# REGIONAL POLICY-MAKING AND REGIONAL DATA BASES

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*Finland*

This paper deals with regional accounting problems in Finland. Regional policy planning problems and special regional characteristics of the country are discussed as a background to the development of regional accounts. Accounting problems such as regional division, regionalization methods, general and special solutions to problems affecting specific sectors of the accounts, and problems in allocating production across regions are dealt with in the paper. In addition, supplementary data such as state income and expenditure data by region and regional input-output calculations, both of which may be needed in regional policy-making, are discussed. In Finland, both types of data have been included in a regional data bank compiled by the Central Statistical Office. For the future, monitoring regional standards of living and observing differences in welfare and in production by region remain important challenges for the development of regional data systems.

Finland has a multitude of statistical data compiled on the basis of a quite dense regional division. For example statistics on industrial production have been compiled by municipalities ever since 1909. The key regional statistics have been assembled in a regional data base, from which they can easily be put to use for various forms of economic analysis. However, we do not intend to discuss the statistical needs of regional policy but to concentrate on the description of the compilation of regional accounts in Finland.

We start by examining the foundations of regional development of the Finnish economy, and the links between regional accounting and the monitoring of regional economic development. Subsequently, there is a description of the particular solutions required for the compilation of accounts by provinces, and the needs for future development of regional accounting. The paper ends with a summary presentation of the key methods and data sources used in the compilation of various economic activities on a regional basis.

## 1. BACKGROUND ON REGIONAL ECONOMIC DEVELOPMENT AND POLICY NEEDS IN FINLAND

Regional economic development in Finland was made difficult by the concentration of economic potential in southern Finland in the beginning of the 1960s. The first generation of regional policy legislation in Finland was enacted in the middle of the 1960s to help remove this problem.

Regional policy legislation was at that time designed to balance internal migration, to speed up economic growth in the developing regions and to level off the large differences in the living conditions of the population in education, availability of health services, level of income, standard of housing etc. By the 1970s regional development in Finland was already in line with the set targets.

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The population of Finland is under 5 million. On the other hand, in area the country is one of the largest in Europe. The population density averages 15.7 persons per square kilometer, while in the most densely populated southern province it is 116 persons per square kilometer. In Lapland, which covers 30 per cent of the total land area, the density of population is 2.1 persons per square kilometer. The land area of the country is 304,000 square kilometers.

The second industrial revolution in Finland took place after World War II. The transition from a rural society to an industrial and service society has been fast. The rapid growth of the service industries as a share of the economy started in the 1970s. This development partly explains the essential requirement for special regional policy. The relatively large proportion of the population that is rural, relative to the national income share of agriculture, underlines this need. An additional problem was the migration of the rural population to Sweden between 1960 and 1970—approximately 143,000 migrants left Finland for Sweden during those years. Myrskylä (1978).

After the enactment of the first regional policy acts, plans were made to organize the monitoring of regional economic development. These plans included the compilation of a so-called regional model in the macro-economic statistical framework. Talousneuvosto (1972) The basis for this work was the national accounting system.

## 2. Contents of Regional Policy and Monitoring

Finland has 12 provinces, 461 municipalities, 20 regional planning areas, and dozens of administrative areas. Finland has municipal autonomy, but cities and rural communes are in many respects tied to the central government via, e.g. state participation in local government expenditures.

For actual regional policy, the country has been divided into development regions, and regional policy measures are specified on the basis of these areas. The division into the development areas does not follow the administrative division in provinces.

Regional policy has aimed at regional equality as well as macroeconomic efficiency, despite the potential conflict between the two. Priority between the two aims has always depended on the actual economic situation. When the economic situation is good, measures intended to reduce income differences between regions naturally receive a more sympathetic hearing than when there are general economic problems. The regional policies of the 1960s aimed at the augmentation of welfare in areas that had been left behind in income development, even with the risk that this sort of activity could produce macroeconomic costs. A primary focus was the development of small firms in areas with an abundance of labour. In the 1970s greater emphasis was given to the view that regional policy, and especially the removal of disequilibrium between regional economies, could be beneficial for the overall development of the economy.

In the present decade the situation is changing again. The overall changes that have taken place, especially in industrial structures, are strongly reflected in regional development. Changes in the general economic situation have also led to more critical attitudes in regard to regional policies. This is primarily seen in

the fact that today there is less certainty of the efficiency-increasing role of regional policy measures for the economy as a whole.

Today it also appears that many students of regional policy are willing to accept macroeconomic arguments as a means of promoting the development of regional economies. The same researchers view the role of actual regional policy largely in the prevention of immoderate regional differences. Tervo (1984)

New regional policy legislation became effective at the beginning of 1982. The Act for the Promotion of Balanced Regional Development defines the framework of regional policy. The key aims include securing permanent jobs, increasing income levels, and preserving a good living environment. Means used to achieve these aims include, e.g., support of productive activity, improvement of the overall operating conditions of firms, guidance in firm location, improvement in the overall availability of services, and allocation of public services.

Monitoring of regional development, which is coordinated by the Ministry of the Interior, has been delegated to the same authorities that are responsible for the preparation of regional policy measures. Monitoring centers mainly on the examination of changes in the production and population structure. However, matters connected with technological development as well as the level and quality of life are also included. Among other things, this means that the monitoring of regional social indicators is to be coupled with the regional framework of national accounting.

In its entirety, regional development should be followed with the aid of at least the following variables:

—population
—supply and demand of labour and unemployment
—structure and changes in production
—development of income levels
—availability of services and quality of life. Valtioneuvoston kanslia (1981).

The essential information for the preparation and monitoring of policy measures consists of the follow-up reports of authorities carrying out regional policy measures, and official statistics, which include the regional national accounts.

## 3. Regional Accounting

The task of the Central Statistical Office of Finland is to produce a major part of the regional accounts and to make these available to users in a suitable form.

The present regional accounts were created at the beginning of the 1970s. At that time the purpose was to build a macroeconomic regional mode, which the regional accounts would serve as a data-producing system. The regional economic model was to comprise a population and labour force block, a production and investment block and an income and expenditure block. The development of regional accounts started with the production and investment block, and regional employment was to be included in the statistics as well. Subsequently, the regional accounts were to be expanded to cover incomes and expenditures. However, the extension has not proceeded as planned. This is largely due to the

fact that the data needed for the extension are only now available. Even if the regional accounts only cover part of the block of functional accounts in the national accounts, they have proven to be a very useful regional information system. The regular compilation of regional accounts started in 1972, after which the statistics have been compiled every second year. In the following sections we shall describe the foundations and the compilation of the regional accounts in Finland, as well as the special solutions which are due to the regional nature of the statistics.

### 3.1. *Regional Division*

Several different, often contradictory factors must be taken into account in the choice of regional division to be used in regional planning and decision-making. These factors include, e.g.,

—factors describing homogeneity of regions or regional similarity,
—factors describing the allocation of economic activities by regions,
—factors concerning the organization of the regional policy measures.

The first two factors are functional by nature while the third is institutional.

The choice of regional division naturally depends on the needs of description for regional policy. Structurally homogenous areas are similar with respect to selected variables, but generally they consist of separate geographical areas. The determination of built-up areas in censuses is based on homogenous regional classification. Also the presentation of the SNA on the urban/rural division designed to be used primarily in developing countries can be interpreted as a regional division formed on the basis of homogeneity.

The regional division made up on the basis of the allocation of functions is a transformation of the homogenous regional division. Functional regional division is formed by limiting to one area all those basic areas in which a certain factor, for instance acquisition of services, concentrates mainly in one centre. Functional division is very useful for regional planning. A weakness of the functional division especially of large areas is the heterogeneity of their economic structures, which reduces the reliability of conclusions drawn.

In Finland regional division based on productive activities has been a starting point for many regional divisions. Purely functional regional division is not found in Finland. Closest to a functional region is the regional planning area upon which land-use planning is carried out.

In practice it is important that decisions can be carried out within the framework of the chosen regional division. In several instances regional planning, research and decision-making are based on administrative boundaries. The weakness in the use of the administrative area division lies in the fact that economic activity is often artificially bounded. Activity between areas can in practice differ from that set out by, e.g., provincial boundaries. The boundaries of administrative regions can be changed by administrative decisions etc., which can complicate comparisons between different periods of time. Furthermore, there exists a multitude of administrative divisions.

The central administrative areas in Finland are the province and the municipality. The former is a regional unit of the central government, and the latter is

an autonomous administrative unit. The basis chosen for the compilation for regional accounts is the province. The use of municipalities as the basic units in the compilation of accounts is complicated by poor availability of data.

The compilation of statistics using parallel regional divisions is a problem in terms of both costs and availability of data.

### 3.2. *Regionalization Methods*

In simple terms it can be said that the way to compile regional accounts is to find distributions that can be used to divide the components of ordinary annual accounts by province or region—i.e., allowing them to be regionalized. When data are obtained directly by municipalities or by provinces, regionalization is naturally clear-cut and the results reliable. Even though the coverage of regional accounts in Finland is generally quite good, we nevertheless have to use quite varying regional divisions in the compilation of regional national accounts. This is also reflected in the differing levels of accuracy of the statistics on different economic activities. Käär, Leppänen (1983)

### 3.3. *General Solutions for Regional Accounts*

A versatile and at the same time comprehensive description of regional economies requires the application of uniform concepts, definitions and classifications in statistical systems for areas smaller than the entire country. In principle, the national accounting system is also suited for the description of regional economies. In practice data availability problems due to the openness of regional economies and other factors prevent the application of the SNA in its entirety.

The data describing economic structures are the most important in the regional examination of economic activity. Regional differences in cyclical variations and economic growth are largely due to structural features of regional economies. In this case the focal point of a regional accounting system is the development of the parts describing the regional distribution of production and investment.

The foundation for the Finnish regional accounts lie in the national accounting framework. The statistics are compiled from the final current-price figures for the country as a whole. The accounts include data on production, employment and gross fixed capital formation. Regional accounts examine how the figures for the entire country are distributed by province. The basic principle of compilation is additiveness, which guarantees that the sums of the province totals in the regional accounts are the same as the corresponding figures in the national accounts.

The following economic transactions are presented in the provincial production account of the regional accounts:

Wages and salaries
Employers' contributions to social security
Gross operating surplus
Intermediate consumption
Gross output

In the production account value added is disaggregated into three economic transactions. The first two make up the compensation of employees and the third—gross operating surplus—comprises both the actual operating surplus and the consumption of fixed capital. We have come to this solution because data on the capital stock are not available by province, and because the figures on the consumption of capital are not the most essential for the aims of regional accounting.

Output is divided into 40 kinds of activity in accordance with the ISIC. The same applies for employment by province, which is divided into employees and private entrepreneurs.

Gross fixed capital formation is presented by type of capital goods:

Residential buildings.

Non-residential buildings.

Other construction.

Machinery and other equipment.

### 3.4. *Special Solutions in Regional Accounting*

As all the solutions of the national accounts cannot be applied in regional accounting, special solutions have been reached for certain activities and economic units. The most important of these special solutions deal with national activities and the treatment of firms that have several locations as well as those operating in several fields.

#### 3.4.1. National Activities

National or indivisible activities are those that extend to several regions or throughout the nation and for which regionalization of economic transactions is conceptually problematic. Along with these we of course have to treat as indivisible those activities which cannot be regionalized because of lack of data. The first group includes, e.g., central administration of the state, administration of external affairs and national defence. These activities belong to general national consumption and are in this respect indivisible. Another problematic group is transport and communication, both international and between the different regions of the country.

In the Finnish regional accounts, efforts have been made to allocate economic activities to provinces whenever possible. Only about 2 percent of production remains in the indivisible block. Unregionalized activities are: railway and air traffic, part of sea traffic, and administration of external affairs. In the appendix we have briefly described the methods of regionalizing different types of activities.

#### 3.4.2. Firms with Several Branches

In the regional accounts the regional value of a firm's output is determined on the basis of the value of goods produced by the branch operating in the area. Total input correspondingly comprises the value of the factors of production used by the branch.

When the object of description is a firm operating in several provinces, one of whose branches is a separate head office, a computational solution must be used.

Head offices do not generally produce goods sold outside the firm, even if production can be regarded as occurring in them and value added is generated in the form of, e.g., wages and salaries. In the regional accounts head offices have been defined as a separate kind of activity, producing goods characteristic of head offices. The value of output of head offices is determined on the basis of total input. Output of head offices is bought by the other branches of the firm and used as intermediate inputs. This way it is possible to avoid biasing production accounts and value added by province, which would happen if the costs of the head office were counted only in the province where the office was located.

In solving the problem of treatment of head offices one actually has to examine the allocation of such economic activities between regions, for which statistical data are not available. As a result, in the Finnish regional accounts the head office problem has not been fully solved. The division of costs has been carried out only for head offices in industry (ISIC 2, 3, 4).

### 3.4.3. Problems of Regional Volume Computation

Another problem of regional accounting today lies in the lack of volume computations. Volume computations by region would require the availability of regional price or volume indicators. These are generally not available, so that the deflation must be carried out using indices measuring average price changes in the whole country. By using national average price indices, volume differences between regions then reflect differences in the production structure or the weight structure of output by kinds of economic activity. It is nevertheless questionable whether it is generally worthwhile to aim at regional price indices, as the same price formation often takes place in different regions. To fit together demand and supply in regional accounts it would perhaps be useful to use the average national price for the various products.

## 4. Statistics Supplementing Regional Accounting

In Finland we today have at our disposal enough regional statistical data that an institutional regional distribution would appear possible. Another way of developing regional accounting is the compilation of regional input-output tables. In Finland, flows of goods between regions have been analyzed and regional input-output methods been developed primarily within various universities.

### 4.1. *Central Government Income and Expenditure by Provinces*

The first comprehensive study of the distribution of central government income and expenditure by province was carried out in Finland for 1978. Pietilä, Alanen (1981) The data in the study were based on the accounts of the central government. This analysis is currently carried out every second year, as are regional accounts themselves. The purpose of the study is to serve research on state expenditure and income as well as to provide the basic statistics for accounting by province.

The basic idea behind the regionalization of state income and expenditure is to allocate state incomes to the areas from which they are collected, and

expenditures to the areas to which they are paid. Regionalization extends to 86 percent of state income and to 90 percent of expenditure.

The following methods have primarily been used in the regionalization of different income types. Direct taxes have been allocated to provinces according to the domicile of the taxpayer. The payer of indirect taxes is the final purchaser of a good. Data sources include tax statistics and various information on the distribution by provinces on the consumption or use of goods. Such sources include, e.g., household surveys. In interest and dividend income, regionalization extends to dividend income and interest paid on housing loans.

Income received by the state from business enterprises has been regionalized according to the location of the productive activity in question. The income from Post and Telecommunications has not been regionalized. Of income connected with state lending, only amortization of housing loans have been regionalized. As in several other instances, such as other amortizations, more could be allocated to provinces if the basic data were sufficient.

State expenditure has been regionalized following the same basic ideas as in the regionalization of income. State consumption expenditure has been allocated to provinces in accordance to where the production of the service in question takes place.

State transfer payments have been allocated to the domicile or home province of the recipient. For a unit operating in several provinces the allocation of transfers is solved case by case.

Among investment expenditures, real investment has been regionalized in the province of location or in the province in which the capital good will be primarily used. State financial investment has been regionalized in the same way as state transfer payments. Interest and amortizations on state debt are indivisible, because sufficient basic information for division is not available.

### 4.2. *Regional Input-Output Tables*

Compilation of regional input-output tables in Finland has mainly been carried out in the Universities. Multi-regionality has been typical for these studies, limiting analysis to the clarification of internal supply and demand in each area. Multi-regional studies thus do not examine exports going outside regional boundaries nor imports from outside on the basis of the region of the receiver or sender. Inter-regional analysis designed to clarify flows between regions is complicated by the lack of basic data.

The aim of regional input-output studies has been to clarify the economic structure of a province, its inputs and resource needs, the links between different branches of the regional economy, and the dependency of the regional economy on other areas. Forssell (1977).

Many of the regional input-output studies carried out in Finland have been based on input-output tables describing the whole country which have then been broken down by province. Thus the input-output tables by province assume the same production function for each field of activity in every province. This iterative method has been criticized. Criticism is mainly centered on the fact that by using regional data derived from national parameters, the researcher is still on the level

of a macro description, and cannot apply the results as such to problems of the regional economy. Some academic researchers actually start from the idea that regional input-output tables ought to be compiled on the basis of inquiries and studies of productive activity in the area in question. Eskelinen (1979)

It appears that the application of the input-output method aims at the limits of traditional national accounting, or even outside, that is, compilation of accounts of natural resources and flows of materials.

The official statistics of Finland do not include comprehensive regional input-output statistics. The calculation of a regional input-out tables is a very hard and resource-demanding task, and it thus presupposes a clear need for regional data of this kind. The development of regional input-output analysis is part of the overall development of regional information, and thus always a question of resource allocation. At the moment it would appear that we should rather develop regional accounting in the direction of income and expenditure accounts than input-output analysis.

### 4.3. *Regional Data Bases*

Regional statistics have often been criticized for being very difficult to use, and it has been said that the endless compilation of statistics and analysis carried on the basis of them causes the major part of the work input of a researcher to be spent in the collection of data, with insufficient time for drawing clear conclusions. In facilitating the use of data, the regional data base of the Central Statistic Office has meant considerable progress. Regional accounting part of the regional data base.

The regional data base is a user-orientated direct access system of the regional statistics of Finland. The data base contains aggregated statistics, and does not have a connection to unit-level information. The regional data base contains data on municipalities, parts of municipalities and built-up areas and can be used to produce data on the user's own area divisions.

In developing the regional data base we have aimed at as large independence of particular equipment as possible, flexibility in updating and analysis, and easy use. The core of the data base is made up of multi-dimensional matrices, which are reminiscent of traditional statistical tables. The statistical series of the data base extend over nine years. There are approximately 100 statistical matrices in the data base, containing about 40,000,000 entries, a large part of which refer to areas smaller than a municipality, i.e. the so-called map square. Two of the matrices deal with regional accounts.

The regional data base was made available for use in the beginning of 1982 and its use has proceeded according to plan. The main users are regional administrative authorities.

## 5. Future Development of Regional Accounts

As regional policy measures are often motivated by the desire to even out welfare differences, it may be increasingly necessary to examine regional differences in welfare and their development with the aid of, e.g., data on disposable income and consumption. Regional consumption data related to a unit of con-

sumption are in practice the best data available for the study of welfare differences. Consumption describes welfare potential, and data on consumption can actually be assembled in a more reliable fashion than data on income, for example. Estimates of consumption by region, dealing with private as well as public consumption, are possible with available data.

The present regional accounts measure the distribution by province of output and investment, by type of economic activity. These accounts are used to explain the growth of output and productive capacity by area. Data on the functional distribution of income by province are also included. Nevertheless, a functional distribution of income is not sufficient; the system ought to be supplemented in such a way that it also describes the institutional distribution of income. In practice the aim is to estimate disposable income by province.

In national accounts, the income and expenditure account explains the distribution of income earned in production, transfers, disposable income, and their distribution in consumption and saving. The same formula will be used in the regionalization of the institutional accounting block.

In the income and expenditure accounts, decision-making units in a regional description must be divided into a regional block and a national block. The first block would include those units which can clearly be regionally identified, whereas the national block would include all others. The regional block would include households, municipalities, and eventually firms operating in one province. The national sector would include the state, nationally operating financial institutions and firms operating in several provinces. For firms operating in several provinces, there would also appear to be grounds for regionalization according to the province of location of the head office.

As every transaction is shown in the accounting system as both income and expenditure, the regional effects of the income and expenditure of the sectors of the national block can be analyzed when transactions take place between sectors of the regional block and sectors of the national block. An example is offered by the above-mentioned statistics on state expenditure and income by province. In addition it should be noted that the production accounts of sectors which belong to the national block in the income and expenditure accounts can in this respect belong to the regional block.

Output generated in a region determines original incomes in the region in question. Wages and salaries and entrepreneurial income can fairly easily be regionalized from these original incomes. In some cases the province in which wages are earned and that in which they are spent may not be the same, but this problem is not very large in Finland. Instead, lack of data is the main reason that the allocation of the major part of the operating surplus by province is a very difficult task, and many significant transactions will have to be treated as national.

## Appendix: Data Sources for Regional Accounts

*Agriculture*

The main source for the regionalization of agricultural accounts is the agricultural enterprise and income statistics. These statistics are based on taxation

data by province and give the necessary data for the computation of output and input, and gross fixed capital formation. The production of other branches of agriculture, e.g., the output of agricultural services, fur farms and the rearing of reindeer, are based on numerous separate inquiries, individual statistics and indicators.

*Forestry*

The compilation of the production account for forestry starts with the determination of its operating surplus. Income from sales of standing timber forms an essential component of the operating surplus. Direction of sales income to the provinces is carried out on the basis of the market timber study and stumpage price information by province. It is characteristic of the basic data on forestry that there is an abundance of basic statistics but that they are often based on the own regional divisions of the forestry industry, which deviate from those of the provinces. Similarly, the definitions of transactions used in the forestry statistics differ from those used in the national accounts.

*Industry*

Industry is here treated as branches 2, 3 and 4 of the ISIC. In order to treat firms operating in several areas, the activity classification has been supplemented by the addition of head office activities.

The compilation of the production accounts for industry is based on data which have fairly extensive coverage and have quite suitable regional divisions and, apart from the treatment of head offices, causes few problems.

*Construction*

In the Finnish national accounts construction is a purely functional activity. This means that construction does not appear as a by-product of any other activity. Regionalization of new production has been carried out on the basis of municipal data from the construction statistics. Regionalization of repairs and major repairs causes problems because data are lacking.

Employment has been regionalized according to gross output by province. Investment has been calculated following the distribution of new production by province.

*Wholesale and Retail Trade, Restaurant and Hotel Services*

The output of wholesale and retail trade is regionalized by dividing gross output by province, and the resulting distribution is applied to the value added. The use of intermediate inputs by trade is a residual in the calculations, which means that the components of value added are regionalized using different statistical sources. The data sources consist primarily of population censuses and firm registers.

Gross fixed capital formation is allocated to provinces primarily on the basis of the distribution of production. We had to settle with this substitute solution

because data are not available on investment in wholesale and retail trade by province.

Restaurant services have been regionalized using the same principles as trade.

*Transport, Storage and Communication*

These are problematic types of activities for regional accounting. Some forms of transport are intra-regional and it is not easy to allocate their output by region.

In the Finnish regional accounting railway traffic, air traffic and part of maritime commerce have been considered national. Of maritime commerce, output by the merchant marine of the Åland Islands has been regionalized. The regionalization criterion used is the information on home ports obtained from the register of shipping of the National Board of Navigation.

Efforts have been made to regionalize the output of shipping on the basis of the home ports of ships. On the basis of the sources used this was not possible in a sufficiently reliable way. The great significance of shipping to the Åland Islands was nevertheless the reason why regionalization was carried out for this particular area.

Operational boundaries have been set to some forms of transport in Finland. This means that a transport licence is granted only for a certain area or route. On the basis of such administrative boundaries it has been possible to regionalize bus, taxi and route goods traffic in Finland.

Telecommunications are regionalized in two parts, the Board of Posts and Telecommunications on one hand, and private and municipal telephone networks on the other. Sources used consist of the regional statistics of the establishments in question.

*Financial Institutions and Insurance*

The output of financial services is regionalized by bank groups. The data sources comprise Bank of Finland balance sheet data, annual bank statistics and annual reports, and regional credit stock statistics. In addition special inquiries are made to financial institutions.

The main part of the total output of financial services is formed from a imputed bank service charge. This difference between interest earnings and interest costs in the regional accounts has been placed in the area in which the margin is cumulated. The remainder of the total output of financial services has been regionalized in relation to interest earnings.

The output of co-operative and savings banks has been regionalized on the basis of the annual statistics of banks. The regional criterion used is the location of the head office of each bank. The solution is easy because of the fact that in Finland co-operative and savings banks are mainly local units, consisting of a few offices.

The Finnish commercial banks are national enterprises. Their output has been regionalized on the basis of special clarifications received from the banks.

Other financial institutions have been placed in different areas on the basis of the location of their offices, and the Province of Uusimaa has been solved as a residual. As this kind of activity is much concentrated in the Greater Helsinki

Area and the Province of Uusimaa generally, in the regional accounts we have collected data on financial institutions operating elsewhere in the country and deducted their output from the ouput data presented in the national accounts. the difference has been allocated to Uusimaa.

Insurance services are regionalized by type of enterprise. The main types are life insurance and pension insurance companies and casualty insurance companies. The output of insurance services has been regionalized by varying methods. A common factor for all regionalization is the division of total output by province.

The service charge component of individual and group life insurance output has been regionalized on the basis of the distribution of population by province. Other life and pension insurance forms have been regionalized on the basis of information on wages and salaries and consumption of fixed capital.

The output of casualty insurance companies has been regionalized in such a way that the distribution between provinces is based on the regional distribution of insurance premiums. Reinsurance has been treated in the regional accounts as output of the head office, and the regional criterion is the location of the head office.

*Real Estate and Business Services*

The output of the activity of ownership of dwellings is regionalized starting from the total output. Regionalization is carried out on the basis of gross rent by provinces.

Other real estate activities are regionalized using employment data.

The regionalization of business services is a problem mainly because of the incoherence and partial lack of data. We have been forced to compile regional accounts by leaning on annual reports of units belonging to the branch, membership registers and other lists. Generally information is available on turnover and employment.

*Community, Social and Personal Services*

Computational entities in these activities include, e.g., educational activity, research activity, medical services, branch and labour organizations.

Uniform regional data are not available for the regionalization of community, social and personal services. For this reason the major part of these transactions must be distributed among provinces with the aid of various indicators. In practice we have worked out indicators of distribution for various economic transactions—most often total output—which are then used to allocate annual data on levels to provinces.

*Government Services*

The regionalization of government services is divided in the computational entities of state and local government. Calculations concerning the central government are for the most part based on the regionalization of the national accounts. Statistics sources for the calculations of central government output are fairly

good. However, because of conceptual problems, part of state activity has not been regionalized.

Indivisible economic transactions include expenditures on the administration of external affairs, and equipment acquisitions of the defence forces, which are counted as intermediate inputs of the state.

Few problems exist in the regionalization of the economic activity of municipalities and associations of municipalities. All economic units in this sector operate in clearly identifiable areas. Furthermore, municipalities, associations of municipalites and the provincial administration of the Åland Islands form a clear computational entity, with an existing statistical base.

*Non-profit Services*

Regional data on non-profit activities is—as that of entrepreneurial activities in group 9 of the ISIC classification—incoherent and incomplete, and requires manipulation of regional classifications.

*Household Services*

The economic significance of household services is fairly small. Calculations for this sector are carried out in three entities, in which varying methods and data sources are used.

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