



**Institut für Rundfunkökonomie
an der Universität zu Köln**

Manfred Kops

**What Is Public Service Broadcasting
and How Should It Be Financed?
(Summary)**

**Institute for Broadcasting Economics
University of Cologne, Germany**

Working Paper

No. 145_s

Cologne, Sept. 2001

Arbeitspapiere des Instituts für Rundfunkökonomie
Working Papers of the Institute for Broadcasting Economics

ISSN der Arbeitspapiere: 0945-8999
ISSN of the Working Papers: 0945-8999

ISBN des vorliegenden Arbeitspapiers 145s/2001: 3-934156-48-7
ISBN of the Working Paper at hand 145s/2001: 3-934156-48-7

Schutzgebühr 5,- €
Price 5,- €

Die Arbeitspapiere können im Internet eingesehen
und abgerufen werden unter der Adresse

<http://www.rundfunkoekonomie.uni-koeln.de>

*The Working Papers can be read and downloaded
from the Internet URL*

<http://www.rundfunk-institut.uni-koeln.de>

Mitteilungen und Bestellungen an das Institut richten Sie bitte per Email an:

rundfunk-institut@uni-koeln.de

oder an die u. g. Postanschrift.

Messages and Orders to the Institute can be sent via Email to:

rundfunk-institut@uni-koeln.de

or to the mailing address mentioned below.

Kritik und Kommentare zum vorliegenden Entwurf werden
ebenfalls an die obigen Anschriften erbeten oder direkt an die
Email-Adresse des Verfassers: Manfred.Kops@Uni-Koeln.de

*Comments on the draft at hand are kindly requested
to the addresses mentioned above or directly to
the author's email-address: Manfred.Kops@Uni-Koeln.de*



Institut für Rundfunkökonomie
an der Universität zu Köln

Hohenstaufenring 57a

D-50674 Köln

Telefon: +49(0)221-23 35 36

Telefax: +49(0)221-24 11 34

Manfred Kops
Institute of Broadcasting Economics,
University at Cologne, Germany

**What Is Public Service Broadcasting
and How Should It Be Financed?**
(Summary)

Foreword	I
1. Alternative Methods to Provide Broadcasting Programmes	1
2. The Idea of Public Service Broadcasting	4
3. Principles to Finance Public Service Broadcasting	6
4. A Geometric Exposition of the Revenue Structure of Broadcasting Systems	9
5. The Revenue Structures of Material Broadcasting Systems - Internationally Compared	15

Foreword

In most countries there are Public Service Broadcasters. Their targets and legal competences, budgets and revenues however differ considerably. Some almost act as commercial broadcasters, others almost as governmental or state broadcasters. “What is Public Service Broadcasting” therefore is a well qualified and a frequently raised question.

In this paper we do not try to answer this question inductively, i.e. with regard to the material broadcasting systems that exist in the world in many variations, but deductively, i.e. as a normative concept that can be characterized by a few attributes and that serves a few (but important) functions for society. In line with the economic tradition we understand public service broadcasting here as a form of allocation mechanism, and we define and evaluate his advantages and weaknesses with regard to the generated programme output. From this point of view this text suggests not to secure public service broadcastings’ functions (or his functionality) mainly by legal orders but by economic incentives, especially by the incentives rendered by the broadcasters’ opportunities to raise revenues. In other words: the revenue structure is considered as the central instrument to steer the broadcasters behaviour and output – and thus the effects for society, which are most important for “information societies”, in which the citizens receive most of their information by the mass media (and in which their attitudes dominantly are shaped by the mass media).

We thus connect the (normative) characteristics of public service broadcasting to the question, how public service broadcasting should be financed. By this we do not neglect that also cultural, social, and legal factors substantially influence a broadcasters’ programme output, but we abstract from these peculiarities and concentrate on the possibilities to design a broadcasters’ revenue structure in order to make him produce the output that can be expected and requested by a democratic civil society. For this purpose a theoretical framework is presented by which the incentives that are generated by the different forms of revenues for the broadcasters behaviour (and programme output), can be evaluated and steered.

To realize this concept both the normatively appropriate revenue structures and the material (sometimes inappropriate) revenue structures of a countries’ broadcasting system have to be described empirically. However, in many countries the categories applied for this description are not derived theoretically, but depend on the requirements of public accounting and on bureaucratic restrictions. For this reason there also is no universal categorisation scheme, by which revenue structures can be compared internationally and by which each country can compare and evaluate his national revenue structure with the structure of other nations. The author hopes that this publication helps to raise the awareness for this lack of comparable data and maybe also raise the willingness to assemble such a data base. The UNESCO – and for the Asian-Pacific region the AIBD – could be appropriate organisations for this important task.



The paper results from several presentations, the author has prepared for the AIBD, e. g. at the 2nd International Conference and Europe-Asia-Pacific Dialogue on Public Service Broadcasting in Ouezon City/Metro Manila in 1999, at the Meetings of the AIBD on “Legal, Administrative and Financial Aspects of Public Service Broadcasting”, in Singapore and in Colombo in 2000, and at the AIBD-UNESCO-In-Country-Seminar on “Legal, Administrative and Financial Aspects of Public Service Broadcasting” in New Delhi in 2001. The author thanks the participants of these meetings for valuable comments.

Special thanks go to Rainer Welzel from the Friedrich-Ebert-Stiftung (FES), who initiated the authors’ contacts to the AIBD in Kuala Lumpur, I always enjoyed the long discussions with him (not only about broadcasting), and to Javad Mottaghi, director of the AIBD, who permanently (and patiently) encouraged me to finish the text.

A longer version of it, which includes case studies for the broadcasting systems of several countries, and which deals with the issues in more detail, will be available soon as Working paper No. 145.

Cologne, in September 2001

Dr. Manfred Kops

1. Alternative Methods to Provide Broadcasting Programmes

1.1. Goods can be provided (i.e. produced, distributed, and financed) by three types of institutions: a) by markets, b) by governments (or states), and c) by non-governmental non-profit organizations (NGOs, like charity organizations, cultural foundations, sects, neighbourhoods, leisure clubs etc.). These institutions have specific advantages and disadvantages, due to the decision rules they apply.

As *markets* apply de-central and horizontal decision rules (voluntary decisions between suppliers and customers), they firstly create high incentives to provide exactly the goods that are demanded by the customers, that is by people who are able and willing to pay for them (*preference orientation* of the market). Because of the markets' target to maximize profits they secondly create *efficiency*, and thirdly they support *freedom and self-responsibility*, both of the suppliers and the customers. -- On the other hand the markets' decision rules only can be used for goods that obtain certain properties: They must be additive in costs, excludable, symmetric with regard to the quality of information between suppliers and customers, and they may not cause external effects to persons that do not decide about the goods' allocation in their roles as suppliers or customers. Goods that do not obtain these properties cannot be provided by markets at all ("market failure") or can only be provided with deficiencies ("market deficits"). And the distributive results of markets are determined by the customers' incomes – not taking into account the reasons for income differences (e.g. disability or illness versus laziness) or criteria of need what could be relevant for the distribution of goods from an ethical, social or political point of view.

Governments can take into account those distributional criteria. And as they do not apply the de-central and horizontal decision rules of markets but central and vertical rules (orders), they also can provide goods with market failures, i.e. goods that are sub-additive in costs (especially due to non-rivalness of consumption) or non-excludable, that are asymmetric with regard to the suppliers' and customers' quality of information about the goods' properties or that cause external effects. – On the other hand governmental provision does not care as much about the citizens' preference structures, does not have high incentives for efficiency, and instead of supporting freedom and self-responsibility it rather creates restraint, dependence and a mentality of requesting and taking.

Non-governmental non-profit organizations apply a mixture between the markets' de-central and horizontal decision rules and the governments' central and vertical decision rules. People are engaged in such organizations neither mainly for money (as in commercial firms) nor as a result of governmental directives, but mainly to satisfy intrinsic motivations, like cultural, artistic, educational, religious or charity targets. Decisions of NGOs thus are horizontal with regard to the (voluntary) membership, and they are vertical with regard to the rights of NGOs to give orders to their members concerning the production, distribution and financing of the goods they provide. For this reason NGOs also are called a "third way"-solution ("third sector" or "autonomous sector"). Also the term "civil



society” expresses this way of organizing societies and economies. In general, NGOs are not as effective and preference-oriented than markets, but more effective and preference-oriented than governments; and also with regard to the citizens’ freedom and self-responsibility the results are intermediate. However, it highly depends on the NGOs internal organisational structure, if the intrinsic motives of the NGOs members can be profited, and if the efficiency and consumer orientation of markets can be combined with the public welfare orientation of (benevolent) governments.

As large and complex societies have to provide many different goods with different properties, they apply all three of these provision mechanisms (“mixed economies”). Their relative importance, however, varies considerably, both with the demand structure of the societies and with the citizens’ evaluation of the mechanisms’ relative capabilities.

1.2. Also broadcasting programmes can be provided by markets, by governments, and by NGOs. And the general advantages and disadvantages of the three mechanisms also hold here: *Markets* provide programmes that are produced cost-efficient and that fit the viewers’ and listeners’ preferences, which is especially valuable, when the programme preferences change quickly (many new and innovative programme formats have been elaborated by commercial broadcasters). -- However, if there are market failures, the commercial output will deviate from the public welfare optimum. If broadcasting programmes e.g. cause positive externalities (like contents that stabilise, pacify and integrate societies, strengthen democracy, and increase plurality), this is not considered by commercial broadcasters (i.e. such programmes are not sufficiently provided), and if broadcasting programmes cause negative externalities (like contents that destabilise and disintegrate societies, weaken democracy and decrease plurality), this also is not considered by commercial broadcasters (i.e. these programmes are provided to a larger extend than appropriate). Other deficiencies of commercial broadcasting appear, if there is asymmetric information (which is opportunistically abused to the debit of the viewers and listeners), and if there are sub-additive costs, that lead to a horizontal, vertical and diagonal concentration of the broadcasting industry (which reduces the programmes’ plurality and may lead to journalistic monopoly power as result of economic monopoly power). -- When broadcasting programmes are financed by advertising (as a result of non-excludability), there are additional deficiencies: The programmes do not care for the preferences of the viewers and listeners (but for the preferences of the advertising industry), thus they are dominated by commercial contents and interests, they are not pluralistic, and they ignore the programme interests of people that are not able to buy the advertised goods (poor, unemployed people) or whose consumer patterns can hardly be influenced by commercials (old people). When commercial programmes are financed by subscriptions (pay per channel) or payments (pay per view), there are no negative programme effects of that kind. However, objections then can be made against the distributive effects of the commercial provision of broadcasting programmes (as the access to the programmes depends on the citizens purchasing power).



These market failures can be prevented by a “vertical” provision of broadcasting programmes, i.e. by a provision by governments. External effects, asymmetries, non-excludability, and sub-additive costs then can be considered and corrected by the state authorities’ coercion and sanction, based on the governments’ democratic legitimacy. These general advantages of a governmental provision, however, count little when they are compared with the disadvantages, a governmental provision of broadcasting programmes has: The programme preferences of the viewers and listeners hardly are regarded, also the efficiency of governmental broadcasting in general is smaller than the efficiency of profit driven commercial broadcasting. Even bigger objections against governmental broadcasting must be made with regard to the governments’ general tendency to abuse broadcasting for their own political targets. For state broadcasting led by parliaments this means a domination of political contents, for government broadcasting led by governments it means, even worse, a domination of contents that favour the governments or the governing parties above the opposition or the opposition parties. Both state and (more) government broadcasting run counter to freedom of expression and of public and individual opinion making, and they seriously jeopardise democracy, especially when there are no efficient safeguards to protect broadcasters from the states’ or governments’ discretionary grip.

Non-governmental non-profit organisations in general can be regarded as appropriate institutions to provide broadcasting programmes, as there neither is the commercial domination that is inherent to programmes provided by markets, nor the political (governmental) domination that is inherent to programmes provided by states or governments. However, as a provision of programmes by NGOs requires high intrinsic motives, there is another form of domination or “bias” (of contents that are valuable for the NGO’s members, but not representative for the society as a whole). Another severe problem exists for (non-encoded) broadcasting programmes that are non-excludable: For them a provision by NGOs tends to fail because of the so-called free-rider problem (the individuals’ tendency to use but not to pay for the non-excludable goods). This problem can be solved partly by combining the non-excludable broadcasting programmes with private (excludable) goods, e.g. by publicly honouring the individuals contributions in cash (donors) and kind (honorary offices). But even when such organisational measures are used to support and increase intrinsic motives, the voluntary contributions hardly allow NGOs to provide a sufficiently large offer of broadcasting programmes.

For this reason, in many countries NGOs partly act as commercial broadcasters (e.g. by partly fund from advertising or the sale of programme rights) or they are supported by the governments, e.g. by giving them public revenues or by granting them own revenue sources that are enforced by state authority (like license fees). This increases the abundance of the NGOs’ revenues (and the scope of broadcasting programmes that can be financed by them), but to the price, that the NGOs become dependent from commercial influences and by the political interests of the governments. Actually these programme providers then



are no pure public service providers (in the sense non-commercial, non-governmental organisations), but they are a mixture between public service broadcasters, commercial providers and governmental broadcasters.

2. The Idea of Public Service Broadcasting

2.1. The idea and purpose of public service broadcasting has to be defined with regard to the above mentioned capabilities and weaknesses of the alternative allocation mechanisms, and it has to be determined for a mixed system that besides public service broadcasting also consists of commercial broadcasting and/or governmental broadcasting.

Taking that into account, public service broadcasting in its pure form should, first of all, be *non-governmental* public broadcasting, i.e. the decisions about its tasks, contents, organization and financing should be made publicly, but not by the existing political (governmental) public institutions, but by separate non-governmental public institutions. To ensure that public service broadcasting is not abused by incumbent governments in its attempts to preserve or enforce the present proportions of political power, these institutions should neither directly nor indirectly be controlled by ongoing governments, but they should be controlled by politically independent boards, which should be recruited by the citizens in their role as viewers and listeners, who feel responsible for the political, social, and cultural effects of broadcasting programmes and who should thus be able to directly influence these programmes. These boards, therefore, along similar lines to governments, should be founded democratically and pluralistically, but not in the usual way through political elections, but through separate, non-political ways of recruitment and public decision-making.

Such a political independence and neutrality of public service broadcasting is hard to put into practice, as there are high motivations for governments and the individual politicians of the governing political parties to control public service broadcasting. For the workability of democracy this political independence is a basic precondition, however, as the governing politicians and parties and opposition politicians and parties only then have the same opportunities to present their political views to the public. Only this independence also ensures that the governing parties and politicians maintain fair access to the media after they have lost their majorities and find themselves back in the role of the opposition.

The renunciation by governments of gaining control of public service broadcasting, therefore, can be interpreted as a long term contract, which, under the veil of ignorance (i.e. the uncertainty about the future position as government or opposition), is beneficial for both sides, and – more important – is beneficial for the citizens who want a functioning democracy. Nonetheless it cannot be expected that governments, whose decisions usually are restricted to effects they cause within the legislation period, will voluntarily comply with such a contract, if they can assume that they are going to lose their political majorities by not controlling the mass media. Political freedom of the mass media, as well as political freedom in general, hence is permanently threatened by governments, and it needs to be protected by explicit and binding contracts, preferably by con-



stitutional law. Only then governments can be forced to keep their hands off the mass media and off public service broadcasting. The German Broadcasting Law for these reasons e.g. prohibits the Government from influencing the media. And based on this law concrete obligations and restrictions are formulated for the German Government with regard to decisions about the media, especially about the tasks of public service broadcasting and about its funding.

2.2. Public service broadcasting should, secondly, be *non-commercial* public broadcasting. As broadcasting programmes in general, or at least specific types of programmes, have market failures, the decisions about its tasks, contents, organization, and funding cannot be made by market criteria suitable and effective for commercial goods. For the same reasons the benefits of public broadcasters' programmes cannot be evaluated by criteria suitable for the evaluation of commercial broadcasting programmes. Willingness to pay and audience size e.g. are weak criteria for evaluating public broadcasters programmes, as the programmes' social effects (e.g. for the stability and coherence of a society, for strengthening its democracy or for achieving certain cultural and educational standards) are not considered then. They can and should be taken into account, however, and they should be measured explicitly with the help of several social sciences that have to work together (like communication and media theory, political journalism, empirical sociology, broadcasting law, and broadcasting economics). The relative importance these criteria possess for the overall evaluation of the social benefits of public service broadcasting programmes then can be discussed and determined explicitly by the usual ways of social and political discourse.

Commercial influence on public service broadcasting should be restricted for two reasons. Firstly, public service broadcasting should articulate a wide, pluralistic spectrum of issues and attitudes considerably exceeding the range that is interesting from a purely commercial point of view. For instance, it should include cultural and religious issues that are of fundamental importance for the citizens and for society at whole, but that – as non-market goods – are of no interest for (and not provided by) commercial broadcasters. This wide spectrum of contents and opinions leaves the public communication open for new and better ideas, and it offers the chance to correct wrong ideas and policies, also for minorities. Secondly, commercial influence on public service broadcasting involves the risk that commercial and political interests merge, and that the commercial power will be used to steer political power in a non-transparent and antidemocratic way. The case of Berlusconi in Italy is an illustrative example for this.

2.3. According to our evaluation, the role of public service broadcasting should increase over time. As with the globalisation of the world economy market processes and market criteria dominate all spheres of society – also spheres that cannot adequately be shaped by the market mechanism – social and cultural achievements are jeopardized (like cultural heritages, traditional social values, political awareness and participation, and systems of a non-market provision of goods and services). Public service broadcasting can create a public conscious-



ness for these achievements and thus can contribute to sustaining and promoting them. It is needed as a counterpart to the growing and globally merging commercial broadcasters, whose programme contents are restricted to privately demanded issues and whose programme politics is restricted to private profit making. And in the course of increasing globalisation and commercialisation this counterweight becomes more important, especially for developing countries.

However, with regard to the worldwide triumphant advance of capitalism it becomes difficult to explain this necessity of the public service broadcasting's "third way" between private entrepreneurship and governmental vertical ordering. The tendencies of deregulation, that can be observed everywhere as a means to "untie the high potentials of markets", have also contributed to an intellectual mainstream that contrasts with the ideal of a strong non-commercial public service broadcasting. But the obviously high capacity of capitalism to provide consumer goods should not suggest that all kinds of goods could best be provided by markets. Instead, for a market provision goods have to fulfil specific preconditions, and broadcasting programmes do not or only partly fulfil these preconditions.

3. Principles to Finance Public Service Broadcasting

3.1. There are different means to politically steer the structure of a mixed broadcasting system (i.e. the relative importance that commercial broadcasting, governmental broadcasting, and public finance broadcasting play in this system), and its programme output. One way is to regulate the programming decisions and outputs by legal orders and inhibitions. Whereas most layers prefer this way, most economists consider it only as a second best solution. As a first best solution to steer a broadcasting systems' programme output they instead consider *adequate financing rules and resources* that set the right economic incentives for the provision of broadcasting programmes that maximize public welfare.

Also the study at hand is based on the assumption that the types of revenues that are assigned to an institution determine the institutions' achievements. If an institution is completely financed by market revenues, it will act according to the rules of the market. If it is financed completely by governmental revenues, it will act according to the expectations of the government. And if it is financed completely by the voluntary donations of individuals and organisations, it will act according to the expectations of these donors. Institutions that are financed by mixed revenue structures consequently will act according to the expectations of all suppliers, and they will try to fulfil their (different) expectations according to the relative portions of revenues these suppliers contribute.

This also is true for organizations that provide broadcasting programmes. Also for them the revenue structure determines the incentives and thus the output, i.e. the content and making of the programmes they provide. An appropriate revenue structure for the different types of broadcasters that is derived from



their different tasks in a mixed broadcasting system therefore is considered as the key element of broadcasting policy.

3.2. *Public service broadcasters* from that perspective should be financed in principle by voluntary contributions, either in cash (donations) or in kind (honorary services). When the resources from such contributions are too small to fund the requested programmes, attempts should be made to increase intrinsic motives (e.g. to publicly honour the donors or to involve them into the programming decisions) and to reduce the free rider problem (e.g. by combining public programmes with private services). Only if the abundance of the voluntary contributions cannot be increased sufficiently by these remedies, also supplemental commercial and/or governmental revenues should be allowed for public service broadcasters, keeping in mind that commercial/governmental contents may become dominant and that this jeopardizes the public service broadcasters' task to provide programmes according to the public interest. The concrete portions of commercial and governmental revenues must be determined with regard to the abundance of the voluntary contributions (which varies with the countries political, cultural and economic framework) and with the political and legal safeguards, by which the governments' and corporations' influence on the broadcasters' programming decisions can be reduced.

The receiving license fee from this regard certainly is no perfect revenue for public service broadcasters, as it depends on the states' decisions to allocate the yields to them, as it depends on the states' administrative apparatus to enforce the payments, and as it offers the governments potential opportunities to steer public service broadcasting by discretionary varying the level of the fee. On the other hand, if the yield of the license fee directly goes to the public service broadcasters and not to the governments' budgets, this supports the attitude, that the revenues originally belong to public service broadcasters and cannot be varied or even rejected totally by the governments, whereas for governmental grants, that are spent out of the governments budgets, this is the common attitude. From that regard, the license fee could be classified as a good "pragmatic" solution: It does not provide the independence of donations, but the fees' higher risk to be influenced by the governments can be justified by the much higher abundance (and indirectly: by the higher independence from commercial restraints), the revenues from the license fee possess in comparison to the more "proper" revenues from donations.

3.3. *Commercial broadcasters* should fund from market revenues. Revenues from advertising, from sponsoring, and from merchandising can be mentioned here as the most abundant forms of commercial revenues, revenues from programme sale also should be mentioned. For pay-per-channel and pay-per-view broadcasters subscriptions and viewer payments are most important. These revenues all ensure that the broadcasters offer programmes that fit the customers' preferences (where the advertising companies are the customers of advertising funded broadcasters, and the viewers and listeners are the customers of pay per-channel and pay-per-view broadcasters). When there are mar-



ket failures, these revenues cannot ensure, however, that the commercial broadcasters also provide the programmes that are appropriate for the public welfare.

When we again exclude legal orders and inhibitions as measures to adjust commercial programmes' common interests, financial incentives and disincentives remain as the alternative form of regulation that is preferred by economists. The provision of programmes with negative externalities e.g. can be reduced by taxes, and the provision of programmes with positive externalities can be increased by subsidies. External effects of broadcasting programmes thus can be internalised, and commercial broadcasters can be motivated to take into account public effects of their programmes that run counter their internal (profit seeking) purposes. Commercial revenues then are complemented by public revenues (either by governmental means or by private donations), and commercial programming is corrected by governmental and public interest programming. Commercial broadcasters in this case actually are mixed broadcasters, and the portions of the non-commercial revenues determine the importance of the non-commercial programming elements.

With concern to the reservations mentioned above, it is doubtful if *governmental broadcasters* should exist at all. If they are considered useful for certain (narrow) functions (e.g. for the governments obligations to inform the people about their political targets and measures), they should be funded by government money that can be taken from the governments' budget (usually from the ministry of information or the like) or from public revenues (grants or tax revenues). In any case the funding should be restricted to the narrow programme scope necessary for governmental broadcasting, and it should not cover a general and broad programme scope that contains entertainment, educational and cultural programmes or even news or political comments (as this would enable governments to abuse broadcasting for their political purposes).

3.4. These considerations illustrate, that the attributes of the pure forms of market revenues, governmental revenues, and non-governmental public revenues can be combined, and that by these combinations *many intermediate forms of revenues* can be created. This offers the opportunity, that the relative importance, a country considers optimal for markets, governments, and NGOs, is steered by the relative importance of pure or mixed revenues that are appropriate for the respective allocation methods.

This raises the question, if a certain revenue vector of a broadcasting system should be realized by several broadcasters (each with pure revenues = "oligopolistic pure system"), or by only one broadcaster, whose budget is composed by different kinds of revenues ("monopolistic mixed system"). Alternatively, also a system of several broadcasters, each with a mixture of revenues ("oligopolistic mixed system"), could be established, or a system of several broadcasters, from which some are funded by mixed revenues and others by pure revenues ("oligopolistic mixed system with pure elements").

Without discussing this question here in detail (see the long version of the paper for this), the "oligopolistic mixed system", that provides both internal and external

competition, seems to be superior both to the “oligopolistic pure system” and to the “monopolistic mixed system”, that both are restricted to internal or external competition respectively. And the “oligopolistic mixed system with pure elements” seems to be superior to all three of them, as it, in addition to the internal and external competition, provides programmes with pure elements.

One has to consider, however, that with the number of broadcasters and with the complexity of the broadcasting system also the costs of the system vary. *Ceteris paribus* they are lower for “monopolistic systems”, higher for “oligopolistic systems”, and highest for an “oligopolistic mixed system with pure elements”. The choice thus much depends on the resources a nation is willing and able to spend for its broadcasting system. Less developed countries may consider it sufficient, if they have a monopolistic (pure or mixed) system with just one broadcaster, or an oligopolistic (pure or mixed system) with two or three broadcasters, one being purely (or dominantly) commercial, a second one being purely (or dominantly) governmental, and maybe a third one being a pure (or dominant) public service broadcaster. Highly developed countries may be willing and able to devote more resources for their broadcasting systems. They may then afford a costly “oligopolistic mixed system with pure elements” that contains ten or more different broadcasters, some of them with pure revenue structures, others with mixed revenue structures.

4. A Geometric Exposition of the Revenue Structure of Broadcasting Systems

4.1. With the assumption of this study that the types of revenues assigned to an institution determine the institutions’ achievements, the knowledge of the broadcasting systems’ revenue structure is a measure both for positive analysis (“what programme effects will be rendered by the existing revenue structure?”) and for normative broadcasting policy (“in which way should we change our revenue structure to render the programme effects we achieve?”). The following *geometric exposition* provides this information in an intuitive and easily understandable form.

The revenue structure of a broadcasting system there is described as a vector with the three values a , b , and c :

- a is the share of non-governmental revenues in relation to the total revenues,
- b is the share of governmental revenues in relation to the total revenues, and
- c is the share of market revenues in relation to the total revenues.

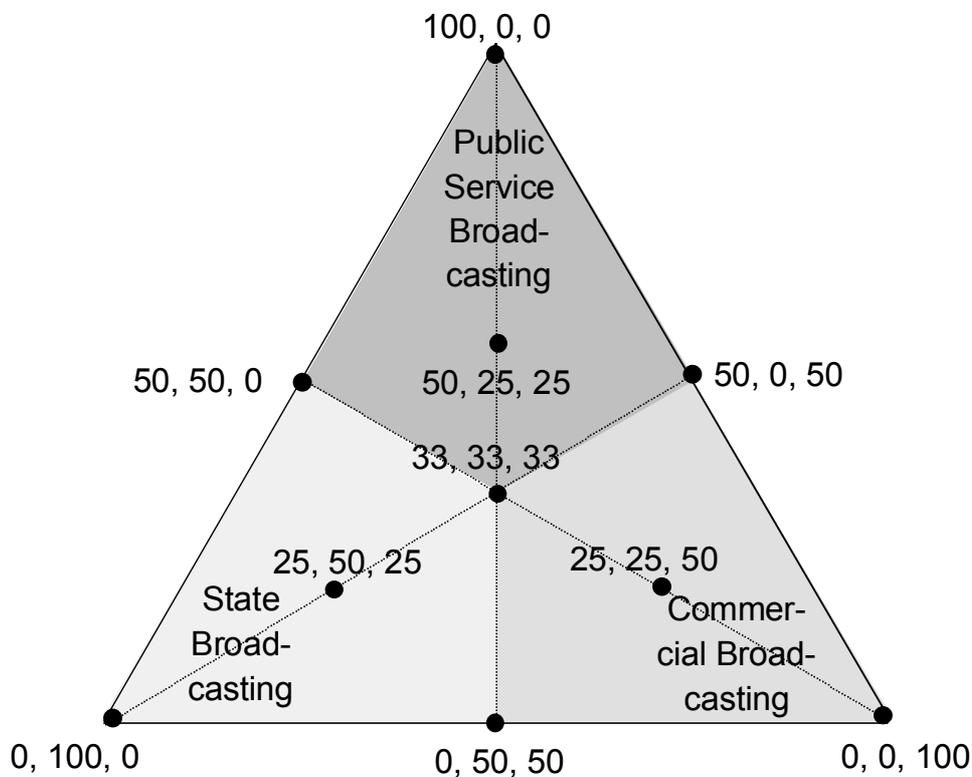
A broadcasting system, that is financed by non-governmental revenues only (public service broadcasting), then is described by the vector $100,0,0$, and it is located at the upper edge of the triangle. A broadcasting system, that is funded by governmental revenues only (governmental broadcasting), is described by the vector $0,100,0$, and it is located at the left edge of the triangle; and a broadcasting system, that is funded by market revenues only (commercial broad-



casting), is described by the sector 0,0100, and it is located at the right edge of the triangle.

Also the mixed revenue structures that were discussed in the last section can be exposed that way. If non-governmental revenues, governmental revenues, and market revenues e.g. each contribute by one third to the total revenues, the vector is 33,33,33; such a system is located in the centre of the triangle. If the broadcasting system is financed by one half from governmental revenues and by the other half by commercial revenues, the vector is 0,50,50, and it is located in the middle of the basis line of the triangle.

Figure S-1:
A Geometric Exposition of the Revenue Structure of Broadcasters,
Distinguishing Three Types of Broadcasting Systems



Revenues that are neither purely voluntary (NGO-type), nor purely commercial, nor purely governmental, can also be located into the triangle. If we assume, for instance, that the receiving licence fee is a mixture between voluntary donations (located in the upper corner of the triangle) and governmental revenues (located in the left corner of the triangle), a broadcaster that solely is funded from the license fee would be located somewhere between these two corners (i.e. on the left edge of the triangle), and the importance of the voluntary NGO-character of the license fee compared to the importance of its character as a governmental obligation will determine the distance from the two poles of this continuum. If we suppose, e.g., that both elements are equally important, the vector would be 50,50,0, and it would be located at the middle of the left edge (similar to a



broadcaster that is half funded from pure NGO-revenues, say donations, and half funded from pure governmental revenues).

By means of the revenue vector one also can separate different types of broadcasting. If the system is located in the left part of the triangle, governmental revenues have the highest portion, this system thus can be labelled as “governmental broadcasting” or “state broadcasting”, although it does not correspond to the ideal revenue vector (which is 100,0,0). If the system is located in the upper part of the triangle, non-governmental public revenues have the highest portion – it then can be labelled as “public service broadcasting”, although it does not match the ideal vector (which is 0,100,0). And if the system is located in the right part of the triangle, market revenues have the highest portion – it then can be labelled as “commercial broadcasting”, although it does not match the ideal vector (which is 0,0,100).

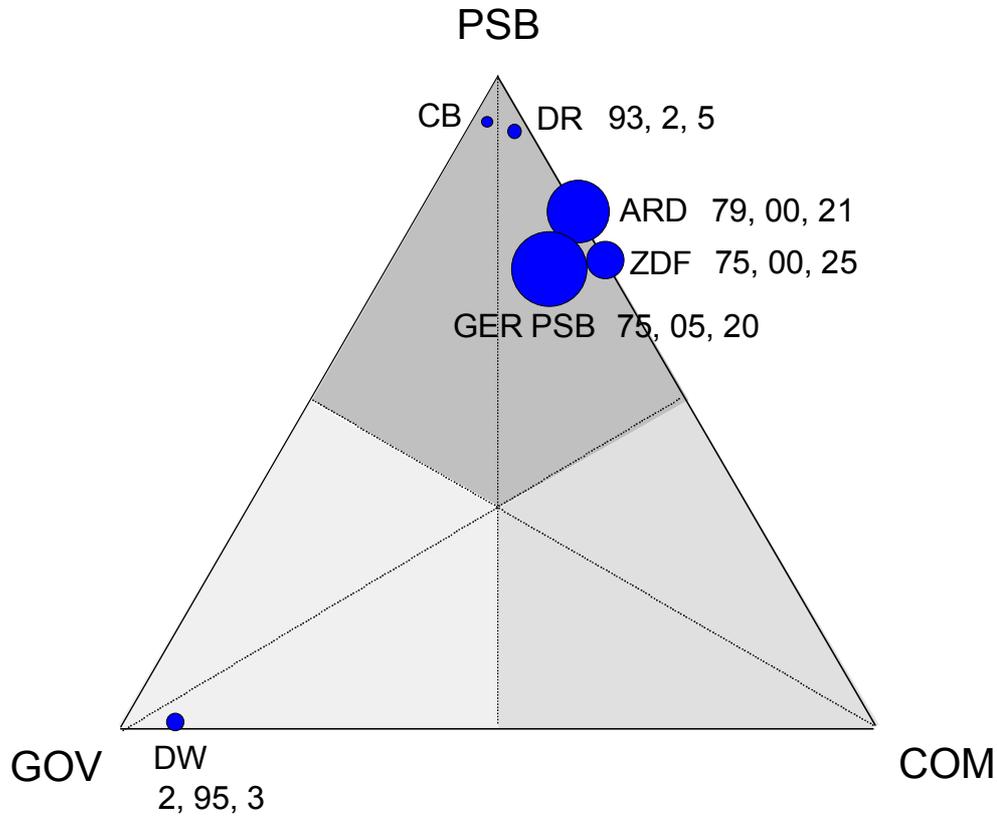
4.2. To dispose the broadcasting system of a country in the geometric form described by figure S-1, the revenue structures for the individual private broadcasters and governmental and non-governmental public broadcasters that materially exist in this country must be aggregated: In a first step the revenue structure of the separate existing broadcasters have to be investigated empirically and have to be positioned into the geographic diagram, and in a second step the revenue structure of the overall broadcasting system has to be determined by aggregating the (weighed) revenue structures of all separate broadcasters of the country.

4.3. For revenues that are not “pure”, i.e. that contain both governmental and non-governmental characteristics, or both commercial and governmental characteristics, or both commercial and non-governmental characteristics, a qualitative adjustment of the graphical location is necessary. We can illustrate this by means of the receiving license fee that in general is to be classified as non-governmental revenue but contains a strong element of governmental revenues. Hence we could categorize one portion (say 50 %) of the license fees as non-governmental revenue, and the other portion (here: also 50 %) as governmental revenue. Depending on the degree of governmental intervention, of course different portions can be chosen.

4.4. The application of the geometric exposition can be illustrated by the German broadcasting system a material example. There are four public service broadcasters: ARD (which actually is an association of several regional stations, providing both radio and TV-programmes), ZDF (as a nation-wide station, only for TV-programmes), Deutschland Radio DR (as the national radio station), and Deutsche Welle DW (providing radio programmes for foreign countries). The ARD has the highest budget (in 1999 5,060 Bill. US Dollars, from which 4.800 are categorised here), followed by the ZDF (1,080 Bill. US \$/1,000 Bill US \$), DR (152 Bill. US \$/150 Bill. US \$), and DW (305 Bill. US \$/300 Bill US \$). In addition, there is the so-called Bürgerfunk (Citizen broadcasting, CB) that provides low-budget and non-professional radio and TV-programmes.



Figure S-2:
A Geometric Exposition of the Revenue Structure
of the German Public Service Broadcasting System

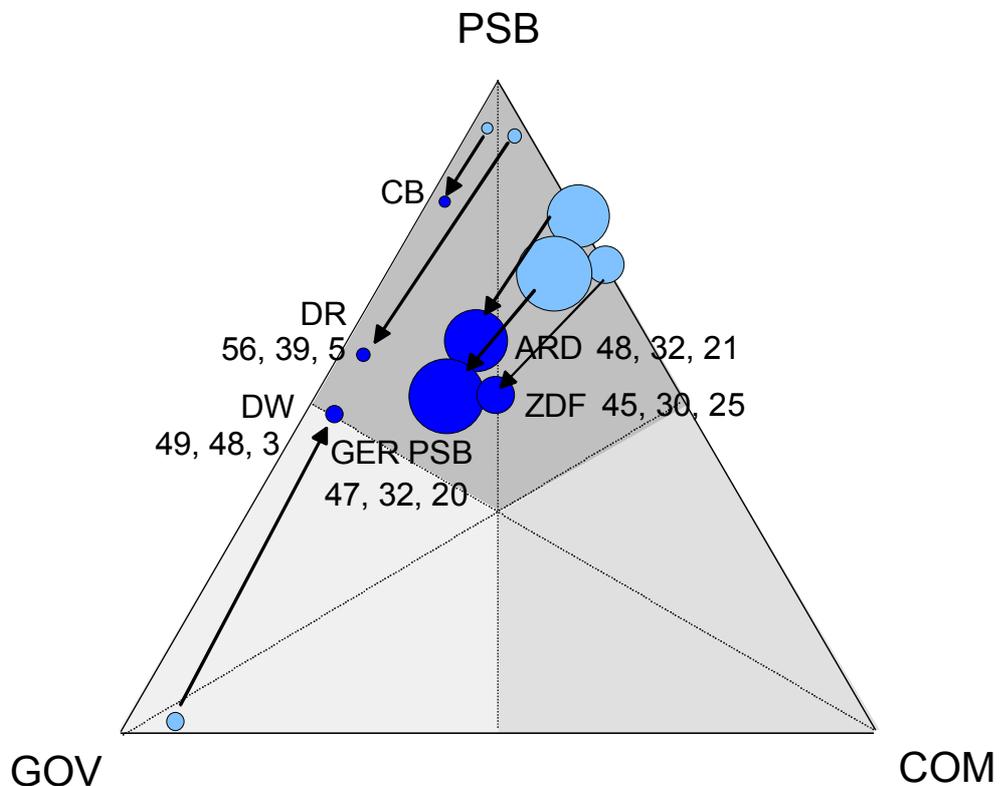


ARD, ZDF, and DR are dominantly public service broadcasters, being funded primarily by the license fee, their revenue vectors are 79,0,21; 75,0,25, and 93,2,5, respectively, for the proportions of non-governmental public revenues, governmental revenues and commercial revenues. CB (which could be neglected with regard to its low budget of less than 62 Bill. US \$) has a revenue vector of 97,2,1, i.e. it almost corresponds with the revenue structure of a pure public service broadcaster. Only DW with a revenue vector of 2,95,3, gets most of its revenues from the government (although the governments' influence on the programmes contents is limited, see below). Adding the revenues of all these broadcasters gives 75,5,20 as the weighted revenue vector for the aggregated German PBS sector. Inserting this revenue vector into the familiar diagram (figure 2S) shows, that the revenue structure for the sum of all German public service broadcasters comes near the ideal profile, although with DW there is one Broadcaster, whose revenue structure is atypical for public service broadcasting.

Taking into account the qualitative peculiarities of the revenues available for public service broadcasters, three adjustments of the geometric exposition should be made: Firstly, the revenues of ARD, ZDF, and DR should be shifted down and left (towards governmental broadcasting), as the governments of the German "Länder" (states) under certain circumstances can forbid, that the

broadcasters increase the license fee. I.e. there is governmental control, and the revenues from license fees therefore cannot be located at the upper corner of the triangle, but should be located somewhere between the upper corner and the lower left corner. Secondly, and oppositely, the revenues of the Deutsche Welle should be shifted upwards, as there are several safeguards that hinder the German government from varying the grants discretionarily. For CB such a correction only is necessary for the small portion of revenues they receive from the regulatory bodies (as these stem from the license fee). For the major portion of donations in kind and cash remains the position unchanged. Hence CB stays near the ideal position, i.e. the upper corner of the triangle.

Figure S-3:
A Geometric Exposition of the Corrected Revenue Structure
of the German Public Service Broadcasting System

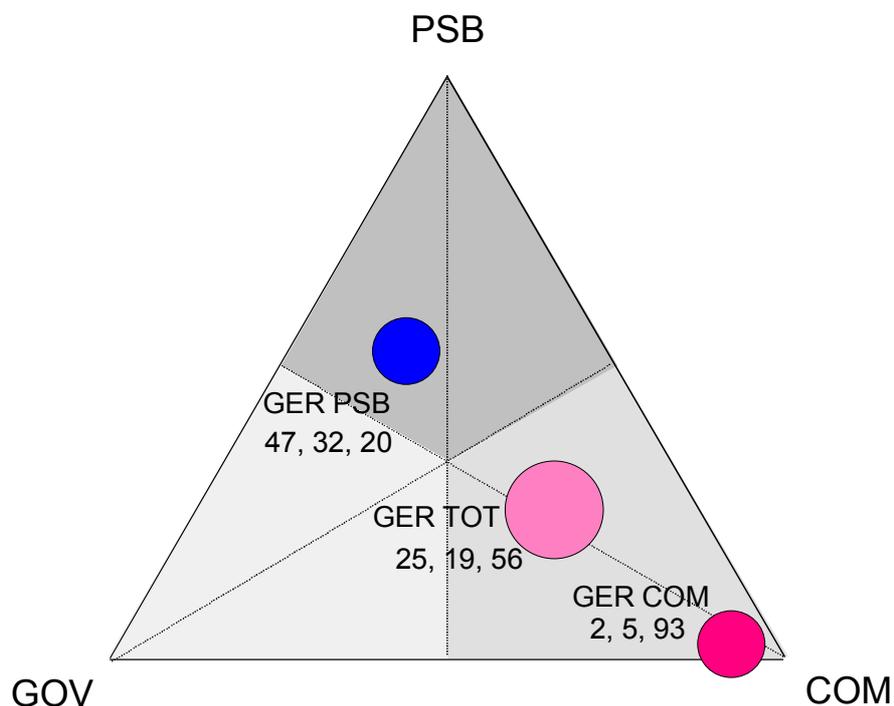


If one transforms these qualitative peculiarities into quantitative revenue vectors (explained in the long version of the paper), one gets the “corrected” revenue vectors: For the ARD the vector changes from 79,0,21 to 48,32,21; for the ZDF from 75,0,25 to 45,30,25, for the DR from 93,2,5 to 56,39,5, for the DW from 2,95,3 to 49,48,3, and for CB from 97,2,1 to 90,9,1. Hence the distance from the perfect (or pure) revenue structure (of 100,0,0) has increased (see figure S-3). A classification as (dominantly) public service broadcaster still is justified, however, and with this revenue structure the German public service broadcasters still are much better off than public service broadcasters in many other countries.



This structure of the public service broadcasting sector only can be evaluated properly, if also the size and revenue structure of the commercial broadcasters are taken into account. In Germany there exist about ten of them, RTL, SAT.1, and PRO7 being the biggest. The sum of all commercial broadcasters' budgets is about 6,000 Bill. US \$), which almost equals the total budget of all German public service broadcasters. As these commercial broadcasters fund themselves only from market revenues, the revenue vector is 0,0,100. However, also here a correction is necessary, if one considers the peculiarities of the German broadcasting constitution: Firstly, the government can influence the commercial broadcasters' revenues (e.g. by altering the regulations about the amount and content of commercials); therefore the proportion of governmental revenues should be shifted, especially as the commercial broadcasters in Germany by law also have to fulfil certain political functions, e.g. before the political elections they have to broadcast spots of the political parties without being paid for that. Hence parts of their commercial revenues (we suppose: 5 %) actually are not available for them, but are to the governments' disposal. They hence should be classified as governmental revenues. Secondly, in Germany some commercial broadcasters fulfil certain public service functions. According to Article 26 of the Broadcasting Law ("Rundfunkstaatsvertrag"), the big commercial broadcasters e. g. have to provide programmes from independent producers during a specific time of the day ("programme windows"). On the other hand, the regulation authorities for commercial broadcasters ("Landesmedienanstalten") are financed by revenues from the licence fee, and the commercial broadcasters also participate from the national film fund, which also is partly financed from the license fee. Therefore it seems to be justified to categorise a certain portion of their revenues (we assume: 2 %) as public service revenues.

Figure S-4:
A Geometric Exposition of the Corrected Revenue Structure
of the German (Public Service and Commercial) Broadcasting System



If we take these adjustments into account and compile the relative proportions of the different revenue types, we finally get the (corrected) vectors for the commercial broadcasters. It is 2,5,93. We then also can compile the (weighted) vector for the sum of the total commercial sector plus the total public service sector. It is 25,19,56. That means, the German broadcasting system is a dominantly commercial one, but it has both strong public service elements and considerable governmental elements. Figure S-4 visualises this result: There the total German broadcasting system is located almost exactly between the position of the German Public Service Broadcasting and the position of the German Commercial Broadcasting (of course, as both sectors have almost equally high budgets).

5. The Revenue Structures of Material Broadcasting Systems. An International Comparison

5.1. Each society has to determine the mix of allocation mechanisms – and the mix of revenues for these mechanisms – that is optimal with regard to objective factors (like the consumer structure) and subjective factors (like the evaluation of the mechanisms relative capacities). In the search of this optimum it can be valuable to know which mix other societies have chosen. Here again two major determinants have to be considered: firstly the public service broadcastings' quantitative importance, compared to the importance of the commercial and governmental sector; and secondly the qualitative revenue structure of the public service broadcasters.

The budgets of the public service broadcasters are a major indicator for the quantitative importance of public service broadcasting. According to a study by MCKINSEY (1999), which is presented in greater detail in the long version of this paper, public service broadcasting in Germany, Japan, the United Kingdom, Italy, and France by far possesses the highest operating incomes. To a large extend these differences are due to the variations in the countries' size and in the differences of their economic capabilities, however. By compiling the PSB's operating incomes per capita, this factor can be eliminated. The ranking between the included nations then changes considerably. Denmark, for instance, a small country that from the absolute operating income only ranges on position eight, per capita has the highest operating income; being followed by Germany. Japan and the United Kingdom, on the other hand, those absolute operating incomes ranged on the second and third position, fall back on position eight and ten, respectively, when the per capita values are compared. -- For the per capita values also the variance between the countries is much smaller than for the absolute figures. It still remains considerable, however: Public service broadcasters in Denmark, for instance, annually can spend 83,1 € for each citizen (i.e. about (115 US \$)); in the U.K., in Italy, or in Japan, public service broadcasters can spend only about 30 %, and in South Africa, the Czech Republic, or in Poland only about 10 % of that amount.



The McKinsey study also provides empirical data on how the operating incomes of the public service broadcasters are funded. The categorisation differs from ours, as only license fees (as the major form of non-governmental public revenues), governmental grants (as the major form of governmental revenues), and advertising (as the major form of commercial revenues) are considered there, and other forms of our categories are subsumed in the category “other revenues” (i.e. donations as a form of non-governmental public revenues, taxes as a form of governmental revenues, and sponsoring as a form of commercial revenues). Lacking better empirical data, we nonetheless accept McKinsey’s figures as rough indicators for the question, which type of broadcasting the considered countries have established. According to these data four different funding structures can be distinguished:

- A first group of countries, which are funded purely or almost purely by license fees only (Japan, Norway, Sweden, Australia, the United Kingdom, and Denmark). In a previous chapter of our study we had labelled such broadcasters as *pure public service broadcasters*.
- A second group of countries has a mixed revenue structure, in which license fees dominate (ARD and ZDF in Germany, Turkey, Belgium, Netherlands, France, Czech Republic, and Italy). Such broadcasters were labelled as *dominantly public service broadcasters*.
- For a third group, license fees are important, but not the dominating source of revenue (France, Poland, Denmark, South Africa). For them governmental grants or/and commercial revenues are the main sources of revenues, and with regard to our classification, these broadcasters would not be considered as public service broadcasters, but as *commercial broadcasters with public service elements* or as *governmental broadcasters with public service elements*.
- Finally, there are countries, whose broadcasters do not yield any license fees, but are funded by governmental grants and/or advertisements only (Portugal, Spain, New Zealand). For them, the label “public service broadcasting” definitely is false. Instead the labels *purely commercial broadcasters* (New Zealand) or *commercial-governmental broadcasters* (Portugal, Spain) were appropriate, eventually with minor public service elements.

In figure S-5 we have placed the countries into the common diagram (in the corners of the triangle we have now placed McKinsey’s categories, which changes the meaning of the diagram somewhat in comparison to the labels we have used up to now for the corners of the triangle).

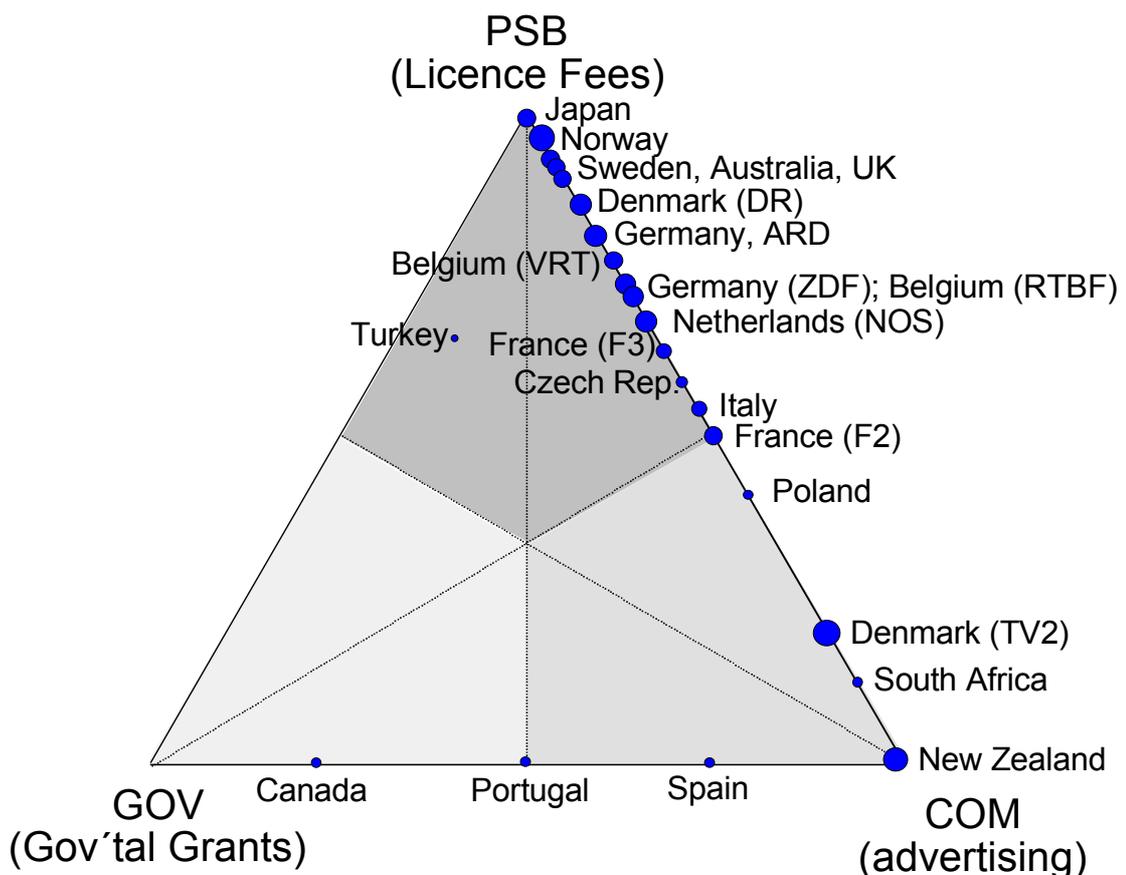
1. The spread illustrates the variety of solutions the countries in the world have chosen to design their broadcasting systems. We find the whole range between a pure public service broadcasting funding (Japan) and a pure commercial funding (New Zealand), lined up like pears on the right edge of the triangle; and we find a similar line up on the lower edge of the triangle, that describes the dimension between pure commercial broadcasters and pure governmental broadcasters. Canada comes nearest to this type, although

there exist a lot of states (mainly dictatorships), whose broadcasters are purely governmental, but which were not included in the McKINSEY study.

2. For the countries included into the McKINSEY study, two clusters become visible: a first cluster with dominantly public service broadcasters, this cluster ranges from Japan to Italy and France (F2), and a second cluster with dominantly commercial broadcasters, containing Denmark (TV2), South Africa, New Zealand, and Spain.

Countries that want to evaluate and improve the revenue structure of its public service broadcasting can collect and categorise the empirical data about their own actual revenue structure and use these data to place it into the sphere described by figure S-5. Comparisons with other countries, especially with neighbour countries and/or with countries with comparable economic, political and cultural characteristics, may offer hints, which adjustments of the revenue structure could be appropriate.

Figure S-5:
International Comparison of Public Service Broadcasting Revenue Structures
Based on the Categories and Data of McKINSEY 1999



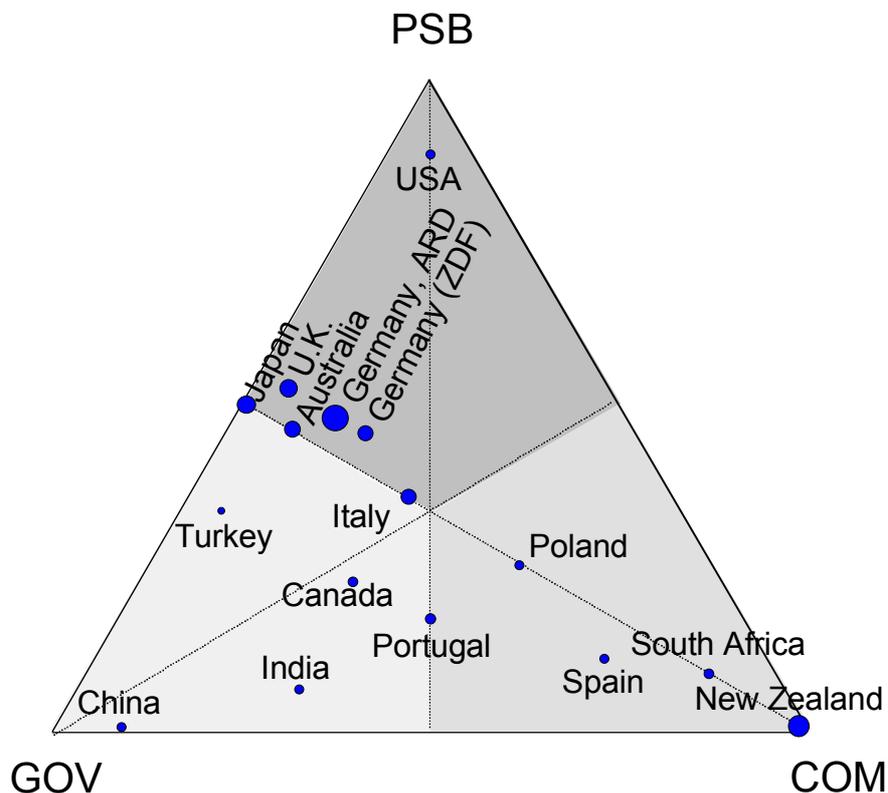
However, for such international comparisons the qualitative peculiarities of the revenue structures that were discussed above (but are not considered for plotting the McKinsey data in figure S-5), should be included into the analysis,



and also the corner points of the graphical space should be substituted by the more general categories, that in section 3 were introduced by us. Also the various revenues that were put together in one residual category by McKinsey should be re-categorised.

In figure 6S we have done this for those countries of the McKinsey study, for which the necessary information were available to us (Japan, Australia, UK, Germany, Italy, Poland, Turkey, New Zealand, Spain, Portugal, Canada). Other countries considered by McKinsey (Norway, Sweden, Denmark, Belgium, Netherlands, Czech Republic, France, South Africa) were left out there. Instead, we added some countries, which were not included by McKinsey, but are especially interesting for theoretical or political reasons (USA, India, China).

Figure S-6:
International Comparison of Public Service Broadcasting Revenue Structures,
Based on Data of MCKINSEY 1999, and Re-Categorised and Corrected
for Qualitative Peculiarities of the Revenue Systems



As license fees in our category system are a mixture of governmental revenues and non-governmental public revenues, the countries that were placed on the right border line of the triangle now are placed on the bisector (i.e. on the line that starts with Japan and ends with New Zealand). Among others, also the German public service broadcasters ARD and ZDF are placed on this line (or more exactly: somewhat above this line), which confirms the results we presented for the German broadcasting sector. Turkey now is located below this line, moving further to the governmental edge, as it is funded from (governmentally

steered) license fees by 59 %, and from direct governmental grants by 21 % (and only from 5 % by commercial revenues). On the other hand, Canada, Portugal and Spain have moved upward a little, away from the governmental pole, as the governments there are hindered to discretionarily vary the broadcasting grants, both by written law and by the political culture.

5.2. The “landscape” exposed in diagram S-6 provides a better picture of the scope and solutions, the countries in the world have chosen for their public service broadcasting system, and the centre solutions and variations that become visible there may each country give hints to readjust its own revenue structure. However, as we emphasised by means of the German broadcasting system, already, it is necessary for a balanced evaluation, to take into account also the number and size of pure commercial and pure governmental broadcasters, that exist in a country, provided they were not yet included (falsely) as forms of “public service broadcasters”. Such a detailed analysis cannot be undertaken in the study at hand, as it would need detailed (and actual) data that is not available for all countries.

To illustrate our point, we instead only present some “case studies” for countries, for which these data are present, and for which the political consequences of an extended analysis can be illustrated most informatively.) As such we have considered the U.K., the USA, China, India, Poland, and Germany. In figure S-7 the broadcasting systems of these countries (as aggregations of the public service broadcasting sectors and the commercial sectors) have been placed into the familiar triangle space. The sizes of the dots again represent the quantities of the broadcasting sectors (per capita) in these countries, and the locations again represent their revenue structures, as proportions of non-governmental public funding, governmental funding, and commercial funding.

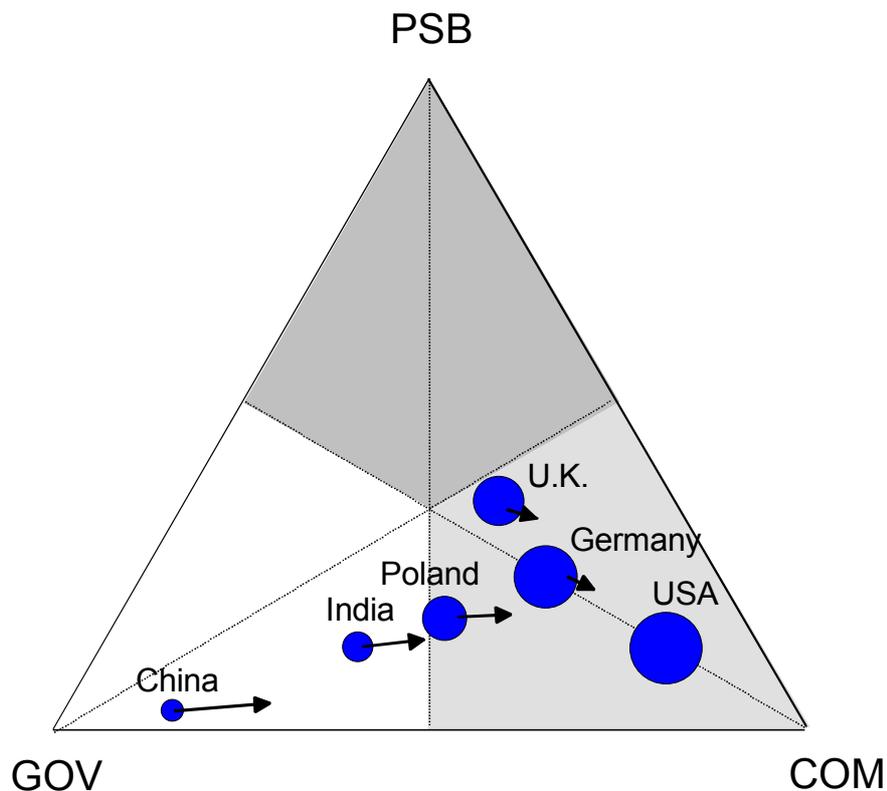
Although (or because) China is one of the most profitable markets for broadcasting companies (or more general media companies) with regard to the absolute number of inhabitants and to the big growth potentials, it has the smallest broadcasting sector per capita compared to the other countries of our analysis. Also in India the broadcasting sector per capita still is rather small. An intermediate position takes Poland, which on the way from a communist central economy to a market economy has considerably approximated to its Western neighbours, although considerable differences still remain, e.g. in comparison to the U.K and Germany. The highest value per citizen has the USA. These differences illustrate the general correlation between the economic capacity of states and their relative expenses for broadcasting (or more general: for the media).

In the vertical perspective, which describes the relative importance of public service elements compared to the other two sectors, a correlation with the countries’ economic capacities cannot be observed. Here e.g. India with a rather low GNP is on the same line as the USA. Instead the attitudes about the capabilities and merits of a strong independent sector, which neither is vertically directed by the states powers nor horizontally directed by the markets income incentives, has to be considered to explain the countries different positions on the vertical



dimension: Countries that evaluate the advantages of an autonomous sector high and that had the time and the political and economic means to develop adequate institutions for a civil society (like Germany and, more, the U.K.) are placed nearer to the upper corner; countries that rather emphasise the weaknesses of an autonomous sector in comparison to the market (USA) and/or that did not have the time and means to evaluate the adequate institutions (China, India) are placed further away. In the course of economic and political conversion an approximation from both sides is probable on this vertical axis.

Figure S-7:
Broadcasting Systems in Selected Countries - Internationally Compared



It is positive to note, that in a secular perspective all countries are distancing from the governmental sector. This first and foremost is the result of the fundamental changes in political and ideological beliefs about the states' function for modern society, which had massive effects for the political systems of many states in general, becoming most obvious from the transformation processes in the former communist countries in Eastern Europe, and which, of course, also affected the governments' influence on broadcasting, as one of the most crucial and most effective instruments to combat the states' power (both in its illegal form as dictatorships and in its legal form as democracies).

To gain such a distance from the governmental sector these societies either could walk into the direction of the market or into the direction of non-market/non-governmental institutions (the public service corner). From that perspective it is negative to note, that in the secular perspective all countries of our survey



are approaching the commercial corner, again moving the faster, the further away they are from that corner. Only for the USA, which has furthest approximated to a pure commercial broadcasting system already, such a move cannot be observed. In other words, all countries adopt the commercial solution of the USA, no country goes for the British model, even the U.K. itself shifts nearer to the commercial corner. The sceptical prospects that were given for public service broadcasting already at the beginning of the nineties thus have come true in most countries.

There are several reasons for this decline of the public service model in comparison to the commercial model. A first reason was mentioned already: The high capability of the market, to produce industrial mass products efficiently and effectively, by many people is taken as a proof for its general preponderance to the other allocation mechanism – also for goods for which the presuppositions of a provision by markets are not fulfilled. It therefore is a prominent task for the supporters of public service broadcasting, especially for those with an economic background, to create a public awareness not only for the superiority of markets, but also for its preconditions and its failures, when these preconditions are not met.

Another reason for the decline of public service broadcasting also was mentioned already: Public service broadcasting that serves the common good in itself is a common good – and as such has to suffer the difficulties of being provided commonly: Although it is highly esteemed by most citizens, there is no sufficient private initiative to finance and provide it. On the other hand, examples from other public goods have proved that intelligent arrangements and alliances can solve the public good problem, and can promote public engagement. Those who feel obliged to the idea of public service broadcasting should think in these lines and intensify their personal efforts to combat its decline.

A third reason might be, that it is more complicated and takes more time to establish the political culture and the institutions that are needed for public service broadcasting than to implement markets. The transformation of the post-communist countries has demonstrated, that not much leadership and no ambitious concepts are necessary to pave the way to (unregulated) markets. From that regard governments go the easy way when they allow or even encourage their public service broadcasters to increase the portion of commercial revenues: Such a policy is welcome by the citizens, as it obviously reduces the risk of governmental abuse for the broadcasters, and as it also obviously increases the broadcasters' economic efficiency. The massive disadvantages, such a commercialisation has in the long run, in contrast, are not overt, but subtle and hard to prove empirically - like the increase of majority (or "mainstream") programming (and the relinquishment of minority programming), the narrowing and simplification on economically relevant programme contents (and the relinquishment of educational, cultural, religious, and local programming), and the increase of attention gaining programmes (like fast, loud, selfish, violent, sensational, spectacular, aggressive, affective, confirming, and separating programmes) to the debit of (slow, gentle, cautious, profound, questioning, ca-



ring, communitarian, and integrating) programmes, that fail to catch mass attention due to its content or making.

These hidden defects of commercial broadcasting make the effects of commercialisation even more harmful, as they might unconsciously and irreversibly change the viewers' and listeners' programme preferences and – even worse – their willingness and capabilities to participate in the political, democratic debates about public affairs. Also from that regard instead of further commercialising the broadcasting systems a strengthening of its non-commercial elements would be appropriate, assuring that the economy should be subservient to democracy, and assuring that “democratic debate can take place, and then the organization of the economy should result from that debate”; McCHESNEY 1999, p. 283) and preventing that, on the contrary, the economy dictates the contents and form of this debate.

ISSN 0945-8999
ISBN 3-934156-48-7