the provisions of the Act,

(b) contravenes the terms or conditions of the lease,

(c) contravenes the law relating to explosives or the employment of labour, or

(d) is convicted of an offence involving dishonesty.

However, before the lease is revoked the lessee must be given an opportunity to remedy the breach or to show cause why his mining right should not be revoked.[27] The Zambian Act follows a similar scheme but includes in the list of matters which may lead to a termination of the mining licence failure to develop and mine the mineral deposits in accordance with the programme of development and mining operations submitted for approval at the time the licence was granted.[28]

The only law covered by the survey which leaves the Government with a large measure of discretion is Tanzania's Mining Ordinance as amended by an Act passed in 1969. The statute in its original form provided that a lease might be terminated if the lessee was in breach of the Ordinance, the regulations or any of the conditions of the lease or where for a continuous period of six months the lessee ceased to carry on work. The amending Act provides in addition that the President may cancel a mining lease during the continuation of the period of its validity if "he considers it desirable in the national interest to do so." The amending Act further provides that an order made by the President under this provision is final and "shall not be questioned in any court."[29]

V. Possession and Marketing of Minerals

Most of the statutes covered by the Survey contain some provisions regulating the possession of minerals and prohibiting unauthorised persons from dealing in them.[30] In the case of gold, diamonds,[31] precious and semiprecious stones, these provisions may be of considerable practical importance in preventing a loss of revenue resulting from illicit transactions. However, they are essentially an exercise of police powers and are largely unrelated to problems of marketing in the context of large scale foreign investment. However, some of the mining laws do contain certain provisions more directly related to marketing and attention should perhaps be drawn in particular to the following:

(i) Uganda and Swaziland have provisions in substantially similar terms which provide that the lessee under a mining lease may not enter into any agreement with any person outside Uganda/Swaziland for the joint control of the price, output or sale of the minerals mined without the consent of the Government.[32]

(ii) The Mines and Minerals Act of Zambia provides in section 56 that the "President may, if in his opinion it is in the national interest to do so, order the holder of a mining licence to curtail the production of any mineral in any mine to such extent as he may specify." The powers conferred on the President by this section have not yet been invoked. However Zambia is a member of the Intergovernmental Council of Copper Exporting Countries (CIPEC) and it will be appreciated that, should the members of CIPEC seek an upward adjustment of copper prices by curtailing

supplies to the market, in the absence of agreement with the mining companies, an overriding statutory power of this kind might prove necessary if effect were to be given to their decision.

(iii) In Ghana the Minerals Act 1962 gives to the Government a right of pre-emption in respect of minerals won or gotten by the holder of a licence and in respect of products derived from the refining or treatment of such minerals. The price to be paid for minerals taken in exercise of this power is:

(a) Where it is provided for in any written agreement the specified price.

(b) Where not so provided for, the publicly quoted market rate ruling for such minerals or products as delivered at the mine or plant, as the case may be, at which the right of pre-emption was exercised.

(c) In the absence of such written agreement or such rate, as decided upon by an arbitrator appointed under the enactment relating to arbitration.[33]

VI Government Participation

The Mines and Minerals Act of Zambia is the only Act covered by this Survey which makes express provision for Government participation in mining ventures. Section 20 of the Act provides that an application for a prospecting licence may be granted subject to conditions including in particular

> "a condition requiring the applicant to agree to the Republic, or any person nominated on behalf of the Republic, having an option to acquire an interest in any mining venture which might be carried on by the applicant or by any person to whom he transfers his mining right, in the proposed prospecting area".

Part VII of the Act which deals with the grant of mining licences lays down the procedure to be followed where a condition of this kind has been included in a prospecting licence or carried over into an exploration licence. In the first instance the Act provides for the contingency that the holder of the option has neither exercised the option nor informed the holder of the licence that he does not intend to do so. In such a case,

prior to applying for a mining licence, the holder of a prospecting licence or an exploration licence must notify the Minister and the holder of the option that he intends to apply for a mining licence and require the holder to exercise his option.[34]

The Act then provides that application for a mining licence may be made if and only if the holder of the option:

(a) exercises the option;

(b) informs the holder of the licence in writing that the option will not be exercised; or

(c) fails to so act within six months of being required to exercise his option.[35]

It will be appreciated that if these provisions are to be implemented according to their tenor it would be necessary before the issue of a prospecting licence to determine the extent to which Government or its nominee is to have the option of participating in a mining venture, the price to be paid for that share, and the manner of payment. This is, of course, consistent with the general scheme of the Zambian Act. The concept of vested rights which, as already pointed out, is an essential element in that scheme would be eroded if negotiations relating to participation by Government or its nominee were to take place after the issue of prospecting or exploration licences. However it does have the disadvantage of introducing an element of formality which requires the Government to consider matters relevant to the fiscal regime for the mining company before the results of prospecting and exploration are available.

While the mining legislation of the other countries covered by this Survey does not make express provision for government participation in mining ventures the statutory provisions do not generally represent any impediment to a negotiated agreement ensuring for Government or its nominee in the parastatal sector a share in the equity capital of the mining company. In some cases outside the legislative framework foreign investors in the mining sector have been put on notice by the issue of policy statements that Government participation must now be regarded as an essential element in any new ventures.[36]

FOOTNOTES

1. In certain cases however, the legislation covered by this Survey was enacted after the attainment of independence. The Mines and Minerals Act 1967 of Botswana and the Mining Rights Act 1967 of Lesotho were enacted one year, and the Mines and Minerals Act 1969 of Zambia and the Minerals Act 1962 of Ghana five years, after independence.

2. See for example Section 8 of the Mining Ordinance of Kenya which provides as follows:

> "Nothing in this Ordinance shall be deemed to prevent any citizen of Kenya from taking, subject to such conditions as may be prescribed, iron, salt or soda from lands (other than lands within the area of a mining lease or location) from which it has been the custom of the members of the community to which that citizen belongs to take the same."

3. e.g. The Minerals Ordinance of Nigeria provides that "a prospecting right shall not be granted -

   (i) to any person who in the opinion of the prescribed officer is not able to read and understand this Ordinance in such a way as to form a reasonable guide to and restriction on his actions;

   (ii) to any person who is under twenty-one years of age;

   (iii) except with the consent of the (Governor-General), to any person who or whose present employer or partner has been convicted of an offence under this Ordinance, or who or whose present employer or partner has previously held any right, licence, or lease granted under this Ordinance or under any previous enactment relating to minerals which has been revoked by reason of a breach of the terms or conditions of the same: Provided that, if such consent has once been given after such conviction or revocation, it shall not be necessary in respect of any subsequent application;

   (iv) to any person who is unable to give satisfactory proof that he possesses sufficient money or credit to enable him to pay any expenses which may be incurred by

prospecting in an adequate manner and any compensation which may be payable by him in the exercise of the rights conferred by a prospecting right;

(v) to any person who is not in possession of a copy of this Ordinance and the regulations thereunder."

4. The Resolution declares, inter alia, as follows :

"1. The right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development and of the well-being of the people of the State concerned.

2. The exploration, development and disposition of such resources, as well as the import of the foreign capital required for these purposes, should be in conformity with the rules and conditions which the peoples and nations freely consider to be necessary or desirable with regard to the authorization, restriction or prohibition of such activities.

3. In cases where authorization is granted, the capital imported and the earnings on that capital shall be governed by the terms thereof, by the national legislation in force, and by international law. The profits derived must be shared in the proportions freely agreed upon, in each case, between the investors and the recipient State, due care being taken to ensure that there is no impairment, for any reason, of that State's sovereignty over its natural wealth and resources.

4. Nationalization, expropriation or requisitioning shall be based on grounds or reasons of public utility, security or the national interest which are recognized as overriding purely individual or private interests, both domestic and foreign. In such cases the owner shall be paid appropriate compensation, in accordance with the rules in force in the State taking such measures in the exercise of its sovereignty and in accordance with international law. In any case where the question of compensation gives rise to a controversy, the national jurisdiction of the State taking such measures shall be exhausted. However, upon agreement by sovereign States and other parties

concerned, settlement of the dispute should be made through arbitration or international adjudication.

5. The free and beneficial exercise of the sovereignty of peoples and nations over their natural resources must be furthered by the mutual respect of States based on their sovereign equality.

6. International co-operation for the economic development of developing countries, whether in the form of public or private capital investments, exchange of goods and services, technical assistance or exchange of scientific information, shall be such as to further their independent national development and shall be based upon respect for their sovereignty over their natural wealth and resources.

7. Violation of the rights of peoples and nations to sovereignty over their natural wealth and resources is contrary to the spirit and principles of the Charter of the United Nations and hinders the development of international co-operation and the maintenance of peace.

8. Foreign investment agreements freely entered into by or between sovereign States shall be observed in good faith; States and international organizations shall strictly and conscientiously respect the sovereignty of peoples and nations over their natural wealth and resources in accordance with the Charter and the principles set forth in the present resolution."

See also General Assembly resolutions 2158 (XXI) of 25th November 1966, 2692 (XXV) of 11th December 1970 and 3016 (XXVII) of 18th December 1972.

5. Section 3 of the Minerals Ordinance of Sierra Leone is typical. It provides, inter alia, that "The entire property in and control of all minerals and mineral oils, in, under or upon any lands in Sierra Leone, and of all rivers, streams and watercourses throughout Sierra Leone is hereby declared to reside in the (Crown), save in so far as such control may in any case have been limited by any express grant made by the (Crown) before the commencement of this Ordinance."

6. The most remarkable example of this situation is the case of the British South Africa Company in Zambia. For an

account of the nature of the rights held by the Company and the circumstances in which there were eventually extinguished on the eve of independence see "Economic Indepenedence and Zambian Copper" (edited) by Mark Bostock and Charles Harvey, pages 23-52 and "Towards Economic Independence" by M.L.O. Faber and J.G.Potter, pages 40-62.

7. Section 3 of the Mines and Minerals Act of Botswana is a good example. The section provides, inter alia,

(1) "Subject to the provisions of subsection (2) and save as is otherwise provided in this Act the right of taking, prospecting for, mining and disposing of minerals on any land is vested in the State.

(2) Save as is otherwise provided in this Act where mineral rights over any land are held by a person other than the State, the right of taking, prospecting for, mining and disposing of minerals on that land is vested in the holder of the mineral rights: Provided that the onus of establishing that mineral rights are vested in a person other than the State shall rest on the person alleging such vesting."

8. It now appears, however, that the remaining privately held mineral rights in existence at the time the Mineral Rights Tax Act 1972 was enacted have since been surrendered to the Government.

9. e.g., in Sierra Leone the Minerals Ordinance makes no provision for minimum expenditure to be incurred by a person holding a "prospecting right" or for any limitation on the area over which the right may be granted.

10. See for example Sections 18 (4) and 24 of the Mining Ordinance of Tanzania which provide respectively as follows :

> "An exclusive prospecting licence shall not be granted in respect of any area exceeding eight square miles, provided that in special circumstances the (Governor) may at his sole discretion grant exclusive prospecting licences over areas exceeding eight square miles upon such terms and conditions as he may think fit."

"The holder of an exclusive prospecting licence shall during the continuance of the licence adequately carry on to the satisfaction of the Commissioner bona fide prospecting operations on the lands included in the area in respect of which the licence has been granted:

Provided that the Commissioner may on the application of the holder and for good cause shown by writing under his hand suspend the obligation imposed by this section in respect of any licence for such time as to the Commissioner may seem proper."

11. e.g. The Kenyan Ordinance has provisions for the pegging of "locations" giving the holder of the location the right to mine apart from the right to mine that may be obtained under a mining lease. Similarly the Tanzanian Ordinance provides for the pegging of "claims". See also the Botswana Act.

12. See Sections 18, 19, 20 and 26 of the Act.

13. See Sections 27, 29, 30, 31, 33 and 37 of the Act.

14. See Sections 45, 46, 47, 48, 49 and 51 of the Act.

15. See "Economic lndependence and Zambian Copper" (eds) Mark Bostock and Charles Harvey. Pages 53-88.

16. See Sections 119-124 of the Zambian Act.

17. e.g. The Kenyan legislation under which the grant of a mining lease to the holder of a location or a prospecting right is discretionary. However the Act provides that the holder of a prospecting right or an exclusive prospecting licence is entitled as of right to peg locations.

18. The United Nations Revolving Fund for Natural Resources Exploration has been established as a trust fund by the General Assembly and placed in the charge of the Secretary General to be administered on his behalf by the Administrator of UNDP. (See General Assembly resolution 3167 (XXVII) and Economic and Social Council resolution 1762 (LIV).

The Fund, at least in its early stages, will concentrate its activities on solid minerals and projects will generally

fall within the following categories.

(a) Preliminary activities to verify and evaluate geological and related data provided by the applicant country and limited field checking within the area or areas said to possess good potential for mineral development.

(b) Technical reconnaissance within the chosen area or areas using photogeological, geochemical, geophysical and other techniques to define more precisely targets for detailed prospecting.

(c) Detailed evaluation including large scale mapping of of the targets, detailed geochemical and geophysical investigation, trenching, pitting and prospect drilling to limited depths to outline geological structure in depth, and as far as possible to obtain information on the order of magnitude of tonnages and grades of possible ore bodies. Additionally, limited benefication tests and preliminary studies of infrastructure, marketing, profitability, etc. may be included.

The Fund's operations may therefore be seen as covering work commencing after the completion of an adequate geological survey and ending when the pre-feasibility phase is complete.

Developing countries having recourse to the Fund will be required to make what is called a "replenishment contribution." Replenishment Contributions from user countries will be levied at the uniform rate of 2 per cent of the annual value of produced commodities and will be payable at this rate for a period of 15 years from the start of commercial production or until a ceiling has been reached. The basis on which a ceiling is to be established appears not to have been finally determined. However at present it is envisaged that the ceiling will be in the region of 15 times the original investment by the trust fund. (Operational Procedures and Administrative Arrangements D.P./142 24th October 1975).

19. See Section 51 (Zambia)

20. See Section 51 (Zambia)

21. The Tanzanian and Ugandan legislation provides for an

initial period of not less than five years and not more than twenty-one years with a right of renewal for a further twenty-one years.

22. See Section 31 (Sierra Leone)

23. "Report of the Group of Eminent persons to study the Impact of Multinational Corporations on Development and on International Relations". Document E/5500/Rev. 1 ST/ESA/6 of 1974. Page 38.

24. The report of the Department of Economic and Social Affairs of the United Nations Secretariat "Multinational Corporations in World Development" (Document ST/ECA/190) contains an illuminating explanatory note on this concept. It reads as follows:

> "The Calvo doctrine was named after a distinguished Argentine jurist of the 19th century. Calvo argued that a state could not accept responsibility for losses suffered by foreigners as the result of civil war or insurrection, on the ground that to admit responsibility in such cases would be to threaten the independence of weaker states and would "establish an unjustificable inequality between nationals and foreigners".
>
> To prevent appeals by aliens to their home governments for diplomatic intervention on behalf of their contract rights, a number of Latin American states, during the latter part of the 19th century, adopted a policy of writing into their contracts with aliens a clause, known as the "Calvo Clause", the general tenor of which was that the alien agreed that any disputes that might arise out of the contract were to be decided by the national courts in accordance with national law and were not to give rise to any international reclamation.
>
> The decisions of international arbitration tribunals and of mixed claims commissions upon the subject have been conflicting, some upholding the Calvo Clause as a bar to the interposition of the alien's government, others rejecting it on the ground that the act of the alien can not restrict the rights of his government under international law. As Latin American governments generally interpret the Calvo Clause, they

would deny all local rights and remedies to any foreign owned subsidiary if the subsidiary called on a foreign government in a dispute with its host government."

Reference may also be made to the eighth edition of Oppenheim's International Law (ed.) Lauterpacht (Vol.1) pages 344-5 and other materials on this subject cited therein.

25. See for example clause 42 of the Master Agreement between the Republic of Botswana and Bamangwato Concessions Limited and Botswana R.S.T. Limited and B.C.L. (Sales) Limited dated 7.3.72 and, also schedule "E" to Diminco Agreement (1970) Ratification Act 1970 of Sierra Leone.

26. It must, however, be recognised that the image of ICSID in the Third World is impaired by its close association with the World Bank. The weighted voting system in IBRD and IDA, inevitable in present circumstances, places ultimate control over decisions in the hands of the capital exporting countries on which the Bank is dependant for its finance. This makes it difficult for the developing countries to see the Bank, or any institution sponsored by it as disinterested or objective in the context of a dispute between one of the multinational corporations and a host government in the Third World. These reservations may not be a wholly rational response to the institutional framework within which ICSID has been established, but in practice they may prove to be of overriding importance. While many developing countries have subscribed to the Convention which established ICSID, and many investment agreements provide for reference to the Centre in the event of a dispute it is significant that at the time of the latest annual report 1975/76 there were only five cases in which disputes had been submitted to the Centre for arbitration. In three out of the five, Alcoa Minerals v. Government of Jamaica, Kaiser Bauxite v. Government of Jamaica, Reynolds Jamaica and Reynolds Metals v. Government of Jamaica. The Government concerned is not participating in the proceedings.

Apart from the institutional problems associated with ICSID recourse to international arbitration in the context of a clause which provides for re-negotiation assumes that a reasonable man of good will and impartiality can be

relied upon to do justice between the competing claims for a developing country and a transnational corporation. This assumption does not perhaps pay sufficient attention to the increasing disparity between the thinking of developed and developing countries as exemplified by controversies surrounding the concept of the New International Economic Order. (See the Declaration and Programme of Action on the Establishment of a New International Economic Order adopted by the United Nations General Assembly in its Sixth Special Session 9th April - 2nd May 1974 and the Charter of Economic Rights and Duties of States adopted by the Assembly on 12th December 1974 (Resolution 3281 (XXXIX)).

For a general discussion of periodic revision in concession contracts - see "Negotiating Third World Mineral Agreements" David Smith and Louis Wells Ballinger Publishing Co. Cambridge Mass.pages 138-140.

27. See Section 29 (Uganda)

28. See Section 89 (Zambia)

29. See Section 65 A (Tanzania)

30. e.g. Sections 68 and 69 of the Nigerian Ordinance provide respectively as follows :

"No person other than a Government servant acting in the execution of his duty shall possess any controlled mineral unless -

(a) such mineral has been won from ground held under a mining lease or temporary mining lease of which he is the lessee and which entitled him to mine that mineral, or

(b) such mineral has been won from ground held under a mining right or temporary mining right of which he is the holder and which entitled him to mine that mineral or obtained in the course of prospecting under a prospecting right or exclusive prospecting licence of which he is the holder and which entitled him to prospect for that mineral, or

(c) he holds a licence issued under section 70 in respect of that mineral, or

(d) he is in respect of that mineral within the meaning of the regulations a duly authorised agent or employee of a person permitted by paragraphs (a), (b) and (c) of this section to possess that mineral."

"No person shall purchase any controlled mineral unless he holds a licence to purchase it issued under section 70."

31. In the case of diamonds in countries where diamond mining is undertaken on a substantial scale separate statutory provision is normally made for policing the marketing of diamonds, e.g.,

Lesotho - The Precious Stones Order 1970.

Tanzania - The Diamonds Industry Protection Ordinance

Ghana - Diamonds Decree 1972.

32. See Section 54 of the Uganda and the Swaziland legislation.

33. See Sections 5 and 6 (Ghana)

34. See Section 46 (Zambia)

35. See Section 46 (Zambia)

36. e.g. The Sierra Leone Government policy statement issued in 1970 which reads as follows:

A NEW MINING POLICY FOR SIERRA LEONE - PARTNERSHIP FOR THE FUTURE

"The Sovereign State of Sierra Leone hereby declares its intentions to enter into a full, just and freely negotiated partnership agreement with each of the mining companies operating within its borders.

Notwithstanding the individual differences which distinguish these companies from one another all have in common with the Government and people of Sierra Leone a dependence upon this country's diminishing mineral wealth which in turn inextricably binds the fate and future of each company and the fate and future of this nation. The

time has come to make explicit in law, with an appropriate sharing of responsibilities and information as well as revenues, what is already implicit in fact: that mining is a joint venture between the Government of Sierra Leone and the owners of each company, and can succeed only if they act in concert for the long-run interests of all.

lgnoring tired ideological labels, it is the intention of the Government to achieve, through voluntary negotiations with each mining company, a hopeful example of government-business co-operation which will assure economic justice to all our people and a healthy climate to prospective investors. The Government's goal is the peaceful avoidance of both foreign domination and domestic confiscation through mutual agreement of fair participation.

In order to assure the people of Sierra Leone that each of the mining companies operating within this country's borders:-

(a) is providing the Government of Sierra Leone with a reasonable share of the profits and an informed voice in each company's future; and

(b) is providing for the betterment and long-range development of the Sierra Leone economy and labour force as well as the localities in which each company operates;

the Government of Sierra Leone hereby promulgates the following basic principles as part of its fundamental policy on mines and minerals:

I OWNERSHIP

The Government shall ultimately purchase for fair value a majority ownership interest in each mining company. Payment shall be made out of future dividends, the valuation of each share of stock acquired to approximate its book value in the light of the company's profitability, capital investment in Sierra Leone and depreciation of assets. The Government will appoint a majority number of the directors of each company and day to day managerial operations shall be a subject for negotiations. The Government's shares shall be held by a new Government owned Corporation.

Government expects to hold preliminary discussions with the Mining Companies affected and to finalize all arrangement within the first quarter of 1970.

II PROFITS

The Government shall, by means of taxation and dividends, share in all profits directly or indirectly generated to the fullest extent required by a careful evaluation of profitability, fair return, past and future investment decisions, and foreign tax credits. Existing tax rates on mining companies in Sierra Leone have been below those applied by other governments and shall be increased for those companies making great profits. Accurate reporting of income and expenses shall be required; and the Government shall seek the maximum simplification and consolidation of tax statutes. The Government shall, once its stock in a company has been paid for, adjust downward the effective tax rate applicable to each company to offset the revenues realized through its ownership interest. When any mining operation approaches exhaustion, a lower scale of tax rates may be considered to extend the profitable life of the mines.

III ECONOMIC DEVELOPMENT

The Government shall formulate, with each mining company an explicit plan and fund for the co-ordinated long-range development of the Sierra Leone economy.

Such a plan should include :

- the establishment of new industrial and agricultural enterprises to offer viable alternative employment to those now engaged in illicit mining and in the future to those now extracting minerals that will someday be depleted;

- the training and retraining of Sierra Leone citizens, and each mining company shall adopt guidelines for reducing the proportion of expatriate staff and increasing the pace at which Sierra Leoneans are now trained for managerial, technical and professional positions by the mining companies;

- the improvement of schools, hospitals, road, electric power and water supplies and other facilities in the

localities in which each mining company operates; and the rehabilitation of those abandoned lands from which all mineral wealth has been extracted.

IV RECIPROCAL OBLIGATIONS

The Government recognizes that implementation of the foregoing principles will demand much from mining companies in the way of understanding and resources; but it is convinced that such efforts will produce a mutually profitable long-term atmosphere of co-operation and confidence. The situation in diamond mining offers the most dramatic example. It has been difficult as a practical matter for the Government to take the necessary police measures required in this situation against its own citizens on behalf of an expatriate company. But any government owning a majority interest in a depleting-asset venture would be derelict in its responsibilities to its own citizens if it did not take whatever measures were required to protect the profitability of that interest. This Government intends to meet its responsibilities.

CONCLUSION

This Government welcomes private foreign investment in Sierra Leone as a part of its programme to increase the rate of per capita economic growth. The policies outlined above are consistent with the findings of the recent business-government Panel on Foreign Investment in Developing Countries sponsored by the Economic and Social Council of the United Nations. The people of Sierra Leone, proud of their political and economic independence, hereby reaffirm their commitment to work co-operatively with all those, foreign or domestic, profit-making or public, who share their economic development objectives. It is in that spirit of partnership that we set forth these principles and seek a new era of both profits and progress."

See also the "White Paper On State Participation In Mining Industry" issued by the Government of Ghana in 1972.

PART II : THE FISCAL REGIME
by Mike Faber

I

The problem confronting developing country governments in the now normal situation where all mineral rights are vested in the State can be posed like this:-

How are large sums of external capital to be obtained such as are now required for the opening up of a major mineral deposit, while at the same time the government is assured that, once the mine is developed and in operation, a fair and full price is acquired for the value of the ore being extracted? (The matching problem on the side of the operating and investing institutions is this:- how can the operators and investors, after sinking what may be hundreds of millions of dollars over a period of years in the discovery, development and construction of a mine in a foreign jurisdiction be assured that they will be able to earn and repatriate a full and fair return on the capital and effort invested, taking account of the risks they have taken?). The situation is made more difficult by two additional factors. First, it is normally impossible to decide with any accuracy in advance of actual mining operations what the size, profitability and value of any ore body is eventually going to turn out to be. Second, it is now almost invariable practice for major foreign investors to want to assure themselves of what the lease, royalty, tax and foreign exchange arrangements are going to be during the whole potential life of the mine, before even a detailed "development of the ore body" is undertaken. These factors together produce a situation where a major agreement (or set of agreements) needs to be negotiated and concluded between the host government, the operating company, and the financing institutions while knowledge of the extent and value of the actual ore body to be mined is still at a very primitive stage.

The issues to be determined in such agreements are of course multiple, and some of them are treated in other sections of these essays. This section deals only with the issue of arriving at an appropriate charge for the alienation of the ore body, and for simplicity's sake that charge will be referred to as 'the royalty' although it may be levied in many different forms and may be designated by many different names.

An appropriate formula must relate the charge to the value of the ore body, which in turn is a function of the stream of profit that stands to be derived from the mining of that ore body and the extraction from it of valuable metals or stones. This would seem to suggest that the royalty charge should be solely related to the profitability of working a particular section of an ore body at a particular time, as mining companies themselves tend to urge, and there has indeed been an increasing tendency for royalty formulae to be related to profitability. A strictly rigid application of the Ricardian theory of rent would in fact imply that the royalty on the most marginal part of the ore body would be zero, while that on the most profitable parts would be sufficiently large to reduce the profitability of working such an area to a 'normal' level. The logical application of this theory would thus be a royalty exactly equal in any time period to the excess of profit in that period over a designated rate of return. The designated rate of return would itself be determined by a judgment of the level of activity required to be expended in the national interest on prospecting, exploration, and mine development. Again speaking in theoretical terms only, such arrangements could be shown to procure for the host government the maximum royalty receipts consistent with a desired level of feasible mining activity.

In practice, a royalty design of this type has to be tempered by several practical considerations. First, it is not sensible to attempt to siphon off for Government (or any other owner of the mineral rights) all the excess revenue above the designated rate of return, since to do so is to sap the incentive of the mine operators to mine efficiently. If the royalty is to be based upon profit, some significant share of the marginal revenue must be left to benefit the operator. Second, it is to be doubted whether a royalty defined solely in terms of current profitability should be accepted, in view of the many assumptions and conventions that have to be adopted to arrive at any measure of profit - particularly in relation to depletion and depreciation allowances - which must have the effect of allowing the extent of 'profitability' to be somewhat within the operator's own control. Third, it is not necessarily right for the owner of mineral rights to waive all claim to royalties on ore being extracted, even if the operation is not making a profit in a particular year. It may frequently be the case that the metal in the ore has a value or a potential future value that the owners should still be compensated for. Fourth, it is an observable feature of resource projects everywhere that if pre-tax profits are exceptionally high, costs in one form or another will start to rise quite rapidly to meet them. If the royalty is taken in the form of a minerals tax based upon profit, assessed and collected

after the profit has been determined, there is a danger that it will be other costs that will rise to absorb the profits - other than the royalty, that is. All costs - not just flat-rate royalties - influence the determination of what is "ore", and therefore the size of an "ore body". It would be ironic indeed if the abandonment of royalties based upon tonnages or value in order to maximize the size of the ore body was to lead indirectly to other cost increases that would not only diminish it again, but reduce the proportion of its value that would ultimately accrue to the owner of the mineral rights.

A way around this dilemma, again theoretical, would be to value the mineral in the ground, and then to levy a fixed annual charge based upon this. With such a charge, efficient firms would prosper and expand and inefficient firms would suffer and close, and everything payable would be extracted from the ore body because the marginal cost of production would not be affected by a fixed annual rent (or royalty). But that brings us back to the problem of valuing the mineral in the ground before mining starts. Procedures for doing this are both very costly and very imperfect. Relatively simple ways of putting a value on the ore body do however exist - for instance by auction or by putting the mining rights out to competitive tender. Such methods will yield a market price at the particular time the auction or tender occurs. But whether, ex post facto, this will turn out to be an appropriate price is another matter. The chances are that it will be a wrong price - too low for "goers", and too high for failures, and that even the average of all auction or tender prices will be too low, because of the substantial risk factor that will be attached for each individual bidder. The dilemma thus remains.

II

In the last ten years developing country governments - and for that matter the Provinces of Canada and the States of Australia - have tried a variety of devices whose purpose has been to reconcile the attainment of the maximum feasible share of the surplus from mining activities with the maintenance of reasonable incentives for continued exploration and investment.

The nearest approximation to the Ricardian hypothesis (that all the 'rent' element in the surplus will accrue to the owner of the mineral rights) has perhaps been attempted in legislation passed or agreements concluded in Botswana,

Papua New Guinea, and Zambia. But there are other instances of "progressive" regimes that are worthy of attention as well.

In particular the regimes in force in Lesotho and in the Republic of South Africa are of interest. Lesotho, as an African Commonwealth country, falls directly within the scope of this Survey. The South African system of leasing and tax charges is however also of considerable importance, since many of the companies mining elsewhere in African Commonwealth nations are subsidiaries or affiliates of South African based mining companies.

The Botswana arrangements as they relate to the Selebi-Pikwe copper nickel deposits and to the 1970 and 1972 De Beers (diamond) agreements will be described briefly hereafter. These arrangements approached, without yet giving full effect to, the government's pronounced policy that the State, as owner of the country's mineral resources, ought to have the right both to determine the initial price at which it would sell those resources to a mining company and to adjust that price as circumstances changed. The method of adjustment, as provided for in the Mines and Minerals Act, was to be through a varying royalty on mineral sales. The principle underlying any adjustment would be this:- that the mining company would be allowed what the government considered to be a fair return on its investment after taking into account all the other elements in the lease terms and the fiscal regime and other factors, such as inflation. In other words, the mining company concerned was to be allowed a "fair return" on its investment, and the State were to acquire the whole of the rest of the surplus (less tax) as the price charged for the ores being extracted. A corollary of these arrangements may be that, should the rate of return fall below the "fair" rate, the company will be entitled to a "negative royalty" to bring it up to such a rate. In such a regime it could almost be said that the mining company concerned is acting as extracting and marketing agent for the Government, for a fee fixed in relation to its capital investment. No details of any such scheme are available for publication, but it is known that the later agreements between the Government of Botswana and De Beers, concluded in 1975, for the Orapa Expansion and DK1/2 Development, give effect to very much these principles.

It cannot be anticipated that the variable royalty and the rate of return in the mining enterprise limited to what the government unilaterally considers to be a "fair return on investment" will be concepts of wide appeal to mining companies undertaking investment in exploration or the development of

large and possibly risky projects. Most professional opinion would consider these inducements impractical in circumstances where the opening up of a major new mine was under consideration. But when the expansion of what may be regarded as a singularly rich existing enterprise is being negotiated, the circumstances are somewhat different. In this respect, it is significant that the most perfect example of a neo-Ricardian solution was attained when a company, in order to expand an existing mine and to open up a new one in an adjacent area where the existence and extent of the mineral wealth was well established and risk of unprofitability was negligible, found itself forced to renegotiate a set of existing arrangements. If this analysis is correct, the 1975 Botswana-De Beers Agreements may come to be looked upon in retrospect as a "one-off" achievement where an LDC Government very successfully took advantage of a set of exceptionally favourable circumstances.

Less rigid and severe - but equally interesting and possibly more practical - arrangements for assuring to Governments a major share of the surpluses derived from mining activities are to be found in agreements recently concluded between the Government of Papua New Guine and major mining enterprises. The country's Prime Minister has stated that his government's mineral policy would adhere to two principles: one, that the foreign investor in resource projects should be allowed a reasonable return on his investment, and two, that the "lion's share" of profits above that level should belong to the people of the country. Two distinct agreements, one the renegotiated agreement of 1974 with Bougainville Copper Limited covering the actual working of the Bougainville mine, and the other the agreement of 1975 with Dampier Mining Company Limited (a wholly owned subsidiary of The Broken Hill Proprietary Company Limited) intended to define the fiscal and financial conditions under which the Ok Tedi deposit (also, like Bougainville, a copper and gold deposit) might be exploited, give effect to these principles.

The Papua New Guinea Government's share of the surplus from Bougainville Copper may be said to be comprised of five elements. They are

(i) a royalty fixed at $1\frac{1}{4}$ per cent of the value of sales;

(ii) the normal company income tax, currently at the rate of 33 1/3 per cent;

(iii) an additional profits tax at a rate of 70 per cent which "kicks in" whenever profits net of company income tax exceed a rate of return exceeding 15 per cent of capital employed;

(iv) a 20 per cent interest in the equity of the company, which was purchased, but on concessionary terms; and

(v) a 15 per cent dividend withholding tax on all dividends paid to shareholders outside Papua New Guinea.

The royalty element is straightforward. Taxable income is arrived at without the benefit of either a depletion allowance or of concessionary capital allowances. Originally the Government was granted an option to take up a 20 per cent shareholding. By the time it came to exercise that option the market value of the shares was about three times the price that the Government had to pay for them, so that - crudely - one might say that two thirds of the Government's dividend receipts represent a form of payment for the company's right to mine. The remaining shareholders are preponderantly resident outside Papua New Guinea and dividends distributed to them are liable to dividend withholding tax.

The regime of imposts, taken as a whole, is progressive in respect of taxable income, except at very low rates of profit when the royalty element becomes predominant. Consequently the government's share of pre-royalty and pre-tax profits can, in theory, vary between about 50 and 75 per cent. In fact the latter figure is unlikely to be realised since, to reach it, a profit would be required almost twice as large as those realised in 1973 and 1974, when copper, gold and silver prices were generally strong. Had the present fiscal regime been in force for the whole of 1973 and 1974, it would have procured for the Papua New Guinea Government about 65 per cent of the surplus.

With regard to the impact of this regime upon high marginal profits, the interpretation of what "the lion's share" means in practice is reasonably clear. The royalty element will comprise about 2 per cent, company income tax and additional profits tax will comprise 70 per cent, the concessionary element in the government's receipt of dividends from its own shareholding will comprise some 3 per cent, and the dividend withholding tax on dividends being sent abroad will also comprise about 3 per cent. Taken together these imposts imply that the marginal rate of "take" once a return of 15 per cent on the company's capital has been exceeded totals about 78 per cent. It would

seem fair to speculate that the residual 22 per cent, at the margin, which is what the remaining non-governmental shareholders are entitled to, represents what the originators of the formulae would regard as a minimum acceptable inducement for efficiency in current operations, and expansion of future operations.

The Ok Tedi agreement prescribes the fiscal regime that will come into effect if the mine is developed by Dampier. There are both similarities and differences compared with the Bougainville formula, but the same basic principles are observed. During the investment recovery period, income taxation will be limited to the prevailing general rate of company income tax or 35 per cent, whichever is the less. After the investment recovery period, the company will be required to pay a marginal rate of 70 per cent tax (comprising the normal company income tax plus an additional profits tax) on income accruing in any one year in excess of such income as would give a 20 per cent internal rate of return on the project.[1] Adjustments in exchange rates between the American dollar and the PNG kina are allowed for. The royalty and dividend withholding tax provisions are broadly similar to those prevailing for Bougainville. Provision is also made for the State to participate to the extent of 20 per cent in the equity of the company, with complicated arrangements being agreed as to the extent credit against calls for payment for this equity is to be allowed for work already done.

The Zambian Mineral Tax Act, 1970, also relates the rate of tax payable to some indicator of the rate of return on investment. New mines pay no tax until the original capitalisation and subsequent expenditures have been recovered. Beyond that, when it can be shown that the average after-tax return on equity over a period of three years is less than 12 per cent, the Mineral Tax Act provides for the remission of part or all of the mineral tax paid. This provision operates only for "new" mines, and only the mineral tax not the ordinary income tax may be remitted. Refunds thus obtained are not liable to income tax. The effect of these arrangements is twofold:

(1) for new mines the mineral tax acts as a royalty which only comes into effect when total capitalisation has been recovered and the average rate of return on the investment exceeds 12 per cent;

(2) taking mineral tax and income tax together, a sliding scale in the combined rates is established ranging, for copper mines, from a minimum of 22.05 per cent when

all mineral tax is refunded to a maximum of 73.05 per cent when no mineral tax is refunded. Because the mineral tax on lead and zinc is only 20 per cent, as opposed to 51 per cent on copper, the range of combined tax rates on new lead and zinc mines would be smaller, from a minimum of 36 per cent to a maximum of 56 per cent.

Other royalties, taxes, or duties which are progressive in relation to some measure of profitability will later be noted in the legislative provisions of Ghana and Uganda. A technically interesting system of mine leasing and taxation is in effect in South Africa for the mining of gold and precious stones. Essentially there is a two-tier charge for gold mines (consisting of lease and income tax plus surcharge) and a three-tier charge for diamond mines (consisting of export duty, lease, and income tax plus surcharge). For gold mining, both the rates set in the lease and the applicable rates of income tax are determined by sliding scale formulae which are progressive with respect to profitability, where 'profitability' is defined as profit divided by revenue expressed as a percentage. For diamond mining, only the lease consideration is progressive in respect of profitability. The income tax is a fixed percentage (at the time of writing 45 per cent), the surcharge (10 per cent) and loan levy (also 10 per cent) are fixed in relation to the income tax, making a total of 54 per cent of taxable income, and an export duty of 15 per cent is also payable on the value of all rough and uncut diamonds exported.

Leaving aside for the moment the effect of capital allowances, which are exceptionally liberal, the share of the take that the Government of South Africa would stand to get from the mining of deposits held in the name of the state is theoretically very high and would in practice be very high if we were able to assume the existence of a gold or diamond mine with high profitability where very little capital expenditure was taking place.

Essentially the lease consideration (or royalty) payable to the state for the mining of precious metals and other minerals, such as uranium, produced in conjunction therewith is given by the formula

$$y = a - \frac{6a}{x} \qquad \text{or} \quad y = a - \frac{8a}{x}$$

where 'y' is the percentage of profits payable to the state as royalty and 'x' is the ratio of profit divided by revenue, expressed as a percentage.

The income tax payable on gold and uranium mining is also based on a sliding scale formula

$$y = 60 - \frac{360}{x}$$

or, for gold mines established after 17 August 1966,

$$y = 60 - \frac{480}{x}$$

where 'x' has the same meaning as above, and 'y' is the percentage of profit payable as income tax. Lease consideration or royalty payable to the State is deductible for tax purposes. A 5 per cent surcharge is added to the income tax of all gold mines, plus a further 5 per cent loan levy calculated before the addition of the 5 per cent surcharge.

It should be mentioned that a more lenient formula is applied to small gold mine operators (i.e. those with a taxable income below R 150,000), and financial assistance is afforded to certain gold mines which would otherwise be in danger of closing down because of rising costs.

The impact of the royalty (or lease consideration) taken in conjunction with the income tax clearly depends upon the value ascribed to 'a' in the lease formula, and the actual profitability of the mine as expressed by 'x'. The actual values ascribed to 'a' have in the past ranged from 10 to 30. In determining the magnitude of "a" cognizance is taken of the indicated return on the capital invested. In the years before inflation became endemic, a return of 10 percent to 15 per cent compound interest was considered as a reasonable return, bearing in mind the risks involved in mining ventures.

The table overleaf displays, for values of "a" between 10 and 30 and for values of 'x' between 6 and 60, the different proportions of profit that will be payable to the State as royalty, income tax, surcharge, and loan levy. But in interpreting the figure it does have to be remembered that 'profit' for the purpose of determining these levies may have been reduced considerably below normal or 'accounting' profit by the application of the liberal allowances for capital expenditure.

The following points are also of relevance:-

1. The lease formulae applicable to individual mines are published.[2]

2. The value of 'a' has over the years varied from 10 - 32. Over the last two decades the value of "a" has been of the order of 15.

3. The highest value of 'x' achieved to date is of the order of 80 per cent.
(NB:- A value of 'a' of 15 combined with a value of 'x' of 80 would give a theoretical government take of 64 per cent, which would be supplemented by a 2.4 per cent compulsory loan.)

4. For the purpose of calculating the indicated return on capital invested, capital is taken to include loans and the interest and other charges payable in respect thereof as well as equity. The ratio between loan capital and equity varies considerably.

5. The return on capital invested is based on the discounted cash flow of distributable profits that will accrue to the mining company after the payment of lease and tax to the State. Allowance is made for cost and price escalation.

6. Revenue is gross revenue derived from the working of the lease area including revenue from uranium and sundry sources such as the sale of crushed stone etc.

7. All gold mines established after the 23 February 1946 are allowed to write-off all redeemable capital expenditure before becoming liable for lease or tax payments.

8. The 15 per cent export duty on diamonds sold is deducted from gross revenue and the profit upon which lease payments are calculated is reduced accordingly. The percentage of diamonds exported in the rough and uncut form is not published.

9. The sliding scale formulae were designed to encourage the mining of low grade ore.

GOVERNMENT TAKE AS % OF PROFITS FROM GOLD MINING IN SOUTH AFRICA

values of 'x'	ROYALTY (%) (values of 'a') 10	15	20	25	30	rate of income tax (%)	including surcharge (%)	GOVERNMENT TAKE (%) from royalties and income taxes (values of 'a') 10	15	20	25	30	equivalent to the 5% surcharge on I.T. compulsory loan	GOVERNMENT TAKE (%) including compulsory loan (values of 'a') 10	15	20	25	30
6	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
10	4	6	8	10	12	24	25.2	28.2	29.7	31.2	32.7	34.2		29.3	30.8	32.3	33.8	35.2
15	6	9	12	15	18	36	37.8	41.5	43.4	45.3	47.1	49.0		42.8	44.7	46.5	48.3	50.1
20	7	10.5	14	17.5	21	42	44.1	48.0	50.0	51.9	53.9	55.8		50.0	51.8	53.7	55.6	57.5
25	7.6	11.4	15.2	19	22.8	45.6	47.88	51.8	53.8	55.8	57.8	59.8		53.9	55.8	57.7	59.6	61.5
30	8	12	16	20	24	48	50.4	54.4	56.4	58.3	60.3	62.3		56.6	58.5	60.4	62.2	64.1
40	8.5	12.75	17	21.25	25.5	51	53.55	57.5	59.5	61.4	63.4	65.4		59.8	61.7	63.6	65.4	67.3
50	8.8	13.2	17.6	22	26.4	52.8	55.44	59.4	61.3	63.3	65.2	67.2		61.8	63.6	65.5	67.3	69.1
60	9	13.5	18	22.5	27	54	56.7	60.6	62.5	64.5	66.4	68.4		63.0	64.9	66.7	68.5	70.4
	assumes formula $y = a - \frac{6a}{x}$					assumes formula $y = 60 - \frac{360}{x}$ + 5% surcharge												

It is instructive to compare the table showing the potential share of the South African Government's take from gold mining, as displayed in the preceding table, with the actual percentages that lease and tax liability bore to profits in a recent financial year for a number of the country's leading gold mines. These percentages are shown in the list that follows.[3]

Name of Mine	Lease and tax liability in last financial year expressed as percentage of profits
Western Holdings	63.4
Free State Geduld	63
Bracken	62
West Driefontein	61
Doornfontein	60
St. Helena	60
Leslie	58
Blyrooruitzicht	56
Winkelhaak	56
Grootvlei	55
Marievale Consolidated	54
Stilfontein	54
Welkom	54
President Brand	53
Western Deep Levels	52
Buffelsfontein	52
Libanon	51
President Steyn	50
Venterspost	50
East Daggafontein	49
Harmony	47
Vlakfontein	45
S.A. Land & Exploration	43
Hartebeestfontein	20
Kinross	13
Kloof	10
West Rand Consolidated	5
East Rand Proprietary	1.3

Source: Quarterly Review of South African Gold Shares.

The Government take from diamond mining in South Africa and in Namibia is more difficult to compute. In terms of the Diamond Export Duty Act (1957), an export duty of 15 per cent is payable on the value of all rough and uncut diamonds. The existence of such a duty makes it theoretically possible for the

take to go up to or exceed 100 per cent of profits, but that would only happen if profits were less than 15 per cent of the value of such exports. In practice this is very unlikely. But the combination of an export duty of this type with a fixed percentage rate of tax and a lease formula that is only mildly progressive almost certainly means that the share of government take (although not the absolute amount) actually declines with profitability.

Diamond royalties are computed on the basis of

$y = 15 - \frac{120}{x}$, in the case of most alluvial or fissure workings,

and $y = 20 - \frac{160}{x}$, in the case of diamond mines (pipes)

Solving this second formula for different values of 'x' we find

when x =	10	20	30	40	50	60	80
then y =	4%	12%	14.7%	16%	16.8%	17.3%	18%

('x' again stands for the ratio of profits to revenue expressed as a percentage, and 'y' for the lease consideration or royalty to be levied upon assessable income for tax purposes.)

The lease charge is thus relatively insensitive to the rate of profit, but will almost certainly fall within the range of 16 per cent + or - 2 per cent.

Income tax on diamond mining is levied at the rate of 45 per cent, plus a 10 per cent surcharge and a 10 per cent loan levy. The effective rate of income tax is therefore 49.5 per cent.

Putting together the three charges - export duty, royalty, and income tax including surcharge - it is found that over the most likely range of profitability the theoretical government take will vary between 63 per cent and 65 per cent. On top of that will be levied the compulsory loan constituting a further 3.5 per cent of profits, but this will be repayable after seven years with 5 per cent tax free interest. The 'actual' government take will be reduced below the 'theoretical' government take by the extent to which liberal capital allowances reduce taxable income below the income that would be shown were all capital assets to be written off over their expected working life.

For base metals, including lead and zinc, the South African lease and tax rates are generally below those shown for gold and uranium, or for diamonds. For base minerals on state land or alienated state land, the Government normally accepts a lease consideration of about 10 per cent of profits before tax is deducted. Income tax for base mineral companies is 40 per cent of taxable income, plus a surcharge of $2\frac{1}{2}$ per cent thereof, bringing the total to 41 per cent of taxable income. The theoretical government take from lease, royalties and income tax (with surcharge) is thus around 46.9 per cent of profits, with an additional loan levy of 5 per cent of the income tax payable, which levy is repaid at a date decided on by the Minister of Finance, the period not to exceed seven years. Simple interest on this amount accrues at the rate of 5 per cent per annum.

A somewhat similar concept, involving a higher proportion of net proceeds accruing to the owner of the mineral rights at exceptional levels of profitability, is embodied in the agreement concluded between the Government of Lesotho and De Beers for the opening of the Letseng-la-Terai diamond mine in the Maluti mountains. In contrast to the Botswana diamond mine, where the grade is high and the value per carat is low, the very low grade of the Lesotho pipe is expected to be compensated by a small percentage of large stones of high quality. The agreement provides in effect for the Lesotho Government to receive $62\frac{1}{2}$ per cent of profits after the recovery of capital invested, and that if the mine proves to be substantially more profitable than anticipated Government's percentage of profits could rise on a sliding scale to a maximum of 72 per cent. De Beers have commented that they regard this percentage as "unquestionably high" but reasonable "bearing in mind that De Beers itself did not make the discovery nor bear the substantial costs of the original prospecting programme".[4]

Many of these divergent formulae can best be regarded as attempts to resolve a single technical problem. That problem is how to combine levies of normal severity on mining activities of average profitability with very high proportionate levies on mines of exceptional profitability without introducing a marginal rate of charge that is so steep that it is likely to reduce the company's incentive to operate with maximum efficiency. This is a problem of quite a different nature to the issue of whether or not a particular fiscal and royalty regime operates to encourage or discourage expansion of existing mines and exploration for new ones. The problem can be illustrated with a simple example.

EXAMPLE TO ILLUSTRATE EFFECT OF PRODUCT PRICE CHANGE ON "REQUIRED"ROYALTY AND TAX RATES

1.	Capitalization			100
2.	"reasonable rate of return" [a] (post-tax)		say	15%
3.	Normal position:			
	Assume sales revenue of	130		
	Operating and other costs	100		
	Pre-royalty and pre-tax profit	30		
	Royalties and taxes (at 50%)	15		
	Post-tax profit	15		
	∴ return on capitalization		=	15%
4.	Assume sales revenues double	260		
	Operating and other costs remain	100		
	Pre-royalty and pre-tax profit	160		
	(a) If post-tax profits are to be allowed to double, but to rise no more than that, royalties and taxes will need to be	130		
	(b) Marginal rate of Government take would then require to be 115 ÷ 130 =	88%		
	Leaving a marginal rate of retentions for the company of	12%		
5.	Under these assumptions, lower marginal rates of Government take will allow company profits to more than double, e.g.			
	(a) If marginal rate is	80%		
	Company's post-tax profits =	41		
	and return on capitalization		=	41%
	(b) If marginal rate is	75%		
	Company's post-tax profits =	47.5		
	and return on capitalization		=	47.5%

Footnote

(a) No inference should be drawn from this example that the author considers a "reasonable rate of return" (post-tax) to be 15 per cent. What is a "reasonable" rate in any situation will depend upon a wide variety of circumstances. The figure has been chosen for illustrative purposes only.

(c) If marginal rate is 70%
Company's post-tax profits = 54
and return on capitalization = 54%

The problem can now be restated in these terms. In theory the increased revenues shown in the illustration, assuming that they arise from a wind-fall doubling of the product price, belong to rent. But by extracting the royalty (rent) as a profits tax, either the marginal rate has to be excessively high; or a substantial component of what should be extracted by the ore-owner as rent gets left with the mine-operator as greatly increased post-royalty and post-tax profit.

The sections that follow examine a selection of the taxation and royalty arrangements that are in force in African Commonwealth countries. If they are to be judged - and no such judgement is attempted explicitly in these pages - it should be (we suggest) by reference to two criteria:-

1. Do the leasing, royalty, participation and taxation provisions jointly facilitate an optimum level of exploration, mine development and mining in the particular jurisdictions under consideration? and

2. Do such arrangements procure for the governments concerned the maximum possible share of the revenues from mining consistent with the objective defined above?

III

Governments raise revenue from mining activities in the countries under review[5] in ways that can usefully be distinguished under three main headings:-

(A) Imposts, such as rents, fees, licence charges etc., that are generally of a minor amount, and which can be looked upon primarily as payments for use of land or for an administrative service.[6]

(B) Imposts, such as royalties, or other forms of arrangement which represent payment by the mining company to the owners of the mineral rights for the right to extract, process and dispose of the ore.

(C) Imposts which take the form of regular taxation, such as income tax, company or corporation tax, withholding taxes etc., which are not special to mining enterprises in the particular country.

Unfortunately, from the point of view of exposition, actual arrangements in practice often cut across or obscure these three categories of imposts. Thus the rent on a mining lease is usually relatively small in comparison with the value of minerals won; but on occasions it is substantial and, in these instances, a portion of the rent may be regarded as assuming the nature of a royalty. (i.e. it does not only reflect the surface value of the land in alternative uses; it also comprises a part payment for the right to extract minerals).[7] Mineral taxes (or Mining Company taxes) may be chargeable on the assessable income of companies in the same manner as income taxes, but because they are only levied on mining companies they in fact constitute a form of (or a substitute for) mineral royalties.[8] Export taxes may also serve as a form of royalty in situations where virtually all the production of one particular mineral is exported.[9] Alternatively the orebody may be paid for by other means, such as the issue of equity to the owner of the mineral rights free or at a discount,[10] or by making available an option (should a profitable orebody be discovered) for the owner to take up shares at a favourable price,[11] or by making over at no cost a share of the production to the owner of the rights. Where Government is the owner of the mineral rights, arrangements of this kind may be negotiated at the same time as the conditions governing rents, royalties, tax rates, allowances and exchange control provisions. In the resultant sets of arrangements the distinction between the three types of charges, though conceptually simple, may not be reflected clearly in the financial flows. In particular, it may suit both host government and mining company to present what is in essence a royalty charge as an income tax, so as to take advantage of double taxation relief in another country.

Apart from these imposts there are a number of other taxes - of which the mineral rights tax[12] and the severance tax[13] are important examples - which may be special to mining enterprises. The possible uses of these taxes to influence the pace of exploration and of exploitation within a given jurisdiction are extremely interesting. But they are not in general use for revenue raising purposes in the countries under review. This may be largely because both the minerals right tax and severance taxes are of much greater relevance where the mineral rights themselves remain in private hands.

IV

Imposts of the first type (A) - the rents, fees, licence charges etc. are only of minor interest to us. Their normal range is indicated in Table One - one has to say 'normal' because the Minister or Chief Mines Officer usually has the right to designate an exceptional charge if he feels the circumstances warrant it.[14] From the revenue raising point of view it is the other forms of impost (B) and (C) that are of far greater importance.

V

Before discussing royalty arrangements in detail - including what we call 'quasi-royalties' it will be convenient to characterise and consider two attitudes towards royalties that are so distinct that they may be said to embody starkly contrasted approaches to the whole process of private sector mining. The point of contrast, and the issue at stake, involves any surplus above normal rates of return that may arise from the exploitation of a particular mineral deposit. To whom does that surplus rightly belong? Does it belong to those who have risked their capital in exploring for the deposit, finding it, and bringing the mine (or well) into production? Or does it belong to whomsoever can establish claim to the ownership of the particular mineral rights? Or, should the Government, if it is not itself the owner of the mineral rights, claim the major part of the value of the surplus (i.e. above what it would stand to receive by normal taxation) on behalf of the people of the country? Or should the surplus be divided between all three parties; and if so, according to what principles and in what proportions? Or is the issue not a moral one at all - even in the sphere of political philosophy - but one to be settled by bargaining strength and negotiations?

On one side of the argument, representatives of the mining companies are prone to argue that mineral resources - however rich - are valueless until they are discovered and extracted from the ground; that the exceptional 'riskiness' of mining justifies an above-normal return; that against any surplus achieved from the exploitation of one particular rich deposit have to be offset the expenditure on prospecting and the losses incurred in less successful operations; that the owner of the mineral rights will get a fair share through a royalty expressed as a fixed percentage of the value of output or even a fixed

TABLE ONE

FEES, RENTS AND LICENCE CHARGES

	Sierra Leone	Ghana	Nigeria	Kenya	Uganda	Tanzania	Zambia	Botswana	Lesotho	Swaziland
Fees - Miscellaneous Transactions (maximum payable)	20 Le	£75[n]	£40[o]	shs150[f]	375/-	100 shs			j	£ 2[p]
Licence Charges	15 Le				75/-[k] 150/-	40 shs 20 shs[g]			j	
Rents	20 Le[a]		£5.00[a]	shs2.50c[d]	300/-[a]	100 shs[a]		R2-R10[h]		£ 5[a]
	4 Le[b]		2.0s[b]		75/-[i]	10 shs[h]		R100[l]	j	£ 1[i]
	4 Le[e]		15.0s[c]		20/-[d]	1 shs - 2.50 shs[d]		R50p.mth[m]		5s[d]
	1-2Le[d]		6d-3.0[d]		75/-[e]					

TABLE ONE

NOTES

a. holder of an exclusive prospecting licence for every square mile or part thereof per annum.

b. holder of an exclusive prospecting licence for every square mile or part thereof per annum for lignite only.

c. holder of a mining right for every hundred yards or part thereof measured along the centre of the stream bed.

d. leases per acre or part thereof.

e. a waterright.

f. apart from an assay fee of Shs.500 per month for laboratory use.

g. for renewal of licence.

h. a claim.

i. a location.

j. fees and rents payable to the state are prescribed by the Mining Board in terms of Section 16 and 17 of the Mining Rights Act 1967.

k. fee is shillings 75/- for preparation of a prospecting licence and a location and a fee of shillings 150/- for a lease.

l. a mining claim for precious stones.

m. a mining claim for alluvial deposits.

n. on 1 January 1973 Nigeria changed over to the decimal currency system. The unit of currency is the Naira (₦) which is divided into 100 kobo (K). At that time One Naira was equivalent to 10 shillings sterling, and One Kobo to 1.2d. At current (July 1974) values, the Naira is worth ₦ 1.46 = £1 sterling.

o. The present unit of currency is the Cedi (C) divided into 100 pesewas (P). With effect from 7 February 1972 the new Cedi was revalued to US $ 0.78. At current (1 July 1974) values, the Cedi is worth C 2.71 = £1 sterling.

p. One old Swaziland £ was made equal to 2 Rand; and 1 s became equivalent to 10c.

percentage of profit; and that Government will get its due share through the normal taxation of company income and dividends.[15]

The other side of the argument is based upon an assertion that the intrinsic value of the orebody belongs to the owner of the mineral rights; that the company which mines the orebody is entitled to a normal return on its capital (which will vary upwards or downwards from the normal according to its comparative efficiency) but nothing more; that any additional surplus arising out of the working of the orebody due to its exceptional richness or other favourable natural features or from movements in mineral prices that create windfall profits properly belongs to the owners of the orebodies; and that the royalty (or other arrangements) should be so designed as to 'cream off' all such surpluses for the owners of the mineral rights.[16]

The proponents of one school, in a sentence, look upon the mining companies which find and work them as being the rightful owners of the richness of the orebodies; the proponents of the other look upon such companies as merely extractors and processors earning what amounts to a fee related to the work they do but with the value of the mineral products after meeting all discovery and extraction costs still belonging to those who owned the undiscovered ores.

The older Mining and Minerals Legislation in force usually reflects the first school of thought - i.e. it enshrines the concept of vested rights, it makes no provision for participation in equity, and it sets royalties generally at a low level as if mining itself was a welcome activity as a means of providing employment and of 'opening up the country'. The legislation itself often seems to be mainly concerned with bringing order into a situation where numerous prospectors are likely to be in dispute over the area of the claims that they have staked.[17] It is in part because of the discrepancy between this legislative framework and what developing country governments now regard as their proper rights that major new discoveries are nearly always embarked upon not in terms of the general enabling legislation, but according to the terms of special agreements which are individually negotiated (and periodically re-negotiated) between the host government and, characteristically, a transational mining enterprise.[18]

These special agreements approach much closer to the second school of thought that we have characterised. Indeed, in examining such agreements and comparing the terms that are negotiated in different countries at different times, it is

possible to trace a process that is progressive and of major significance.[19] One interpretation of this process sees it as a manifestation of the increasing political self-consciousness and economic nationalism of the mineral-producing LDCs; i.e. as an expression of a growing determination to have greater control over the exploitation of their natural resources and of a similar determination to receive for the products of those resources the highest price that purchasers can be induced or forced to pay.[20] Another interpretation - and, in a sense, a complementary one - sees this process as part of the effort by the developing world as a whole to redress the unfavourable movement against them in the world's terms-of-trade by collectively forcing up the price of primary commodities in an era when demand for some of such commodities in the industrialised countries expands continuously while the world's supply is being depleted. Sometimes this collective action may take the form of joint and united action through a single organization. More often the movement is less ordered and coherent. One country with exceptional resources, exceptional determination, or a fortuitous position of strength holds out for exceptional terms and gets them. The details of this new arrangement become disseminated in time, and equivalent or even better terms are demanded in the next agreement that comes up for negotiation. In this way a sort of follow-my-leader process is established.[21]

The attitude of the large mining enterprises themselves towards this process can be observed. Initially they may threaten to leave (or not to start mining in) those countries which stiffen terms against them.[22] Some will do so; others will restructure their prospecting activities away from the countries which are considered 'unreliable' (in terms of their adherence to agreements) or too demanding (in terms of the conditions that they set) and towards countries which are considered more reasonable, amenable, or subject to developed country influence. This has happened.[23] But as the 'new' sets of developing country terms are more widely accepted and applied - and the process here can be observed to be spreading from the developing world to the more developed areas - viz. the State governments in Australia;[24] the Provincial governments in Canada[25] and the European governments in their attitude towards North Sea oil[26] - so the transnational companies condition and adjust themselves to what, in effect, are the higher prices that the mineral producers are demanding for their natural resources. Moreover, so long as all (or nearly all) the mineral producers behave in the same way so that all (or nearly all) the international mining companies are affected (more or less) equally - the latter will find that this process is likely to have only a

temporarily adverse effect upon the level of their profits. A more immediate cause of awkwardness arises when one operator in a particular jurisdiction may obtain or may continue to enjoy exceptionally favourable terms, thus enabling him to undercut his international competitors and/or make their profit performance look poor by comparison with his own.

VI

Where governments own the mineral rights, and deliberately charge mining companies for the right to sell the ores which they have extracted, the charge is levied in the countries that we are considering in one (or more) of three ways, viz. (i) through a royalty, (ii) through a special mining tax, (iii) through government participation in the equity.[27]

There are many different ways of assessing a royalty charge, five of which are to be found in the Minerals Legislation of African Commonwealth countries. These are (a) a fixed amount per unit of output; (b) a fixed percentage of the value of output;(c) a variable amount per unit of output depending upon price (which can also be expressed as a variable percentage of value); (d) a variable percentage of value of the output depending upon some measure of the mine's profitability; and (e) a fixed or progressively variable percentage of profit.[28]

Royalties fixed in monetary terms per unit of output are normally only used for levying upon quarried materials or bulky minerals of relatively low value, and the charge itself is usually kept low (viz. 2.75 cents per ton of coal in Botswana; 1½ d per ton on lignite in Nigeria; 3 d a ton on coal in Swaziland; 8 d a ton and 10 c a ton on chromite and ilmenite in Sierra Leone; and a whole range of charges in Tanzania from 30 cents (T) a ton on coal, 50 c per hundred cubic foot of sand or clay and 1 sh per hundred cubic foot of gravel and stone up to 6 sh a ton for salt and 150 sh a ton for meerschaum clay). Royalties of this kind have the advantage of being very simple to administer, but the owner of the mineral rights is likely to lose revenue at times of rising prices.

Royalties fixed as a percentage of value are by far the commonest form of royalty. They avoid, in part, the danger of revenue loss from price rises , but they suffer from other conceptual and practical disadvantages. The range of such fixed royalties in African Commonwealth countries spans from

1½ per cent to 10 per cent. It should be emphasized that these are the rates set in the ordinances or regulations, not those prevailing in special agreements; nor can it be assumed any minerals are mined that are actually liable to the royalties in the specific countries. Given these qualifications, the table overleaf shows the fixed percentage royalties payable on certain different mineral products in different Commonwealth African countries.

Royalties, where the percentage charge varies with the price of the metal, are in force in Nigeria. The most important royalty is that upon tin, which was revised downward in 1973 from a top marginal rate of 40 per cent of the value per ton of metallic tin to the present royalty, shown below, where the top marginal rate is 16 per cent.

Royalty per ton of metallic tin - Nigeria.

11% of the value up to	₦	2,200 per ton, plus
12% of the additional value up to	₦	2,400 per ton, plus
13% " "	₦	2,600 per ton, plus
14% " "	₦	2,800 per ton, plus
15% " "	₦	3,000 per ton, plus
16% " "	₦	3,200 per ton, and thereafter.

(Note: originally 2 Naire (₦) = £1 sterling
since April 1973 1 Naire (₦) = $ US 1.52)

For columbian ores, tungsten ores, zinc ores and gold, similar royalty formulae are laid down generally relating the percentage of value payable, progressively, to the prevailing price for the mineral.

An example of a royalty fixed as a constant percentage of profit for tax purposes (in this case 5 per cent) but defined as a royalty in the regulations is to be found in the Mineral Regulations of The Nortern Territories of the Gold Coast of 1937. The provision states "Every lessee of a mining lease shall be charged with the payment to His Majesty of the following royalty, namely, one shilling for every twenty shillings of the annual amount of all profits made from or in respect of the exercise of the rights conferred by such mining lease".

These royalties have been replaced by a straight 6% charge on gross value for gold and diamonds, but remain in force for bauxite and manganese. Both types of royalties are

TABLE TWO

ROYALTIES EXPRESSED AS A PERCENTAGE OF VALUE OF PRODUCTION

	Sierra Leone	Ghana	Nigeria	Kenya	Uganda	Tanzania	Zambia	Botswana	Lesotho	Swaziland
Barytes			1½	d						
Coal, Lignite										
Kaolin						2½				
Mica			5			5				
Asbestos										2
Ilmenite (rutile)					)	)		)		)
Bauxite					)	)		)		)
Manganese					)	)		)		)
Tin			11 to 16[b]		)	)		)		)
Columbium	4-50[a]		4-50[a]		)5	)5		)3		) 2½
Lead			2[c]		)	)		)		)
Zinc			1-5[a]		)	)		)		)
Copper					)	)		)		)
Platinum	5		6		)	5				)
Gold	9	6	4-10[a]		)5	1½				)
Diamonds	5	6	10		10	15		10		)
Silver			6		5	1½				)
Tungsten			1-5[a]							
Thorium			4							
Zircon			4							

a. depending upon price per unit.

b. depending upon profit.

c. if the lead contains not less than 4 oz. of silver per ton there is an additional 3 per cent on the value of the silver.

d. as prescribed by the Minister from time to time by notice in the Gazette.

supplemented by a Minerals Duty, which is a variable charge based upon the profitability of the individual mining enterprise.

Royalties (or equivalent charges) which vary in percentage according to some measure of profitability are to be found in the Minerals Legislation of Ghana and Uganda, and are increasingly becoming a feature of special mineral agreements. The Ghana impost is described as 'a minerals duty' and measures profitability in relation to the value of minerals won (v), and the operational cost of production (c). The critical expression

$$\frac{v - c}{v}$$

is called 'the yield ratio' and the following table relates the yield ratio to the applicable rate of duty.

Yield Ratio	Rate of Duty
Up to 45%	10%
Over 45 and up to 60%	15%
Over 60 and up to 75%	20%
Over 75 and up to 100%	25%

The Uganda Fees and Royalties Act (Chapter 168) flatly stipulates: 'Notwithstanding the provisions of any mining lease, special mining lease, or any other law, royalties shall be computed on profits arrived at before the deduction of royalties for the purpose of computing income tax'. The royalty payable by Kilembe Mines (which mines copper and is the largest mining enterprise in the country) is calculated according to the following prescription:-

On that part of the profit which does not exceed 10% per annum of the capital employed in the business	...	Nil
On that part of the profit which exceeds 10% per annum of the capital employed in the business but does not exceed 20%	...	5%
On that part of the profit which exceeds 20% per annum of the capital employed in the business but does not exceed 30%	...	10%
On that part of the profit which exceeds 30% per annum of the capital employed in the business but does not exceed 40%	...	15%

On that part of the profit which exceeds 40% ... 20%

VII

The objections to any form of royalty which operates as a charge upon costs are well known. It is said that they operate to discourage the opening of marginal mines, that they lead to the by-passing of marginal ores in existing mines which once passed can never be recovered, that they tend to be relatively penal on high cost disadvantageous mines and relatively generous to low cost well-endowed ones. Thus, it is claimed, they increase the financial riskiness of opening new mining ventures and may bring forward the date when older ones have to be closed down. Similarly, if we assume that royalties need to be uniform for any given mineral, the owner of the mineral rights in a number of different properties (be he government or private person) is likely to face the following dilemma :- if the royalty is set low enough to make the most marginal mines profitable, the better endowed mines will be presented with the prospect of larger-than-necessary profits, but if the royalty is set high enough to reduce to normal the return on the richest mines, the more marginal deposits will be rendered unprofitable. One way out of this dilemma is to abandon the idea that royalty rates should be uniform for all mines of a particular mineral within a country. But although this is entirely logical in economic terms, there are other reasons of a political and administrative nature why governments when they own the mineral rights are very reluctant to take this course. Another way out is to relate the royalty rate to some measure of profitability - and we have seen instances in Ghana and Uganda and elsewhere of how this may be done. A third possibility is to abandon the idea of a royalty as a charge upon production (or perhaps simply reduce it to a minimal) and to take the rest of the payment for the ores in another form. This course has been becoming increasingly common.

One such form, which we shall examine next, comprises an exceptional (or additional) tax upon mining company profits. It does not much matter whether this is called a 'profit tax' (as in Botswana - though here it is allowable as an expense against income tax), or a Mining Tax (as in several Canadian provinces), or a Mineral Tax (as in Zambia); it is the principle and the mode of operation that are important.

In Botswana, De Beers Botswana Mining Company (Proprietary) Ltd., by the terms of their special agreements of 1970 and

1972 - pay a royalty of 5 per cent onthe gross proceeds of sales of diamonds, a profit tax of 10 per cent of the annual profits calculated as for Income Tax assessment, and company taxation at the normal rate, with the royalty and profits tax being allowable expenses. (As part of the same set of arrangements, the Government is also allocated 15 per cent of all equity issued by the Company from time to time, free of consideration.)

Also in Botswana, the agreements relating to the "Shashe Project" for the opening up of Selebi-Pikwe copper-nickel deposits establish a different form of regime. The royalty is set at $7\frac{1}{2}$ per cent of net income (with a minimum annual royalty payable in advance of Rand 750,000). The tax that the company, Bamangwato Concessions Ltd. (BCL), pays on its profits from mining operations is set at a basic rate of 40 per cent rising by 1 per cent for every 1 per cent by which the operating profit margin exceeds 48.5 per cent to a maximum tax rate of 65 per cent. For the purpose of this provision 'operating profit margin' means 'the result obtained by subtracting the production cost from sales revenue and expressing the difference as a percentage of sales revenue'. The royalties paid by BCL to Government are treated as a production cost. Again the Botswana Government is allocated 15 per cent of the equity.

The new Zambian legislation, while embodying much the same idea as is evident in the Shashe Agreements, approaches the matter in a different way. Under the new system, the major imposts on mining operations are based entirely on profits. Royalties and the export tax have been abolished. There are now two elements in the system:-

(a) Mineral Tax, and
(b) Income Tax.

The rate of tax on the assessable income of companies is currently set at 45 per cent. But it is the mineral tax which represents a mode of 'paying for the right to work the ores'. Mineral tax is chargeable on the assessable income as defined in the Income Tax Act at the following rates:-

Copper	.....	51%
Lead and Zinc	.....	20%
Amethyst and Beryl	.....	15%
Gold, Bismuth, Selinium, Cobalt, Silver, Cadmium	.....	10%

The Income Tax Act makes provision for mineral tax to be deducted as an allowance in ascertaining the gains or profits of a business for the purpose of the income tax. The effect of this provision when taken together with the Mineral Tax Act is to produce a combined rate of payment for the copper mining companies on their profits of 73.05 per cent.

Since the Zambian Government has already bought and paid for 51 per cent of the shares in the two main copper companies, the current situation with regard to all pre-royalty and pre-tax profits from copper mining amounts approximately to this:-

(a) Government takes 51 per cent of all pre-tax profits in the form of a Minerals Tax, as a charge for allowing the copper companies to mine the ore;

(b) Government then takes 45 per cent of the profits after payment of Minerals Tax, as ordinary corporation tax on company profits;

(c) Government then receives, as 51 per cent majority shareholders of the mining enterprises, 51 per cent of the post-Mineral Tax and post-Income Tax profits.

(d) A further 20 per cent withholding tax may be payable on those dividends relating to the 49 per cent minority holding which are payable abroad.

Matching these additional or exceptionally high charges on the income tax of mining enterprises in certain countries, other instances may be cited where the effective income tax rate upon mining companies is lower than normal. One common way in which this has been brought about is by allowing mining companies a 'depletion allowance' which permits them to reduce what would otherwise be their assessable income for tax purposes by a prescribed proportion. Another method is simply to specify a lower than normal rate of company taxation for companies recognized as mining enterprises. A justification for this second course is normally a recognition that the mining enterprises affected are encountering exceptional difficulties or are having to work an orebody nearing exhaustion. An example of such a sub-normal tax may be found in Uganda where the tax for mining companies (at 22½%) is only half the normal company tax rate (this is in recognition of the difficulties being encountered by the Kilembe mines). A variation may be seen in the Swaziland tax provisions where the rate applied to mining enterprises

varies between 27 per cent and 37½ per cent depending upon the size of profit compared to a normal tax rate of 33 1/3 per cent.

VIII

The following formulation may be taken as a guide. The mineral royalty

(i) is a payment to the owner of mineral rights for the right to extract and sell the ore.

(ii) is a charge upon production.

(iii) should be variable with the value of the ore being mined.

(iv) should be so designed that the increase in the value of the ore accrues mainly to its owners.[29]

The relationship between the value of the ore and its price is neither obvious nor simple. An example will illustrate this. Supposing the cost of working an orebody is taken to be $100, while gross revenue to be obtained by selling the metal mined is only $90. If we assume comparative costs and prices to remain unaltered for ever then that orebody would always be of no commercial value. Now assume that the price of metal increases by twenty per cent, so that the gross return becomes $108, the value of the orebody now becomes positive, and if we were looking for a net present value we would say it was the equivalent to an income stream of $8 a year - again assuming comparative costs and prices will not alter further. Now assume that the price of the metal increases by a further 20 per cent while costs remain constant so that the gross revenue becomes $129.60. The point deserving attention is that this 20 per cent increase in selling price results in an increase of profit from $8 to $29.60 - i.e. an increase in profitability (and most importantly of the potential value of the orebody) of 370 per cent. A royalty appropriately designed should relate the charge levied for working the deposit to variations in the profitability and value of the deposit. Of course to do this changes in working costs have to be taken into account as well and a theoretically correct solution is made more complicated by continuing inflation. In practice, of course, the best that can be attempted may be a royalty designed to approximate the theoretical ideal in its operation but at the same time to be administratively straight forward and reasonably simple to explain and justify.

If quasi-royalties are defined broadly as types of imposts having the same intended effect as royalties, and if royalties are defined prescriptively as we have suggested above, the variety of types of royalties and quasi-royalties becomes very extensive.

The following list is not exclusive in the sense that some of the types listed could be further subdivided according to their manner of calculation. Its interest derives from the fact that all (or nearly all) of the types of charges listed are in use somewhere in the Commonwealth.

Types of Royalties and Quasi-Royalties

(i) Fixed amount per ton
(ii) Fixed percentage of value
(iii) Variable amount per ton, with production
(iv) Variable percentage of sales, with production
(v) Variable amount per ton, with price
(vi) Variable percentage per ton, with price
(vii) Variable amount per ton, with total profit
(viii) Variable percentage per ton, with total profit
(ix) Variable percentage of profit, with total profit
(x) Variable amount per ton, with profitability
(xi) Variable percentage per ton, with profitability
(xii) Variable percentage of profit, with profitability
(xiii) Mineral Export Tax, fixed amount per ton
(xiv) Mineral Export Tax, fixed percentage of value
(xv) Mineral Export Tax, variable percentage of value
(xvi) Mining Company Profit tax, in lieu of royalty
(xvii) Mining Company Surtax, in lieu of royalty
(xviii) Cost and revenue sharing, without Equity Participation
(xix) Right to Participate in Equity, free or at discount
(xx) Production sharing (i.e. proportion free for disposal)
(xxi) Compulsory state purchase, for resale
(xxii) Posting of 'artificial' prices for tax purposes
(xxiii) Differential exchange rate imposition
(xxiv) 'Royalty auctions'
(xxv) Obligation on Producing Company to provide infra-structure.

IX

The third element we have tried to distinguish amongst the imposts by which Governments collect revenue from mining

enterprises comprises what we have called 'regular taxation'. A whole series of well-recognized difficulties bedevil attempts to compare the impact of taxation upon mining enterprises in different countries. One such difficulty involves the known differences that exist between the rates that are set in the ordinances, and the actual amounts (or proportions of income) that will be payable after all allowances and off-sets are taken into account.[30]

For instance, differing initial capital allowances, depletion allowances, tax holiday periods, treatment of losses, dividend withholding taxes etc. profoundly alter the actual impact of company, corporation, income or profits taxes even where the actual rates set in the budgets appear identical. A second such difficulty stems from the fact that exactly similar foreign enterprises in the same country may be differently affected by the host country's tax regime depending upon whether or not they can offset such foreign-paid taxes against tax liabilities in their own home country.

For all these reasons, the table of comparative basic tax rates set out below has to be interpreted with great caution.

Depletion allowances, which have the effect of reducing the mining company's income upon which tax is assessed, have been the subject of controversy for a very long time. Conceptually they purport to represent a recognition that the resource which the company is mining at a particular mine is limited, and that when it is exhausted the investment at the mine will have next to no residual value. In this, so it is argued, investment in mining is different from investment in most other types of productive activity. Therefore an allowance, analogous to the depreciation which is allowed against plant and equipment, should be established to reflect the gradual depletion of the orebody, or, as some commentators have put it, to recognize the fact that part of the income stream from the mine constitutes consumption of capital.[31] From here, it is but a step to argue that a depletion allowance should be set off against company profits before arriving at company income for tax assessment, just as is done with depreciation allowances. But since it is so difficult to know or agree upon the capital value of an orebody, depletion allowances (unlike depreciation allowances) most commonly take the form of a straight percentage deduction on profits, before arriving at the income of the company to which tax will be applied.

TABLE THREE
COMPARATIVE BASIC TAX RATES

COUNTRY	Basic company rate of tax %	Depletion allowance	Range of Initial allowances %	Range of Capital allowances %	Can allowances exceed 100% ?	Withholding Taxes on dividends %	Withholding Taxes on interest %	Withholding Taxes on M.ment fees %	Withholding Taxes on Tech. royalties %
Sierra Leone	45	No		g		45	45	-	-
Ghana	55	No	10 - 20 f	5[c] 15min.[d]		55	55	-	55
Nigeria	40/45 [a]	No	Nil - 20	5[c] 10 $12\frac{1}{2}$[d] $12\frac{1}{2}$[e]		-	40[a]	40[a]	40[a]
Kenya	40 $47\frac{1}{2}$[h] $22\frac{1}{2}$[i]	No	40	10	No	$12\frac{1}{2}$	$12\frac{1}{2}$	20	2
Uganda	45 $22\frac{1}{2}$[i] $51\frac{3}{4}$[h]	No	40	10	No	Nil	$12\frac{1}{2}$	20[g]	20
Tanzania	40 $47\frac{1}{2}$[h] $22\frac{1}{2}$[i]	No	40	10	No	12	12	20	20
Zambia	45	No	10	2[m] - 30		20	20		
Botswana	30	No	Nil	1	No	15	15	-	-
Lesotho	$37\frac{1}{2}$	No	-	30	No	-	30	-	-
Swaziland	27 [i b] 33 1/3	No	Nil	k	No	15[j]	$7\frac{1}{2}$	-	-

TABLE THREE (Contd.)

	Export Tax	Tax Holiday	Other Taxes	Exchange Control restrictions
Sierra Leone		Discretionary	Surtax 15%, Diamond Industry Profits Tax 27½%, Iron ore concession tax 5%	-
Ghana	¢ 2.50 per fine troy oz. gold	Discretionary		Important
Nigeria				-
Kenya				-
Uganda				Important
Tanzania				Yes
Zambia				Important
Botswana			Mineral rights tax 10% of value of mineral rights[n]	-
Lesotho	15% diamonds			-
Swaziland			Mineral rights tax R10 per each hectare, R50 after 5 years. Capital gains tax 37½%	-

TABLE THREE

NOTES

a. 40% is the rate of tax on the first £N 5,000, 45% is the rate on total profits in excess of £ N 5,000.

b. On taxable income exceeding 20,000 Rand the rate is 37½%.

c. qualifying building expenditure.

d. qualifying mining expenditure.

e. qualifying plant expenditure.

f. An investment allowance is also granted: 5% of the expenditure incurred on any industrial plant or machinery.

g. There is an annual allowance on "qualifying mining expenditure", which is calculated as the greater of either 1/20th or the basis period year's output divided by the basis year's output and future potential output.

h. non-resident company permanently established.

i. income derived from mining.

j. for companies carrying on business in Botswana, Lesotho, Swaziland or the Republic of South Africa the rate of tax is 12½%.

k. The annual allowance shall be the equivalent of such annual annuity payment as would aggregate over 30 years (or the expected life of the mine, whichever is the less) at 3% compound interest to the sum of unredeemed capital expenditure.

l. Residual capital expenditure including capital expenditure incurred during tax year, divided by expected life of the mine or thirty (whichever is less).

m. capital expenditure incurred by "new mines" is allowed in full in the year incurred.

n. or if higher, a rate of Rand 40 for every square kilometre of land or part thereof over which mineral rights are held.

Let us consider some of the issues arising from these points. To begin with, it is by no means clear that a mining enterprise is as different from a manufacturing enterprise as the argument would have us believe. Manufacturing enterprises are liable to go out of business if they do not modernise or diversify their product; and changing conditions may well induce them to change their location. The expenditure that has to be put into research, market survey, product re-design and the purchase of patents may be regarded as similar to the outlays that a mining company has to make on prospecting and exploration, or on the purchase of other mineral rights, if it intends to stay in business. The fact of the matter is that, while mines may become worked out just as factories may have to close down, mining companies do not necessarily have such a finite life. On the contrary, the trend is for a larger and larger proportion of the world's mining to be done by major multi-national groups whose life expectancy is not dependent on the reserves of one particular deposit.

Where the mining company does not own the orebody, but works a mining lease, the questions arise 'In what sense is it the capital of the company that is being depleted and paid out as income?' and 'If anybody is entitled to a depletion allowance to offset against his income, should it not be the owner of the mineral rights?'

Mineral royalties are nearly always allowable as a cost to the mining company before arriving at profit for income tax purposes.[32] The written down value of plant and equipment which has to be scrapped, or the shortfall below such value realized in a final sale of property where a mine has to be closed down is similarly allowable as a cost against income. And these allowances - one a revenue allowance and the other a capital allowance - take care of two aspects of a mine's exhaustible nature. There remains, however, the expenditure on exploration, prospecting, and on proving the deposits, the expenditure on the purchase of leases or rights to mine; and the preliminary expenditure undergone in establishing the mine. In a situation where the life of a mine is recognized as being limited, it is reasonable to allow these types of capital expenditure to be written-off against income over the life of the mine so that the owners of the mining enterprise may receive the equivalent of their original capital contributed back untaxed, while the income earned by that investment and any capital gain realized upon it are taxed in the normal way and at the normal rates.

But what of the owner of the mineral rights when the owner is not the government? What view should the tax authorities take of his receipts from royalties? A number of interpretations, depending upon how the rights were established, used and disposed of would appear to be equally admissible. Where the owner is himself the prospector (or prospecting company) which has discovered and pegged the claim, it would be reasonable to regard the royalties as earned income and his expenses in prospecting, pegging etc. as allowable expenses - either in the form of a loss brought forward, or to be set-off against income in the current year if the prospector was in the business of discovering and pegging claims. In neither case would a depletion allowance be appropriate.

Suppose, however, that the discoverer of the mineral deposit was to sell his established ownership of the mineral rights, rather than holding it and enjoying the royalties therefrom. In such a case, the tax authorities could appropriately look upon the receipts from the sale as income if the prospector was deemed to be in the business of discovering, establishing and selling mineral rights; but as a capital gain if the seller could persuade the authorities that dealing in such rights was not his normal business[33] - though in such a case the authorities might well be inclined to examine more stringently any claims for off-setting expenses. Parallel considerations regarding the treatment for tax purposes of the receipts from a sale of mineral rights would apply, had the rights in question been acquired through purchase rather than through discovery and pegging.

Let us next consider the situation where mineral rights have been acquired privately by purchase (or by inheritance), and when they are held by the owner who receives royalties from them. This would appear to be the sole circumstance in which a depletion allowance in recognition of the diminishing nature of the asset should conceptually be recognized.[34] The simplest way to compute this allowance would be to allow an annual deduction equivalent to the original cost of the rights divided by the anticipated life of the mine. (There are many examples of the practical procedure for doing this, most of them by way of a three-yearly revision). In times of general inflation, a factor to take account of this could be fed in. To those who would argue that the purchase price might grossly understate the actual value of the deposit, the answer should be made : 'Quite so; but if the original purchase price undervalued the orebody and the owner claims that depletion allowance is too small on this account, then it must also be acknowledged that

the owner should become liable for capital gains tax on the increased value of his asset'. The extent to which the owner would then gain from an upward revaluation of his asset for calculating the depletion allowance would become a direct function of the difference between the tax rates applicable to company (or personal) income and those applicable to capital gains.

But conceptually and in terms of equity, it should be repeated that only the private owner of mineral rights receiving income from mineral royalties has a legitimate claim to a depletion allowance, and then only if he has acquired those rights in the ways specified.

Other proponents of the depletion allowance take a different approach. They cite the risks attached to mining enterprises, especially in the early stages, and the large outlays that have to be made upon exploration and prospecting, much of which is certain to be abortive, as reasons why income from mining should be effectively taxed, through the depletion allowance, at lower rates than income from other types of endeavour.

It may well be that the factors cited do have the effect of raising the minimum expected rate of return required before finance can be raised or committed for a mining venture above the average minimum expected rates required for investment in other sectors. But this does not, in itself, indicate any misallocation of investment funds; nor does it constitute, in itself, any reason why a government (particularly the government of an exporting country)[35] should take special steps to lower the tax rate upon mineral as opposed to other enterprises.

Moreover, even if it is decided that special encouragement should be given to the mining sector because of the desire to open up new mines, the percentage depletion allowance is both a crude and an expensive tool for government to use: crude, because it does not differentiate between projects which require special encouragement and those that do not; expensive, because, once established, it will extend over the whole life of the mine, and not merely assist in the early years when measures to allow for a reasonably early return on investment may indeed be sensible.

For the reasons cited we must conclude that the depletion allowance and, more particularly, the percentage depletion

allowance - where it exists - is more the result of historical circumstances or of the successful political pressure of the miners' lobby than the product of rational fiscal logic. It is not therefore surprising that depletion allowances are generally going out of favour,[36] or, where allowed, that they generally have to be earned, as under the new Canadian legislation.

X

There are also variations in the way in which a government may charge for the right to mine its ores by taking a participation in the equity of the mining company. One such way, which has been adopted in Botswana, is for the government to be issued with a certain percentage of all equity stock free of any charge to itself. The second way, which was exemplified in the 1967 Bougainville Agreement, is for the Government to have the right to subscribe to a portion of the original share issue at the initial nominal value of the shares. A third way, which is exemplified in the 1971 agreement between the Government of Lesotho and the Maluti Diamond Corporation, is for the company to be offered an option to subscribe to a proportion of the equity capital at the original nominal value of the shares, with this option not having to be exercised until a full prospecting programme has been completed by the company. A fourth way, of which the operations of the Government of Ghana in relation to that country's gold and diamond mines provide one of many examples, involves enunciating a policy that a certain proportion of the equity of all major mining companies should be owned by the government and then 'inviting' the companies concerned to enter negotiations with a view to giving effect to this policy.

It may be assumed that each of these tactics has the effect of providing the government with a share of the equity (and therefore profits) of the mining enterprise at a lower price than it would have had to pay had such a share been acquired by purchases of stock in the market. The extent to which shares are acquired in these circumstances at below market price will always be a matter of dispute and judgment. It may sometimes be a matter of controversy too whether a share in such profits represents an appropriate element in a fair charge for extracting the country's mineral resources, or whether it should be construed as an example of a government taking 'unfair' advantage of a 'captive' foreign investment. Similarly there are likely to be some observers who regard some of the tactics

employed in obtaining equity in this way as involving a breach of agreements and a manifestation of the unrealiability of developing countries' governments, while others will construe such methods as being an appropriate, legitimate and inevitable part of the strategy by which developing countries procure a larger price for the depletion of their natural resources and, in doing so, correct inappropriate arrangements which might have been agreed to or which may have been imposed upon them in the past.

XI

A mining company contemplating a major investment is likely to be most influenced in its decision by whether the expected rate of return on the investment is likely to exceed a certain required minimum rate. That is not to say that many other factors will not also have considerable weight - amongst such factors will be maintenance of market shares, importance of acquiring sources of supply for downstream processing, availability of surplus funds for re-investment, possibility of fitting in with complementary activities, desirability of achieving a geographical spread in investments, an assessment of the commercial and political risks in the particular country, the ambitions and drive of management, the pure size of the investment involved, and the possible alternative uses of the available funds.[37] Other factors could be mentioned, but it is convenient to regard them all as influencing either the required rate of return on the investment, or the expected rate of return; and further to assume that only if the expected rate of return exceeds the required rate, after tax, will the investment go ahead. This analysis can be assumed to remain true, with appropriate adjustments, where expected rates of return are arrived at by discounted cash flow analysis (DCF), and where separate calculations are performed (i) for rate of return on all funds invested, and (ii) for rate of return on participant's equity capital only.

This model of decision-making would make it appear that, being mainly concerned with the net after tax flow of distributable funds emanating from its investment, the investing company is indifferent as to the manner in which the various imposts, charges and deductions are taken by the host government. This is far from being the case, and to that extent the model is misleading. Let us consider four obvious examples. First example: if a major part of the Government's share is taken in

the form of 'free' equity, this will dilute the return and may possibly make more difficult the raising of the remaining equity. It may also lead to demands for substantial government representation on the board which the company may fear will lead to interference in management decisions. On the other hand, a small (say 15 per cent) participation by Government in the equity is usually regarded as giving added security to the investment. Second example: a royalty formula which operates as a fixed charge upon costs may have a particularly serious effect upon profits when prices are low. The investing company might well prefer a flexible charge related to profits even if this resulted in a higher expected overall royalty payment. Third example: some forms of charges (i.e. company profits tax and income tax) in the host country may be usable by the company as a credit against tax liability in other countries while other forms of imposts (royalties, export taxes etc.) are not. Fourth example: income from management fees, production patents, sales commissions for the investing company may be looked upon as a more secure source of income than income from profits, and for that reason may be more highly valued than the same sum in the shape of an expected dividend.

XII

It would be extremely convenient if there were a uniform way to compare the proportions of gross sales value, and of pre-royalty and pre-tax company profits taken by governments through the various imposts that they use. But no such comparison is possible. The ways of exacting these imposts is by no means uniform, nor is there any reason why they should be. And all who try to analyse such matters will know that it is difficult enough to ascertain what proportion of profits the mining industry in a given country has paid out in royalties and taxes, let alone conduct a cross-country analysis of the effects of different assumptions about prices and working costs in a whole series of countries.

What is possible, or what at least may be attempted, is the formulation of a series of hypotheses (or generalisations) suggested by the evidence under review.

With those reservations, the following apparent generalisations can be put forward:-

(1) There is an extraordinarily wide range between the smallest and the largest government shares of the

revenues from mineral production, measured as a percentage of pre-royalty and pre-tax profits. The effective range is from little more than two per cent to over seventy per cent.

(2) No single explanation accounts for this wide variation, but a number of factors of undoubted significance can be cited.

(3) The maximum potential government take tends to vary with the mineral being mined - being highest for diamonds, gold and copper.....and lowest for minerals like iron ore, bauxite and manganese.

(4) The circumstances noted in (3) above appear to be partly a function of the value-to-weight ratio of the mineral, partly a question of whether the price of the particular mineral is in some sense abnormally high, and perhaps most importantly a function of the obtainability of alternative supplies of the particular mineral outside the country/continent being examined.[38]

(5) The comparative richness or poverty of a particular deposit is also of importance in determining the maximum potential government take . As the Ricardian theory of rent would lead us to expect, the maximum potential share (and also the appropriate share in countries where governments own the mineral rights) is highest where the deposits being mined are richest in ore and/or cheapest to work.

(6) lt is usually - but not always - easier to 'up' the share of the government's take by changing the royalty, quasi-royalty and fiscal provisions relating to existing and well-established mines than by introducing such provisions before an industry mining the particular mineral has become established.

(7) Despite (6), it is clear that the average government's take both from established mining industries in African Commonwealth countries, and from the terms upon which new mining ventures are established is tending to increase.

(8) This increase is being brought above in variety of ways. Company tax rates tend to go up, albeit slowly, with development. Withholding taxes not only upon dividend and interest payments, but also upon management fees

and licensing fees, are being more widely introduced. Rents and other comparable fees are being raised.

(9) Royalties have not been subject to much variation - less indeed in Commonwealth Africa than elsewhere in the world. But wider use is being made of what we have broadly called 'quasi-royalty' arrangements - such as equity participation upon privileged terms, pre-emption of output, and production sharing.

(10) A rapidly changing concept of the appropriate role of the mining sector in developing African countries and of the appropriate financial relationships between government and major mining enterprises has not been matched by an equally rapid replacement of the main mining, minerals or associated fiscal legislation. What has been occurring instead has been the negotiation of a series of special agreements whenever major mining enterprises have had to be undertaken.

(11) Such mineral concession agreements are tending to become, paradoxically, both successful and unenduring. Successful in the sense that they succeed in establishing a basis upon which the particular mine can be financed and can start operations; unenduring in the sense that the financial terms of such agreements are very frequently either re-negotiated or over-ridden within a comparatively short time of the mine being opened.[39]

(12) The tendency for the level of imposts to rise over time, and the certainty that agreements that turn out to be too 'unbalanced' in their effects will be renegotiated are becoming more widely recognized by transational corporations and the international financial community.

(13) The desire of developing country governments for greater participation in the enterprises which mine their mineral resources and for greater control of their operations is also becoming more widely recognized - and recognized as legitimate as well. This desire is being matched by an increasing willingness by transnational mining groups to offer a substantial equity participation to host governments, and to subject a wider range of activities to host government guidance or control.[40]

(14) It is noticeable that mining companies - especially transnational companies operating in the countries under review - prefer high tax rates, or excess profits taxes or

supplementary mining taxes, or equity participation to devices such as increased royalties or export taxes that might, conceptually, be a more appropriate way for charging for the resource being extracted and exported.

(15) It would be interesting to determine whether the relative importance of the mining sector in any economy displayed a positive or negative correlation with share of the Government's take . But no such simple relationship can be confirmed.

FOOTNOTES

1. The Company has the right to choose at the commencement of production an applicable interest rate of 20 per cent or a rate which for each year will be 10 per cent above the U.S. prime domestic borrowing rate.

2. In the annual report issued by the Department of Mines and also in the Quarterly Review of South African Gold Mining Shares published by the Mining Journal in London.

3. Certain other gold mines are not included in the list either because they have accumulated losses which reduce lease and tax liability to zero, or because they had not at that stage completed a financial year.

4. Quotations from De Beers Consolidated Mines Limited, Annual Report, 1974, p.6.

5. The countries whose mining regimes are specifically under review are Sierra Leone, Ghana, Nigeria, Uganda, Kenya, Tanzania, Zambia, Botswana, Lesotho and Swaziland; but reference may also be made to the arrangements in other Commonwealth or former Commonwealth countries, such as Canada, Australia, New Zealand, the Republic of South Africa, Jamaica, Guyana and Papua New Guinea.

6. The legitimacy of separating out surface rents from mineral royalties - regarded as a form of sub-surface rent - has itself been disputed, the argument being that a full rent should conceptually incorporate the charge for using the surface and subsurface together in their most profitable possible joint uses. Whatever the theoretical merit of this approach, it remains true that most of the legislative regimes under discussion do distinguish imposts of type (A) from those of type (B).

7. As in the Republic of South Africa where base metal leases used to take the form of a fixed 10 per cent of profits, while precious metal mines paid a lease consideration on a sliding scale formula depending upon the ratio of profits to revenue.

8. As in Canada, see Digest of Mineral Laws of Canada, by E.C. Hodgson, published by the Mineral Resources Division of the Department of Energy, Mines and Resources.

9. As in Ghana, and in Zambia prior to 1970. See "A Future for Zambia's Copper Industry?" in "Towards Economic Independence", by M.L.O. Faber and J.G. Potter. (C.U.P.)

10. As in Botswana.

11. As in Papua New Guinea.

12. The Minerals Rights Tax introduced in Botswana in 1972 is a connoisseur's example of a tax introduced not to raise revenue but to achieve a social purpose - in this case to induce the residual owners of mineral rights to make them over to the state. The social purpose was completely achieved by 1974; while the actual revenue raised by the tax was nil.

13. Taxes that might accurately be described as severance taxes on minerals are of course much more common in the United States of America. See "State Taxation of Metallic Deposits" by W.A. Roberts, Harvard University Press 1944.

14. For instance the Minerals Regulations of Nigeria provide for the reduction, remittance or waiver of the rents and fees payable under the Regulations as follows:

"The rents set out in the Second Schedule shall be so paid but the (Governor-General) may, whenever he may think fit, reduce or remit either temporarily or for the remainder of the term the amount of any rents payable under this regulation.

The fees set out in the Third Schedule shall be so paid except that the (Governor-General) may, whenever he may think fit, reduce, waive or refund in whole or in part any fee payable under this regulation: Provided that the Chief Inspector may, upon good cause shown, reduce, waive or refund in whole or in part the fee payable on the withdrawal of any application."

15. "The unusual capacity of the mining industry to create wealth for an economy, to literally turn what was once rock or dirt into a valuable metal.....needs to be more fully understood ...." Chairman Henry S.Wingate's message to shareholders of the International Nickel Company of Canada, Feb.18, 1971, quoted in Eric Kierans "Report on Natural Resources Policy in Manitoba",1973.

16. The parallel is of course with Ricardo's theory of rent, and John Stuart Mill's prescription for its taxation.

17. Examples of precisely these attitudes are to be found in the unamended minerals legislation of virtually all the countries under review.

18. Amongst important mining agreements of this type in the countries under review are :

Sierra Leone

(i) The Bauxite Mineral Prospecting and Mining Agreement 1961 (ratified by Act No.35 of 1962).

(ii) The Diminco Agreement 1970 (ratified by Act No.22 of 1970).

(iii) The Sierra Leone Rutile Agreement 1972 (ratified by Act No.1 of 1972).

(iv) The Tonkolili and Marampa Agreements 1937, 1944, 1947, 1956, 1967 and 1973.

Zambia

(i) The Heads of Agreement between the Republic of Zambia and the Industrial Development Corporation of Zambia Limited and Bancroft Mines Limited and Nchanga Consolidated Copper Mines Limited and Rhokana Corporation Limited and Rhokana Copper Refineries Limited and Zambian Anglo American Limited dated 24/12/69.

(ii) The Agreement between the Republic of Zambia and the Industrial Development Corporation of Zambia Limited and Roan Selection Trust Limited dated 24/12/69.

Botswana

(i) Agreements between the Government of the Republic of Botswana and De Beers Botswana Mining Company (Proprietary) Limited dated 2/3/70 and 10/8/72.

(ii) Master Agreement between the Republic of Botswana and Bamangwato Concessions Limited and Botswana

R.S.T. Limited and BCL (Sales) Limited dated 7/3/72.

Kenya

(i) The Agreement between the Industrial and Commercial Development Corporation and Continental Ore Corporation and Bamburi Portland Cement Company Limited dated 8/3/71.

(ii) The Agreement between the Industrial and Commercial Development Corporation and Geomin (a body corporate established in Romania) providing for the development of certain deposits of ores of various metals including lead, zinc and silver.

It will be appreciated that a number of these agreements do not relate to new mining ventures but to terms and conditions of government participation in existing mining operations.

19. One could, for instance, take as a starting point the Sierra Leone Bauxite Agreement of 1961, progress through the Bougainville Agreement of 1967 concluded by the Papua New Guinea Administration, and arrive at the De Beers Botswana Agreement of 1970.... noting the progressive tendency for the terms to be enjoyed by the governments owning the mineral rights to improve. This is certainly a valid and significant trend. However, too much cannot be inferred from the contents of any one agreement. The minerals and the potential profitability of the deposits differ. The strength of the bargaining position, and the knowledge and skill of those conducting negotiations vary. And, as Louis Wells has pointed out, there tends to be a geographical similarity as well as a temporal similarity to the terms negotiated in major mining agreements because companies adjust their demands and expectations to the terms of the concessions that other governments in the region have granted.

20. Viz. Michael Manley, in his statement to the Jamaican Parliament...."We do not accept the idea of bauxite being exploited for foreign companies in whose ownership we do not participate and over whose operations we have no influence or control."

21. One must avoid being too facile about this. Nonetheless, both Chilean and Tanzanian nationalisation arrangements

affected the 51 per cent nationalisation proposals in Zambia. There was inter-influence, both on the Government and on the companies' side, between the measures negotiated in Zambia and Zaire. The Zambian example had an influence on measures which Ghana introduced to effect a 55 per cent government holding in the main gold and diamond mines. And the Ghanaian actions influenced the declared policy of the Government of Sierra Leone. The two Botswana agreements are perhaps more precedent-making than precedent-following. The Jamaican Government's 1974 action in raising taxes on bauxite production, although clearly influenced by the success of OPEC producers in raising the effective export price of oil, is also likely to create a precedent as statements by the Governments of Guyana and the Dominican Republic have already indicated.

22. Two quotations from Alcan's significantly low key reaction to the Jamaican impositions are illustrative :

"The unilateral manner in which the taxes have been imposed in contravention of understandings and contracts with the Government causes us serious concern. Actions taken in this manner inevitably undermine the confidence with which future investments can be undertaken," and "Bauxite is a plentiful ore and there are vast deposits of alternative materials that become economic if the prices go too high." Statements by J.H. Hale, executive vice-president, finance, of Alcan Aluminium Ltd.

23. See the EEC Secretariat's document on Europe's prospects of procuring future raw material needs.

24. The insistence of the Western Australia government that major infrastructural developments should be constructed as part of the price for being allowed to work major mineral deposits; and the 1974 action of the Queensland government in raising its mineral royalties.

25. viz. the actions of the governments of British Columbia, Alberta, Manitoba, Saskatchewan and Newfoundland.

26. viz. the British Government's changed attitude to North Sea Oil profits and the renegotiations insisted upon by the Norwegian Government.

27. "Mining Royalties and Rents in the British Empire" published by the Mineral Resources Department of the

Imperial Institute in 1936; and "Royalties on Minerals in Certain Commonwealth Countries (including Dependent Territories)" compiled by the Mining Law Section of the Mineral Resources Division of the Overseas Geological Surveys in December 1961 contain comprehensive information on royalties as they existed at the time of their publication. But no later compendium of comparable coverage has been prepared.

28. "Mining Legislation in British Commonwealth Countries where Minerals are vested in the Crown" by F.R.H. Green, published in 1964 by the Institution of Mining and Metallurgy describes the "three main royalty systems in use" as being

"(a) a profits tax or levy based on the "profitability" of the mine;

(b) a percentage or sliding scale based on the value of the production or sales from the mine; and

(c) a fixed sum per ton or other unit for each mineral or metal raised or sold. "

and asserts that each is suitable under different circumstances.

29. Compare F.R.H. Green's assertion :

"A mineral royalty is a compensation to the owner for the exhaustion of an asset and ideally, therefore, should be fixed at a figure bearing some relation to the value of the mineral as it lies in the ground, i.e. the sale of the mineral recovered less a reasonable charge for extraction, treatment and transport to the point of sale, sufficient to cover all costs and overheads including a reasonable return on the capital expenditure, together with the provision for the amortization of that capital."

30. See in particular the Report of the Public Accounts Committee of the House of Commons on North Sea Oil.

31. See for instance "Some Notes on Mine Taxation" by H.W. Faulkner in Transactions of the Institution of Mining and Metallurgy, volume XLIX, 1939-40, where he argues "that profits from mining must be considered partly as interest on the capital invested and partly as a return of capital, since in calculating the operating profit no deduction

is made for the raw material - the ore in the mine - that has been used up in the process. The part of the profits representing the return of capital, corresponding to the disappearance of the raw material, should be free of tax. In other words a deduction for this depletion of the ore reserves should be allowed in arriving at the taxable profits. It appears to be the general opinion that, when the average of successful and unsuccessful mining enterprises is considered, a deduction of 50 per cent would be a reasonable allowance."

32. But this is not the case with regard to the mining of bauxite in Sierra Leone. See "An Act to Ratify and confirm an Agreement for the Prospecting and Mining of Deposits of Aluminium Ores in certain Areas in Sierra Leone" 1961.

33. The tax authorities in New Zealand are prepared to regard mineral prospecting as a hobby for many people - and one to be encouraged at that. Nor is there a capital gains tax operating in New Zealand at present.

34. However in exactly parallel circumstances, when a householder holds a limited lease but lets the house in question, no allowance is allowed by the British tax authorities to compensate for the diminishing period or value of that lease.

35. It would be more logical for the government of an importing country to do so if, by stimulating local production of an ore, it believed it could reduce the price that it would have to pay for its imports of the same ore.

36. "The most notorious of taxes affecting natural resources is of course the income tax with its special depletion allowances, including discovery value depletion, percentage depletion, and provision for the expensing of development outlays. That these provisions can hardly be defended on any principle of income definition that will stand scrutiny, or in terms of equity between individual tax payers, is fairly clear ....." from William Vickrey "Optimum Rates of Depletion" in M.Gaffney "Extractive Resources and Taxation"; Wisconsin, 1967.

37. It was recently argued by one company that the most important single consideration in its decision to go ahead with a mining project was its own estimated production costs

compared to those of other producers. So long as such production costs were significantly lower - so it was argued - the prospective mine would be likely to do better than average when mineral prices were high and would survive long enough to remain in production when prices were low.

38. The degree of vertical integration characterizing the companies extracting the particular mineral may also be influential.

39. Two partial explanations can be put forward to account for this paradox. First, the anticipated range of rates of return has to be much higher at the stage of exploration, proving the orebody, feasibility studies and project financing than it needs to be ex post facto to provide a sufficient cash flow to service loans and to pay dividends that will provide a good return on capital invested. Second, the high mineral prices of the past few years have provided most such projects returns towards the upper end of their "upside potential".

40. Transnationals have not been slow to discover that a system that grants 51 per cent ownership to the host government, but combines this with appropriate Articles of Association, management and sales contracts, financing agreements etc. can procure for them a higher rate of return on a lower capital sum risked, with greater security. Students of these matters will, by now, be able to draw up an "ideal-type" of contract that procures all these.

PART III : CHOICE OF LAW PROVISIONS IN CONCESSION AND RELATED CONTRACTS

by Roland Brown*

Part A - The Trend in Contractual Documents: Some Examples

A Mining company contemplating a major investment in a developing country will always make a careful assessment of the non-commercial risks. The possibility that the government might, at some time in the future, expropriate the investment, and the uncertainty surrounding the whole topic of compensation for expropriated assets, are matters which would normally have to be taken into account. However, no less important in practice, particularly where there are detailed stipulations relating to the fiscal regime, is the risk that the government might in the future seek to extinguish or modify its contractual obligations by an exercise of legislative competence. An examination of a number of concession and related agreements made in Commonwealth countries suggests that the mining companies over the past 10 to 15 years have been concerned to protect themselves against this risk by seeking through choice of law provisions to establish for their investments, at least in some measure, an extraterritorial or enclave status. This objective has resulted in increasingly elaborate provisions in clauses purporting to establish the proper law[1] or specifying the law which arbitrators are to apply. Clauses of this kind give rise to difficult problems of construction, and their meaning and effect appears to turn on unsettled questions in the borderland where there is interaction between the principles of public and private international law.

During the colonial period it may generally be assumed that the mining companies treated the selection of a proper law to govern the contract as a matter of convenience rather than substance. Significant investment tended in the first instance to be made by companies incorporated in, or controlled from, the metropolitan country. Provided, therefore, that there was a settled system of government, and courts staffed by competent judges, applying principles of law with which the investors were

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broadly familiar, there was generally no significant reason in a contract to which a colonial government was a party, for a mining company to seek to displace the law of the territory from its natural place as the proper law of the contract.[2]

If the case of Sierra Leone may be taken as typical,[3] the first real indication of some shift in the thinking of the mining companies came in 1961 the year in which Sierra Leone attained independence. In that year an important agreement relating to prospecting for and mining of aluminium ores was made between the Government and the Sierra Leone Ore and Metal Company and its parent the Aluminium-Industrie-Aktien-Gesselschaft of Switzerland. The agreement,[4] which was cast generally in terms which might now be regarded as rather favourable to the Company, provided for the proper law of the contract as follows:

> "Except as may be otherwise herein expressly provided this agreement shall be construed and the rights of the Government and the Company thereunder shall be determined according to the laws of Sierra Leone".

The qualifying words at the beginning of this provision are somewhat puzzling since no other clause in the agreement deals, or purports to deal, with the proper law of the contract. There is however a subclause headed "Limitation on Minerals Ordinance Application" which may well provide the explanation. It reads as follows:

> "The provisions of the Minerals Ordinance and any amending Ordinance and Rules made and to be made thereunder including the provisions of any official forms prescribed by such Rules shall be binding upon and inure to the benefit of the Company except such provisions thereof as may be inconsistent with the terms or provisions of this Agreement. Any inconsistency between a provision of any such Ordinance or Rule and a provision of this Agreement shall be resolved by giving effect to the provisions of this Agreement."

In so far as this subclause relates to inconsistency between the provisions of the agreement and legislation which might be enacted in the future (i.e. an amending Ordinance or Rules "to be made") it seeks to create an enclave status for the company by providing that the agreement will prevail. It was no doubt this aspect which was perceived by the draftsman of the agreement as requiring qualifying words in the clause establishing

the law of Sierra Leone as the proper law of the contract. Whether this was a correct perception, and the effect (if any) of the qualifying words turns on questions of principle some of which will be examined hereafter. At this stage, however, it should be noted that the arbitration clause made no express provision about the law which was to be applied in arbitration proceedings. It provided without elaboration for arbitration "in accordance with the provisions of the Arbitration Ordinance of Sierra Leone, or any Ordinance or law amending or replacing the same for the time being in force".

In 1962, a year after the conclusion of this agreement, the Government of Sierra Leone granted an oil concession to an American company, Tennessee Sierra Leone Incorporated. In this case the foreign investor appears to have adopted a rather different approach. The proper law of the Agreement[5] was established by the following provision:

> "This agreement shall be governed by and interpreted in accordance with the laws of Sierra Leone and such principles and rules of international law as may be relevant and the arbitrators and umpire shall base the award upon these laws, principles and rules."

In contrast with the bauxite agreement no attempt was made to provide elsewhere in the agreement for the possibility that the law of Sierra Leone might in the future be amended in a manner inconsistent with the provisions of the Agreement. It appears to follow that the extent (if any) to which the investor succeeded in this case in insulating his transaction with the Government from changes in the municipal law of Sierra Leone must depend on the meaning and effect of the words "and such principles and rules of international law as may be relevant."[6]

At this point it may be convenient to turn from Sierra Leone to Zambia and to examine some of the provisions which were included in the agreements made with the copper mining companies when the Government of Zambia acquired a majority interest (51 per cent) in their operations.[7] At the time of the takeover two groups of companies were engaged in copper mining, the R.S.T.[8] group and the Anglo American group. Separate arrangements were made with each group in substantially similar terms, and for the sake of convenience reference is made here to the agreements with the R.S.T. group. The basic document was a contract of December 24, 1969 (the Master Agreement), made between the Government, the Industrial Development Corporation of Zambia (an agency of the Government) and R.S.T.

Ltd. The Master Agreement did not make explicit provision for the proper law of the contract but contained a clause dealing with the settlement of disputes. This provided for submission of disputes to the International Centre for the Settlement of Investment Disputes (ICSID), established under the auspices of the World Bank, and the parties agreed that, subject to a limited power to decide disputes ex aequo et bono, the arbitrators should apply "the law of Zambia (including its rules on the conflict of laws) as in force on the date of execution of this Agreement disregarding all legislation, instruments, orders, directions and court decisions having the force of law in Zambia (other than those contemplated by this Agreement) adopted, made, issued or given subsequent to the date of execution of this Agreement."

This provision may be regarded as typical of a number of clauses in investment agreements between companies and governments which seek to create an enclave status by freezing the law of the host country at the moment of contract. This device was, for example, adopted in Sierra Leone, when, influenced perhaps by events in Zambia, the Government in 1970 acquired a majority interest in the diamond mining operations of the Consolidated African Selection Trust (CAST). This was done by the establishment of a joint enterprise, the National Diamond Mining Company (Sierra Leone) Ltd. (DIMINCO). The agreement[9] between the Government and CAST for the establishment of the joint enterprise contained a schedule providing for the submission of disputes to ICSID. The schedule dealt with the applicable law as follows:

> "Any arbitral tribunal constituted pursuant to this Agreement shall subject to paragraph 8 below, in interpreting and applying any agreements, documents, legislation, orders, regulations and other instruments with which the dispute is concerned, apply the laws of Sierra Leone (including its rules on conflict of laws) as it existed on March 31, 1970 disregarding all legislation, instruments, orders, directions and court decisions having the force of law in Sierra Leone (other than those contemplated in the Heads of Agreement) adopted, made, issued or given subsequent to March 31, 1970, under the laws of Sierra Leone as then known, provided that nothing herein shall prevent the application of international law to any matter to which the arbitral tribunal determines international law to be applicable. Without limiting the foregoing, the parties agree that the various agreements and instruments referred to in paragraph 1 above are lawful and valid under the law

of Sierra Leone and are in no respect contrary to its public policy or national interest." [10]

It should, however, be noted that in contrast to the Master Agreement in the Zambian case the Agreement between the Government of Sierra Leone and CAST to which the arbitration clause was scheduled made express and separate provision for the proper law of the contract in the following terms:

> "This Agreement shall be governed by the laws of Sierra Leone in force from time to time, save where such law is inconsistent with the terms hereof, and such rules of international law as may be applicable."

The reference in this provision to the laws of Sierra Leone "in force from time to time" results, of course, in an imperfect correlation between the proper law of the contract and the law which the arbitrators are enjoined to apply in the event of a dispute. Even if the reference in the schedule to the law of Sierra Leone as it existed on March 31, 1970, is treated simply as an instance of incorporation this could give rise to a conceptual problem of some difficulty.[11]

Elements of the same problem reappear in some of the provisions agreed between the Government of Botswana and a group of foreign investors in connection with the establishment in Botswana of the Selebi Pikwe copper nickel mine (the Shashe Project). In this case the approach of the mining companies was rather different but the end result can be said to represent a high water mark in recent attempts to create, in terms of concession and related agreements, an enclave status for foreign investors. The legal documentation setting up the project was unusually complex and comprised a Master Agreement and some 40 "Scheduled Agreements". The Master Agreement contains provisions dealing with the proper law and with the settlement of disputes. Both sets of provisions are relevant for our purpose. The proper law of the contract appears to be established by a clause headed "Governing Law and Contraventions". It is an elaborate and in some respects a surprising provision and the relevant parts are worth setting out in full:

> "44. Governing Law and Contraventions.
>
> (a) Subject to the provisions of Clause 42 (j) hereof, this Master Agreement and the Scheduled Agreements to which there are no other parties than the parties to this Agreement plus the Water Corporation and the Power Corporation (except as otherwise expressly provided therein but subject

always to the proviso to this subclause (a)) shall be governed by, and the Company. BRST and BCL Sales shall be subject to, the laws of Botswana, as amended from time to time; provided, however, that the enactment of any amendments to existing laws or regulations or the enactment of any new laws or regulations applicable to the Company or BRST or BCL Sales or any of their shareholders shall constitute a breach by Government of this Master Agreement in the event that:

Either

(i) such laws or regulations contravene the terms and conditions of this Master Agreement or any of the Scheduled Agreements;

Or

(ii) if such laws or regulations do not contravene the terms and conditions of the Master Agreement or any of the Scheduled Agreements;

(A) the application of such laws or regulations to the Company, BRST, or BCL Sales or any of their shareholders (either alone or taken together with the prior applications to the Company, BRST, or BCL Sales or to any of their shareholders of such laws or regulations on a cumulative basis) has or would have a materially adverse effect on the net income or financial position of the Company, BRST or BCL Sales or a financially materially adverse effect on the rights and obligations of their shareholders under the law of Botswana existing as at the date hereof;

and

(B) such laws or regulations impose requirements or standards on the Company, BRST or BCL Sales or any of their shareholders which are more onerous than requirements or standards generally internationally accepted at the time of enactment.

(b) In entering into agreement on this Clause the parties contemplate that there would be in most cases generally internationally accepted requirements or standards available with which such laws and regulations may be compared. It is recognised, however, that in some cases there may be no relevant or appropriate generally internationally accepted requirements or standards available with which such

laws and regulations may be compared. In such latter cases the imposition of such new laws or regulations should be reasonable in all the circumstances."

The provisions of the Master Agreement relating to the settlement of disputes distinguish between disputes which are arbitrable and those which are not. Arbitrable disputes cover a wide area and are deemed (inter alia) to include "any dispute which involves a substantial sum of money and/or an issue of significance or which taking into account all relevant circumstances could reasonably be construed as involving a substantial sum of money or an issue of significance." Disputes which are not arbitrable are, in terms of the Agreement, to be submitted to the Courts of Botswana for final determination. In the case of arbitrable disputes the parties agreed to submit to the jurisdiction of ICSID and provision was made for the law to be applied in the two following sub-clauses:

"(j) Subject to the provisions of sub-clause (k) of this Clause and to the provisions of the proviso to clause 44 hereof, any international arbitration tribunal constituted pursuant to this Master Agreement shall apply the law of Botswana on the one hand and Public International Law and General Customary Law on the other hand, but in the event of a conflict between such two systems, shall apply only Public International Law and General Customary Law.

Without limiting the foregoing, the parties hereto agree that this Master Agreement and the Scheduled Agreements define the rights and obligations of the parties thereto and beneficiaries thereof and that resort beyond such agreements to any other sources of law shall be required only in cases where the agreement in question is so ambiguous that its intent cannot be determined or where such agreements do not apply to the dispute in question or are not relevant to it.

(k) Any arbitration tribunal constituted pursuant to this Master Agreement shall have power to decide any dispute ex aequo et bono."

A strictly legal analysis of the significance of these provisions must focus on the conceptual difficulties involved in reconciling clause 44 which purports to establish the proper law of the contract with a disparate regime established in the context of arbitration proceedings. In a broader framework the proviso to clause 44 is of particular interest. It appears to break new new ground in seeking to protect the investors from the adverse

consequences of legislative changes in Botswana falling outside the scope of the matters regulated by the complex of interrelated agreements establishing the project. It is this aspect of the Master Agreement which is thought to justify a description of these provisions as representing a high water mark in recent attempts to create an enclave status for foreign investments.

Part B - The Theoretical Framework

The provisions extracted from concession and related agreements and set out in Part A are of course no more than a selection chosen from material which happens to be available for public inspection.[12] There is however, no reason to suppose that they are not typical of the way in which legal draftsmen have approached the problem of establishing, at least in some measure, an enclave status for the foreign investor in developing countries. It would not be appropriate to attempt a systematic analysis of the particular clauses. However, taken together, they do provide a context in which to examine some of the elusive conceptual problems inherent in attempts by the mining companies to insulate their transactions with governments from the effect of changes in the law of the host country.

An analysis of this topic should perhaps begin with an apparently simple question. Where a government is a party to a contract with a foreign national does a breach of that contract by the government, in the absence of any additional factors, give rise to liability under settled principles of public international law? This question has been said to need an answer.[13] However the text writers are divided[14] about what the answer should be, and situations do not often arise in which it is pertinent to pose a question in this simple form. The issues which arise in practice are rather different. If there is a breach of a contract to which a government is a party it is normally the case that in international law no issue of state responsibility can arise unless the foreign national has exhausted his local remedies.[15] If he is prevented from doing so, or if the court is intimidated or otherwise suborned the issue is not directly concerned with breach of contract as such, but turns on the extent to which international law can provide a remedy for a denial of justice.[16] In any event in the context of a mining concession this is not generally the contingency against which the foreign investor is concerned to protect himself. As suggested earlier in this article his anxieties are more likely to focus on the possibility that the contractual obligations of the government may be discharged or modified by an exercise of

the legislative competence of the State. If such an event occurs the contract as originally agreed between the parties no longer exists, and remedies for breach of it may not be strictly in point.[17] It follows that in a situation in which the dominant concern of the foreign investor is with the legislative competence of the State, attention, in the first instance, at least, must focus on questions concerned with the proper law of the contract.

Within the framework in which questions stem from consideration of the proper law of the contract, it may be convenient to begin with the case of a contract which provides, without qualification, that the agreement between the State and the foreign investor is governed by the law of the host country. Given this context what is the situation if the State by an exercise of its legislative sovereignty discharges or modifies its contractual obligations? In terms of its own municipal law there can of course be no argument, and if the matter is looked at as one giving rise to a problem in the conflict of laws, there can again be no doubt that the proper law, as determined by the private international law of the forum, "not merely sustains but, because it sustains, may also modify or dissolve the contractual bond."[18] Does the matter end there? Or does public international law provide a remedy for the foreign investor whose rights under a contract with the State have been adversely affected by an exercise of legislative sovereignty? Opinion on this issue is sharply divided and on what emerges as the crucial point decisions of international tribunals are inconclusive, or open to diverse interpretation.[19]

On one side of the line a distinction has been drawn between situations in which the contracting State has acted in a way that must, without regard to the provisions of any particular agreement, attract international responsibility, and situations in which its conduct is open to attack only by reason of being inconsistent with antecedent contractual obligations. In the latter case it is argued[20] that a government which in answer to an assertion that it is in breach of contract relies on changes in the proper law does what it is entitled to do, and international law neither can, nor should, seek to provide a remedy for the foreign national who is adversely affected. If this analysis is correct it is of great importance for governments and foreign investors alike to be able with some measure of certainty to identify those situations which, without regard to contractual stipulations, will attract international responsibility. In some cases this will present no problem. If there is expropriation without payment of appropriate compensation, or if legislation is discriminatory, the foreign investor may invoke the protection

of his own State. In the context of a mining concession if laws are enacted which abrogate the concession, and terminate the right to mine, expropriation has clearly taken place. On the other hand it must be recognised that international law is largely silent about the extent to which measures which do not involve a direct taking of property may amount to expropriation.[21] The right of the State, without incurring an obligation to pay compensation, to regulate property, including foreign owned property, is not in dispute, and it extends, of course, to the right to levy taxes.[22] It follows that difficult problems may arise in distinguishing regulation on the one hand from a taking or confiscation on the other. Nor is the concept of discrimination free from difficulty, particularly in the context of mining concessions. In many developing countries a single mine, or group of mines, may occupy a unique position in the economy, and where this situation obtains a basic conceptual difficulty arises in finding an appropriate, indeed perhaps any, meaning for the idea of discrimination, especially in connection with the fiscal regime.[23]

Problems of this kind do not of course arise on the other side of the line, where, without reference to the proper law of the contract, international law is seen as providing a remedy for any action by the State which in terms of its own municipal law discharges or modifies its contractual obligations.[24] In its most extreme form this approach assimilates government contracts to treaties and invokes the principle pacta sunt servanda. This was how Switzerland presented her argument to the Permanent Court of International Justice in the Losinger case,[25] and essentially similar arguments were adduced by France in the Norwegian Loans case.[26] It has been said that no other country has adopted the Swiss/French approach,[27] and in the stark form in which the argument was presented in these cases it is not consistent with what appears to be British and United States practice.[28] Certainly no international tribunal can be said, in unequivocal terms, to have applied the principle pacta sunt servanda in the context of a government contract. Apart from these considerations there are difficulties in principle inherent in this approach, and it may be worthwhile drawing attention to two in particular:

(a) At least one writer has pointed out that the principle pacta sunt servanda, standing in isolation, is not responsive to the situation under consideration where contractual rights are modified or extinguished by a change in the proper law.[29] In such cases as far as the proper law is concerned no breach of contract has taken place.

(b) Application of the principle pacta sunt servanda to all cases

in which a government has entered into a contract with a foreign national would impose a major limitation on the right of a sovereign State to expropriate foreign property. At least where there is no discrimination the right to expropriate for a public purpose and against payment of compensation is not in dispute, and it is difficult to see why contractual rights which are a species of property, should be seen as a unique case requiring special rules.

What might be described as a more moderate approach seeks to limit the effect of changes in the proper law of government contracts by invoking the concept of acquired rights.[30] Essentially, if the matter is looked at in this way, rights of a foreign national under a government contract are seen as a species of property and interference with them as expropriation or at least as something analogous to expropriation. If this position is pushed to its logical conclusion and any change in the proper law of a State contract affecting the rights of a foreign national is treated as expropriation the result in practice would be very similar to the result which would follow from an application of the principle pacta sunt servanda.[31] However the concept of acquired rights has been described as flexible,[32] and if it is taken as the starting point for an analysis of this problem the crucial question concerns the extent to which acquired rights under a government contract may be "regulated" in the public interest by changes in the proper law which are not discriminatory in their effect.[33] In certain situations (with which most capital exporting countries are familiar in their own experience) some degree of flexibility is often taken for granted. Transfer restrictions and exchange control in time of war are cases in point, and some writers would also see gold clause legislation in much the same way.[34] What is perhaps most obviously lacking in this analysis is not just a principle to give shape to the notion of flexibility, but some recognition of the predicament of many developing countries facing a continuing crisis of poverty. An international jurisprudence cannot be built exclusively on the experience of the capital exporting countries. The way in which their governments have responded to recurrent crises may indicate the need for flexibility, but this particular body of experience cannot be treated as defining the limits of what may be regarded as acceptable conduct.[35]

The uncertain state of international law with regard to the effect of a change in the proper law of the contract may be taken as the origin of some of the clauses set out in Part A which provide that the proper law of the contract is the law of the host country, and then seek by adding additional words to qualify

or supplement that proposition. Basically there are two different kinds of provision which need to be considered:

(a) A clause which seeks to limit the operation of the proper law by reference to the provisions of the agreement itself, e.g. "This agreement shall be governed by the law of Atlantis save where such law is inconsistent with provisions of this agreement."

(b) A clause which incorporates a reference to international law, e.g. "This agreement shall be governed by the law of Atlantis and such principles of international law as may be applicable."

With regard to provisions of the first type their inclusion in concession contracts suggests a failure on the part of the draftsman to distinguish between a provision which indicates a choice by the parties of a proper law for the contract and a case of incorporation.[36] If the intention of the parties were simply to incorporate a body of rules which could not conveniently be set out in the contract itself, a limitation of this kind might be seen as appropriate, indeed perhaps necessary. However the choice of a proper law is something very different. It is a reference by the parties to a system of law which is to give life to the contract. A contract is the creature of its proper law, and provisions in the contract itself cannot limit the application of the proper law without in effect stating a contradition.[37] It follows that in cases where the context indicates that the intention of the parties is not confined to incorporation, the effect of words of limitation of the kind set out in subparagraph (a) above must be regarded as nugatory.

A clause of the type set out in subparagraph (b) raises different and perhaps more difficult issues.[38] Much has been written about the possibility of "internationalising" concession and other significant transnational agreements,[39] but positions taken on that issue are only marginally relevant to a situation in which the parties make, in the first instance, express reference to a municipal law system, characteristically, of course, to the law of the host country. Given that context it is not immediately apparent that there are any principles of international law which might be applicable to supplement the muncipal system which the parties have chosen for themselves as the proper law. If it is correct to regard the principle enuniciated by Lord Radcliffe in Kahler's case[40] as one of universal application it is difficult to see what role is left for "principles of international law" if the task of a court or tribunal is to determine the rights and obligations of the parties under the contract.

If the municipal law system chosen suffices to dispose of the matter can international law be "applicable" except in a case (likely to be of limited importance in practice) where municipal law itself ordains that a particular issue should be determined by reference to international law? Moreover international law, at least in the traditional view, regulates the conduct of States in their relations with each other — is jus inter gentes and can have no direct application to a dispute between a State on the one hand and a foreign investor on the other. These arguments tend to the conclusion that the effect of the additional words in a clause of this type is again nugatory. However they state only one side of the case. The crux of the matter appears to turn on a basic question of principle — the extent to which it is right to see the individual as the object only, and never the subject, of international law. In that context arguments can be adduced for taking a broader view. "To say that international law is not 'applicable' to relations between States and individuals but only between States and States, is to attribute to the distinction between the rights of the State and the rights of its national a rigidity which hardly reflects the essentials of even traditional (to leave aside contemporary) international law. It has long been recognised that fundamentally a State is injured only because of the injury done to its nationals, and not independently of it."[41] If this argument is sound does it follow that appropriate words in a contract can confer upon a foreign national the rights which customary international law accords to his State in the event of an injury to his person or property? Should this question be answered affirmatively it would still, of course, be necessary to consider, in the case where the obligations of government had been modified by a change in the proper law, what those rights might be.

If the conclusion reached about clauses of the type set out in sub-paragraph (a) above is correct, as a matter of principle it would be difficult to avoid reaching a similar conclusion about a provision which requires an arbitrator in the event of a dispute to apply the law of the host country as it existed at the date of the contract. However clauses in this form are not uncommon, and the elaborate way in which some of them have been drafted justifies separate treatment. Some of the baffling problems of construction to which they give rise can most easily be identified in terms of a hypothetical example.

Let us suppose that the Government of Atlantis enters into a contract with a foreign investor which contains a clause of this type. The substantive provisions of the contract provide for the establishment of a joint company to be incorporated in Atlantis, and a Memorandum and Articles of Association are agreed and

annexed to the contract. They include special provisions dealing with the composition of the Board of Directors to which the foreign investors attach the greatest importance. Subsequently Atlantis, which is a member of a regional community, makes changes in its company law in order to bring it into harmony with the law in neighbouring countries. These changes involve far-reaching provisions for workers' representation at Board level. The foreign investors complain that they are inconsistent with the Articles of Association previously agreed with the Government and damaging to their interests. A dispute results and the matter is referred to arbitration. The arbitrators are of course enjoined to apply the law of Atlantis as it existed at the date of the contract and to disregard subsequent legislative changes. How can they comply with this injunction? On the facts assumed the existence of a dispute depends on a change in the law, and if no change in the law has taken place, or is disregarded, the foreign investor's case appears to be misconceived. Faced with this dilemma, one approach open to the arbitrators, not necessarily inconsistent with their mandate, would be to ask how a court sitting in Atlantis on the date the contract was signed would have dealt with a case in which rights under a contract to which the Government was a party were said to have been modified by subsequent legislation. If this approach were adopted the result in practice would be to resolve the dispute by reference to the proper law of the contract without antecedent qualifications.[42]

If this is the correct approach in the circumstances of the hypothetical case considered in the previous paragraph, it is also the correct approach where the logic of the situation is less compelling? In place of that rather complicated hypothesis let us suppose that the Government enters into a contract under which it is obliged to make periodical payments to foreign investors in discharge of a loan obligation. The contract contains a gold clause but subsequently Atlantis enacts legislation of general application abrogating gold clauses in terms similar to the Joint Resolution of Congress.[43] Given that set of facts the issue which arises between the Government and the foreign investors turns on whether a payment by the Government in accordance with the requirements of its own legislation is a good discharge of its contractual obligations notwithstanding the gold clause in the contract as originally signed. In this situation if the arbitrators are required to apply the law of Atlantis, as it existed at the date of the contract, they do not face any logical difficulty in complying literally with their mandate. They can approach the question of the Government's contractual obligations by disregarding the legislation abrogating the gold-clause, i.e. treating it as though it had never

been enacted. But apart from the basic question of principle which must focus on the significance of the proper law of the contract, as a matter of construction would they be right to do so? This depends on what is meant by the requirement that the arbitrators should apply the law of Atlantis as it existed at the date of the contract. Is it possible for arbitrators to set up an accurate model of the law of Atlantis at a particular point in time on the assumption that in the case of a contract governed by the law of Atlantis the rights of the parties would be determined without regard to relevant legislation enacted in the proper manner and form? If the matter is looked at in this way the mandate given to the arbitrators (like the clauses which seek to limit the application of the proper law by reference to the terms of the contract itself) appears to state a contradiction. The dilemma which results could, of course, be resolved by adopting the approach suggested in the previous paragraph. However, where the facts of the case do not impose their own logic, that way out of the dilemma is less attractive, and could hardly be described as compelling.

If reference is made to some of the material set out in Part A it will be seen that the difficulties inherent in the construction of clauses of this type may be compounded in situations in which there is an imperfect correlation between a clause intended to establish the proper law of the contract, and a clause specifying the law which the arbitrators are to apply in the event of a dispute. In a limited category of cases it is possible, at least in theory, to see this as a situation which could be resolved by treating provisions relating to the law to be applied in arbitration proceedings as a case of incorporation and accordingly something liable to modification by changes in the proper law. If for example a contract contains a provision specifying that it is governed by the law of Atlantis, but also provides that in the event of a dispute the arbitrators are to apply the law of Japan "as it existed at the date of the contract" it would be difficult to avoid the conclusion that the reference to the law of Japan was limited to incorporation. Given that construction, if at the time when a dispute arose there had been a change in the law of Japan but no relevant change in the law of Atlantis, the particular wording used could assume some practical importance. However, if both clauses refer to the law of Atlantis, they cannot be reconciled in this fashion, and one is left with a puzzle rooted in a contradiction.

CONCLUSION

It would be inappropriate to bring the analysis attempted in Part B of this paper to an end by listing a specific set of conclusions however tentative. The object of providing an analysis has been to indicate some of the conceptual problems inherent in the attempt to create by contract a legal enclave for foreign investment. Questions have been posed but no systematic attempt has been made to provide answers. Enough has been said about the state of opinion on some of the issues raised to indicate deep divisions, creating an impression of intellectual disorder.[44] It would be easy, but quite wrong, to conclude from this that the whole matter is academic. In fact foreign investors and governments alike actually face these issues in practice, and their conduct must, in some measure, be influenced by the uncertain state of the law. That uncertainty reflects the difficulty of reconciling the contractual obligations of a government with its sovereign status as guardian of the public interest. Considered as an academic discipline, the entire corpus of international law is no more than a disquisition on the limits of sovereignty, and in principle there is no reason why its rules should not yield an answer to this particular problem. Nonetheless, if partisan enthusiasm is laid aside, they cannot be said to have done so yet.

FOOTNOTES

1. In this article the term "proper law of the contract" refers to the legal system which governs the contract. "The 'proper' law of the contract is a convenient and succinct expression to describe the law that governs many of the matters affecting a contract." Cheshire, Private International Law (9th ed.), p.201 citing Mount Albert Borough Council v. Australasian Temperance and General Mutual Life Assurance Society (1938) A.C.224 where the court defined the proper law as "that law which the English or other court is to apply in determining the obligations under the contract."

2. The model oil mining leases prepared by the Colonial Office before the last war (1938) contain no express provisions relating to choice of law.

3. There is no reason to suppose it is not typical, and it is certainly convenient. It is the practice in Sierra Leone to ratify by legislation all major agreements relating to the exploitation of minerals, and the text of the agreements are scheduled to the Acts.

4. Laws of Sierra Leone, Act No.35 of 1962.

5. Laws of Sierra Leone, Act No.72 of 1962.

6. Compare Art. 42(1) of the Convention for the Settlement of Investment Disputes between States and Nationals of Other States (1965) which provides, "The Tribunal shall decide a dispute in accordance with such rules of law as may be agreed by the parties. In the absence of such agreement, the Tribunal shall apply the law of the Contracting State party to the dispute (including its rules on the conflict of laws) and such rules of international law as may be applicable." And see post, pp. 93-94.

7. For a general account of the takeover and the background to it see, Bostock and Harvey: Economic Independence and Zambian Copper — A Case Study in Foreign Investment (Praeger, 1972).

8. Roan Selection Trust Limited.

9. Laws of Sierra Leone, Act No.22 of 1970.

10. The agreement also provides that an arbitral tribunal shall have power to decide a dispute ex aequo et bono.

11. On the concept of incorporation in this context see post pp. 92-93

12. For some further examples see Broches "Choice of Law Provisions in Contracts with Governments" in Choice of Law and Language (Parker School of Foreign and Comparative Law, 1962).

13. Amerasinghe "State Breaches of Contracts with Aliens and International Law," 58 Am.J.Int. Law 881.

14. In favour of the proposition that breach by a State of a contract with an alien is per se a breach of International Law, Amerasinghe cites Fauchille, Traite de Droit International Public, Vol. 1 (8th ed., 1925) p. 529; Clarke, "Intervention for Breach of Contract or Tort committed by a Sovereignty," (1910) Proceedings, Am.Soc.Int.Law 149, 155; Oppenheim-Lauterpacht, International Law, p.344 (8th ed., 1954); Hershey, Essentials of International Law, p. 261 (1927); Cavare, La Protection des Contractuels Reconnus par les Etats a des Etrangers a les Exceptions des Emprunts, (1956) p. 27; Brandon, "Legal Deterrents and Incentives to Private Foreign Investments" (1957) 43 Grotius Society Transactions 39, 54, 55. Also Schwebel, "International Protection of Contractual Arrangements" (1959) Proceedings, Am.Soc. Int. Law 266. Against the proposition he cites, Hyde, International Law chiefly as interpreted by the United States Vol.2, p.988; Jessup, A Modern Law of Nations (1948), pp.104, 109; Whiteman, Damages in International Law (1943), Vol. 3, pp. 1555, 1558; Borchard, Diplomatic Protection of Citizens Abroad, Chap. VII, Westlake, International Law (2nd ed.,1910) Vol.1, p.331; Decenciere-Ferrandiere, La Responsibilite Internationale des Etats (1925), p.174; Hoijer, La Responsibilite Internationale des Etats (1930); Feller, The Mexican Claims Commissions (1935) p. 174; Dahm, Volkerrecht Vol. 3, p. 210, note 2; Dunn, The Protection of Nationals (1932), p.165, also Mann, "State, Contracts and State Responsibility" 54 Am.J.Int. Law 572-591. For a somewhat different line up of opposing teams see Brownlie, Principles of Public International Law (2nd ed.), pp. 530, 531.

15. State can, and in the context of agreements providing for international arbitration, frequently do waive the rule

requiring an aggrieved party to exhaust his local remedies. On the rule generally see Brownlie, op. cit., pp. 482-492, O'Connell, International Law (2nd ed.) pp.1053-1059; Fawcett, 31 B.Y.B.I.L. 452-458; Amerasinghe, "State Responsibility for injuries to Aliens," pp.169-269. And see (inter alia) the Ambatielos arbitration (1956) 23 International Law Reports 306 and Interhandel case (1959) International Court of Justice Reports 6.

16. Here the term "denial of justice" is used broadly speaking in the sense given to it by Art.9 of the Harvard Draft Convention on State responsibility for injury to aliens — 23 Am.J.Int.Law Special Supplement p.173 viz. "A State is responsible if an injury to an alien results from a denial of justice. Denial of justice exists when there is a denial, unwarranted delay or obstruction of access to the courts, gross deficiency in the administration of judicial or remedial process, failure to provide those guarantees which are generally considered indispensable to the proper administration of justice or a manifestly unjust judgment. An error of a national court which does not produce manifest injustice is not a denial of justice." The concept of "manifest injustice," of course, gives rise to elusive problems of definition.

17. This difficulty was perceived very clearly by the draftsman of the Bougainville Copper Agreement 1967 made between Bougainville Copper Pty. Limited and the Administration of Papua New Guinea. The Agreement is governed by the law of Papua New Guinea and cl. 2(a) of the Agreement provided that the Administration would introduce legislation to ratify the agreement and give it the force of law in the territory; referring to such legislation cl.2(c) then provided as follows: "If such Ordinance comes into effect as aforesaid but at any time thereafter such Ordinance is expressly or impliedly amended or repealed or this Agreement is expressly or impliedly varied added to cancelled abrogated or deprived of any of the force or effect which it has upon the coming into effect of such Ordinance (except as provided by the Ordinance of this Agreement, or with the prior consent of the Company) then irrespective of whether such amendment repeal variation addition cancellation abrogation or deprivation would otherwise constitute a breach of this Agreement the Company the members of the Company and the beneficial owners of shares in the Company shall in respect of the same have all the rights and remedies which it or they would have as if the same were a breach of this Agreement by the

Administration." The laws of Papua New Guinea, Ordinance No.70 of 1967 (the Sched.). As a result of negotiations which took place in 1974 the Agreement has been substantially amended. However this particular provision remains unaltered. For an account of the changes made in the fiscal regime see — M.L.O. Faber, "Bougainville Re-negotiated — an Analysis of the New Fiscal Terms," Mining Magazine, December 1974.

18. Per Lord Radcliffe, Kahler v. Midland Bank (1950) A.C. at p.56. This principle has been described as "one of universal application" — Mann, op. cit. at p.581. See also International Trustee for the Protection of Bond Holders v. The King (1937) A.C. 50. However, in connection with the latter case it should be noted that the change in the proper law of the contract which modified the obligations of the British Government was a change in the law of New York.

19. "It should be stated from the outset that there are no well settled and universally accepted international rules regarding state measures affecting the contractual rights of aliens. Not only writers and scholars but states and international tribunals, as well, differ in their views on the law in effect. The difference of opinion extends both to the lex lata, the legal rules held as effective, and to the lex ferenda, the law which, according to the particular views of each state or person ought to exist. These controversies, far from being merely 'theoretical' disputes, are of real practical importance and have far-reaching effects on the life and relations of nations." Fatouros,Government Guarantees to Foreign Investors (1962), p. 244. See also this writer's account in this context of the "classical" and "modern" theories, ibid. pp. 247-252, 262-271.

20. Notably by Mann, op. cit. For criticism of Mann see Jennings, "State Contracts in International Law", 37 B.Y.B.I.L. 156; Delaume, Legal Aspects of International Lending and Economic Development Financing (1967).

21. "No state can be fixed with responsibility for expropriation unless the act complained of can fairly be said to involve the taking of property within the meaning attributed to that conception by the general principles of law recognised by civilized nations. These principles cannot be ascertained otherwise than by comparative law."

Mann, op.cit. p.583. If general principles of law recognised by civilised nations can be identified in this context, it is of course true — indeed no more than a tautology — to say that the task of identification is one for the comparative lawyer. But what are the ingredients that are to go into the comparison? Much attention has been paid to the concept of the "police power" in the constitutional law of the United States, but there is a danger in attributing universal validity to principles which are rooted in the political and social mores of a particular system of government.

22. A difficult conceptual problem arises in distinguishing taxation from confiscation. All taxation is confiscatory. Taxation is the confiscation of property, normally in the form of money, for a public purpose. For an unconvincing attempt to distinguish taxation from other forms of confiscation see B.A. Wortley, Expropriation in Public International Law (Cambridge, 1959), p.39. There is a more sophisticated analysis by Mann in "Outline of a History of Expropriation," 75 L.Q.R. While the Supreme Court in the United States has kept open the possibility that a tax might be characterised as confiscatory, its cautious approach to particular cases means in practice that a challenge based only on the rate at which a tax is levied is extremely difficult to sustain. See for example Magnano v. Hamilton (1933) 292 U.S. 40 where the court said, "Except in rare and special instances, the due process clause contained in the Fifth Amendment is not a limitation on the taxing power conferred upon Congress by the Constitution. And no reason exists for applying a different rule against the state in the case of the Fourteenth Amendment. That clause is applicable to a taxing statute such as the one here assailed only if the Act is so arbitrary as to compel the conclusion that it does not involve an exertion of the taxing power, but constitues in substance and effect the direct exertion of a different and forbidden power, as, for example, the confiscation of property. Collateral purposes or motives of a legislature in levying a tax of a kind within the reach of its lawful power are matters beyond the scope of judicial inquiry. Nor may a tax within the lawful power of a state be judicially stricken down under the due process clause simply because its enforcement may or will result in restricting or even destroying particular occupations or businesses; unless indeed, as already indicated, its necessary interpretation and effect be such as plainly to

demonstrate that the form of taxation was adopted as a mere disguise under which there was exercised, in reality, another and different power." It is difficult to avoid the conclusion that the international lawyer who turns to the American cases on this issue is left with a metaphysical conundrum: when does an issue of quantity become one of quality?

23. Consider for example the case of Zambia. The copper mines in which foreign investors still own 49 per cent of the equity, pay 51 per cent of their profits in mineral tax and then pay income tax at the usual rate (45 per cent) on their profits after payment of mineral tax, giving a combined rate of tax on profits of 73.05 per cent. Mineral tax at the rate of 51 per cent applies only to copper and the only copper mines are those jointly owned by the government and foreign investors. The foreign investors may regard this regime as astringent, but have never suggested that it is discriminatory. Copper mining in Zambia accounts for over 90 per cent by value of the country's exports.

24. See for example Carlston, "Concession Agreements and Nationalization," 52 Am.J.Int.Law 260; Schwebel, "International Protection of Contractual Arrangements," 53 American Society for International Law Proceedings 266.

25. Referring to the principle Pacta sunt servanda Switzerland said "Il s'impose non seulement a propos d'accords directement conclus entre Etats, mais aussi pour ceux passes un Etat et des etrangers; en raison precisement de leur caractere international, ils peuvent faire l'objet d'un litige dans lequel un Etat se substitue a ses ressortissants pour obtinir le respect des engagements contractuels assumes envers eux. Le principe Pacta sunt servanda permet donc a un Etat de s'opposer a l'inobservation des obligations conventionnelles prises envers des ressortissants de cet Etat par un autre Etat....." "L'Etat ne peut se liberer d'obligations contractuelles valables ni par son droit prive interne, ni par ses dispositions legales de droit public. La these contraire equivaudrait a rendre aleatoires tous les contrats conclus par des etrangers avec un Etat, puisque celui-ci aurait toujours la faculte d aneantir ses engagements en promulguant des lois speciales, comme il l'a fait en l'espece." Losinger case, Pleadings, Oral statements and Documents, series C No. 78, p.32.

26. "Une loi interieure ne peut modifier la substance des contrats internationaux consentis par un Etat; admettre le contraire serait sortir du droit pour entrer dans la voie de l'arbitraire. Le Gouvernement de l'Etat emprunteur ne peut se trouver degage a l'egard de l'etranger par sa propre legislation; s'il suffisait de promulguer une loi pour etre libere de son obligation internationale, il n'existerait plus entre le preteur et l'emprunteur de rapport contractuel, mais seulement un rapport de sujet a souverain mettant le premier a la merci du second," I.C.J.Rep. Pleadings 34. Neither the Permanent Court of International Justice in the Losinger case, nor the International Court of Justice in the Norwegian Loans case, found it necessary to render a judgment on the merits.

27. By Mann, op. cit. p. 578.

28. In this connection the opinion of Harding Q.C.is frequently cited. In 1858 he advised the British Government that it should not afford diplomatic protection to British nationals who had entered into contracts with foreign governments unless they had suffered "a denial or flagrant perversion of justice or some gross wrong." McNair International Law Opinions, pp. 201-204. For the American practice see Whiteman, pp.906-907,viii.

29. "In particular the question immediately arises of the precise meaning of the principle in the context of this general problem of the relationship between international law and the proper law of the contract: for in the difficult case, where the contract is alleged to have been terminated by operation of some change in the proper law, there is after all, according to the proper law, no breach whatever of the principle pacta sunt servanda. The principle does not, therefore, without further definition, indicate which the cases are where, though there is no breach in the proper law, international law will, nevertheless, view that state of the proper law as being itself a breach of the requirements of international law in respect of state contracts." Jennings, op. cit. at p.176. And see also ante p. 90 and note 17.

30. See in particular Jennings, op.cit. whose cautious views are described by Delaume as the "correct approach," op.cit. p. 124 — also Schwarzenberger, 5 Current Legal Problems 294.

31. If interference with contractual rights resulting from a change in the proper law is treated as something giving rise to a claim for compensation it is difficult to see how the quantum of compensation could be assessed without approaching the case as though it were a claim for damages for breach of contract. But see Lena Goldfields Arbitration where the arbitrators preferred to base the award on the principle of "unjust enrichment" while pointing out that "the money result" was the same as it would have been in a claim for damages, Annual Digest (1929-30), Case No.1 and p.258.

32. Delaume, op. cit. p. 122 — Jennings says "Neither the principle of acquired rights nor the principle of pacta sunt servanda is therefore to be regarded as being necessarily absolute or unconditional in its application. As so often in law it is a question of drawing limits and defining exceptions. Whether or not an alleged "breach" of contract amounts to a breach of international law may depend on a number of variants such as the circumstances, or even the motives of the State action with respect to the contract; as also on the nature of the contract and the terms on which it is drafted," op. cit. p. 177.

33. Mann says that the crucial case arises where "the defendant state's refusal to perform the contract according to its tenor is said to be justified by legislative or executive measures of general impact taken since the conclusion of the contract by the defendant state whose law governs the contract, and which are not open to attack," op. cit. p. 576-577. Jennings comments that this is not the crucial case "but merely the difficult case."

Whether this case is regarded as "crucial" or "difficult" it should be noted that many of the decisions of international tribunals to which reference is made in the lierature cannot, because of the existence of extraneous factors, be regarded as establishing any principle which relates directly to this particular situation. This is true for example of the Delagoa Bay Railway case (Moore, International Arbitrations (1898), Vol.3, p.1865), the Schufeldt case (24 American Journal of International Law 799) and the El Triunfo case (Moore, Digest of International Law (1906), Vol. VI, p.649). For a critique of the relevance in this situation of the U.S.-Mexican Claims Commission cases see Mann, op. cit. p.580.

34. "It is clear for example, that the imposition of wartime transfer restrictions or genuine exchange control regulations would not necessarily give rise to responsibility even though similar measures, taken in another context, would be objectionable. Similar problems may arise in connection with the manipulation of currency and gold clause legislation." Delaume, op. cit. p.123, note 164, referring to cases where the contract contains an express promise of non-interference by future legislation — a fortiori, one must assume, if it does not.

35. This point might be thought trite but in practice appears to need some emphasis. A major international company in recent negotiations for the grant of mining rights in Papua New Guinea stated that its minimum requirements for an arbitration clause would guarantee "the right to international arbitration based on general principles of commercial law and international law accepted by developed nations." If a concensus is to be established the mining companies must be ready to take account of, even if they cannot accept, contemporary thinking in the Third World. In this connection see the Declaration and Programme of Action on the Establishment of a New International Economic Order adopted by the United Nations General Assembly in its Sixth Special Session, April 9 - May 2, 1974, and the Charter of Economic Rights and Duties of States adopted by the Assembly on December 12, 1974 (Resolution 3281 (XXIX)).

36. On the distinction between the choice of a proper law and a case of incorporation see Dicey and Morris, Conflict of Laws (9th ed.), p.732.

37. The idea associated with Professor Verdross that a contract can create its own independent legal system which exhaustively regulates the relations between the parties is difficult to comprehend, and has not generally been well received. Mann describes it as "so doctrinally unattractive, so impracticable, so subversive of public international law, so dangerous from the point of view of legal policy and so unnecessary that its novelty will not cause surprise " — "The Proper Law of Contracts concluded by International Persons" — (1959) B.Y.B.I.L.34. For a milder critique see Delaume, op. cit. pp. 73-74, note 6.

38. For an excellent analysis of some of the difficulties in the context of Art. 42(1) of the Convention for the Settlement

of Investment Disputes see E. Lauterpacht — "The World Bank Convention on the Settlement of International Investment Disputes," En Hommage a Paul Guggenheim (1968), p.642. For the text of Art. 42 (1) of the Convention, see note 6.

39. See e.g. McNair, "The General Principles of Law Recognised by Civilised Nations," 33 B.Y.B.I.L.; Mann, "The Proper Law of Contracts concluded by International Persons" (1959) B.Y.B.I.L. 34; Schartzenberger, op. cit.; Broches, "Choice of Law Provisions in Contracts with Governments," ante, note 13. And see the Award of Lord Asquith of Bishopstone in the Abu Dhabi Arbitration (1951) 37 Int. L.R. 18.

40. Ante, note 18.

41. E. Lauterpacht, op. cit. It is not clear in the context of the essay whether the learned author espouses this view or is simply rehearsing it.

42. A similar result would follow if the direction to the arbitrators were treated, in spite of the language used, as referring only to questions of interpretation. Delaume says that a reference to a particular law in force at the time of contracting "cannot by all relevant canons of interpretation be construed as a choice of law provision," op. cit. pp. 84, 85 (in connection with early IBRD agreements which were to be interpreted in accordance with the law of New York as in effect at the time of the agreement).

43. The Joint Resolution provided that every provision contained in or made with respect to any obligation which purported to give to the obligee a right to require payment in gold or a particular kind of coin or currency, or in an amount in money of the United States measured thereby was against public policy and every obligation containing such a provision should be discharged upon payment dollar for dollar in any coin or currency which at the time of payment was legal tender.

44. "It is difficult enough to predict the effect of a choice of law clause in a domestic contract; but to do so in an international contract involves so many imponderables that it seems more like predicting the result of a lottery." Nurick, "Choice of Law Clauses and International Contracts" Proceedings of the American Society for International Law (1960).

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