

Evaluation of the Norwegian Mixed Credits Programme

A report prepared by
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Responsibility for the contents and presentation of findings and recommendations rests with the evaluation team. The views and opinions expressed in the report do not necessarily correspond with the views of the Ministry of Foreign Affairs.

Preface

In January 2000, Fafo – the Institute for Applied Social Science – was awarded the international tender for evaluating the Norwegian mixed credit arrangement by the Norwegian Ministry of Foreign Affairs. To undertake the project, Fafo mobilized an international research team consisting of Jon Hanssen-Bauer (Managing Director, team leader, Fafo), Professor Anthony David Owen (University of New South Wales, Australia), Dr. Imron Husin (Director, Center for Policy and Implementation, Indonesia), Dr. Chen Zhaoying (Director, NCSTE, China), Wang Fenyu (Researcher, NCSTE, China), Professor Guy Christopher Zimema Mhone (South Africa), Mohamed Motala (Researcher, Fafo South Africa), Karstein Haarberg (Researcher, Fafo) and Bjørne Grimsrud (Research Coordinator, Fafo).

The team met in Oslo in February 2000 to prepare the methodology for the project. On 22 February 2000, a workshop was held with Norwegian stakeholders at Fafo in Oslo. Invitations were sent to all companies that have received mixed credits, as well as interested NGOs and institutions involved in the administration of mixed credits. Around 30 people participated. In addition, interviews were conducted with four selected enterprises and all relevant institutions involved, and an archive study was undertaken in NORAD.

Field studies were carried out in China, Indonesia and in Southern Africa. In Southern Africa, visits were made to Botswana, Lesotho and Zimbabwe; Mozambique was inaccessible at the time due to flooding. All projects were reviewed in each of the countries except for China, where a selection was made. In each of the three fields, local stakeholders were invited to a workshop to discuss their experiences of using Norwegian mixed credits. Field reports were compiled from each field and used as input for this report. The whole team then met for a second joint workshop in Oslo to define the main conclusions across the fields.

This evaluation report has been prepared by Anthony David Owen, Bjørne Grimsrud, and Jon Hanssen-Bauer. In addition to the core Fafo team, the following researchers contributed in various ways: Marie W. Arneberg, Laurie Blome Jacobsen, Kyrre Knudsen, Frode Longva, Jon Pedersen, and Tone Sommerfelt.

The evaluation team wishes to thank the Ministry of Foreign Affairs for entrusting us with the project and thereby providing us with a very exciting challenge. We would also like to express our gratitude to Norwegian and foreign officials, company representatives, and local informants, all of whom have impressed us with their willingness to contribute openly and frankly to our study.

It goes without saying that this report only expresses the views of the evaluation team and that its authors bear full responsibility for any misunderstandings or factual errors it may contain.

Fafo, Oslo, October 2000

Jon Hanssen-Bauer
Managing Director
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Abbreviations

AusAID = Australian Agency for International Development

BAKOSURTANAL	= Indonesian Mapping Authority
BAPPENAS	= Indonesian National Planning Development Agency
BNP	= Gross Domestic Product
CIRR	= Commercial Interest Reference Rate
DAC	= Development Assistance Committee
DANIDA	= Danish International Development Agency
<i>De minimis</i>	= Tied aid notifications with a value less than SDR 2 million
Fafo	= Fafo Institute for Applied Social Science
GDP	= Gross Domestic Product
GIEK	= The Norwegian Guarantee Institute for Export Credits
ICB	= International Competitive Bidding
LDC	= Less Developed Countries
LLDC	= Least Developed Countries
NIB	= Nordic Investment Bank
NGO	= Non-Governmental Organization
NORAD	= Norwegian Agency for Development Co-operation
NOU	= Norges Offentlige Utredninger
MC	= Mixed Credits
MFA	= Ministry of Foreign Affairs
MOF	= Ministry of Finance
NCSTE	= The National Research Center for Science and Technology for Development, China
OECD	= Organization for Economic Co-operation and Development

ODA	= Official Development Aid/Assistance
R&D	= Research and Development
SDR	= Special Drawing Rights
Sida	= Swedish International Development Co-operation Agency
TOR	= Terms Of Reference

Executive Summary

The term "mixed credits" refers to tied grant aid in connection with regular export credits to developing countries. Norway established such a facility in 1985, following the introduction of similar export facilities in most other OECD countries. At that time, reference was made to the need to "level the playing fields" for competition for Norwegian firms. The purpose of the move was to increase the contribution made by Norwegian businesses to private and public sector development in the recipient countries through the transfer of capital, technology, infrastructure and competence.

The principal objectives of this evaluation have been to assess (1) to what extent mixed credits have contributed to private and public sector development, and, as such, (2) to what extent mixed credits have fulfilled Norwegian development co-operation policy objectives in general. The evaluation focused on three main issues. First, we explored how the Norwegian mixed credit facility fits into the international context in general and in particular to the Helsinki Arrangement. Second, we carried out extensive field studies to assess the impact of mixed credit projects in the recipient countries. Third, we evaluated how mixed credit projects are managed by the Norwegian actors in order to assess the effects in Norway and the way in which the projects are fitted into the framework of Norwegian development co-operation.

- *Internationally, tied aid and mixed credits follow different trends.* The general overall trend has been a decline, with a notable exception of Japan's Special Yen Loans program. With the exceptions of Belgium, Denmark and Spain, OECD nations are generally reducing their levels of such aid. Australia and the United Kingdom have discontinued the use of mixed credits. Spain is the leading donor (41 per cent of the total mixed credits from OECD countries), followed by France (14 per cent) and Denmark (12 per cent). In all, Norway has provided less than 2 per cent (SDR 406 million) of the total value of mixed credits in the OECD during the period 1992–1999 (SDR 23,251 million).
- *The OECD regulates the use of mixed credits, and Norwegian guidelines comply with these regulations.* In 1992, the OECD countries agreed on guidelines to prevent trade distortions arising from tied aid concessionary credits being used to finance what would otherwise be financially viable projects in developing countries. According to the guidelines, mixed credits should be restricted to projects that will not generate sufficient cash flow to cover the cost of operation and to service the capital employed, or to projects that are unable to attract the credits needed on ordinary commercial terms. The evaluation team found that the Norwegian MC facility has been established and is operated according to guidelines that comply with the existing OECD arrangement. A number of the projects fall outside the area regulated the most strictly by the OECD.
- *The Norwegian MC program has been important, but its current budget is too small to achieve the objectives.* Since its inception, a total of NOK 1,865 million has been allocated to mixed credits. The yearly budget levels peaked in 1992 at NOK 331 million (7.5 per cent of all Norwegian aid). From a level of NOK 200 million per annum in the mid-1990s, the budget had been reduced to NOK 70 million in 1999 (less than 1 per cent of all aid). At this level, few projects can be given support on a yearly basis, and the users of the facility within the Norwegian business community will find it increasingly uninteresting to compete for the funds.
- *With some exceptions, the profile of the Norwegian program is quite similar to the average profile of the other OECD countries: focus on the social sector, concentration on a limited number of*

countries. China and Indonesia are dominant recipients. The five top countries account for 67 percent of the total grant value. Norway fares better than other OECD countries in extending the facility to African countries. After 1992, the social and energy sectors have been the major beneficiaries. When Norway reduced its budget for mixed credits, this was not matched by a corresponding increase in other, untied credits – as it was in the OECD as a whole. As a result, Norway is one of the OECD countries that is most prone to tying its credits. The evaluation team noted, however, that the guidelines for mixed credits have been changed to allow for the possibility of reduced delivery from Norway if more participation is forthcoming from partners in the recipient country.

- *The projects are of acceptable standard as measured in terms of fulfilling their immediate objectives.* All in all, the evaluation team concluded that the projects are professionally implemented and compare well with other development projects, even if a few of them have stalled. Variations do exist between the different countries. China does well, due in part to strong and competent local credit management and a development regime. African countries do quite well for the opposite reason: their weak development planning encourages good helpers primarily to target financially viable projects and to help formulate good projects for integration into the plan. The projects in Indonesia came out relatively poorly, as four out of seven projects encountered serious problems due to a combination of external factors and insufficient *ex ante* appraisal.
- *The projects are initiated locally and are part of the local development plan.* With one exception (in Indonesia), all projects have been subjected to the established systems of appraisal and prioritizing, even if they were actively promoted by both potential suppliers from Norway and Norwegian authorities. The quality of the plan or development strategy in the countries is an issue that deserves great attention, as it was found to be the single most important factor for overall success in the use of mixed credits.
- *The use of competitive bidding is limited (4 out of 28 projects).* According to the general guidelines, mixed credits should, as far as possible, be granted to contracts won in international tender competitions. In the appraisal of projects, concern for long-term sustainability seems to be insufficient. As all projects should be commercially non-viable following the introduction of the Helsinki Disciplines in 1992, some projects will require financial support for a major part of their economic life. This was found to apply to six of the seven projects in Indonesia that do not generate enough revenue to service their credit properly. Four of these projects were of questionable economic viability.
- *Overpricing.* Theoretical considerations, informed judgment and evidence in some cases all lend support to the conjecture that overpricing occurs (up to a level of 20 per cent). This is the accumulated effect of several factors, including administrative costs and other costs related to the instrument. Even when the price before subsidy is higher than world market prices, the *net* costs of the projects are still lower than world market prices when the subsidy is taken into account. The recipients therefore find the projects worthwhile.
- *Mixed credits help mobilize additional resources for development, but this argument must be used with caution.* Access to mixed credits increases the volume of projects that a given country is able to undertake, and the value of the additional projects is approximately three times the grant element. However, the additional resources consist of foreign credits that have to be reimbursed, as well as local capital contributions that could have been allocated to alternative projects.
- *A majority of the projects provide training, few involve more advanced forms of technology transfer, and even fewer economy-wide institutional development.* Training was carried out both as a planned effect and as an effect of the co-operation between the local user and the Norwegian supplier. More advanced forms of transfer of technology were found to a limited extent. Industry-wide institutional development or growth is seldom a direct result of MC projects. The projects are more than exports *per se*, but less than promoters of industrial development. The evaluation team found little direct but some indirect impact on local employment, and more a potential for, than actual effects on, South–South trade and local (or, in the case of Africa, regional) contributions. In fact, we found almost no effect on economic opportunities for women. As a consequence of the profile of the instrument, there is a bias towards formal sector, urban-based economic activities that tend to benefit commercial users and middle-income consumers rather than the poor directly. Positive environmental impact was observed, and there was some positive effect on labour standards.

- *The winners in terms of Norwegian suppliers are to be found among the medium-sized Norwegian companies.* These companies tailor-make systems and processes for integration into the local environment, primarily using own competencies and engineering know-how as well as standard elements purchased internationally. The losers are those doing what, it could be argued, the export credit facility really demands, i.e., the export of turnkey equipment featuring technology that requires little or no adaptation to suit the local context.
- *MC has little impact in Norway.* In total, 42 companies have received mixed credit financing, and ten have received 70 percent of the funds. Most of the suppliers have run fewer than three projects. The direct effect on employment in Norway is insignificant, but the MC instrument has had a noticeable effect in allowing Norwegian companies to penetrate markets in developing countries. A few companies seem to have used the competencies they have gained for further internationalization.
- *The facility is managed as an integral part of NORAD's systems for appraising development projects.* NORAD is no longer a direct partner in MC contracts, preferring to leave this role to commercial banks. The evaluation team found some potential for improvement in the administration of the facility, and this should be considered if the facility is continued or extended.
- The evaluation team has drawn the following main conclusions:
 - No major change has yet been observed in the international context that would make it urgent for Norway to change or to discontinue its mixed credit facility. However, the OECD is currently moving towards a new arrangement aimed at untying all aid to the least developed nations. In practice, this would leave mixed credits as an option for developing nations only.
 - The finding that mixed credit projects are successful and that the wider impact on development is more limited is consistent with findings made by other evaluations. This is not in itself a reason to discontinue the facility. However, if wider impact on development is the main objective, the facility should be redesigned to attain higher efficiency.
 - Budget allocations are now so low that the facility can not be expected to reach the intended level of impact either abroad or in Norway, and this is currently the main impetus for making a strategic choice.

Fact sheet

- The term "mixed credits" refers to tied grant aid in connection with regular export credits to developing countries.
- Norway established such a facility for Norwegian firms in 1985, following the introduction of similar export facilities in most other OECD countries.
- The purpose of the facility was to increase the contribution made by Norwegian businesses to private and public sector development in the recipient countries through the transfer of capital, technology, infrastructure and competence.
- Since its inception, a total of NOK 1,865 million has been allocated to cover the grant element of mixed credit projects (including Asiabevilgningen). The grant from Norway must be associated with a private credit transferred to the recipient country from abroad.
- The facility is managed as an integral part of Norad's system for appraising development projects. Norad is generally not directly involved as a party in MC agreements. The export bank enters the agreement with the authorities in the recipient country, who are formally considered the borrower.
- Private banks (primarily Eksportfinans) provide the credit, and the Norwegian Guarantee Institute for Export Credits (GIEK) guarantees the credit.
- A total of 131 projects by 42 Norwegian companies have received mixed credit financing. Ten companies have received 70 per cent of the funds. The total export value of the mixed credit projects constitutes 0.3 per cent of all Norwegian exports (excluding crude oil and gas, ships and oil platforms) since 1985.

- The yearly budget of mixed credits peaked in 1992 at NOK 331 million (7.5 per cent of all Norwegian aid) and has been reduced to NOK 70 million in 1999 (less than 1 per cent of all aid).
- The use of mixed credits by OECD countries is regulated by the 1992 Helsinki Arrangement. The arrangement consists of guidelines established to prevent trade distortions arising from tied aid concessionary credits being used to finance what would otherwise be financially viable projects in developing countries.
- After the Helsinki Arrangement, Norway shifted from principally targeting communications and manufacturing to concentrating on the social and energy sectors.
- China and Indonesia are dominant recipients. Of 24 countries involved in the scheme, the five top countries account for 67 per cent of the total grant value.
- Spain is the leading mixed credit donor, followed by France and Denmark. Norway has provided less than 2 per cent of the total value of mixed credits in the OECD during the period 1992–99.
- The evaluation of the facility aimed at assessing (1) to what extent mixed credits have contributed to private and public sector development and, (2) to what extent mixed credits have fulfilled Norwegian development co-operation policy objectives in general.

• **Recommendations**

- The evaluation team recommends that on a strategic, policy level, Norway should use the fact that it has an *option*: either the facility should be improved and expanded, or it should be discontinued and replaced by other measures. To continue at the present level is not recommended.
- The decision should be taken on the basis of careful consideration of, and debate concerning, three issues. First, is tying necessary to mobilize Norwegian industry and to provide the same opportunities as those enjoyed by their competitors, or would other mechanisms be more efficient in achieving the intended result? Second, is there any advantage in providing credits in addition to grants to promote development? Third, how can what has been learned from the involvement of Norwegian businesses through MC be used to strengthen co-operation for private sector development?
- The evaluation teams favours untying, but continuing credit facilities for developing nations.

• **Recommendations for scenario A: expand and improve**

- If a political decision is taken to continue the mixed credit arrangement, we recommend that it should be expanded substantially from its present low level. There are many ways of achieving this, and the environmental strategy for Asia provides a good example of new initiatives that can add volume and new directions. Such an expansion would imply a need to increase the limits for the Norwegian Guarantee Institute for Export Credits (GIEK) in providing guarantees to the least developed countries.
- **Within this scenario, we recommend:**
 - A1. Increasing the total budget available for mixed credits, possibly as parallel financing in combination with other similar programs (*Ministry of Foreign Affairs, Parliament*).
 - A2. Strengthening the administration with the focus on
 - A2.a *ex ante* evaluations to reduce overpricing (*NORAD*);
 - A2.b business plans for all recipient countries, in line with the GIEK requirement for non-commercial credit countries, to improve the focus on sustainability (*NORAD, GIEK*);
 - A2.c the dialogue with recipient countries on their development plan to assess the quality of the planning process and guard against corruption (*NORAD, MFA/Embassies*);
 - A2.d strengthening reporting and evaluation to include effects in the recipient countries (*NORAD*).
 - A3. Ensuring stricter compliance with OECD regulations in all phases and at all levels (*NORAD*)
 - A3.a Define policy on use of tender and strengthen procedures to be followed in cases in which the tender system is not used (i.e. probably in most cases) in order to avoid overpricing (*NORAD*).

- A4. Targeting private sector development effects, the transfer of technology, competence and institution-building effects by
- A4.a clarifying the development criteria to be targeted (*NORAD*);
A4.b continuing the present sector orientation, but introducing incentives for "soft" issues (tie grant elements to training, provision of productive technology, etc.) (*NORAD*);
A4.c giving priority to projects submitted by joint ventures or local companies – Norwegian supplier partners, or project planning for South- North co-operation;
A4.d establishing a facility to finance the initial costs linked to establishing partnerships between Norwegian and local companies (*MFA/NORAD*);
A4.e reducing the level of tying on the condition that the substitution comprise of local and regional deliveries (avoid competition with and stimulate industry in the recipient country or the region) (*MFA/NORAD*).

Recommendations for scenario B: discontinue and replace

If a political decision is taken to discontinue mixed credits, for example with the principal intention of untying aid, a strategy for business development in the South is already in place, along with a comprehensive set of facilities in terms of investment support programs, facilities for financing technical assistance, export credit guarantees, parallel financing and import support for Norway. What has been learned from the mixed credit program should be used to improve and strengthen these options.

Within this scenario, we recommend:

B1. Improving and revising alternative programs as mentioned above in order to be better able to cater for support to business development with the emphasis on

B1.a investments (*NORFUND*);

B1.b South/Norwegian partnerships (*MFA/NORAD*);

B1.c stimulating joint South/Norwegian partnerships in bidding for projects with commercial credits (*MFA/NORAD*).

B2. Expanding untied credits from Norway by

B2.a expanding the special fund for export credit guarantees in GIEK (*MFA/Parliament/GIEK*);

B2.b establishing a non-tied mixed credit line (*MFA/Parliament*).

B3. Influencing the multilateral institutions that provide concessionary loans to place higher emphasis on the "soft" issues in bid evaluations as these are believed to provide additional development effect (*MFA/relevant institution*).

B4. Stimulating Norwegian participation in bidding for multilateral concessionary credits.

1 Norwegian mixed credits and the international context

A mixed credit combines a development assistance grant with an ordinary export credit (i.e., loan). This type of financing is to be used in connection with exports that will contribute to economic and social development in the recipient country.

The Norwegian Parliament established the mixed credit instrument in 1985 with a view to broadening economic co-operation between Norway and the developing countries. The purpose was to contribute to economic and social development in the recipient countries by offering credit on better terms than the market can offer. The aid component was expected both to help increase the supply of credit from other sources and to stimulate co-operation on infrastructure and industrial projects – including the transfer of technology and know-how to the developing countries. By tying the instrument to contracts won by Norwegian companies, positive effects on Norwegian exports to developing countries were expected. It was anticipated that such an instrument would be most useful for developing countries that were economically more advanced than the poorest ones. Reference was made to similar instruments adopted by most OECD countries, and the arrangement was designed to follow guidelines and regulations adopted by the OECD (see St.prp. no. 51/1984- 85). Later, in 1995, Norway established an arrangement for using mixed credits for environmental projects in Asia.

In this chapter, we will present the international context – in practical terms, the OECD framework – within which Norway has operated its mixed credit program, and illustrate how the mixed credit arrangement has been implemented as part of Norwegian assistance to developing countries. The main findings and conclusions of the evaluation team are:

- The OECD regulates the use of tied aid in order to avoid trade distortions. A significant change in this framework came with the Helsinki Consensus Arrangement in 1992. The aim was to prevent tied aid concessionary credits from being used to finance what would otherwise be financially viable projects in developing countries. The OECD is now preparing a move to untie all aid to the world's least developed nations. The Norwegian arrangement has adhered to OECD guidelines both before and after the 1992 Arrangement.
- Spain, France, Germany, and Japan have provided nearly two-thirds of all Helsinki-type tied aid. The total sum allocated by OECD countries was SDR 23,251 million between 1992 and 1999. Norway's share was SDR 406 million or NOK 1.865 billion. The provision of such credits is generally in decline, but Belgium, Denmark and Spain are increasing their levels of tied aid. Spain is now the major donor of mixed credits. While Australia and the UK have terminated their mixed credit programs, most other countries have reduced theirs.
- The Norwegian MC program has been significantly reduced. From being a major instrument for private sector development – and peaking in 1992 at a level of NOK 331 million (71 per cent of private sector development funds) – the total volume of mixed credit grants has dropped from around NOK 200 million in 1997 to NOK 70 million in 1999.
- Mixed credits are supplied to a relatively limited number of recipient countries. Of the 24 countries involved, five receive 67 per cent of the total grant value. China and Indonesia are the major beneficiaries of mixed credit aid from Norway and the other OECD countries. Norway's level of involvement in African countries is higher than the average for the OECD as a whole.
- After the Helsinki Arrangement, Norway shifted from principally targeting communications and manufacturing to concentrating on the social and energy sectors.
- Norway figures among the countries in the OECD supplying the highest level of tied credits as a proportion of all aid credits, but the volume of credits as a whole is falling sharply and has now reached a very low level. Credits are being replaced by grant aid to private sector development. At the same time, the tied element in the mixed credit instrument has been reduced (from 70 to 50 per cent) to allow for more local participation in the delivery.
- The evaluation team concludes that the profile of the Norwegian mixed credit instrument fits in with the OECD framework, and that it has responded to changes in this framework. The actual profile is more in line with Norwegian aid objectives than the OECD average. Norway does not need to change the instrument to comply with external regulations or best practice as they are at the moment.
- The evaluation team concludes that the international trend is best described as mixed: the total volume of mixed credits is gradually falling, but only two countries have discontinued the use of such credits while three countries have actually increased their contributions. In this sense, the argument for introducing the instrument with regard to the competitive situation for Norwegian business still holds.
- The evaluation team concludes that Norway has the option to continue or discontinue using the instrument. However, the actual budgetary level is so small that the instrument is no longer able to achieve its objectives. Therefore, a policy decision should be made whether to increase or to discontinue the use of mixed credits.

1.1 The international context regulated by the Helsinki Arrangement

The use of officially supported export credits to reduce risk for domestic exporters has been an instrument of government policy in developing countries since the start of the twentieth century. By the 1970s there was growing concern among OECD countries about increasing the use of export credits and tied aid to subsidize exports as a means of capturing market share in developing countries. An *Arrangement on Guidelines for Officially Supported Export Credit* was first formulated in 1978 as a "gentlemen's agreement" based upon consensus between the OECD members. Later, particularly in the wake of the 1980s Third World debt crisis, tied aid once again became a prime object of contention between OECD member countries. Having agreed on rather strict terms for the subsidization of commercial credits, tied aid remained the only export promotion instrument for capital goods available. The total value of tied aid offers rose sharply, as both exporters in developed countries and importers in developing countries sought such assistance for commercial purposes.

Concessionary loans offered by OECD nations to developing nations generally comprise a loan element at the prevailing Commercial Interest Reference Rate (CIRR) combined with a grant element. Thus the mixed credit effectively yields the equivalent of a loan with a concessionary rate of interest. In order to permit such a scheme to operate in the interests of aid delivery, rather than trade distortion, formal operating guidelines were agreed upon by OECD member nations meeting in Helsinki and published as the *Arrangement on Guidelines for Officially Supported Export Credits* (revised in 1998). These guidelines are frequently referred to as the "Helsinki Arrangement".

The Helsinki Arrangement came into effect in March 1992. It was conceived of as a means of preventing trade distortion arising from the use of tied aid concessionary credits – provided by OECD member nations – to finance what would otherwise be financially viable projects in developing countries. In terms of this objective, the Helsinki Arrangement should be considered a success. In particular, the provision of *ex ante* guidance appeared to be a major factor in determining the tied-aid investment decisions taken by participating OECD countries.

In order to separate aid from trade objectives, two key tests are to be applied to all aid credits above SDR 2 million or with a level of concession below 80 percent: a financial viability test and a test of availability of finance (credits to LLDC countries are not covered by this requirement). Potential projects must fail to satisfy one of these two key tests to be termed "commercially non-viable". However, a "special circumstances" clause permits any participant to discuss whether an aid offer is justified, even if the requirements of these two tests are not met. More explicitly, the two key tests are:

- whether or not the project is financially non-viable: the project lacks capacity with appropriate pricing determined by market principles to generate cash flow sufficient to cover the project's operating costs and to service the capital employed; or
- whether or not it is reasonable to conclude, based on communication with other participants, that it is unlikely that the project can be financed on market or Arrangement terms.¹

In order to apply the first of these two tests, it is necessary to evaluate analytically the financial viability of a project. To this end, two definitions are fundamental to the Arrangement's operational integrity:

- a project is defined in terms of a mix of inputs and value-added activities that produce a certain marketable output. A project may be defined as the smallest complete productive entity (physically and technically integrated) that fully utilizes the proposed investment and captures all financial benefits attributable to the investment;
- a project's financial non-viability is tested against the project's capacity to generate cash flow sufficient to cover operating costs and service the capital employed, with appropriate pricing determined according to market principles. Therefore, in principle, "appropriate pricing" should be based on local economic conditions, without excessive government intervention and free of excessive market distortion; and inputs and outputs in cash flow analyses should reflect such a "global" approach with provision for individual projects considered on a case-by-case basis.

In addition to these tests, procedures have been laid down for informing other OECD member countries (notification), and for consultation. Any OECD nation contemplating a mixed credit tied aid loan to an eligible country must "provide notification" of the project to the OECD Trade Secretariat, for circulation to all participants at least 30 working days prior to bid closing or the commitment date, whichever is earlier. The next phase is the consultation process, whereby participants can request that the proponent provide additional project information or clarification over the OECD's online information service or in face-to-face consultations.² The minimum permitted level of concession for LLDC countries is 50 percent, while for other eligible countries it is 35 percent.

The provisions of the Helsinki Arrangement do not apply to tied aid notifications with a value of less than SDR 2 million. Such notifications, generally referred to as *de minimis* notifications, were excluded from the Arrangement largely on the grounds of administrative convenience. Although some participants have expressed the view that the terms of the Helsinki Disciplines should nevertheless apply to *de minimis* transactions, the total value of these notifications has never been very significant in terms of total tied aid credits.

Historically, non-Helsinki-type aid credits, consisting of untied aid, small tied aid and tied aid for LLDCs, have been of far greater significance than Helsinki-type aid credits. Five of the ten Development Assistance Committee sectors have dominated notifications to the OECD from donor countries. In terms of value, the "social" sector (projects such as roads, hospitals, water and sewage treatment plants) and the "transport"

sector dominate, followed by "energy", "communications", "manufacturing" and "other". After the inception of the Helsinki Arrangement, the energy and manufacturing sectors have received much fewer credits, with the number and credit value of social sector projects increasing. In recent years, the number of communication projects has also declined. These trends are illustrated in Table 1.1.

Table 1.1 The development of notifications of aid credits by OECD countries in SDR million, by type of aid credit and sector for Helsinki-type aid credits. (Source OECD)

Together, Spain, France, Germany and Japan have accounted for almost two-thirds of the total value of notifications since 1992. Austria, the Netherlands and Australia have accounted for a further 16 per cent. Table 1.2 lists the value of tied aid notifications by notifying country since 1992. Internationally, trends regarding tied aid and mixed credits take different directions. The general overall trend has been a decline, with the notable exception of Japan's Special Yen Loans programme, which was introduced in the context of the Asian economic crisis. With the exceptions of Belgium, Denmark and Spain, OECD nations are generally reducing their levels, but only Australia and United Kingdom have discontinued their programmes. Spain is now the leading donor (41 per cent of mixed credits from OECD countries), followed by France (14 per cent) and Denmark (12 per cent). The United States does not operate a mixed credit program, but do have a policy of contesting projects and matching offers. The OECD is preparing a move to untie all aid to the world's least developed countries. This move will limit the facility for developing countries and eventually reduce the options for using mixed credits in Africa, even if in this country Norway mostly targets small projects that fall outside the OECD regulations.

Table 1.2 Value and trend of tied aid notifications by notifying country from March 1992 to year-end 1999 in SDR million. (Source OECD)

1.2 The Norwegian mixed credit instrument: guidelines and profile

When the Norwegian mixed credit instrument was established in 1985, it was designed to adhere to the requirements defined by the OECD countries. It was also specified that mixed credit projects should be managed in the same way as other development aid projects and evaluated on the basis of their development value and potential impact in the recipient countries. Mixed credit projects should ultimately aim to reduce poverty through economic and social development.

From the outset, the Norwegian authorities required that projects eligible for mixed credits should be of priority to the recipient country. They were also to comply with a number of criteria for development effects in line with OECD guidelines. These included ensuring business development effects in the recipient country, targeting commercially underdeveloped regions, systematic training of the local workforce, stimulation of new local businesses (possibly based on local raw materials and resources), improving the balance of trade, extending the use of appropriate technology and increasing of the technological level locally.

Since its inception a total of NOK 1,865 million has been allocated to mixed credits from the Norwegian development aid budget. From starting out as the major instrument for private sector development, the mixed credit facility has gradually been replaced by other mechanisms and has latterly become rather small. The yearly levels of allocation peaked in 1992 at NOK 331 million, equivalent to 7.5 per cent of all Norwegian aid. From a level of NOK 200 million per annum in the mid-1990s, the level of allocations had fallen to NOK 70 million in 1999, i.e. less than 1 per cent of all aid.

1.2.1 The Norwegian Mixed Credit guidelines

The following sections describe the mixed credit guidelines used by NORAD and how these guidelines have been modified to comply with the OECD framework.

The recipient country

To be eligible for mixed credits, Norway requires that the recipient country qualify for aid under both OECD and Norwegian regulations. As the country must obtain the credit and the guarantees to cover political and commercial risks from either a Norwegian or an international export credit bank, the country and the project have to comply with the requirements put forward by these banks and guarantors. From the outset, the arrangement targeted countries that faced restrictions in obtaining commercial credits despite possessing the financial strength to be able to service their loans. The grant element was to account for at least 25 per cent of the contract value. In 1987, countries in the upper middle-income band were excluded from obtaining mixed credits.

The lower limits of the grant element as a percentage of the export contract value (excluding the required local cash contribution) in use after 1992 are: minimum 50 per cent for the least developed countries (GNP less than USD 785 per capita in 1996), and minimum 35 per cent for the low and lower-middle income countries (GNP between USD 785 and USD 3,115 per capita).

Countries with income above this level are not eligible for MC. NORAD's internal guidelines specify that the development effects of a project must be considered to be exceptionally high in order to justify increasing the grant element above the minimum. A local initial capital contribution, or "cash payment", amounting to at least 15 per cent of the export contract value is normally required.

A grant from Norway must be associated with a private credit transferred to the recipient country from abroad, and, in most cases but not exclusively, the credit is provided by Eksportfinans, a private Norwegian bank. Another provider is the Nordic Investment Bank. In this way the grant has "additional effects" as it helps to release commercial credits for developing countries.

Before 1989, mixed credit agreements was accompanied by an agreement between Norway and the government in the recipient country (*landavtale*). After this date, the general rule has been for NORAD not to be directly involved as a party in any agreement except for those concerning the aid component with the export credit bank. The bank enters the agreement with the authorities in the recipient country, which are formally considered the borrower. The contract stipulates obligations for the recipient to report to NORAD and to allow for project inspections. The authorities in the recipient country receive the grant and the credit. A corresponding loan in local currency is then given to the end user. Normally, the authorities themselves will keep the grant, but they may also pass it on to the end user.

The end user

Mixed credits are open to any end user chosen by the recipient country. In theory, the end user could be a privately owned company, but this has proved difficult to implement in practice. In addition, principally subsidized loans and grants to private companies may distort markets.

In countries with low credit ratings, mixed credit projects are subjected to additional requirements to assess their financial viability and capacity to service the debt. In addition to ordinary feasibility studies, the end user is required to prepare a business plan for the implementation period and the five following years, as well as to present external audits carried out by an international auditor and covering the institutional and financial aspects of the organization. If the end user's organization is found to be unsatisfactory, institutional development assistance may be given (given that the recipient country is a Norwegian partner).

Credit conditions

Mixed credits supplied by Norway differ from the OECD specifications for normal, officially supported export credits with regard to interest and the repayment period. However, under the Consensus Agreement, changes in the terms for the concessionary credits are permitted, on condition that the grant level complies with the minimum requirements of the OECD. It seems that the factor limiting NORAD in this regard is to be found in the Norwegian Guarantee Institute for Export Credits (GIEK) rather than in the OECD regulations. GIEK is the governmental agency responsible for furnishing guarantees and insurance of export credits. The primary function of the Institute is to promote exports of Norwegian goods and services, and Norwegian investment abroad. With the exception of Indonesia, for which 25-year repayment periods have been accepted, GIEK limits the period to 15 years for developing countries.

During the first years of the arrangement, mixed credits were only accorded to projects with a maximum contract value of NOK 150 million and a minimum value of NOK 10 million – or 5 million if a credit line for the country already existed – due to the costs involved in establishing the credit. The maximum value was removed in the early 1990s. In the mid- 1990s the minimum limit was removed and the projects became smaller. The reason for this was decreasing funds, and not adaptation to the new OECD regulations from 1992. The financing package may take several forms, with the grant normally being used to subsidize the interest cost of the credit.

Project conditions

Mixed credits may be used to finance the export of capital goods and equipment, consultancy services, and the costs normally associated with such contracts. Mixed credit financing is not to be used for consultancy work and pre-investment studies for high-risk projects that may not be pursued.

Prior to 1992, only projects that were found to be financially viable were eligible for mixed credit grants. With the introduction of the stricter OECD regime in 1992, the NORAD criteria were changed accordingly, and

mixed credits could only be granted to commercially non-viable, but economically sound, projects to which the development plans of the recipient country accord priority.

By year-end 1999, the OECD Consultations Group had considered 121 projects and a "body of experience" had developed for use in providing *ex ante* guidance on the critical boundary between financial viability and non-viability on a sector-by-sector basis. The general characteristics of financially non-viable projects include projects in which the principal output is a public service (such as roads, water supply, and sewage treatment), capital intensive projects with high "per unit" production costs and slow capacity uptake (such as new rail networks), and/or projects in which the beneficiary group (normally household consumers) is deemed unable to afford the output at the market-determined price (such as public transport systems).

The commercial non-viability rule does not always apply, even for projects initiated after 1992. Many Norwegian projects are smaller than the SDR 2 million limit, or the grant element is above 80 per cent, or the credit is given to a country in the least developed category. The small projects, called *de minimis*, are exempt from the OECD limit. NORAD's guidelines state that even for such *de minimis* projects, the principles of the Helsinki Arrangement on commercial non-viability should be followed, and it has been stressed that projects can not be split up to fall under the SDR 2 million limit.

NORAD's guidelines state that projects submitted for mixed credit financing should be economically sound before considering the grant element. If a project is not able to recover its cost, it will require financial support during operations. In such cases, NORAD should make certain that the required subsidies to sustain operations are available and given priority in the public budgets of the recipient country.

The supplier and the supply

The supplier must be a company of acknowledged solidity and registered in Norway – as one of the intentions behind creating the instrument was to broaden the involvement of the Norwegian business community in activities in developing countries, and thereby to extend business perspectives, technology and know-how.

However, the total supply does not have to originate from Norway as a 30 per cent input from other countries is allowed. It is a prerequisite that the Norwegian supplier does not compete with a local or a regional supplier. In 1998, NORAD opened up the possibility of reducing the Norwegian input level by 20 per cent if a developing country could supply at least this volume. NORAD's guidelines emphasize that projects financed by mixed credits are to be subjected to international competitive bidding in which Norwegian companies compete on level terms with other companies that have access to similar credit arrangements.

1.2.2 Profile of Norwegian mixed credits

From 1985 to 1999, a total of 113 projects have received support from the Norwegian mixed credit arrangement. The total amount allocated is NOK 1.865 billion. In 1995, an additional grant was earmarked for environmental projects in Asia (*Miljøtiltak i Asia*). This grant has financed mixed credits for a further 17 projects.

Over the period, the annual allocations have varied considerably, peaking in the early 1990s. The environmental projects in Asia helped sustain a level of around NOK 200 million per year until 1997 when the level decreased considerably – down to NOK 70 million in 1999. This is illustrated in Figure 1.1.

Figure 1.1 Volume of mixed credit grants by year, in NOK mill. (Source NORAD)

Of the 24 countries that have received Norwegian mixed credit support, China is the major recipient followed by Indonesia. China alone accounts for one-third of the (monetary) volume of Norwegian mixed credits and for 48 per cent of all the projects. The top five beneficiary countries received 67 per cent of the total volume. The top ten are shown in Figure 1.2. The other countries that have received Norwegian mixed credit support are: Bhutan, Thailand, Chile, Malawi, Angola, India, Honduras, Costa Rica, Malaysia, Macedonia, Namibia, Vietnam, Senegal, and Tanzania. Together, these countries received 15 per cent of the total volume. If we compare this with the aid profiles of the other OECD countries, we find the same domination of China and Indonesia. We also find a somewhat stronger concentration of Norwegian credits to these two countries (in the OECD, the five top countries receive 56 per cent), mainly due to the fact that Norway focuses heavily on China.

The fact that none of the "top five" Norwegian countries is a Least Developed Country indicates not only the difficulties these countries have in obtaining the guarantees required for export credits, but also the lack of

projects that Norwegian firms find attractive, as well as the corporate knowledge and strategy among Norwegian firms. In addition to China and Indonesia, Pakistan is the only country to figure in both the Norwegian and the OECD top ten ranking. Norway seems to focus more heavily on African countries than is usual for OECD countries.

The Helsinki Arrangement led to a major change in the sectors that benefited from Norwegian mixed credits – the focus shifted from communications and manufacturing to the social, energy and "other" sectors. The two latter sectors account for 50 per cent of the total volume of credits issued in the post-Helsinki period. This is illustrated in Figure 1.3.

In comparing these figures with those of the other OECD countries, the most striking feature is the low level of Norwegian support for the transport sector, which is the second-most important sector for the other OECD countries. Both Norway and OECD as a whole favour projects in the social sector. Table 1.3 presents the distribution of notifications by sector for the OECD countries, before and after the introduction of the Helsinki Agreement.

[Figure 1.2. Top ten countries benefiting of mixed credit financing in Percentage of total volume of all aid credits. \(Sources: NORAD and OECD\)](#)

[Figure 1.3 Volume of Norwegian mixed credit financing by main sector in NOK million. \(Source: NORAD\)](#)

Table 1.3 Summary of notifications in the OECD by sector Pre- and Post-Helsinki. (Source: OECD)

Pre=1991 and Jan/Feb of 1992, Post=March 1992–1999

Sector	Notifications (Percentage of total)		Value (Percentage of total in SDR million)		Average project value (SDR million)	
	Pre	Post	Pre	Post	Pre	Post
Social	20	49	17	36	16.1	10.6
Energy	26	17	35	19	24.9	16.1
Transport	15	16	2	30	20.3	26.9
Communications	14	9	1	8	15.2	14.1
Manufacturing	18	6	18	5	18.0	11.8
Other	6	3	3	2	9.1	10.2
Total	N=604	N=1,604	11,351	23,251	18.8	14.5

The Helsinki Arrangement considerably reduced the use of tied aid internationally. In general, the OECD countries have compensated for a falling volume of Helsinki-type credits by increasing the volume of non-Helsinki-type aid credits. This does not, however, apply to Norway, where both types of credits have been reduced over the last decade. While the share of Helsinki-type aid credits in the OECD is at present considerably below the levels that existed prior to the Helsinki Arrangement, the share of Helsinki-type aid credits has reached levels as high as 60–70 per cent in Norway during the majority of the post-Helsinki period, although the volume has fallen in absolute terms (from a total of SDR 210 million in 1992 to SDR 23 million in 1999). In the other OECD countries, the share of Helsinki-type aid has averaged around 22 per cent after the introduction of the 1992 Agreement, while it was nearly 50 per cent in 1991 and even higher the two first months of 1992. This is illustrated in Figure 1.4. In 1992, mixed credit allocations accounted for

7.5 per cent of the total Norwegian development aid budget. In 1999, mixed credits constituted less than 1 per cent of all aid.

Concerns have been raised internationally about the possibility that the falling share of Helsinki-type aid credits indicates that such credits are being allocated to smaller projects, deliberately split up to circumvent the Helsinki rules. Indeed, although the volume of *de minimis* aid credits – i.e. tied and partially untied credits with a value of less than SDR 2 million – has never been significant in terms of total aid credits, the use of such notifications accelerated in the OECD area during the first three years of the post-Helsinki period. While the volume rose from SDR 38 million to SDR 324 million from 1992 to 1995, the number of projects increased from 36 to 252. Since 1995, however, there has been a slight fall in both the total volume and number of *de minimis* aid credits in the overall OECD area, even though levels remain much higher than they were prior to the Helsinki Arrangement.

In Norway, the use of such aid credits increased from SDR 3.6 million to SDR 19.5 million in the period from 1992 to 1995. The level then fell to SDR 3 million in 1999. Credits of this kind constituted 2 per cent of all aid credits in 1992, and reached 36 per cent in 1996, while the corresponding figure for the OECD as a whole has never exceeded 3 per cent during the post-Helsinki period. These fluctuations should not be interpreted as purely adaptation to the Helsinki Arrangement as they also seem to relate to fluctuations in the total volume of aid credits. As indicated above, this volume fell just after 1992, and then rose in 1994 and 1995 before falling again. The shift towards smaller projects preceded the major decrease in the budgets and may be an adaptation to the Helsinki Arrangement.

Compared to the OECD as a whole, Norway is among the countries providing the highest share of tied aid (75 per cent), but the total volume of such aid in Norway is small, amounting to just SDR 406 million or 1.7 per cent of the OECD accumulative total between 1992 and 1999. Figure 1.5 summarizes the use of tied aid relative to all aid credits in the OECD.

Figure 1.4 Total volume of all aid credits by type, Norway (Chart A) and the OECD countries (Chart B) in SDR million. (Source: OECD)

Figure 1.5 Helsinki-type and *de minimis* aid credits as a proportion of all aid credits during the entire post-Helsinki period (1992–1999)

¹ In general, Arrangement terms (for developing countries) are: (1) a maximum repayment term of 10 years, with repayments in equal six-monthly instalments; and (2) interest payments (normally not to be capitalised) payable every six months. Both payments commence six months after the start of the project.

² During such consultations a participant may request the following information, among other items: (1) a detailed feasibility study for the project; (2) evidence of a competing offer with non-concessionary or aid financing; (3) expectations of the project's capacity to generate or save foreign currency; (4) evidence of co-operation with multilateral organisations such as the World Bank; (5) presence of International Competitive Bidding, in particular if the donor country's supplier is the lowest evaluated bid; (6) environmental implications of the project; (7) evidence of private sector participation; and (8) the timing of the notifications of concessionary or aid credits.

2 Effects of Norwegian mixed credits in the recipient countries

This chapter contains a summary of the information regarding the various projects in the different countries selected for review. The projects were examined as a part of country-specific fieldwork. Information was collected in the field in the form of semi-structured interviews with informants (end users, recipient institutions, businesses, authorities) who had been involved with the projects in the countries selected. The evaluation team visited and assessed 28 projects in Botswana, China, Indonesia, Lesotho, and Zimbabwe (descriptions of all projects and summaries of the observations made during the visits are appended).

The first part of this chapter analyses how these projects were initiated and implemented, and whether the goods delivered operated satisfactorily after the completion of the project. This analysis aims at assessing the extent to which the projects reached their *immediate* goals. The second part of the chapter takes a broader view: to analyze the *impact or the development effects* of the mixed credit projects in terms of their contribution to private and public sector development. This section also discusses the extent to which the projects comply with Norwegian development policy objectives.

The main findings and conclusions of the evaluation team are:

- The projects are of acceptable standard as they are generally successful in meeting their immediate objectives (18 of 26 projects). The evaluation team found no evidence to suggest that the standard of these projects is lower than in other development co-operation projects. The team found implementation problems in some projects – three projects were delayed, two had stalled, and two were under construction. Some are successful because they fall within lucrative sectors such as energy supply and telecom infrastructure, and these would not have been funded under the post-Helsinki mixed credit regime.
- All projects except one appear to have been initiated locally and form part of local development plans. They have therefore been subjected to the established systems of appraisal and prioritization. In some cases, potential Norwegian suppliers or authorities (or both) have actively promoted the inclusion of the projects in the development plan of the recipient country. However, the quality of the plan or development strategy is an issue of concern as it was found to be the single most important factor for overall success in the use of mixed credits.
- The use of tenders and competitive bidding is limited (4 of 28 projects). This is at variance with the Norwegian guidelines which state that, as far as possible, mixed credits should be granted to contracts won in international tender competitions.
- China has more success with its mixed credit projects than the other countries. At project level, Africa is also performing well. The projects in Indonesia appear to be relatively poorer. Two factors seem to explain this variation: the quality of the local governance system applied (China), and the strategy followed for mixed credit loans applied by Norway (Africa).
- The concern for the long-term sustainability of the projects seems to be too low. After 1992, all projects are required to be commercially non-viable, and some will therefore require financial support for a major part (or all) of their economic lifetimes. This applies to six of the seven projects in Indonesia, which do not seem to generate enough benefit to service the credit properly. Four of the projects in Indonesia are of questionable economic viability.
- The relevance, in terms of delivering an appropriate product or technology, is high for the majority of the projects, even though a few projects have made use of unproven technology or have been involved in the technological development of the supplier company – which exposes the recipient to high risk.
- The tying of deliveries to Norwegian suppliers (50–70 per cent), and the design of projects as turnkey installations reduce local input to a level below what it could have been with a more flexible approach by the MC arrangement. In Southern Africa, it is a question of whether NORAD's guidelines not to give MC credits in competition with local or regional companies have been complied with in full.
- Mixed credits mobilize additional resources for development, but this argument has to be used with care. Access to mixed credits increases the volume of projects that a given country is able to undertake. The 28 projects analyzed had a total contract value of three times the grant element (nearly four times in China and Indonesia, double in Botswana and Lesotho). On the other hand, the additional resources primarily consisted of foreign credits that have to be reimbursed. They also included local capital contributions that could have been allocated to alternative projects and can not therefore be considered additional.
- A majority of the projects provide training, both as a stated aim of the plan and as an additional effect of the co-operation between the local user and the Norwegian supplier. More advanced forms of technology transfer were found only to a limited extent. Industry-wide institutional development or growth seldom occurs as an effect of the MC projects. The projects are more than simple exports, but less than promoters of industrial development.

- When evaluating the projects in the light of the broader Norwegian aid criteria, the team found little direct but some indirect impact on local employment, some potential for increased South–South trade and local contributions, but no particular effect on economic opportunities for women. As a consequence of the profile of the instrument, it is biased towards formal sector, urban-based economic activities, and tends to benefit commercial users and middle-income consumers rather than the poor directly. Positive effects were found with regard to environmental impact, and, to an extent, to labour standards including health and safety for workers.
- *The evaluation team concludes that the impact and the quality of the projects are acceptable, and, with the exception of the projects in Indonesia, there is little ground for fundamental criticism. However, several lessons can be learned with regard to improving the mixed credit instrument if it is to be continued with the aim of promoting private sector development.*
- *The evaluation team concludes that if the instrument is continued, it will be necessary to clarify several issues, such as the general requirement for international competitive bidding, which countries and sectors to target, how to integrate the instrument within the context of other private sector development initiatives, how to promote increasing local participation, and how to best capitalize on the competence and technology of Norwegian businesses.*

2.1 Assessment of project success

Mixed credit projects are identified, assessed, contracted and financed in line with a standard process. This process includes a series of control mechanisms that are intended to ensure that the projects selected are of high priority in the recipient country – with regard to desired development effects – and designed to be an effective use of resources. The process also ensures that both the general conditions for Norwegian development co-operation and the specific conditions for mixed credits, as defined by Norway and the OECD, are met. This process is described in text box 2.1.

The team has several observations to make in this regard. The first is that the process depends on the quality of governance in the recipient country. If the planning process is good, the development value of the projects selected will have been correctly balanced against cost in order to make a sound investment decision. The second is that the process builds on principles of recipient control. It is the responsibility of the recipient country to identify, contract and implement the projects. The appraisals carried out by NORAD and the other Norwegian organizations involved are normally based on information drawn from the domestic or local planning processes, and information contained in the project documents is used to check compliance with Norwegian and OECD criteria. The third observation is that competition is used as a mechanism for selecting the best projects at several stages. The main source of deviation from this mechanism is the tying of the credit itself: Norway provides "soft credit" only if the supplier is a Norwegian company and a minimum of 50 per cent of the delivery is purchased in Norway (previously, this level was 70 per cent).

In contrast to the other counties involved, China systematically produces feasibility studies and makes use of international competitive bidding. China has the most comprehensive system for the identification and prioritization of projects. The use of domestic banks for lending introduces an extra control mechanism. Most of the African countries are covered by the special guarantee arrangement in GIEK for developing countries. This specifies particularly comprehensive documentation requirements, and may be an explanation of the relatively high success of the use of MC in Africa.

The team's analyses focus on the fulfilment of what can be termed the projects' immediate objectives, and follow the OECD checklist for developmental quality of aid-financed projects (see OECD 1986, 1987, 1988). The most important elements on this checklist include the requirements that a given project should (1) be part of, and identified through, a proper planning processes in the recipient country; (2) be prepared, designed and evaluated against a set of standards and criteria consistent with the DAC Principals for Project Appraisal, which includes economic, technical and financial aspects such as price of Norwegian delivery, relevance of the product or technology purchased, and assessment of financial and economic sustainability; and (3) be implemented successfully and efficiently in accordance with a plan.

In this chapter, the authors assume that if a given project has been selected for MC financing via a proper local planning process and the appraisal system implemented in NORAD (see NORAD 1998), it will yield positive (or desirable) developmental effects if it is implemented according to plan. The procedures include an economic viability test for all projects. It would be beyond the scope of this evaluation to assess the quality of the different projects as compared to alternative investments, or to evaluate the quality of the prioritization and planning processes themselves in the recipient countries. The development effects of MC projects will be discussed in greater detail below.

This review uses three levels of sustainability (see Figure 2.1), which are based on the Helsinki criteria. A project is *commercially viable* if the feasibility study shows that it will generate enough profit to be able to attract and repay commercial credit based on the Helsinki Arrangement. A project is *cost recovering* if it is able to cover all operational costs including servicing the (soft) credit with which it was financed according to the terms agreed (this may also be called *post-grant financial viability*). Mixed credit projects are normally expected to fall into this category, and, if not, measures should have been taken to guarantee public subsidies from the recipient country to accommodate the costs of operations. This is made clear in the NORAD regulations (NORAD 1998:32) in which the DAC guidelines are cited as follows: "Where a project is *not financially self-supporting*, special care must be taken to make certain that the subsidies required to maintain operations are ensured and that this represents a priority use of the recipient's public resources" (ibid., original language version has precedence).

Finally, a project is *economically viable* if the discounted net present value of its time stream of (real) net benefits is greater than zero. The time stream of benefits includes both the cash flow and financial values imputed for non-cash benefits (e.g., environmental benefits). Similarly, the cost stream will include traditional cost items (expressed in cash values) and non-financial costs (such as pollution) with a value imputed for the latter. In other words, the commercial viability test reflects the value of the project solely to the company concerned. The economic viability test reflects the value of the project to society as a whole. All aid projects are expected to be highly economically viable.

Projects should not be commercially viable to fall within the Helsinki Guidelines, but should be able to recover their costs and be economically viable. If they do not recover their costs, the recipient country must provide support in the form of operational subsidies for the project to fall within the guidelines for Norwegian mixed credits. All the projects evaluated were scored according to these three levels of sustainability.

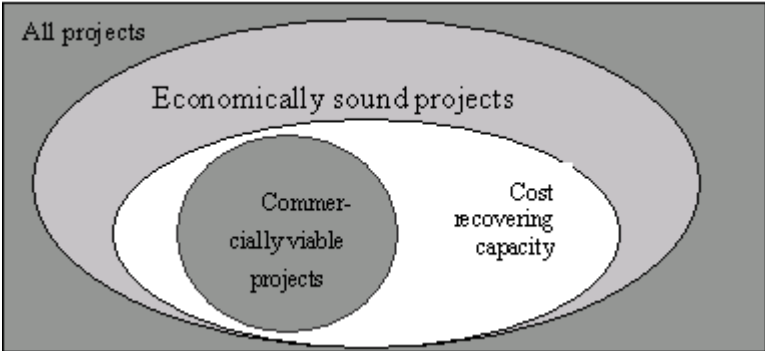


Figure 2.1 Project sustainability

Text box 2.1: The project cycle and its control mechanisms

In terms of its control mechanisms, the project cycle can be described as consisting of four stages:

1. *Need identification, assessment and prioritisation.* Typically, an end user identifies a need and plans an investment by purchasing equipment or capital goods. The project is forwarded to a local, sectorial or ministerial authority for review and inclusion in their plan, to be funded by a national planning unit. This is often in the Ministry of Finance, which co-ordinates all public investment proposals and consolidates the national development plan. During the process, a feasibility study is

conducted to establish the project's development value and all commercial and financial aspects. The recipient country's government selects the projects for financing through the different aid or credit mechanisms offered by the various donors. At this stage, some recipient countries will use international tenders to identify the supplier and, as a result, the donor country. In all cases, a list of projects is presented to donor countries at high-level meetings. On the basis of previous contacts, the parties know the kind of projects likely to be presented and the amounts of funds likely to be made available.

At the end of this stage, a project has been evaluated for its cost and development value, has competed with a number of other projects, and is part of the national plan cleared for financing by foreign credits. Per definition, it should therefore be good in terms of development value for investment.

2. *Norwegian appraisal.* Norwegian involvement starts when a partner country submits projects that fit the profile Norway normally supports, or projects in which Norwegian suppliers have been identified. NORAD and other relevant institutions will then review each project.

At the end of this stage, a given project has been evaluated for its suitability for Norwegian mixed credit funding, including clearance with regard to OECD rules and compliance with Norwegian development co-operation criteria.

3. *Negotiation and contracting.* The recipient country may, if no international tender has been held previously, initiate a tender in Norway, or, if the Norwegian supplier has already been identified, start negotiating the price. NORAD sometimes commissions a consultant review. The contract between the end user and the Norwegian supplier is then signed. The credit is normally provided by Eksportfinans AS, a private Norwegian export credit bank, while the guarantee is posted by GIEK, the Norwegian State Guarantee Institute for Export Credits. GIEK requires corresponding guarantees from the recipient government. The credit institutions make their own assessment of the commercial risk involved with the credit. NORAD will also review the contract before the grant part is made available to the recipient. The credit is then allocated to the end user by the national central co-ordination body, which will decide the terms of credit for the end user.

At the end of this stage, the cost of a given project has been evaluated and compared to world market prices, and the risk has been evaluated and found acceptable.

Project implementation and follow-up. The end user implements the project together with the Norwegian supplier, and the project is followed up in the same way as any other commercial contract. The end user reports progress to NORAD. In some cases, consultants are used for the follow-up work, and field visits may be undertaken to perform *ex post* evaluations, primarily to assess technical aspects. Eksportfinans AS monitors the disbursement of the credit. The recipient government shoulders the responsibility in the event that the end user falls short in the areas of implementation or reporting, also guarantees to provide resources to complete the project if the contracted resources are not sufficient.

At the end of this stage, the project has been successfully implemented and the case is closed for NORAD and the Norwegian supplier. The credit institution follows up on the servicing of the credit for the duration of the loan, with the government of the recipient country as its counterpart.

2.1.1 Botswana: four successful and viable projects predating Helsinki

All four projects in Botswana predate the Helsinki arrangement. The projects evaluated here therefore date from the late 1980s or early 1990s. Both before and after this period, Botswana enjoyed considerable economic growth, and has access to commercial credits. It has been argued that the country's capability to administer aid is an important factor in explaining this achievement. In Botswana, the Public Service and Development Fund is the central authority for co-ordinating foreign credits, including mixed credits from Norway.

The mixed credit projects in Botswana were all economically, and, probably, commercially viable projects. This is partly explained by the fact that all the projects were linked to commercial activities such as power supply to tourist destinations and enhanced telecom links to diamond mining centres. The electricity project and the three telecom projects were of national significance, and although the primary aim of the projects did not include providing needy communities with the services, they did prove of benefit to several communities. The projects were an integral part of the development plans of Botswana, and funding was channelled through the Public Service and Development Fund. This ensured co-ordination between the externally financed development projects and Botswana's own investments. The government of Botswana and the parastatal institutions concerned initiated the Norwegian mixed credit projects.

As regards pricing and cost, some of the components could probably have been acquired at a lower price on the world market. At the same time, the total project packages, including the grants, were favourable deals. With reference to end users in Botswana it is probably more pertinent to consider the value obtained at the level of the total aid package, rather than to looking at the individual price of the separate products, goods or services delivered. By the end of the 1980s, Botswana already possessed sufficient foreign exchange resources to finance their purchases themselves, but they used MC in order to take advantage of the grant component.

The telecom projects served to upgrade the technology of the national system from an analogue to digital, and the systems purchased involved the transfer of technology of a significantly higher level. The technology used in the electricity project was relevant, compatible and modern. Had the tying been less strict (in this case, it was 70 per cent) a higher level of local or regional input could have been achieved.

The four projects have been completed, and the systems are operating satisfactorily. Even though competitive bidding was not used in all projects, they do seem to comply with the rules that applied to mixed credits at the time they were initiated.

2.1.2 China: the major recipient and a strong MC partner

China is the country that has made the most extensive use of mixed credits. Of the total of 130 Norwegian mixed credit projects, 63 were carried out in China in the period 1985 to 1998. The volume of projects, measured in both value and number, has varied over the years, as illustrated below in Figure 2.2.

Figure 2.2 Mixed credits to China 1985–99, in NOK million and by number of projects. **(Source: NORAD)**

The distribution of the projects between different sectors has also varied considerably over the years. In the early 1990s the highest number was found in the telecommunications and manufacturing industries, followed by projects concerning water supply and the environment. After the introduction of the Helsinki Arrangement most telecommunications projects were ruled out because they were viewed as being commercially viable. In other sectors, mixed credits have been used to finance social projects or projects aimed at environmental improvement. These include water supply projects and purely environmental projects.

The evaluation team selected nine of the projects in China for further review. The selection was based on two main factors (in addition to geographical accessibility): the desire to examine projects in the industrial sectors most frequently receiving Norwegian mixed credits; and the desire to see projects in different regions, such as eastern and in western regions, developed and less-developed regions, etc.

The projects are spread all over China. At least one project is being run in all 17 provinces. However, only one project (less than 5 per cent of the value) has been carried out in the very poorest province, Guizhou, and four (8 per cent of the value) are located in the poor provinces of Gansu, Guangxi Zhuang Autonomous Region, and Shanxi. Most projects (74 per cent of the total value) are found in the mid-range provinces, while four (8 per cent of the value) are located in the richest and most developed provinces – Guangdong and Shanghai.

The overall impression gained from reviewing the projects is that most of the investment seems to be economically sound and is recovering its costs. This is confirmed by the interviews the

team conducted with Chinese authorities, intermediaries and banks. These sources revealed that they consider 70–80 per cent of Norwegian mixed credit projects in China to be operating satisfactorily in the sense that the projects generate sufficient revenue to pay back the credit (recovering costs). This is one of the highest rates of success of among OECD countries operating MC programs in China.

Only one of the projects visited faced such serious problems that it is likely to become an inferior investment. We found examples of delays due to technical problems with the equipment or problems with the chosen construction site. The evaluation team is of the opinion that the end users must be considered inexperienced, so future projects should be designed with sufficient robustness to deal with the most common challenges. In this regard, the Norwegian participants will often be expected to shoulder most of the responsibility. In cases in which the Norwegian supplier is inexperienced in working in China – and as one of the objectives of the projects is to promote new trade links, this may often be the case – NORAD will be largely responsible for providing appropriate *ex ante* appraisals of the projects.

The high rate of success in China is probably attributable to the administrative capacity and experience of China as a recipient country. All the projects are integrated into local and central planning processes. China also seems to use mixed credits purposefully. Instead of buying turnkey projects, mixed credits are used to purchase specific components of larger investments, such as components that are not available locally and must therefore be purchased abroad. The mixed credits are used for projects that are to be implemented anyway, but which the mixed credit instrument allows to be realized sooner. Because of the size of the overall investment, these projects are properly planned and managed. The component or part selected for mixed credit financing will be chosen with an aim of acquiring technology that fits in well with the overall package. In the view of the evaluation team, China stood out as the country with the most sustainable industrial development strategy to support the use of mixed credits. The Chinese authorities seemed to welcome the use of mixed credit as a means to encourage specific suppliers to start investing in China.

In China, the mixed credit instrument is part of a larger policy for attracting foreign capital, including guidelines for the use of credit and direct foreign investment. This policy states that medium and long-term foreign loans should primarily be used for productive construction projects such as supporting infrastructure and basic industries, and for the development of export-oriented industries that are likely to generate an influx of foreign currency. China has designed its core administrative capacity to follow up this policy in the *Ministry of Finance* (MOF), which is the governing authority for favourable foreign loans.³

Chinese end users estimated prices for equipment procured in Norway on mixed credit projects to be 10–20 per cent higher than prices obtained via international competitive bidding (one end user claimed that some parts of the equipment could be produced in China at much lower prices). Such competitive bidding methods are difficult to implement, however, due to the restrictions that apply to the mixed credit facility. Therefore, the most common method is to fix prices through negotiations. Some projects adopt limited bidding, such as tendering projects to a short-list of suppliers.

2.1.3 Indonesia: a heterogeneous and rather weak MC package

Historically, Indonesia has been the second largest recipient (by value) of MC loans from OECD countries. From March 1992 until year-end 1999, the country received MC totalling SDR 3.8 billion, or 16 per cent of the total value of all such loans. However, its relative importance has fallen since 1997, largely due to the Asian Financial Crisis and domestic political activities. Norway has provided mixed credit loans to finance seven projects since 1988, and the last credits were granted in 1995. Due to the economic crisis (1997–99), formal constraints were applied to mixed credits. All seven projects in Indonesia were evaluated for the purpose of this report.

Indonesia has traditionally been a major recipient of MC loans from OECD nations, although Norway's role has been relatively minor. From the inception of the Helsinki Arrangement in 1993 to year-end 1999, Norway's funding has amounted to just 2 per cent of the total value. This figure is on the low side, however, as MC loans from Norway were discontinued in 1995.

The distribution by sector of Norway's seven MC projects in Indonesia could best be described as heterogeneous, with no clear sectoral concentration of aid effort. Of the seven projects, only

three could be described as "successful" (in this context, "success" is defined as the project operating at, or close to, design capacity and achieving the majority of its objectives). The remainders have faced a number of obstacles that have resulted in performances well below those anticipated at project inception stage. Few projects are recovering their costs, and it would have been reasonable to expect special insurance in the project approval documents from Indonesian authorities to cover the operation costs of the projects (in line with NORAD guidelines). This is not the case.

In 1997, the Indonesian economy was struck by the Asian Financial Crisis. A rapidly declining currency, spiralling public and private sector debt, and associated political crises forced dramatic cuts in government expenditure. The consequent lack of recurrent operating and maintenance funding is clearly responsible for the inability of most of these MC projects to operate according to design capacity. However, some projects also appear to have been plagued by fundamental problems in the areas of training, technology transfer, and institution-building. These problems also had an adverse effect on operational capabilities.

The only overtly commercial project in Indonesia that Norway financed with an MC loan was a project concerning telecommunications equipment for an electricity network in North Sulawesi. The project involved the provision of new, but widely used, technology to an industry with experienced staff, and the equipment has performed satisfactorily since installation. The other five projects relied very heavily on the transfer of technology, training, and institution-building for their success, and the results largely reflect the efforts that have been made by the Norwegian supplier and its Indonesian counterpart to achieve this end. A land-mapping project and a project designed to improve educational aids for blind and partially sighted schoolchildren can both be regarded as relatively successful in this context, despite insufficient recurrent domestic funding. The locally based Norwegian operatives have established a close working relationship with their Indonesian colleagues and both projects now appear to have developed sufficient momentum for longer-term sustainability.

In contrast, three other projects have stalled, all of which are characterized by the provision of advanced technology not typically available in Indonesia. In 1996, 10 (of a planned) 12 buoys were installed at various marine locations in order to monitor the ocean and seashore ecology. Although they appeared to function satisfactorily until 1999, all but one are now in storage and consequently non-operational. The major obstacles to the sustainability of this project are: high operating and maintenance costs; the high cost of satellite access; and conflicts with the Indonesian navy regarding placement of the buoys. In addition, the end user reports that technology transfer and training have been poor.

Although the first phase of a sea-mapping project was accomplished, progress through the following two stages has stalled. This has been largely attributable to insufficient recurrent domestic funding. Some stopgap measures have been proposed, but there are significant problems relating to ongoing training, technology transfer, and institution-building, and consequently the long-term sustainability of the project is threatened.

While the logic supporting the provision of a Research Vessel under an MC loan may make it a justifiable investment, in common with the two projects mentioned above, this project is currently suffering from insufficient domestic funding for operations and maintenance, as well as inadequate levels of training, technology transfer, and institution-building. Since delivery, the vessel has spent extended periods in harbour. Lack of operational experience will only further jeopardize the long-term sustainability of this project.

Four of the seven MC projects that Norway has financed in Indonesia have stalled, either through lack of domestic operational funding, poor levels of training, technology transfer and institution-building, or poor design. The relative importance of all of these factors is difficult to determine. Certainly, the financial crisis of 1997 has led to stringent cutbacks and restrictions on domestic government expenditure, but the advanced technical nature of these four projects may also have made a significant contribution to their relative failure in terms of long-term sustainability. For all projects, no analysis appears to have been carried out to establish whether the Norwegian technology was being supplied at a competitive price.

In Indonesia, the government stipulates the total permissible volume of foreign export credits and the list of development projects to be financed with foreign export credits each fiscal year. The priority list of officially sanctioned development projects is developed by the National Planning Development Agency (BAPPENAS), and is published in its *Blue Book*. In theory at

least, these projects have been analyzed by relevant government departments, non-governmental institutions, and state-owned corporations.

As regards Norwegian MC for Indonesia, it is clear that some form of co-operation was established between the end user and the potential Norwegian supplier and/or Norwegian authorities well before the project appeared in the *Blue Book*. A close relationship also seems to have existed throughout negotiations relating to technical specifications, pricing, training, and other contractual arrangements. As a consequence, it was unlikely that the project would be submitted to international competitive bidding procedures. In addition, the field mission gained the impression that some projects were "adopted" by high-ranking individuals who took a personal interest in securing the projects' appearance in the *Blue Book*. This could have led to inappropriate investments in the context of enhancing aid delivery and encouraged corruption.

In Indonesia, the projects listed in the development plans may contain projects not related to the plan. In 1988, the first Indonesian project to receive funding from Norwegian MCs concerned an application for a "turnkey" wavepower plant. The project was valued at NOK 53.3 million (70 per cent of which was to be supplied by Norway as the MC loan). This project was not listed in the Bappenas *Blue Book*, but the project loan agreement was nevertheless eventually concluded in 1995. The Norwegian supplier's choice of location for the plant was then found to be inappropriate, and an alternative site had to be found. Work stalled when two-thirds of the loan had already been spent. The plant is still not built and is currently the subject of arbitration.

2.1.4 Lesotho: four energy and telecom projects in a small, vulnerable country

Lesotho is a small country (population of around 2.3 million) that has yet to recover fully from the political crisis it experienced two years ago. The country's administrative capacity is also considered to be limited, and the political processes lack transparency. The Southern African region is a priority area for Norwegian development aid. Lesotho, however, has not featured among the countries given priority for grant aid. The country has received mixed credit loans for four projects to a total value of NOK 304 million and a grant component of NOK 71 million.

The Lesotho Ministry of Finance coordinates all use of aid and concessionaire loans supplied as mixed credits in Lesotho. It was necessary for potential investment projects to be made part of the National Development Plan. A ceiling had been set on the total permissible level of public foreign borrowing. The projects financed by Norwegian mixed credits were part of the National Development Plan. The projects in the southern part of the country had benefited from industrial development and many town residents had benefited from the provision of electricity and a telephone service.

The electricity projects in Lesotho are examples of the need to see MC projects in a wider perspective. The Norwegian supplier erected the power lines itself, according to the contract. Problems arose in a number of areas. First, the suitability of the design to local conditions is questionable. Second, a larger part of the delivery could have been bought locally or regionally – the steel for the pylons, in particular. Third, although progress was made between the first and the second project, more emphasis could have been placed on involving local engineers and civil work subcontractors, although this would probably have necessitated alternative project design and contracts. The development effects of the electricity projects in the country could have been better with more use of local and regional input.

In the same wide perspective – and beyond the Norwegian MC projects – there are (as detailed previously) grounds for concern with regard to the potential mismatch of equipment delivered by different suppliers, and the risk of a subsequent need to re-train personnel and to build up duplicate stocks of spare parts. This was related to competition among foreign countries and suppliers involved in mixed credit projects. Such competition was seen to result in a lack of coherence in the use of the mixed credits provided. In the case of Lesotho, when the source of MC from Sweden dried up, the alternative to using Norwegian MC (and continue with the same Swedish multinational supplier) was to choose to use MC from another supplier in another country and thus to be obliged to introduce a new type of equipment.

In addition Lesotho authorities noted that projects were not always initiated locally. They told us they had found it necessary to organize seminars to raise the awareness of top officials in government and alert them to the problems associated with uncritical acceptance of donor or supplier-driven initiatives in mixed credits, as well as to the dangers of corruption.

2.1.5 Zimbabwe: acceptable, but is the planning process sufficiently robust?

Zimbabwe has one of the more diversified economies in Africa. As a result of its socio-economic history, access to economic assets and income entitlements is very unequal – in a way quite similar to South Africa – with the Africans historically being disadvantaged. At the time the field studies were carried out, Zimbabwe was experiencing the onset of political tensions that later erupted and culminated in land occupations and associated political violence of extreme severity.

A special Norwegian credit line for mixed credits was made available to Zimbabwe from 1992 onwards, with an initial size of NOK 150 million, on the basis of a bilateral agreement stipulating both conditions and procedures to follow. This seems to have encouraged Norwegian suppliers to bid for projects in Zimbabwe, and it created a more predictable environment for all parties concerned. In total, six projects with a total contract value of NOK 188.5 million and a grant value of NOK 58.8 million have been financed with Norwegian mixed credits. Two of these projects concern financing consultancy work in conjunction with the Mutare Water Supply project. The main project is the only one to have been evaluated in detail. As a result, only four of the projects have been evaluated.

The mixed credit projects in Zimbabwe appeared to have been given development priority and were processed through normal routines within the appropriate government bodies. Projects are submitted by various government agencies and departments. They are then screened by a number of committees to establish their value and alignment with national development objectives, as well as their economic sustainability. The accepted projects are subsequently prioritized and decisions are then taken as to which of them can be undertaken with the domestic funds available. Foreign funds are sought to finance the remaining projects. The Ministries of Finance and Economic Planning are the key players in this process, and the Public Sector Investment Programme provides the formal framework for the prioritization of projects.

Officially, all projects financed through mixed credits are linked with and integrated into development plans and policies. In practice, however, it is questionable whether these plans and policies are really cogent and fit for implementation. Prospective donors and suppliers seem to be able to exert considerable influence. On the one hand, formulated development plans and policies are not always followed and implemented. On the other, lobbying behind the scenes may change the outcome of the process and help promote mixed credit projects. Even if the financed projects may all be important, it is unclear how they stand with respect to development value in competition with alternative proposals.

In Zimbabwe, the end users generally initiated the projects themselves. However, once a need had been identified and expressed to both government and donors, informal lobbying for mixed credits by officials from the agencies concerned, government officials, prospective suppliers and by prospective donors often took place in way that could blur the formal procedure. Norwegian companies and official representatives were no exception to this rule. As explained previously in the theoretical section, the indirect costs of mixed credit projects are open to possible distortions in the use of aid, with the result that the goods and services offered may be of low priority to the recipient, excessively capital intensive, highly dependent on donor technologies and import-oriented.

2.2 Analysis of development effects

The following sections are given over to a discussion regarding the development effects in terms of the contribution of the mixed credit projects to private and public sector development, and to an assessment of the extent to which the mixed credit arrangement fulfils Norwegian development policy objectives in general.

As specified in the Terms of Reference, the evaluation team reviewed theoretical works of relevance to the analysis of mixed credits. One reason for doing so is that it is almost impossible to measure the direct impact of mixed credits in terms of overall development in the recipient countries – and to measure the impact of the Norwegian mixed credits separately. Another reason is, naturally, to establish guidelines for selecting the issues for the evaluation that are likely to be of highest importance to promoting private sector development.

The main conclusion drawn from the literature by the team is: neo-classical studies on economic

growth conclude that a large share of the production and income growth experienced by wealthy countries can not be explained by increased stocks of inputs; labour, capital or land. The "unexplained residual" is attributed to technical progress or innovation – the knowledge of how to combine inputs so as to produce useful outputs. The implication is that export of technology from developed to developing countries can greatly increase economic growth in the importing country. However, empirical applications of the theory indicate that domestic innovations are of higher importance to economic growth than are foreign innovations.⁴

Theoretical development within the field of industrial organization points to similar conclusions, emphasizing the synergy effects of integration between local enterprises that both compete with each other and learn from each other. According to the theoretical developments, growth depends on developing *national industrial clusters*. Within this framework, export credits will only serve their purpose if they are integrated into the development strategy of the importing country. Officially supported export credits to other sectors can redirect investments and know-how away from the strategic clusters, thus producing adverse effects on growth.

The team has summarized the theoretical findings and their implications for assessing the usefulness to private sector development of mixed credits in Figure 2.1. According to this view, the mixed credits should not only increase the credit opportunities and include the "soft issues" of technology transfer – such as training and competence-building; they should ideally contribute to the development of local innovation systems. Such as position implies a need to make strategic use of the mixed credits to help stimulate local production and South–South trade, and contribute to strengthening the competitiveness of local national clusters.

Table 2.1. Development theory and meaning for development aid and mixed credits

Period	Economic growth presupposes	Development aid should	MC credits should
1950-	Capital	Supply capital	Increase credit opportunities
1980-	Technology	Transfer technology	Include training and competence-building
1990-	Innovation systems	Transfer technology, but build indigenous innovation systems while doing so	Increase local procurement and enhance South–South trade

In operational terms, the team uses the following criteria to assess the contribution to development in the recipient country:

- The MC projects are given priority in a sound (undistorted and informed) national planning process – or at least help to form such a planning process;
- The projects mobilize resources for development;
- The projects contribute to technology transfer and institution-building;
- The projects contribute to increasing employment creation, or South–South trade.

The authors would now like to turn to a discussion in which the various projects and countries visited are analyzed for evidence relating to each of these issues, as well as for contributions to Norwegian development aid objectives.

2.2.1 Initiated locally and part of a plan, but is the plan good enough in itself?

As the Helsinki Arrangement limits the projects eligible for MC financing to the commercially

non-viable ones, it becomes imperative that the projects have the capacity to recover costs, and are among the projects given high priority in the recipient country. A main issue, of course, is to establish the quality of the planning process. Earlier in this chapter, it was stated that all projects are *de facto* inscribed into the national development plan. The team also found that, on initial inspection at least, all projects appear to have been initiated by the end user.

In several cases, however, we were informed that suppliers play an active role in promoting projects. Suppliers also begin lobbying at an early stage of the project cycle. One Norwegian supplier stated that networking was needed from an early stage – through local agents as well – in order to ensure that interesting projects for potential clients are included on the national priority list. Relations with the end user had to be built before tendering started. In some cases, Norwegian authorities have become involved at an early stage to help ensure the inclusion of projects that could be delivered by Norwegian suppliers. The team was given examples of incidences of such promotion work being carried out by NORAD, The Norwegian Trade Council and the Norwegian embassies.

Suppliers and intermediaries scan projects that are potentially eligible for mixed credit support and approach prospective clients to help negotiate projects through their governments and respective embassies. One representative for a national planning unit was of the opinion that mixed credits are strongly supply-driven in contrast to commercial loans. Even in China, where the planning process seemed to be strictly managed by the authorities, suppliers need to play an active role to ensure that their projects are given priority.

These observations do not necessarily intimate that the local planning process is distorted. Early involvement by the actors might be a response to the imperfect information held by the end users and recipient countries. Such early intervention may, in fact, be necessary in order to rationalize the planning process. Donor countries often target particular sectors and need to match these with projects. Nonetheless, early involvement can distort the planning process and favour projects that fit the priorities of donors. The team was told that recipient authorities are influenced by the existence of mixed credit arrangement from various donors, but it is difficult to determine the degree – if any – to which this fact put the plans in jeopardy.

The general impression of the team is that the domestic planning process in China is solid and not biased by the early contacts. It was also stated that the projects would be undertaken regardless of Norwegian involvement. In the African countries, the situation seems more complex. In most cases, the planning process lacks robustness and may in fact benefit from stronger involvement by the donor countries. In Indonesia, the planning process seems to be more open to external influences, a situation which is fuelled by the fact that the MC arrangement requires potential projects to be integrated into the national plan.

The field study made it clear that in practice the policy implementation processes are disjointed. Firstly, the macroeconomic environment may be compromised and jeopardize the whole development strategy. Secondly, various complementary parts of the development plan that are required to produce the intended effect may not reach implementation. Thirdly, the prioritization process may be biased towards responding to the supply more than to the demand, and even be distorted by corruption. A combination of these factors seems to contribute to the low achievement of projects in Indonesia, for example.

2.2.2 Mobilization of additional credits for development

When used properly, foreign borrowing can be an effective way to add resources to a domestic economy whose need for external resources is beyond the country's current export earning capacity. Foreign borrowing also can be utilized to bring about increased growth in the economy if combined with new technology and technical assistance. The combination of these resources can help to expand the productive base, increase domestic savings, and increase the pace of capital formation.

The market does not always provide adequate information and insurance for exporters to be fully aware of the associated risks (such as default of debtors, refusal of goods on delivery, or risks of a political nature), and therefore limits their ability to cover them. In other words, an optimal allocation of resources can not be achieved because the volume of export to high-risk markets will be too low. This implies wastage of resources in both the exporting and importing countries: the exporting country can not fully utilize its comparative advantage in production, and the importing country can not gain access to the "best" products in terms of price and

quality. A negative effect on economic growth in the importing country results from the lack of imported goods (especially capital equipment) required for increasing the domestic production. Therefore, donor guarantees may be needed to enable developing countries to access the external resources necessary.

Mixed credits allow countries to finance more projects than would otherwise be possible if they were forced to rely on domestic capital or commercial credits alone. This means that projects given second-highest priority can be implemented before they reach the level of prioritization that makes them eligible for funding via domestic capital. The grant element subsidizes the interest rates, thus allowing the country to increase its total foreign borrowing. In this way, the MC increases the volume of capital presently available for development projects.

The 28 projects studied received a total of NOK 685 million in grants from Norway, and the total contract value of the projects amounted to NOK 2,150 million, or three times the contract value. This ratio varied between the countries, as the LLDC-countries are allocated a higher grant element. China obtained nearly four times the grant value in projects (381 per cent), Indonesia almost the same (360 per cent), while Botswana and Lesotho obtained twice as much in project value than the grants allocated (210 and 240 per cent respectively). Zimbabwe tripled the capital outcome of their grants (331 per cent). This evaluation found that the countries visited that enjoyed proper macroeconomic management at the time of our survey – China, Botswana and Lesotho, for example – have obtained positive economic return on this invested capital.

The other side of the coin is that a heavy burden of debt can have negative economic effects. One of the problems with mixed credits, as with other forms of foreign borrowing, may be that the individual loan tends to be evaluated on a project-by-project basis. As a result, insufficient consideration may be given to the aggregate-level effects. The primary issue in debt management, however, is not the size of the debt itself, but the productivity of the use of the funds. Therefore, to defend the additional resources spent, the mixed credit projects must be carefully evaluated for their capacity to service their debt, or, as defined above, the *post-grant cost recovering viability*.

Another line of argument is worth mentioning. A mixed credit project combines resources from donor (the grant), a foreign credit, and the local contribution. This last is sometimes misleadingly viewed as an additional resource. In some cases, such as the Norwegian MC projects in China, it is common for 60–70 per cent of the total project investment to be derived from local capital sources. The argument was made, *inter alia* at the Fafo workshop for Norwegian suppliers, that mixed credits have additional development effects as compared to grant aid because they attract local resources, which are a prerequisite for the project to qualify for credit. Local government officials in China pointed out that as Norway favoured the use of mixed credits within infrastructure construction and environmental protection, the arrangement has served to attract local strategic capital to these two fields.

However, this may be misleading, as the local contribution is not really "additional" for the recipient country. A local contribution means that the resources spent on the MC project could alternatively have been invested in other projects. Only if the MC project yields more than the alternative use of the local resources can we consider additional development effects to have been obtained. If a project financed by MC is unsuccessful, both Norwegian funds and scarce local resources will have been used inefficiently. Furthermore, as the credit is added to the country's total debt, it may influence the availability and cost of other credits.

2.2.3 Training and technology transfer, limited institution-building

It is possible to distinguish between four levels of technology transfer: firstly, technology as inherent in the transferred object; secondly, training associated with increasing the competence and know-how of the end user to enable this user to achieve optimal operation and maintenance of the supplied goods; thirdly, the supplier may transfer the technology in such a way as to enable the end user to reproduce and extend it to other projects and products; fourthly, the supplier may help with institution-building, which contributes to the more long-term development of a given industrial sector or cluster. The fourth level makes the greatest contribution to economic growth and development.

As regards the majority of the projects, transfer of technology involved transferring equipment of a higher technological level, thus permitting more sophisticated output of a higher quality. Although the contracts of most of the projects stipulates the transfer of technology, such

transfers appeared rather weak. Issues pertaining to property rights, absorptive capacities of the recipients, and market size limited the transfer of technology. An earlier evaluation of technology transfer concluded that transfer of technology is "generally not much planned by the private firms. It occurred ad hoc and often the firm in the developing country had to pay a large share of the costs. Much of the technology transfer took the form of transfer of documents and technical information" (The Norwegian Ministry of Foreign Affairs 1998:58). The findings of the team confirm this.

In the majority of the cases, the technology delivered was deemed to be relevant and suitable by the recipient, and the informants rated Norwegian mixed credit projects more favourably than those of other supplier countries. Indonesia was the exception. Four of the seven projects have stalled, and the advanced and sometimes experimental technical nature of these four projects may have made a significant contribution to their relative failure in terms of long-term sustainability.

The evaluation found that some provision of training was built into the majority of the MC projects.⁵ Such training was usually focused on operation and maintenance of the supplied equipment. In some cases, as in the water and telecommunication projects in Africa, the training was extended to include business and operational aspects in the recipient country, helping to introduce elements such as new tariffs and market relations. In general, the long-term and industry-wide institution-building seems to have been limited. The field assessment is that institution-building in China is not significant. In Africa, there is some, but opportunities are missed. In Indonesia, there are many failures, a fact that reduces the effect of institution-building generally.

The evaluation team made the following additional observations:

- Several end users emphasized the fact that a major learning and training element consisted of contact and co-operation with the Norwegian supplier during the establishment and implementation of the project. End users in China in particular noted that they have learnt modern business methods from the reasoning and business negotiation carried out by the Norwegian companies. They expressed the opinion that the conduct of Norwegian staff and experts provided them with modern role models.
- End users tended to describe medium-sized Norwegian exporters who are relatively new to such exports as the those who were most professional and open to training and technology transfer.
- Turnkey projects restrict the institution-building effect. Chinese actors "cherry pick" the technology required for larger domestic investments while elements that can be built in China are actually built there. The two are then integrated into the bigger project. In contrast, Indonesian and Southern African projects are often turnkey projects with very little domestic input.

2.2.4 Indirect industrial development effects

The terms of reference called for an evaluation of different aspects of what can be termed industrial development in the South. This concept includes employment creation, South–South trade, and the use of local suppliers.

The direct employment effects of MC projects are often small and sometimes negative. In China, in most cases, the projects produced limited job opportunities (from 6-8 persons to 50-60). In one case, the introduction of advanced equipment caused a lay-off of 60 per cent of the personnel in the original company. In all the countries visited, jobs created in conjunction with the MC projects were mostly temporary ones during the construction period.

However, a limited or negative effect on direct employment is not a suitable indicator of industrial development. Firstly, most MC projects are within the infrastructure and environmental sectors, and they target the delivery of higher quality and more reliable services such as telephone networks, electricity and water. Clean water may, for example, prepare the ground for food and beverage industries. The indirect employment effects may be more significant, but these are difficult to substantiate. Secondly, and probably a more important factor to assess for MC projects, the creation or loss of jobs may depend on whether or not local or regional deliveries are included. Purchasing goods and services locally or regionally secure local or

regional production. In addition, it is likely that the Norwegian company require that the supplier comply with international standards and procedures, thereby promoting learning.

It proved difficult to find evidence of increased regional trade or South–South trade directly attributable to Norwegian MC projects. In general terms, much more could be done to encourage the use of local and regional supplies and technical expertise. The turnkey nature of most projects appeared to discourage the use of local supplies. As examples:

- In China, although most commercial contracts that stipulated 50 per cent of the procurement was to be conducted outside of Norway, this almost exclusively implied purchasing equipment from other industrialized countries;
- In Indonesia, even such trivial items as cutlery and tableware for the research vessel were supplied from Norway;
- In Southern Africa, pylon steel was bought from Norway, apparently due to the requirement of obtaining 70/50 per cent of the delivery from Norway. A local supplier was not considered, and the steel could also have been purchased in Zimbabwe.

The reduction of Norwegian input from 70 to 50 per cent on condition that 20 per cent be purchased in the recipient country has been a step in the right direction. It seems mandatory, however, to refine the rules and the practices and to clarify the meaning of local input. NORAD states that the definition "local" may include neighbouring countries. However, both in internal NORAD correspondence and in the field we found statements that limited the definition to the country in question.

This review of industrial development theory provided at least two benchmarks for evaluating the development effects of mixed credits: (1) the extent to which the MC contributes to developing clusters and industrial environments in the recipient country; and (2) the extent to which such development is undermined because the subsidies go to OECD-based industry rather than to strengthening production capacity in the developing country. to which extent does the MC contribute to developing clusters and industrial environments in the recipient country.

The question is further complicated by the fact that many capital goods would require a certain local or regional demand in order to justify investment in the local production capacity. A supply of MC-subsidized goods from industrial countries could lead to less or slower development of such industries in the developing countries. To illustrate how a narrow national focus limits the options in the African context, it is sufficient to compare the size of the African economies with the size of the economies of Norwegian counties (see Table 2.2).

Table 2.2 BNP for Norwegian (Nor) counties and selected African countries, in USD million in 1993. (Sources: SSB, World Development Report)

<i>Nor County</i>	<i>Rank Nor</i>	<i>BNP in USD</i>	<i>Country</i>	<i>BNP in USD</i>	<i>Rank Nor</i>
Oslo	(1)	20142	Zimbabwe	4986	(5)
Rogaland	(2)	8266	Botswana	3813	(10)
Hordaland	(3)	8349	Zambia	3685	(11)
Sør-Trøndelag	(5)	4566	Tanzania	2086	(16)
Vestfold	(10)	3334	Malawi	1810	(17)

Aust-Agder	(18)	1685	Mozambique	1367	(18)
Finnmark	(19)	1204	Lesotho	609	(19)

2.2.5 Norwegian aid objectives

According to NORAD, MC projects should preferably – but not exclusively – be carried out within sectors of priority for Norwegian aid in general. Support for individual projects should be considered within the context of total Norwegian private sector development support to the recipient country in question. The evaluation team would make the following observations:

- The geographical distribution of mixed credits has varied from year to year. Over the period as a whole, it can be argued that the MC instrument has complemented grant aid as it directs funds to countries not eligible for grant aid (such as China, Indonesia, and, to some extent, Lesotho). However, Norway has also been more successful than other countries in directing mixed credits to the African region and in linking the instrument to grant aid projects and national or regional programmes.
- Generally, the MC projects tend to be biased in favour of formal sector, urban-based economic activities. The benefits are primarily enjoyed by high and middle-income consumers and commercial users. A bias towards the richer, more developed coastal provinces existed, in the case of China for example. For most of the projects, links to development objectives such as poverty alleviation, employment creation, and local industrialization, were rather indirect and incidental.
- MC seems to be a suitable tool for promoting environmental protection and most projects had at least some positive effects on the environment. None was found to have significant negative effects in this regard. The *ex ante* evaluation of environmental effects was comprehensive in the case of several projects, and probably contributed to the positive picture. In Indonesia, positive environmental effects were achieved by three of six projects. In China, at least five of the nine projects have a direct positive impact on the environment.
- The promotion of labour standards and health and safety standards was introduced into the guidelines only recently and did not affect the projects studied in this evaluation. Other studies suggest that improvements in labour standards follow the increase in involvement of foreign firms (Andvig, Grimsrud and Melchior 1997). The team found only few examples of problematic labour relations and questionable standards. In China, the advanced equipment has improved working conditions and safety for workers.
- Effects on gender are more systematically evaluated *ex ante*, but are then discarded as irrelevant. The team did not find any evaluation *ex ante* or *ex post* of special effects on increasing economic opportunities for women. Nor did the team find a single project in which economic opportunities were enhanced for women beyond very general effects for the population. Mixed credits do not appear to be the right instrument in this area.

³ After the organisational reform of the government in 1998, the authority over the use of favourable foreign loans was transferred from the Ministry of Foreign Economy and Trade and the People's Bank to the Ministry of Finance. The MOF is now responsible for the overall management of and arrangements concerning favourable foreign loans, the co-ordination of using multilateral and bilateral loans, and project reviews. Together with the State Development Planning Commission, the MOF leads negotiations with foreign parties and is responsible for the management of refunds and the procurement of equipment.

⁴ Having established that export of technology from developed to developing countries can foster economic growth does not necessarily imply that economic theory supports export credits as a means to increasing economic growth in developing countries. Firstly, there may be more efficient ways to transfer technology than through the use of export credits, for instance, by providing the recipient country with money to buy the best available technology available. Secondly, export credits may not only facilitate the transfer of goods and technology that would not otherwise taken place, but also, as an effect of the tied element, provide incentives to avoid adverse resource allocation as this will have a negative effect on local growth.

⁵ The training component may be built into the main contract, but just as often, agreement is reached separately under the NORAD programme to support training in connection with export, according to which NORAD may allocate 3 per cent of the contract value (maximum USD 1 million) to training. Several, but not all, projects benefited from such additional support.

3 The Norwegian Institutions and Suppliers: effects in Norway

This chapter describes the Norwegian institutions and suppliers involved in the mixed credit arrangement, and analyzes the effects of mixed credits in Norway. It also contains an evaluation of the efficiency of the Norwegian institutions involved and summarizes the team's findings and views regarding the tendering processes and pricing. The information is based on views expressed during the Fafo workshop for participating organizations, and on interviews with core personnel in four of the participating companies. These four companies represent 35 per cent of the mixed credit volume. The third source of information consists of interviews with the Norwegian institutions concerned.

The main findings and conclusions of the evaluation team are:

- The core suppliers in Norway are few; several companies are involved in one or two projects. In all, 42 companies have received mixed credit financing and ten have received 70 per cent of the funds.
- The direct employment effect in Norway of the mixed credit arrangement is not significant. Other effects seem more interesting. The MC instrument has had a noticeable effect in bringing Norwegian companies to markets in the developing countries and thereby increasing their competence in dealing with and on these markets. Some companies have been able to use the competence and experience gained from these export engagements for further internationalization.
- Engineering and the design of systems and processes using standard components are more important than manufacturing capital goods for export – which the instrument is normally designed to promote. This fact paves the way for adapting the MC arrangement better to suit such companies and, at the same time, to target more sub-suppliers from south.
- The MC arrangement is managed as an integral part of NORAD's systems for appraising development projects and is submitted to the same appraisals in the area of development effects as other grant or credit projects. NORAD is no longer a direct partner in MC contracts, preferring to leave this role to commercial banks.
- The documentation of the projects is not always complete or consistent.
- Tendering and competitive bidding is not widely used, and informants in the recipient countries assess overpricing (relative to international competitive bidding) as reaching levels of up to 20 per cent.
- *The evaluation concludes that the MC arrangement has had reasonable effects in mobilizing Norwegian industry, but is now below a viable size. The effects on jobs creation in Norway are insignificant. The effects in terms of opening up new markets, building up domestic competence and international experience are noticeable, but these are scattered and not really sustained at the present budget level.*
- *The evaluation concludes that the control mechanisms set up to manage the arrangement function reasonably well, but there is room for improvement. More flexibility in the arrangement with regard to the purchase of goods and services locally would, in some cases, enable the companies involved to be more competitive. All in all, a revision of the core elements in the arrangement is necessary if the arrangement is to be continued. Alternatively, other means could be devised for obtaining the desired effects, given the nature of the Norwegian industrial base.*

3.1 Concentrated on few suppliers, limited impact in Norway

Overall, 42 Norwegian companies have received mixed credit financing since the inception of the arrangement in 1985. These companies are listed in Table 6.1. As the table shows, there is both concentration and spread. Most companies have been involved in one or two projects (26 suppliers), nine companies have been involved in three to five, while seven companies were involved in more than six projects each. The most active (Nera ASA) has implemented 18 projects with mixed credits. If we add the projects of Kværner (in reality six units) and ABB (two units), these three have implemented nearly one third

of all projects. In terms of monetary value, only five companies have spent more than NOK 100 million each and ten of the companies have received 70 per cent of the total financing of the arrangement. Subsidiaries of non-Norwegian based multinationals have utilized close to a quarter of MC funds.

Is this result small or good? One line of argument could be that in relation to the total number of Norwegian companies, very few have participated in the arrangement, and the mixed credit instrument therefore seems to reach only few suppliers in Norway. In addition, there are grounds for pointing to the fact that the number of core companies participating is even smaller, as only 16 companies have been involved in three or more projects. Another line of argument would start with the limited and falling size of the total amount of available funds and add that the funds have been allocated to only a few sectors of development. Looking at how many Norwegian suppliers are active within these sectors and are therefore eligible for contracts, it may be argued that the achievement in terms of spread is better. It is also interesting to note that a relatively large number of service sector companies (consultants, engineering and research) are represented, reflecting their weight in the Norwegian industrial base.

The mixed credit arrangement is intended to have positive effects in Norway regarding the following issues:

- Generation of employment in Norway;
- Building competence, know-how and international experience;
- Opening up for new business opportunities; and
- Creating support and understanding for Norwegian aid policy in Norway.

The effects on employment in Norway are difficult to estimate. The direct effects are probably not significant as the total volume of the mixed credits projects is relatively small.⁶ International experience gained from mixed credit projects seems to be more important, particularly for the small and medium-sized companies. Several of the Norwegian companies that used mixed credits subsequently made further investments in developing countries – including some that are part of multinational firms and some medium-sized Norwegian companies.

Table 3.1 Companies that have received mixed credits financing since 1985 (including "Miljøbevilgningen" – environmental allowance). (Source: NORAD)

Companies	Mixed Credit paid NOK million)	Number of projects	Percentage of total volume
Nera ASA	345	18	18
ABB	252	10	14
Bloms Oppmåling A/S	153	3	8
Linjebygg A/S	115	3	6
Ericsson Telecom A/S	108	5	6
Kværner A/S	80	11	4
OCEANOR-Oceanographic C	69	3	4
Alcatel Telecom A/S	65	8	3
Mjøllem & Karlsen	64	1	3
Elkem	63	4	3
Solberg & Andersen	58	7	3

Stord International	49	5	3
Jacobsen Electro AS	46	2	2
Braillo Norway	45	1	2
Norconsult International	41	8	2
GOODTECH AMI AS	40	4	2
Owens Corning A/S	34	1	2
Rieber & Søn A/S	31	6	2
Unitor Ships Service	27	1	1
Degremont Norge	26	3	1
Finsam AS	24	2	1
Norcontrol Systems AS	19	2	1
Aquamarine Systems AS	11	3	1
Indonor A/S	10	1	1
Norsk Data A/S	10	1	1
Normarc a,s	9	2	0
Hollung Stålindustri A,	8	1	0
Team Tec AS Incinerator	8	1	0
Alcatel Kabel Norge A/S	7	1	0
Norway Registers Develo	7	1	0
Stentofon AS	6	1	0
Veritas	6	1	0
Statkraft Engineering a	5	1	0
Siemens AS	5	1	0
Vingmed Sound AS	5	1	0
Frank Mohn Flatly AS	4	1	0
Maritime Hydraulics A,S	3	1	0
Dyno Industrier ASA	3	1	0

Norsk Hydro A/S	3	1	0
Hafslund Nycomed AS	1	1	0
Mercur Subsea Products	1	1	0
Scancem International A	0	1	0
Total	1,865	131	100

Text box 3.1: company cases regarding entry into MC and follow-up

1. Mixed credits led to the assimilation of experience from developing countries, but the competence was not sustained.

One Norwegian subsidiary of a large multinational company entered into MC projects after credit had dried up in other OECD countries where the company had production facilities. Using mixed credit projects, the Norwegian subsidiary built up regional competence on Africa over a period. However, as MC opportunities also decreased in Norway due to the restrictions on telecommunications and the overall reduction of the volume of the credit, this competence was gradually lost. It seems that the company never fully integrated these markets into its business strategy and found it too expensive and risky to continue with the present low levels of mixed credits. Therefore, in this case, they did not create significant short or long-term employment in Norway.

2. Mixed credits helped a company build up a more permanent pool export knowledge.

This was a medium-sized engineering company with a long history of projects in developing countries financed through grants, parallel financing and then mixed credits. Some projects had been undertaken by an umbrella organization for projects in the development aid market for all the Norwegian suppliers in this branch. The company was first awarded a contract from the World Bank, through which it built up local knowledge and contacts, and it subsequently obtained two large Norwegian mixed credit projects. The company subsequently carried out smaller projects on a commercial basis and developed local production capacity in the recipient country. The competence acquired also helped the company to enter other non-OECD markets. Production has been moved from Norway to such areas. This internationalization has probably helped secure the activities in Norway.

3. A company developed its water process division through mixed credit projects, enhancing both its technical and marketing skills.

The company was introduced to mixed credits through an American intermediary seeking export possibilities under the Norwegian scheme. The mixed credits have been the only channel for exports from the firm's water process division. Without the MC facilities, a similar export orientation could not have been undertaken, as it would have exposed the enterprise to a much higher level of risk.

4. Mixed credits were used strategically by a multinational firm.

A Norwegian subsidiary of a multinational company, where the multinational parent company co-ordinated the use of mixed credits strategically from different OECD countries both to expand into new markets and to secure production volume in Norway (and thereby protecting Norwegian jobs). The production unit in Norway was later closed down. In several of the developing countries, export had been followed by investment in local production.

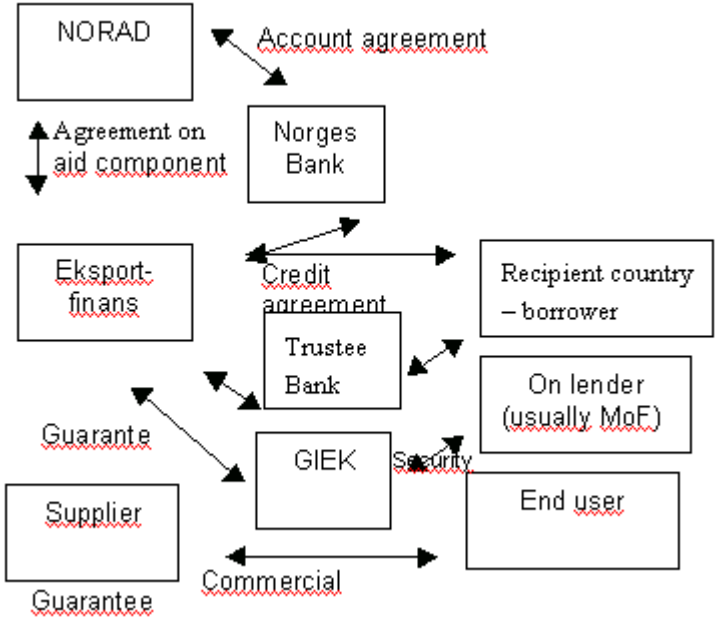
The small size of the Norwegian industrial base, particularly when it comes to the manufacture of capital goods, has an effect on both the types of projects chosen by the companies and the way in which the procedures are implemented (the latter point is discussed in more detail below). As production of capital goods is very limited, the typical value added for Norway by the MC projects stems from the engineering and design of systems and processes rather than from the export of manufactured goods. Deliveries are often based on standard components imported from other industrialized countries. The team was told that some of the companies faced complications due to the rule stating that 70 (later 50) per cent of the content of the delivery had to be Norwegian, and were therefore obliged to increase the volume of Norwegian services included and/or switch to the use of more components manufactured in Norway. These observations are illustrated by descriptions of four cases of entry into and use of mixed credits, presented in text box 3.1.

Theoretically, it has been argued (Jepma 1990) that under given conditions net export creation from tied aid is limited – that the export financed by the mixed credit would have taken place regardless of that financing. This effect is often called "fungibility". The concept of fungibility is based on the fact that companies involved in mixed credits are already well equipped to conduct these export projects alone, and the export would therefore have occurred anyway. This conclusion repudiates the argument that aid-financed export is the cause of a company's export activities, i.e. that the aid-financed export is the result of the company's previous export activities. The relevance of this argument in Norway is limited to the subsidiaries of non-Norwegian-based multinationals, but, as mentioned above, these have utilized close to one quarter of MC funds.

3.2 Norwegian administration of mixed credits

MC projects require administration of both the aid component and the commercial credit component. NORAD administrates the aid component, and the Norwegian Guarantee Institute for Export Credits (GIEK) administrates the credit together with a commercial export credit bank.² The Department for Industrial Co-operation is responsible for mixed credits within NORAD. NORAD's local field officers handle much of the contact with the recipient country and the end user in countries where they are present. The Credit Approval Committee (*Kredittutvalg*) section within the Department approves all MCs. NORAD's supreme project approval committee (*Bevilgningsutvalget*) decides on MC projects amounting to NOK 15 million or above.

Figure 3.1 Contract arrangements for Norwegian Mixed Credits



Two types of guarantees are available, depending on the recipient country in question. GIEK runs the general export guarantee on a commercial basis (China and Zimbabwe up to the present, and Indonesia before the Asian Financial Crisis). Guarantees GIEK provides to other developing countries (including the other countries we studied) are backed by a special fund of NOK 300 million. The ceiling for commitments and guarantees issued against this fund has recently been increased from NOK 900 million to NOK 1,500 million, as the ceiling has been fully utilized during the last 2–3 years and thus has limited the number of new MC

projects.

The evaluation team found some areas in the administration of the mixed credits that could be improved. On the other hand, some aspects that could be considered weaknesses become quite understandable when the constrained resources available and the cost of establishing mixed credits are taken into account. It also appeared that NORAD takes on more of a "broker" role than seems to be intended in the regulations and guidelines – a fact that seems understandable for reasons listed below.

The evaluation team conducted interviews at several levels in NORAD and the government ministry to assess how NORAD has established institutional routines and systems to evaluate the quality of the mixed credit projects in terms of development value in the recipient country. At ministerial level, some concerns were expressed regarding whether the arrangement was submitted to sufficient internal control mechanisms to ensure fulfilment of the stipulated development criteria.

The evaluation team found that mixed credit projects are submitted to the same evaluation and appraisal procedure in NORAD as any other credit, involving the use of the same checklists and the same units within NORAD. Bigger projects with a grant element more than NOK 15 million obtain final approval from the Director. Notifications questioned by the OECD are reported to the political level of the Ministry.

End users and recipient countries both stressed the time and costs involved in establishing MC agreements. It normally takes more than a year from the time the end user decides to go ahead with a particular investment to the signing of the purchasing contract. In principle, the cost of establishing a MC is equal to the cost of an ordinary export credit, i.e. 13 per cent of the value of the loan as credit insurance fee to GIEK.⁸ Legal fees and other costs are estimated to add NOK 200,000 regardless of the size of the credit. Given the relatively small credits involved, the result is a relatively high unit cost for administration.

Taking into account the size of the mixed credit arrangement, and given the relatively small industrial base in Norway, NORAD needs to ensure that appropriate projects and suppliers are found. High up-front costs on both sides make this role important, as does the need to ensure that the available funds are taken up in a given year. However the role of broker can also be problematic. Early involvement by NORAD may detract attention from the recipient country's responsibility for strategic planning. Close contact between NORAD and Norwegian suppliers may lead to a lack of transparency and to pressures from the suppliers.

The evaluation team found the following deviations from stated guidelines:

- Before the Helsinki Arrangement the *ex ante* evaluations of projects vary substantially. Some projects were initiated without extensive evaluation, while others (for example, in Botswana) were well documented. After 1994, documentation gradually improved. Nevertheless, the evaluation team has not been able to locate feasibility studies for a number of projects, while for others, the content of the documents varies.
- NORAD's internal guidelines call for an *ex ante* evaluation of development and macroeconomic effects (cost-benefit analysis and analysis of the debt situation in the recipient country). Often, however, the documentation deals with development effects through generic statements only. The team learnt that in NORAD, aid assessment is normally undertaken only in the case of projects being challenged in the OECD.
- The official policy is to implement not only the letter but also the intent of the Helsinki Arrangement. Challenges are to be avoided, but they do occur. Instances were found in which NORAD has argued for not exceeding SDR 2 million per project. In one case, this was done to avoid the condition of non-commercial viability. Project documentation from Zimbabwe lends support to the assumption that small projects (less than SDR 2 million) are preferred.
- NORAD's *ex post* evaluation and project follow-up have been sources of concern. The internal NORAD guidelines (1998) stipulate annual visits to the MC projects, either by NORAD, the embassies, or external consultants. The evaluation team has had access to a few evaluation reports. It is regrettable, however, that none of these reports contains wider analysis of the economic soundness and development contributions of the projects.

3.3 The tender process and pricing

One of the arguments put forward in theoretical studies concerning the impact of MCs in the donor country is that tied aid may generate interest for the industry in the donor country. The interest is generated when the supplier can, because of the mixed credit, offer terms (price, financing and delivery terms) that provide the supplier with higher profits than would be possible if the export were conducted in a free market. This might be the case in situations where tying and the MC reduce competition and give the supplying company a stronger market position. Such a strong market position may exist when the supplier knows that the project will be financed anyway – the supplier does not need to be concerned about competition or the recipient will not be overly critical regarding delivery terms.

An essential factor in the determination of the development effects of mixed credits is the degree to which tied foreign loans can be used to purchase goods and services at competitive world prices. Any price premium paid to foreign suppliers reduces the net return from the investment accruing to the recipient country.

Given Norway's relatively small industrial base, many of the projects have only one potential Norwegian supplier. Even in the few cases in which multiple Norwegian suppliers exist, early engagement of one supplier (often with the support of NORAD) leads to a *de facto* supply monopoly. Of the 28 cases examined, only four had been subject to tender. To compensate for the lack of tender and competition, NORAD commissions independent (mostly Norwegian) consultants to evaluate the Norwegian supply. These evaluations paint a mixed picture. On several occasions, NORAD has asked for clarification of what is included in the price, or called for a reduction of the price appearing in the offers.

The price is also evaluated and negotiated on the recipient side. However, the recipient often lacks appropriate price information for the supply requested. The recipient may not have the institutional capacity necessary to handle procurements effectively. In some cases, the end users claimed that the NORAD price evaluation report was not available to them. The evaluation team also came across one case in which a recipient cancelled a contract based on a consultant's report which concluded that the project was overpriced. In this case, NORAD had cleared the contract and the price of the project.

On purely theoretical grounds, mixed credits must be expected to imply some overpricing and the level of such overpricing will depend on several factors. Empirically, conclusions are difficult to establish, but informants in the recipient countries commonly expressed the view that the price of equipment purchased using Norwegian mixed credits is higher than prices obtained after international competitive bidding. Overpricing is also of concern in follow-up provisions and procurements, especially when prior contractual arrangements limit subsequent competitive bidding (see text box 3.2 for more details).

The evaluation found that both the kind of products most commonly purchased (tailor-made and specially engineered products that are difficult to compare with world market prices) and the procedures followed (early identification of supplier and reduced use of tenders) support the opinion generally held by informants in the recipient countries that prices before subsidies are higher than world market prices. The price level may be up to 20 per cent higher, but the recipient countries still obtain *net* prices, i.e. prices including subsidy, that are lower than the international bidding cost.

Text Box 3.2: the issue of overpricing

One argument put forward concerning the impact in the donor country is that tied aid may generate interest for the industry (overpricing). The interest is generated because the donor country ties the delivery from its own country, even often from a particular supplier. This tied arrangement enables the supplier to obtain prices that may not be available in a free market situation with no ties and no subsidies. In order to avoid overpricing, the mixed credit facility in Norway stipulates that international tenders should be used, and, if this is not possible, independent consultants should evaluate the prices before the final price is negotiated. However, the more tailor-made the product and the more complex the delivery, the less easy it is to establish a "market price". Other studies of mixed credits generally find overpricing. Jempa (1991) suggests that overpricing in the OECD in general falls within the range of 10–30 per cent.

This evaluation found that most Norwegian deliveries are tailor-made, complex and difficult to compare to any standard delivery on the market. International bidding is not widely used. The Norwegian suppliers are generally identified early in the process and often help initiate a project. Therefore, a certain amount of overpricing is to be expected.

The authorities in the recipient countries confirmed this expectation:

- In China, the relevant authority normally compares with ICB-prices, but not for Norway "given the nature of the programme". They estimate overpricing of between 10–20 per cent.
- In Botswana, the Ministry of Finance and Development Planning claims that the nominal price tends to be higher than world market prices.
- In Indonesia, the authorities reduced supervision and comparison as projects were unique and as no tenders were used.
- Zimbabwe claimed that Norwegian projects were overpriced and they had turned one project down after the project had been given green light by NORAD – in spite of the consultant having pointed to the high price.
- In Lesotho, the Ministry of Finance found the direct prices to be reasonable.

End users often stated that they found the prices before subsidies to be higher than market prices, but they found the net price after the subsidy to be lower than the world market price. There is no indication that *net* prices are higher than ICB. The evaluation also found that mixed credits carry costs that may account for a part of the overpricing as seen from the perspective of the end user. Such costs include some financial and insurance costs, as well as items such as additional administrative procedures and longer lead time for the processing of proposals.

NORAD commissions independent (mostly Norwegian) consultants to evaluate the offers. The evaluation

team has seen only a sample of such evaluations (none from Indonesia). They paint a mixed picture, and approximately half indicate overpricing. On several occasions, NORAD has requested clarification and asked for reduction of the price.

This evaluation has concluded that there is evidence to indicate that the prices paid for Norwegian deliveries are very likely to be higher than those that could be obtained on the international market with competitive bidding. It is difficult to define an exact figure due to measurement problems, but the team believes overpricing to reach a level of up to 20 per cent – i.e. somewhat lower than is suggested in the available literature on the subject. This estimate is based on responses collected in the field, on consultancy reports, and on the fact that some additional establishment costs are incurred. In any case, this is certainly the view currently held by our partners in the recipient countries.

Overpricing must be seen in relation to relevance and quality of the delivery. For the recipient country, the cost is only really unacceptable when the delivery is of inadequate quality or contains elements that are not strictly required. The evaluation did not conclude that this was a problem.

⁶ The grants allocated from 1985 to 1999 total NOK 1,865 million, and the team estimates the total contract value of the projects to be NOK 5,600 million (i.e. three times the grant value). During the same period, the value of all Norwegian exports (excluding crude oil and gas, as well as ships and oil platforms) amounted to NOK 1,823,977 million. Mixed credits thus constitute 0.31 per cent of these total exports.

⁷ NORAD uses Eksportfinans as its agent and has established a framework agreement with this private export credit bank. Eksportfinans signs agreements with the end users and GIEK guarantees the credits.

⁸ The loan is approximately 55 per cent of the contract value. Previously, countries not eligible for commercial export credits paid a 4 per-cent fee under the special guarantee scheme for developing countries, but this rate was raised to 13 per cent in April 1999.

4 Policy options and recommendations

This evaluation has looked at the Norwegian mixed credit arrangement from three different positions: firstly, we explored the *international context*, in particular the regulations on the use of mixed credits established by the OECD, and what other countries are doing. We described the Norwegian facility in order to evaluate its conformity with internationally established regulations and practice.

Secondly, we visited *the projects* in selected countries and interviewed stakeholders in the recipient countries. The purpose was to consolidate experience and evaluate the impact of the projects that were financed through the Norwegian facility.

Thirdly, we reviewed the *Norwegian stakeholders* in order to evaluate the administrative mechanisms set in place to administer the facility and ensure that projects comply with Norwegian development aid policies and regulations, and in order to explore effects of the mixed credit arrangement in Norway.

4.1 The Norwegian mixed credit programme has merits ...

The mixed credit programme was introduced to provide Norwegian companies with the same credit facilities as those available to their international competitors, and it was initially established as a major element in a strategy for private sector development (as defined in NORAD 1998:7, footnote 1) in the recipient countries. The arrangement aimed at broadening the participation of the Norwegian business community in development co-operation, and at its peak the programme accounted for 7.5 per cent of Norwegian grant aid. It also aimed at enlarging the total capital flowing to developing countries.

The evaluation found that the Norwegian mixed credit facility complies with international regulations, although some aspects call for clarification when we look at practice rather than guidelines and procedures. When the Norwegian Parliament introduced the instrument, it was argued that the instrument should create level playing conditions for Norwegian companies in order to induce them to take a greater part in international tenders in developing countries. The evaluation found that international tenders are not much used, and that Norwegian authorities and companies are more proactive in promoting the facility than was the intention – as we understand it. It also found that the control mechanisms should be strengthened to better prevent overpricing and unwanted competition with local or regional industries. While project implementation is satisfactory, long-term economic development effects and sustainability are not given adequate consideration. We found several investments, mainly in Indonesia, that were not economically

viable. On the other hand, the evaluation found that the appraisal and control procedures followed by NORAD are the same as for other development aid. It can be questioned whether the NORAD representation in Indonesia should have been stronger, given the total volume of the co-operation.

The projects are of acceptable standard, except for Indonesia. Generally, they are initiated locally and are part of the development plans of the recipient countries. The impact of the projects seems dependent on the quality of the local planning regime. China has good mechanisms to ensure that foreign credits are used optimally. Other countries show a more mixed picture where elements of the plan prompt questions as to whether they mostly reflect the available aid possibilities or a prioritization of development needs. For the countries with weaker planning, support to strengthen the development planning itself is called for.

The mobilization of additional resources for development is certainly an effect of the mixed credit facility. The instrument provides financing for development projects three times the value of the grant element, but the argument must be used with care: the development effect and the economic returns of the additional capital are crucial. Foreign credits have to be serviced and paid back. The additional burden is economically viable if there is a substantial gain in productivity. Domestic capital or credits are not really additional.

Economic and industrial development theory provide us with two core messages: firstly, mixed credits, as all tied aid – even when following the OECD regulations – tend to *increase* prices compared with those that can be obtained at the world market. How much the prices will increase, and who will actually pocket the interest, will depend on a series of factors. The control mechanisms installed with the aim of reducing such overpricing, and in order to maximize the development effect of the aid component, create fertile ground for corruptive practices and initiatives to circumvent control. Secondly, the export of capital alone as the chief means to promote development is outdated. Rather, what is needed is strategic competence and technology that can help build competitive industries with their more complex institutions (clusters) in the recipient countries. This will help the country to participate in and benefit from international trade and the global division of industrial labour. The implication is that the mixed credit arrangement appears to be shooting at modern targets with outdated ammunition and hence needs rethinking to better formulate its strategic intent.

This evaluation lends support to the claim that Norwegian mixed credit projects are overpriced compared to world market prices. We estimate the overpricing to be up to 20 per cent, although the estimate is uncertain. However, informants generally told us that, in spite of high costs, they found the Norwegian mixed credits to be lower than international competitive prices when the subsidy is included.

In other evaluations of mixed credit schemes, the projects are commonly found to be good, as they are professionally implemented and meet their objectives, while the assumed broader effects on development are less apparent. This evaluation was no exception. The additional or "soft" effects are mostly limited to training and to some extent to the transfer of experience and business culture. Institutional developments or more advanced forms of technology transfer are more difficult to find. Of course, this result is influenced by the measurement problems inherent in assessing the effects of such projects on broader development indicators.

The implication is that indirect purposes are better targeted by direct measures or at least if they are more explicitly integrated into the facility. For example, if it is believed that partnerships between Norwegian firms and business in the recipient country are beneficial, such partnerships should be promoted directly. The exposure of local firms to the international market can be promoted by increasing the proportion of goods and services provided locally or regionally.

Interestingly, the winners in terms of suppliers are probably to be found among the medium-sized Norwegian companies. They tailor systems and processes to be integrated into the local environment by using basically their own competence and engineering know-how and internationally purchased standard elements. The losers are those who are doing what could be argued is what the export credit arrangement is really asking for, i.e. exporting turnkey equipment with little need for integrating the new and sometimes trial technology into the local technology context.

4.2 but it is virtually dying out

Internationally, Norway is a small donor of mixed credits as well as of untied concessionary credits. The country pursues a policy of untying aid. Consequently, the mixed credit facility has been reduced to a rather insignificant level in budgetary terms. Meanwhile, other mechanisms have been established to promote private sector development. Lately, an overall strategy for this field of development co-operation has been adopted.

The evaluation team was unable to trace significant effects of the mixed credit projects in Norway. Whatever the situation may have been before, the facility is not *today* important for domestic employment. The team found examples of companies that had benefited from the facility in terms of opening doors to new markets. However, few companies are actively involved in mixed credits today, and those who are, express serious concerns regarding the usefulness of upholding competence in using a facility of the particular size in question. Company representatives also express serious concerns regarding bidding on tenders for untied credits by multilateral organizations like the World Bank. Such tenders often consist of infrastructure projects where Norwegian companies become too small to compete, or the competition is too focused on price. The team did not investigate Norwegian bidding on international tenders, but the impression is one of little participation.

The conclusion is that, on the one hand, the mixed credit facility compares favourably with the average profile of the programmes in the OECD nations, and the investments made justify themselves except for some of those made in Indonesia. In our view, it is not a matter of urgency to stop offering mixed credits unless Norway wants to do so on grounds of principle, as a policy move towards untying aid. On the other hand, the arrangement can no longer reach its objectives with the current budgets.

The evaluation team favours untying credits, but we do not want to rule out the use of credits for development. We certainly recommend considering how the participation in development co-operation of Norwegian business and the private sector can be promoted with the aim of making Norwegian expertise, technology and competence produce growth in developing nations and increase the participation of those nations in international trade.

4.3 Expand and improve, or discontinue and replace

Norway *has an option* to choose between two policies: either to close down the facility and replace it with something else, or, to modernize and expand the facility. A third option, to continue the arrangement under its current limited form with no major changes, is not recommended.

Internationally, the trend regarding tied aid and mixed credits is taking two opposite directions: while some influential countries have decided to close their mixed credits and to untie aid to a larger extent (UK, Australia), others are actively tying and expanding their mixed credits (Japan in particular, but also Spain and Denmark). The OECD recommends untying aid and reducing or at least better controlling the mixed credits to account for market distortions, and it will probably move to further limiting the use of tied aid for the least developed nations. The general trend is a decline in mixed credits, although the overall volume is still high.

The implication is that the Norwegian argument for initiating the mixed credit arrangement, i.e. to create a level playing field for Norwegian business with regard to international competition, is still valid. At the same time, to continue the arrangement means disassociating oneself from those who argue for untying aid on grounds of principle. To continue implies a need to improve the instrument in order to defend it even better against criticism. In both cases the overall strategy should aim at mobilizing Norwegian business competence and technology in order to promote private sector growth and trade relations. Our general position is that trade relations are to be preferred to aid relations. Therefore, the principle of utilizing aid to initiate trade should be defended, and the strategy should not exclude the use of credits.

There are other Norwegian facilities already in place that can be used as alternatives to mixed credits, including investment support, technical assistance, export credit guarantees, parallel financing and support for importing to Norway. The parallel financing consists of tied co-financing with multilateral development banks on a grant basis to projects or project components where the non-Norwegian content is not more than 50 per cent (domestic Norwegian tendering is required). There are three investment support facilities of interest in this context:

- The *investment support facility* includes 50 per cent support for feasibility studies, loans and guarantees to joint ventures or the establishment of local companies, and support for investments in local infrastructure and the training of local staff. NORAD, together with GIEK, offers insurance to cover political risk relating to equity investments made by Norwegian companies.
- The Norwegian Parliament set up NORFUND to administer support for investments in developing countries. NORFUND is itself an active investor in financially sound private enterprises in developing countries, directly or through other funds.

- The export credit guarantee is a joint NORAD/GIEK facility set up to cover political risk which, since its inception in 1989 and up to 1998, has provided guarantees for 16 export and 2 investment projects (a total exposure of 500 million NOK).

We recommend that the two options be explored in dialogue with representatives of the Norwegian business community in order to reach the best policy conclusion. The reason for this is that the best conclusion should give due consideration to the Norwegian competence base, to the structure of Norwegian industry in general, and to how the companies see that their own interests and the interests of the developing nations can best be made to overlap.

4.3.1 Recommendations for scenario A: expand and improve

If it is decided politically to continue the mixed credit arrangement, it is our recommendation that it should be expanded substantially from its present low level. There are many ways of achieving this, and the environment strategy for Asia gives a good example of new initiatives that can add volume and new directions. Such an expansion would imply a need to increase the limits for GIEK in providing guarantees to least developed countries.

Within this scenario, we recommend that:

A1. the total budget available for mixed credits be increased, possibly in combination with other similar programmes as parallel financing (*Ministry of Foreign Affairs, Parliament*).

A2. the administration be strengthened with a focus on:

A2.a *ex ante* evaluations to reduce overpricing (*NORAD*);

A2.b business plans for all recipient countries, in line with the GIEK requirement for non-commercial credit countries, to improve the focus on sustainability (*NORAD, GIEK*);

A2.c the dialogue with recipient countries on their development plan to assess the quality of the planning process and protect against corruption (*NORAD, MFA/Embassies*);

A2.d strengthening reporting and evaluation to include effects in the recipient country (*NORAD*).

A3. stricter compliance with OECD regulations be secured in all phases and at all levels (*NORAD*);

A3.a policy should be defined on the use of tenders and procedures should be strengthened to follow where a tender is not used (which will probably still often be the case) to avoid overpricing (*NORAD*).

A4. private sector development effects, transfer of technology, competence and institution-building effects should be targeted by

A4.a clarifying the development criteria to be targeted (*NORAD*);

A4.b continuing the present sector orientation, but introducing incentives for "soft" issues (tying grant element to training, provision of productive technology, etc.) (*NORAD*);

A4.c giving priority to projects submitted by joint ventures or local company / Norwegian supplier partners, or project planning for South- North co-operation;

A4.d establishing a facility to finance the initial costs of establishing partnerships between Norwegian and local companies (*MFA/NORAD*);

A4.e reducing the level of tying on the condition that the substitution comprises of local and regional deliveries (avoid competition with and stimulate the industry in the recipient country or the region) (*MFA/NORAD*).

4.3.2 Recommendations for scenario B: discontinue and replace

If it is decided politically to discontinue mixed credits, e.g. on grounds of principle in order to untie aid, there are already in place both a strategy for business development in the South and a comprehensive set of facilities in terms of investment support programmes, facilities for financing technical assistance, export credit guarantees, parallel financing and import support to Norway. The experience gained from the mixed credit programme should be used to improve and strengthen these alternatives.

Within this scenario, we recommend that:

B1. alternative programmes above be improved and revised to better cater for support to business development, with an emphasis on

B1.a investments (*NORFUND*);

B1.b South- Norwegian partnerships (*MFA/NORAD*);

B1.c stimulating joint bidding on commercial credits for South- Norwegian partners (*MFA/NORAD*).

B2. Norwegian untied credits be expanded by

B2.a expanding the special fund for export credit guarantees in GIEK (*MFA/Parliament/GIEK*);

B2.b establishing a non-tied mixed credit line (*MFA/Parliament*).

B3. the multilateral institutions providing concessionary loans be influenced to give "soft" issues believed to provide additional development effects greater weight in bid evaluations (*MFA/relevant institution*).

B4. Norwegian participation in bidding for multilateral concessionary credits be stimulated.