FROM: The President

TERM OF BANK LOANS

During the discussion of the recommendation in the Financial Policy Paper (FPC/63-8) that there might be some liberalization of the amortization terms of Bank loans in appropriate cases, some Executive Directors suggested that it would be helpful to have a further statement on this subject. The attached paper on "Term of Bank Loans" has accordingly been prepared by the staff and will be considered at the next meeting of the Financial Policy Committee scheduled for Tuesday, November 26.

Distribution:

Executive Directors and Alternates
President
Vice Presidents
Department Heads
I. Evolution of Present Practice

1. Apart from the general provision of Article III, Section 4 (iv) that the schedule of principal repayments shall be "appropriate to the project," the Bank's Articles of Agreement give no guidance concerning the term of loans.

2. The Bank's earliest loans were long term: 30 years for the loan to the Credit National (France) and 25 years for loans to Denmark, Luxembourg and the Netherlands. These were not "project loans" but were disbursed against imports required for purposes of reconstruction.

3. A change came in March 1948, with two loans made to Chile for development purposes. One was a 20-year hydroelectric power loan with amortization starting in the sixth year; the other was a 6½-year agricultural equipment loan with amortization beginning in the third year. These loans marked the start of the practice of normally relating amortization to the nature of the project being financed. The principal departure from this practice has been exceptional general development loans.

4. In the Bank's early years, when the emphasis was on the financing of equipment, the term of the loan was generally no longer than the expected life of the equipment. With the shift in emphasis to financing of production facilities, such as power plants and factories, other factors have been taken into account. In the case of revenue-producing projects, for example, more consideration has been given to the financial position of the enterprise carrying out the project.

5. The Bank's practice with respect to amortization may be summarized as follows:

   (a) Where the project is defined as the construction and operation of a fairly self-contained physical unit (for example, a power station), the length of the loan is based on the assumed useful life of the project, subject to conventional maxima (for example, 20 years for a thermal power plant, 25 years for a hydroelectric plant).

   (b) Where the project is defined as part of an expansion or modernization program of a large undertaking with an undetermined life (for example, the modernization program of a railway system), the length of the loan is based on the assumed useful life of the principal items being financed.

   (c) Loans for highways are based on assumed useful life. Those for new highway construction are generally for periods of 20 to 25 years, those for highway improvement, 15 to 20 years.

   (d) Loans for irrigation are in some cases based on the rate of recovery of cost from the farmers. The expected productive life is also taken into consideration. In practice, irrigation loans, other
than the $90 million loan for Indus, are usually made for periods ranging between 20 and 25 years.

6. Whatever the term of the loan, with only one or two exceptions amortization is calculated to produce roughly even half-yearly payments of interest and principal combined.

7. Periods of grace, with only isolated exceptions, run until the project is expected to come into operation; this period usually coincides roughly with the disbursement period.

8. Annex I shows a tabulation of Bank lending for the past decade. While the year-by-year experience is not a reliable indicator because of the uneven incidence of large loans with special features, there appears to have been a trend toward longer lending, particularly with respect to transportation loans.

II. Considerations Bearing on the Term of Bank Loans

9. The following considerations are relevant to a determination of the appropriate term of Bank loans: 

(a) the financial position of the Bank (including its ability to borrow in the market);

(b) the economic situation and prospects of the borrowing country; and

(c) the circumstances of the project (including those of the enterprise carrying out the project).

Each of these considerations is discussed below.

The Financial Position of the Bank

10. It is important that the Bank avoid the dangers involved in "borrowing short and lending long." In the past, thanks to the Bank's "equity" in the form of its usable capital and of retained earnings, there has normally been an ample margin between the maturities of the Bank's own obligations falling due year by year, and yearly receipts in the form of loan repayments and net income. In the future, the margin may become narrower, since a greater share of the Bank's lending is likely to be financed by borrowing and the receipts from new releases are likely to be small.

11. Annex II charts the possible course of the Bank's maturing obligations and of loan repayments on the basis of certain projections which were distributed to the Executive Directors on December 28, 1962 (R62-110). Taken literally and alone, the chart suggests that although there is room to lengthen final maturities, there is little room to lengthen grace periods. But the Bank's considerable holdings of cash, its short-term investments and its ability to roll-over its short-term obligations are relevant to this issue. If due account is taken of these, it would seem that in some kinds of cases, as discussed below, there could be some lengthening of both maturities and grace periods without prejudice to the Bank's financial position.
12. In fixing the terms of its loans, the Bank must take into account the 
practices of the market and the likely reaction of the market to the Bank's 
own practices. In order to preserve the Bank's reputation as a prudent fi-
nancial institution and to safeguard its ability to borrow, it is important 
that there be no radical or wholesale relaxation of the terms of the Bank's 
lending. There would, on the other hand, seem to be scope for some lengthening 
of maturities and of grace periods in selected cases without departing from 
sound financial practices or impairing the market's confidence in the Bank.

13. Almost always, a shorter grace period would facilitate sales of partici-
pations (at least to banks), while a longer one would tend to hamper them. 
But since, in determining the life of a Bank loan, the marketability of a bor-
rrower's obligations is a less important consideration than the appropriate-
ness of the term for the borrower itself, this aspect of the question is not 
considered further in this paper.

Economic Situation of the Borrowing Country

14. A longer period of grace or amortization, or both, does not change the 
total principal amount to be repaid; it merely postpones repayment. That post-
ponement can have advantages for the borrowing country in any of the following 
circumstances:

   (a) if world prices generally are rising;

   (b) if the real return on capital in the borrowing country is higher 
       than the rate of interest paid; or

   (c) if the economic position of the country is improving over the long 
       run.

One or more of these conditions have characterized the post-war experience of 
most countries and, assuming that they continue, it can be said to be in the 
interest of most developing countries to borrow for periods as long as pos-
sible.

15. A memorandum prepared by the Economic Staff dated August 15, 1963 
(FPC63-13), calculated the amount of annual debt service which would be im-
posed by certain types of loans. Included in the illustrations were loans 
of equal amounts, each bearing interest at 5\,\%\, but one for a term of 20 years

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1/ Many instances can be cited of successful domestic public issues with 
longer maturities than those which have heretofore characterized Bank loans. 
For example, issues of publicly owned power and turnpike systems in the United 
States have carried terms ranging from 27 to 49 years. (Department of Water 
and Power, Los Angeles, California; Puerto Rico Water Resources Authority; 
State of New York Power Authority; Public Utility District No. 2, Grant County, 
Washington; Pennsylvania Turnpike.) As recently as late October 1963, the 
City of New York floated a $118.7 million 30-year issue to finance various 
city improvements, including schools and sewage disposal plants.
with amortization starting in the fifth year, the other for a term of 40 years with amortization starting in the eleventh year. The return to be derived by the borrowing country from the investment of capital represented by the loan was assumed to be 10%, a conservative estimate. The calculations of "cost" to the borrower with respect to these loans are shown below, together with a calculation for a 20-year loan at 5 1/2% with amortization starting in the eleventh year.

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>Actual Amounts Payable</th>
<th>&quot;Cost&quot; to Borrower (Payments discounted at 10% p.a.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interest</td>
<td>Amortization</td>
</tr>
<tr>
<td>20-year loan</td>
<td>667</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td>773</td>
<td>1,000</td>
</tr>
<tr>
<td>40-year loan</td>
<td>1,553</td>
<td>1,000</td>
</tr>
</tbody>
</table>

16. The 40-year loan costs more in money than either of the 20-year loans because interest is payable over a longer period. The 20-year loan with the 10-year period of grace costs more than the 20-year loan with the 4-year period of grace because the average amount outstanding is higher. But, at the assumed rate of productivity of capital, the 40-year loan is about 15% more beneficial than the 20-year loan with the 4-year grace period. As between the two 20-year loans, the one with a 10-year grace period is 5% more beneficial than the one with four years of grace.

17. These comparisons understate the advantages which would accrue from longer amortization periods or longer periods of grace to countries whose income and foreign exchange earnings are likely to increase substantially over the long term, but which have limited medium-term export prospects or face very heavy external debt service payments in the next few years. For these countries the difference between a series of 20-year loans repayable from the fifth year and a series repayable from the eleventh year may be of considerable importance in alleviating the transfer burden.

18. It may be said that the economic advantages of borrowing at long-term can be overemphasized, and that the balance of payments benefits could as well be realized by continual rolling-over of short-term debt. But long-term loans may have a number of practical advantages for a borrowing country. The borrower has the assured use of money without having to renew the original loan or to contract new debt, possibly on less advantageous terms, or to run the
risk that it might not be able to do either. And such loans eliminate the need for repeated and lengthy loan negotiations, a significant consideration for poor countries. These considerations are particularly important when external financing is available primarily for projects or for procurement in the lending country.

19. It may also be said that an extension of the repayment term of Bank loans would not significantly alleviate the debt service burdens of individual developing countries, because loans from the Bank are likely to be a relatively small part of the total borrowing of any given country. According to the latest figures available, Bank loans account for no more than 20% of the total external public indebtedness of the Bank's less developed member countries. The individual cases vary widely, from countries which owe most of their external debt to the Bank to those whose indebtedness to the Bank is small or nonexistent. However, a lengthening of the maturities of Bank loans might permit the Bank to lend somewhat more in appropriate cases. Moreover, longer-term Bank loans and an extension of the grace period might have some influence on the practices of other lenders, and thus lead to an improvement in the over-all debt service position of the capital-importing countries.

Factors Relating to the Project

20. As noted above, the Articles provide that the repayment schedule of the loan must be "appropriate" to the project. This does not mean that the life of the loan must coincide with the life of the project. The requirement is met provided that the Bank is satisfied that the financing of the project is assured and on a sound basis, taking into account the factors discussed below.

21. It should be noted that the question of relating the term of a loan to the project being financed has nothing to do with the project's merits. The availability of long-term money does not make a slow- or low-yielding project attractive. The Bank's policy is to finance only those projects which show an adequate economic return, and to compare projects showing an early return with those where the return is more distant by discounting the returns from both at an appropriate rate of interest. Whatever change may be made in the practice concerning amortization terms, that policy should still be applicable.

22. Merits of the project apart, the Bank could—and does—take account of other circumstances pertaining to the project in fixing the term of its loans. These circumstances include (a) the project's physical life; (b) the project's
earnings; and (c) the finances of the enterprise which operates the project. Although these are discussed separately in the paragraphs which follow, in fact in a given case more than one of these factors may be relevant. (Factors (b) and (c) are applicable, of course, only in the case of revenue-producing projects.)

23. The case for relating the term of a Bank loan to the life of the project is probably strongest when the provision of equipment is the substance of the project, e.g., a loan for the purchase of farm equipment or aircraft. This technique conforms more or less to market standards, and has the advantage of not subjecting private lenders to "unfair" competition, while at the same time accustoming borrowers to the conditions they would meet in the market.

24. In other situations, the physical life of fixed assets has little relevance to a determination of the kind of financing appropriate for the project. This is particularly true of machinery and equipment which are installed as part of a productive facility and are expected to generate their own replacement cost and to be continually renewed. In such cases, the enterprise needs either permanent equity capital or long-term loans, the duration of which should normally be determined, not by the life of the equipment, but by the earnings of the project or of the enterprise operating the project.

25. Where a loan is sought for a revenue-producing "self-contained" project, it will often be appropriate to finance that project in such a way that interest and amortization would be covered out of its earnings, i.e., to relate the life of the loan to the project's earnings. This has the advantage of assuring that the economic merits of the project will be measured against the expected ability of those earnings to meet the cost of servicing the loan.

26. Usually, however, the most logical approach is to relate the life of the loan to the finances of the borrowing enterprise as a whole. This would normally mean lending at long term where the enterprise's operations are financed largely by borrowed funds or where its cash receipts are likely to be small in the early years; a shorter-term loan would normally be appropriate where the enterprise had raised a high proportion of its capital in permanent form, where large cash receipts are expected or where the enterprise has good prospects of borrowing on its own credit.

27. Relating the term of the loan to the project—whether to its physical life or earnings or to the earnings of the enterprise as a whole—may be a means of imposing a useful discipline on the borrower. For example, in lending to a privately owned utility enterprise such as a power company, the Bank normally requires the company to fix its rates in accordance with some standard, say a return on invested capital. However, the enterprise's need to earn enough to pay interest and to amortize its debt serves as an additional discipline. The consequences are similar where the government itself is the borrower and re-lends the funds to a public autonomous entity on the same terms as the Bank loan. On the other hand, where the government re-lends the funds to a public entity as permanent capital or on very long term, the life of the Bank loan has
no influence on the conduct of the entity. Similarly, for non-revenue producing projects (e.g., most road projects), the disciplinary effect of the term of the Bank's loan on the conduct of the project is usually remote. Thus, from this aspect, the usefulness of relating the term of the loan to the project will vary greatly according to the nature of the project and the constituency of the borrower or beneficiary. The usefulness is likely to be greatest in the case of loans made directly to autonomous public or private enterprises and to be least in the case of loans for projects carried out by government departments.

28. There may well be cases in which the loan maturity suggested by the borrowing country's economic situation does not coincide with the term appropriate to the project selected as having priority for Bank financing. In that situation, the solution might be to break the link between the amortization schedule of the Bank loan and the life of the project, just as IDA does through its relending procedure. That is, the Bank's loan would be made to the government on terms appropriate to the country's economic situation, and the government would then relend the proceeds to the ultimate user on terms appropriate to the project. In most instances, the term appropriate for the loan to the government is likely to be longer than the appropriate term for relending for the project. In that case, the government would have the use of local currency repayments from the ultimate user until the due date of repayment on its loan from the Bank. There may be some instances, however, particularly involving countries whose economic position is relatively strong, in which it would be appropriate and desirable for the Bank's loan to the government to be at somewhat shorter term than usual, with the government relending the proceeds for a longer period suited to the circumstances of the particular projects involved. In that situation, the government would have to find the funds necessary to bridge the gap between the date on which it is required to repay the Bank and the later receipt of repayments from the ultimate user.

III. Conclusions

29. The foregoing discussion suggests the following conclusions with respect to the term of Bank loans:

(a) In determining the life of a loan, the Bank should continue to take into account the physical life of the project, the finances of the project and the finances of the enterprise carrying out the project. This

2/ For example, the Bank's 25-year loans to Norway for the NVE's electric power system were, as far as NVE was concerned, the same as capital provided from the Norwegian budget.

3/ An autonomous highway authority may be able to obtain more regular or more adequate budgetary appropriations if it must meet debt service payments. But the way in which the road systems of most countries are operated remains unaffected by the terms on which the government raises money for them.

4/ If the government itself operates the project, this would be merely a bookkeeping procedure.
is particularly useful in the case of loans to private or autonomous public enterprises.

(b) In some instances, however, the economic situation of the borrowing country should be the predominant factor in determining the duration of a loan.

(c) If the terms appropriate to the economic situation of the borrowing country differ from those appropriate to the project, the Bank should envisage the possibility of making its loan to the government on terms suited to the country's economic situation, with the proceeds being relent on terms appropriate for the project.

(d) There is room for making Bank loans at somewhat longer term and with longer grace periods, in appropriate cases, without prejudice to the Bank's financial position or its ability to borrow in the market.
## Annex I

**Term of Bank Loans 1953-54 Through 1962-63**

The Table below shows, for each year, the amount of Bank loans by principal sector and the weighted average of their maximum life. Loans to development banks have been excluded.

(Commitment figures net of cancellations and refundings)

<table>
<thead>
<tr>
<th>Fiscal Years</th>
<th>Power $ m.</th>
<th>Power Years</th>
<th>Railroads $ m.</th>
<th>Railroads Years</th>
<th>Roads $ m.</th>
<th>Roads Years</th>
<th>Ports and Waterways $ m.</th>
<th>Ports and Waterways Years</th>
<th>Agriculture and Forestry $ m.</th>
<th>Agriculture and Forestry Years</th>
<th>Industry $ m.</th>
<th>Industry Years</th>
<th>General Development and Other $ m.</th>
<th>Total $ m.</th>
<th>Weighted Average Maximum Life Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953-54</td>
<td>104</td>
<td>17.2</td>
<td>49</td>
<td>11.8</td>
<td>26</td>
<td>10.0</td>
<td>4</td>
<td>19.5</td>
<td>10</td>
<td>19.9</td>
<td>20</td>
<td>17.0</td>
<td>97</td>
<td>310</td>
<td>15.9</td>
</tr>
<tr>
<td>1954-55</td>
<td>105</td>
<td>20.9</td>
<td>101</td>
<td>17.5</td>
<td>11</td>
<td>12.0</td>
<td>20</td>
<td>15.0</td>
<td>48</td>
<td>19.4</td>
<td>28</td>
<td>18.2</td>
<td>79</td>
<td>393</td>
<td>18.2</td>
</tr>
<tr>
<td>1955-56</td>
<td>175</td>
<td>23.1</td>
<td>43</td>
<td>12.6</td>
<td>52</td>
<td>13.1</td>
<td>32</td>
<td>22.3</td>
<td>2</td>
<td>13.5</td>
<td>92</td>
<td>15.0</td>
<td>-</td>
<td>395</td>
<td>18.6</td>
</tr>
<tr>
<td>1956-57</td>
<td>108</td>
<td>21.9</td>
<td>-</td>
<td>-</td>
<td>18</td>
<td>20.0</td>
<td>5</td>
<td>17.0</td>
<td>35</td>
<td>17.7</td>
<td>64</td>
<td>15.6</td>
<td>140</td>
<td>370</td>
<td>15.5</td>
</tr>
<tr>
<td>1957-58</td>
<td>240</td>
<td>23.4</td>
<td>193</td>
<td>15.5</td>
<td>60</td>
<td>19.3</td>
<td>53</td>
<td>19.1</td>
<td>38</td>
<td>22.2</td>
<td>92</td>
<td>16.1</td>
<td>-</td>
<td>676</td>
<td>19.4</td>
</tr>
<tr>
<td>1958-59</td>
<td>278</td>
<td>23.4</td>
<td>157</td>
<td>18.2</td>
<td>77</td>
<td>16.9</td>
<td>23</td>
<td>22.9</td>
<td>-</td>
<td>-</td>
<td>148</td>
<td>15.4</td>
<td>-</td>
<td>683</td>
<td>19.7</td>
</tr>
<tr>
<td>1959-60</td>
<td>208</td>
<td>24.0</td>
<td>64</td>
<td>18.9</td>
<td>63</td>
<td>18.9</td>
<td>67</td>
<td>14.4</td>
<td>54</td>
<td>17.9</td>
<td>113</td>
<td>15.3</td>
<td>50</td>
<td>619</td>
<td>18.8</td>
</tr>
<tr>
<td>1960-61</td>
<td>130</td>
<td>24.2</td>
<td>184</td>
<td>19.5</td>
<td>92</td>
<td>16.3</td>
<td>27</td>
<td>25.0</td>
<td>121</td>
<td>27.7</td>
<td>13</td>
<td>15.0</td>
<td>-</td>
<td>567</td>
<td>22.0</td>
</tr>
<tr>
<td>1961-62</td>
<td>493</td>
<td>23.6</td>
<td>61</td>
<td>18.2</td>
<td>150</td>
<td>19.9</td>
<td>29</td>
<td>22.7</td>
<td>8</td>
<td>20.0</td>
<td>106</td>
<td>14.7</td>
<td>3</td>
<td>852</td>
<td>21.4</td>
</tr>
<tr>
<td>1962-63</td>
<td>124</td>
<td>21.3</td>
<td>66</td>
<td>19.2</td>
<td>110</td>
<td>18.8</td>
<td>13</td>
<td>21.0</td>
<td>24</td>
<td>19.9</td>
<td>30</td>
<td>15.0</td>
<td>-</td>
<td>369</td>
<td>19.6</td>
</tr>
</tbody>
</table>
AMORTIZATION OF BANK BORROWINGS IN RELATION TO REPAYMENTS OF LOANS HELD BY BANK

(MILLIONS OF U.S. DOLLAR EQUIVALENTS)

FISCAL YEARS

BORROWINGS MATURING

REPAYMENTS OF LOANS TO THE BANK

BORROWINGS MATURING EXCLUDING $200 MILLION OF TWO YEAR BONDS

IBRD - Economic Staff
Mr. Cope

Leonard Rist

Bank Portfolio of Loans

January 17, 1964

Further to my memorandum of January 16, there are given below new computations on the basis of Statement of Loans dated December 31, 1963, together with corrected figures as of June 30, 1963.

<table>
<thead>
<tr>
<th></th>
<th>June 30 1963</th>
<th>Dec. 31 1963</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective loans held by Bank:</td>
<td>1,122</td>
<td>1,822</td>
</tr>
<tr>
<td>Loans to Europe only:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>75</td>
<td>73</td>
</tr>
<tr>
<td>Belgium</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Denmark</td>
<td>29</td>
<td>13</td>
</tr>
<tr>
<td>Finland</td>
<td>102</td>
<td>107</td>
</tr>
<tr>
<td>France</td>
<td>59</td>
<td>-</td>
</tr>
<tr>
<td>Italy</td>
<td>131</td>
<td>133</td>
</tr>
<tr>
<td>Norway</td>
<td>72</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>3475 or 10.7%</td>
<td>459 or 2.3%</td>
</tr>
<tr>
<td>Add loans to other countries guaranteed by Part I European members:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guaranteed by - Belgium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>73</td>
<td>51</td>
</tr>
<tr>
<td>Belgium</td>
<td>69</td>
<td>65</td>
</tr>
<tr>
<td>France</td>
<td>110</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>727 or 16.4%</td>
<td>702 or 14.6%</td>
</tr>
<tr>
<td>Add loans to other Part I countries:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>195</td>
<td>195</td>
</tr>
<tr>
<td>Japan</td>
<td>59</td>
<td>57</td>
</tr>
<tr>
<td>South Africa</td>
<td>65</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>1,391 or 31.5%</td>
<td>1,433 or 29.7%</td>
</tr>
</tbody>
</table>

LRmat

cc: Mr. Howard Johnson (New York)
In our talk yesterday, you mentioned that, on the basis of June 30 figures, Part I European borrowers were liable for 10% only of our loan portfolio. If, however, we add to this loans to other countries guaranteed by Part I European members, the proportion rises to over 17%. And, taking all loans to Part I debtors together (including the obligations guaranteed by them), the proportion rises to one-third of the total.

Effective loans held by Bank, June 30, 1963 ... Total $1,422 million

Loans to Europe only:

<table>
<thead>
<tr>
<th>Country</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>$75 million</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
</tr>
<tr>
<td>Denmark</td>
<td>29</td>
</tr>
<tr>
<td>Finland</td>
<td>102</td>
</tr>
<tr>
<td>France</td>
<td>59</td>
</tr>
<tr>
<td>Italy</td>
<td>134</td>
</tr>
<tr>
<td>Norway</td>
<td>72</td>
</tr>
</tbody>
</table>

Total: $475 million or 10.7% of total

Add loans to other countries guaranteed by Part I European members:

Guaranteed by

<table>
<thead>
<tr>
<th>Country</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>$77 million</td>
</tr>
<tr>
<td>France</td>
<td>128</td>
</tr>
<tr>
<td>U.K.</td>
<td>109</td>
</tr>
</tbody>
</table>

Total: $789 million or 17.6% of total

Add loans to other Part I countries:

<table>
<thead>
<tr>
<th>Country</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>195 million</td>
</tr>
<tr>
<td>Japan</td>
<td>40h</td>
</tr>
<tr>
<td>South Africa</td>
<td>65</td>
</tr>
</tbody>
</table>

Total: 1,453 million or 32.8% of total
Loans to Countries with Established Market Credit

1. For some considerable time the Bank has been making loans to certain of the more developed countries among its membership who have been able to establish their credit, but who have been unable to meet all their legitimate needs for imported capital in the market.

2. On each occasion, the Bank, mindful of the Articles of Agreement, has taken care that the country in question was making due efforts to borrow in private markets, and could not obtain the money elsewhere on reasonable terms. With the Bank's lending rate at 5-1/2%, however, the more creditworthy of the Bank's borrowers had little incentive to borrow in private markets where the net cost of borrowing was seldom below this figure, and frequently considerably above. In these circumstances the problem of avoiding competition with the market is a real one.

3. From time to time, Executive Directors have raised questions whether the Bank was justified in continuing to lend to these countries, even though it had ample resources. Doubts have been expressed as to whether the countries in question were really making every effort to raise money in foreign private capital markets themselves.

4. It so happens that it is these countries who have also been very restive at the insistence of the Bank on its conventional "project approach". Bank staff has also been skeptical of the value of a detailed project appraisal in some of these countries. The time and labor necessary to appraise a project and follow it up is hardly justified if the Bank is unable to exercise any significant influence on, or make any appreciable contribution to, the project itself or the borrowing country's policies.

5. In these circumstances, I propose that for the small group of countries who have established their credit in foreign capital markets, the Bank should make loans at rates reflecting the market rating of their bonds, or at its standard rate (at present 5-1/2%), whichever is higher. The loans would give the Bank the right to call for bonds of a marketable type and would enable the Bank to market these bonds through the countries' own investment bankers as suitable occasion offered. These loans would normally be for general development and would not be linked to specific projects. In the remainder of this paper these loans are termed "market loans" to distinguish them from loans of the type now made by the Bank, which are termed "conventional loans".

6. The proposal would be applied to countries which were normally able to meet in the market a substantial part of their needs for external capital. The list would include such countries as Australia, Austria, Denmark, Japan, New Zealand, Norway and South Africa. Other countries would be added to the list as they became
able to rely mainly on the market for their needs. Countries which have at one time borrowed externally, but which no longer do so (for example, Belgium, France and Italy), would be added if in the future they needed to resort to external borrowing. Countries which have borrowed abroad in recent years, but have doubtful prospects of being able to do so again soon, would have to be examined individually. (For example, Argentina would not be on the list.) Cases of countries which have not borrowed abroad, but which presumably could do so, would also have to be examined individually. There will undoubtedly be difficult borderline cases. Neither Spain nor Sweden have borrowed in New York. Sweden certainly could, and should be on the list. Spain should not, at least for the present time.

7. Market loans would be made under a special form of agreement. They would have the following characteristics:

(a) They would bear a rate of interest which would be agreed upon at the time between the Government and the Bank as reflecting the current credit standing of the borrowing country in external markets, allowance being made for the cost of offering the bonds publicly in due course. For example if the country's 5%, 20-year bonds were quoted at 94 to yield 5.5% to redemption, the Bank would lend (say) at 5.75%, the difference of 0.25% representing the amount required to amortize an assumed 3 point cost of marketing. The same result could be obtained by setting aside (say) 3% of the original amount as a reserve for selling costs. The market rating in New York would be given the predominate weight, since New York is in present circumstances the largest market for foreign issues. In determining the price, and incidentally the reserve for issue expenses, the Bank would consult with the government's bankers.

(b) The Bank would have to be satisfied as to the purposes for which the loan proceeds would be used. In most cases the purposes would be defined as the general development of the country concerned, in which case the appraisal would be of the economy and of the development program of the government. In a few cases, there might also be a project which would call for the usual kind of appraisal.

(c) In most cases the borrower would be the government, since direct obligations are normally more marketable than guaranteed obligations.

(d) In the case of a loan for the government's general program of capital investment, disbursement would be made against the certification that the money had been, or would be, applied to expenditure of capital works.
this case, it would obviously be impracticable for the
Bank to insist on competitive bidding. If there were a
conventional kind of project, the disbursement basis
would reflect the actual circumstances.

(e) The currencies disbursed would be selected so as to fa-
cilitate the subsequent sale of bonds. Dollars would be
the currency disbursed in most instances.

(f) As in the case of conventional loans, the agreement in
respect of a market loan would give the Bank the right
to call for bonds at any time. The form of the bonds
would conform to market requirements. The loan agreement
could provide that bonds could be serial bonds or sinking
fund bonds at the Bank's option, provided that the ag-
gregate amortization schedule in the agreement was not
exceeded. Provision would also have to be made for is-
suing bonds bearing a lower rate of interest than that
provided in the market loan agreement, the difference
being paid to the Bank as a service charge.

(g) If and when the Bank was ready, it would call for bonds
and offer them publicly through the borrower's regular
bankers. In some cases the whole or a part of the issue
might be placed privately either under a conventional
type of participation agreement or by a sale of bonds.
Contrary to present practice, the Bank would retain
(any) profit resulting from a sale as well as bear the
loss. This profit or loss might take the form of a dif-
ference in price, or, in the case of a profit, by the
payment by the borrower to the Bank of a service charge.

8. The idea of the Bank providing a loan in a marketable form
could be applied in conjunction with a conventional public bond
issue. For example, suppose that in a country on the margin of
being able to raise money on its own credit, there were a need for
external financing of $25 million. The borrower's bankers might
feel able to raise $10 million immediately and $5 million in a year
or two's time. In these circumstances, the financing might take
two forms. One would be a public issue of $15 million, of
which the Bank would take $5 million on underwriting terms, and a
conventional Bank loan of $10 million. The other would be a public
issue of $10 million, a market loan of $5 and a conventional loan
of $10 million. Once the principle is accepted that the Bank can
make loans or buy bonds on market terms, the actual technique can
be flexible and be adapted to circumstances.

9. The question arises whether there are any provisions in the
Articles of Agreement which would prevent the Bank making market
loans of the kind proposed. The "project" for which the market
loan was granted (Article III, 4(vii)) would in most cases have to
be defined as the development program of the government in question.
Requirements regarding the use of the proceeds of the loan (Article II, S.5) could be satisfied in such cases by the payment of the proceeds to the government for its capital expenditures. The provisions of Article IV, S.3(c) requiring exceptional circumstances to justify payments for local expenditures would not pose any particular difficulty. The 1% commission under Article IV, S.4 could form part of the interest payable under the market loan as in a conventional loan. As in the case of any other sale out of its portfolio, the Bank could sell the bonds in respect of the market loan only with the agreement of the member in whose markets the sale was to be made (Article IV, S.8).

10. The selling arrangements would give rise to a number of technical problems which would have to be explored with the SEC and with one or two representative New York houses before the scheme was launched. For example, when is registration with the SEC required? What is the role of the Bank in the registration process, and what are its responsibilities? Would the registration complications involved in marketing a guaranteed obligation in effect restrict market loans to governments?

11. Decisions involved in marketing the bonds arising under this arrangement would not always be easy. Subject to Article IV, S.8 of the Articles of Agreement, the Bank would be free to sell at any time (otherwise its portfolio would be "frozen"), but it should undertake to consult with the borrower before selling, as it does on selling out of its present portfolio. There might be differences of view between the Bank, the borrower and its bankers on terms and on timing. A problem might arise when the borrowing country finds that the market is receptive to an issue and wants to raise fresh money rather than facilitate the placement of bonds under a market loan held by the Bank. This problem is analogous to that faced by the Bank at present when its desire to sell out of portfolio is restrained by the marketing plans of the borrower. As at present, the Bank would always regard the marketing of its own portfolio as subordinate to the encouragement of a member's resort to the market.

12. There is also the basic question as to whether, in principle, the Bank should adopt a system involving differential interest rates. To single out certain borrowers and make them pay more than the generality of borrowers might provoke the question as to whether the Bank should not apply a specially low rate to the poorer of the Bank's creditworthy members. The general question of interest rates is now being studied by a committee under Mr. Rist, and the committee will no doubt come up with views on this point.

S. R. Cope
Department of Operations - Europe
December 12, 1963
FROM: The President

TERM OF BANK LOANS

November 15, 1963

During the discussion of the recommendation in the Financial Policy Paper (FP063-8) that there might be some liberalization of the amortization terms of Bank loans, some Executive Directors suggested that it would be helpful to have a further statement on this subject. The attached paper on "Term of Bank Loans" has accordingly been prepared by the staff.
I. Evolution of Present Practice

1. Apart from the general provision of Article III, Section 4 (iv) that the schedule of principal repayments shall be "appropriate to the project," the Bank's Articles of Agreement give no guidance concerning the term of loans.

2. The Bank's earliest loans were long term: 30 years for the loan to the Credit National (France) and 25 years for loans to Denmark, Luxembourg and the Netherlands. These were not "project loans" but were disbursed against imports required for purposes of reconstruction.

3. A change came in March 1948, with two loans made to Chile for development purposes. One was a 20-year hydroelectric power loan with amortization starting in the sixth year; the other was a 6½-year agricultural equipment loan with amortization beginning in the third year. These loans marked the start of the practice of normally relating amortization to the nature of the project being financed. The principal departure from this practice has been exceptional general development loans.

4. In the Bank's early years, when the emphasis was on the financing of equipment, the term of the loan was generally no longer than the expected life of the equipment. With the shift in emphasis to financing of production facilities, such as power plants and factories, other factors have been taken into account. In the case of revenue-producing projects, for example, more consideration has been given to the financial position of the enterprise carrying out the project.

5. The Bank's practice with respect to amortization may be summarized as follows:

   (a) Where the project is defined as the construction and operation of a fairly self-contained physical unit (for example, a power station), the length of the loan is based on the assumed useful life of the project, subject to conventional maxima (for example, 20 years for a thermal power plant, 25 years for a hydroelectric plant).

   (b) Where the project is defined as part of an expansion or modernization program of a large undertaking with an undetermined life (for example, the modernization program of a railway system), the length of the loan is based on the assumed useful life of the principal items of equipment being financed.

   (c) Loans for highways are based on assumed useful life. Those for new highway construction are generally for periods of 20 to 25 years, those for highway improvement, 15 to 20 years.

   (d) Loans for irrigation are in some cases based on the rate of recovery of cost from the farmers. The expected productive life is also taken into consideration. In practice, irrigation loans, other
than the $90 million loan for Indus, are usually made for periods ranging between 20 and 25 years.

6. Whatever the term of the loan, with only one or two exceptions amortization is calculated to produce roughly even half-yearly payments of interest and principal combined.

7. Periods of grace, with only isolated exceptions, run until the project is expected to come into operation; this period usually coincides roughly with the disbursement period.

8. Annex I shows a tabulation of Bank lending for the past decade. While the year-by-year experience is not a reliable indicator because of the uneven incidence of large loans with special features, there appears to have been a trend toward longer lending, particularly with respect to transportation loans.

II. Considerations Bearing on the Term of Bank Loans

9. The following considerations are relevant to a determination of the appropriate term of Bank loans:

   (a) the financial position of the Bank (including its ability to borrow in the market);

   (b) the economic situation and prospects of the borrowing country; and

   (c) the circumstances of the project (including those of the enterprise carrying out the project).

Each of these considerations is discussed below.

The Financial Position of the Bank

10. It is important that the Bank avoid the dangers involved in "borrowing short and lending long." In the past, thanks to the Bank's "equity" in the form of the initial 1%, releases of so-called 18% subscriptions, and retained earnings, there has normally been an ample margin between the maturities of the Bank's own obligations falling due year by year, and yearly receipts in the form of loan repayments and net income. In the future, the margin may become narrower, since a greater share of the Bank's lending is likely to be financed by borrowing and the receipts from new 18% releases are likely to be small.

11. Annex II charts the possible course of the Bank's maturing obligations and of loan repayments on the basis of certain projections which were distributed to the Executive Directors on December 28, 1962 (R62-110). Taken literally and alone, the chart suggests that although there is room to lengthen final maturities, there is little room to lengthen grace periods. But the Bank's considerable holdings of cash, its short-term investments and its ability to roll over its short-term obligations are relevant to this issue. If due account is taken of these, it would seem that in some kinds of cases, as discussed below, there could be some lengthening of both maturities and grace periods without prejudice to the Bank's financial position.
12. In fixing the terms of its loans, the Bank must take into account the practices of the market and the likely reaction of the market to the Bank's own practices. In order to preserve the Bank's reputation as a prudent financial institution and to safeguard its ability to borrow, it is important that there be no radical or wholesale relaxation of the terms of the Bank's lending. There would, on the other hand, seem to be scope for some lengthening of maturities in selected cases without departing from sound financial practices or impairing the market's confidence in the Bank.

13. Almost always, a shorter grace period would facilitate sales of participations (at least to banks), while a longer one would tend to hamper them. But since, in determining the life of a Bank loan, the marketability of a borrower's obligations is a less important consideration than the appropriateness of the term for the borrower itself, this aspect of the question is not considered further in this paper.

Economic Situation of the Borrowing Country

14. A longer period of grace or amortization, or both, does not change the total principal amount to be repaid; it merely postpones repayment. That postponement can have advantages for the borrowing country in any of the following circumstances:

(a) if world prices generally are rising;

(b) if the real return on capital in the borrowing country is higher than the rate of interest paid; or

(c) if the economic position of the country is improving over the long run.

One or more of these conditions have characterized the post-war experience of most countries and, assuming that they continue, it can be said to be in the interest of most developing countries to borrow for periods as long as possible.

15. A memorandum prepared by the Economic Staff dated August 15, 1963 (FPC63-13), calculated the amount of annual debt service which would be imposed by certain types of loans. Included in the illustrations were loans of equal amounts, each bearing interest at 51/2%, but one for a term of 20 years.

1/ Many instances can be cited of successful domestic public issues with longer maturities than those which have heretofore characterized Bank loans. For example, issues of publicly owned power and turnpike systems in the United States have carried terms ranging from 27 to 49 years. (Department of Water and Power, Los Angeles, California; Puerto Rico Water Resources Authority; State of New York Power Authority; Public Utility District No. 2, Grant County, Washington; Pennsylvania Turnpike.) As recently as late October 1963, the City of New York floated a $118.7 million 30-year issue to finance various city improvements, including schools and sewage disposal plants.
with amortization starting in the fifth year, the other for a term of 40 years with amortization starting in the eleventh year. The return to be derived by the borrowing country from the investment of capital represented by the loan was assumed to be 10%, a conservative estimate. The calculations of "cost" to the borrower with respect to these loans are shown below, together with a calculation for a 20-year loan at 5% with amortization starting in the eleventh year.

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>Amortization</th>
<th>Amortization</th>
<th>Amortization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>from 5th year</td>
<td>from 11th year</td>
<td>from 11th year</td>
</tr>
<tr>
<td>Interest</td>
<td>667</td>
<td>773</td>
<td>1,553</td>
</tr>
<tr>
<td>Amortization</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,667</td>
<td>1,773</td>
<td>2,553</td>
</tr>
</tbody>
</table>

"Cost" to borrower (payments discounted at 10% p.a.)

<table>
<thead>
<tr>
<th></th>
<th>Interest</th>
<th>Amortization</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>317</td>
<td>350</td>
<td>667</td>
</tr>
<tr>
<td>Amortization</td>
<td>300</td>
<td>237</td>
<td>537</td>
</tr>
<tr>
<td>Total</td>
<td>617</td>
<td>587</td>
<td>1,204</td>
</tr>
</tbody>
</table>

16. The 40-year loan costs more in money than either of the 20-year loans because interest is payable over a longer period. The 20-year loan with the 10-year period of grace costs more than the 20-year loan with the 4-year period of grace because the average amount outstanding is higher. But, at the assumed rate of productivity of capital, the 40-year loan is about 15% more beneficial than the 20-year loan with the 4-year grace period. As between the two 20-year loans, the one with a 10-year grace period is 5% more beneficial than the one with four years of grace.

17. These comparisons underestimate the advantages which would accrue from longer amortization periods or longer periods of grace to countries whose income and foreign exchange earnings are likely to increase substantially over the long term, but which have limited medium-term export prospects or face very heavy external debt service payments in the next few years. For these countries the difference between a series of 20-year loans repayable from the fifth year and a series repayable from the eleventh year may be of considerable importance in alleviating the transfer burden.

18. It may be said that the economic advantages of borrowing at long-term can be overemphasized, and that the balance of payments benefits could as well be realized by continual rolling-over of short-term debt. But long-term loans may have a number of practical advantages for a borrowing country. The borrower has the assured use of money without having to renew the original loan or to contract new debt, possibly on less advantageous terms, or to run the
20. In cases where a country has already built up a heavy debt service burden which will persist for a considerable number of years, an alteration in the term for a grace period of future loans will not affect the situation much. Where, however, a country is likely to be short of foreign exchange for a limited period ahead, either because of unfavorable conditions outside its control or because of an inherited debt service burden, longer term bank loans and/or an extension of the grace period might be justified. On the other hand, where a country's unsatisfactory economic performance is attributable to unsound policies and where prospects of improved performance are doubtful, it might not be appropriate to lend on longer terms and it may be inappropriate to lend at all.
risk that it might not be able to do either. And such loans eliminate the need for repeated and lengthy loan negotiations, a significant consideration for small and poor countries. These considerations are particularly important when external financing is available primarily for projects or for procurement in the lending country.

19. It may also be said that an extension of the repayment term of Bank loans would not significantly alleviate the debt service burdens of individual developing countries, because loans from the Bank are likely to be a relatively small part of the total borrowing of any given country. According to the latest figures available, Bank loans account for no more than 20% of the total external public indebtedness of the Bank's less developed member countries. The individual cases vary widely, from countries which owe most of their external debt to the Bank to those whose indebtedness to the Bank is small or nonexistent. However, a lengthening of the maturities of Bank loans might permit the Bank to lend somewhat more in appropriate cases. Moreover, longer-term Bank loans and an extension of the grace period might have some influence on the practices of other lenders, and thus lead to an improvement in the over-all debt service position of the capital-importing countries.

20. In taking account of the borrowing country's economic situation when fixing the term of Bank loans, it may often be relevant to consider the extent to which that situation is due to unsatisfactory economic performance. Where the latter is an important factor and where prospects for improved performance are doubtful, it may not be appropriate to lend at longer term and, indeed, it may not be appropriate to lend at all. Where, however, a country is likely to be short of foreign exchange resources for some period ahead either because of unfavorable conditions outside its control or because of an inherited excessive debt service burden, longer-term Bank loans might be justified.

Factors Relating to the Project

21. As noted above, the Articles provide that the repayment schedule of the loan must be "appropriate" to the project. This does not mean that the life of the loan must coincide with the life of the project. The requirement is met provided that the Bank is satisfied that the financing of the project is assured and on a sound basis, taking into account the factors discussed below.

22. It should be noted that the question of relating the term of a loan to the project being financed has nothing to do with the project's merits. The availability of long-term money does not make a slow- or low-yielding project attractive. The Bank's policy is to finance only those projects which show an adequate economic return, and to compare projects showing an early return with those where the return is more distant by discounting the returns from both at an appropriate rate of interest. Whatever change may be made in the practice concerning amortization terms, that policy should still be applicable.

23. Merits of the project apart, the Bank could—and does—take account of other circumstances pertaining to the project in fixing the term of its loans. These circumstances include (a) the project's physical life; (b) the project's
earnings; and (c) the finances of the enterprise which operates the project. Although these are discussed separately in the paragraphs which follow, in fact in a given case more than one of these factors may be relevant. (Factors (b) and (c) are applicable, of course, only in the case of revenue-producing projects.)

24. The case for relating the term of a Bank loan to the life of the project is probably strongest when the provision of equipment is the substance of the project, e.g., a loan for the purchase of farm equipment or aircraft. This technique conforms more or less to market standards, and has the advantage of not subjecting private lenders to "unfair" competition, while at the same time accustoming borrowers to the conditions they would meet in the market.

25. In other situations, the physical life of fixed assets has little relevance to a determination of the kind of financing appropriate for the project. This is particularly true of machinery and equipment which are installed as part of a productive facility and are expected to generate their own replacement cost and to be continually renewed. In such cases, the enterprise needs either permanent equity capital or long-term loans, the duration of which should normally be determined, not by the life of the equipment, but by the earnings of the project or of the enterprise operating the project.

26. Where a loan is sought for a revenue-producing "self-contained" project, it will often be appropriate to finance that project in such a way that interest and amortization would be covered out of its earnings, i.e., to relate the life of the loan to the project's earnings. This has the advantage of assuring that the economic merits of the project will be measured against the expected ability of those earnings to meet the cost of servicing the loan.

27. Usually, however, the most logical approach is to relate the life of the loan to the finances of the borrowing enterprise as a whole. This would normally mean lending at long term where the enterprise's operations are financed largely by borrowed funds or where its cash receipts are likely to be small; a shorter-term loan would normally be appropriate where the enterprise had raised a high proportion of its capital in permanent form, where large cash receipts are expected or where the enterprise has good prospects of borrowing on its own credit.

28. Relating the term of the loan to the project—whether to its physical life or earnings or to the earnings of the enterprise as a whole—may be a means of imposing a useful discipline on the borrower. For example, in lending to a privately owned utility enterprise such as a power company, the Bank normally requires the company to fix its rates in accordance with some standard, say a return on invested capital. However, the enterprise's need to earn enough to pay interest and to amortize its debt serves as an additional discipline. The consequences are similar where the government itself is the borrower and re-lends the funds to a public autonomous entity on the same terms as the Bank loan. On the other hand, where the government re-lends the funds to a public entity as permanent capital or on very long term, the life of the Bank loan has
no influence on the conduct of the entity.\textsuperscript{2} Similarly, for non-revenue producing projects (e.g., most road projects), the disciplinary effect of the term of the Bank's loan on the conduct of the project is usually remote.\textsuperscript{3} Thus, from this aspect, the usefulness of relating the term of the loan to the project will vary greatly according to the nature of the project and the constitution of the borrower or beneficiary. The usefulness is likely to be greatest in the case of loans made directly to autonomous public or private enterprises and to be least in the case of loans for projects carried out by government departments.

29. There may well be cases in which the loan maturity suggested by the borrowing country's economic situation does not coincide with the term appropriate to the project selected as having priority for Bank financing. In that situation, the solution would appear to be to break the link between the amortization schedule of the Bank loan and the life of the project, just as IDA does through its relending procedure. That is, the Bank's loan would be made to the government on terms appropriate to the country's economic situation, and the government would then re-lend the proceeds to the ultimate user on terms appropriate to the project.\textsuperscript{4} In most instances, the term appropriate for the loan to the government is likely to be longer than the appropriate term for relending for the project. In that case, the government would have the use of local currency repayments from the ultimate user until the due date of repayment on its loan from the Bank. There may be some instances, however, particularly involving countries whose economic position is relatively strong, in which it would be appropriate and desirable for the Bank's loan to the government to be at somewhat shorter term than usual, with the government relending the proceeds for a longer period suited to the circumstances of the particular projects involved. In that situation, the government would have to find the funds necessary to bridge the gap between the date on which it is required to repay the Bank and the later receipt of repayments from the ultimate user.

### III. Conclusions

30. The foregoing discussion suggests the following conclusions with respect to the term of Bank loans:

- In determining the life of a loan, the Bank should continue to take into account the physical life of the project, or the finances of the project or of the enterprise carrying out the project. This is

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\textsuperscript{2} For example, the Bank's 25-year loans to Norway for the NVE's electric power system were, as far as NVE was concerned, the same as capital provided from the Norwegian budget.

\textsuperscript{3} An autonomous highway authority may be able to obtain more regular or more adequate budgetary appropriations if it must meet debt service payments. But the way in which the road systems of most countries are operated remains unaffected by the terms on which the government raises money for them.

\textsuperscript{4} If the government itself operates the project, this would be merely a bookkeeping procedure.
particularly useful in the case of loans to private or autonomous public enterprises.

(b) In some instances, however, the economic situation of the borrowing country should be the predominant factor in determining the duration of a loan.

(c) If the terms appropriate to the economic situation of the borrowing country differ from those appropriate to the project, the Bank should envisage the possibility of making its loan to the government on terms suited to the country's economic situation, with the proceeds being relent on terms appropriate for the project.

(d) There is room for making Bank loans at somewhat longer term, in appropriate cases, without prejudice to the Bank's financial position or its ability to borrow in the market.
TERM OF BANK LOANS

I. Past Practice

1. Apart from the general provision of Article III, Section 4 (iv) that the schedule of principal repayments shall be "appropriate to the project," the Bank's Articles of Agreement are silent on the subject of the term of loans.

2. The Bank's earliest loans were long term: 30 years for the loan to the Credit National (France) and 25 years for loans to Denmark, Luxembourg and the Netherlands. These were not "project loans" but were disbursed against imports required for purposes of reconstruction.

3. A change came in March 1948, with two loans made to Chile for development purposes. One was a 20-year hydroelectric power loan with amortization starting in the sixth year; the other was a 6½-year agricultural equipment loan with amortization beginning in the third year. These loans marked the start of the practice of normally relating amortization to the nature of the project being financed.

4. In the Bank's early years, when the emphasis was on the financing of equipment, the term of the loan was generally no longer than the expected life of the equipment. With the shift in emphasis to project financing, other factors have been taken into account. In the case of revenue-producing projects, for example, more consideration has been given to the financial position of the enterprise carrying out the project.

5. Recent practice with respect to amortization may be summarized as follows:

   (a) Where the project has been defined as the construction and operation of a fairly self-contained physical unit (for example, a power station), the length of the loan has been based on the assumed useful life of the project, subject to conventional maxima (for example, 20 years for a thermal power plant, 25 years for a hydroelectric plant).

   (b) Where the project has been defined as part of an expansion or modernization program of a large undertaking with an undetermined life (for example, the modernization program of a railway system), the length of the loan has been based on the assumed useful life of the principal items of equipment being financed.

   (c) Loans for highways have been based on assumed useful life. Those for new highway construction have generally been for periods of 20 to 25 years, those for highway improvement, 15 to 20 years.

   (d) Loans for irrigation have been based largely on the rate of recovery of cost from the farmers. The expected productive life is also

   1/ The principal departure from this practice has been exceptional general development loans—to Australia, Belgium, Iran, Italy and Norway—disbursed against a list of imports unrelated to specific projects.
taken into consideration. In practice, irrigation loans, other than the $90 million loan for Indus, have usually been made for periods ranging between 20 and 25 years.

6. Whatever the term of the loan, with only one or two exceptions amortization has been calculated to produce roughly even half-yearly payments of interest and principal combined.

7. Periods of grace, with only isolated exceptions, have run until the project is expected to come into operation; this period usually coincides roughly with the disbursement period.

8. Annex I shows a tabulation of Bank lending for the past decade. While the year-by-year experience is not a reliable indicator because of the uneven incidence of large loans with special features, there appears to have been a trend toward longer lending, particularly with respect to transportation loans.

II. Considerations Bearing on the Term of Bank Loans

9. The following considerations are relevant to a determination of the appropriate term of Bank loans:

   (a) the financial position of the Bank (including its ability to borrow in the market);

   (b) the economic situation and prospects of the borrowing country; and

   (c) the circumstances of the project (including those of the enterprise carrying out the project).

Each of these considerations is discussed below.

The Financial Position of the Bank

10. It is important that the Bank avoid the dangers involved in "borrowing short and lending long." In the past, thanks to the Bank's "equity" in the form of the initial 1%, releases of so-called 16% subscriptions, and retained earnings allocated to the Supplemental Reserve, there has normally been an ample margin between the maturities of the Bank's own obligations falling due year by year, and yearly receipts in the form of loan repayments and net income. In the future, the margin may become narrower, since a greater share of the Bank's lending is likely to be financed by borrowing, and the receipts from new 16% releases are likely to be small.

11. Annex II charts the possible course of the Bank's maturing obligations and of loan repayments on the basis of certain projections which were distributed to the Executive Directors on December 28, 1962 (R62-110). Taken literally and alone, the chart suggests that although there is room to lengthen final maturities, there is little room to lengthen grace periods. But the Bank's considerable holdings of cash, its short-term investments and its ability to roll-over its short-term obligations are relevant to this issue. If due account is taken of these, it would seem that the Bank's financial position would permit some lengthening of both maturities and grace periods.
12. Almost always, a shorter grace period would facilitate sales of participations (at least to banks), while a longer one would tend to hamper them. But since, in determining the life of a Bank loan, the marketability of a borrower's obligations is a less important consideration than the appropriateness of the term for the borrower itself, this aspect of the question is not considered further in this paper.

13. Many instances can be cited of successful domestic public issues with longer maturities than those which have heretofore characterized Bank loans. For example, issues of publicly owned power and turnpike systems in the United States have carried terms ranging from 27 to 49 years.\(^2\) As recently as late October 1963, the City of New York floated a $118.7 million 30-year issue to finance various city improvements, including schools and sewage disposal plants. This suggests that some lengthening of the maturities of Bank loans would be consistent with market practice in domestic securities in the United States.

**Economic Situation of the Borrowing Country**

14. A longer period of grace or amortization, or both, does not change the total principal amount to be repaid; it merely postpones repayment. That postponement can have advantages for the borrowing country in any of the following circumstances:

(a) if world prices generally are rising;

(b) if the real return on capital in the borrowing country is higher than the rate of interest paid; or

(c) if the economic position of the country is improving over the long run.

These conditions have characterized the post-war experience of most countries and, assuming that they continue, it can be said to be in the interest of most developing countries to borrow for periods as long as possible.

15. A memorandum from the Secretary, dated August 15, 1963 (FPC63-13), calculated the amount of annual debt service which would be imposed by certain types of loans. Included in the illustrations were loans of equal amounts, each bearing interest at \(5\%\), but one for a term of 20 years with amortization starting in the fifth year, the other for a term of 40 years with amortization starting in the eleventh year. The return to be derived by the borrowing country from the investment of capital represented by the loan was assumed to be 10\%, a conservative estimate. The calculations of "cost" to the borrower with respect to these loans are shown below, together with a calculation for a 20-year loan at \(5\%\) with amortization starting in the eleventh year.

\(^2\) Department of Water and Power, Los Angeles, California; Puerto Rico Water Resources Authority; State of New York Power Authority; Public Utility District No. 2, Grant County, Washington; Pennsylvania Turnpike.
20-year loan 20-year loan 40-year loan
amortization amortization amortization
from 5th year from 11th year from 11th year

<table>
<thead>
<tr>
<th></th>
<th>20-year loan</th>
<th>20-year loan</th>
<th>40-year loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual amounts payable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>667</td>
<td>773</td>
<td>1,553</td>
</tr>
<tr>
<td>Amortization</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,667</td>
<td>1,773</td>
<td>2,553</td>
</tr>
</tbody>
</table>

"Cost" to borrower (payments discounted at 10% p.a.)

<table>
<thead>
<tr>
<th></th>
<th>20-year loan</th>
<th>20-year loan</th>
<th>40-year loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>317</td>
<td>350</td>
<td>435</td>
</tr>
<tr>
<td>Amortization</td>
<td>300</td>
<td>237</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>617</td>
<td>587</td>
<td>519</td>
</tr>
</tbody>
</table>

16. The 40-year loan costs more in money than either of the 20-year loans because interest is payable over a longer period. The 20-year loan with the 10-year period of grace costs more than the 20-year loan with the 4-year period of grace because the average amount outstanding is higher. But, at the assumed rate of productivity of capital, the 40-year loan is about 15% more beneficial than the 20-year loan with the 4-year grace period. As between the two 20-year loans, the one with a 10-year grace period is 5% more beneficial than the one with four years of grace.

17. It may be said that an extension of the repayment terms of Bank loans would not significantly alleviate the debt service burdens of individual developing countries, because loans from the Bank are likely to be a relatively small part of the total borrowing of any given country. According to the latest figures available, Bank loans account for only about one-fifth of the total external indebtedness of all countries—including the more industrialized ones—which have borrowed from the Bank. But if account is taken only of the less developed borrowing countries (which are the intended beneficiaries of any lengthening of the terms of Bank loans), the proportion of Bank loans to total external indebtedness rises to over one-third. The individual cases vary widely, from countries whose indebtedness to the Bank is very small to those which owe most of their external debt to the Bank.

18. A lengthening of the maturities of Bank loans would not only be of direct benefit to borrowing countries but also might have some influence on other lenders. While longer-term Bank lending is not likely to have any great effect as far as short-term suppliers' credits are concerned, it might well affect the practices of other international lending institutions and of national development assistance agencies.

19. It may be said that the economic consequences of borrowing at long-term can be overemphasized, and that the balance of payments benefits could as well be realized by continual rolling-over of short-term debt. But when loans are linked to projects or expenditures in the borrowing country, rolling-over of
debt may involve a real cost to the borrower. Moreover, long-term loans may have a number of practical advantages for a borrowing country. The borrower has the assured use of money without having to renew the original loan or to contract new debt, possibly on less advantageous terms, or to run the risk that it might not be able to do either. And such loans eliminate the need for repeated and lengthy loan negotiations, a significant consideration for small and poor countries.

20. In taking account of the borrowing country's economic situation when fixing the term of Bank loans, it may often be relevant to consider whether that situation is due primarily to lack of resources or is a consequence of unsatisfactory economic performance. If the latter factor predominates, and the Bank wishes to be in a position to exert some influence on the borrower's future fiscal and economic policies, it may be more appropriate to lend at relatively short term. Where, on the other hand, a prospective borrowing country is in a weak economic position because of a shortage of resources, loans somewhat longer than normal would seem appropriate.

Factors Relating to the Project

21. As noted above, the Articles provide that the repayment schedule of the loan must be "appropriate" to the project. This does not mean that the schedule must be determined by the theoretical life of the project. It is the Bank's present practice to satisfy itself that the financing of the project is assured and on a sound basis, taking all sources of finance, including earnings, into account. Provided this practice is continued, there seems no reason why the Articles should be construed as implying a direct connection between the life of the loan and the life of the project.

22. It should be noted that the question of relating the term of a loan to the project being financed has nothing to do with the project's merits. The availability of long-term money does not make a long-term but low-yielding project attractive. The Bank's policy is to finance only those projects which show an adequate economic return, and to compare projects showing an early return with those where the return is more distant by discounting the returns from both at an appropriate rate of interest. Whatever change may be made in the practice concerning amortization terms, that policy should still be applicable.

23. Merits of the project apart, the Bank could—and does—take account of other circumstances pertaining to the project in fixing the term of its loans. These circumstances include (a) the project's physical life; (b) the project's earnings; and (c) the finances of the enterprise which operates the project. Although these are discussed separately in the paragraphs which follow, in fact in a given case more than one of these factors may be relevant. (Factors (b) and (c) are applicable, of course, only in the case of revenue-producing projects.)

24. The case for relating the term of a Bank loan to the life of the project is probably strongest when the provision of equipment is the substance of the project, e.g., a loan for the purchase of farm equipment, aircraft or locomotives. This technique conforms more or less to market standards, and has the advantage of not subjecting private lenders to "unfair" competition, while at the same time accustoming borrowers to the conditions they would meet in the
market. It also avoids the psychological difficulty for borrowers of having to continue repayments long after the equipment financed has worn out (even though it has been replaced out of depreciation funds).

25. In other situations, the physical life of fixed assets has little relevance to a determination of the kind of financing appropriate for the project. This is particularly true of machinery and equipment which are expected to generate their own replacement cost and to be continually renewed. In such cases, the enterprise needs either permanent equity capital or long-term loans, the duration of which should normally be determined, not by the life of the equipment, but by the earnings of the project or of the enterprise operating the project.

26. Where a loan is sought for a revenue-producing "self-contained" project, it will often be appropriate to finance that project in such a way that interest and amortization would be covered out of its earnings, i.e., to relate the life of the loan to the project's earnings. This has the advantage of assuring that the economic merits of the project will be measured against the expected ability of those earnings to meet the cost of servicing the loan.

27. Usually, however, the most logical approach is to relate the life of the loan to the finances of the borrowing enterprise as a whole. This would normally mean lending at long term where the enterprise's operations are financed largely by borrowed funds or where its cash receipts are likely to be small; a shorter-term loan would normally be appropriate where the enterprise had raised a high proportion of its capital in permanent form, where large cash receipts are expected or where the enterprise has good prospects of borrowing on its own credit.

28. Relating the term of the loan to the project—whether to its physical life or earnings or to the earnings of the enterprise as a whole—may be a means of imposing a useful discipline on the borrower. For example, in lending to a privately owned utility enterprise such as a power company, the Bank normally requires the company to fix its rates in accordance with some standard, say a return on invested capital. However, the enterprise's need to earn enough to pay interest and to amortize its debt serves as an additional discipline. The consequences are similar where the government itself is the borrower and relends the funds to a public autonomous entity on the same terms as the Bank loan. On the other hand, where the government relends the funds to a public entity as permanent capital or on very long term, the life of the Bank loan has no influence on the conduct of the entity. Similarly, for non-revenue producing projects (e.g., most road projects), the disciplinary effect of the term of the Bank's loan on the conduct of the project is usually remote. Thus, from this aspect, the usefulness of relating the term of the loan to the project will vary greatly according to the nature of the project and the constitution of the borrower or beneficiary. The usefulness is likely to be greatest

3/ For example, the Bank's 25-year loans to Norway for the NVE's electric power system were, as far as NVE was concerned, the same as capital provided from the Norwegian budget.

4/ An autonomous highway authority may be able to obtain more regular or more adequate budgetary appropriations if it must meet debt service payments. But the way in which the road systems of most countries are operated remains unaffected by the terms on which the government raises money for them.
in the case of loans made directly to autonomous public or private enterprises and to be least in the case of loans for projects carried out by government departments.

29. There may well be cases in which the loan maturity suggested by the borrowing country's economic situation does not coincide with the term appropriate to the project selected as having priority for Bank financing. In that situation, the solution would appear to be to break the link between the amortization schedule of the Bank loan and the life of the project, just as IDA does through its relending procedure. That is, the Bank's loan would be made to the government on terms appropriate to the country's economic situation, and the government would then relend the proceeds to the ultimate user on terms appropriate to the project. In most instances, the term appropriate for the loan to the government is likely to be longer than the appropriate term for relending for the project. In that case, the government would have the use of local currency repayments from the ultimate user until the due date of repayment on its loan from the Bank. There may be some instances, however, particularly involving countries whose economic position is relatively strong, in which it would be appropriate and desirable for the Bank's loan to the government to be at somewhat shorter term than usual, with the government relending the proceeds for a longer period suited to the circumstances of the particular project involved. In that situation, the government would have to find the funds necessary to bridge the gap between the date on which it is required to repay the Bank and the later receipt of repayments from the ultimate user.

III. Conclusions

30. The foregoing discussion suggests the following conclusions with respect to the term of Bank loans:

(a) Bank loans could be made at somewhat longer term, in appropriate cases, without prejudice to the Bank's financial position or its ability to borrow in the market.

(b) In some instances the economic situation of the borrowing country should be taken into account in determining the duration of the loans it receives.

(c) As a general rule it is useful to relate the life of a loan to the physical life of the project or to the finances of the project or of the enterprise carrying out the project, particularly in the case of loans to private or autonomous public enterprises.

(d) If the terms appropriate to the economic situation of the borrowing country differ from those appropriate to the project, the Bank should envisage the possibility of making its loan to the government on terms suited to the country's economic situation, with the proceeds being relend on terms appropriate for the project.

5/ If the government itself operates the project, this would be merely a bookkeeping procedure.

Development Services Department
November 4, 1963
Annex I

Term of Bank Loans 1953-54 Through 1962-63

The Table below shows, for each year, the amount of Bank loans by principal sector and their weighted average life. Loans to development banks have been excluded.

(Commitment figures net of cancellations and refundings)

<table>
<thead>
<tr>
<th>Fiscal Years</th>
<th>Power $ m.</th>
<th>Power Years</th>
<th>Railroads $ m.</th>
<th>Railroads Years</th>
<th>Roads $ m.</th>
<th>Roads Years</th>
<th>Ports and Waterways $ m.</th>
<th>Ports and Waterways Years</th>
<th>Agriculture and Forestry $ m.</th>
<th>Agriculture and Forestry Years</th>
<th>Industry $ m.</th>
<th>Industry Years</th>
<th>General Development and Other $ m.</th>
<th>Total $ m.</th>
<th>Yearly Average Life</th>
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<td>1953-54</td>
<td>104</td>
<td>17.2</td>
<td>49</td>
<td>11.8</td>
<td>26</td>
<td>10.0</td>
<td>4</td>
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<td>10</td>
<td>19.9</td>
<td>20</td>
<td>17.0</td>
<td>97</td>
<td>310</td>
<td>15.9</td>
</tr>
<tr>
<td>1954-55</td>
<td>105</td>
<td>20.9</td>
<td>101</td>
<td>17.5</td>
<td>11</td>
<td>12.0</td>
<td>20</td>
<td>15.0</td>
<td>48</td>
<td>19.4</td>
<td>28</td>
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<td>79</td>
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<td>1955-56</td>
<td>175</td>
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<td>43</td>
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<td>52</td>
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<td>32</td>
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<td>92</td>
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<td>-</td>
<td>395</td>
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<td>1956-57</td>
<td>108</td>
<td>21.9</td>
<td>-</td>
<td>-</td>
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<td>5</td>
<td>17.0</td>
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<td>17.7</td>
<td>64</td>
<td>15.6</td>
<td>140</td>
<td>370</td>
<td>15.5</td>
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<td>240</td>
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<td>193</td>
<td>15.5</td>
<td>60</td>
<td>19.3</td>
<td>53</td>
<td>19.1</td>
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<td>-</td>
<td>676</td>
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<td>1958-59</td>
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<td>-</td>
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<td>15.4</td>
<td>-</td>
<td>683</td>
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<tr>
<td>1959-60</td>
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<td>24.0</td>
<td>64</td>
<td>18.9</td>
<td>63</td>
<td>18.9</td>
<td>67</td>
<td>14.4</td>
<td>54</td>
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<td>113</td>
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<td>18.8</td>
</tr>
<tr>
<td>1960-61</td>
<td>130</td>
<td>24.2</td>
<td>184</td>
<td>19.5</td>
<td>92</td>
<td>16.3</td>
<td>27</td>
<td>25.0</td>
<td>121</td>
<td>27.7</td>
<td>13</td>
<td>15.0</td>
<td>-</td>
<td>567</td>
<td>22.0</td>
</tr>
<tr>
<td>1961-62</td>
<td>493</td>
<td>23.6</td>
<td>61</td>
<td>18.2</td>
<td>150</td>
<td>19.9</td>
<td>29</td>
<td>22.7</td>
<td>8</td>
<td>20.0</td>
<td>106</td>
<td>14.7</td>
<td>3</td>
<td>852</td>
<td>21.4</td>
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<tr>
<td>1962-63</td>
<td>124</td>
<td>21.3</td>
<td>66</td>
<td>19.2</td>
<td>110</td>
<td>18.8</td>
<td>13</td>
<td>21.0</td>
<td>24</td>
<td>19.9</td>
<td>30</td>
<td>15.0</td>
<td>-</td>
<td>369</td>
<td>19.6</td>
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</table>
AMORTIZATION OF BANK BORROWINGS
IN RELATION TO REPAYMENTS OF LOANS
HELD BY BANK
(MILLIONS OF U.S. DOLLAR EQUIVALENTS)

FISCAL YEARS

REPAYMENTS OF LOANS TO THE BANK

BORROWINGS MATURING

BORROWINGS MATURING EXCLUDING $200 MILLION OF TWO YEAR BONDS

'63 '64 '65 '66 '67 '68 '69 '70 '71 '72 '73 '74 '75 '76 '77 '78 '79 '80 '81 '82 '83
Term of Bank Loans

Introduction

1. The President's memorandum dated July 18, 1963, FPC 63-8, contains a suggestion that the Bank should lengthen the maturities of its loans up to perhaps 40 years and to provide for periods of grace up to perhaps ten years. It was suggested that loans of this character at the standard interest rate would facilitate (a) the financing of long-term agricultural improvement, (b) pioneer industries, and (c) school building.

2. In the course of discussions of the President's memorandum by the Financial Policy Committee, a number of Executive Directors expressed their views, often only tentative and personal, on the proposal to lengthen the life of Bank loans. Although some reservations were expressed, the proposal was generally received favorably, and there was a feeling that the question merited further study. The present paper has been written with a view to discussion of this question among the staff and is not intended for distribution to the Executive Directors.

Historical

3. The Bank's first loans for reconstruction were long term: 30 years for the loan to the Credit National and 25 years for Denmark, Luxembourg and the Netherlands. These loans were not based on projects in the narrow sense of the term, but were disbursed against imports of goods required for reconstruction.

4. With the shift to development lending, there came a change in the Bank's policy. The change was marked by two loans to Chile made in March 1948. One was a $13.5 million loan for hydroelectric power development for a term of 20 years with amortization beginning in the sixth year. The other was an agricultural equipment loan of $2.5 million to Corporacion de Fomento de la Produccion for 6-1/2 years with amortization beginning the third year. The practice thus started of basing the amortization of loans on the nature of the project was generally maintained. The main exception were the general development loans which were disbursed against a general list of imported goods unrelated to specific projects.

5. The policy was first made public in the so-called Capehart report, which appeared in a published version in 1954.

"In establishing the length of its loans, the Bank has generally followed the principle that the term should not be longer than the anticipated life of the equipment being financed. Loans made for very heavy equipment—for example, power installations—have customarily been made for terms of from 20 to 25 years. Loans made for less durable equipment, such as farm machinery, have often been made for around seven years." (p. 80)
Since the early days of the Bank, there has been a shift in emphasis from financing equipment to financing projects, with the result that more consideration is being given to the financial position of the enterprise carrying out the project, and the Bank has moved away to some extent from the sweet simplicity of the Capehart formulation.

Present practice is hard to define precisely, but may be illustrated as follows:

(a) where the project has been defined as the construction and operation of a fairly self-contained physical unit (for example, a power station), the amortization pattern has been based on the assumed useful life of the project,

(b) where the project has been defined as part of an expansion or modernization program of a large undertaking with an undetermined life (for example, the modernization program of a railway system), the amortization has been based on the assumed useful life of the principal items of equipment being financed.

(c) loans for new highway construction have generally been for periods of 20 to 25 years; for highway improvement for periods of 15 to 20 years.

The determination of the length of the loans has been subject to (i) conventional maxima (for example, 20 years for a thermal power plant; 25 years for a hydroelectric plant; 15 years for an industrial plant) and (ii) adjustments in some cases to take account of the expected cash flow of the enterprise carrying out the project or other factors.

There have been exceptions to the general practice set out above. For example, since 1951 loans to South Africa have had a life of ten years, although the projects for which they were granted would have justified 15 or 20 years. Moreover, there have been cases where the real justification for the loan was the need of the economy for foreign exchange rather than the need of the enterprise for capital. For example, the recent Public Utilities Board of Singapore $15 million, 20-year loan was based on the life of the project, a thermal power station. However, the prospective cash flow of the electricity department of the Board would have indicated a loan with a shorter life, so that in effect the loan will release funds for the gas and water departments. Moreover, the Board finances would have justified a shorter loan, so that the real justification for the 20-year term was the needs of the economy of Singapore and later the needs of the Federation of Malaysia.

To illustrate current practice, the loans made in 1962/3, excluding loans to development banks, have been classified by major purpose to show the maximum term applied to each category. (Annex I)

The Bank's practice appears to have resulted in a general lengthening of the life of Bank loans over the past ten years.
Although year-by-year results are apt to be affected by the incidence of large loans with unusual repayment terms, the table below suggests a general trend.

11. The average life, weighted by the size of loans, and excluding development bank loans and the $90 million multipurpose Indus loan, has been as follows:

<table>
<thead>
<tr>
<th>Loans made</th>
<th>Average Life (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal year</td>
<td></td>
</tr>
<tr>
<td>1953-54</td>
<td>14-1/2</td>
</tr>
<tr>
<td>1954-55</td>
<td>18</td>
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<tr>
<td>1955-56</td>
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<tr>
<td>1957-58</td>
<td>19</td>
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<td>19-1/2</td>
</tr>
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<td>18-1/2</td>
</tr>
<tr>
<td>1960-61</td>
<td>20-1/2</td>
</tr>
<tr>
<td>1961-62</td>
<td>21-1/2</td>
</tr>
<tr>
<td>1962-63</td>
<td>19</td>
</tr>
</tbody>
</table>

The Problem

12. The various aspects of the problem fall under three headings:

(1) Considerations concerning the Bank as a financial institution.

(2) Considerations concerning the economy of the country in whose territories the project is located, and its ability to transfer debt service.

(3) Considerations concerning the project—using this term to include the enterprise carrying out the project.

13. In the following discussion the term "life" has usually been used to connote "average life" or "amortization pattern" and, thus, includes the combined effects of the period of grace, the final maturity date and the basis on which the amortization schedule has been drawn up. The arguments put forward in this paper are intended to apply to all these factors, it being recognized that each will have different weight in different circumstances.

The Bank as a financial institution

14. The Bank's useable funds are derived partly from borrowed funds. It is important for the Bank's reputation as a conservatively run institution that it should avoid the accusation of "borrowing short and
lending long". In fact, the Bank's practice has been very conservative in that the maturities of its outstanding loans are year by year, except in two years, well in excess of the maturities of its own obligations.

15. Without making projections of future earnings, borrowing and lending, it is not possible to indicate the precise extent to which longer loans could be made while still covering the maturities of the Bank's own obligations. However, the shaded area of the attached chart (Annex II) shows clearly in retrospect that there has been an ample margin within which the Bank could have lent at longer term.

16. Considerations relating to the Bank's reputation as a prudent financial institution include not only its own financing, but also the more intangible consideration of the general "appearance" of its lending. It is important for the Bank's loans to appear to conform to sound financial practices. In the past the terms of Bank loans have been more or less in line with market practices, and this has been a merit from the viewpoint of the Bank's own reputation, quite apart from any benefit to the borrower, a point which is discussed in paragraph 45 below.

17. I therefore reach the conclusions that considerations of the Bank as an institution would permit some scope for making longer term loans, although the change should be restrained by the considerations mentioned in the preceding paragraph.

18. Obviously, the repayment terms of loans have an effect on the saleability of the Bank's portfolio. However, I do not think that this factor should be taken into account in determining the life of our loans.

Economic Aspects

19. It is obvious that a longer period of grace or amortization, or both, does not change the total principal amount to be repaid. It simply postpones repayment. This is an advantage to the borrowing country in one or more of the following conditions.

(a) if world prices generally are rising.

(b) if the real return on capital in the borrowing country is higher than the rate of interest paid.

(c) if the economic position of the country is improving over the long run.

20. These conditions have been characteristic of the post-war experience of most countries and assuming that they continue, it can be said to be in the interest of most developing countries to borrow for periods as long as possible.

21. The benefits to be derived from borrowing at longer terms can easily be over emphasized. Calculations bearing on this point were set out in the Secretary's memorandum dated August 15, 1963 (FPC 63-13).
The first two calculations were in respect of loans of 1,000 units, each bearing interest at 5-1/2%, one for 20 years with amortization starting in the fifth year (Table A) and the other for 40 years with amortization starting in the eleventh year (Table B1). To compare the two loans requires making an assumption about the return to be derived by the borrowing country from the investment of capital represented by the loan, and the calculations in the Secretary's memorandum assume a rate of 10%. Widely differing results can, of course, be produced by varying the assumed rate of return.

22. To show the effect of a long grace period, a third calculation has been made of the cost of a 20-year, 5-1/2% loan with amortization starting in the eleventh year. A comparison of these three examples shows the following position:

<table>
<thead>
<tr>
<th></th>
<th>20-year loan</th>
<th>20-year loan</th>
<th>40-year loan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>amortization</td>
<td>amortization</td>
<td>amortization</td>
</tr>
<tr>
<td>from 5th year</td>
<td>from 11th year</td>
<td>from 11th year</td>
<td></td>
</tr>
<tr>
<td>Actual amounts payable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>667</td>
<td>773</td>
<td>1,553</td>
</tr>
<tr>
<td>Amortization</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,667</td>
<td>1,773</td>
<td>2,553</td>
</tr>
</tbody>
</table>

"Cost" to borrower (payments discounted at 10% p.a.)

<table>
<thead>
<tr>
<th></th>
<th>20-year loan</th>
<th>20-year loan</th>
<th>40-year loan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>317</td>
<td>350</td>
<td>435</td>
</tr>
<tr>
<td>Amortization</td>
<td>300</td>
<td>237</td>
<td>84</td>
</tr>
<tr>
<td>Total</td>
<td>617</td>
<td>587</td>
<td>519</td>
</tr>
</tbody>
</table>

23. The longer loans obviously cost more in money than the shorter ones because interest is payable over a longer period. However, rating the productivity of capital at 10% per annum (a fairly high rate) the 40-year loan is about 15% more beneficial than the 20-year loan with four years of grace (The "cost" is 519 instead of 617.) Comparing the two 20-year loans, the ten years of grace compared with four yields a benefit of less than 5%, the "cost" being 587 instead of 617. What is striking is the smallness of the benefit derived from postponing repayment.

24. If the effect of a lengthening of the life of any single Bank loan is relatively small in relation to that loan, it is obviously smaller still in relation to the total volume of the country's borrowing. For example, an arbitrary selection of countries to whom the Bank has made loans shows the following positions:
Debt at December 31, 1963
($ million)

<table>
<thead>
<tr>
<th>Country</th>
<th>Total</th>
<th>Bank</th>
<th>% Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>742</td>
<td>95</td>
<td>12.8</td>
</tr>
<tr>
<td>Colombia</td>
<td>638</td>
<td>215</td>
<td>33.6</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>79</td>
<td>22</td>
<td>27.8</td>
</tr>
<tr>
<td>Denmark</td>
<td>284</td>
<td>50</td>
<td>17.6</td>
</tr>
<tr>
<td>El Salvador</td>
<td>51</td>
<td>27</td>
<td>51.1</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>65</td>
<td>24</td>
<td>36.9</td>
</tr>
<tr>
<td>Finland</td>
<td>367</td>
<td>123</td>
<td>34.5</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>47</td>
<td>23</td>
<td>48.9</td>
</tr>
<tr>
<td>Pakistan</td>
<td>829</td>
<td>244</td>
<td>29.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>250</td>
<td>114</td>
<td>45.6</td>
</tr>
<tr>
<td>Uruguay</td>
<td>150</td>
<td>74</td>
<td>49.3</td>
</tr>
<tr>
<td>Venezuela</td>
<td>362</td>
<td>45</td>
<td>12.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,580</strong></td>
<td><strong>1,066</strong></td>
<td><strong>29.7</strong></td>
</tr>
</tbody>
</table>

25. Furthermore, a change in policy now is obviously not going to influence the burden arising from past indebtedness.

26. In short, it can be said that except in the case of the newly-emerging countries which have little or no external debt and which can be expected to borrow wholly or mainly from the Bank, an extension of repayment terms of Bank loans would not significantly alleviate the debt service burdens of developing countries.

27. It might be argued that if the Bank extended the repayment period in some cases, other lenders would do so too, and that its own action would provide the Bank with a talking point in discussions with other international lending institutions and with governments providing bilateral aid. There is something in this argument, although it is hard to decide how much weight it deserves.

28. One more point ought, perhaps, to be made in discussing the debt service burden. In real terms, a burden exists only if maturing debt is not replaced by new borrowing, i.e. if the debt is serviced out of earnings or reserves. This seldom happens in the case of developing countries, most of whom are consistently net importers of capital. As long as there is a large enough inflow of capital, a heavy debt service does not impose a real burden on the economy, although it complicates the technical task of debt management. In fact, the question of the relative merits of borrowing at long term and borrowing at short term in the expectation of renewing the debt at maturity should be discussed in terms of uncertainty and the risk of not being able to renew, rather than in terms of debt service burden.

29. It remains to look at the question from the viewpoint of the lenders. Private lenders tend to take the view that the less satisfactory is the borrowing country's economic position and prospects, the more they would prefer to shorten the terms of their lending. The Bank
has to reconcile its own interest as a lender with those of its borrowers. It might wish to get its money back more quickly from countries which were in a relatively good economic position at the time of lending, particularly, as in the case of South Africa, when it saw that they had troubles ahead. It might also wish to temper the wind to the shorn lamb and lend at a somewhat longer term to borrowers in a relatively poor position now but with good prospects later. There is a good deal to be said for giving special help to countries which are in the "take off" stage where capital is especially productive.

30. If the position is accepted that the Bank should be more flexible in fixing the amortization of its loans by having regard to the economic position of the borrowing country, two courses would be open. The first would be to select the projects whose life fitted in best with economic considerations. Thus the Bank would finance long life projects in a very underdeveloped country and short life projects in a more prosperous one. One cannot be sure, however, that in the first case the projects having a high economic return will always be those with a long life, nor in the second case that they will be short term. The solution lies, therefore, in the second course, which would be to break the link, where necessary, between the amortization schedule of the loan and the life of the project. This is in fact done by IDA, and there seems to be no reason why it should not also be done by the Bank.

31. If the life of the loan is longer than the life of the project, the IDA solution would be adopted and the enterprise operating the project would repay in local currency to the government. As in the case of IDA, the Bank would not attempt to control the use of these monies. If, on the other hand, the life of the loan were shorter than that of the project, there would be the problem of finding the local currency. Various solutions might be possible, depending mainly on whether the project is a government project, in which case the funds would have to come from the budget, or whether it is run by a financially autonomous enterprise, in which case the enterprise might provide the funds from its own earnings or refinance.

32. My tentative views on the economic aspect of the problem are as follows:

(a) The amortization of Bank loans in most cases has limited importance in the balance of payments of the borrowing country.

(b) Where, however, the debt service burden of Bank loans would be a real handicap and the country has good growth prospects, the Bank would be justified in lengthening somewhat the period of grace or the period of amortization, or both.

(c) Countries which are on the "margin" of eligibility because of the strength of their economic position should have loans with a somewhat shorter grace period and life than has hitherto been customary.
In suitable cases, the link between the life of the loan and that of the project might be broken.

The Project

33. The Bank has always tried to ensure that the investment represented by a project it finances earned an adequate return either in the form of revenue accruing to an entity providing a revenue-earning service or as economic benefit in the case of a service for which no direct charge could be made.

34. It has not always been clear whether lower interest rates and longer amortization periods advocated for certain classes of project have been intended to make low yielding projects look more attractive. There is a danger that soft terms will lead to soft projects, and it is important to keep the question of economic return on projects separate from the terms of Bank loans or IDA credits.

35. Before examining the arguments for relating the life of a Bank loan to the life of the project, it is necessary to dispose of the idea that this course has any theoretical economic justification. An item of capital equipment earning an economic return will generate enough to cover not only the appropriate rate of interest on the capital involved, but also the amortization of the capital. From a general economic point of view, it is just as sound to reinvest this amortization in new equipment as it would be to repay the loan and incur another loan to finance replacement. There is no economic argument, for example, for limiting loans for agricultural equipment to six or seven years, although there may be other arguments in favor of this course.

36. The purposes served by linking the life of a Bank loan to the physical life of the project may be said to be three.

(1) Debt service can be useful in imposing a financing discipline on the entity operating the project.

(2) The link avoids whatever psychological disadvantages lie in the borrower having to repay a Bank loan long after the project built with its proceeds has become worn out.

(3) In practice, it tends to ensure that the term of Bank loans conforms more or less to the practice of private lenders.

37. These considerations sometimes cut across those relating to the economy of the country in which the project is operating, as mentioned in paragraph 30 above.

38. The merits of relating the life of the loan to that of the project vary according to the kind of business involved and the kind of enterprise running it.
39. First, take a revenue-earning utility enterprise, an electric power company for example. It will normally be required to fix its rates in accordance with some standard, such as, for example, a return on invested capital, but an important additional means of "discipline" is the need for the enterprise to earn enough money to pay interest and amortize its debt.

40. An industrial company selling in a free market is in a different position. Since it has no control over its revenues, and will always seek to maximize its profits irrespective of whether it borrows short or long, the "discipline" consists in inducing the management to deal with the company's profits in a conservative way.

41. Revenue-earning utility services may be run by public bodies who provide them with all their capital. Here relationships differ so much that it is difficult to make useful generalizations. Where money is borrowed by the government and provided to an autonomous entity on the same terms, conditions approximate to those of a private company. But where, as sometimes happens, it is provided as permanent capital or on very long term, the term fixed for the Bank loan plays no role at all in the conduct of the entity. For example, the Bank's ten-year loans for the South African railways were, as far as the railway administration was concerned, on all fours with capital provided from the South African budget.

42. For projects which are not revenue producing, for example most road projects, the influence of the term of the loan on the way the project is run is usually remote and mostly non-existent. The director of an autonomous highway authority may, in some cases, be able to get more regular or more adequate budgetary appropriations if he has to meet debt service payments. But the road systems of most countries would not be influenced by the term on which the government raises money for them.

43. To sum up, it can be said that the "disciplinary" value of relating the term of the loan to the project varies greatly according to the nature of the enterprise operating and is generally of limited significance.

44. The psychological value of linking the life of a loan to that of the project is of no great importance. The argument that a borrower is more likely to default when the project he has acquired with the loan becomes worn out has an obvious application in lending to individuals, some relevance perhaps in Bank lending to very primitive countries, but in general little validity.

45. On the other hand, the principle that the terms of Bank loans should as far as practicable conform to "market" standards is important for three reasons. First, it protects lenders from "unfair" competition from the Bank. Secondly, it gets borrowers accustomed to conventional lending terms so that they adjust their financial practices to conditions they would meet if in due course they were to borrow on their own credit. Thirdly, it has advantages to the Bank as an institution. (See paragraphs 14 to 18 above.)
46. This discussion of project considerations leads to the conclusion that basing the life of a loan on the life of the project

(a) has no economic justification.

(b) has some value in the case of revenue-earning services run by autonomous bodies, but in other cases has little value.

(c) has advantages in that it happens to fit in with market practices and may help the enterprise in raising private capital.

Conclusion

47. I believe it to be important that the Bank should not change its policy of financing only those projects which show a high economic return; that in comparing projects showing an early return with those where the return is more distant, returns from both should be discounted at an appropriate rate of interest, and that the conditions as to interest and amortization on which finance might be provided should not be taken into account in evaluating projects.

48. After considering the basis on which the Bank should fix the life of its loans, I conclude:

(a) that the Bank's financial structure and character as a sound institution permits some lengthening of the life of its loans in suitable cases, provided that this lengthening does not change drastically the average.

(b) that the effect on the balance of payments of borrowing countries of changing the length of Bank loans is usually small, but that from time to time cases will arise in which the economic condition of the borrowing country should be taken into account in determining the duration of the loans it receives.

(c) that as a general rule it is convenient to relate the life of a loan to the life of the project it finances.

(d) that the selection of projects for Bank financing should be based on economic priorities and should not take account of the desirability of the country's borrowing at shorter or longer term.

(e) that if there is an inconsistency between the term appropriate to the project and that appropriate to the economy, the Bank might cut the direct link between the payments made by the enterprise operating the project and those received by the Bank.

S. R. Cope
August 26, 1963
ANNEX I

Amounts and Maximum Lives of Bank Loans made in 1962-63 (Excluding Loans to Development Banks) Classified by Major Purpose

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Hydroelectricity</th>
<th>Thermo-electricity</th>
<th>Highways</th>
<th>Railways</th>
<th>Irrigation</th>
<th>Steel</th>
<th>Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ M. Years</td>
<td>$ M. Years</td>
<td>$ M. Years</td>
<td>$ M. Years</td>
<td>$ M. Years</td>
<td>$ M. Years</td>
<td>$ M. Years</td>
<td>$ M. Years</td>
</tr>
<tr>
<td>30.0</td>
<td>25</td>
<td>22.0</td>
<td>17</td>
<td>23.0</td>
<td>5.6</td>
<td>15</td>
<td>30.0</td>
</tr>
<tr>
<td>4.0</td>
<td>25</td>
<td>18.5</td>
<td>15</td>
<td>13.2</td>
<td>3.4</td>
<td>20</td>
<td>13.5</td>
</tr>
<tr>
<td>3.7</td>
<td>15</td>
<td>35.0</td>
<td>20</td>
<td>30.0</td>
<td>2.6</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>6.6</td>
<td>20</td>
<td>35.0</td>
<td>20</td>
<td></td>
<td>12.5</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.8</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>57.3</td>
<td>67.0</td>
<td>110.5</td>
<td>66.2</td>
<td>24.1</td>
<td>30.0</td>
<td>13.5</td>
</tr>
</tbody>
</table>

368.6 19 yrs.
COVERAGE OF BOND REPAYMENTS DUE BY THE BANK WITH LOAN REPAYMENTS DUE TO THE BANK AS OF JUNE 30, 1963
(IN MILLIONS OF U.S. DOLLAR EQUIVALENTS)

<table>
<thead>
<tr>
<th>Year</th>
<th>Bond Repayments</th>
<th>Loan Repayments</th>
<th>Amortization Receivable</th>
<th>Amortization Payable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>4,500</td>
<td>1,000</td>
<td>3,500</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>4,000</td>
<td>500</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>1966</td>
<td>3,500</td>
<td>0</td>
<td>2,500</td>
<td></td>
</tr>
<tr>
<td>1967</td>
<td>3,000</td>
<td>0</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>1968</td>
<td>2,500</td>
<td>0</td>
<td>1,500</td>
<td></td>
</tr>
<tr>
<td>1969</td>
<td>2,000</td>
<td>0</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>1,500</td>
<td>0</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>1971</td>
<td>1,000</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>500</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

NOTES: 1. Amortization receivable by Bank takes no account of further lending or further sales out of portfolio.
2. Amortization payable by Bank takes no account of further borrowing or of $298 million of short-term borrowing (less than 5 years) which can be regarded as covered by short-term investments.

IBRD - Economic Staff