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# EIB Operations in Ireland: European Finance for Long-Term Development

More than ten years have passed since Ireland's accession to the European Community on 1 January 1973, which brought with it automatic membership of the European Investment Bank – and the right to draw on the Bank's resources for funds to implement capital investment projects promoting economic development.

Since that time, the EIB has channelled over IR£ 1 500 million<sup>(1)</sup> – IR£ 1 289 million from its own

The substantial flow of EIB capital investment financing into Irish development reflects the close correspondence between the needs of the Irish economy and the given task of the European Investment Bank -i.e. to promote the steady and balanced development of the Community through its loans and guarantees.

At the time that Ireland joined the Community, it suffered from major infrastructure deficiencies and the problem was to be compounded by pressure placed on already inadequate facilities by demographic changes and the requirements of new industries setting up in the country during the 1970s. Deficiencies in telecommunications, roads, water supply and effluent disposal resulted in bottlenecks impeding

<sup>(1)</sup> End of September, IR£ 1 = £ 0.82 or US\$ 1.025

(2) New Community Instrument

The Commission of the European Communities has been authorised by the Council of the European Communities to contract borrowings in the name of the EEC, within limits set by the Council, for the purpose of promoting investment in the Community. The Commission decides the eligibility of projects for a loan within guidelines laid down by the Council of the European Communities. The EIB examines the loan applications in accordance with its customary criteria, decides on the loans to be granted and the terms, and administers the loans. economic growth. There was also the complex question of energy: in 1973, when the first oil-price crisis shook Europe, imports of energy to Ireland accounted for 85% of energy consumption, of which oil constituted 90%.

The Community recognised these needs during negotiations and a Protocol was attached to the Treaty of Accession relating to "certain special problems of concern to Ireland", providing, in effect, a Community pledge to promote Ireland's social and economic development. From the beginning, it was clear that the European Investment Bank would be a major component of Community support for the Irish Government's efforts towards the industrialisation of a largely rural economy and the building up of theinfrastructure necessary for longterm economic growth.

This was underlined with the arrangements made when Ireland joined the European Monetary System (EMS) in 1979: in the five years 1979–1983, the Community budget was to bear the cost of providing 3% interest subsidies on loans granted by the EIB, both on its own resources and those of NCI, in support of infrastructure investment helping to solve major structural problems,

resources and IR£ 216 million from the resources of the New Community Instrument<sup>(2)</sup> – into a wide variety of industrial, energy, communications and infrastructural investment throughout Ireland. This corresponds to over 8% of the Bank's total financing operations in the Community from 1973 to August 1984, so that Ireland – with just over 1% of the Community's population – has accounted for a higher per capita EIB investment ratio than any other Member State in this period.

> reducing regional disparities and improving employment opportunities.

> Some 86% of EIB lending in Ireland has, in fact, taken place in these five years, when 78% of loans carried a subsidy.

#### Infrastructure and Energy

Laying the foundations for future development has called for considerable expenditure on infrastructure, not only on a national level but also to improve economic conditions in more remote areas and to take account of the problems posed by rapid urbanisation, particularly in the Dublin area. Nearly a third of the Bank's total lending in Ireland, to date, has gone towards assisting improvements in telecommunications, roads, water supplies and sewerage systems, while a further 23% has been directed into energy investment.

Telecommunications: IR£ 351 million has been lent for the extension

Entries are invited for The 1985 EIB Prize see loose-leaf page and modernisation of the telephone system, notably the trunk network. Works assisted by the EIB involve over 300 000 subscriber connections, i.e. more than 60% of the telephone lines installed in Ireland since 1973.

**Transport:** Roads have absorbed IR£ 98.6 million, i.e. about 7% of total Bank lending since 1973 and have mainly involved improvements to the national road network. Railway investment financed by the EIB has been chiefly in the electrification of the suburban line from Howth to Bray, which is designed to ease traffic congestion in the Dublin area.

In the light of Ireland's development objectives and in the interest of its tourist industry, the smooth operation of access transport to the country is of great importance. To this end, the Bank has helped to finance the purchase of two ferry ships by the British and Irish Steam Packet Company and the development of harbour installations at Cork to create a deep water port for oceangoing vessels. Funds have also gone towards the construction of port installations for commercial fishing.

Water supplies and sewerage systems: Supply deficiencies in water infrastructure, particularly in Dublin, had acted as a brake on industrial

expansion in the past and Bank finance has been chiefly aimed at helping to remove this obstacle to economic development. Funds have also gone into the provision of basic facilities for modern requirements, especially important in rural areas if a viable population structure is to be maintained. Out of a total IR£ 195 million lent in this sector, IR£ 128 million was channelled into new water supply and sewerage systems, or the upgrading of existing ones, throughout the various sub-regions of Ireland. IR£ 46.5 million went to Dublin Corporation and Dublin County Council for water supply and sewerage facilities in the City, its suburbs and nearby new towns; and IR£ 20 million was lent for works carried out by the Cork local authorities to improve water supplies in the harbour area so as to meet growing industrial needs. EIB funds, totalling IR£ 18.5 million, have also contributed to drainage of farmland in Counties Meath, Limerick and Mayo.

**Energy:** This sector has accounted for a total of IR£ 346 million in loans since 1973. The funds have been directed into investment in electricity generation, improvements to the electricity transmission and distribution networks, turf production facilities and the Cork-Dublin pipeline, carrying gas from the Kinsale offshore gas field. Electricity generation projects – aimed at reducing dependence on imported oil through diversification of energy sources – include a major coal-fired power plant at Moneypoint, a natural gas-fired plant at Aghada and peatfired stations at Shannonbridge and Lanesborough.

Although energy consumption in Ireland had been growing rapidly (by 6–7% a year) up to 1979, development of domestic energy sources meant that, in 1979, energy imports covered 80% of consumption needs, oil constituting 70% of imports (as compared with 85% and 90% respectively in 1973). With the coming "onstream" of the Kinsale gas deposits, dependence on imported fuel supplies declined further, falling to 72% in 1981 and to around 61% by 1984.

The emphasis on diversification of electricity generation has meant that oil-fired plant now contribute only about 25% of total electricity production in Ireland, while gas-generated electricity comes to more than half. The present high level of gas usage for electricity may decline in the future, when the necessary infrastructure is created to channel natural gas directly to domestic and

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Solid fuel extraction Gaslines	19.0 18.0	1.5 1.4 1.0	7.4	35.0 2.3 28.0 1.9
	465.3 36.1	1 1 1 1 1 1 1 1	46.1 564	
Transport	189.8	14.7 24.0	• • • • • • • • • •	213.8 14.2
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Telecommunications		21.4 75.6	35.0	351.1 23.3
Water schemes	173.3 13.5	21.8	10.1 195	1 13.0
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Services	396.2 30.7	2.6	1.2 398.	8 26.5
Industry		23.9 2.6	1.2	· 310.8 · · · · 20.7
Agriculture	55.6	4.3		55.6 3.7
Services	32,4	2.5	of the <b>−</b> be proved	32.4

industrial consumers, but sufficient electricity generating capacity is available from other non-oil-based sources to take its place, should the need arise.

#### Industry

In the last decade, the growth of Irish manufacturing output has been one of the highest among OECD countries and there has also been a rapid growth of Irish manufactured exports: between 1973 and 1983, the proportion of gross manufacturing output exported increased from 34% to around 50%. This, however, has been largely due to the high level of penetration of the industrial sector by foreign firms as, by 1982, these accounted for 70% of total manufactured exports.

In contrast, the importance of traditional "indigenous" industries – textiles, clothing, footwear and leather – has declined sharply. Irish industry has, therefore, developed a dual structure and, despite its considerable export performance, the establishment of competitive multinationals in Ireland seems to have taken place with relatively little backward linkage into the local economy, most high-skill components required by foreign-owned firms being imported.

In terms of employment, "indigenous" industries still account for about two thirds of the manufacturing work-force and nearly 25% of all Irish manufacturing workers are occupied in the food-processing sector.

Foreign-owned firms, which operate chiefly in the chemical, electronics, mechanical engineering and health care sectors, employ about 35% of the Irish manufacturing work-force.

Out of an estimated 5 500 manufacturing concerns in Ireland, 90% employ fewer than 100 people and most EIB lending for industrial investment has been directed into meeting the needs of predominantly small-scale firms: 9.5% of total Bank lending since 1973 has gone to industry in the form of global loans, i.e. lines of credit opened to Irish financial institutions, which then on-lend the funds to support investment by small and medium-sized enterprises. With the provision of exchange risk cover by the Government (on loans up to IR£ 500 000 to firms employing fewer than 100 people), there has been a rapid expansion of Bank

lending for industry through the Industrial Credit Company (ICC). Funds for agri-industrial investment have also been made available through the Agricultural Credit Corporation (ACC).

EIB global loans provide a source of long-term, fixed interest finance for smaller scale enterprises which might, otherwise, experience some difficulty in obtaining such finance. These funds have assisted the setting up or expansion of over 1 400 ventures in Ireland since 1973, and have involved the creation of an estimated 16 000 jobs throughout the country.

Direct EIB loans to larger enterprises have included an animal feedstuffs plant, cement factory modernisation and extension projects, a dairy products plant and a joint private/State-sponsored venture for processing soft wheat. Funds have also been made available for the construction of advance and custom-built factories. Development of expertise in this field has resulted in Irish specialists advising several developing countries on the adaptation of the advance factory technique to meet their own particular requirements.

An important new direction in Bank lending was set into motion in 1982 with IR£ 21 million made available to ANCo (An Chomhairle Oiliúna) for the construction or extension of industrial manpower training centres. This was followed, in early 1984, by a IR£ 7 million initial loan for extensions to the National Institute for Higher Education (at Limerick), a third-level institution devoting a large part of its resources to technical training for new industrial needs.

#### Agriculture and Forestry

The agricultural sector, which employs about 19% of the total Irish work force, is undercapitalised by Community standards and shows a heavy dependence on milk and beef production. Possibilities of expanding and diversifying agricultural production have been limited both by socio-economic factors and by slow adaptation to modern agricultural methods and techniques within the sector. Deficiencies in rural infrastructure have also hampered progress in this area.

EIB lending in this sector has been chiefly aimed at improving the general conditions for agricultural development, although funds have also gone directly into land drainage schemes and, through the ACC, into small-scale on-farm investments. The Bank has assisted the provision

### European University Institute: The EIB awards three Scholarships

Three students have been awarded this year's European Investment Bank's "Campilli and Formentini" scholarships. Since 1978 these scholarships, which are named after Pietro Campilli, the first EIB president (1958–1959) and Paride Formentini, the second president (1959–1970), have been granted annually to students writing their doctoral dissertation at the European Institute in Florence on economic topics of relevance to the Bank's areas of operations.

The recipients of "Campilli and Formentini" scholarships for the academic year 1984/1985 are Ulrich Nötges (who gratuated from the University of Kostanz) for his research on environmental deterioration and the need for industry to respond to the problem, Francesca Di Brisco (who graduated from the University of Sienne) for her dissertation on the relationship between the balance of payments and rates of exchange, and to Serena Sordi (also a graduate of the University of Sienne) for her thesis on cyclical models representing varying rates of investment and economic growth.

The scholarships, which have been increased to FB 450 000 (about 10 000 ECUs), are administered by the European University Institute, and are intended to cover the students' study costs and living expenses.

.Those interested in EIB-Scholarships may contact the European University Institute at the following address:

Badia Fiesolana Via dei Roccettini 5 I–50016 San Domenico di Fiesole (FI) Telephone: (055) 477931 of water supply and sewerage facilities to rural areas, the construction of roads and the expansion of the telephone network. EIB finance has also supported ACOT's (An Chomhairle Oiliúna Talmhaíochta) agricultural manpower training centres, which develop the skills necessary for modern farming.

Some 1.2 million hectares of land considered marginal for agriculture have been identified as suitable for forestry development by the State, which has undertaken a longterm afforestation programme covering 17% of all marginal land in the country. EIB loans totalling IR£ 56 million have gone towards helping to finance afforestation of over 60 000 hectares in various parts of Ireland as well as new forest roads, research programmes and amenities for tourism and wildlife conservation, including the establishment of game sanctuaries and nature reserves.

Investment in forest estates in Ireland will contribute not only to the preservation and extension of an important natural resource, but also to greater timber self-sufficiency in the future for Ireland – and for the Community as a whole, which currently imports about two-thirds of its timber requirements.

Since 1973, the European Investment Bank has channelled funds into investment directly linked with future economic productivity, or into the provision of the infrastructure that is necessary to support and sustain growth. Capital investment financing does not always show obvious results quickly, but it does provide the means for continued economic development in the future and this is the primary aim of the EIB, in Ireland as in the other Member States of the Community.

In the medium term, to judge from the apparent thrust of economic policy in the countries of the Community,

the highly-depressed state of the labour market looks

like continuing (with unemployment running at over

10% of the working population), while there could be

With the situation as it is, there arises the question of a possible shift in economic policy, away from a

central concern with curbing inflation towards the

rekindling of economic activity. That is in fact pre-

cisely the direction in which the findings of various

economic studies are pointing, including those of a

a further improvement in public finances.

group headed by Professor Dornbusch<sup>(2)</sup>.

## Investment in E.E.C. Countries<sup>(1)</sup>

A. Kervyn de Lettenhove and D. Weiserbs

The recovery that the economies of Europe are beginning to show after three years of stagnation shows nothing of the vigour attending the upturn in the United States: the medium-term (1985-88) prospects, on the strength of current policies, are in fact for slow growth, at less than 2.5% per annum.

At the same time, the economic policies brought into play in response to the second oil shock have led to a distinct reduction in the rate of inflation in the Community and have helped in some measure to reduce the proportions of the deficits suffered by some of the countries more hard-hit in this respect.

What clearly emerges from these studies is that inadequate demand has today replaced the cost of labour as the principal root cause of unemployment; that the danger of a fresh surge in inflation stoked by a price/wage spiral has become a slim possibility; that the risk of private investment being squeezed out by minimal recourse by the public and semi-public sectors to the financial market can be obviated by the right sort of mix in fiscal and monetary policies, and that the lingering deficits in public finances are largely attributable to the recession and would disappear with a more robust recovery.

Seen from this angle, the advantages of a new drive for growth would outweigh its drawbacks quite considerably. What the authors have in mind is that the drive should be spearheaded by the rekindling of investment in both the public and private sectors, by means of not only direct grants but also subsidised job-creation. What the studies do not however contain is any quantitative indication as to the effect that any such policies might have on the level of investment or the macroeconomic implications of any rise in that level.

Albert Kervyn de Lettenhove, Professor emeritus, has taught in a number of universities (Louvain, Namur, Nancy, Yale and MIT) and was the head of administration for Belgium's first Economic Plan. He has since worked for a number of international organisations and is currently retained by the European Community authorities as a consultant. He has for some time been chairman of the EEC's working party on the medium-term economic outlook.

Daniel Weiserbs is Professor at the Economics Faculty of the Catholic University of Louvain.

This article represents the personal views of the authors.

Without nailing its colours to the mast, the European Investment Bank decided to promote this economic policy debate by commissioning from the Economic & Social Research Institute at the University of Louvain a study covering both quantitative analysis of past investment (level, determinants and financing) and a tentative evaluation of the repercussions of any increase in the level of investment in comina years. The latter exercise was conducted with the help of the COMET model

This article summarises the main findings that emerged from the study.

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<sup>&</sup>lt;sup>(1)</sup> This is a summary devised by Professors A. Kervyn de Lettenhove and D. Weiserbs of the Catholic University of Louvain, who carried out the study proper. Anyone desiring further information on the study itself should apply to the Documentation and Library Division at the EIB.

<sup>&</sup>lt;sup>(2)</sup> Basevi, Blanchard, Buiter, Dornbusch and Layard (Centre for European Policy Studies) — "Macroeconomic Prospects & Policies for

the European Community" (April 1983). — "The Case for Unsustainable Growth" (April 1984).

## The EIB "Investment and its Financing" Prize

When the European Investment Bank celebrated its 25th anniversary in 1983, the EIB thought it necessary to raise awareness of the decisive role investments will play in the future development of the European economy. Marking the occasion of its anniversary, the Bank organised an international symposium on the theme of "Investing in Europe's Future". In November 1983 economists, politicians, Community officials, and representatives of trade unions gathered in Luxembourg for an intensive exchange of views. The discussions were based largely on the contributions eight prominent economists had made to a book, published with EIB-support under the same title as the symposium: "Investing in Europe's Future" (See EIB-Information no. 38).

At the same occasion, the European Investment Bank established an EIB Prize to be awarded every two years for a doctoral dissertation on a topic of investment and its finance. The prize consists of 10 000 ECUs and a diploma signed by the Chairman of the Prize Jury and the President of the Bank. An international jury has recently been appointed. The members of the jury are:

Beniamino Andreatta

Professor of Economics, University of Bologna

Arnold Heertje

Professor of Economics, University of Amsterdam

Jacques Lesourne

Professor of Economics, Conservatoire National des Arts et Métiers, Paris

Michael MacCormac

Professor of Business Administration, University College Dublin

Lord Roll of Ipsden

Chairman, S.G. Warburg & Co. Ltd., London

Wolfgang Stützel

Professor of Economics, University of the Saar

The members of the jury elected Lord Roll as their Chairman.

The EIB Prize and the symposium serve the same purpose: to focus attention on the importance of investment and its finance.

The first EIB Prize, for which entries are invited, will be awarded in 1985. The closing date for submission of suitable theses is 1 March 1985. To qualify, theses must have been accepted as doctoral dissertations by a university or equivalent institution in a Member Country of the European Community between January 1981 and 1 March 1985. Candidates must have the nationality of one of the Member Countries and be under 40 years of age at the date the thesis is sent to the EIB as an entry for the Prize. (For the rules governing the EIB-Prize, see below).

### **Rules for the EIB Prize**

Art. 1. The EIB Prize was instituted by the European Investment Bank on the occasion of its 25th Anniversary in 1983.

Art. 2. The EIB Prize was instituted to promote in the academic institutions of the European Community Member Countries the study of investment and its financing in all its various aspects.

Art. 3. The EIB Prize shall be awarded for a thesis on the topic of investment and its financing.

Art. 4. To qualify as an entry for the EIB Prize, each thesis will have to have been successfully presented as a doctorate dissertation to a university or equivalent academic institution in a Member Country of the European Community.

**Art. 5.** The EIB Prize may be awarded to any person having the nationality of one of the Member Countries of the European Community, who is under 40 years of age on the date the thesis is sent to the EIB.

Art. 6. The jury will accept as entries for the Prize theses by which doctorates have been obtained during the four calendar years prior to the year in which the Prize is to be awarded and up to the final date of submission in the year of award.

Art. 7. The Prize shall consist of: (a) the sum of 10 000 ECUs; (b) a diploma signed by the Chairman of the Prize Jury and the President of the European Investment Bank.

**Art. 8.** The Prize will be awarded in 1985 and 1987. The terms for its award may be reviewed following the conferral of each Prize. The continuation of the Prize in future years will be considered after the conferral of 1987.

**Art. 9.** The Prize shall be announced in the Official Journal of the European Communities and in relevant economic and financial publications published in the Member Countries at least 4 months prior to the closing date for the submission of entries.

Art. 10. The Prize Jury shall consist of six independent learned experts of high repute, to be appointed by the Management Committee of the European Investment Bank.

**Art. 11.** The Prize Jury shall make known its decision to the President of the European Investment Bank, no later than June 1st of the year of the award, in the form of a summary report, stating its grounds. The Management Committee shall award the Prize on the basis of that report. The Prize Jury shall have the option of not recommending a candidate for the award. The Prize Jury's findings shall be final and not open to appeal.

Art. 12. The name of the prizewinner will be announced and the Prize will be awarded on the day of the Annual Meeting of the EIB Board of Governors of the year in question.

Art. 13. The costs of adjudication and award shall be borne by the European Investment Bank.

Art. 14. EIB staff shall not be eligible to enter for the EIB Prize.

Art. 15. Theses can be submitted in any of the official languages of the European Community. An elaborate summary in any of the official languages of the European Community has to be annexed.

Art. 16. Candidates for the 1985 Prize should send two copies of their entries by registered mail to the EIB, 100 Boulevard Konrad Adenauer, L-2950, Luxembourg by 1st March 1985 at the latest.

#### Corporate investment and its financing

#### General study

Since 1973, the European economy has been experiencing a period of slow growth during which productive investment has been particularly affected, almost stagnating in real terms and thus declining, by reference to the preceding period, as a proportion of overall demand. The aim for the first part of the study was, therefore, to try to explain this trend and trace back the determining factors in corporate investment.

An econometric study, using data from the principal Member States of the Community, was carried out. The statistical series referred to were neither long enough nor sufficiently reliable or complete to warrant undue faith in the arithmetic findings that emerged, but various general conclusions could be drawn. In the first place, it would appear that perceptions of the future pattern of demand are the key consideration in decisions to invest. This means that the actual impact on figures of more optimistic projections hinges chiefly - and in a mechanical kind of way - on the capital/output ratio(3) obtaining at any given time. That ratio varies considerably from one country to another, tending on average to be higher in Italy and lower in France. The way it moves over time reflects changes - themselves connected with the structure of production costs - in the technology deployed in attaining the required capacity. Indeed, in Germany, the Community's premier supplier of capital equipment, it is held that an increase in equipment prices has an appreciable impact on the supply situation.

In the short term, the time it takes for companies trying to make good the difference between existing and desired capacity seems to depend not only on the extent of the gap but also on their own self-financing capabilities<sup>(4)</sup> (bearing in mind once again that the statistical interpretation of those capabilities is something to be handled with great circumspection — see above).

The relationships thrown up by this exercise reflect productive invest-

ment on the part of all companies in the manufacturing sector. Closer analysis would call at least for the drawing of a distinction between public and private undertakings, which are differently motivated in their investment decisions.

#### **Public undertakings**

Separate series exist only in the cases of France, the United Kingdom and — partially — Italy. Elsewhere, all that exists are breakdowns showing the extent of the market presence of this type of undertaking in the transport, energy and communications sectors and their predominant rôle in matters of investment (with the sole exception of the petroleum sector in the United Kingdom). This constrained us to connote those sectors with the public sector as a whole, as a first approximation.

These are sectors in which investment is typically "heavy" and slow of implementation (classic case in point: nuclear power station). Capacity planning must be done well ahead of time and erroneous demand projections will create either bottlenecks or in-built excess capacity. What we can therefore expect in these sectors is a looser connection between ups and downs in demand, on the one hand, and investment and production capacity on the other.

Secondly, public companies are the preferred instruments of aovernment policy, and their investment activity in particular can be used as the tool for combatting short-term trends, i.e. as a way of rehabilitating public finances. Here, there is a stark contrast between France and Italy on the one hand and the United Kingdom on the other. Investment in the two former has in recent years been progressing apace even though the rate of growth has failed to keep abreast of demand. At the same time, domestic savings were being eroded and external financing was rising accordingly. The upshot in France was that the self-financing rate fell to an exceptional low of

## EIB — Sponsored Conference on Investment Determinants

On 13 and 14 September 1984, the Catholic University of Louvain hosted the fifth European Production Study Group (E.P.S.G.) Conference in Louvain-la-Neuve.

The E.P.S.G. was created in July 1976 to foster cooperation and communication between European economists involved in the theoretical, statistical or econometric problems connected with input/output analysis of the production cycle. This conference, sponsored by the European Investment Bank, was addressed to the exploration of the determining factors in investment, looking not only at developments on the theoretical side but also to a large extent at empirical research, with special reference to the European Economic Community and its Member Countries.

Those attending the conference numbered about forty, many of them from academic circles, but also delegates from the Commission of the European Communities, the Bank of England, the European Investment Bank and so on. The twelve main papers presented fall basically into two categories: empirical analyses (eight), either of individual countries or of the Community at large, and theoretical studies (four).

Most were sectoral or national studies with international comparisons, but there were also novel contributions: the definition and assessment of a disquilibrium model for the demand for investment in the private-enterprise sector, with in-built provision for the various constraints that might possibly affect any decision to invest, or indeed the relationship between rates of capacity utilisation and investment, also allowing for the option of two- or three-shift working.

The general consensus was that the conference achieved a very high standard: the papers served to stimulate enlightening discussions, which were carried over into the round table debate on "Investment and Growth in Europe". Especially galvanising throughout the conference was the exchange of ideas between adherents of different schools of thought.

Shortly to be published is a special issue of "Recherches économiques de Louvain"\*, which will contain the conference papers and commentaries, pending the issue of the full proceedings of the conference in book form.

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<sup>&</sup>lt;sup>(3)</sup> Volume of output producible from a given unit of capital.

<sup>&</sup>lt;sup>(4)</sup> The self-financing rate is defined as the ratio of a company's rate of saving to its rate of investment.

<sup>\*</sup> To obtain copies of this special number, please apply to "Recherches économiques de Louvain": 3, Place Montesquieu, B-1348 Louvain-la-Neuve, Belgium.

36%, while interest charges had already climbed to 14% of value added in 1981. In Italy, the latter ratio was held down by inflation, but there was also a sharp downturn in the proportion of shareholders' funds to balance sheet totals.

Conversely, in the United Kingdom, the Government's policy in recent years has held down investment by public undertakings but made for an increase in their internal savings coefficient. External financing requirements have actually dropped.

The conclusion to be drawn is that public enterprise investment decisions do not have a great deal to do with either forward perceptions of demand or the financial situation of the undertakings in question.

#### **Private undertakings**

The second stage in the study was to look at manufacturing industry and services, where the comportment of private interests shapes trends in the sector. Here, the pattern observed for public-sector-dominated activities disappears: changes in production capacity actually reflect quite closely the trend of demand, in both the short and the medium term. This stems largely from the technology being used in these sectors (less "heavy" than in the case of public undertakings), such that the investment input required to alter capacity to the level desired is not great and does not involve long lead times.

One of the more noteworthy facts is that, even during the protracted recession of 1980-82, investment generally kept going at better than replacement level, still in 1982 running at 11% of value added in Germany and 14% in Belgium. It seems likely that the explanation lies in investment in rationalisation schemes, the volume of which remained significant. The odd man out is the United Kingdom. where investment slumped by 40% between 1979 and 1982, when it worked out at a mere 8.8% of value added, itself already 15% down on the 1979 figure.

As with the global situation, so with individual sectors: there is a statistical link between cashflow and shortterm modulation of investment. The tie is less close however than that between fixed capital formation and demand trends, and a word of caution against reading too much into it is in order.

In point of fact, identical changes in cashflow patterns can say quite different things about the comportment of companies. An improved

## Dutch MPs visit the EIB

A delegation of eleven members of the Netherlands House of Parliament visited the EIB headquarters on 14 September. The delegation, headed by foreign affairs specialist Hans Gualthérie van Wezel, was made up of representatives of the three main political parties in the Netherlands, and of two small parties, who together covered the entire range of Dutch politics.

The Members of Parliament were welcomed by A. Pais, Vice-President of the European Investment Bank and himself a former MP and Minister of Education in the Netherlands, and senior members of the staff. Discussions embraced a variety of topics related to the Bank's tasks and activities: financing in the Member Countries as well as the role the EIB plays in implementing Community development aid policy in the Mediterranean, Africa, the Caribbean and the Pacific were covered and project appraisal procedures explained. The specific role the Bank could play in financing projects in less-favoured regions and in making loans to specific investment projects was also examined.

Up to now, the Bank has been known in the Netherlands mainly for its borrowing rather than for its lending activities. Through public issues and private placements the EIB raised close to 900 million Guilders (357.6 million ECUs) on the Dutch capital market last year alone. As EIB borrowings totalled 3 500 million ECUs in 1983, at 10% of this the Guilder held fourth position after the US-dollar, the Deutsche Mark, and the yen. A position it is expected to maintain in 1984.

To meet the interest of Dutch firms for EIB loans and for procurement for EIB financed projects in the European Community and outside, a special information conference has been organised in The Hague on October 16. The visit of the Dutch Members of Parliament and the conference in The Hague have helped to increase knowledge about the EIB and make it more accessible in a country where so far investment projects financed by the EIB have been relatively scarce.

cashflow ratio, for instance, could indicate that, thanks to increases in savings of larger proportions than those achieved in investment, the company's finances have improved; equally, it might betoken straitened finances, with a downturn in savings inducing an even larger shrinkage in investment.

That said, however, empirical analysis points, other than in the case of Germany, to changes in savings preceding changes in investment, which could go part of the way towards validating the contention that the availability of own resources is a prerequisite for the placing of investment capital. That availability of funds does not however provide a complete answer: as the recent economic situation has shown, companies enjoying rising profits might opt for rehabilitating their finances (restructuring the balance sheet), rather than go for investment.

Be that as it may, the existence of a causal link between cashflow and investment hinges upon the assumption that something is not as it should be in the financial market — in particular a credit squeeze — or alternatively upon corporate perceptions of a risk element which, all other things being equal, inclines business heads to tap own resources as the first recourse.

# Repercussions of increased investment

The final step was to take a reference situation and simulate the effects upon it of increases in investment, using the COMET model.

For the purposes of the exercise, it was assumed that investment would increase, exogenously, at rates ranging between 0.4 and 0.6% of GDP, or about 3% by volume, over a variable timescale (gradual or once-for-all) and a variable geographical scatter (distribution across Member States' territory). In every case, how-ever, it was taken that the rise would be a concerted one, with the trend most pronounced in productive enterprise (4/5 and 2/3 respectively of the overall additional volume of investment).

Before looking at the main conclusions derived from this simulation, it is as well to offer a number of remarks to shed light on its limitations:

 a) To assume additional investment input as an exogenous factor flies in the face of the logic of the model; it fails to make the connection with more optimistic perceptions of demand or increased financial constraints.

b) The investment functions used in the COMET model for these simulations were toned-down versions of the estimates actually taken, and in particular were smaller than the valthat emerged from ues the econometric part of the study referred to in the first section of this summary. That approach was necessary, for the purposes of lending the model greater stability, but its effect was to scale down the multiplier effects of any increase in demand and phase them over time, all of which almost certainly means that the global effects have been understated.

c) The country-by-country breakdown of the findings should be read with some diffidence: intra-Community and extra-Community trade and the estimation of certain parameters at national level are probably all weak points in a model that is basically pitched towards analyses of Community aggregates as such.

d) The use of an all-embracing model (for want of any alternative), precludes the selection of individual sectors or projects, which in turn tends to eclipse the paramountcy in questions of investment of the choice of projects and the meticulous vetting of their economic viability.

e) Exchange and interest rates are set in a way that is exogenous to the simulations, which means that changes in the external deficit or surplus and corresponding ones in the internal financial deficit or surplus should logically alter both the ECU/dollar rate and interest rates. Always supposing that those changes are significant, there is no way of gauging their extent, or their impact either on exports or on investment.

Bearing in mind the above provisos, the following conclusions may be drawn from the exercices as conducted:

— Wholly self-sustaining growth did not emerge in any of the cases. During the early years, increased demand has a multiplier effect on both consumption and investment. But investment itself sparks off growth in production capacity above and beyond actual needs. Spin-off investment of this kind stops showing a return after 4 or 5 years and the multiplier-effect consumption that goes with it similarly fades with it.

 Increases in household and corporate savings stemming from increased investment are proportionately very low, while those achieved by the public sector are much greater. Even where a third of the investment is financed by the authorities. this means with most Member States that there is an improvement in their budgetary situation by the second year, whereas at Community level a further effect is a sizeable external deficit. This in fact tends to diminish over time and private savings reap the benefit. To take a typical result, for 1989, fifth year of the simulation: with 25 billion ECUs' worth of additional investment, we obtain something in the region of 5 billion ECUs' worth of private savings, 10 billion public savings and a similar amount as external deficit. Taking the latter effect into account, the impact on GDP is of similar proportions to the increase in investment, sometimes slightly greater, sometimes slightly smaller (but see previous remarks). To put it another way, induced private consumption is of similar magnitude to net additional imports where we assume no change in public consumption.

- The impact on employment is smaller than might have been hoped: slightly more than 300 000 jobs in 1987, Community-wide, with the best scenario, with figures dropping below 200 000 extra jobs in all cases by 1990. This takes account not only of losses to the outside (in particular procurement of capital goods from outside the Community), but also of the fact that additional investment and even growth in GDP also make for increased labour productivity. What is more, the input of additional expenditure produces a rise in private consumption in the early years, but this is swiftly inhibited by high taxation.

— The chief implication of the above paragraph, and of increased productivity in particular, is that the effect on inflation of growth of the order of magnitude suggested in the simulations amounts to little or nothing. The fact is that the unit cost of labour diminishes everywhere during the first few years and it is only after 1989, and then only in certain countries, that nominal pay increases keep pace with or even overtake productivity gains.

— Overall findings apart, the simulations show striking differences between countries. One key to these is capital equipment import ratios, which are everywhere high, but most especially in the Community's

least industrialised countries (plus. less explicably, France). This makes for massive outflows via foreign trade (including imports from outside the Community) and low multiplier effects. The result is that simulations where a higher proportion of overall investment is attributable to the countries in question throw up a larger Community deficit and less satisfactory overall figures for a comparable investment input. What is more, of course, they offer a particularly disappointing picture when it comes to balance-of-payments deficits and job creation in the countries concerned.

Capital equipment exports also show a variegated picture. The effect on exports is most marked in Germany, the United Kingdom and, to a lesser extent, Belgium, With some of the simulations, Germany's trade balance improves over the entire period of the exercise, and in others towards the end of it. As Germany and the United Kingdom are the countries also where labour productivity is showing the least improvement against GDP, it is there that job creation is concentrated. The same characteristics make them also the countries where improvements to public budgets are most pronounced.

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100, bd Konrad Adenauer L-2950 Luxembourg tel. 4379-1 – telex 3530 bnkeu lu telecopier 43 77.04

Department for Italy: Via Sardegna, 38 – I-00187 Rome tel. 49 79 41 – telex 611130 bankeu i telecopier 474 58 77

Representative Office in Brussels: Rue de la Loi 227 B-1040 Brussels

tel. 230 98 90 – telex 21721 bankeu b telecopier: 230 58 27

> Liaison Office for the United Kingdom: 68, Pall Mall London SW1Y 5ES tel. 839 3351 telex 919159 bankeu g telecopier 930 9929

Representative Office in Athens: Odo Ypsilantou 13-15 GR-10675 Athens tel. 724 9811 telex 222126 bkeu gr telecopier 724 9814

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#### Conclusions

All in all, the implications of these simulations are not very encouraging, especially as far as growth and employment are concerned. The structure of the model must be borne in mind, but the principal impact of additional investment would appear to be to increase production capacity and labour productivity. Should overall demand fail to expand sufficiently to warrant those increases, there will be untoward effects on spin-off investment during subsequent periods and on employment. The model has not been so put together as to reflect the impact of investment on modernisation and the reshaping of the structure of production, which means that the supply factors written into it are negative rather than positive.

In other words, to play the investment card in the pursuit of shortterm recovery, taking all sectors together, might result in failure to accommodate the structural adjustment needs of the economies of Europe in the long term (investment in building and public works rather than advanced technology, for instance).

Another worrisome aspect has to do with the concentration of favourable effects in the countries that are more sound structurally and the tendency for disparities between Member Countries to become more pronounced. Although the findings at national level remain imprecise, it would not be possible to present them as simple overall figures for the Community without masking an important part of the results of the simulation exercise: it is, after all, at national level that the overriding problems of employment and the balance of payments have to be confronted at this stage.

Lastly, we should perhaps not be surprised by the fact that the simulations conducted for this study rule out any return to a self-sustaining process of growth. For one thing, the theories explored above underscore the need to get to improved perceptions of future demand before private investment can be lent

## Operations during the first nine months of 1984

Loans granted during the first nine months of 1984 amounted to 3 690.2 million ECUs, of which 676.8 million came from the resources of the New Community Instrument for Borrowing and Lending (NCI), compared with 3 420.8 million (NCI 496.3 million) during the corresponding period of 1983. Of this total, 3 313.0 million ECUs helped finance investment projects within the EEC (3 183.1 million at 30 September 1983) and 377.2 million outside the EEC (237.7 million at 30 September 1983).

Within the Community, 1 620.4 million ECUs was lent, for regional development purposes, to help finance infrastructure and industrial investment in assisted areas. In addition, 1 203.7 million was granted in support of measures to reduce the Community's dependence on imports of oil (exploitation of internal resources, more rational use of energy and energy savings, and import diversification). 608.8 million concerned investment projects aimed at modernising and converting enterprises, in particular SMEs, and 226.1 million concerned infrastructure benefiting the Community as a whole, particularly in the transport sector<sup>(1)</sup>.

The geographical distribution of lending was as follows: Italy, 52.5% (1740.8 million ECUs), France, 17.1% (567.9 million), United Kingdom, 13.8% (455.8 million), Denmark, 6.2% (207.2 million), Greece, 4.5% (148.1 million), Ireland, 2.8% (92.8 million), Germany, 1.6% (51.5 million), Belgium, 1.0% (32.5 million), Luxembourg, 0.5% (16.4 million).

**Outside the Community,** 298.6 million ECUs was lent to countries in the Mediterranean region and 78.6 million ECUs in the ACP States which were signatories to the Lomé convention or Overseas Countries and Territories. Of the total of 377.2 million ECUs, 55.0 million came from Community budgetary or European Development Fund resources entrusted to the EIB for loans on special conditions or risk capital operations.

**Borrowings** at 30 September 1984 amounted to 2 920.3 million ECUs, comprising 2 408.5 million in the form of public loan issues and 511.8 million in the form of private placements. 22.1 million was raised by the allocation of participations in Bank loans.

new impetus. For another, past experience shows that a cyclical upswing has seldom if ever been set in train by a spontaneous rise in corporate investment. That being so, if self-sustaining growth is to become a fact, it will above all take the implementation of economic policy measures designed to boost the outlook for demand and hence corporate perceptions of the future and the propensity to invest.

## ECU

On 15 September last, the Council of the European Communities decided to amend the composition of the ECU.

At the request of the Greek Government, the Council agreed to include the Drachma in the ECU, emphasising that for Greece this measure was part of a mediumterm policy aimed at increasing convergence between that country's economic development and that of the other Community Member Countries.

With effect from 17 September 1984, therefore, the ECU is defined as the sum of the following amounts of the currencies of the Member States:

0 719	Bfrs	3.71
		0.14
1.31	DKr	0.219
140	Dr	1.15
0.256	IR£	0.00871
		0.0878 Lfrs 1.31 Dkr 140 Dr

This amendment is in accordance with the rule governing maintenance of the value of the ECU. It does not affect the central rates in ECUs of the various currencies involved in the exchange mechanism or the bilateral parities within the EMS.

Below are the ECU's values in national currencies, as at 28 September 1984; these rates are applied to the present quarter in preparing financial statements and operational statistics of the Bank:

DM	2.23453	Bfrs	45.3114
£	0.592711	Lfrs	45.3114
Ffrs	6.85877	Dkr	8.08762
Lit 1	387.72	Dr	92.1597
FI	2.51939	IR£	0.720910
		US\$	0.738933

Statistics summarising Bank activities have been based on several different conversion rates applied since 1958, first to the unit of account, then to the ECU. This, coupled with the effects of price trends, would suggest prudence in interpreting the significance of figures which relate to operations extending over several years.

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<sup>&</sup>lt;sup>(1)</sup> Certain investment projects, eligible for financing by virtue of their benefits for more than one European country and their contribution towards regional development, have been accounted for under two headings. The amount involved is 346.0 million ECUs.