

Municipal transfer systems: Regional effects of public activity

Paper submitted to the 41st Congress of the European Regional Science Association,
Zagreb 29 August – 1 September 2001

Jan Mønnesland
Norwegian institute for urban and regional research
Oslo, Norway
e-mail: jan.moennesland@nibr.no
fax: +47-22607774

Abstract

While regional incentive programmes attract high attention in the regional policy debate, less attention is devoted towards municipal transfer systems. Nevertheless, these systems will in many countries redistribute more financial resources between regions than the more narrowly defined regional policy programmes.

The municipal transfer systems are described briefly for the 5 Nordic countries. Focus is made on the volume of the programmes (relatively to the size of the local government activity level) as well as on the shape of the transfer systems. The material shows great variation between the countries.

The systems are normally based on two pillars, one intending to equalise differences in local income potentials, and one to compensate for differences in the needs for public services. The last pillar will be based on models giving credit to social and demographic factors generating the need structure.

The paper focus on differences between the countries in how demographic and social factors are weighted, and how such differences lead to different regional effects.

The paper end up in a description on the total "non-intended" regional distribution effect of the programmes. The non-intended aspect refer to the fact that regional policy is not (at least formally) an argument in the programmes, they are designed from a welfare and income distribution perspective. However, some aspects are included for some of the countries with a declared regional policy aim. Also, regional policy strategies are often referred to in the debate on the programmes, even when they are not formally included. The mix between implicit and explicit regional policy elements is discussed on a comparative perspective.

Introduction

When regional development and regional policy are discussed, the instruments discussed are normally within the scope of regional policy incentives. These may be firm oriented incentives available in zones set up in order to stimulate the industrial development in designated areas or regions. Alternatively, regional development may be stimulated by different types of general incentives as infrastructure investment, educational programmes etc.

It is well known that the total impulse on regional development generated by governmental activities will emerge from more than the narrowly defined regional policy activities. Here, industrial policy (agriculture, manufacturing industry etc), infrastructure investments (roads, telecommunications, harbours etc.), location of public institutions etc are important elements. Also public transfers to private households (pensions, unemployment compensations etc.) will in fact generate important stimulus to the regional economies. The regional economic effects of such programmes outside the regional policy sphere may often be far more important than the effects of the regional policy incentives.

Public sector will influence regional development partly by the stimuli made a.o. through regional development programmes, partly by resources transferred to the private sector (through welfare programmes and industrial policy programmes), and partly by public service production. Public service constitute a significant part of the national economies. On the regional level, the public share of the total economy will vary substantially, but a common tendency is that public service constitute the highest share in those regions being regards as priority areas in the nationally defined regional policy.

A substantial part of the regional public activity is the responsibility of local governments (counties, municipalities). The activity levels are confined by the income resources available for these governments. As the tax base normally will be weaker in the periphery regions, a system based on local taxation will tend to give better service and higher employment stimulus in the central part, and this way counteract the regional policy priorities set up in the national policy documents.

Through the income systems for local government funding, money is transferred from the state to the counties and municipalities, and between the local governments, in a way that alter the resource base for the units. The way these income systems operate, will therefore have substantial influence on the regional economic development, as well as for the public service in the different parts of the countries.

This article presents a short overview of the transfer systems for municipalities in the Nordic countries. Here, the level of redistribution between rich and poor units are commented,

as well as what criteria are used in order to define differences in expenditure structures for the service demand. To what extent are periphery oriented cost elements focused relative to centre oriented elements, and to what extent are regional policy elements explicitly taken into account? A tentative ranking of the Nordic countries are set up along these lines.

The article is based on a more detailed study (Mønnesland 2001) where the income systems are described more in total. The conclusions drawn will then lay on a more detailed base than illuminated in this article alone.

The local governmental structure in Norden

When the income systems for local governments are compared, it is important to be aware of major differences between the countries regarding the role of the local governmental sector. Here both the size as well as the location pattern is of importance. Also, differences in the role division between the private and public sector as well as between the central and local governments must be focused.

Table 1. Local governments in Norden: structure and population per 1/1-2000

	Finland	Sweden	Denmark	Norway	Iceland
Total population	5.145.596	8.861.426	5.330.020	4.478.497	278.717
Number of municipalities	436	289	275	435	124
Inh. in the greatest municipality	551.123	743.703	495.699	507.500	109.795
Inh. in the smallest municipality	235	2.746	2.293	256	31
Average population in the municipalities	11.384	30.662	19.382	10.295	2.248
Number of counties		21	16	19	
Inh. in the greatest county		1.803.377	637.122	507.500	
Inh. in the smallest county		57.428	44.337	74.100	
Average population in the counties		421.973	333.126	235.710	

The autonomy regions of Åland, Greenland and the Faeroe Islands are not integrated with the local government transfer systems of Finland and Denmark, and are not included in the national figures of the table.

Units in Norway (1), Sweden (1) and Denmark (2) responsible both for municipal as well as county functions are included as units on both the two governmental levels

In Finland and Iceland, there are no regional governmental level in the way we find this in the three other countries, i.e. a separate unit governed by an assembly appointed by direct regional elections. Instead, services are often operated by units generated by neighbouring municipalities on a more or less voluntarily basis.

The total population in Iceland is about half of the population in the greatest municipality (the capital) in the other Nordic countries (or one third compared with Sweden). The average municipality size vary from about 30.000 in Sweden, 20.000 in Denmark, 10-11.000 in Norway and Finland and 2.250 in Iceland. In both Sweden and Denmark, the smallest municipality is about ten times the level in Norway and Finland, with Iceland at an extreme level of 31 as the minimum. Both for counties and municipalities, the units lies all over on a greater level in Sweden than in the other Nordic countries. In all countries, however, there are great internal size differences between the units.

Table 2. Key figures on local governmental activity levels, 1999

figures in per cent:	Finland	Sweden	Denmark	Norway	Iceland
Shares of GNP					
consumption, investment	14	20	21	15	9
total expenditure	15	23	31	18	11
Employment share	21	26	25	24	12
Shares of public sector:					
consumption, investment	56	69	75	61	35
employment	76	82	79	76	59

The figures are set up according to national account standards, which imply that services paid by the consumers are regarded as private and not public sector activity independent of the ownership of the institutions operating the activity. However, all public operated activities influence the employment figures

It differs somewhat between the countries what are the responsibilities of the local governmental levels. However, if the more detailed differences are ignored, the main deviations between the countries are the following:

In Iceland, health services are mainly the responsibility of the state. The same is the case for secondary education. Then, the regional distribution of these parts of the public activity will be channelled within the state budget and will not be influenced by the local governmental economy. This may explain why the local governmental sector in Iceland constitute a lower share of both the national economy as well as of the total public sector than in the other Nordic countries.

In Denmark, more of the social transfers to public households are channelled through the local governments, which in the other countries are handled directly from the state to the households. To a high degree, the state is the final payer also in Denmark, by total or partial refunds to the local governments. This explains why the local governments in Denmark has a higher expenditure share of GNP than the activity share. In the other countries, these indicators are more close due to a moderate level of municipal transfers to the private sector.

The activity level of the local governments are on about 20% of GNP in Sweden and Denmark, and on about 15% in Finland and Norway and 10% in Iceland (the Iceland figure should be interpreted according to the deviating division of responsibility between central and local government levels). The weaker levels of Finland and Norway are also visible on the employment shares, but to a more moderate degree. This may be explained by differences in the use of part time employment in the local governmental sectors.

Local governmental finances

Table 3. Local governmental income by sources. 1999

figures in per cent:	Finland	Sweden	Denmark	Norway	Iceland
Local tax income:					
personal tax	42	60	52	40	66
tax on firms and properties	12		8	1	11
State transfers					
through the income system	17	16	10	23	10
mainly earmarked transfers	2	5	8	17	4
outside the income system					
Consumer shares	25	18	21	14	5
Other income	3	1	1	5	4
Sum total income	100	100	100	100	100

In all the Nordic countries, the main income resource for the local governments is local taxation. This source account for 77% of the total income in Iceland, 60% in Norway and Sweden, 54% in Denmark and 41% in Norway. On the other hand, the state transfers account for 40% of the local government income in Norway, around 20% in Finland, Sweden and Denmark and 14% in Iceland. These rather substantial deviations should partly be explained according to differences in the legal rights for the local level to decide on their own taxation levels.

In Norway, local taxation rates have to be below an upper limit fixed by the state, and all the units use this maximum rate. Then, the state is able to fully control the income level of the local government, by simultaneously fix the transfer level and the taxation rate. Through this strict control, Norway has chosen a higher transfer level and a lower local taxation level than the other Nordic countries. On several occasions, the state has lowered the maximum taxation rate in order to secure that the income share through transfers should be on a high level, as this will allow for a better control on the income distribution within the sector.

Also Iceland obtains a legal control on the local taxation rates, by fixing a maximum as well as a minimum taxation rate, with a moderate difference between those legal frames.

The state control in Iceland is however somewhat balanced by a tradition where the transfer levels are set up in a more or less fixed framework established by involvement of both state and local government levels.

In Denmark, the state transfer level is an element in a negotiation process, and is linked to an agreement also involving restrictions from the local governments on the upward regulation of local taxation rates. The negotiation is set up between the state and the organisations of the local governments and are then not legally binding for each unit, but in reality the restrictive effect on the taxation rates are significant.

In Sweden, the local governments may in principle set their own taxation rates. However, during the last decade, the state has enforced several ad hoc regulations limiting this right on temporarily basis, making the “free years” to occur relatively seldom. This policy, however, has not been in action since 1999.

Also in Finland, the local governments are free to set their own taxation rates.

In all countries, the income distribution systems are set up in a way where the taxation base, and not the actual taxation income, are regarded when the transfer levels are accounted. Also the competition between the units will tend to limit the growth of these taxation rates.

Consumer payment for the services is an important income sources. To some extent, legal restrictions will limit this income potential. Finland has the highest share of consumer financing, accounting for 25% of the total income, followed by Denmark on 21, Sweden 18%, Norway 14% and Iceland 5%. Here again, it is of importance that the health sector is not a local governmental responsibility in Iceland.

Norway is outstanding regarding the amount of earmarked grants outside the ordinary income transfer system. This may be interpreted as another effect of the more strict state control towards the local governments compared to the other Nordic countries. As the income possibilities are strictly limited, it is necessary for the state to operate a substantial part of the total transfers as earmarked grants in order to avoid political problems related to weak service levels in priority sectors. The growth of earmarked grants has been criticised, and it is now a claimed target to incorporate more of these transfers into the ordinary income system based on frame grants where the local governments are free to decide on how to use the money.

In especially Finland and Iceland, and to a minor degree also in Denmark, several elements in the ordinary transfer system are also of an earmarked character. This will not challenge the outstanding position of Norway, but should be taken into account when the figures in table 3 are compared.

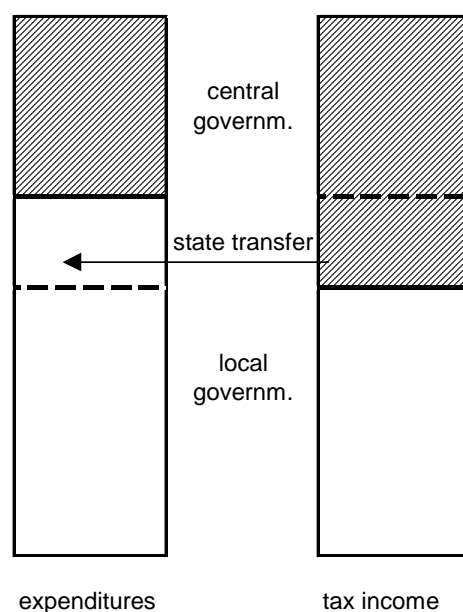
Table 3 is related to the local governmental sector as total. In a situation where the income systems for the local governments are based on state transfers alone, and these state transfers are distributed according to criteria reflecting income differentials and differences in expenditure needs, such figures will include the income system in a complete way.

However, in most countries, most of the income distribution are arranged through transfer streams within the sector, where the units regarded to be better off pay money and those units being in a worse situation receive money. Such internal redistribution will be invisible in table 3, but are of major importance for the total income systems in the sector.

It should be irrelevant whether the transfers are delivered according to needs, or the transfers are distributed in a general way (per inh.) and then nil-sum distribution systems re-channel money from the best off units to the worse off units. If the re-channelling model is obtained, one “advantage” here is that the redistribution effects of the system may be designed without any link to the total state transfer levels. Then the state may be free to reduce the total support level without fearing that such a transfer reduction may have distribution effects of a problematic political nature.

When such a dichotomy is established, the total transfers from the state to the local governments will be an effect on how the central and local governmental shares of the total taxation relate to their shares of the total public expenditures, ref. figure 1. Then, this transfer level may be of minor relevance for the distributive levels of the income systems.

Figure 1. The need for state transfers to the local governmental sector



The state shares of the columns are scattered, the local governmental shares are white.

The income system for the local governments, per country

As mentioned, the state transfers may be channelled either in a more or less neutral way (as per inhabitant, which are often regarded neutral but still gives a distribution deviating from the tax base distribution of the local units), or alternatively they may be distributed according to certain criteria. Similarly, pure redistribution systems (where the amounts paid and amounts received by local units are financially balanced) will be based on criteria. Such criteria are of two different main types, reflecting either distribution according to income base or alternatively the distribution according to expenditure needs.

Distribution according to income base intends to allocate (or re-allocate) resources in order to avoid too great differences in the ability for the units to finance local governmental services. Similarly, distribution according to expenditure needs will have the same aim, but here the focus is not on the financial equalisation but to adjust for differences on the expenditure side. If one municipality face greater need for public services than another even when the population size and financial situation are similar, such structural differences should also be reflected in the income system in order to equalise the ability for the units to deliver services to the inhabitants.

The differences between the countries relate partly to the degree of equalisation, what inequalities are accepted and to what degree does the system level off differences between rich and poor units and units with easy and heavy structural needs. Also the weights given to each element differ. An important element is how different factors are taken into account in the equalisation of the expenditure needs (factors related to urbanisation contra factors related to periphery), and also the involvement of pure regional policy elements in the income transfer systems.

Finland

The income system for the municipalities consists of a general grant (distributed partly by need criteria and partly per inhabitant), an income redistribution scheme, and sector grants for the health and for the educational sector. These sector transfers accounts for about 80% of the total transfer income, while the general grant only account for 5%.

Table 4. The income system, Finland. % of total municipality income, 2000

	Fees	Transfers	Net transfers
General grants		0,9	0,9
Income based re-distribution	2,5	2,2	-0,3
Sector grants			
- health, social sector		9,3	9,3
- education, culture	2,7	9,0	6,4
state investment grants		0,6	0,6
transmission scheme	0,001	0,063	0,062
grant for special needs		0,2	0,2
Sum, % total of income	5,2	22,4	17,1
<i>Bill. FIM</i>	7,4	32,0	24,5

The fees collected within the sector grants transfers are the municipality share of the estimated cost base for those educational activities not operated by the municipalities themselves. For these activities, the total cost base is accounted as transfers to the municipality sector, not only the state share of the cost base.

The income re-distribution scheme provide grants to units lying below 90% of the average tax income per capita, to an amount bringing them to this level. The units lying above the country average per capita pay a fee of 40% of the tax amount above this average, but the total fee should not exceed 15% of the total tax income for any municipality. The calculation is based on the average tax rate, not the actual rate for each municipality. As the fees collected are somewhat higher than the grants paid, the scheme surplus will be an income for the state.

Most of the general grant is channelled on a per capita basis, but 10% of the allocation is distributed according to criteria such as skerries location (i.e ferry dependency), remote location according to greater urban centre, separate allocations for greater urbanisations, plus allocations for bi-linguistic status (Swedish and Sami minority languages).

The sector grants (health and social sector, and education and culture sector) are set according to indicators for the expenditure needs. For both sectors, the estimated cost level is divided in a state share and a municipality share. The national municipality share is, however, distributed among the individual units according to the number of inhabitants. The state share for the individual municipality will be the difference between the estimated cost and the per capita based municipality share. This way, the schemes also involve a re-distribution element in addition to the selective grant distribution set up according to expenditure needs. Normally, the municipality share will not be paid physically, it is only used in the calculations of the state share payments.

The grants for the health and social sector are financially dimensioned by the state sector plan. 93% of the social sector grants are distributed according to demographic criteria and 7% according to unemployment figures. For the health sector, 76% of the grants are distributed according to demographic criteria and 24% according to registered differences in

morbidity. For both the health and the social sector, remote and skerries municipalities will get a mark-up by up to 10% of the grants calculated from the ordinary indicators. The state share will be paid to the municipalities, and when the activities are carried out by other units (f.i. hospitals owned by several neighbouring municipalities), these units will have to charge the needed money from the responsible municipalities.

The grants for the education and culture sector are dimensioned mainly by activity indicators. (although some cultural activities are calculated according to total population). This may be registered pupils, supplied with other relevant cost elements. The cost factor is set separately for each type. Then, each individual institution will get a calculated cost level. When the municipalities operate the activity, the refunding of the state share will follow the same method as described for the health and social sector. When the activity is operated by other units (which often is the case for secondary education), the total calculated cost is paid from the state to the unit, and the municipalities will have to pay their municipality share (calculated on per capita basis) to the state.

Most of the sector grants for educational purposes (and some for cultural purposes, a.o. museums) should be regarded as ear-marked grants. One of the reasons why Finland has turned the system this way (from a system similar to the one used in the health sector) was to avoid a down-scaling of the public secondary education. The schools should to a certain extent not be restricted by lacking payment abilities from their respective municipalities (an effect of the tightened municipal economy accepted for the hospitals).

The grants allocated for investment purposes are all ear-marked grants, where the municipalities may apply for state shares of specific investment projects, up to a budget limitation. The grant for special needs may, however, be partly ear-marked and partly general, as financial problems may be a special need in this context.

Sweden

The income system consists of a general grant combined with re-distribution schemes for income inequalities and inequalities in expenditure needs. Both the re-distribution schemes are balanced, i.e. the fees and the received transfers are in sum equal. Both for the grants and the re-distribution, there are separate schemes for the municipalities and the counties. The grants play a dominating role, channelling about $\frac{3}{4}$ of the total transfer income, see table 5.

Table 5. The income system, Sweden. % of total municipality/county income, 2000

	Municipalities			Counties			Sum net transfers
	Fees	Transfers	Net transfers	Fees	Transfers	Net transfers	
General grants	0	16,3	16,3	0	11,5	11,5	14,8
Income based redistribution	2,7	2,7	0	2,3	2,3	0	0
Needs based re-distribution	1,4	1,4	0	0,7	0,7	0	0
Transmission scheme	0,3	0,7	0,5	1,0	1,5	0,5	0,5
Sum, % of total income	4,7	21,2	16,8	4,0	16,0	12,0	15,3
<i>Bill. SEK</i>	<i>16,5</i>	<i>74,7</i>	<i>59,2</i>	<i>6,3</i>	<i>25,2</i>	<i>18,9</i>	<i>78,1</i>

The general grant for the counties is distributed on a per capita basis. The same is the case for 90% of the general grant for the municipalities, while 10% is distributed according to demographic criteria, i.e. number of children in school age and number of elderly people.

The income re-distribution scheme charges a fee from the units with a tax income per capita above the average and provides transfers to the units with a tax income per capita below the average, both the fees and the transfers are 95% of the tax income deviance from the average (the tax income is calculate according to standard and not individual tax rates). The system is the same for counties and municipalities, both based on the average level for each governmental level. A separate fee limitation is set up for rich municipalities with low individual tax rate, in order to avoid negative marginal effects of growing tax bases.

The re-distribution scheme based on expenditure needs consists of separate models for each component of expenditure needs. There are 4 types for the counties and 16 types for the municipalities. For each component, the designed model calculate a cost based on indicators relevant for that type of expenditure needs. When the estimated cost per capita is above the average, the unit will receive a transfer, and when the estimated cost per capita is below the units will pay a fee, both the fee and the transfer will be the full deviance to the average level.

The most heavy components for the municipalities are child care, primary school, secondary school, care for the elderly and social services for the municipalities, and health services for the counties. Here, the demographic components are the most important factors in the calculation of estimated costs, but also indicators related to settlement patterns (density, distance, unit size) and social factors (unemployment, single parents etc.) are included. For the other (less heavy) components, non-demographic factors are more dominating (climate, physical structure, population decline, need for industrial and labour marked actions). In total, factors connected to periphery, distance, low density will have a significant role in the need calculations. Also centre related factors have some influence, but on a more modest level. As

the different components often generate effects in different directions, the net transfers when all models are summed up will be on a relatively moderate level (see table 5).

Denmark

The Danish income system consists of Block Grants, i.e. state transfers which have been negotiated with the union of the municipalities, resp. the counties. There gives also some general grants (i.e. “free” transfers, no ear-marking) outside the Block Grants. Then, There are financial balanced re-distribution schemes, one based on income re-distribution and one based on re-distribution according to expenditure needs, for the counties and for the municipalities separately. For the municipalities, there are also similar systems for the capital region. Some minor re-distribution schemes serving separate purposes are also operative. The total re-distributed transfers accounts for $\frac{1}{3}$ of the total transfer income for the municipalities, and $\frac{1}{4}$ for the counties.

Table 6. The income system, Denmark. % of total municipality/county income, 2000

	Municipalities			Counties			Sum net transfers
	Fees	Transfers	Net transfers	Fees	Transfers	Net transfers	
Block grants ex. income comp.		9,0	9,0		12,7	12,7	10,1
Income compensating grants		0,3	0,3				0,2
Other general state grants		0,1	0,1		0,1	0,1	0,1
Income based re-distribution same, Capital area	1,5	1,5	0	3,4	3,4	0	0
	0,6	0,6	0				0
Needs based re-distribution same, Capital area	0,5	0,5	0	0,8	0,8	0	0
	0,2	0,2	0				0
Other re-distribution schemes same, Capital area	1,7	1,7	0	0,02	0,02	0	0
	0,6	0,6	0				0
Sum, per cent of total income	5,0	14,4	9,3	4,1	16,9	12,7	10,3
<i>Bill. DKK</i>	<i>12,4</i>	<i>35,2</i>	<i>22,8</i>	<i>4,3</i>	<i>17,5</i>	<i>13,2</i>	<i>36,0</i>

The Block Grant for the counties, and 96% of the Block Grant for the municipalities, are distributed according to the tax base. Here, the Danish transfer system deviate from the other Nordic countries, where the general part of the state grant is distributed according to the number of inhabitants. Denmark has chosen their own way, as it makes it easier to link the negotiation on the size of the Block Grant to a limitation on the municipalities (and counties) right to rise their tax rates. If all units changed their tax rate with one percentage point, the fiscal effect will be distributed the same way as a rise in the Block Grant. Compared to the per

capita system operated in the other Nordic countries, the Danish system imply a much skewer grant distribution in favour of the richer units.

For the municipalities, the 4% of the Block Grant is distributed by separate schemes: compensation for municipalities with regional economic difficulties, help for raising the local budget share for EU programmes, and (ca. 3% of the Block Grant) a scheme compensating for low tax base. This scheme provide grants to municipalities with a tax base per capita below 90% of the average, and the compensation is on 40% of the deviance up to the 90% level.

Outside the Block Grant there are grants for municipalities on greater ferry based islands, and for municipalities outside the capital region with a weak economic situation. Part of this scheme was incorporated with the Block Grant in year 2001. Also for the counties, there is a scheme compensating for units with a weak economic situation.

The income re-distribution schemes provide transfers to the units lying below average tax base per capita, and the units above the average pay a fee, both the fees and transfers are set to 80% of the deviance from the average for the counties, and 45% for the municipalities. The re-distribution level may seem rather moderate for the municipalities, but for those below 90% of the average the income distributed part of the Block Grant will add so all together the compensation will be around 80% (40% of the gap up to 90% of average plus 45% of the gap to 100% of the average).

The national re-distribution scheme for expenditure needs for the municipalities is based on estimates for the expenditure level consisting of a base element (same amount per municipality irrespective of population size), a demographic element based on per capita expenditure rates for different age segments (with extra costs estimated per person in social housing and for pre-retired persons) and a social element based on indicators for unemployment, single parent households, immigrant share, and persons living in “problem housing areas”. The social element constitute 20% and the base and demographic elements constitute 80% of the total estimated costs. 45% of the deviance from the national average cost estimate per person is compensated by transfers or charged as fees. For the counties, there are no base elements, and the weighting of the age groups in the demographic element is adapted to the expenditure profile for county based services. The social element here have fewer indicators than for the municipalities. The social element constitute 22,5% and the base and demographic element constitute 77,5% of the total estimated costs for the counties. Here, 80% of the deviance from the average cost estimate is compensated by transfers or charged as fees.

The capital region, consisting of 50 municipalities around (and including) the capital, are included in the income system schemes described above. In addition, there are separate re-

distribution schemes for the municipalities within the capital region. The reason for this is partly that the municipal structure in this region is characterised by geographically small units, at the same time the functional labour market is wide, covering all the capital region. Therefore, social segregation are taking place in the housing market, as well as the services to a large extent may be utilised also by people living outside the financing municipality.

The income re-distribution scheme for the capital region is similar to the national scheme, but the compensation rate is set to 40% of the deviance from the average taxation income potential. Here, it is the capital region average that are used, which is on a higher per capita level than the similar national average. There are set some limitation rules to avoid a too high total fee payments for the richest municipalities. The expenditure need based re-distribution scheme is also similar to the national based scheme, although no base element is included, and the social element indicators are somewhat altered. The social element accounts for 25% of the estimated costs and the demographic element 75%. 40% of the deviance from the average is compensated.

A separate re-distribution is operative among the counties to benefit units with above average expenditure for AIDS patients, For the municipalities, a national re-distribution scheme is operative to account for immigration related expenditures. In the capital region, separate re-distribution schemes are set up for differentials in housing expenditure, and to provide support for units in a difficult economic situation.

Norway

The income system in Norway consists of a general grant distributed per capita, combined with an income based and a need based re-distribution scheme, all the elements exists separately for counties and municipalities. In addition, the system have separate regional oriented allocations: a regional support for small and non-rich municipalities in non-central areas, a North Norway support both for counties and municipalities, and a capital support for Oslo (which is both a county and a municipality).

The general grant dominates both relative to the regional oriented grants as well as to the money channelled through the re-distribution schemes, constituting around 4/5 of all the gross transfers both for the counties and municipalities.

Table 7. The income system, Norway. % of total municipality/county income, 2000

	Municipalities			Counties			Sum net transfers
	Fees	Transfers	Net transfers	Fees	Transfers	Net transfers	
Income based re-distribution	1,8	1,8	0	2,2	2,2	0	0
Needs based re-distribution	1,8	1,8	0	1,7	1,7	0	0
General grant		19,3	19,3		21,5	21,5	20,0
Regional grant		0,3	0,3				0,2
North Norway grant		0,6	0,6		0,9	0,9	0,7
Capital grant		0,1	0,1		0,2	0,2	0,1
Grants for special needs		2,0	2,0		1,6	1,6	1,9
Sum, per cent of total income	3,6	25,9	22,3	3,8	28,0	24,2	22,9
<i>Bill. NOK</i>	5,8	40,9	35,2	2,9	21,0	18,2	53,3

The income based re-distribution schemes for municipalities provides transfers to units with a per capita tax base below 110% of the average, the compensation rate is 90% of the deviance up to the 110% level. The units with a per capita tax rate above 140% of the average pay a fee on 40% of the deviance to the 140% level. This system is not balanced. The under-balance is covered by a per capita fee charged for all the municipalities. Including this fee, the net outcome is that the units below 94% of the average receive transfers and those above 94% pay fees. For the counties, the units with a per capita tax base below 120% of the average, the compensation rate is 90% of the deviance up to the 120% level. The costs of the scheme are covered by a per capita fee charged for all counties. Including this fee, the units lying below 97% of the average are receivers and the other are payers.

The needs based re-distribution schemes are based on several indicators reflecting the expenditure structure for the municipalities, resp. the counties. The demographic indicators (age structure) accounts for about 75% of the estimated costs. Of the remaining 25%, the social indicators dominate. Indicators reflecting low population densities, distances to centre etc have only a marginal weight.(1,1% for the municipalities and 3.1% for the counties).

The regional grant is allocated to municipalities lying in the designated zone for regional policy support, i.e. the non-central part of the country. 30% of the municipalities lies within this zone. To receive the grant, the population must be below 3000, and the per capita tax income must be below 110% of the national average. The support is a fixed amount per municipality, those lying in the uttermost north receives an additional sum.

The North Norway grant is provided to counties and municipalities in the 3 northernmost counties. The grant is per capita, at a higher rate the more north the county is located.

The capital grant is a special allocation to Oslo. The formal argument is that to operate the capital functions need some cost compensation. In reality, the grant is also a reflection of special expenditure needs caused by being the greatest urban centre.

The grant allocation for special needs is partly a budget where the units may apply to the ministry about special needs not covered by the ordinary income system. A separate budget is set up to compensate those units who were loosing when the system was reformed from 1997. This part is planned to be taken away gradually up to 2006, at the same time as the indicators in the needs based red-distribution schemes will re-enter some more weight for distance based expenditures.

Iceland

The income system in Iceland is based on state grants which are channelled by different criteria..

Table 8. The income system, Iceland. % of total municipality income, 2000

	2000	
	Mill. ISK	Per cent
General grants:		
Income based	507,3	0,8
Needs based	1248,9	1,9
Compensation grants, primary schools	2882,7	4,5
Sum general and compensation grants	4667,1	7,2
Other grants:		
Support for merging of municipalities	21,0	
Grants for units with economic problems	0	
Support for school buildings etc. in smaller municipalities	321,3	
Support for school transport and lodging in smaller municipalities	427,3	
Support for housing transfers	294,0	
Support for school buildings in greater municipalities	400,0	
Grants for units with declining population	350,0	
Sum other grants	2113,0	2,8
Sum	6780,1	10,0

Based on preliminary account figures

43% of the grants is a compensation for a reform of the primary school financing in 1996, where the municipalities got all the financing responsibilities while this earlier was shared with the state. This part is channelled by estimated cost profile (incorporating a.o. small scale expenditures), the underlying idea is to reflect the actual cost rise generated by the reform, but through an cost estimation reflecting needs more than actual account figures.

The income based grant compensate the deviance up to 96% of the average per capita tax base within each size group. There are 4 size groups: under 300 inh., 300-10000 inh., above 10000 ex Reykjavik, and Reykjavik (at around 110.000). As Reykjavik is alone, it will be at the group average and then not receive grants. For the other groups, the grant threshold is 20% higher in the two higher size groups than in the lowest one. The effect is that the grants received by the smallest municipalities is on a much lower level than if the system were based on the total average irrespective of size groups. The logic behind this system is to stimulate the smaller units to merge into a more functional municipal structure.

The needs based grant is for 73,5% distributed after demographic criteria (shares of children, primary school ages, youth, elderly plus immigrants). The grant level is reduced according to raising population size, with no grants above 21.000 inh. 10% is distributed according to snow related expenditures, distributed according to road km and climate zones (nothing in the southern zone), and 16,5 according to internal distances and urbanisation (more the more of population living in towns up to a rate of 90%, but 0 if all live in towns). The total needs based grant is reduced gradually according to income above 115% of per capita average in the size group, nothing is distributed if the income per capita is above 130%.

The other grant schemes are channelled according to more specified targets. A separate allocation is given to cover merging costs when municipalities decide to do such a merger. A separate allocation is given to smaller municipalities (below 2000 inh.) for transport and lodging costs for school children. There are also allocations for support for building costs. This is mainly for smaller municipalities, but temporarily grants are also channelled to greater municipalities in order to avoid evening classes in the primary school. These, together with the refund system for housing transfers, are of an ear-marked character.

A new element is the grant for municipalities with declining population. This was introduced in 2000 together with a financial upgrading of the needs based general grant. Then, these extra funding made it possible not to use the budgeted allocation for municipalities with special difficulties.

Comparative comments

The comparative comments are based on the structures of the income systems in the different countries. No analysis have been done using the effect figures to see more detailed how the systems in practice are distributing the grants and re-distributing the tax income between the different regions. Such effect figures are in principle available in all of the countries. In some of the countries, however, this information is not utilised in such a way, so

to make an effect analysis will need more project resources than so far has been available. In countries where such information is easy at hand, the figures are in line with the conclusions made below based on the system element reasoning alone.

There is a lot of specialities in the income system of all the Nordic countries. However, there is also a high degree of similarities. In all the countries, separate grants and/or redistribution schemes are set up to address income inequalities as well as inequalities in expenditure needs. These schemes are (except in Iceland) combined with general grants, distributed either per capita (Finland, Sweden, Norway) or by the tax base (Denmark).

A high degree of income equalisation will normally be of benefit to the periphery, which in the Nordic context will say that they are in accordance with the regional policy priorities. This is a fact not without exemptions, as some periphery units may have high resource based income, and some central units may have greater poverty problems. But the general tendency will still be dominating in all the countries.

The demographic elements in the transfer schemes may have a more labile regional effect. The ageing of the population, combined with a centralising migration pattern (where the young adults have the highest migration rates) will tend to give a quicker ageing in the periphery than in the central area. Then, the weights given to the elderly people will be in favour of the periphery, while the weight given to children and school age population will be in favour of the more central areas. This picture is, however, not a homogenous one. Due to high fertility in the periphery up to the recent past, many peripheral regions now have a high youth proposition, and also for historic reasons, many central regions have a high proportions of old people. It is therefore not a clear pattern, and not at all a stable pattern, how the demographic elements will benefit (or counteract) the regional policy dimension.

The schemes directed towards income equalisation are most ambitious in Sweden. As 95% of the distance to the average level is re-distributed as fees resp. transfers, the total effect is to generate a minimum level, after re-distribution, on around 98% (due to transmission schemes and to fee limitations for the richer municipalities, the actual re-distribution is somewhat less ambitious). In Iceland, all municipalities receive grant which bring them up to 95% of the average, but here it is the size group and not the national average which makes the total equalisation effect somewhat more moderate. In Finland, the re-distribution scheme brings all units up to 90% of the average. In Norway and Denmark such a bottom floor is not defined, but as net transfer in the Norwegian re-distribution system are given from 94% of the average and downwards, the system may give a total equalisation below the Finnish level. Denmark is on the bottom line in this ranking, both by having the 85%-equalisation only below 90% of

the average (and 45% below the 100%-line), and also by distributing the general grant according to the tax base which is in favour of the richer municipalities.

The schemes directed towards equalisation of differences in expenditure needs are more difficult to compare. The degree of effective compensation is dependent not only on the formal compensation rate, but also on how well the operative models and indicators reflect the actual differences in the expenditure needs influencing municipal services. To answer such a question, one will need a deep going effect analysis of the systems combined with a structural analysis on the services. However, it is possible to compare the profile of the systems, to what extent different elements are weighted in the schemes.

One dimension which is of regional policy relevance, is to what extent the systems are based on the demographic structure, to what extent social dimensions are taken into account, and to what degree centre oriented factors (housing, single parenthood, traffic congestion etc) are weighted relative to periphery oriented factors (low density, small service units, transport costs etc.) Here, Denmark has the greatest weight on social indicators, among whom the centre oriented elements have an important role. The periphery oriented elements occupy a marginal role in the Danish system. The ranking between Sweden and Norway is dubious: Sweden has a much more periphery oriented indicator system (in the Norwegian system, the periphery oriented indicators are really marginal in the needs re-distribution scheme), but this fact may be counter-acted by the explicit periphery oriented schemes in the Norwegian Scheme. In Finland, most of non-demographic indicators are periphery oriented both for the general and the sector based transfer schemes. In Iceland, the periphery orientation is as strongest, where only a marginal part is available in the capital while the distance indicator influence many of the transfers schemes based on need compensation.

Reference

The paper is based on a study financed by the Nordic Council of Ministries, and published in Norwegian as

Mønnesland, Jan: "*Kommunale inntektssystemer i Norden*", NIBRs PLUSS-serie 2-2001, Oslo.

The material is collected partly through public written sources and partly through interviews. The total list of documents is too voluminous to be re-printed here, please check the above reference for details.