OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

FAIR USE POLICY

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

ml

05801

United Nations Industrial Development Organization

ID

Distr.
LIMITED
ID/WG.187/14
16 September 1974
ORIGINAL: ENGLISH

Meeting of Experts/Decision Makers for Promotion and Development of Machine Tool Industries in Developing Countries of Asia and the Far East

Tbilisi, Georgia, USSR, 5 - 15 October 1974

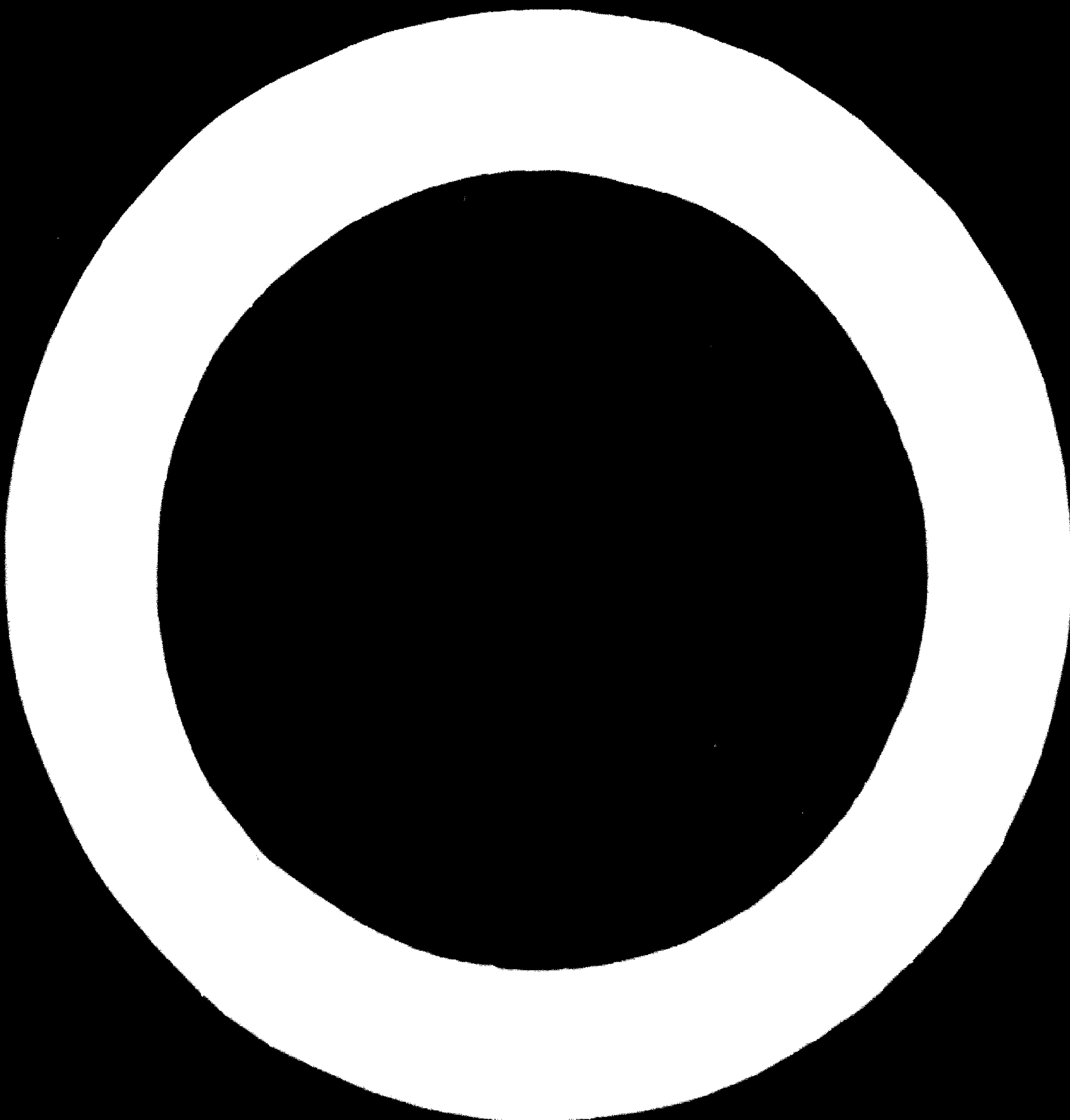
SOURCE AND USE OF FUNDS IN MACHINE TOOL MANUFACTURING COMPANIES 1/

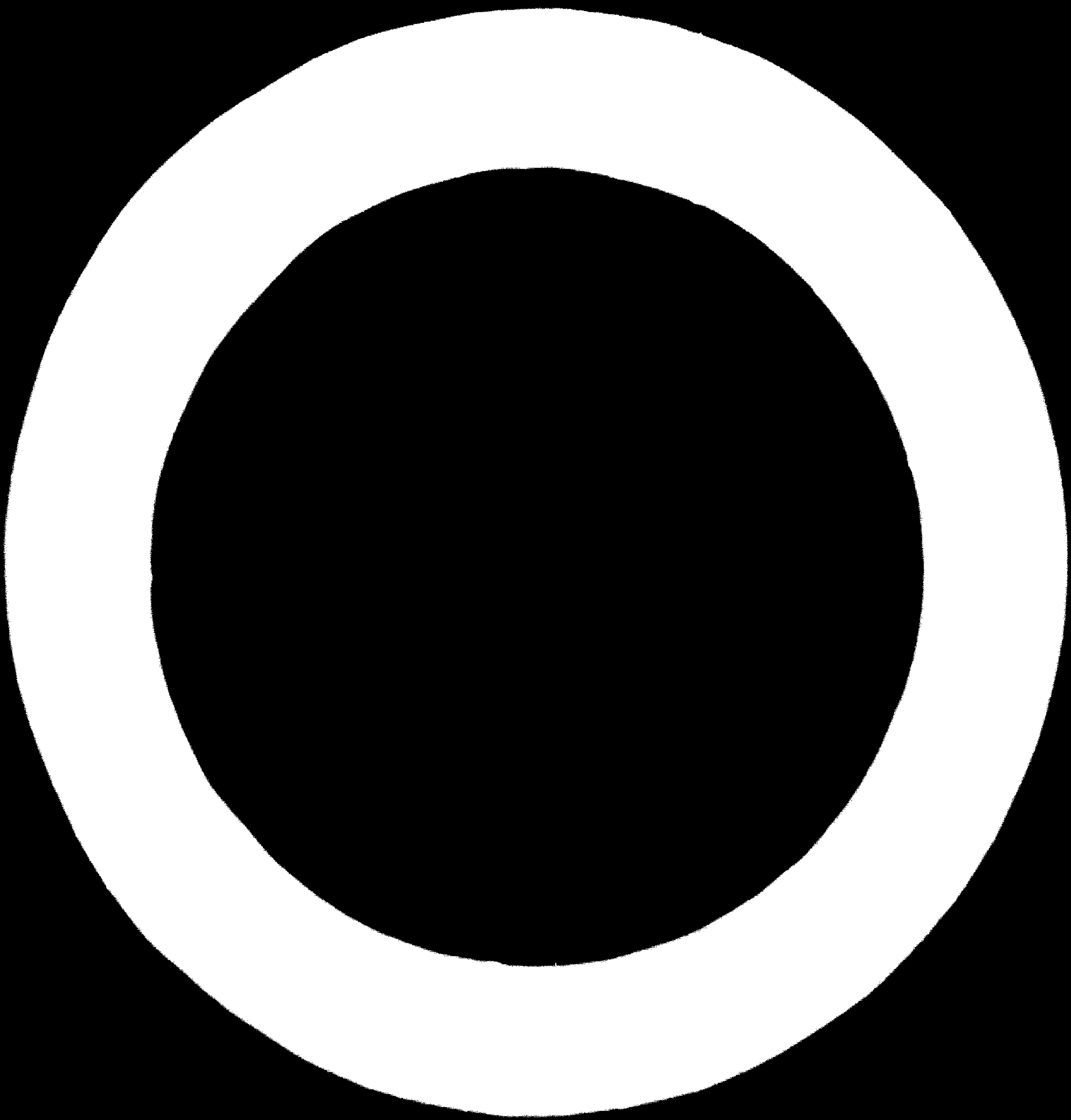
L. Elliott*

* Peat, Marwick, Mitchell & Co., Management Consultants
Austral House, Basinghall Avenue, London, EC2V 5EU, England

1/ The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the secretariat of UNIDO. This document has been reproduced without formal editing.

id.74-5801





1. PURPOSE

The purpose of this paper is to provide background material for discussion on various aspects of financing and investment.

2. SOURCE OF INFORMATION

The information used in the 'use of funds' section of this paper is based largely on a report prepared by Peat, Marwick, Mitchell & Co. (Management Consultants) on behalf of the National Economic Development Office (NEDO) and is published under the title 'A Financial Study of British Machine Tool Companies'. The findings contained in this report are the result of a study carried out by the firm into the financial performance and management practices of a number of machine tool manufacturing companies. The author was the partner in charge of the study.

Although the study covered the years 1968-1972, for the purposes of this paper, single ratios and percentages for the period are used to demonstrate the way in which funds were deployed.

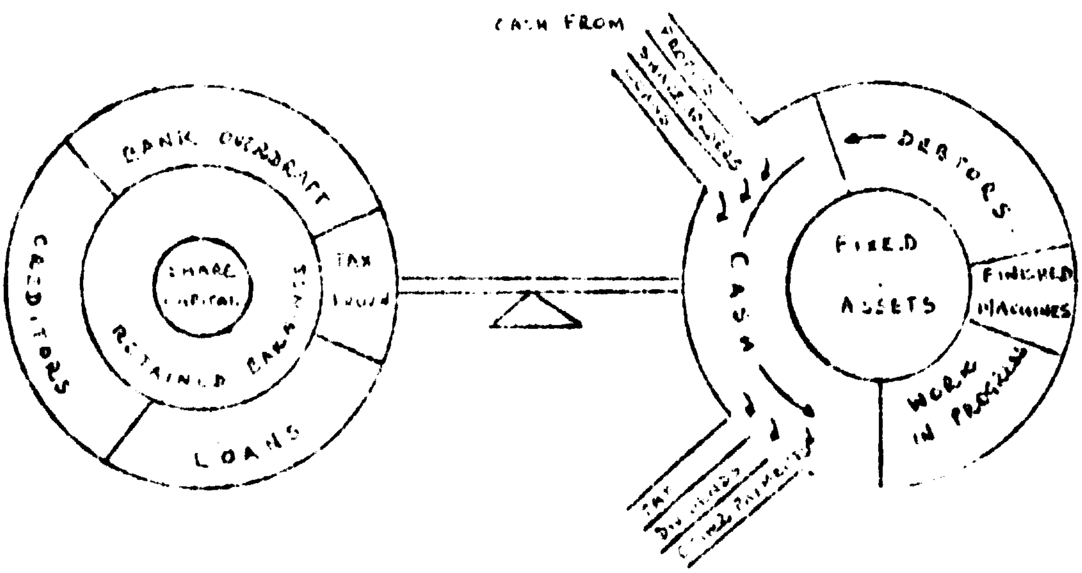
The methods of financing were not part of the study such that the section, 'source of funds' is dealt with in a more general way. The sources discussed are, nevertheless, appropriate to the industry.

3. FINANCIAL STRUCTURE OF COMPANIES

The following diagram illustrates the division between the sources and use of funds and, in so doing, underlines the fact that business comprises a series of transactions.

SOURCE OF FUNDS

USE OF FUNDS



4. SOURCE AND USE OF FUNDS

In order to demonstrate the source and use of funds, the following statement was prepared as a result of the survey. It is divided into two time periods, namely 1968-1970 and 1971-1972. The reason for this division is to reflect the different levels of activity between the two periods in that the latter (1971-1972), in terms of turnover, was lower than the former (1968-1970). This applied to the British machine tool industry as a whole.

	3 years 1968-70	2 years 1971-72
	%	%
SOURCE		
Profit before depreciation (pre-tax, pre interest)	80.0	48.6
Reduction in debtors	-	20.9
Increase in creditors	5.2	-
Short term borrowings	14.8	30.5
	100.0	100.0
APPLICATION		
Tax, dividends and interest	46.3	22.8
Additions to fixed assets (net of disposals)	20.0	30.5
Increase in stocks	25.7	7.6
Increase in debtors	4.6	-
Reduction in creditors	-	32.4
Exceptional items	3.4	6.7
	100.0	100.0

The significant difference between the two periods was the considerably reduced level of profits - and, in turn, retained earnings - in the second period (26%) compared with the first (34%). A further fact was that, whereas the investment in stock during 1968-70 accounted for 26%, this dropped to 8% in 1971-72, again reflecting the lower level of activity.

It will be seen that 30% of the funds available during 1971-72 came from short term borrowings, this being equivalent to the amount invested in fixed assets.

5. USE OF FUNDS

Funds are used basically in two ways:

- provision of working capital
- acquisition of fixed assets.

5.1. Working capital

- Working capital ratio: 2.5

This measures the ratio of current assets (i.e. stock, debtors and cash) to current liabilities (i.e. creditors and overdraft). Since 'current' normally implies that assets will be converted to cash within a year and that current liabilities will need to be paid within a year, this ratio is important in terms of a company's ability to continue and expand its trading activities. Capital goods industries (e.g. machine tools) tend to have a higher ratio than other types of industry because of the relatively high investment in stocks (including work in progress) and the length of credit given to their customers.

- Liquidity ratio: 1.0

This shows the extent to which 'liquid' assets (i.e. debtors and cash) cover current liabilities (i.e. creditors and overdraft). This ratio demonstrates a company's ability to pay its liabilities from assets which are normally realisable quickly.

- Trade debtors/creditors

A study of the companies included in the survey showed that:

- debtors (customers) were being given/or taking 13 weeks credit
- creditors (suppliers) were being paid 11 weeks after delivery of the goods.

These periods of credit have an important impact on the amount of working capital required in a business.

- Stockturn: 1.6

This measures the number of times stock (including work in progress) has been turned over in a year. It is calculated by dividing the cost of stocks into the cost of sales (NB not the value of sales as is the more usual practice).

The ratio reflects the comparatively long production cycle of machine tool manufacture.

5.2. Fixed capital

- Investment per employee:

The companies surveyed showed the following levels of investment per employee:

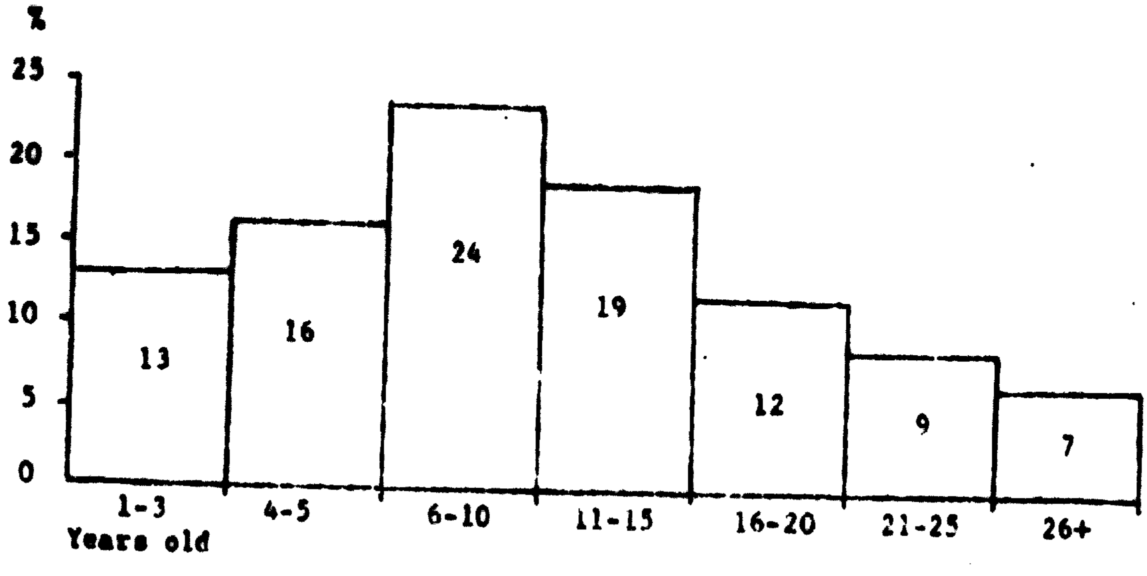
	1968	1969	1970	1971	1972
	£	£	£	£	£
Capital employed*	2,637	2,903	2,716	3,056	3,300
Plant and machinery	1,205	1,331	1,282	1,561	1,573

* includes investment in working capital

It will be seen that, apart from 1970, there was a steady increase in the amount of investment per employee.

- Age structure of plant and machinery:

The age structure of plant and machinery in the companies surveyed showed the following pattern:



Thus, 53% of plant was ten years old or less.

6. SOURCE OF FUNDS

The following brief survey of the source of funds for companies is related specifically to the practices within the UK.

There are basically three sources of funds available:

6.1. Retained profits

Retained profits are the most important single source of finance in the UK today.

6.2. Profitable use of existing funds

It is expensive to seek external funds. Before doing so, therefore, it is important to examine the use being made of current resources tied up in such assets as:

- stocks, work in progress, debtors
- unprofitable activities
- surplus or under-employed assets - land, plant, etc.

6.3. External finance

There are basically four types of external finance:

- short term borrowing (1-3 years)
- medium term borrowing (3-10 years)
- long term borrowing (10 years or more)
- permanent capital,

each of which is dealt with separately in the next section.

7. TYPES OF EXTERNAL FINANCE

7.1. Short-term borrowing

This is normally arranged for:

- specific seasonal/cyclical situations
- financing general working capital requirements
- bridging finance prior to making more permanent arrangements.

- Bank overdraft facilities consist of an agreed line of credit (technically at call) on current account whose repayment terms in practice, vary from being on call to up to one year. They tend to be renewable unless Government measures decree otherwise.

At one time such facilities were generally granted on an unsecured basis but today about 60% such lending is secured.

- Bill financing (trade bills and acceptance credits) is a method of financing either buyer or seller (it must always be justified by a transaction involving the sale or purchase of goods) and based on a written undertaking by the borrower to pay a particular sum at an agreed future date (a bill of exchange). If a finance house 'accepts' the bill (for which it is paid commission) it undertakes unconditionally to meet that bill at maturity, thus making that bill discountable (at a rate which is slightly higher than normal bank overdraft interest) for cash in the money market and providing the borrower with credit supplementary to his normal overdraft facilities.

Trade bills are those signed by the buyer which the seller gets accepted so that he can sell them at a discount.

Acceptance credits arise through a purchaser drawing a bill on an accepting house, discounting it and paying the supplier with the proceeds.

- Credit from suppliers arises in a variety of ways and is the period between the receipt of supplies and the payment for them. The study showed that the average length of credit being taken from supplies was 11 weeks.
- Invoice discounting arises when a company passes specific unpaid debts to a factor and receives an agreed percentage (say 60%-80%) of those debts immediately and the balance on collection (for which either the factor or the company may be responsible).
- Export finance (short and medium term) is available from banks, often on preferential terms, so long as the debt is insured (in practice by the Export Credits Guarantee Department).

British machine tool companies use the facilities of bill financing and export finance quite extensively for their overseas business where the periods of credit can range from cash on delivery (via a letter of credit with a bank) to up to seven years where the supplier may borrow the money from a bank backed by a guarantee from ECGD.

7.2. Medium term borrowing

Medium term borrowing is normally used for:

- financing fixed asset expenditure
- funding, more appropriately, the permanent portion of an overdraft
- providing working capital demands of a programme of planned growth.

- Hire purchase agreements are entered into between a finance house and the borrower who hires goods he is purchasing for an agreed period with an option to purchase them for a nominal sum after all the instalments have been paid - under a credit sale arrangement (otherwise comparable) ownership passes immediately.
- Equipment leasing is similar to hire purchase save only that ownership stays with the lessor. This is a useful selling tool for suppliers of capital goods (e.g. machine tools, computer manufacturers).
- Term loans are available from a variety of sources (joint stock banks, merchant banks, finance houses). A term loan is one made for a fixed period, normally secured, with an interest rate that is fixed or based on the base rate (with a minimum) and made with certain conditions which, if contravened, make it repayable immediately.

7.3. Long term borrowing

This is normally obtained to provide finance for fixed assets.

Sale and leaseback

A company which owns a valuable property and requires additional finance may sell it to a property investment company or, possibly, an insurance company. Simultaneously with the sale, a long term lease is agreed upon, the former owner now becoming the lessee of the property at a stated rental.

Mortgages

Money is borrowed and, as security, the company gives a charge or lien on its property. If the company fails to pay the interest due, the lender will be able to exercise its right under the mortgage deed and take possession of the property mortgaged.

Basically, mortgages are available from insurance companies, trust funds, banks and investment companies.

7.4. Permanent capital

This basically consists of ordinary and preference shares.

7.5. Other sources

- Finance Corporation for Industry Limited (FCI)

  FCI provides finance for companies where they are unable to attract it from normal sources and the project for which it is required appears to be important in the national interest.

- Industrial & Commercial Finance Corporation Limited (ICFC)

  Generally provides finance to the smaller companies.

- Government grants

  E.g. towards expenditure involved in setting up in a development area.

74. 11. 27