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Recent Development of Municipal Finance in Selected European Countries

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DRAFT

Recent Development of Municipal Finance in Selected European Countries

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Abstract

The idea of fiscal decentralisation has become increasingly fashionable world-wide. In some developed countries the systems of intergovernmental finance have evolved gradually and each country has unique features. Transition countries on different continents have had differing reasons and motivations for such reforms. More recently, the acknowledgement of subsidiarity as the basic principle for the European Union, the introduction of the West German federal system in the eastern part of the country, the revival of regionalism in European countries are distinctive examples of the decentralisation process in Europe. Following the equalisation objectives, one tends to argue that those municipalities with greater spending needs automatically require more financial support from central or upper-level government. Yet, the sum of grants to municipalities should basically be induced from the comparison of their expenditure needs with local fiscal capacity from their own resources such as local tax revenues and fees. Surely the expenditure behaviour of municipalities is also, to a great extent, influenced by their present fiscal capacity and by the size of local debts. Four European countries were chosen to survey the recent development of local finance: the UK, Germany, Poland and Switzerland. This paper firstly identifies and highlights the similarities and differences in municipal finance in an international context. Secondly it theoretically examines the possibility of enhancing fiscal autonomy of local governments through increasing revenues from fees.

Keywords: fiscal decentralisation, local expenditures and taxes, shared taxes, intergovernmental transfers, municipal borrowings, Poland, the UK, Switzerland, Germany

JEL Classification: H7, H2, H4, H6, H8

1. Introduction

The idea of decentralisation of political decision-making has become increasingly fashionable world-wide, which is also accompanied by fiscal decentralisation in most cases. In some developed countries the systems of intergovernmental finance have evolved gradually and each country has unique features (Ahmad, Hewitt and Ruggiero, 1997). Emerging countries on different continents have had differing reasons and motivations for such reforms and their consequences for macro-economic stability and growth have also varied significantly from one country to another (Fukasaku and de Mello, 1999). More recently, the acknowledgement of subsidiarity as the basic principle for the European Union, the introduction of the West German federal system in the eastern part of the country, the revival of regionalism in Western European countries like Portugal are distinctive examples of the decentralisation process in Europe. This kind of political decentralisation has also been pronounced in the transition countries like Poland.¹

Compared to the case for cities and municipalities in western Europe, those located in the transition countries have been confronted with more serious problems caused by the speedy industrial modernisation and de-industrialisation, the rapidly increasing public activities due to social, economic, health and environmental ills, as well as by the provision of additional new (city-specific) infrastructure that is often better adapted to newly emerging economic activities. In particular, the challenges for large cities in eastern Europe have been more immediate and have also become more intensified in the course of the ongoing economic and political transition. On the other hand, it is argued that since the large agglomeration areas provide an unparalleled business environment to economic sectors, rural regions and municipalities are at loss to compete, which, in turn, leads to the increase in regional disparity in a country. As a result, municipalities in disadvantaged regions suffer from a net reduction in population size, decreasing local tax revenues, fewer job opportunities etc. Furthermore, cities and municipalities in transition countries seem to be (in some cases seriously) suffering from a lack of necessary financial means to cover the increasing expenditures and to meet current challenges. Such fiscal stress usually takes place either when the costs of providing local services increase faster than revenues needed to finance them, or when, at given costs of public service provision, local government revenues are constrained by a declining economic base which reduces taxable resources.

Following the equalisation objectives, one easily tends to argue that those municipalities and cities with greater spending needs automatically require more financial support from central or upper-level government. Yet, the sum of grants to municipalities should basically

¹ The advantages of decentralised government system include (1) electors have votes in different political levels and thus have more (and better) opportunities to express their preferences, (2) each elected representative needs to supervise fewer public services and fewer officials and (3) having more tiers

be induced from the comparison of their (existing and/or anticipated) 'true' expenditure needs with local fiscal capacity from their own resources such as local tax revenues and fees. To be sure, the expenditure behaviour of municipalities is also, to a great extent, influenced by their present fiscal capacity as well as by the size of local debts. Most common types of public activities which are legally assigned to local governments include, for example, (1) land planning and local environmental protection, (2) municipal housing and property management, (3) local transport system, (4) water supply and waste disposal, (5) primary health care and social welfare services, (6) elementary education, (7) culture and sport, fire protection, etc. Four European countries were chosen to survey the recent development of local finance: the UK, Germany, Poland and Switzerland. Germany and the UK are EU members; Germany is also in the euro zone. Poland is an EU candidate. Regarding the national constitution the UK is centrally structured, while Switzerland and Germany are federal states. Poland also guarantees a substantial degree of municipal autonomy but which is limited compared to that of Germany and Switzerland. Moreover, Poland and (the eastern part of) Germany are transition economies. Among the selected EU nations and candidates, Germany is the only country currently suffering from the difficulties of satisfying the Maastricht convergence criteria. Switzerland would probably be at the Maastricht limits if it were a member. The UK and Poland presently belong to those European countries with an above-average GDP growth rate, whereas Switzerland and Germany have recently experienced a rather moderate or low growth. Due to these different economic, fiscal and institutional characteristics of the investigated countries one could a priori expect that the local finance system and its development would differ from one country to another. This paper identifies and highlights the similarities and differences in municipal finance in an international context.

Apart from taxation, public debts and intergovernmental fiscal resource allocations other modes of finance are relevant for the fiscal autonomy of local governments. They comprise revenues from fees, public enterprise activities, public private partnership, management of public property, privatisation, shifting of bureaucratic burdens to other public or private bodies, collecting tributes, concession payments, revenues from sanctions etc. In previous years the issues on fees levied by local governments have not been adequately investigated in the public finance. Based on the various model approaches this study additionally highlights the possibility of enhancing fiscal autonomy of municipalities through increasing revenues from fees.

may help electors to evaluate the cost of each tier's services when the taxes of each tier are perceptible and relate closely to that tier's spending (Council of Europe, 1997).

2. Basic Theoretical Explanations on Fiscal Decentralisation and Municipal Finance

The greater sensitivity of sub-central governments to local preferences achieved through the decentralisation “may enhance the ability of the provider to identify both recipients’ and citizens’ willingness to pay. [...] people will be more willing to pay for [public] services that they find to be responsive to their priorities, especially if (1) they have been in the decision-making process and (2) costs are clearly perceptible in the process. [In other words] decentralisation [would] result in a closer approximation to the efficient solution of provision to the point at which the marginal costs and benefits of provision are equated” (Darby, Mucastelli and Roy, 2003, p. 14).

Regarding the efficient provision of local utilities, Oates (1972) highlights that public expenditures should be assigned in a way that provision of public services is made by the jurisdiction representing the smallest possible area over which the benefits are distributed. Although some inefficiencies would be expected from a multiplicity of tiers of governments (like increased administrative complexity, lack of transparency, clashes in competencies, etc.), the key principle is that the (optimal) size of the subcentral tiers should be selected to well match the broad range of services provided under the consideration of economies of scale. This fact in turn implies that economies of scale from joint consumption of public services set a limit to an ever decreasing size of local governments. According to Tullock (1969), such a problem can be solved by an external contracting with large private suppliers or other governments to obtain a service, only if the service is tangible and its quality and standard are safeguarded.

Moreover theoretical and empirical investigations on fiscal federalism show that a complete fiscal autonomy can also be disadvantageous and undesirable. First of all, regional and municipal disparities in income and wealth will lead to different levels of tax revenues in the individual jurisdictions. Consequently, some degrees of resource redistribution are necessary among those sub-central governments to ensure that citizens can have access to a comparable level (and/or standard) of public service nation-wide. Secondly, the so-called tax exportation between sub-national jurisdictions can be avoided when taxes are assigned to different levels of government. For instance, if a substantial part of local expenditures is covered by taxes paid by non-residents, local governments will have an incentive to increase spending beyond efficient levels. Insofar as non-residents benefit from service provision, then there could be under-provision, a problem that often arises with large cities and their satellites. Thirdly, the mobility of production factors accompanied by tax competition imposes limits on fiscal autonomy. For this reason the most decentralised taxation systems still assign the corporate taxes (on capital) to central government. Finally, fiscal decentralisation can cause administrative com-

plexity in tax collection and provision of public utilities (Blankart and Borck, 2003; Darby, Muscatelli and Roy, 2003).

In the provision of infrastructure, local governments tend to (critically) consider an increase in local taxes, especially when intergovernmental grants to municipalities do not adequately compensate the existing fiscal stress that is caused by large expenditure needs, and/or, when the total sum of local debts has already reached the maximum level that should not be exceeded. In addition, a jurisdiction with well-equipped infrastructure is obviously more attractive for investors and firms looking for a new location, while the increase in local taxes immediately means the loss of regional and municipal competitiveness. In the case that the additional provision of infrastructure will mainly be financed by higher local taxes, local governments should also be well aware of such a trade-off relationship and their short-term as well as long-term effects on the local economy (Nam, 2000). Based on a similar logic the traditional Tiebout model of revealed preference (1956) postulates “that [citizens] would choose to locate in jurisdictions that provide them with the mix of public services [and the local tax burden] that maximise their welfare. [... Those who] are dissatisfied with the given pattern in their area would [...] move to areas where the pattern [better corresponds their preferences]. So under certain assumptions, diversity of provision [of local utilities and tax burden] combined with consumer mobility can lead to the Pareto-optimal provision [of municipal services]” (Darby, Muscatelli and Roy, 2003, p. 14).

According to the subsidiarity principle, efficiency in the allocation of financial resources is best achieved by assigning responsibility for each type of expenditure to the level of government that most closely represents the beneficiaries of provided public goods and services (Frenkel, 1986; Hyman, 1993; Ter-Minassian, 1997).² Compared to the apparent cases for the central provision of national public goods and services like macro-economic stabilisation, redistribution, defence and foreign affairs, those activities related to social protection, education, health and environment have generally been considered as typical public services which can be well provided by local or regional governments. Yet, in most cases public goods have a character of mixed goods, for which some degree of decentralisation combined with some centralised co-ordination appears to be feasible and desirable, due to unclear distribution of benefits among regions, externalities and spill-overs, etc. As a consequence, overlapping responsibilities in policy formulation, financing and administration of public goods and services are quite common, which have also partly contributed to the existing great variety of intergovernmental fiscal arrangements and expenditure assignments among different countries (Levin, 1990; Ahmad, Hewitt and Ruggiero, 1997). Furthermore, the central government in many countries can influence the decentralised provision of public goods

through the regulation of their delivery in terms of quality³ and the ex-post control of the use of financial means and transfers.

The strong policy orientation of allocation objectives in terms of the devolution of expenditure responsibilities to local governments can create conflicts with the achievement of the macro-economic stabilisation and the redistributive goal, which appear to be better accomplished by the central government (Musgrave, 1983; Oates, 1972). Although “the overall level of expenditures of [regional or local] governments is effectively constrained by limits on their taxation and borrowing powers, changes in composition [for example, in favour of transfers to individuals with a high propensity to consume] may run counter to the stabilisation objective of the central government” (Ter-Minassian, 1997, p. 5). Empirical investigations (including Brosio, 1985) do not always confirm the so-called Leviathan hypothesis by Brennan and Buchanan (1980) that decentralisation generally limits the growth of total government expenditures.⁴ Furthermore, “with increased decentralisation comes the possibility of loss of macroeconomic control as local bureaucracies multiply, [which make] monitoring and evaluation more problematic [...]” (Ahmad, Hewitt and Ruggiero, 1997, p. 31). In a country with large economic disparity among its regions, the ability of local or regional governments to deliver public goods and services can also vary widely, which, in turn, could trigger undesirable internal migration. In countries in transition such type of economic policy conflicts appear to be more adequately taken into account in making decision about assigning certain expenditure responsibilities to local governments.

The general principles of decentralisation also guide the assignment of taxes to different levels of government. In practice, two options of assigning funds to local jurisdictions are commonly adopted but quite often in a combined form:

- assignment of (some) taxing power to the central government and financing local expenditure needs by intergovernmental grants or other transfers, for example, in form of sharing tax revenues, and
- assignment of (some) taxing power to the local governments, if necessary complementing the revenues (raised locally) with tax-sharing arrangements with the central government (Norregaard, 1997).

Table 1 illustrates more precisely how different types of taxes and grants can be assigned to the lower level of governments.

² The expenditure assignments involve decisions as to which level of government should be predominantly responsible for the formulation, financing and administration of policy activities and related follow-ups.

³ This type of concern is particularly strong in areas such as health and education.

⁴ In the research on the consequences of fiscal decentralisation, some economists also deliver empirical evidence that public deficit has actually grown in centralised countries than in decentralised ones (Wrim and van Rompuy, 1990).

Table 1 Fiscal autonomy in local governments

Own taxes	Base and rate under local control
Overlapping taxes	Nation-wide tax base but rates under local control
Shared taxes	Nation-wide base and rates, but with a fixed portion of the tax revenues (on a tax-by-tax basis or on the basis of pool of different tax sources) being allocated to the local governments in question, based on (1) the revenues accruing within each jurisdiction (also so-called the derivation principle) or (2) other criteria, typically population, expenditure needs, and/or tax capacity.
General purpose grant	Local government's share is fixed by central government (usually with a re-distributive element), but the former is free to determine how the grants should be spent; the amounts received by individual authorities may depend on their tax efforts.
Specific grants	The absolute sum of grant may be determined by central government or it may be open-ended (i.e. dependent on the expenditure levels decided by lower levels of government), but in either case central government specifies the expenditure programmes for which the funds should be spent.

Source: Norregaard (1997), Tax Assignment, Washington DC.

According to the standard theory of public economics (Oates, 1972; Musgrave and Musgrave, 1980; King, 1984), there are several characteristics for typical local taxes, which financially support a decentralised public expenditure system:

- The base of local taxes should be neither very mobile nor very unevenly distributed among jurisdictions. In the case of prevailing strong mobility, taxpayers will relocate the income activities or tax sources from high to low areas. This fact will also limit the freedom of local governments to change the rates.
- Local taxes should be accountable and local taxpayers should know what the tax liabilities are. In addition, they should be fairly easy to administer on the local level.
- The link between payment of the tax and local service received should be intact. In other words, such benefits should be strongly internalised to the local taxpayers.
- Local taxes should be able to generate sufficient revenues to avoid large vertical imbalances and ideally be less sensitive to the changes in business cycle.

In accordance with such criteria mentioned above, land or property taxes and, to some extent, personal income taxes have been quite often suggested to be suitable local taxes, while corporate income taxes have usually been considered to be less appropriate for the same purpose (Paugam, 1999). For example, “[in] some countries, state-level taxation of corporate profits, in the absence of a coordinated approach, has been accompanied by strong competition (tax wars), leading to distortions in enterprise’s location decisions, tax avoidance through transfer pricing by enterprises operating in multiple areas, and erosion of revenue” (Ter-Minassian, 1997, p. 10).

Intergovernmental transfers are aimed at rectifying not only the vertical imbalance caused by the unequal own tax revenues and expenditures of different levels of governments but also the horizontal imbalance which is led by the different fiscal capacities among same level jurisdictions. Although the local expenditure needs appear to be hardly measured in an objective way, the role of transfers becomes more crucial for those deficit jurisdictions on the sub-national level, especially when their increasing expenditures cannot be financed by borrowing or they lack direct access to capital markets. In the cases of existing externalities on other jurisdictions, the central government also needs to financially support sub-national authorities in order to guarantee the provision of certain public services on the local level like pollution control, inter-regional highways, etc. (Davis and Lucker, 1982; Frenkel, 1986; Ali, Lerne and Nakosteen, 1993; Boadway and Hobson, 1993; Hyman, 1993; Rosen, 1995; Dahlby, 1996; Ahmad and Craig, 1997). Furthermore, the amount of grants should vary with the local expenditure needs and inversely with local fiscal capacity, while their distribution must be transparent and fair. More importantly, an effective transfer system should neither encourage overspending nor weaken tax collection efforts on the sub-national level (Gage and Mandell, 1990; Jones and Cullis, 1994; Bahl and Linn, 1994; Shah, 1994a and 1994b; Winkler, 1994; Oates, 1998; Nam, Parsche and Steinherr, 2001).

Basically the re-allocation of fiscal resources from one level of government to another takes place through the sharing of tax revenues or through a form of grants. In the case of revenue sharing, tax bases can be shared on a tax-by-tax basis (in some cases with different coefficients of distribution among levels of government for each tax), or taxes can be pooled and shared systematically thereafter, as illustrated in Table 1. According to the previous experiences in emerging countries, such revenue sharing arrangements appear to be less successful in encouraging local revenue mobilisation (Fukasaku and de Mello, 1999). Grants from higher (federal or state) to lower levels (state or local) can be conditional (i.e. closely tied with specifications regarding the use of the funds and/or the performance achieved in the supported programme), or unconditional respecting the autonomy of local governments in spending such financial means. The so-called block grants also have a fixed character, which are, however, designed to support broad areas of local activities (like education, environmental preservation, etc.) rather than specific projects. On the other hand, intergovernmental grants can be open-ended — regardless of the transfer size required to cover the expenditure needs of individual local governments — or subject to certain limits. In addition, the down-flow grants have been quite often made in the EU on the basis of the so-called additionality principle, which requires — as a eligibility criterion for the supporting grants — the partial financial participation of local governments in providing local goods and services in its territory.

In many countries municipal fees have recently been increased considerably, which have led to an expansion of local revenues from this item. As long as profits were

yielded, municipal autonomy has been widened. However, higher fee revenues that stem from higher sales on the basis of given fees require a large scale production. In countries like Germany there are laws that stipulate cost coverage of local firms but do not allow profit-making. Therefore, an increase in fees only temporarily eases fiscal stress. More benefits may result from transferring municipalities' rights to private economic units against concession payments. Such rights include rights to provide energy, to organise passenger traffic, to use the municipal territory for storage, to organise markets, to use urban land for manufacturing, housing, gas lines, electricity and communication infrastructure (Friedrich, Gwiazda and Nam, 2003).

In addition "concerns over the distortionary effects of tax financing, fairness and a wish to make costs more perceptible to consumers are all factors that potentially support increases in the scope of user charges. [In particular, OECD] has been critical of low reliance on user charges by various [member] countries in the areas of child care, care of elderly and pharmaceuticals. Trends in these areas suggest that take-up of free services is booming and supply-side rationing is considerable. The provision of services free of charge, or without making costs perceptible, obviously risks prompting excessive demand and hitting supply constraints, because the social costs of supply are largely irrelevant for the individual. User charges offer the potential to gain more information about price sensitivity of demand for services and can potentially render demand pressure directly influential rather than being expressed indirectly and imperfectly through the electoral system. Demand pressures may also be influential on supply-side efficiency. However user charging will be viable only if the costs of collection and of compensation through the benefit system are low relative to the sums that can be levied and the efficiency gains that result. Countries that have tried to increase reliance on fees and charges have generally aimed at strike a balance between copayment and maximum contribution to avoid imposing unduly high expenses on some households" (Darby, Muscatelli and Roy, 2003, p. 29).

Borrowing has traditionally been an important source to finance long-term public infrastructure projects in advanced countries because it enhances intergenerational equity. In other words, these projects yield returns through several generations, over which the costs for the provision of public goods should be shared equally. Such type of intergenerational burden sharing enables small local governments to undertake the necessary large scale infrastructure investments (Shah, 1999). However, some countries still impose strict restrictions on local borrowing. For example, in some developing and transition countries large infrastructure projects have recently been more strongly supported in terms of capital grants or on-lending from higher level governments, since local governments (especially in the small entities due to their weak economic power, small size of tax income and other unfavourable creditworthiness) quite often suffer from the lack of direct access to credit markets.

More importantly, fiscal deficits and debt have continuously risen over time in a large number of countries both at the state and local levels. The rapid growth of local public debt in a country, which eventually endangers the macro-economic stability, also immediately questions whether the local borrowing is tightly oriented to the necessary financial needs for well-designed local public projects and whether its process is transparent and efficient enough in an administrative sense.⁵ In general there are four basic debt-control categories which are applied in practice in combined forms:

- primary reliance on market discipline without the so-called bail-out guarantee of the central government when the credit market is free and transparent information prevails (Lane, 1993),
- a dialogue-oriented co-operation and negotiation among different levels of governments in the design and implementation of debt controls (including limits on the indebtedness of sub-national governments),
- rules-based controls as specified in the constitution or by law regarding, for example, setting purpose- or project-oriented limits on the absolute level of local debts, and
- direct administrative controls of the central government over local borrowing, including setting of annual limits on the overall debt of individual sub-national jurisdictions⁶, the tight review and authorisation of individual borrowing operations like credit approvals (or the centralisation of all government borrowing) and ex-post monitoring, etc. (Ter-Minassian, 1997; Ter-Minassian and Craig, 1997; Shah, 1999; Council of Europe, 2000).⁷

All these controls can also be classified into passive and active controls, as illustrated in Table 2.

⁵ “[In Poland] the 1998 Law on Public Finance imposes certain restrictions on local and regional budget deficit. ... When the national public deficit is between 50% and 55% of the GDP, the [sub-national] authorities may not increase their budgetary deficit [in relation to the prior year. When the same ratio ranges] between 55% and 60%, local and regional governments must lower their deficit to an amount which varies proportionally from 100% of the previous year’s deficit (when the ratio public deficit/GDP is 55%) to nil (when the ratio is 60%). No public deficit is allowed and no new guarantee may be granted when national public debt exceeds 60% of the GDP” (Council of Europe, 2000, p. 23).

⁶ This is the case in Denmark, for example.

⁷ In the UK basic approvals for borrowings of individual municipalities are made on the basis of their general need to spend on capital and their usable capital receipts. Specific credit approvals are issued in response to a specific requirement and purpose. Local governments are not allowed to take credit for financing current expenditures. In Poland total local and regional government debt and loan repayment (principal and interest) must not exceed 60% and 15% of the authority’s annual income respectively (Council of Europe, 2000).

Table 2 Active and passive controls over local borrowings

Passive controls	These types of local debt controls have many forms, from broad guidelines on allowable ranges of debt/revenue and debt charges/own-source revenue ratios, to more specific golden rules, which permit borrowing only for capital formation but forbid it for financing current deficits.
Active controls	More active controls on local borrowing include centrally specified limits on capital spending of each local government, central government approval of submitted local project and local debts (including bond finance) and seeking community mandates on borrowing plans through popular referenda.

Sources: Shah (1999), *Fiscal Federalism and Macroeconomic Governance: for Better or for Worse?*, OECD, Paris; Spahn (1999), *Decentralization, Local Government Capacity and Creditworthiness: Macroeconomic Aspects*, World Bank, Washington DC.

3. Comparison of Municipal Finance in the Selected European Countries

Because of their different economic, fiscal and institutional characteristics the UK, Germany, Poland and Switzerland are chosen to survey the development of municipal finance. As already mentioned, Germany and the UK are EU members – the former is also in the euro zone – and since May 2004 Poland is also an EU member. Switzerland and Germany are federal states, while the UK is centrally structured. Compared to Germany and Switzerland the municipal autonomy guaranteed in Poland is limited. Moreover, Poland and (the eastern part of) Germany are transition economies. Germany is the only country currently suffering from the difficulties of satisfying the Stability and Growth Pact among the selected EU nations. Switzerland would probably be at the limits of the Maastricht convergence criteria if it were an EU member. There is an apparent difference concerning the GDP growth rate of Germany/Switzerland and the UK/Poland: While the latter group of countries recently experienced an above-average growth rate, the growth rate of the former two countries was moderate or low. Furthermore the number of native inhabitants of European origin is gradually shrinking in Germany and the UK, whereas the size of the Swiss population has remained rather stable. At the present this is not an important issue in Poland.

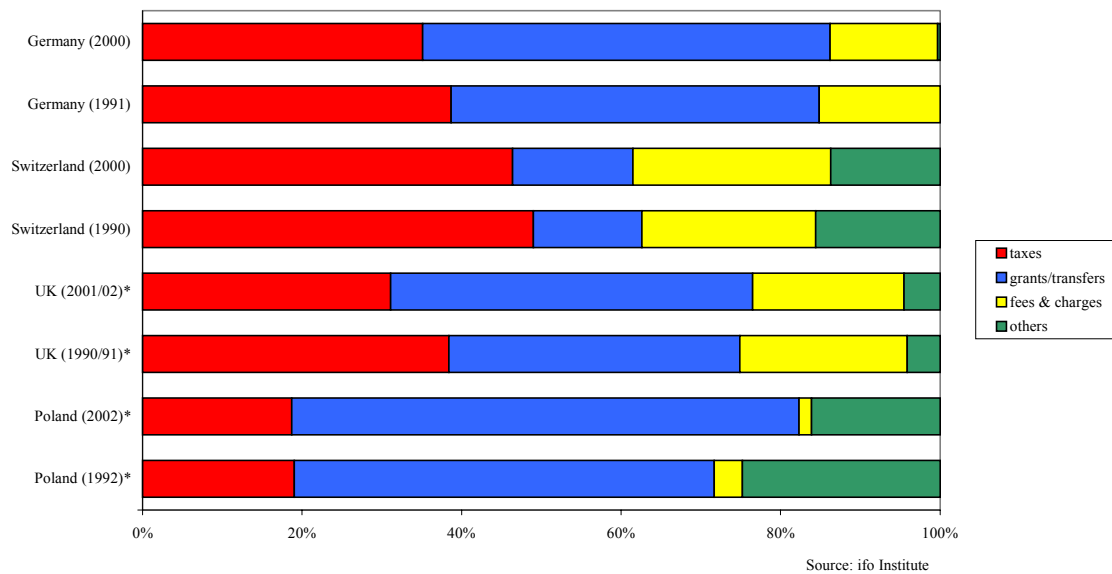
3.1 Development of Municipal Revenues

According to figure 1 one can state that there is a clear difference concerning the structure of municipal revenues of Germany, Switzerland, England⁸ and Poland.⁹ The activities of Swiss municipalities are mostly financed by taxes, whereas for Germany, England and Poland grants are by far the most important source of revenues with a share of over 50% in the former, 45% in England and even 64% in the latter. Tax revenues cover only 35% of municipal finance in Germany, 31% in England and less than 19% in Poland compared to 46% in Switzerland. Compared to Germany, England and Poland fees and charges are of more significant relevance for Swiss municipalities with a share of almost 25%. This very general pattern of municipal revenues for the four states can not only be found for the year 2000 or 2002, but holds true for the 1990s, that will be shown among other things in this chapter. Similar in all four countries is the fact that revenues from grants and transfers gained in importance in the 10-year periods studied whereas revenues from taxes have lost – except in Poland where the share of tax revenues stayed constant – in importance.

⁸ We will restrict our discussion on the development of municipal revenues and expenditures in England because dates for the UK weren't available.

⁹ In Germany the central government (Federal Government, Bund), the 16 state governments (Länder) and the local governments consisting of 13837 municipalities (Gemeinden, towns), 440 cities (117 kreisfreie Städte) and 323 counties (Kreise) make up the existing government bodies. In Switzerland government entities consist of the central government (federal government or Bund), 26 state governments (cantons) and local governments of which 2880 are municipalities (Gemeinden, towns). Furthermore, cantons are divided by 176 districts. There are some cantons like Uri, Zug and Appenzell which have no districts. In contrast to the case in Germany the existence of Swiss municipalities is not guaranteed in the constitutions of the federal government and cantons. Nonetheless, there exists unwritten law regarding their autonomy, although they are legally functioning as an enforcement agency to cantons.

Figure 1: Structure of municipal revenues



* For Poland and the UK grants/transfers also include revenues from tax sharing.

Local revenues increased in all four countries over the investigated period: In Germany they increased from about € 100 billion in 1991 to € 145 billion in 1995, what reflects the unification boom in the municipalities of the former GDR.¹⁰ After a drop to € 141 billion in 1997 due to a reduction of current grants, local revenues increased to € 148 billion in 2000. Tax revenues increased – except of slight business cycle fluctuations – until 2000, because of the participation of (west German) municipalities in income taxation and to the local business tax, i.e. a tax on profit.¹¹ Moreover, German municipalities have increased the property and business tax rates. Reason for increasing total revenues in the years from 1997 to 2000 can be seen in the booming economy which led to additional tax receipts. In Switzerland municipal revenues also gradually increased from Sfr 30 billion in 1990 to Sfr 44 billion in 2000.¹² Furthermore tax revenues, which represent the main source of revenues as mentioned before, continued to rise until 2000 with exception of 1997. However, the share of these revenues reduced over the years from 49% to 46% because fees and charges gain in importance. For England one can find an increase of total revenues of over 65% in the period from 1990/91 to 2001/2002.¹³ They augmented from about £ 59 billion to nearly £ 98 billion. As in Switzerland tax revenues increased in England from £ 23 billion in 1990/91 to £ 31 billion in 2001/2002 with a decrease of their share. The reason for that can be seen in the pattern

¹⁰ All figures about municipal revenues in Germany can be found in Table a1 in Annex.

¹¹ In east Germany tax revenues maintained a share of only 5 % of total municipal revenues, whereas this figure amounted to nearly 30 % for municipalities in the West.

¹² All figures concerning revenues of Swiss municipalities can be found in Table a2 in Annex.

¹³ All figures about municipal revenues in England can be found in Table a3 in Annex.

of the revenues from intergovernmental grants and transfers which doubled. While total revenues of municipalities in Poland did amount only Zlotys 6 billion in 1992 they substantially increased until 2002 to more than Zlotys 38 billion.¹⁴ This corresponds to a six-fold expansion in ten years, for which the reason is nothing else than the transformation process from a communistic state towards political decentralization what finally leads to an EU membership since this year.

As already mentioned German municipalities are extremely dependent on intergovernmental grants, which primarily serve to finance current expenditures in the fields of education, culture, social welfare, health, municipal public facilities and municipal firms and also partly assist in debt servicing and investment financing for local infrastructure projects.¹⁵ They gained about 65% from 1991 (€ 46 billion) to 2000 (€ 76 billion), with a peak in 1995 where they amounted € 78 billion or nearly 54% of total revenues. In the following two years intergovernmental grants declined, because expenses in social welfare were reduced.¹⁶ But since 1999 they started to rise again and in 2000 grants reached a share of 51% of total revenues. This was a result of the good economic development at the end of the 1990s which led to increasing payments from higher tiers of government to the municipalities (*kommunaler Finanzausgleich*). Intergovernmental grants and transfers are also of great importance for the municipalities in England and Poland. In England they doubled in the period from 1990/91 (£ 21 billion) to 2001/2002 (£ 44 billion) and reach now a share of 45% of total revenues. This process was forced by the aim to decentralize the country and making each municipality more economically competitive. As the political responsibility of municipal governments has not been met with equivalent financial authority the payment of grants has been the only way to reach this. Same reason holds for Polish *gminas* (communes). Because of the communistic regime in the preceding decades only grants and transfers have been an instrument to finance the necessary development of rural areas and reaching the goal of fiscal decentralization. So Poland witnessed an increase of the share of grants and transfers from 53% in 1992 to 64% in 2002. Although grants from central government and the respective cantons to municipalities in Switzerland also grew considerably in the 1990s, namely about 61%, there is a clear difference to Germany, England and Poland: Swiss municipalities

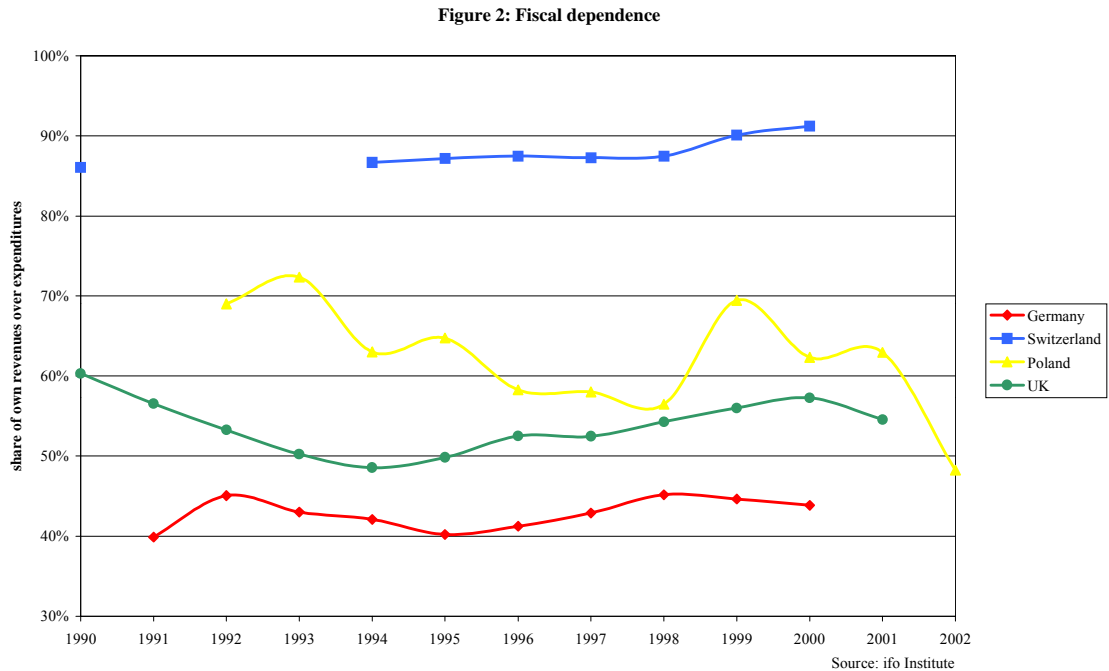
¹⁴ All figures concerning revenues of Polish municipalities can be found in Table a4 in Annex.

¹⁵ Investments grants remained relatively stable although the relation between current and investment grants has changed continuously in the western municipalities in favour of the former type. In the eastern part of Germany over 50% of all local revenues were based on grants due to lagging tax revenues. During the transformation process investment grants continually played an important role. Due to the reduction of expenses for services and the respective number of staff, outsourcing of services, privatization, etc., current grants did not grow strongly in general.

¹⁶ This is the consequence of new regulations related to asylum seekers, health care for the elderly people, further outsourcing and service reductions, changes in legal forms of public facility activities and reduction in local investments.

are not easily as much dependent on them, and in 2000 only about 15% of total revenues attributed to grants.

More clearly the dependence on grants can be seen in figure 2 which illustrates the development of the share of own revenues over expenditures from 1990 to 2002 for the four countries. Important is the fact that own municipal revenues exclude grants and so the dependence of local authorities on grants is shown in figure 2.



Whereas for Swiss municipalities there is only a weak dependence on payments of higher tiers of government which is decreasing since 1998, German, English and Polish local authorities apparently are financed through allowances and this dependence on grants is increasing again. One reason for the huge amount of grants for German municipalities in the 1990s might be the transformation process of the former GDR. Therefore one could expect a sharp change concerning the extent of grant payments in the coming years, because the transformation process will be ‘completed’. But this will not happen, because German municipalities are entitled by law to receive financial resources (tax revenues and grants) for their tasks from the state government. High grant payments are a typical consequence of this and so local authorities in Germany aren’t fiscally spoken very autonomous. In contrast the administrative and fiscal activities of Swiss cantons and municipalities are closely interwoven and the terms ‘joint execution’ and ‘joint responsibility’ are often used. This intensive horizontal cooperation at canto-

nal and communal level is permitted by the federal and cantonal Constitutions (Dafflon 1999). Thus grant payments do not play a major role in Switzerland.

The reason for the strong dependence of Polish municipalities on grants in the 1990s can be seen – as already mentioned – in the transformation process from a socialistic to a democratic state. This includes not only the privatization process of state owned firms but also the fiscal decentralization of the country. This process will sooner or later come to an end. At the same time this won't mean that the municipalities will be less dependent on grant payments, because this can only be achieved if Polish municipalities get more financial authority. Furthermore figure 2 shows that municipalities in England have been strongest dependent on grant payments in the 1990s what reflects the dominant role of the central government for the local finance matters. There is no sign that there will be a change in the future and therefore grant payments won't lose their dominant role in English municipalities.

Regarding the development of municipal revenues from fees (other current receipts) for Germany it is obvious that they are decreasing since 1995 and in 2000 they almost reached the level of 1992. This decrease can be attributed to the budget consolidation of western and eastern German municipalities which led to a reduction of personnel costs, the outsourcing of local activities, the establishment of municipal firms as well as the closing down of institutions and privatization. Contrary to Germany revenues from fees increased about 65% in Switzerland in the last decade. Current costs such as staff costs, material costs, interests or depreciation allowances increased and so Swiss municipalities were forced to charge higher fees because they encountered difficulties in raising tax rates. In the way fees gained in importance in the last years tax revenues were losing it in Switzerland. A similar growth path concerning revenues from fees may be possible in German municipalities: On the one hand municipal expenditures will grow in the future – they already did in the last decade as will be shown below – and on the other hand there exists the same difficulties to raise tax rates in Germany. Therefore municipalities in Germany will be forced to act like their Swiss neighbors and increase fees to cover the expenditures.¹⁷ Same may arise in Poland where the share of fees and charges decreased to less than 2% in the studied period. The transformation process accompanied by privatization and the closure of several institutions did cause the reduction of the share of fees and charges in Polish *gminas*. As there is not much scope to enlarge grant payments and tax increases aren't additionally enforceable regarding the increasing tax competition in a further growing EU, only fees and charges can be used to cover the growing municipal expenditures in the future in Poland. The pattern of revenues from fees and charges in municipalities in England confirms this assumption: Whereas

¹⁷ The current discussion about a reform of the German tax system whose purpose it is to simplify the existing fiscal system accompanied by decreasing tax rates for every income group strengthen this argument.

the share of fees and charges on total revenues decreased about two percentage points from 21% to 19% due to the above average increase of grant payments, the **total amount** increased of about 50% from 1990/91 to 2001/02. Reason for this may be seen in the growing municipal expenditures, which were in the last decade mainly covered by grants. As there is a limit for grant payments since higher tiers of government have to stabilise their finances because of the compliance with the Stability and Growth Pact only fees (and charges) can be used to achieve more local income.

Because of the transfer of legally dependent local facilities to public firms and policies which aimed at consolidating municipal firms there was an increase concerning the revenues from enterprise in Germany in the 1990s. Those revenues from business performance of municipal firms amounted € 7.9 billion in 1999 – in 2000 there was a small decrease of 2.4%. In the eastern part of Germany municipal firms were newly established during the last decade and losses have been reduced. But there also was an active privatization process of firms making not only profits but also losses,¹⁸ what may be the reason for the decreasing revenues in 2000. Influenced by these privatization and budget consolidation policies municipal revenues from the sale of property peaked in 1996 with € 6.5 billion. Until 2000 those revenues declined – an ongoing process. As well as in Germany revenues from business performance of municipal firms and the sale of property increased in Switzerland, namely from Sfr. 1.9 billion in 1990 to Sfr. 3.0 billion in 2000. However, compared to Germany, this is to a lesser extent partly due to the transfer of municipal facilities to public firms and the increasing prices for public services to consolidate local firms. Furthermore these revenues with a share of 6.9% of total revenues at the most contributed to a lesser extent to the increase in municipal revenues than in Germany, where they amounted 15.5% of total revenues in 2000, for instance.¹⁹

Net new debts of German municipalities, which borrowed both from capital markets and from other public institutions, reached their maximum in 1992 with € 0.66 billion and compared to the previous year that corresponds to an increase of about 127%. This sharp increase in 1992 may be a consequence of the downturn and the fact, that East German municipalities were particularly forced to take large scale credits between 1991 and 1993. After 1992 net crediting dissipated because of budget consolidation policies and transfers of public debt to municipal firms, so that in 2000 net new debt reached a level of about € 0.4 billion. It should be stressed that rather strict regulations of municipal debt has linked local investment with the fiscal capacities of municipalities. Also an important determinant of municipal debt has been a mixed funding of public programs

¹⁸ European competition policies have gradually reduced the profits of municipal firms, especially in the energy sector where charges for concessions to use the municipal territories by energy firms came under pressure.

¹⁹ There are no comparable dates about revenues from enterprise and from sale of property for municipalities in England and Poland available.

in which municipalities share the financial burden with the federal and state government.

In English municipalities revenues from bank credits and municipal bonds peaked in 2000/2001 with £ 1.9 billion, but their share never was larger than 2.2% of total local authority income. This reflects the restrictive credit policy: As municipalities in England aren't financial autonomous they aren't inevitably allowed to use a credit and the obligation of municipal bonds to finance themselves.²⁰

To summarize the development of municipal revenues in the four studied countries one can state, that there is a prevailing difference concerning the structure of municipal income not only between all four countries but also between the two federal states Germany and Switzerland and the two more or less centrally structured countries England and Poland²¹. Whereas tax revenues are the most important source of income in Switzerland followed by fees and charges, grants do play a major role in municipalities of Germany, England and Poland, but with different shares (see figure 1). At the same time tax revenues are more important in Germany than in England and of less relevance in Poland. The share of fees and charges only increased in Switzerland in the last decade. In Poland they are only on the fringes. For the future one should notice a change concerning the importance of revenues from fees and charges in Germany, England and Poland: To cover the further increasing municipal expenditures their share will increase as already happened in Switzerland. That municipal expenditures already increased in the last decade will be shown in the next chapter.

3.2 Development of Municipal Expenditures

Overall one can find for all four countries an increase of total municipal expenditures in the 1990s: Whereas they gained about 23% in Germany and 34% in Switzerland, there was a strong increase in England with 64% and above all in Poland, where the transformation process caused a sixfold of total municipal expenditures.

In Germany total expenditures increased from about € 134 billion in 1991 to € 165 billion in 2000 with a strong increase until the mid-1990s.²² Afterwards they slightly declined and started to rise again after 1997. This development can mainly be attributed to the transformation process of the former GDR, which required investments in different sectors. Especially social aid – the largest category of expenditure in Germany – increased about 46% in Germany until 1995. New federal laws, which directed insurance agencies to care for the elderly placed limits on social aid and reduced nursing fees, led

²⁰ For Switzerland and Poland no comparable data about net new debt or bank credits is available.

²¹ Poland can be classified as a kind of centralized country because of the limited autonomy guaranteed to their municipalities.

²² All figures about municipal expenditures in Germany can be found in Table a5 in Annex.

to a decrease of social welfare expenditures in the following years. But since 1999 they again started to rise and reached a share of about 27% of total municipal expenditures in 2000. Reason for this can be seen in the structure of the social system in Germany. To prevent an ongoing increase of these expenditures in the future because of the demographic changes reforms have to take place as soon as possible. Otherwise the share of social aid on total municipal expenditures will further grow and German municipalities will need more financial resources – like fees – to cover these expenses. In Switzerland municipal expenditures gradually increased from Sfr 30 billion in 1990 to Sfr 41 billion in 2000.²³ Only in 1997 there was a slight reduction. In the same time expenditures for social welfare gained about 79%, but only have a share of 15% of total municipal expenditures. But together with expenditures for health care which increased from Sfr 5 billion to over Sfr 7 billion in 2000 the share is 33%. Compared to Germany and Switzerland total expenditures increased even more in England from £ 60 billion in 1990/91 to £ 98 billion in 2001/02.²⁴ This is mainly caused by growing expenditures for personal social services which increased about 176% in the studied period. As in Switzerland the share of these expenditures is by far not as high as in Germany, but reached only 16% in 2001/2002. Outstanding is the development of municipal expenditures in Poland: Whereas they amounted Zlotys 6.5 billion in 1992 they nearly reached Zlotys 40 billion ten years later.²⁵ This increase reflects nothing else than the transformation process. After decades of a communistic regime Polish *gminas* were underdeveloped and investments were needed to build up infrastructure of all kind. Concerning expenditures for health care and social welfare one can observe an increase of their share until 1995. After that this share declined except of some fluctuations and in 2002 the share of expenditures for health care and welfare amounted 14% of total municipal expenditures. Thus a change in the social system took place during the transformation process but not such a huge social system as practiced in Germany was adopted. Regarding the forthcoming problems in this sector this can be a comparative advantage sooner or later.

Equal for Switzerland, England and Poland is the fact that not expenditures for social welfare are the largest category but expenditures for education with a share of 23% in the former, 32% in England and even 42% in the latter in the last studied period for each country. In fact there was an increase of those expenditures in Germany in the 1990s of about 9% but the share of expenditures for schooling still amounts less than 10%. Expenditures for education increased nearly 40% in Switzerland and 50% in England in the same time period. This strong increase in both countries doesn't reflect an underdeveloped education system as it did exist in Poland after the socialistic era, but shows

²³ All figures concerning municipal expenditures in Switzerland can be found in Table a6 in Annex.

²⁴ All figures concerning municipal expenditures in England can be found in Table a7 in Annex.

²⁵ All figures about municipal expenditures in Poland can be found in Table a8 in Annex.

that Switzerland and England attach importance on the improvement of schooling and education. This should be used as a sign for Germany.

Staff expenses peaked in Germany in 1995, declined in the following years and started to increase again since 1997. In 2000 they amounted € 14 billion and 8.5% of total municipal expenditures. In Switzerland staff expenditures also increased gradually about 19% in the 1990s and had a share of 8.4% in 2000. The share of municipal expenditures for public administration is highest in Poland with nearly 14%.

After 1992 expenses for construction, housing and traffic decreased in Germany but started to increase since 1998. They have a share of 12% of total expenditures compared to 7% in Switzerland, where we can find a comparable development regarding the spending for housing and traffic. A similar development took place for expenditures for municipal firms and real estate funds in Germany: They increased until 1992 and then after a slight downfall started to increase again after 1998. In England expenditures for transport and housing increased from 1990/91 to 2001/02 with some fluctuations concerning the expenses for transport. Together they have a share of 21.2%. Expenditures for transport and telecommunication services experienced in Poland as the expenditures for education and outstanding increase from a share of total expenditures of 2% to 11% in ten years. This again reflects the necessary investment activities in Polish municipalities after the communistic regime.

Important municipal expenditures in Germany are also expenses for public facilities and business promotion with a share of 10% in 2000. As a consequence of the transformation process of the former GDR they increased until 1992 and then started to decrease. Expenditures for general finance increased 71% in Germany during the 1990s and reached a share of nearly 17% of total municipal expenditures. In Switzerland this share is only 7%. In Switzerland an England municipal expenditures for environment and regional planning increased and have a share of 8.7% and 8.4% of total expenditures. Interesting is the development of expenditures for communal economy in Poland: Their share increased until 1993 to 31% and then decreased to 10% in 2002 what may also be a result of the transformation process.

From this comparison one can state that municipal expenditures did increase in all four studied countries in the last decade. But there are differences concerning the significance of expenditure assets: In Germany expenses for social service are most important, whereas in Switzerland, England and Poland expenses for education are highest. In Switzerland social welfare **together** with health care has with 33% a higher share than in Germany with 27% for social welfare. For both countries this reflects a distinctive social system which has to be reformed in the coming years. Otherwise municipal expenditures will further increase and this may not be financed any more.

4. The Role of Fees for Municipal Finance

Apart from taxation, public debts and intergovernmental fiscal resource allocations other modes of finance are relevant for the fiscal autonomy of sub-states or municipalities as well as central government. They comprise revenues from fees, public enterprise activities, public private partnership, management of public property, privatisation, shifting of bureaucratic burdens to other public or private bodies, collecting tributes, concession payments, revenues from sanctions etc. In previous years the issues on fees levied by local governments have not been adequately investigated in the public finance.

Yet there are some academic discussions on the principles of fixing fees (Bird, 1976; Seldon, 1977; Bohley 1980; Grosseckttler, 1985; Wagner, 1991; Sackofsky and Wieland, 2000). There are normative aspects related to the ways how to formulate fees to increase welfare. According to a welfare function the social marginal benefit of a public service should be equal to the marginal social costs of the same service. The social marginal benefits in terms of willingness to pay for the service has to be equal to the marginal willingness to pay against the provision of the service, if the social net benefit concept is adopted instead of a welfare function. Such different types of willingness can be reflected in consumer surplus, sales, monetary terms for advantageous external effects minus a producer surplus, costs and monetary terms for disadvantageous external effects. If the welfare expression is restricted to consumer surplus and sales subtracted by the related costs, the marginal cost pricing principle applies for fixing fees. With increasing marginal costs in a monopoly the amount of fee appears to be desirable which satisfies the condition that the fee per service unit is same as the marginal costs and also allows profits (Oort, 1961; Lösenbeck, 1965; Nelson, 1964; Thiemeyer 1964; Thiemeyer, 1970, Krelle 1976; Bös 1981): in this case rules for application of peak load pricing possible (Turvey, 1968; Bätz, 1979; Blankart, 1980; Bös, 1981; Wirl 1991). Sometimes institutional framework, organisational and legal forms require a balanced budget for the public institution providing the service. In cases with the falling marginal costs marginal cost prices lead to losses and budget problems occur. For that purpose the so-called Ramsey-pricing (Ramsey, 1927, Bös 1986), the Feldstein-prices considering cost coverage (Wirl, 1991) and the peage systems (Allais, 1984; Hutter, 1950; Boiteux, 1951) were developed for determining fees. In terms of cost effectiveness analysis fees are set to cover the cost required maximal output (Friedrich, 1969; Krelle, 1976). In the utility analysis fees are determined under the consideration of sales and concession (Friedrich, 1969), maximisation of employment (Hansmeyer and Fürst, 1968; Bös, 1986), regional goals (Thiemeyer, 1975), vote maximisation (Blankart, 1980; Ziemes, 1992). The so-called commercial-pricing offers pricing rules that can

also be welfare-oriented as well (Shepherd, 1965; Friedrich, 1969). However, these principles do not consider whether the formation of fees is related to central government, state or municipal government.

The conventional welfare-oriented literature on fees mainly considers the welfare maximisation of the central government for the entire nation taking into account the willingness to pay presented by all the citizens (Friedrich, 1971). The welfare of a member state in a federation or a municipality can not be easily detected through the net-benefit approach, since prices do not only reflect the willingness to pay of people in the state or municipality under consideration. For instance, consumer surplus, turnover, producer surplus, etc. show the judgements of non-state or non-municipal residence, commuters and people abroad too. The benefit-cost analysis oriented to the isolated welfare maximisation of a sub-state or a municipality affords many changes of evaluation in money terms. Sales, consumer surpluses, costs etc. have to be redefined and special deferrals have to be made. Sales to non-residents may be interpreted as exports and procurements from non-residential citizens and economic units as imports. A willingness-to-use indicator of export surpluses, taxes from other residence etc. may be developed. Many more changes have to be introduced in the evaluation schemes (Friedrich, 1971). When determining the optimal size of a fee quite different marginal costs and marginal benefits emerge and marginal cost pricing produces other values to the average fee equated to the state or municipal relevant costs. Therefore, the welfare-oriented fee determination does not deliver satisfactory guidelines to find the optimal sum of fees.

Moreover for determination of fees researchers assume monopolistic market forms for the supply of municipal services. This is true in some exceptional cases like a marriage license bureau. However one finds quite often oligopolies such as convention halls, theatres, swimming pools, municipal garbage plants, municipal or public banks, or oligopsonies like business promotion agencies. With some fees there is monopolistic competition or there are nearly polypolies, for example, if schools can be chosen by parents. Marginal cost pricing is also mainly related to the oligopolies (Friedrich, 1978). Often other parameters of action such as service times are not considered in welfare-oriented approaches (Friedrich, 1978). For the formation of fees the whole bunch of instruments of sales and production management should be considered. Therefore welfare-oriented fee determination does not deliver satisfactory guidelines to find the optimal level.

Fee collecting public institutions such as administrative units and public enterprises can have many organisational forms of public and private laws which also prescribe different regulations for the formation of fees. Therefore, there are actually very different pricing policies allowed, which ranges from acceptable (not maximal) profits for public enterprises to substantial losses (Brede, 1998) in order to promote the receipt of services (theatres, etc.). Moreover, fee collecting public economic units and their pric-

ing policies are used as instruments for economic policy making (Oettle, 1998) or as instrument for promoting regional competition (Friedrich and Feng, 2000). Municipalities also can try to create profits and receipts to consolidate their budget in the framework of legal possibilities or they may follow political aims such as winning votes (Thiemeyer, 1975). Therefore a bundle of different goals may underlay the formation of fees.

A municipality may establish a municipal enterprise of public or private law to provide services. Then the municipality may try to receive gain from the public enterprise in the framework of legal possibilities. If it is in the form of public law, legal requirements for cost coverage exist (Zwehl, 1991, Gawel, 1995; Gottschalk, 1998; Siekmann, 1998; Tettinger, 1998, Färber, 2000). However, due to the autonomy to shape the cost accounting scheme and the consideration of costs leading not to financial outflows like imputed cost for depreciation, for non-realised risks, wages for entrepreneurial management, etc. and the application of different cost assessment and distribution methods, fiscal receipts can be gained (Bolsenkötter, 1998; Friedrich, 1998). Although municipal firms of private law underlies cost coverage pricing requirements (Tettinger, 1998), their legal possibilities for achieving profits are larger. Therefore fees can be determined by special principal-agent relations as well.

Nowadays the private public partnership is developed especially on the local level. Here many legal solutions seem to be possible (Gottschalk, 1998). Fees can be collected by a municipality, whereas production and distribution of services may be organised by a private enterprise selling its services to the municipality. In this case the level of fees strongly depends on the type of contract made between the local government and the private firm, and higher or lower costs occurring with the private firm as well as the legal requirements including laws related to public procurement and the price setting between the municipality and the private firm.

In order to restrict a number of objectives to be achieved when fixing fees requirements are legally suggested with respect to the principles of fee formation. In Poland and Germany the benefit principle is applied in the form of cost coverage requirements (Borodo, 2003; Bohley, 2004). In Germany similar state laws exist which regulate the fee determination of municipalities (Siekmann, 1998; Tettinger, 1998). In Switzerland it is up to individual regulations of the cantons regarding the ways how municipalities charge municipal services. In United Kingdom there are many different regulations with respect to charging for public services. Whether normatively based user-charge policies improve the fiscal situation of municipalities depends on whether loss avoidance or profits are possible or probable. To examine this possibility a positive theory for fee levying administrative units and public enterprises must be developed.

4.1 Positive Theories of Fees

Public administrative units (public office) charging fees attempt to achieve public goals by providing goods and services for other economic units (e.g. businesses and consumers). It possesses the long-term stock of production factors and its management should be competent regarding to essential decisions related to the production and delivery. Public offices comprise legally dependent institutions fully integrated into budget planning. Fees are normally not for direct disposal of such an administrative unit.

A **public firm** is separated from the owner's budget planning (Eichhorn and Friedrich 1976). Such a firm shows some similar characteristics of a private firm, since they are also oriented to sales and markets (Friedrich, 1969; Rees 1976; Turvey, 1971; Thiemeyer, 1975; Blankart, 1980; Bös, 1981; Püttner, 1985; Eichorn, 1991; Friedrich, 1992; Mühlkamp, 1994). On the other hand it is obliged to achieve public goals, which are fixed by an owner, by a regulatory agency or by law or which are determined within the decision making units of the public enterprise. Some public enterprises underlie special fee regulations by state and national laws or the pricing policy guidelines of the firm owners.

A simple model of a public firm serves as a basis for a **theory of public firms** and allows integrating many aspects of fee policies into the model. The following model of a public firm comprises (Friedrich, 1988; Friedrich, 1992; Friedrich and Feng, 2000):

- A **utility** (goal) function U of the public firm's management shows management utility depending on output X and labour input L .

$$(1) \quad U = U(X, L), \quad \partial U / \partial X = U'_X, \quad \partial U / \partial L = U'_L$$

- A restriction concerning the **production function**. There is one fixed factor A and two variable factors of production, $L = \text{labour}$ and $C = \text{materials}$).

$$(2) \quad X = A \cdot f(L, C), \quad \begin{array}{ll} \partial f / \partial L = f'_L > 0 & \partial f / \partial C = f'_C > 0 \\ \partial f'_L / \partial L = f''_{LL} \leq 0 & \partial f'_C / \partial C = f''_{CC} \leq 0 \end{array}, \\ \partial f'_C / \partial L = f''_{CL} = f''_{LC} = \partial f'_L / \partial C > 0$$

- A **demand function** shows the dependency between price P and volume X of output sold

$$(3) \quad P = P(X), \quad \partial P / \partial X = P' < 0$$

- The **costs function** demonstrates fixed costs K_A and two types of variable costs. The factor price of labour is w and that of materials is i .

$$(4) \quad K = K_A + w \cdot L + i \cdot C$$

- A restriction, which **turnover is same as costs**, is introduced. We assume self-financing of the public firm.

$$(5) \quad P(X) \cdot X = K_A + w \cdot L + i \cdot C$$

- Maximisation of utility of management under the restrictions mentioned leads to the following LaGrange formulation:

$$(6) \quad \Lambda = U(X, L) + \lambda \cdot (P \cdot X - K_A - w \cdot L - i \cdot C), \quad \text{while} \quad X = A \cdot f(L, C)$$

The following **first order conditions** of maximisation are delivered,

$$(7) \quad \begin{aligned} \frac{\partial \Lambda}{\partial \lambda} &= P(X) \cdot X - K_A - w \cdot L - i \cdot C = 0, \\ \frac{\partial \Lambda}{\partial L} &= U'_L + U'_X \cdot A \cdot f'_L + \lambda \cdot [P \cdot (1 - \frac{1}{\varepsilon}) \cdot A \cdot f'_L - w] = 0, \\ \frac{\partial \Lambda}{\partial C} &= U'_X \cdot A \cdot f'_C + \lambda \cdot [P \cdot (1 - \frac{1}{\varepsilon}) \cdot A \cdot f'_C - i] = 0 \end{aligned}, \quad \text{while} \quad \varepsilon = -\frac{P/X}{P'}$$

which yield **two optimality conditions**. One concerns the equivalence of the relation of marginal utilities of marginal factor inputs to the proportion of respective marginal profits and the other condition refers to cost coverage of turnover.

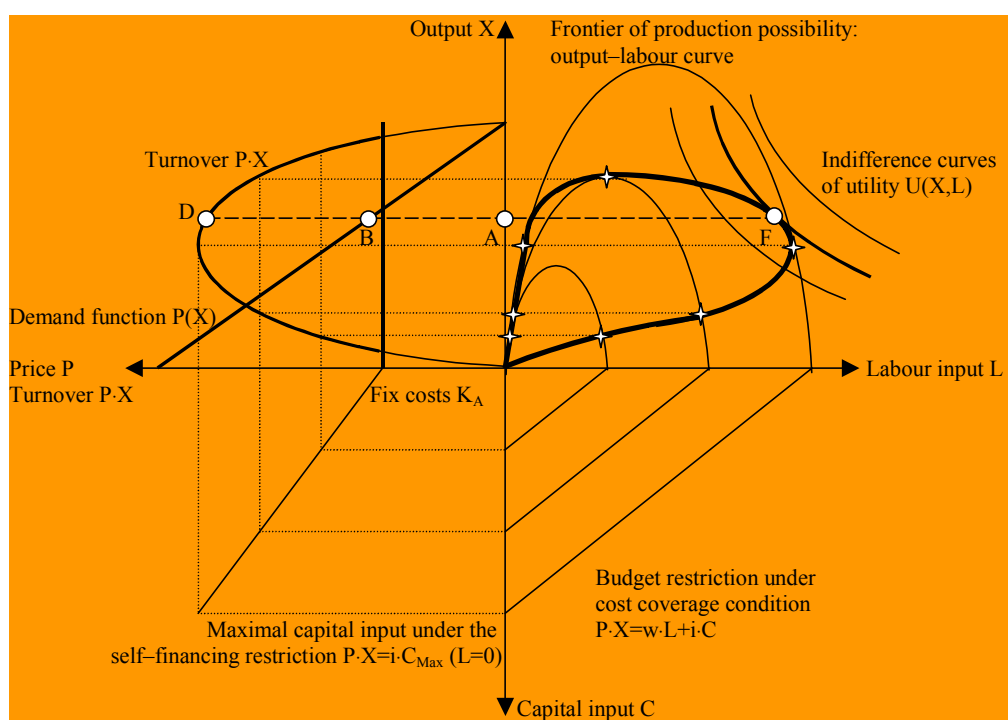
$$(8) \quad \frac{U'_L + U'_X \cdot A \cdot f'_L}{U'_X \cdot A \cdot f'_C} = \frac{w - P \cdot (1 - \varepsilon^{-1}) \cdot A \cdot f'_L}{i - P \cdot (1 - \varepsilon^{-1}) \cdot A \cdot f'_C}$$

$$(9) \quad P = \frac{K_A + w \cdot L + i \cdot C}{X}$$

Corresponding to the various utility functions **different cost curves** emerge. An output maximising public firm shows the curves of minimal costs. If output and labour are evaluated positively, then a curve of higher costs results. If only labour has a positive weight the cost curve is more unfavourable and if management needs labour compensation in case of higher production the cost curve is located even far higher.

The restriction may also refer to a given desired profit requiring a given difference between turnover and costs. However, the results do not change fundamentally. The result of the model is shown graphically in figure 3.

Figure 3: Theory of the public firm

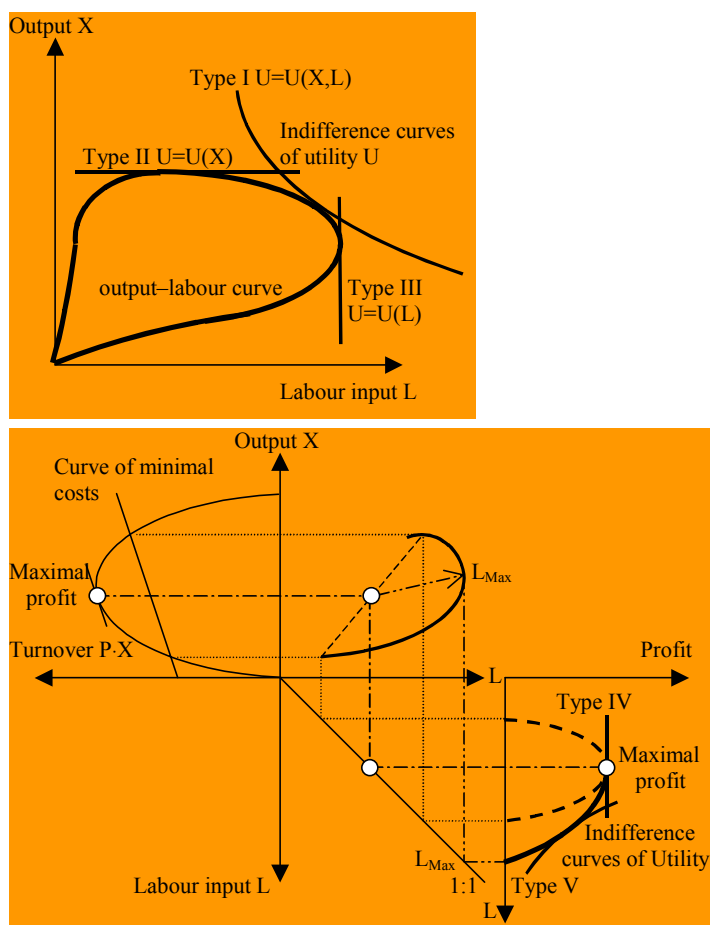


The second quadrant demonstrates the sales conditions of the public firm. For each volume of sale a turnover and the referring financial revenues are generated that are used to cover costs. After deducting fixed costs K_A a financial amount is available to finance variable costs. The so-called output-labour curve illustrates all output labour combinations that can be financed. However to each sales volume only one production volume X corresponds, therefore only two points on the output-labour curve shown in the second quadrant are relevant. One production is material-intensive and the other one is labour-intensive. For alternative turnovers and corresponding production volumes a set of output-labour curves and a set of relevant material-intensive and labour-intensive points result. Their connection leads to a frontier of production possibility on the labour-output curve indicated as a thick curve in this quadrant. Introducing a set of indifference curves

that correspond to the management utility function (1), the highest indifference curve that the management can achieve touches the frontier of production possibility output-labour curve at the point F. This determines the optimal production volume A, the optimal price B and the optimal turnover D. Moreover, there is a path of tangency points between alternative possibility output-labour curves, which correspond to alternative demand curves of the public firms. They are related to the cost curves mentioned above.

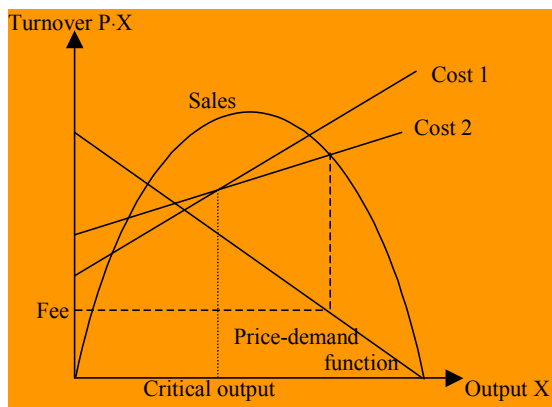
If the management utility function depends on output only, management **maximises output** (II) and the (cost-minimising) cost function results. Utility functions depending on **output and labour** (I) lead to paths more to the right of the cost minimal path in the right hand quadrant. If the public firm is going to **maximise labour input** (III) then a path emerges, which connects those tangency points near the respective maximal turnover volumes. If the utility function (1) depends on profit and the restriction (2) is not binding but just a profit definition, then we end up with a **maximum profit** (IV) solution along the cost minimal path. In rare cases the owner of public enterprise tries to use its public firm to raise local revenues (Friedrich, 1998; Friedrich and Feng, 2002). The respective solution would, in turn, leads to a higher price and a smaller output as the former solutions. A utility function depending on profit and labour (V) results to a solution between the profit maximal and the labour maximal price. The related output and fee solutions are illustrated in figure 3 and figure 4.

Figure 4: Solutions according to types of management



The fee level can also be found by the application of **investment rules** (Friedrich, 1969). In figure 5 different sizes of a charging public firm are shown and resulting cost curve and the turnover curve are depicted. Because of the positive evaluation of output (output maximisation or output- and labour-dependent utility maximisation as above) the intersection of turnover and the cost curve turns out as solution determining output and price. For a given utility function of management the best solution is located always to the right, that means the solution which allows higher output. The point and respective output where the location-oriented cost curves cross is called as the critical output.

Figure 5: Fees corresponding to different sizes of public enterprise

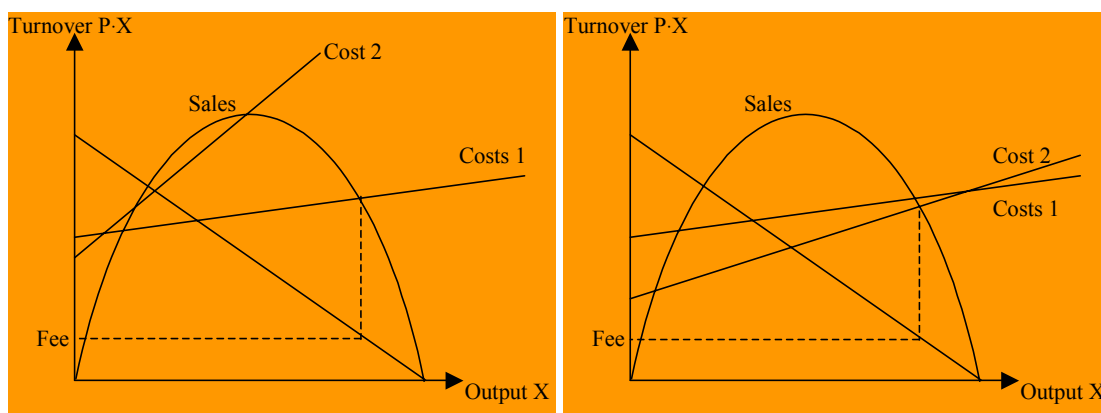


Hence we can derive the **following rules** for user charges of the public enterprise (see figure 6):

- if the critical output can be sold at profit that location is the best where the relevant cost curves shows smaller marginal costs than another one.
- if the critical output, which is smaller than that at maximal turnover cannot be sold at profit, the location with the higher marginal costs is the best one.
- if the critical output, which is bigger than that at maximal turnover cannot be sold at profit the location with highest marginal turns out the best one.

The solution illustrated in figure 4 can also be applied, if a required absolute profit has to be achieved. The cost curves get marked up by the profits and the rules apply to the resulting curves.

Figure 6: Different fees according to different critical outputs



The model introduced above is useful as well if there is another decision maker of higher level such as the owner government, who has a utility preference function concerning the output and the financial means. In a first attempt we consider the owner government as very powerful **principal**, e.g. the management of the public firm needs additional financial means from the owner, the legal form of the public firm guarantees high competence of the owner government, the municipal right for urban planning, etc. It is able to command the management of the public firm serving the principal as an **agent**. However, it should not lose totally the co-operation of the public firms management, for this management is needed to realise the location choice. Therefore, the public management of the firm has to receive a minimum utility to guarantee their willingness to perform.

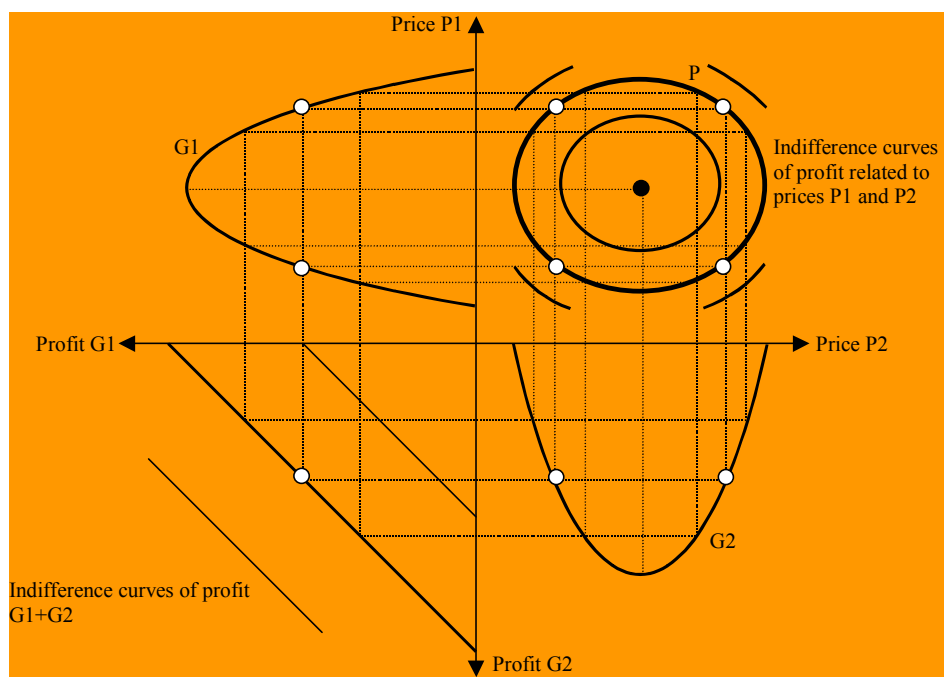
This approach was applied to determine actions of municipal competition through municipal enterprises (Friedrich and Feng, 2000). The utility function of the public firm is again dependent on output and labour. But now a profit F is allowed, which is transferred to the municipality. The utility function of the municipality shows utility depending on the output of the firm and on the profit transfer. Moreover, minimum utilities are introduced for both players. For a given demand function and a production function there are combinations of pareto-optimal profit and output level from which a solution has to be chosen. These combinations lead to combinations of utilities, forming a utility frontier. The best solution in favour of the powerful principal is where the principal receives its maximum utility and the public firm achieves minimum utility.

However, the principal may not be as powerful as mentioned above for various reasons. These can include, for example, (1) dependencies of the local economy on the services and goods of the municipal firm (in electricity, transportation, water supply, tourism and culture, etc.) or the knowledge and skills of the management of the public firm, (2) a favourable relation of the management of the public firm to the management of a municipal savings bank or mutual political support. Then the players have to negotiate to find a solution including a combination of utilities and of output and profits. However, there is a consequence of such solutions depending on the location, which again forms a utility frontier. Out of them a Nash solution can be derived giving **the fee** of the public enterprise.

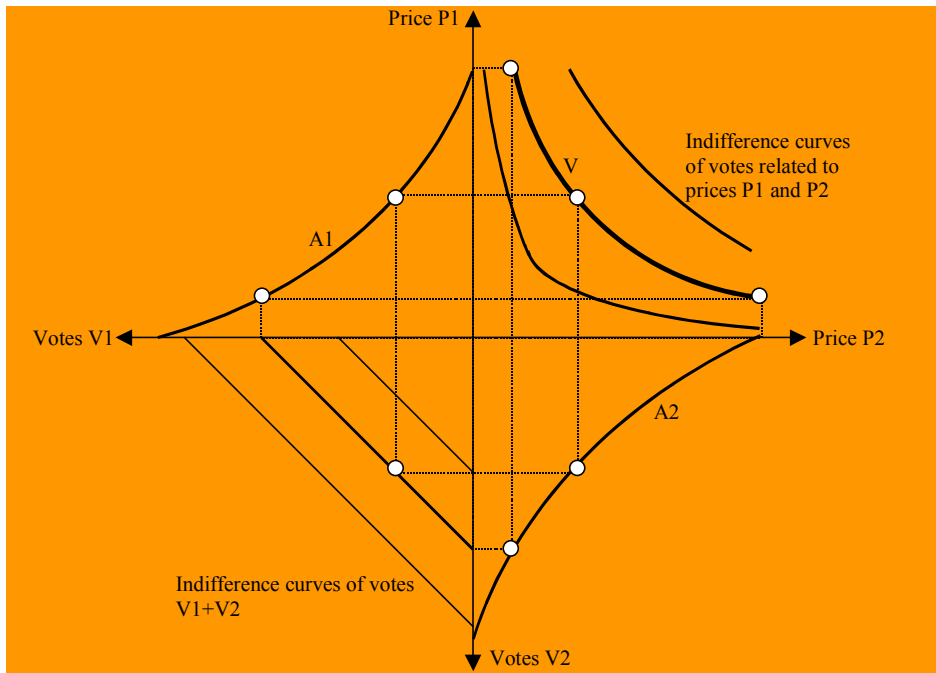
Furthermore models may refer – on the part of the principal – to political goals such as winning elections or maximising votes. There is a model developed by Sam Pelzman (1971; 1976) which was extended by Ziemes (1992), in which the principal is interested in vote maximisation whereas the public firm tries to maximise profits. However, this model also concerns price policies and tackles price setting in two markets referring to different voters. Although the profit maximisation is generally restricted for public enterprises (Friedrich, 1969; Püttner, 1985; Detig, 2004) some public enterprises (especially in the industrial sector) try to achieve such goals. We investigate one public en-

terprise that sells on monopolistic markets (Feng and Friedrich, 2004). The profit of the public enterprise increases with price reductions until a profit maximum is reached but decreases when price cuts follow. This is demonstrated in figure 7 by curves G1 and G2 referring to the different levels of profits. Indifference curves that reflect price combinations are derived. Curve P shows all price combination, which yield the same profit.

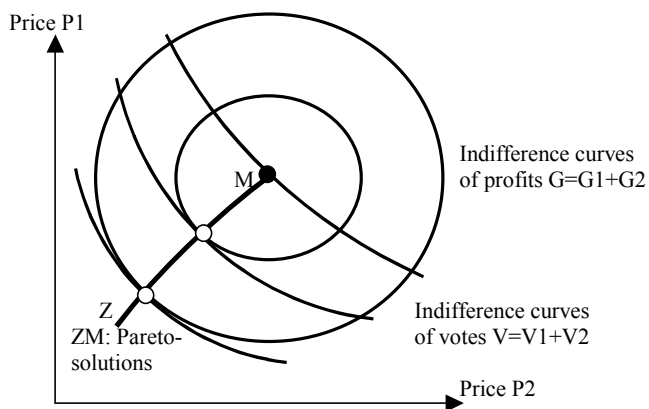
Figure 7: Profit indifference curves



Voters dislike high prices of the public enterprises. Therefore, in figure 6 the curves A1 and A2 result with respect to votes. For votes a curve V is delineated that shows all price combinations at both markets leading to the same amounts of votes.

Figure 8: Indifference curves of votes

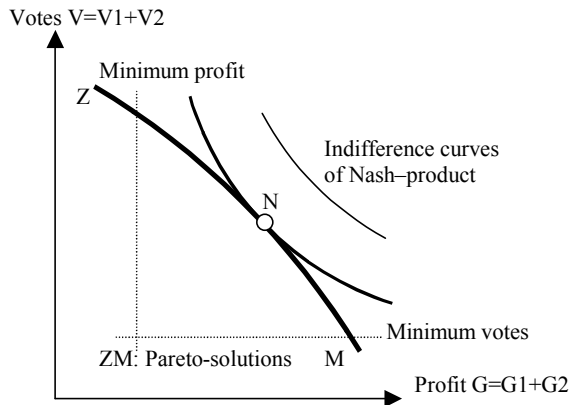
Points of tangency between the curves V and P in figure 9 show a path of pareto-optimal combination of prices ZM for the principal (political interested owner) and the agent that give maximal profit at given votes or maximal votes at given profit.

Figure 9: Pareto-optimal path of fees

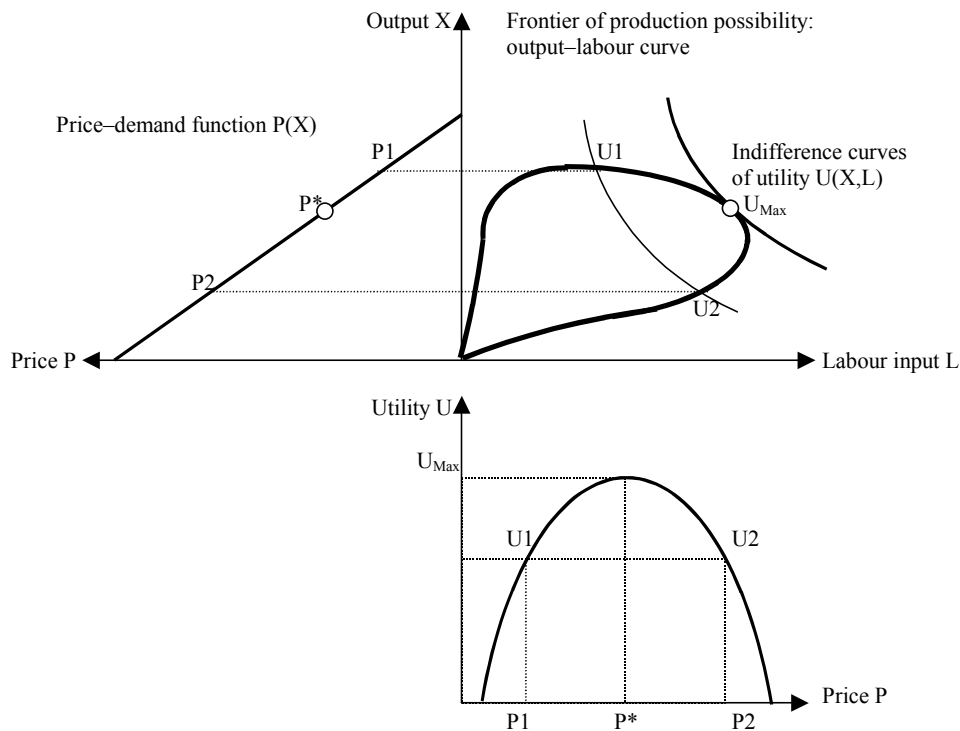
The respective combination of utilities are shown in figure 10 in which vertically the votes and horizontally the profits are depicted. If a very powerful principal (owner) is assumed, he determines a low profit (eventually zero) and a maximum of votes in point Z . If the agent is overwhelming powerful he asks for his maximum profit at point M leaving the principal with the resulting votes. We can introduce a minimum profit in

order to ensure the activities of the public enterprises or minimum votes for the principal necessary to avoid privatisation etc. Again a Nash solution can be achieved at the point N. In this case the political influence of the owner leads to relatively low prices.

Figure 10: Nash-solution for fees



We can also combine the expanded Peltzman approach with our model. Then the G curves are utility curves of the management of the public enterprise if imputation of the fixed costs to the productions are given. Formally the solutions are the same, but the management utility is used instead of profits (see figure 11). If there is no predetermined fixed cost imputation, then the P-curve is follows from the fixed costs distribution which allows the highest utility out of both productions.

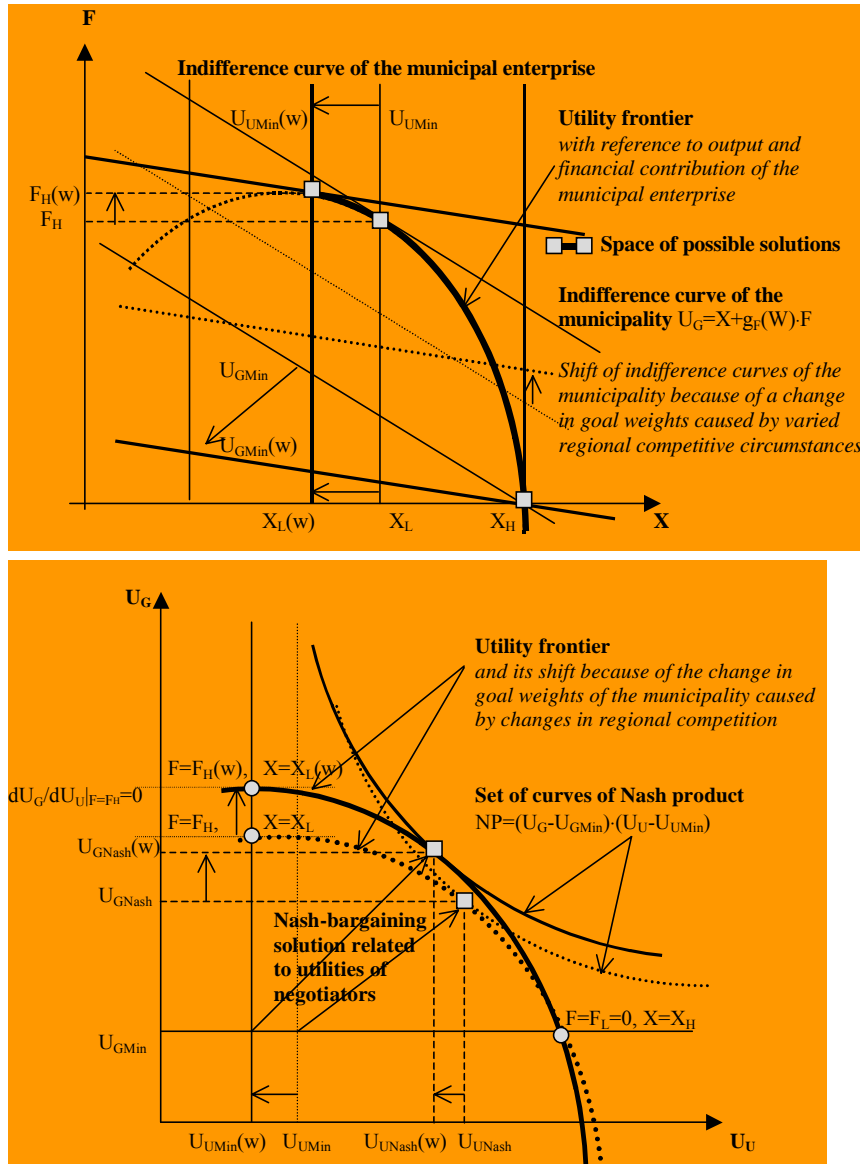
Figure 11: Utility curve of management

However, if the public enterprises compete against themselves as well, the payoff is additionally determined by a duopoly solution embedded in the model above (Friedrich, 1988). For one competitor the solution above is determined for a given fee of the competitor (solution shown in figure 11). Following this assumption a Launhard-Hotelling solution can be elaborated yielding the payoffs. The solutions of the duopolies and municipal competition can also give other results such as employment, prices, outputs, votes, use of land etc as well. A double – two-level – regional competition among municipalities owing public enterprises and charging fees and direct competition among the fee collecting municipal enterprises can also be modelled. (Friedrich, 1998; Lindemann, 1999).

As the horizontal competitive solutions are so difficult to model we may escape to a different modification of our theory. We base on the principal-agent version of our model and refer to the monopoly case. But we introduce a competitive situation W of the municipality and the valuation of the financial target described as F is expressed by $g_F(W)$ – see figure 12. The municipality and the municipal enterprise negotiate about fixing the financial scope F as well as the Volume X to be produced and the fee P to be charged. The utility of municipality U_G depends on output X (or votes depending on output) and on its contribution F to the municipal budget ($U_G = X + g_F(W) \cdot F$). The utility of management of the public firm U_U depends on output X and employment L . Both negotiators want to realise, each for itself, a minimum utility level. The situation of the

firm show production, demand, cost and finance functions. As derived above an area for possible negotiation solutions referring to financial contribution, the output volume X , the fee, and the respective utilities of the negotiators, is determined. By application of bargaining Nash-solution principle a solution is found and the fee is determined (figure 12).

Figure 12: Fees in case of regional competition



If the financial contribution is of high importance, then $g_F(W)$ turns out to be high. If the competitive pressure W on the municipality is high, it needs high financial contributions from public firms like casinos, lotteries, trade fair companies, etc. The owner tries to apply a high price policy mostly against the desire of the public firm. If the municipality

uses the public enterprise directly for competitive purposes such as the case with real estate companies, business promotion agencies or in direct infrastructure or industrial competition such as wineries, farms, manufacturing firms or holiday resorts, sports facilities, municipal tourist firms etc., a higher W in turn leads to a smaller $g_F(W)$. A tendency to a lower financial contribution leads to higher outputs and lower fees.

4.2 Increasing Autonomy through Fees?

The different aims underlying municipal fee policies signal the dependence of fee formation on the various possible goals. Thus various factors determine the level of fees, such as a welfare function, consumer's willingness to pay, sales, costs, willingness to pay in favour or against external effects, such terms concerning the EU, the nation, the region, a municipality, indicators for success in competition such as market shares, outputs, indicators as employment, production, migration, centrality of a municipality, growth rates, budget sizes, political indicators such as number of votes, shared jobs by party members, staffing politically important posts, and many indicators to show administrative success such as number of beds in hospital, square meters of cleaned roads, number of pretended cases of crime, school children, and tourists, tons of water supply, etc. or environmental indicators such as tons of waste, volume of SO_2 , CO_2 , etc. Therefore, according to the various goals quite different fees can result, although in some countries the benefit principle should be applied. Mostly the benefit principle is interpreted as cost coverage principle. However, there are some exceptions, thus the for some fees this principle is merely a guideline. For example in Germany a profit should be small and less than 14 % above costs (Rogosch, 1988, Bolsenkötter, 1998). On the other hand, deficits are allowed or tolerated to achieve environmental, educational or social aims. Moreover cost coverage implies not a well-defined principle. As municipalities have organisational autonomy and the laws concerning fee formation are not very clear, costs can be defined in different ways, municipalities are able to control costs within their types of costs accounting, departmental costs accounting or their cost unit accounting (Friedrich, 1998). Therefore they can allocate their costs according to their aims to result with high or low fees.

The approaches in positive theory of fixing fees show us that additional factors play a role. The aims and utility functions of management and owners lead to different fees. Not only the situations and market forms in vertical and horizontal competition concerning the public firm but also (regional and) municipal competition are relevant. Apart from pricing policies the fixing of other parameter of actions by administrative units and public firms can also cause quite different fees. Moreover, types of production functions, requirements concerning management organisation, factor prices, budget dis-

tribution systems, taxation, subsidisation, legal forms of public firms or public administrative units, and local statutes and laws determine the fees as well.

Compared to the fiscal situation in which all other modes of finance and the volume of revenues are given, a budget increase can be achieved when the formation of fees with respect to providing a fixed amount of services is possible. This also applies even if the turnover out of fees does not cover cost. However if the municipality can choose the output of services and provides a higher volume of services as before, the inherent loss may lead to a shrinking budget. As far as legal requirements force the municipalities just to cover costs their fiscal autonomy can not be significantly improved by collecting fees. As far as they allocate costs adequately in the course of their cost assessment, their fiscal situation may be enhanced by causing hidden profits. If no losses occur, fiscal autonomy is widened through financing higher volumes of municipal activities by user charges. Moreover, the fiscal situation of a municipality may be improved through avoiding losses by appropriate higher fees. When a municipality is able to achieve reasonable non-maximal profits it can improve its fiscal autonomy. In cases where municipalities are free to set fees, profit transfers may lead to sustainable improvements of fiscal autonomy.

Therefore, municipalities should be careful in selling their public firms or outsourcing of own production. The basis for fee financing is public property and public production. In the case of privatisation the benefits from fees are transferred to the private sector and it is not guaranteed that private production leads to higher municipal revenues or even smaller costs. Often, additional tax revenues from private owners are not expected as those fee collecting institutions are many times treated like private firms in taxation. They are due to sales taxes and other taxes like business tax, corporate income tax, real estate tax etc. If the municipalities give up their production and sell their public firms, a control of the local (regional) economy is less effective. Therefore, policy-making to improve the fiscal autonomy becomes more difficult.

Conclusions

There is a difference in local revenue structure among four investigated countries. Whereas tax revenues are the most important source of income in Switzerland followed by fees and charges, grants do play a major role in municipalities of Germany, England and Poland, but with different shares. Tax revenues are more important in Germany than in England and of less relevance in Poland. The share of fees and charges only increased in Switzerland in the last decade, while they are negligible in Poland. Municipal expenditures have gradually increased in all four countries in the last decade. In Ger-

many expenses for social service are the most important expenditure item, whereas the expenses for education have been the highest in Switzerland, England and Poland. The expenditure category social welfare together with health care have recently comprised approximately 30% of total local expenditures in Germany and Switzerland. For both countries this reflects a distinctive social system and the rapidly increasing welfare expenditures which could lead to a further local fiscal stress.

In addition the development of municipal public finance during the last decade demonstrates among others that (1) central government interventions with fiscal consequences have intensified, (2) tax reforms disturbed municipal finance, (3) municipalities tried budget consolidation, and (4) municipalities experienced a reduction in fiscal autonomy. Furthermore, transformation played a role in Poland and Germany.

Some serious attempts appear to be necessary to protect local governments in order to ensure their fiscal autonomy. One possibility would be the increase of fees as the local revenue source. In previous years the issues on fees levied by local governments and their optimum sum have not been adequately investigated in the public finance. As shown in the model analyses various factors determine the level of fees, which include a welfare function, consumer's willingness to pay, sales, costs, indicators for success in competition such as market shares, outputs, indicators as employment, production, migration, growth rates, budget sizes, political indicators such as number of votes, etc. Therefore, according to the various goals quite different fees can result, although in some countries the cost coverage principle should be applied.

The approaches in positive theory of fixing fees show that additional factors play a role. The aims and utility functions of management and owners lead to different fees. Not only the situations and market structures in vertical and horizontal competition concerning the public firm but also (regional and) municipal competition are relevant. Apart from pricing policies the fixing of other parameter of actions by administrative units and public firms can also cause quite different fees. Moreover, types of production functions, requirements concerning management organisation, factor prices, budget distribution systems, taxation, subsidisation, legal forms of public firms or public administrative units, and local statutes and laws determine the fees as well.

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Annex
Table a1

Yearly Classification of Municipal Revenues in Germany (Absolute in million € and Share)

	1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
	actual	%	actual	%	actual	%	actual	%	Actual	%	actual	%	actual	%	actual	%	actual	%	actual	%
Taxes and similar revenues	38709	38.8	43790	32.8	44577	31.6	44836	31.2	44078	30.4	44066	30.6	44805	31.8	48613	33.6	50970	34.9	52001	35.1
Revenues from enterprise and fees	4718	4.7	6270	4.7	6644	4.7	6987	4.9	7036	4.9	7308	5.1	7445	5.3	7697	5.3	7899	5.4	7707	5.2
Received interests	1223	1.2	1576	1.2	1429	1.0	1216	0.8	1144	0.8	1052	0.7	998	0.7	1106	0.8	1041	0.7	1287	0.9
Current grants	46158	46.3	65065	48.7	71814	51.0	75125	52.2	78045	53.9	76777	53.3	72256	51.3	71763	49.6	72830	49.9	75681	51.1
Other current receipts	15179	15.2	19516	14.6	21082	15.0	22122	15.4	22462	15.5	21627	15.0	20870	14.8	20380	14.1	20005	13.7	19986	13.5
Less those from other towns	-18633	-18.7	-22093	-16.5	-25513	-18.1	-27434	-19.1	-28645	-19.8	-28357	-19.7	-27018	-19.2	-26870	-18.6	-27464	-18.8	-28558	-19.3
Sale of real estates	3233	3.2	4492	3.4	5348	3.8	6416	4.5	6273	4.3	6532	4.5	6531	4.6	6637	4.6	6391	4.4	5658	3.8
Property transfer	9184	9.2	14930	11.2	15440	11.0	14066	9.8	14107	9.7	14117	9.8	13546	9.6	13112	9.1	12599	8.6	12239	8.3
Obtain. Capital service	332	0.3	400	0.3	535	0.4	639	0.4	656	0.5	815	0.6	829	0.6	719	0.5	806	0.6	575	0.4
Participation on sale	233	0.2	213	0.2	270	0.2	718	0.5	364	0.3	562	0.4	799	0.6	1724	1.2	1090	0.7	1687	1.1
Net new debts	289	0.3	656	0.5	488	0.3	423	0.3	457	0.3	580	0.4	485	0.3	472	0.3	394	0.3	396	0.3

Less borrows from municipalities	-840	-0.8	-1114	-0.8	-1221	-0.9	-1182	-0.8	-1174	-0.8	-1151	-0.8	-696	-0.5	-696	-0.5	-636	-0.4	-650	-0.4
Total consolidated receipts	99785	100.0	133700	100.0	140893	100.0	143933	100.0	144802	100.0	143928	100.0	140850	100.0	144657	100.0	145925	100.0	148009	100.0

Source: Statistisches Bundesamt (2003a), p. 517, and statistical yearbooks from 1991 on.

Table a2
Yearly Classification of Revenues of Swiss Municipalities (Absolute in million Sfr and Share in %)

	1990		1994		1995		1996		1997		1998		1999		2000	
	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%
Income and property taxes	14763	49.0	17691	46.6	18053	46.7	18142	45.8	17968	45.7	18415	45.7	19394	46.0	20226	46.4
Profits and concessions	70	0.2	117	0.3	99	0.3	99	0.3	119	0.3	122	0.4	138	0.3	125	0.3
Revenues from property	1884	6.3	2547	6.7	2597	6.7	2491	6.3	2618	6.7	2609	6.5	2652	6.3	3000	6.9
Fees	6571	21.8	9526	25.2	9856	25.6	10149	25.7	10173	25.9	10433	25.9	10651	25.3	10797	24.8
?? and unconditioned contributions	1086	3.61	1136	3.0	1120	2.9	1115	2.8	1085	2.8	1168	2.9	1210	2.9	1324	3.0
Grants	4084	13.6	4998	13.2	5005	13.0	5610	14.2	5654	14.4	5805	14.4	6270	14.9	6565	15.1
Receipts for investments	1657	5.5	1813	4.8	1776	4.6	1853	4.7	1615	4.1	1660	4.1	1740	4.1	1567	3.6
Total (in million Sfr)	30115	100.0	37828	100.0	38506	100.0	39459	100.0	39232	100.0	40212	100.0	42055	100.0	43604	100.0

Source: Bundesamt für Statistik (2003), p. 800.

Table a3
Yearly Classification of Local Authority Income in England (Absolute in million GBP and Share)*

	1990/91		1991/92		1992/93		1993/94		1994/95		1995/96		1996/97		1997/98		1998/99		1999/2000		2000/2001		2001/2002	
	Actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%
Revenues from local taxes (a)	22530	38.4	20912	32.2	21756	31.4	20392	29.5	19844	27.7	21042	28.6	23102	30.6	23170	30.0	24759	30.4	26987	31.8	29699	33.0	30440	31.1
Local fees and charges (b)	12340	21.0	13514	20.8	13983	20.2	13191	19.1	13934	19.4	13611	18.5	14180	18.8	14923	19.3	16245	20.0	16892	19.9	17043	19.0	18553	19.0
Non-tax Revenues (c)	4588	7.8	3397	5.2	3114	4.5	4086	5.9	3291	4.6	3018	4.1	3184	4.2	3531	4.6	4137	5.1	5013	5.9	5169	5.7	5253	5.4
Intergovernmental transfers & grants and Revenues from Tax Sharing (d)	21437	36.5	28868	44.4	32585	47.0	34575	50.0	37012	51.6	36919	50.2	35897	47.5	36712	47.6	37234	45.7	37285	44.0	38283	42.6	44436	45.4
Bank credits & municipal bonds (e)	-507	-0.9	529	0.8	557	0.8	1160	1.7	155	0.2	1115	1.5	1570	2.1	931	1.2	931	1.1	136	0.2	1937	2.2	863	0.9
less (f)	-1703	-2.9	-2243	-3.5	-2644	-3.8	-4302	-6.2	-2529	-3.5	-2137	-2.9	-2337	-3.1	-2057	-2.7	-1875	-2.3	-1509	-1.8	-2208	-2.5	-1751	-1.8
Total Amount of Total Revenues	58685	100.0	64977	100.0	69351	100.0	69102	100.0	71707	100.0	73568	100.0	75596	100.0	77210	100.0	81431	100.0	84804**	100.0	89923**	100.0	97794	100.0

*All figures in British Pounds, Millions. According to Table 2.1, Local Government Financial Statistics England 2000, these figures incorporate Total Revenue Income as well as Total Capital Income.

** Overhanging debt on housing sold, repaid by ODPM is not included in 1999/2000 and 2000/2001.

- a) Includes council taxes, national non-domestic rates, council tax benefit grant, council tax transitional reduction scheme grant and since 1998/99 city offset.
- b) Includes fees, charges and other income from General Fund Account, rents and other income from Housing Revenue Account, as well as fees, charges and other income from the External Trading Services Revenue Accounts.
- c) Includes all external interest receipts, as well as non-governmental grants, contributions and capital receipts from Capital Account. Note: Grants, contributions and Capital receipts from disposals of fixed assets, leasing disposals, repayments. etc. have a one-time only revenue character.
- d) Includes revenue support grants to Local Authorities, Community charge grant, SSA reduction grant, specific and special (since 1998/99: central support protection grant and police grant) government grants, government subsidies and grants from Housing Revenue Account and grants used for debt redemption. Tax sharing also included.
- e) Includes external income, notional borrowing, increase in borrowing, commutation of specific loan charges, net change in capital creditors and accruals adjustment to reflect the correct year.
Note: Accruals adjustment for 1990/1 was negative, hence the negative value of Bank Credits and municipal bonds.
- f) Less indicates recharges to other accounts, receipts to local authorities, housing benefit transfers from other revenue account.

Source: UK Office of the Deputy Prime Minister (2003) and former years.

Table a4
Yearly Classification of Municipal Income in Poland (Absolute in million Zlotys and Share)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Revenues from local taxes (a)	19.0	18.6	16.2	16.7	13.8	13.5	13.4	12.2	12.8	15.2	18.7
Local fees and charges (b)	3.5	3.3	2.8	3.0	6.1	6.3	4.2	4.4	4.0	1.6	1.6
Non-tax revenues (c)	n/a	n/a	n/a	n/a	5.7	6.1	6.4	6.8	7.1	4.3	4.3
Intergovernmental transfers, specific grants and Revenues from Tax Sharing (d)	52.7	53.5	59.7	58.9	64.7	63.9	65.8	54.0	54.8	54.7	63.6
Other own revenues (e)	24.8	24.5	21.3	21.4	9.7	10.3	10.2	22.5	21.3	24.2	11.8
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total amount of revenues in million Zlotys*	6440	9649	14808	19993	30956	39518	46119	32354	34584	37287	38474

*Note: Years 1990 to 1991 not included due to the lack of proper data.

a) Includes Tax on real estate and agricultural tax.

b) Includes Transportation charges and revenue from treasury fee.

c) Includes revenue form sale of property i.e. one time revenue character. 1992-1995: data on non-tax revenues not available.

d) Includes shares in income taxes to State budget revenue, allocations and general subsidies from State budget revenue.

e) Due to the lack of more exact data nothing more can be said about these revenues.

Source: Polish Official Statistics, Regional Data Bank, <http://www.stat.gov.pl>.

Table a5
Yearly Classification of Municipal Expenditures in Germany (Absolute in million € and Share)

	1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%
Organisation and Management	12121	9.0	13016	8.5	13083	8.1	13039	8.0	13370	8.1	13365	8.2	13191	8.2	13420	8.3	13873	8.5	14031	8.5
Security	4952	3.7	5792	3.8	6258	3.9	6358	3.9	6696	4.0	6757	4.1	6849	4.3	6980	4.3	7188	4.4	7385	4.5
Schools	12349	9.2	12825	8.4	13167	8.2	13123	8.0	13528	8.1	13376	8.2	13307	8.3	13340	8.3	13343	8.1	13456	8.2
Science and Research	5117	3.8	5812	3.8	5859	3.6	5641	3.5	5733	3.5	5692	3.5	5668	3.5	5782	3.6	5945	3.6	6143	3.7
Social Welfare	33043	24.6	38850	25.5	43396	27.0	46481	28.4	48337	29.1	46618	28.6	43285	27.1	42954	26.6	43230	26.4	43958	26.7
Health, Sports, Leisure	6220	4.6	8362	5.5	8195	5.1	8051	4.9	7876	4.7	7540	4.6	7309	4.6	7212	4.5	7253	4.4	7485	4.5
Construction, Housing and Traffic	18976	14.1	20277	13.3	20081	12.5	19836	12.1	19405	11.7	18971	11.6	18619	11.6	18511	11.5	19240	11.7	19499	11.8
Public Facilities, Business Promotion	16992	12.6	20100	13.2	19778	12.3	19341	11.8	19249	11.6	18423	11.3	17940	11.2	16846	10.4	16428	10.0	16705	10.1
Municipal Firms, Real Estate Funds	8747	6.5	9852	6.5	9871	6.1	9685	5.9	9339	5.6	8646	5.3	8603	5.4	8568	5.3	8865	5.4	8917	5.4
Finance	15942	11.9	17424	11.4	20914	13.0	21898	13.4	22506	13.6	23515	14.4	25181	15.7	27730	17.2	28408	17.3	27340	16.6
Total	134457	100.0	152309	100.0	160603	100.0	163456	100.0	166038	100.0	162902	100.0	159952	100.0	161343	100.0	163774	100.0	164919	100.0

All figures include special financial operations.
Source: Statistisches Bundesamt (2003b), p. 12.

Table a6
Yearly Classification of Expenditures of Swiss Municipalities (Absolute in million Sfr and Share)

	1990		1994		1995		1996		1997		1998		1999		2000	
	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%
Organisation and management	2873	9.5	3351	8.8	3373	8.8	3282	8.5	3335	8.7	3395	8.6	3361	8.5	3417	8.4
Justice, police, fire protection	1360	4.5	1768	4.7	1799	4.7	1789	4.6	1792	4.7	1809	4.6	1783	4.5	1834	4.5
Defence	560	1.9	429	1.1	380	1.0	353	0.9	302	0.8	281	0.7	260	0.7	249	0.6
Education	6673	22.1	8497	22.4	8769	22.8	8886	23.0	8924	23.2	9043	23.0	9028	22.7	9283	22.9
Culture and leisure	1988	6.6	2072	5.5	2038	5.3	2045	5.3	1994	5.2	2094	5.3	2062	5.2	2158	5.3
Health	4826	16.0	6772	17.9	6903	18.0	6923	17.9	6922	18.0	7035	17.9	7260	18.3	7393	18.2
Social welfare	3365	11.1	4776	12.6	4989	13.0	5206	13.5	5346	13.9	5592	14.2	5878	14.8	6013	14.8
Traffic	2642	8.7	2980	7.9	2945	7.7	2940	7.6	2873	7.5	2787	7.1	2921	7.4	2913	7.2
Environment and regional planning	2782	9.2	3345	8.8	3288	8.6	3406	8.8	3378	8.8	3529	9.0	3485	8.8	3530	8.7
Economics	1022	3.4	907	2.4	837	2.2	800	2.1	621	1.6	700	1.8	707	1.8	850	2.1
Finance and taxation	2154	7.1	2976	7.9	3107	8.1	3066	7.9	2982	7.8	3062	7.8	2969	7.5	2958	7.3
Total	30245	100.0	37873	100.0	38428	100.0	38696	100.0	38469	100.0	39327	100.0	39714	100.0	40599	100.0

Source: Bundesamt für Statistik (2003), p. 806.

Table a7
Yearly Classification of Total Local Authority Expenditure in England (Absolute in million GBP and Share)

	1990/91		1991/92		1992/93		1993/94		1994/95		1995/96		1996/97		1997/98		1998/99		1999/2000		2000/2001		2001/2002	
	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%	actual	%
Education	20581	34.5	23508	36.3	25421	36.8	22691	33.0	22791	31.9	22759	30.9	23185	30.7	23722	30.7	25018	30.7	25692	30.3	28057	31.1	30903	31.6
Personal social services	5474	9.2	6077	9.4	6422	9.3	7269	10.6	8607	12.0	9623	13.1	10610	14.0	11362	14.7	12392	15.2	13711	16.2	14713	16.3	15110	15.5
Transport	4665	7.8	4692	7.3	4871	7.1	4733	6.9	4949	6.9	4854	6.6	4621	6.1	4571	5.9	4734	5.8	4867	5.7	5618	6.2	6437	6.6
Fire and Police	6039	10.1	6713	10.4	7290	10.6	7547	11.0	7905	11.1	8004	10.9	8343	11.0	8630	11.2	8973	11.0	9408	11.1	9846	10.9	10538	10.8
Other Home Office/Lord Chancellor Dept. Services	794	1.3	882	1.4	883	1.3	962	1.4	929	1.3	992	1.3	962	1.3	963	1.2	1202	1.5	1273	1.5	1245	1.4	1350	1.4
Housing	9872	16.5	10235	15.8	11322	16.4	12664	18.4	13120	18.4	13603	18.5	13793	18.2	13368	17.3	13689	16.8	13860	16.3	14697	16.3	14297	14.6
Libraries and Art Galleries	829	1.4	889	1.4	904	1.3	918	1.3	944	1.3	902	1.2	953	1.3	972	1.3	1202	1.5	1521	1.8	1634	1.8	1772	1.8
Sports and Recreation	2160	3.6	1229 (b)	1.9	1042	1.5	972	1.4	1002	1.4	1091	1.5	1066	1.4	1043	1.4	1105	1.4	1146	1.4	1284	1.4	1392	1.4
Local Environmental Services	9036	15.1	10172 (b)	15.7	10568	15.3	10686	15.5	10955	15.3	5552	7.5	6132	8.1	6360	8.2	6658	8.2	7097	8.4	7530	8.4	8166	8.4
Other Services (a)	270	0.5	304	0.5	297	0.4	281	0.4	279	0.4	6187	8.4	5928	7.8	6219	8.1	6455	7.9	6249	7.4	5555	6.2	7828	8.0
Total	59720	100.0	64701	100.0	69020	100.0	68723	100.0	71481	100.0	73567	100.0	75593	100.0	77210	100.0	81428	100.0	84824	100.0	90179	100.0	97793	100.0

a) Included till 1994/95 agriculture and fisheries and include since 1995/96 supported employment services, flood defence, coast protection, other agriculture, consumer protection, corporate and democratic core, administration and support services and miscellaneous services.

b) Expenditure on parks and open spaces has been re-allocated to local environmental services.

Source: UK Office of the Deputy Prime Minister from 1993 on and calculation of the ifo Institute for Economic Research.

Table a8
Total Municipal Expenditures by Year in Poland (Absolute in million Zlotys and Share)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Agriculture and Hunting	22.0	2.9	2.4	2.6	2.4	2.5	2.1	2.4	2.0	2.3	2.6
Transport and telecommunication services	1.9	2.4	2.0	1.9	1.9	2.2	2.3	6.2	6.5	12.2	11.1
Communal Economy	20.6	30.9	27.7	29.7	23.0	22.6	22.9	17.0	16.0	9.6	9.6
Dwelling Economy	6.2	8.1	6.9	5.3	4.3	4.7	4.8	4.5	3.9	3.2	2.9
Education	14.7	20.9	26.4	26.0	38.7	37.7	37.2	40.6	42.7	41.0	41.6
Culture. etc.	2.8	3.7	3.5	3.3	2.8	2.8	2.9	3.0	3.0	3.2	3.2
Healthcare**					6.3	6.3	6.3	1.4	1.2	1.1	1.1
Welfare	13.7	17.9	19.2	18.9	9.5	9.7	9.8	10.7	10.6	11.9	12.2
Sport. Physical Education	9.3	1.3	1.3	1.3	1.2	1.6	1.8	2.0	1.8	2.0	2.0
Public Administration	8.8	11.9	10.7	11.1	10.0	9.9	9.9	12.4	12.4	13.5	13.6
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Expenditures*	6488	9583	14904	19828	31499	40504	47495	32835	36211	38568	39548

Note: Data starts with 1993 due to lack of complete data for 1990 - 1992.

* Total Expenditures include operating costs and investments.

** For the data sets in years 1993, 1994 and 1995 Healthcare and Welfare were classified together under the same category.

Source: Polish Official Statistics, Regional Data Bank, <http://www.stat.gov.pl>.