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Spahn, Paul Bernd
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China's reform of intergovernmental fiscal relations in the light of European experiences

by Paul Bernd Spahn

1. Introduction

In October 1992, the 14th Congress of the Communist Party of the People's Republic of China embarked on the course toward creating a socialist market economy. The 8th National People's adopted a revised Constitution in 1993, and significant economic and fiscal reforms were subsequently introduced.

A substantial part of the fiscal reforms was undertaken in the area of taxation. In view of a modern tax system conducive to the growth of the socialist market economy, various tax laws were unified and streamlined, and a value-added tax, excise taxes, and a business tax were inaugurated that conform to international rules. In addition, the income tax was reformed which merged the pre-existing three tax laws into one using a standard approach for the derivation of income. Income is taxed progressively, and the income tax law features itemized deductions in order to pursue horizontal equity. The fiscal reforms go hand in hand with the liberalization of the pricing system, with a rephrasing of rules that govern business investment (in particular foreign investment), and with reforms in the financial sector and in foreign exchange regulations.

As to further reforms in the fiscal area, intergovernmental fiscal relations are undergoing critical review, and basic principles for creating a fair system of burden sharing within the public sector are being discussed. Specifically, the reforms are expected to help promoting initiatives of both the central and regional governments, and to enhance the capacity of the central government to manage the economy at the macro level. The authorities are eager to develop a scientifically-based, non-distortionary system of transfers among government in order to "meet legitimate expenditure needs of the provinces, and to ensure sustainable growth in a way that is commensurate with increased own-tax collection efforts by the provinces" (Ahmad/Craig/Searle 1994, p. 33). As a concrete measure, the State Council has introduced, on the 1st of January 1994, a tax sharing system in combination with the dismantling of the previously employed "contracting system" whereby transfers among governments were effected on the basis of negotiations. Furthermore, taxes are now more clearly assigned to different levels of government. However, some problems relating to a vertical fiscal imbalance between the

tiers of government remain, and the crucial problem of how to deal with fiscal perequation or equalization between regions is unresolved.

At this important crossroad to the future of Chinese intergovernmental fiscal relations, it is appropriate and useful to study the various other models of organizing fiscal relations within the existing federations of the world. Apart from the Anglo-Saxon models of multilayer government, Australia, Canada and the United States with their greatly varying solutions for intergovernmental financial relations, the European variants of federalism may also be of interest to the Chinese authorities, in particular since they rely more heavily on tax sharing and follow principles that are similar to those of the socialist market economy: homogeneity of national standards and similarity, in due account of different local conditions, of public services with the aim of realizing the equality of chances for citizens (if not the equality of outcome).

The European Union herself is moving toward a federal structure with nation states forming her different provinces, and more and more responsibilities being transferred to a nucleus "central government" (the Council and its administration, the Commission). Yet Europeans agree that priority is given to decentralized responsibilities and decision making in order to preserve the cultural diversity of the continent, and equalization among regions is mainly left to the market. Public policy at the central level is confined to preserving "cohesion" which is a much looser concept entailing only small-scale regional redistribution or public resources. It is obvious that this approach to federalism is inappropriate for China with its strong commitment to socialist values and to the equality of chances.

On the other hand, Austria, Germany and Switzerland are European examples of federations at national levels. All are committed to concepts of regional fairness, and all employ revenue sharing as one mean to achieve greater harmony among the different regions of the nation. If we speak of "European federalism" in this paper, it is with reference to these national models rather than the supranational organization of the European Union herself.

The present paper dwells on the experiences of Switzerland and Germany while disregarding the Austrian model that lies somewhere in between the two models discussed. Germany has a very strong commitment to the uniformity of living conditions within the nation, and tax sharing as well as specific perequation rules are used to achieve this goal. The Swiss Constitution is more heavily influenced by the United States' model and, hence, more decentralized. However strong reliance on consensus forming within the public sector corresponds with Chinese

traditions, and the desire to protect regionally dispersed minority groups very much reflect China's problems *en miniature*. Both models, Swiss and German federalism, can be said to have achieved their goals of regional fairness in harmony with economic growth and general welfare of their nations.

In a last part of the paper, the author comments -- in a tentative and preliminary fashion -- from a European perspective on the Chinese options for reorganizing their intergovernmental fiscal relations. It is obvious that this perspective is limited as there are multiple other options for organizing the public sector. China will ultimately have to decide on its own whatever approach suits best to a socialist market economy. It is hoped that the information provided in this paper will be useful in making this choice.

2. The Swiss experience

2.1. General

Switzerland is a land-locked country composed of 26 cantons (and half-cantons) of unequal size, topography and economic potentials. Its population exhibits great variety as to cultural background, language, religion, settlement characteristics, and economic activities. While some regions at the crossroads between Italy, France and Germany have benefited from international trade for centuries, others remained more secluded facing unfavorable mountainous conditions and geographical isolation. This explains large regional disparities and imbalances within the Swiss economy. In recent times, some formerly remote areas have experienced dramatic change to their economies due to transalpine traffic and tourism, with a notable impact on the ecology. Swiss attitudes are thus characterized by the protection of minority groups, the preservation of cultural diversity, mutual consideration and assistance, and the care for the environment--which has constitutional rank. Such attitudes have also shaped institutional political arrangements.

Of all the federations in the world Switzerland has by far the oldest tradition dating back to the famous Everlasting Alliance of 1291 when three cantons formed a union to resist Habsburg rule. In 1815, the Congress of Vienna confirmed Switzerland's independent political status and the Swiss Confederation was constituted in its present boundaries. In 1848 a formal federal Constitution was adopted for Switzerland that had consisted of a loose confederacy of regions until then. The present arrangements are based on this first Constitution that was, however, amended several times thence, notably through the important overhaul

of 1874, which was strongly influenced by the United States' model of federalism.

2.2. Structure of government

The basic elements of Swiss federalism are the following:

- The cantons¹ are legally sovereign states unless their sovereignty is explicitly limited by the Constitution. Likewise, municipalities have considerable legal autonomy and political power although not being fully sovereign.
- The Confederation is based on the idea of equality between its constituents, the cantons, which is reflected in the role of the Council of States, the Upper House of Parliament. Its voting procedure accords equal weight to each canton, big or small.²
- The Constitution provides for a vertical distribution of responsibilities among layers of government, yet, as in Germany, lower tiers of government also perform functions that are delegated from above. Thus a neat vertical distribution of functions among authorities is difficult to discern. There are also elements of cooperative federalism -- horizontal cooperation, through ministerial conferences, and expert-based discussions and consulting procedures (*Vernehmlassungsverfahren*) whereby government agencies of different levels, political parties, and economic and social groups are involved in preparing legislation. Formal collective decision-making bodies are lacking, however.
- Revenue as well as expenditure functions are distributed independently among the tiers of government. Each authority has its own budget, yet budgets are interrelated through a network of intergovernmental transfers.
- Constraints are imposed on both expenditures and revenues by the political system of "direct democracy". Voters are not only asked to elect representatives; they are frequently called to the polls to decide

¹ There are 23 cantons three of which are divided into half-cantons. In addition there is a municipal substructure of about 3000 communes that act under cantonal control. As in Germany--and contrary to Australia--this layer of government is very important in Switzerland. Since the cantons may delegate government functions to their communities at extremely varying degrees it is best to treat the state level in Switzerland inclusive of communal services (and revenues).

² Each of the 20 full cantons has two representatives in the Council of States; the six half-cantons send one representative each.

on all proposed constitutional changes and on specific pieces of legislation (including projects to amend federal tax financing). Federal referenda must not only be approved by a majority of voters, but also by a majority of the cantons.

- Regional diversity in combination with cantonal sovereignty and direct democracy have led to different levels in the provision of regional public goods and to a variety in regional tax laws.³ The communes-- which have no independent tax sovereignty--may levy surcharges on cantonal taxes with varying annual coefficients.

The Swiss model of federalism is complex not only because of the complicated network of intergovernmental relations; it also interacts with the system of semi-direct democracy and proportional representation of parties which aims at maintaining close links between authorities and citizen-voters. Such arrangements reflect the importance accorded to the protection of minorities, and they entail specific forms of constitutional and legislative procedures (see below).

2.3. Current arrangements

a. Expenditure assignment

The Constitution attributes, to each layer of government, so-called "principal responsibilities". Article 49 of the Constitution empowers the Confederation to deal with foreign affairs, yet cantons are also allowed to enter into international agreements "on matters of neighborly relations".

³ For income tax, for instance, where sovereignty is shared by the Confederation and the cantons, there are 26 + 1 different tax codes with varying definitions for tax bases, for exemptions and deductible items, as well as for tax rates.

**Table 1: The structure of government budgets in Switzerland
- 1993 -**

	Confederation	Cantons	Communes	Total*)
In percent of consolidated total				
Outlays	37.5	48.5	35.0	100.0
Revenues	33.1	44.6	32.8	90.5
Deficit	4.4	4.0	2.3	9.5
In percent of GDP				
Outlays	11.6	15.0	10.8	30.9
Revenues	10.2	13.8	10.1	28.0
Deficit	1.4	1.2	0.7	2.9

*) Single items do not add up due to the elimination of double counting for the total. Budgeted figures may not coincide with financial accounts.

Source: Eidgenössische Finanzverwaltung, Öffentliche Finanzen der Schweiz 1993; own calculations.

The exclusive responsibilities of the Confederation are in defense, citizenship and the status of foreigners, political asylum, civil and penal law, social protection, policies on property, economic order, money and currency, energy policy, national transportation and telecommunication (Article 50). Exclusive competences of cantons are in the maintenance of public order, public welfare, establishments of health care, schools and education, the relationship between state and church, regional and local land planning, highways as well as the use of water and other resources (Article 51). For all further domains--the Constitutions mentions in particular health, the protection of the environment, culture, the fostering of research, science and arts, universities and vocational education--there is a presumption in favor of canton responsibility unless federal law assigns functions otherwise.

This division of responsibilities is, however, not easily discernible from the budget or financial accounts and certainly not fully reflected in the structure of government expenditures. As in the case of Germany, cooperation among authorities and the delegation of executive functions to lower levels of government---in combination with intergovernmental transfers of resources--render it difficult to assess the political signifi-

cance of public authority from the vertical breakdown of public outlays as shown in Table 1.⁴

The extensive network of payments, subsidies, incentives, joint financing and delegation of competences that has evolved over the years tends to dissolve authentic public spending authorities and to blur accountability. Such complexities may also have contributed to hoisting particular private interests over national or regional policy objectives in some instances (Bieri 1979, 48).

b. Tax assignment

The Swiss constitution is very explicit in separating taxing powers vertically. Originally, the center government collected all the indirect taxes (customs duties and excises); cantonal and municipal governments were ascribed direct taxes (income and wealth taxes). Over the years, the Confederation has, however, acquired powers in the realm of income taxation as well. This was mainly dictated by vertical fiscal imbalances and diverging revenue needs--not by stabilization policies. In the Swiss case, the federal income tax was introduced during World War I--in the disguise of a "defense tax". World War II has seen the introduction of yet another important federal tax, the turnover tax (a wholesale sales tax). Both "emergency taxes" stayed on, and their introduction was later sanctioned by a constitutional amendment. However, the law fixes maximum rates for these federal taxes, and "sunset" dates were established for their expiring.⁵

As to present arrangements, the following vertical assignment of taxes is found in Switzerland:

- Indirect taxation on expenditures, excises and customs duties are exclusively federal.

⁴ The sum of outlays of each level of government exceeded the consolidated total by more than 20 percent in 1993.

⁵ The constitutional basis for the Confederation's direct tax and turnover tax ends in 1994. A proposal for a tax reform securing revenue for the Confederation was rejected in 1991, forcing the government to embark on an "emergency program" and, later, on a fourth referendum on introducing VAT in Switzerland. This referendum was finally accepted in November 1993 granting the adoption of VAT at the beginning of 1995. Again, a "sunset" date was established (the year 2006), and the vote, once again, limits the rate by the Constitution, at 6.5 percent significantly lower than in neighboring countries and well below the minimum rate established for members of the European Union (15 percent).

- Tax bases of direct taxes on personal income and wealth, and on business income and wealth are exploited concurrently by all levels of government, including municipalities--with priority given to the cantons.⁶
- As a matter of principle "(e)ach tier of government is endowed with a full or partial tax authority for a number of taxes and not only one. Cantons and communes have also the right to levy user charges and fees for those services where this is appropriate" (Dafflon 1991)
- The cantons have an exclusive right to tax motor vehicles.

As to the contribution of taxes and grants to total revenue at each level of government, Table 2 (for 1988) may serve to illustrate its structure.

**Table 2: Sources of revenue
for each level of government in Switzerland
- in percent -**

Revenue source	Confederation	Cantons	Communes
Taxes on income and wealth	41	50	50
Taxes on consumption and expenditures	52	3	-
Monopolies, license, revenue from property	4	5	6
Total own source revenue	97	59	57
Grants-in-aid and reimbursements	-	21	15
Revenue sharing	-	6	2
Indemnities and sales	3	14	26
Total revenue	100	100	100

Source: Dafflon (1991).

The bestowal of independent taxing powers to each layer of responsibility enables the federal as well as regional governments to discharge their functions effectively without being dependent on each other. Contrary to

⁶ There is opposition against the federal government exploiting direct taxes, however, and a conforming constitutional initiative was lodged in November 1993.

Australia, for instance, cantonal dependence on grants is low in Switzerland. It amounts to an average of 21 per cent of their budgets. If revenue sharing is included, it is only 27 per cent. It should be noted, however, that the figure for grants comprises 7½ per cent of municipal contributions to cantonal services--hence upward-oriented vertical grants. If these grants are deducted, the total dependency of cantons on the Confederation is below 20 per cent of their budget receipts. Competing taxing powers at the two levels of government and diversity in fiscal federal arrangements create enormous problems of tax coordination, tax competition and harmonization in Switzerland (Dafflon 1986). Although the Constitution mandates the avoidance of cantonal double-taxation, legislation was slow to respond and the Courts of Justice largely developed the principles governing horizontal tax coordination. The variety and complexity of subnational tax systems is only rivaled by that of the United States where tax competition as well as vertical and horizontal tax coordination has been a major concern for years. In Switzerland, case law has, however, established a uniform practice as regards the question which canton is allowed to tax which part of the income of individuals and companies.⁷ Some of the constitutional provisions attempting to cope with intercantonal double taxation or prohibiting special taxation of industries (Articles 46 (2) and 31 of the Swiss Constitution) evoke conforming instruments embodied in the United States' federal arrangements (like the "immunity doctrine" or the "due process of law clause" of the Fifth Amendment).

c. Equalization, revenue sharing, and grants

There is a strong tendency in Switzerland to equalize differences in taxable capacity through asymmetrical vertical grants provided by the central government. The objective is to enable the cantons to provide similar levels of services without forcing them to levy taxes that are significantly more onerous than in other cantons. This prescript is firmly entrenched in the federal law on equalization of 1959. The principle of "uniformity of living conditions"--typical for German equalization arrangements--is not adhered to in Switzerland, however (Bieri 1979, 12).

The redistributive aims are mainly achieved through three types of vertical financial adjustments:

- federal tax reimbursements;
- tax sharing; and

⁷ For a further discussion see, for instance, Dafflon (1977), pp. 88ff.

- specific purpose grants (usually conditional grants-in-aid).

Similarly to Australia at the inception of the federation, the Swiss Confederation reimburses part of the revenues collected from customs duties (yet only on fuel and petrol). This reflects the fact that the Confederation has delegated certain responsibilities (especially road building) to the cantons to be administered by them on behalf of the central government. The horizontal incidence of these payments is very complex since they are mainly related to cantonal expenditures on road construction and improvement. Although financial assistance is calculated in accordance with these functions--and on a fiscal capacity yardstick to be discussed below⁸--, these transfers are essentially unconditional.

Tax sharing is often portrayed in Switzerland as a mean to compensate the cantons for their tax sovereignties forgone as these were transferred to the Confederation (Higy 1973, 8). Such means--that have recently become more important under pressure from cantonal governments--can also be interpreted to form unconditional general revenue grants. They are basically distributed in accordance with regional revenue collection, population and with the canton's relative fiscal "needs"--measured in terms of a statistical yardstick. Tax-sharing revenues thus form part of an asymmetrical vertical péréquation scheme that is closed-ended.

The scheme can be imagined to work in two steps: (i) the federal contribution may be thought of constituting a "closed pool"; (ii) horizontal péréquation is then achieved through rules similar to those of German *Finanzausgleich*.⁹

In 1992, tax sharing encompassed three revenue sources. The cantons received 30 per cent of the federal direct tax on income and profits, 10 percent of the withholding tax, and 20 per cent of a tax on exemption

⁸ The formula apportions 34 per cent of the grant according to cantonal expenditures on roads, 12 per cent according to the length of roads, 43 per cent according to equalization yardstick (see below) and the rest in accordance with the canton's relative tax effort regarding the motor vehicle tax and its relative per capita expenditures on roads (Dafflon 1991).

⁹ The federal government's contribution to such a "pool" was zero in Germany before unification, hence the "pool" must be filled through contributions made by the richer states. As to its impact on horizontal fiscal incidence the Swiss model is, however, rather similar to that of German *Finanzausgleich*. In particular, if a canton's fiscal capacity falls, the compensating fiscal effect of the revenue-sharing grant is made-up by other cantons, not by the Confederation.

from military service.¹⁰ The latter tax share is distributed horizontally on a tax origin base--without equalization provisions. The direct tax share is allocated partly on a tax origin base, partly according to the fiscal capacity yardstick discussed below. Revenue sharing from the withholding tax is allocated to the cantons according to population for one half, according to fiscal capacity for the other.

Traditionally, vertical intergovernmental transfers have been dominated by conditional grants-in-aid to be applied in accordance with policy priorities of the donor government. Conditional grants given to cantons by the Confederation are usually closed-ended with strings attached in the form of matching requirements. Some grants are provided with "pass-through" obligations, i.e. they have to be handed down to municipalities, sometimes together with mandatory additional funding of the canton.

In addition to providing funds for specific state functions according to national priorities, federal conditional grants are also intended to have some equalizing effect. As for tax reimbursement grants and for tax sharing, their horizontal allocation is partly based on a cantonal fiscal capacity measure.

d. Fiscal capacity and equalization

Measurement of the cantons' fiscal capacity has been modified several times. The actual formula comprises four ingredients (Dafflon 1991):

- The canton's (adjusted) fiscal revenue per capita. This includes cantonal and local tax revenue from all sources (adjusted for differences in tax effort in order to obtain comparable figures).
- The canton's GDP per capita. Not only fiscal resources are stressed in the formula, but also private income (which seems to be a natural indicator of fiscal capacity); this is different from Germany or Australia where only public revenue is considered in the formulae for horizontal perequation.
- Regional (cantonal and local) tax effort. In a federation that accords a large degree of tax discretion to regional governments, no canton can

¹⁰ Male Swiss citizens exempted from military service pay this tax. It is essentially a "poll tax" that is proportional to income and inversely related to the days of military service accomplished.

be allowed to benefit from higher grants by reducing its own fiscal effort below an acceptable level.¹¹

- The canton's specific expenditure requirements. These enter the formula in a rather modest way--similar to expenditure needs in German *Finanzausgleich*. Differences in the costs of providing services in mountainous regions are expressed by an indicator measuring the relative importance of agricultural areas below 800 meters; another proxy for differences in costs is relative population density. These indicators may appear to be extremely crude in comparison to the criteria developed by the Commonwealth Grants Commission in Australia.

Despite these provisions for horizontal péréquation through asymmetrical vertical revenue sharing and grants, equalization is generally less important in Switzerland than in other Western federation--except the United States. The main outcome was to increase the amount of subsidies given to poorer cantons, a virtually self-perpetuating category (Frey 1977, 98-100). As one prominent writer on Swiss federalism has concluded: "... equalization in grant programs is of subsidiary interest only" in Switzerland (Dafflon 1989, 213).

e. Borrowing

In principle each public constituency is autonomous and independent in its budgetary procedures in Switzerland, including borrowing. Yet this does not mean that there is no effective budget constraint on deficit spending. The idea of "sound financing" of public budgets is firmly entrenched in people's minds, and this consensus view governs fiscal federal arrangements in general. Moreover, direct democracy has secured that law prohibits soft financing through money creation, and obligatory finance referenda--or the mere threat of calling to the polls in the case of facultative referenda--act as an effective constraint on loan finance--as it does on taxation. The "golden rule" is formally established which permits borrowing only for investment purposes on a pay-as-you-use basis. Article 42^{bis} of the Constitution obliges the federal government to consolidate budget deficits with due "consideration for the state of the economy". At the local level, law in most cantons limits borrowing. It is restricted to balancing current budgets (including interest payments and amortization of the debt), and the "golden rule" is also brought to bear.

¹¹ A similar correction is made for horizontal péréquation through special grants in Australia. In Germany--with its uniformity in taxation--such a criterion is not applied (and would not make much sense).

According to the Constitution, cantonal laws or municipal decrees, the following can be subject to referenda: "engagement credits or project appropriations, the estimates (of the budget) as a whole, individual payment credits or annual appropriations, or loans" (Bieri 1979, 70). Despite the fact that the importance of finance referenda has declined, the eventuality of such referenda and a broad consensus on the issue seems to have worked, in the past, as an effective constraint on public borrowing. During the eighties, Swiss governments produced even small financial surpluses. More recently, however, public budgets started to drift into deficits that are estimated to have reached some 5 percent of GDP in 1993.¹² This is attributable both to cyclical and structural problems affecting the Swiss constituency.

2.4. Administrative structure

a. Tax administration

As in Germany, the administration of taxes is highly decentralized in Switzerland. Each layer of government administers its own taxes, with some compensation for administrative costs incurred for shared taxes. This reflects independent taxing autonomy of subcentral governments and the multiplicity of cantonal tax laws that have sprung from it. Unlike in Germany, tax administration is not necessarily guided by uniform rules and procedures as tax legislation for one and the same tax might differ significantly among regions. The assessment of multi-cantonal companies is a burdensome task both for the private sector as for tax administrators, since the rules to avoid double taxation among regions have become rather complex over the years. Significant cooperation and exchange of information among fiscs is required rendering the process of tax assessment and verification very cumbersome. The notion of "tax jungle" is often used in connection with Swiss taxation and its administrative intricacies.

Attempts made in Switzerland in the mid-seventies to introduce a uniform federal income tax with cantonal participation, or to impose uniform cantonal direct taxes throughout the nation were both defeated. Following a constitutional amendment in 1977, the Confederation has chosen the avenue of some formal tax harmonization of income taxes, and, more recently, harmonization of direct cantonal and communal taxation was successful to some extent--following conforming legisla-

¹² Gygi (1994). This figure is higher than the budget figure of Table 1. The effective deficit of the federal government alone is expected to exceed the budgeted figure by about 5 bill. francs (or 1½ percent of GDP). Witschard (1994, 38).

tion.¹³ Furthermore, a referendum on the introduction of VAT held in November 1993 was positive. This illustrates both the Swiss electorate's willingness to accept basic reforms and a mounting disposition toward centralization and harmonization. Such change might also have been spurred by developments in neighboring countries, notably in the European Union, as well as by recent tendencies in world capital markets and international tax competition.

b. Budget formulation and implementation

Budgetary procedures in Switzerland differ significantly from those existing in other countries. Items to be included in the budget must have been decided upon beforehand, and budget appropriations cannot be introduced in their own right. In other words, "public budgets are not material financial laws enacted by Parliament, but only documents or formal laws that are established by the government and discussed by Parliament. The power of the Legislature to decide priorities and the amounts of public outlays is limited." (Dafflon 1977, 72).

The budget and medium-term financial planning--a planning tool of the Federal Council--serve mainly to establish a coherent view on public finances and on its macroeconomic impact. Its classification is by government function and types of expenditure as well as economic categories and modes of financing. The budget is established both on a cash-flow and an accrual basis, and it also allows monitoring government commitments.

The peculiarity of Swiss public budgeting shifts political responsibilities onto legislative and constitutional procedures rather than Parliament and the budget itself. It is through these procedures that direct democracy comes into play. Although legislation is normally initiated by Parliament, the Constitution allows the electorate to challenge any proposition by constitutional initiatives, and the demand must eventually be put to the nation in a referendum. Similarly, any cantonal government can compel the government to examine draft legislation by the Councils.

Examination typically leads to the appointment of a Select Committee, which opens consultation with public authorities, political parties, special

¹³ Loi fédérale du 14 décembre 1990 sur l'harmonisation des impôts directs des cantons et des communes. The cantons and communes are accorded eight years to adapt their respective legislation. After this term, federal rules will apply automatically. At the same time, the federal law on direct taxation has been coordinated.

interest groups and organizations (*Vernehmlassungsverfahren*).¹⁴ This process allows some particular interests to creep in, yet it also ensures legislation to be based on a broad social consensus.

2.5. Macroeconomic Implications

Traditional theory of federalism suggests that macroeconomic management rests on a certain degree of centralizing government spending functions as well as on the power (and willingness) to use the budget as a fiscal policy instrument. In Switzerland, a highly decentralized public sector and complex budgeting procedures do not seem to be advantageous for such a proposition, although the Constitution obliges the federal government to take provisions for balanced economic growth, and all tiers of government to consider macroeconomic aspects when establishing their budgets (Article 31^{quinquies}). Also, built-in stabilizers are weak given a considerable time lag between the accrual of income and the collection of direct taxes. The gross turnover tax, which also taxes investment and intermediate inputs, is even procyclical, and Swiss taxation is sometimes characterized as an "automatic destabilizer" (OECD 1993, 55). On the expenditure side, the government has also limited discretion. During the eighties, when revenues were buoyant entailing small budget surpluses, expenditure policies were equally procyclical (Gygi 1994, 16). The only significant self-acting stabilization effect derives from federal unemployment insurance that came into effect in 1984.

Nevertheless, Switzerland has experienced remarkable fiscal stability over the post-war period, with relative price stability, full employment and a strong currency. Apart from monetary and wage policies, migration, transborder commuters and seasonal workers as well as fluctuating labor participation rates, especially before the introduction of federal unemployment insurance, seem to have cushioned cyclical shocks until more recently. However, unemployment--which stood at only half a percent in 1990--has significantly risen thence (to about 4½ percent in mid-1993). This is mainly attributed the institutional change of unemployment insurance and the behavior of labor supply (OECD 1993, 98), apart from a recession and structural difficulties of the Swiss economy.

Recession and structural problems are also reflected in public budgets, which have deteriorated over the years. In the nineties, expenditure growth has strongly exceeded revenues forcing governments of all tiers into debt. The federal government has responded by submitting to Par-

¹⁴ For a further discussion of constitutional and legislative procedures in Switzerland see Laufenburger (1961) or a summary in Dafflon (1977, 72f.)

liament an extensive fiscal consolidation package, yet the very nature of the budgeting procedure renders its implementation difficult. The government is thus suggesting a constitutional amendment in order to limit parliamentary spending powers as they exceed the proposal of the Executive ("frein aux dépenses").

The introduction of a modern broad-based consumption tax on goods and services in 1995 will strengthen the revenue side of the budget, as it will remove the procyclical conduct of the existing turnover tax. It will also abolish some of the structural handicaps of the old tax system that discriminates against investment and exports--besides impeding effective decentralization and contracting-out. Yet the VAT rate is limited by the Constitution, and the medium-term financial plan foresees a continuing and widening structural budget deficit for 1986-1997 (Gygi 1994, 15).

2.6. Conclusions

If a lesson can be learned from the Swiss experience it is that "systems based on a strong reliance on cantonal sovereignty can work, even though it will likely result in wildly different--though widely accepted--personal (and other) tax systems" (Bird 1986, 67). The picture of a "tax jungle" and lack of coordination is thus inappropriate.

One feature of Swiss federalism is to be stressed in particular: an inherent tendency toward consensus and compromise, and a strong commitment to the securing of minority interests. Political decisions are seldom reached without prior consensus among all parties, and it would not be acceptable to decide on policy issues that are likely to meet resistance by substantial minority groups. Helvetian cooperative federalism means effective coordination at the horizontal level, and institutionalized vertical consulting among political parties, economic and social groups, and government bodies at all levels. Established coordinative bodies (as in Germany) are missing however. The Helvetian brand of "cooperative" federalism resembles more to Asian consensus forming and collective-choice. In the past, this philosophy has brought about effective policy coordination within a highly diversified policy structure, as it has fostered political and economic stability, growth and general welfare, without much formal demand management.

Yet the constitutional and legislative procedures have recently come under strain mainly through the process of European integration and increased competition on international markets. The need for structural reform of the Swiss economy is obvious, and it is likely to corroborate central government involvement. Yet government authority at all levels

remains subject to scrutiny by the Swiss electorate, and conservative trends have often impeded government action on issues sensitive to Switzerland's neighbors (like transalpine traffic). Thus, the Swiss model of political decision-making remains antagonistic to the approach taken by the European Union. It remains to be seen whether Helvetian federalism can survive in an environment that calls for greater coordination at the supranational level, and whether the principle of subsidiarity is sufficient to protect devolution of power and direct democracy in Switzerland.

3. The German experience

3.1. General

A superficial glance at the German arrangements may detect many features of a unitary state. There is a strong central government with an extensive area of influence; there is uniformity in legislation on almost all-important issues; and there is a uniform tax system. For the provision of public goods, the German Constitution emphasizes uniformity of living conditions for the whole nation (rather than minimum standards), and a further peculiarity of German federalism is the strong coordination of policies among different layers of government. Sure, there are distinct elements that vindicate the official title of federation, the existence of intermediate levels of governments, sixteen *Länder* or states (after unification), and a local government sector the importance of which cannot be over-emphasized. Yet the impression of a "unitary German federation" remains very strong.

3.2. Structure of government

The Constitution of 1949, the *Grundgesetz*, confers primary state powers to the states. However, the lower tier of government has since experienced a continuous erosion of its original competences in favor of the federal government. This is the consequence of legislation being concurrent for a great number of responsibilities (according to Articles 72 and 74) and the principle of federal law overriding state law. Even in areas of genuine state responsibilities, the *Länder's* competences have been re-trenched as a result of larger responsibility sharing and joint decision making.

The German constitution makes some attempt to divide government functions among the tiers vertically--exclusive competences are defined for the federal government--, yet its approach to federalism differs significantly from the models of the Anglo-Saxon world. At the central level, emphasis is laid on legislative functions, the allocation of financial

resources and the formulation of policy guidelines. States and local governments are generally in charge of implementing and administering policies. Lower levels of governments often "execute" policies on behalf of higher levels, where financing is sometimes tied to the function performed, with corresponding grants or cost restitution. Based on federal legislation, such functions may also have to be financed by the lower tiers from own resources and without compensation. Central administration is less developed in general, and the states bear the brunt of administrative responsibilities in Germany (including for tax administration). This particular division of functions--central decision-making with decentralized execution--has been labeled the "horizontal" approach to federalism--in contrast to the "vertical" model of the Anglo-Saxon world (Spahn 1978).

At the level of financial arrangements, the horizontal distribution of functions is matched by the prevalence of revenue sharing. All major taxes (income, corporate income, value-added taxes) accrue to federal and state governments jointly. Legislation on taxes is uniform and centralized. Parliaments of regional jurisdictions have no power to legislate on taxes despite the fact that some smaller taxes continue to be assigned to state or local governments. All taxes are assessed according to the same national tax code--in particular as regards the tax base.¹⁵

Virtually every law affecting the interests of the states has to pass the *Bundesrat*, the states' legislative assembly which, unlike the equivalent in other federations as the United States, Canada or Australia, is a true states' House in the sense that its members are appointed by state governments, recalled by them, and strictly bound by the directives of their respective governments. The status of the *Bundesrat* in federal legislation has given the German states jointly a very strong position, which counterbalances the loss of individual state sovereignty in specific areas.

3.3. General arrangements

a. Expenditure assignment

As to the vertical distribution of responsibilities, the Constitution assigns defense, foreign affairs, citizenship, immigration and emigration, international treaties, currency matters, federal transport, postal and telecommunication services to the federal government. The states are re-

¹⁵ Some discretion as to the setting of tax rates is accorded to local governments, however.

sponsible for remaining areas like culture, education, law and order, for environmental and health policies as well as for regional economic policy. Municipalities act in such fields as communal services (sewerage etc.), health, sports and recreation, school building, housing and road construction. Yet in light of the foregoing remarks, it would be wrong to expect this division of functions to be reflected in government outlays given the high degree of horizontal integration of functions. Social policy (including health and education), for instance, is exerted at all levels of government. The same is true for investment in infrastructure (roads, communication, structures) where responsibilities are shared. Since higher levels of government tend to delegate the execution of much of their functions to lower levels, outlays by level of government are a poor indicator of responsibilities. For instance, local governments disburse about two thirds of all public capital expenditure much of which is commissioned by higher levels of government.

The distribution of expenditure functions among layers of government is found in Table 3.

Table 3: The structure of public expenditures by level of government 1992

– in percent of total expenditures of territorial authorities –

EC share	3.5
Federal government	36.6
Länder	35.7
Local governments	24.3
Total of territorial authorities	100.0
Social security funds	62.2
Special funds	5.5

Source: Statistisches Jahrbuch 1993 für die Bundesrepublik Deutschland, p. 533; own calculations

b. Tax assignment and revenue sharing

In Germany the power to legislate on specific taxes has to be seen as totally distinct from the right of each layer of government to appropriate

the proceeds from these taxes. Tax legislation is fully centralized. Tax assignment to specific levels of governments is secured by the Constitution, with only minor adjustments to be made through federal legislation. Major revisions of federal financial arrangements can only be made through an amendment of the Constitution requiring a two-third majority in both Houses of the federal parliament.

The significance of taxes directly assigned to each layer of government is small in Germany. The main federal taxes (14 per cent of total taxes in 1992) are excises, the most important of which are those on mineral oil, tobacco and alcohol (except beer). The federal government has also the right to levy a surcharge on income taxes, which will become more important in the future.¹⁶ The main state taxes (5 per cent of total taxes) are the motor-vehicle tax and the net wealth tax--a rather unimportant levy in Germany. Apart from the local business tax, municipalities employ a property tax as well as communal levies on public services (utilities). Local governments collect about 8 per cent of all taxes.

All of the most important revenue sources are exploited by shared taxes in Germany. The wage and assessed income taxes, the corporation tax and VAT which yield about three quarters of total tax revenue are all jointly appropriated. In addition, the local business tax--although officially not a joint tax--is also shared by all levels of government. From its share of VAT, the federal government has to finance the contributions to the budget of the European Union.

Table 4: Vertical distribution of joint taxes among levels of government in Germany (after Federal Consolidation Program)
- in percent of revenue collected-

Joint tax	Federal	<i>Länder</i>	Local
Personal income tax	42½	42½	15
Corporate income tax	50	50	0
Value-added tax	56	44	0

Source: *Grundgesetz*, and Federal Consolidation Program (see discussion below).

¹⁶ Surcharges on income taxes were introduced towards the end of the sixties as a countercyclical device for demand management, but became outmoded shortly afterwards. After more than 20 years such levy is now being used to finance the unification process.

The vertical distribution of income taxes is fixed by the Constitution (see Table 4) and, except for grants, any adjustment of the vertical distribution of public funds is exclusively effected through the shares of turnover taxes (VAT) to be renegotiated between federal and state governments. The result of this bargaining is cast into a federal law requiring the consent of the *Bundesrat*.

The horizontal distribution of income taxes follows the regional pattern of tax yields according to the residence principle with special rules for the apportionment of the corporation tax. The regional distribution of VAT is essentially on a per capita basis (which implies a strong implicit equalization effect).

c. Vertical grants and cooperative federalism

Before unification, the German federal machinery did not employ vertical general-revenue grants to any substantial degree. They would have made little sense within tax sharing arrangements that allow vertical adjustments through the share of VAT. However, the federal government used a small portion of its VAT for asymmetrical vertical equalization: so-called supplementary grants. These are unconditional and designed to support the poorer states of the federation. After unification and with the implementation of the Federal Consolidation Program discussed below, asymmetrical vertical grants will become more important in the future, though.

Furthermore, there were and are vertical specific grants that imply federal cofinancing of state projects. These grants are conditional and operate within a complex network of interstate cooperation. Such cooperation is governed by a great number of treaties and agreements among authorities and cannot be discussed here. Only two more important constitutional provisions for policy coordination are reviewed in some detail: "joint tasks", which imply joint-decision-making and responsibility-sharing in combination with joint planning and financing, as well as specific grants-in-aid. These are peculiar features of the German federal arrangements.¹⁷

These elements of cooperative federalism were introduced in 1969 when it had become clear that federal legislation alone was not sufficient to coordinate policies at the central level. The federal division of functions—with framework legislation assigned to the center and the implementation of policies to the lower tiers of government—was deficient

¹⁷ For a fuller discussion see, for instance, Reissert (1978).

in view of the (then important) goals of coordinated stabilization policies.¹⁸ The model also precluded the federal government from setting guidelines or prerogatives within those areas in which policies cannot be controlled by legislation, that is the provision of public goods and services, especially public infrastructure. It was in these policy domains that the planning and spending functions attributed to the *Länder* proved to be more important than the legislative functions assigned to the federal government.

The two instruments created in 1969 were "joint tasks" (*Gemeinschaftsaufgaben*) according to Articles 91a and 91b, and grants-in-aid (*Finanzhilfen*) according to Article 104 a (4) of the Constitution. Joint tasks are determined for five policy areas.¹⁹ Grants-in-aid are given to the states for regional and local investments within certain policy areas to be defined by federal law or by federal-state agreement. Again the uniformity-of-living-conditions principle is visible in these arrangements as the Constitution stipulates such grants to be used only for equalizing regional disparities, for stabilization, and for stimulating growth.

The new provisions have legalized anterior practices by which the federal government had provided funds to the *Länder* on a bilateral basis. The new instruments stress multilateral agreement instead—at least for the joint tasks—which is established within so-called "planning committees" (*Planungsausschüsse*) wherein the federal government shares the votes with all of the states. All state projects adopted by the federal government and a majority of states are jointly planned and financed. These instruments have increased the scope for center government intervention in many ways, not only through its impact on the planning process itself (in particular on the selection of projects), but also through the potential threat to withdraw federal cofinancing—that usually covers half of the costs.²⁰

¹⁸ The centralization of competence as a consequence of policy coordination for stabilization purposes has reached its peak at the end of the sixties, when Article 109 *Grundgesetz* was amended (1967), the *Stability and Growth Law* was enacted (1967), a Business Cycle Council (*Konjunkturrat*) and a Finance Planning Council (*Finanzplanungsrat*) were established and the principles governing the budgets of federal and states governments were harmonized (1969).

¹⁹ These are (i) university construction, (ii) regional policy, (iii) agricultural structural policy and coast preservation, as well as (iv) the planning of education, and (v) the fostering of research to the extent that these are of supraregional importance.

²⁰ The Federal contribution varies, though. It is 60 percent for agricultural policy measures, and 70 percent for coast preservation.

**Table 5: Sources of revenue
for each level of government in Germany
(before Federal Consolidation Program)**

– in per cent of total revenue –

Revenue source	Federal	State	Local
Exclusive taxes	22	9	4
Shared taxes	70	64	30
Unconditional bloc grants	–	1	11
Specific purpose grants	–	14	11
Other	8	12	43
Total revenue	100	100	100

Source: Spahn (1993).

The vertical distribution of resources according to source and transfer category including the effects of cooperative federalism are depicted in Table 5 which characterizes the *status quo* prior to the Federal Consolidation Program. The amendments by these programs, which account for the situation after unification, are described below.

d. Horizontal grants and equalization

One particular feature of German federalism is the existence of interstate equalization, the *Finanzausgleich*. This equalization is achieved through a specific set of rules governing a "brotherly" second-round redistribution of means among the states themselves. The following portrayal reports the status before unification when the federal government was not involved in this process (except for legislation); the amendments accommodating entry of the new *Länder* are described below.

The process starts from

- a definition of a state and local fiscal capacity measure for any one *Land* (*Steuerkraftmesszahl*) which is roughly the sum of state tax revenues corrected for special burdens and local tax revenues adjusted for population density, the degree of urbanization etc. This measure is then related to
- an equalization yardstick for this particular *Land* (*Ausgleichsmesszahl*) which is derived from the average per capita fiscal capacity of all participating states multiplied by the population of that *Land*.

Any shortfall of fiscal capacity in relation to the yardstick is equalized in steps with graduated rates. A uniform average is not secured, yet there is a guarantee that fiscal capacity (including equalization payments) should reach at least 95 per cent of the average for the states as a whole.

Equalization payments are made by those states, the fiscal capacity of which exceeds the yardstick, again in graduated contributions. The system works as a clearing mechanism, i.e. payments made by the financially stronger states always equal the sum of receipts of the weaker states.

Financial settlement among states had a rather strong equalizing effect in the past²¹, and, in the beginning, the mechanism has worked reasonably well. Yet the burden of the settlement was consistently shifted onto two states--Baden-Wuerttemberg and Hessen--while all others either benefited or were exempt from contributing to the scheme. This had led to political tensions among the states even before unification. The Federal Consolidation Program has changed these provisions and complemented it by asymmetrical vertical grants, yet its spirit remained virtually intact.

e. Borrowing

The institutional limits on deficit financing in Germany are twofold:

- Para. 20 of the Law on the *Bundesbank* restricts borrowing from the central bank of all tiers of government (local governments have no access to this form of financing at all). There are ceilings for this type of borrowing fixed by legislation, and the amounts involved are rather small.
- The Constitution restricts federal government borrowing to the "amount of projected outlays for investment purposes in the budget" (golden rule). Similar rules apply to *Länder* budgeting in accordance with state Constitutions or legislation. Local government borrowing is tied to their cash flow and subject to state control.

Budget constraints thus appear to be rather tough in Germany. Notably the "quasi-constitutional" limits to central bank financing are often praised as being the grounds for low inflation, a strong currency and financial stability of the German public sector. In principle, this nexus cannot be denied--especially as legislation has rendered the *Bundes-*

²¹ Compare the calculations made in Spahn (1977), pp. 222 ff.

bank legally independent from federal and state intervention. Yet one could argue that the system had not been put to any severe test in the past, and that it had worked largely because it was based on a consensus formed by all political parties and interest groups--in particular trading partners. The test of German unification made it clear, however, that judicial control of budget deficits is difficult to achieve--even *with* constitutional constraints.

The budget constraint had been "softened" in many respects even before unification:

- It is far from clear what is meant by "investment purposes". It is possible to redefine current outlays such as to represent investment outlays without much difficulty in some instances.
- An amendment of the Constitution made in 1969 has permitted the federal government to raise loan money in order to combat "disturbances of general economic equilibrium". This rule is even more difficult to monitor in quantitative terms. The provision was introduced in the heydays of macroeconomic demand management. Application of this rule reached its climax only recently, however, when "disturbance of general economic equilibrium" was interpreted as relating to the consequences of unification.
- German unification with its massive needs to transfer resources from one part of the country to the other has encouraged yet another strategy to dissimulate budget deficits and to soften legal budget constraint: "off-budget" funding. All such funds rely heavily on loan finance.

Central bank independence is in fact the cornerstone for budgetary discipline of the German public sector. Yet it should be clear that deficit financing is much "softer" than may surface at first sight. Restrictive constitutional rules and monetary policies could not prevent the German public sector from running significant deficits more recently. While, in 1990, the debt/GDP ratio was 43 percent--to which Länder contributed 14, and local governments only 6 percentage points--, this ratio will have jumped to two thirds of GDP by the end of 1994.

The repercussions of German unification on deficit financing and public debts are shown in Table 6 that illustrates government borrowing and accumulated debts by level of government at the passage to the new federal arrangements. It also reveals the importance of off budget financing in this context.

Table 6: Indebtedness of German Public Budgets by 1994

	End-of-year indebtedness		Deficit	
	bill. of DM	% of GDP	bill. of DM	% of GDP
Level of government				
Federal	750.5	23.2	71.0	2.2
States	467.0	14.4	42.0	1.3
Local	177.0	5.5	10.0	0.3
Off-budget funding				
European Recovery Program	43.0	1.3	7.0	0.2
German Unity Fund	95.0	2.9	5.0	0.2
<i>Kreditabwicklungsfonds</i>	140.0	4.3	–	–
<i>Treuhandanstalt</i>	250.0	7.7	–	–
Debts of local housing projects in East Germany	30.0	0.9	–	–
Federal Railways (<i>Bundesbahn</i>)	79.5	2.5	9.5	0.3
Federal Mail (<i>Bundespost</i>)	129.0	4.0	11.0	0.3
Total	2161.0	67.0	155.5	4.8

Sources: Deutsche Bundesbank (1993); DIW (1993); Gemeindefinanzbericht 1993; Institut der deutschen Wirtschaft (1993); Müller (1993); own calculations.

3.4. Administrative structure

a. Tax administration

As mentioned before, the structure of administration exhibits a great variety and complexity, and the central government plays only a modest role in direct administration. This is particularly true with regard to revenue raising, which is effected by tax offices that are part of state administrations. According to the Constitution (Art. 108), the federal government is to administer customs duties, fiscal monopolies, excises subject to federal legislation (including on imports) and charges imposed within the framework of the European Union. All other taxes, in particular income taxes and VAT, are administered by the *Länder*. To the extent that taxes accrue wholly or in part to the federal government, Land revenue authorities act as agents of the federation and are entitled to cost restitution for their services rendered. The organization of tax administration is, however, uniform, standardized and highly coordinated by federal

legislation or intergovernmental agreements, as is the ruling on fiscal courts and the training of tax administrators.

As to taxes the revenue of which accrues exclusively to local governments, their administration is wholly or in part transferred, by the states, to communal revenue authorities.

b. Budget formulation and implementation

The Constitution stipulates in its Article 109, that the Federation and the *Länder* shall be autonomous and independent from each other as to their fiscal administration and budgeting. However, the tiers of government are obliged to take due account of the requirements of overall equilibrium which is achieved by federal legislation requiring the consent of the *Bundesrat*.

The Constitution (Article 110) as well as a federal law on budgetary principles for the Federation and the *Länder*,²² coordinate the budget process as well as its performance by guidance of uniform principles to be observed by all authorities. Such principles extent from very general provisions (like the principles of gross estimates, comprehensiveness, unity, clarity, periodicity and antecedence, efficiency and cost effectiveness, authorization to spend and to commit resources) to more specific rules regarding the preparation of the budget, to accounting and the rendering of accounts (including the classification of the budget), to auditing and discharge, and to rules applying for special funds set up under federal or state legislation. Also, the budget process was rendered more transparent in order to assess the budget's effects on the general course of the economy. The second part of this legislation contains regulations that are generally and directly applicable to the Federation and the *Länder* like multi-year financial planning and the exchange of budget-related information.

The annual budgets (calendar year) have to be embedded in a medium-term financial plan that is established jointly by the Financial Planning Council representing all three tiers of government. Its objective is to reach agreement on the coordination of general budgetary policy and to support the federal government in its statutory task to achieve a harmonized stability-oriented budgetary and fiscal policy. The Financial Planning Council is, however, bound by the Constitution to respect auto-

²² This law of 1969, was published in English, together with other relevant material under the title *Federal German Budget Legislation*, by the Federal Ministry of Finance, Bonn, November 1988.

mous and independent fiscal administration of states and the right of self-governance of municipalities. It therefore acts through recommendations that are non-binding, yet have a strong impact on budget estimates and budget execution (including the level of borrowing).

3.5. Macroeconomic Implications

Towards the end of the sixties, Germany pioneered legislation on macroeconomic management. A Stability and Growth Law was enacted which commits the federal government to accomplish certain macroeconomic targets and which provides a number of specific instruments enabling authorities to pursue demand management policies effectively. An inter-governmental Business-Cycle Council (*Konjunkturrat*) was established which was to guide governments in coordinating their budgets--apart from medium-term planning--, and an attempt was made to influence trading partners through concerted action (*Konzertierte Aktion*). Yet formal coordination essentially failed--except for the very beginning--as the crises of the early seventies were found to be structural in nature and the arsenal of policy instruments provided by legislation inappropriate for such purposes. Furthermore, macroeconomic demand management had rapidly become unfashionable in Germany, and the instruments provided by the Stability and Growth Law were in the doldrums.

However, fiscal federal arrangements allowed the federal government to take a lead in reacting to economic shocks provoked by the oil crises, and it was possible to restore macroeconomic stability in conjunction with the central bank policy during the eighties. During the same period, the rapid expansion of social expenditures was curbed, and financial stability maintained at all levels of government--despite weaknesses in the economy. Ironically, the instruments created for demand management a quarter of a century ago would experience a revival in view of the greatest challenge to fiscal policy of recent years: German unification.

3.6. German unification²³

a. Background

On October 3rd, 1990, five new Eastern states²⁴ joined the Federal Republic of Germany that had formerly been administered centrally by a

²³ For further details see Föttinger/Spahn (1994).

²⁴ East Berlin merged with West Berlin that had formerly existed as a West German state under special rule (still being controlled by the Western Allies of World War II). There are plans to merge Berlin with Brandenburg towards the end of the decade.

socialist government. The West German currency was adopted even before unification, and the tax system was introduced in rapid steps almost entirely.²⁵

The effects on fiscal federal relations were and are still enormous. Productivity levels are significantly lower in the East, which--together with concomitant unemployment and short-time work--reduces taxable capacity. On the other hand, demands for government services are colossal. Without equalization payments from the West, large public sector deficits would have emanated for Eastern German state and communal budgets. Such predicaments implied a fundamental revision of fiscal federal arrangements in Germany.

b. Preliminary response

Vertical tax assignment remained unaltered under the new conditions. Also, the horizontal tax apportionment of shared income taxes did not pose major problems as the residence (or tax yield) principle is applied. From an equity point of view, however, income taxes are distributed very unevenly--exacerbated by the progressivity of the tariff, as income levels are much lower in the East.²⁶ On the other hand, the distribution of VAT rouse a major political controversy since it is apportioned on a per capita basis implying strong horizontal equalization effects at the expense of Western state budgets. Nevertheless, and in spite of initial resistance by Western *Länder*, the system now applies to Germany as a whole--letting the East benefit significantly from the higher taxable capacity of the West.

However, Western states would not allow their Eastern counterparts to participate in the horizontal equalization arrangements. If the scheme had been extended to the new States without modification, all of the former beneficiaries of equalization payments in the West would have turned into contributors, and the total volume of clearing payments would have quintupled (from 5 to 25 billion DM). An immediate integration of the new *Länder* would have jeopardized the entire system of intergovernmental solidarity. This led to the creation of the extra budgetary German Unity Fund as a temporary device. Yet new rules on inter-

²⁵ Some taxes--like the wealth tax--will not be introduced in East Germany since its administrative burden was considered too heavy for the new states. There are also some minor tax concessions given to the residents of Eastern states.

²⁶ This effect is accentuated by special deductions from the tax base accorded to residents of the former GDR.

governmental financial relations as stipulated by the Treaty on Unification were to be established from 1995 on.

The objective of the German Unity Fund, inaugurated in 1991, was to strengthen the inadequate revenue basis of the new *Länder* by unconditional grants. Originally, a sum of DM 115 billion, now DM 161 billion, was to be channeled through this Fund to the Eastern states for 1990–94. Of the latter amount, DM 50 billion are contributions from the Federation, DM 16 billion derive from state budgets, and the remainder is to be borrowed from capital markets. The federal government and Western state and municipal authorities in equal proportions carry the servicing of these loans. The new *Länder* are apportioned resources from the Fund according to their population, and they are obliged to hand down to their municipalities 40 per cent of payments received.

Table 7: Net Public Transfers to East Germany
(billions of DM)

	1991	1992	1993 ¹⁾	1994 ¹⁾
Transfers to new <i>Länder</i> and municipalities	108.3	113.5	125.9	130.0
– German Unity Fund ²⁾	35.0	33.9	35.2	34.6
– Outlays of federal government	59.2	65.1	72.2	76.0
– VAT distribution of the <i>Länder</i>	10.8	11.5	12.0	12.5
– Outlays of old <i>Länder</i>	2.0	2.5	3.0	3.0
– Revenue losses ³⁾	1.3	3.0	3.5	3.9
Social insurance funds	20.9	32.1	37.0	35.5
– Unemployment benefits	20.9	30.6	32.1	28.5
– Pension scheme	–	1.5	4.9	7.0
Total transfers	129.2	148.1	162.9	165.5

¹⁾ Estimated; ²⁾ 1990: DM 22 bill.; ³⁾ Investment subsidies given as tax rebates.

Source: Joint Report of the leading economic research institutes and Federal Ministry of Finance (1993).

Further income transfers supporting Eastern governments and citizens included: specific-purpose payments by the federal government; investment credits of the European Recovery Program (ERP); direct transfers from the West German unemployment insurance scheme and pension funds; and direct payments from the old *Länder*.

Table 7 illustrates the transfers and benefits appropriated by regional governments and private households of the new states, yet it does not picture the full scale of interregional support accorded to the East German economy. In order to facilitate transition from a socialist to a market-oriented economy, some additional extra budgetary institutions were created that all impact on interregional transfers and government finance.

c. Extra budgetary funding

The more important federal institutions involved in the transition process are the following:

Treuhandanstalt (THA) --This is a state agency or government trust in charge of privatizing East German businesses, the formerly state-owned corporations. It is controlled by the federal Ministry of Finance. At the start, it was hoped that THA could eventually generate a surplus from selling off the formerly state-owned Eastern economy. However, the capital stock to be privatized was largely obsolete and its real value far below expectations. Massive subsidies had to be given to potential investors as incentives to buy firms and to sustain jobs, thus the value of the capital sold proved to be negative.

THA will have a limited existence though. It is to be wound-up at the end of 1994, its continuing task being to supervise about 40000 sales contracts and to dispose of the remaining real estate. The organization will leave the central government with an expected net debt of about 250 bill. DM of which slightly more than 40 percent will have incurred on restructuring and investment costs; the remainder reflects operating losses. It will also hand over to the federal government the care for a number of unsold "industrial core" firms with about a quarter of a million employees requiring an estimated 45 bill. DM for restructuring.

Kreditabwicklungsfonds--This is a fund created to wind-up debt inherited from the former GDR government and from currency conversion. When the German economic, monetary and social union was inaugurated (July 1990), private demand deposits and savings up to a limit per East German citizen were converted into DM at parity. Savings above this limit and other financial assets and liabilities were converted at DM 1 = M 2.

Since assets of most banks were transformed into DM at a lower rate than liabilities, net assets of the banking system had to be topped up by claims against the Conversion Fund (*Fonds Wahrungsumstellung*). These obligations now amount up to approximately DM 110 billion, liabilities not resulting from currency conversion to DM 30 billion (Deutsche Bundesbank 1993).

d. The "new" system of fiscal federal relations.

Besides the intensive use of loans, an income tax surcharge of 7.5 per cent on all income tax payments was applied from July 1991 until June 1992. The proceeds of this surcharge accrued solely to the federal government. Furthermore, the VAT rate was raised from 14 to 15 percent at the beginning of 1993. Finally, the mineral oil tax and the insurance tax were increased.

As regards the interstate equalization scheme, it was temporarily effected for the two groups of states in isolation--waiting for a final solution. This form of redistributing public revenue is of minor interest to the Eastern states which all command resources at an evenly low level.

The new system of fiscal federal relation scheduled to be introduced in 1995 by the Treaty of Unification passed the federal parliament (*Bundestag*) in June 1993 as part of the so-called Federal Consolidation Program (FCP). This package of bills was to establish a solid and lasting basis for German fiscal federal arrangements.

The provisions made by the FCP as to the financial equipment of *Lander* budgets are the following:

- In order to compensate the old *Lander* for the extra burden imposed onto them, VAT shares between the federal and the state level are to be changed from 63/37 per cent to 56/44 per cent, which increases the scope of implicit equalization significantly.
- The new *Lander* will be fully integrated in the horizontal equalization scheme. The equalization formula will be changed in some respects, for example will the progressivity of payments made by rich states be reduced.
- The formerly less important asymmetrical vertical grants will become more salient. Two types of unconditional grants replace the former federal supplementary grants. Type A grants are given to financially weak states in both East and West. These funds will make up for the shortfall of revenue, after interstate equalization, of 90 per cent of average fiscal capacity per capita. Grants will also be given to some of

the Western states in order to countervail losses they suffer as a result from incorporating the Eastern states into interstate equalization (*Fehlbetrags-Bundesergänzungszuweisungen*). Type B grants are also unconditional but are attributed in response of "special needs" of some of the states (*Sonderbedarf-Bundesergänzungszuweisungen*).²⁷ Additionally, the severely indebted states of Saarland and Bremen will receive financial aid for the amortization of outstanding debt. The Eastern states will obtain conditional grants-in-aid for a ten year period in order to enable them fostering investment and economic growth.

- The federal government will be compensated by the reintroduction of an income tax surcharge of 7.5 per cent on all personal and corporate income tax payments. Furthermore, savings are expected from the termination of transfers to the German Unity Fund as well as other expenditure cuts like the reduction of unemployment benefits.
- A most important new financial institution to be created in this context is a sinking fund, the so-called Inherited Burden Fund (*Erblastenfonds*). The fund will take over all debt and liabilities inherited directly or indirectly from the vanished German Democratic Republic. It comprises the debts of the THA, of the *Kreditabwicklungsfonds*, and of East German local housing projects. More than DM 400 billion will have to be amortized within the next thirty years.

²⁷ These needs result from a relatively high costs of political administration incurred by small states and the still enormous deficiencies of Eastern states as to their public infrastructure.

**Table 8: The effects of the Federal Consolidation Program
on federal and state budgets in 1995**

bill. of DM (-) = outlays, (+) = revenues	Federal Govern- ment	<i>Länder</i> - West -	<i>Länder</i> - East -
I. Claims and obligations			
Inherited Burden Fund	-37.5		
VAT distribution and interstate equalization	-18.1	-16.8	+34.8
Unconditional grants type A	-6.4	+2.3	+4.1
Unconditional grants type B	-7.0		+7.0
Grants-in-aid	-10.0		+10.0
Special aid to Saarland, Bremen	-3.4	+3.4	
Other expenditure	-5.8	+1.4	-1.4
	-88.2	-9.7	+54.5
Sum of I.			
II. Sources of refinancing			
Expenditure cuts	+4.4	+3.0	+1.2
Cuts of subsidies	+4.8	+1.8	+0.1
Income tax surcharge	+28.0		
	+37.2	+4.8	+1.3
Sum of II.			
III. Winding-up of former claims and obligations			
German Unity Fund	+17.6	+7.2	-29.8
Berlin support	+6.2		-6.2
Debt service <i>Kreditabwicklungs-</i> <i>fonds</i>	+5.0		
Former federal supplementary grants	+4.5	-4.5	
	+33.3	+2.7	-36.0
Sum of III.			
Net redistribution effect for 1995	-17.7	-2.2	+19.8

Source: Ministry of Finance (1992, 1993) and *Institut der deutschen Wirtschaft* (1993).

Table 8 shows estimations of the claims and obligations resulting from FCP in 1995. Compared with the interim solution of the period 1990–94, with the German Unity Fund as the main pillar, the Eastern *Länder* now receive an additional amount of DM 19.8 billion, the bigger part of which is borne by the federal budget (DM 17.7 billion). Only a small burden is heaped upon the Western *Länder* (DM 2.2 billion).

3.7. Conclusions

German fiscal federal relations have created a high degree of homogeneity as to the regional availability of public infrastructure and government services. This is the basis on which the economy thrives. Financing public services is mainly based on shared taxes and equalization arrangements stressing the uniformity of living conditions in the whole nation, and on horizontal cooperation among layers of government. This has not prevented regional authorities from exerting an influential role within the realm of their own jurisdiction and at the level of the Federation.

The spirit of these arrangements has survived the strain put onto the system by German unification. However, the experience of the FCP has revealed the solidarity among the *Länder* to have limitations. VAT sharing with its implicit equalization effects as well as asymmetrical vertical grants by the federal government were preferred to explicit horizontal redistribution as embodied in the *Finanzausgleich*. These developments will, however, strengthen over time the role of the federal government through its increased role in intergovernmental finance.

4. A European's view on fiscal federal relations in China

This final chapter must begin with a word of caution: Any foreign scholar of federalism must fail in doing full justice to the cultural heritage and traditions of China when commenting on its system of intergovernmental relations and its options for reform. Intergovernmental relations are indeed largely shaped by historical processes in all federations of the world. There are a great variety of models adopted, and all of the solutions found seem to work reasonably well within their general political and constitutional framework. This does not preclude institutional change and innovation, yet the philosophy reigning federal arrangements in each country seems to be firmly rooted, and it is not abandoned very easily—as illustrated by the German case after unification.

There are a great number of studies relating to intergovernmental relations in the context of other federations, and conforming policy recom-

mendations for China.²⁸ These will not be commented here. The author rather wants to address some of the key problems relating to Chinese reforms from his own standpoint and to pose the question how a European would tackle these problems against the background of his own experience.

4.1 Expenditure assignment

It is crucial for China's intergovernmental fiscal relations that expenditure functions be assigned clearly and unequivocally in order to avoid duplication, political conflict, and a waste of economic resources. The theory of federalism provides guidance in establishing such a division of functions. Also, international comparison may help in many respects.

Outlay functions should be assigned to the provincial level whenever demand for public services differs among regions. The region can then better tailor its public services to local demand, which is more efficient than a uniform provision of the service. This is the essence of the "decentralization theorem" of the theory of federalism. The European Union has even reversed the burden of proof by adopting the "subsidiarity principle" according to which public functions should always be exercised at the lowest possible tier unless they are positively proven to be serviced more effectively at a higher level of government.

Moreover, political identities are primarily formed at the local level. National identities are more abstract and are acquired only at a later stage of personal development. This is why education and support of cultural activities, for instance, are such important functions of regional government. Education and culture also serve as a powerful tool to protecting and preserving regional minority groups. Other important regional functions are public order, public welfare, health care, regional and local land planning, roads, the use of water and other resources, the protection of the environment, the fostering of research, science and arts, universities and vocational training.

Decentralization of functions may also be warranted on administrative grounds. Provinces are typically closer to citizens and problems, and they may administer certain functions more competently than the central government. Decentralization on these grounds is almost dictated by the sheer size of China with some provinces rivaling with the bigger European nations (except Russia) in population size. This does not exclude the possibility that provinces operate within national framework legisla-

²⁸ See, in particular, the studies by Ahmad and others, as well as Anonymous and Gao Qiang in the references.

tion or perform delegated state functions on behalf of the central government.

The allocation of expenditure functions among the tiers of government will have a bearing on intergovernmental relations as well. For instance, autonomous provincial functions require the availability of unconditional revenue, which must be either own funds or closed-ended general grants but can be used at the discretion of the region. Provincial services provided within the realm of national policies may be consistent with special-purpose payments conditioned on observing national standards or framework legislation. Delegated functions, finally, would seem to require open-ended cost coverage grants (gap filling). In the latter case it is essential that the central government has, however, full control over the expenditure side and that inefficient cost maximization by provinces can be avoided.

4.2 Tax assignment

Once a clear division of functions has been established, the next step is to solve the tax assignment problem. This problem is often exacerbated by constitutional or political constraints, and occasional adjustments are necessary in order to take new developments into account. The assignment of taxes is crucial both for the vertical fiscal balance as well as the scope for first-round horizontal equalization. A robust local tax system may also contribute to mobilizing additional resources for public services as well as to enhance the efficiency and equity of the tax system as a whole.²⁹

Europeans tend to assign customs duties and indirect taxes to the central government, and direct taxes to regions. This is true for the European Union as a whole, and it also applies--in principle--to Germany and Switzerland. The major taxes can be exploited conjointly between tiers of government. VAT is shared by the European Union and its member states, as it is shared between the federal and state governments in Germany. The sharing of income taxes is strictly brought to bear only in Germany whereas Switzerland uses income taxes concurrently at all levels of government.

China has also adopted the sharing of VAT among central and provincial governments. However, the level of personal income tax is still low and there is little scope for sharing the tax between levels of government at present. The corporate income tax--which is now assigned to govern-

²⁹ See Spahn (1994) in this volume.

ments according to the ownership principle--may however become subject to tax sharing in the nearer future.³⁰

4.3 Discretionary tax policy

Discretionary tax policy of lower-level governments is very high at the European level. It is substantial for cantons of the Swiss Confederation, but non-existent for the German states where national legislation, requiring the consent of the states, establishes uniform rules. However, even Germany accords some limited tax discretion to its local governments, albeit not for income taxes.³¹ Where it exists, discretion is highest in the realm of income taxation. In Switzerland, where income tax bases are increasingly harmonized, cantonal sovereignty is reduced to the setting of tax rates. Regional taxes would then become similar to surcharges on a national income tax base. In Germany, the levying of a surcharge on income tax (not base) is a privilege of the central government, however--in view of strengthening its macroeconomic stabilization policies.

There is thus no uniform approach to tax sovereignty in Europe, yet there is wide agreement among economists that some tax discretion should be given to lower levels of government--especially to municipalities. This includes, of course, the right to borrow.

4.4 Readjusting vertical fiscal imbalances

The first-round arrangements should ideally avoid vertical financial imbalances if some scope for vertical equalizing grants is taken into account. The purpose of the first round is to provide all governments with sufficiently high levels of general finance in order to allow them to function at a minimum level. If a robust horizontal distribution criterion (like weighted population) is embedded in these arrangements for a major joint tax, like VAT, the achievement of this goal does not require complicated comparisons of standardized budgets. Also, adjustments to vertical fiscal imbalances can easily be effected within the realm of tax sharing--as illustrated by Germany for VAT.

It is not easy to determine vertical financial imbalances however (except in extreme cases like Australia). If all layers of government are allowed to incur debt, the problem of vertical fiscal balance might be severely

³⁰ For a further elaboration of the argument see Spahn, P. B., "Local Taxation: Principles and Scope" in this volume.

³¹ The discretion is given for the land tax and the business tax (local tax on gross capital and gross profits of enterprises).

blurred. One rule should be to look predominantly on current expenditures (including the servicing of outstanding debt) and regular revenue (including general revenue grants and tax sharing means that are available on a recurrent legal basis). These budgets should then approximately be balanced at vertical levels on average, and also allow some saving for the capital budget.³² Capital budgets should ideally be financed by borrowing where the "golden rule" applies,³³ but public borrowing of all levels should be subject to institutional constraints at the macroeconomic level, which requires some intergovernmental policy coordination.

In a longer-term perspective, tax assignment cannot avoid emerging vertical fiscal imbalances however. Any assignment of taxes is arbitrary as to the development of outlay functions over the longer run. Tax sharing allows responding flexibly to such structural changes by adjusting the proportion each tier of government acquires from the common revenue pool. This is the solution adopted in Germany where the share of VAT is continuously adjusted to expenditure developments; it is also the method used to adjust VAT sharing at the level of the European Union.

In China, a certain degree of fiscal imbalance in favor of the central government is, however, desirable since it creates the potential for equalization through asymmetrical vertical grants. If no vertical fiscal imbalance would exist, on average, the central authority would have no room for equalization payments to the provinces. This is essentially the reason why explicit equalization provisions in Germany, where a vertical balance is aimed at, are established mainly at the horizontal level.³⁴ Since an exclusively horizontal equalization scheme seems to be out of question for China, equalizing vertical transfer payments requires financial scope at the center level.

Some vertical imbalance in favor of *particular* regions may however be tolerated for the sake of political stability. For instance, if a resource tax

³² If current budgets cannot be balanced among the tiers of government, the only adjustment is through tax policy, not through institutional redesign.

³³ This means that only capital formation is financed through borrowing which exhibits returns allowing to service the debt. Where there are "social returns" that cannot be realized through the market, the government budget must service the debt through current outlays.

³⁴ It has to be recognized that equalization provisions are also implicit in the first-round distribution of shared taxes, in particular of VAT, and that the federal government--in a "third round"--exerts some residual equalization in Germany, especially after unification.

is fully pooled, some portion of the tax might be returned to the region where the resource is located. This portion may even be excluded from accounting for further equalization provisions. The resource-rich region may retain a bonus not only for reasons of political pacification, but also for reasons of extraordinary public services and infrastructure related to exploiting the taxed resource. This idea runs counter to the solution adopted in Germany where special regional conditions leading to a higher tax potential through royalties are evened out at the level of second-round equalization.

4.5 Regional apportionment of shared taxes

The way shared taxes are apportioned among regions is of utmost importance. This is because they can incorporate a built-in first-round equalization mechanism.

If taxes are distributed according to the derivation principle, regional tax revenue reflects regional taxable potentials (assuming a uniform tax law and identical administrative efforts). This renders strong provinces strong, and leaves economically weaker provinces weak. Some would regard this an appropriate strategy for economic development as tax money is redistributed to those provinces where the rates of return are highest. The argument is doubtful, however, mainly for three reasons:

- First, a national economy forms an integral market, and prosperity of one region hinges on economic developments of other regions. Moreover, the strengthening of purchasing power in the nation as a whole may become a crucial factor for realizing economies of scale through mass-production. Such philosophy was a decisive element in the success of Ludwig Ehrhard's "social market economy" (*Soziale Marktwirtschaft*) in Germany.
- Second, prosperous regions today may face structural difficulties tomorrow, and some regional diversification of infrastructure may thus be welfare enhancing over a longer period. For instance, Germany has experienced a relative decline of the formerly prosperous North, while the previously "backward" South is now the engine of growth through its modern industries and services. The equalization scheme should flexibly respond to such structural change--as it has in Germany.
- And finally, in the context of the Chinese economy with its still largely administered pricing system, it is by no means clear whether the now buoyant sectors or regions of the economy can sustain their prosperity under fully liberalized market conditions. Administered prices may now shift profits to fundamentally non-viable industries while artificially reduce profits in other economic sectors. The latter could then

flourish once they are allowed to adopt competitive pricing and cost-cutting policies.

Whenever such conditions prevail, tax policy operates in a "second-best world" where equalization provisions can even be welfare enhancing. Of course, the main rationale for equalization is regional fairness and equity, but this argument hardly convinces the presently prospering provinces. The efficiency argument may be more convincing here.

Nevertheless, the derivation rule for shared taxes is strong and universal. It is used for personal income taxes in Switzerland and Germany where the residence principle applies. The rule is more difficult to apply to the corporate income tax if firms operate at the supraregional level. In these cases both European federations try to apportion the yield among regions according to indicators of regional economic activity.³⁵

The derivation principle applied to VAT, as in China, seems to exhibit undesirable and potentially disruptive consequences however.

VAT is essentially a tax on consumption. It zero-rates exports as it exonerates the formation of capital. One consequence could be that exporting regions lose under such a scheme (through the tax credit to exporters) while importing regions would benefit (through the collection of import tax). China has avoided such consequence by allowing the central government to collect the import tax while reimbursing exporters for their export tax from the central budget. This must impinge on the vertical fiscal balance of the Chinese tax system however. To the extent that China's trade balance experiences fluctuations (if it swings from surplus into deficit and *vice versa*), such oscillations are reflected in the central government's budget and in a dynamically unstable vertical fiscal balance. Moreover, the Chinese VAT sharing system does not correct for the fact that typical investing provinces collect less revenue in relative terms (through the tax credit to investors) than consuming provinces. This also implies a bias against industrial regions with heavy investment requirements, as it favors provinces that supply chiefly the less capital-intensive services.

Germany avoids such consequences by distributing its VAT mainly according to population--which entails a significant redistribution effect in favor of poorer regions. Another portion of VAT is used for explicit asymmetrical vertical general revenue grants to be given to the poorest regions by the central government. Over the medium term, it might well

³⁵ For a more detailed discussion of such indicators see, again, Spahn, P. B., "Local Taxation: Principles and Scope" in this volume.

be appropriate for China to consider some implicit equalization mechanism for the first-round tax distribution of VAT. At least one part of VAT could be distributed according to population (or some other indicator of fiscal need) while the remainder may continue to be distributed on the basis of local yield. Population figures could also be weighted in order to account for agglomeration effects when relating the big cities to rural areas. This might imply a two-stage distribution formula where one part of VAT goes to the region as such, and another part--with or without pass-down obligations--to municipalities.

4.6 The grants system

The grants system should in principle be neutral as to the decisions of lower level government. The accountability and responsiveness of provinces to regional demand patterns should ideally be unaffected by the financial system. This is, of course, not fully realistic especially in a unitary country like China where the national government pursues its policy goals that must also affect provincial budgets and decision-making. Nevertheless, the general neutrality rule has a significant bearing even within unitary government. It implies, notably, the following recommendations:

- Gap-filling grants should be avoided under almost all circumstances. The unconstrained or negotiated coverage of budget costs, typical for the previous Chinese system of intergovernmental fiscal relations, encourages inefficient spending at lower levels of government. It is thus wasteful in economic terms. Moreover, it is non-transparent and it is likely to exhibit regional inequities. Grant money is typically flows to the politically strong provinces, not where it is most efficient or most needed. The only rationale for gap-filling or cost coverage grants exists for financing functions that are mandated to lower tiers of government. In these cases the province provides the national service on behalf of the central government (which may be warranted on administrative grounds). It is essential however that the central government is able to control the level of spending in these cases (e.g. welfare payments through national legislation).
- Grants to the provinces should in principle be unconditional. They should be employable at the discretion of the provinces, which strengthens their expenditure responsibilities and accountability, and renders them flexible to respond to local demand for public services. Specific-purpose payments (SPPs) as an alternative to unconditional grants often fail to achieve their respective goals. If SPPs are given for a specific service that would have been supplied by the province anyway, the SPP is tantamount to an unconditional grant since it frees

general resources of the budget. If the SPP is given for a service that would not be supplied otherwise, it may fail to meet the pattern of regional demand, and spending would then be wasteful. Moreover, *spending* is different from *output*. Provincial governments may find ways to spend the SPP and still fail to meet a given output goal. This is why general revenue is preferable to SPPs, as provincial budgets remain responsive to local demand.

- For a reduced number of issues SPPs seem to be in order however. This is true whenever strategic behavior of provinces can be excluded—like for disaster relief where the grant is given in response to events outside the control of government. It is also useful employing Sops whenever the central government aims at realizing policy goals with qualitative elements that are not directly related to spending as such. For instance, Sops could be conditioned on the adoption of national quality standards in the provision of health care or education. In these cases, Sops become the vehicle for realizing qualitative policy objectives. Sops then become a "bribe" where the spending decision (whether it uses the grant or unconditional revenue) of the province is secondary.
- As mentioned before, it is doubtful whether SPPs can impose central priorities onto provinces—unless spending is confused with output. However, SPPs may still be in the interest of the central government if it wants to demonstrate the political will to support a specific service even if the province would supply it anyway. This is the political "signal function" of SPPs, an entirely respectable policy goal. Such type of SPPs is employed in the case of politically sensitive issues (like minorities) where the central government must have an interest to "signal" policy objectives. However, there is an inherent tendency to proliferate that type of grant. The number of signaling SPPs should thus be restricted, and periodically be consolidated into unconditional "bloc grants" in order to clear the "jungle" of intergovernmental subsidies.
- If SPPs are provided, care must be taken in analyzing their potential disincentive effects. Not all politically sensitive issues do warrant SPPs. Unemployment, for instance, is undoubtedly a sensitive issue, yet it should not lead to corresponding SPPs. This is because such grants could be interpreted as implicit insurance, which would encourage strategic behavior of provinces. This is because insurance contracts suffer from a series of defects, which may bear on intergovernmental fiscal relations as well. One such deficiency is related to "moral hazard" whereby a change in behavior is induced by the very nature of the insurance contract. At the level of intergovernmental finance this

might lead to self-inflicted shocks (for instance, surrender to unrealistic wage claims), or excessive consumption by provinces. Another problem is "adverse selection" which may tend to divide China into groups of provinces with different "risks". Automatic compensation could also encourage political inactivity in the area of structural adjustment policies. Criteria like regional employment should thus be excluded from determining the level of grants--because of their potential negative incentive effects. If a national unemployment insurance scheme operates at the personal level--for the unemployed--the implicit regional redistribution effects should be wholly sufficient.

4.7 Horizontal equalization

Second-round adjustments to the primary distribution of government revenue are typically concerned with equalization. Equalization arrangements can take very different forms and they can be conducted out of a situation of vertical fiscal balance (as in Switzerland and Germany) or of imbalance (as in Australia). In the first case, a horizontal distribution formula may be used (Germany); in the latter case, the states have to agree on a vertically asymmetrical grants scheme with the central government. Obviously, the states are politically much stronger in the first case while they might be somewhat at the mercy of the central government in the latter.

It was mentioned before that China is unlikely to adopt a horizontal equalization scheme as in Germany. Thus the following relates to a scheme of asymmetrical vertical equalization grants from the central government to the provinces for which actual tax assignment and tax sharing seem to exhibit a sufficiently large scope.

Equalization should be based on a formula that is general and transparent. The formula should provide general revenue as in Australia, and it must be independent of strategic behavior at the provincial level. This requires some form of revenue and/or outlay standardization, and it excludes, of course, negotiated elements of the grant system. The formula should also be based on hard statistical data that cannot be controlled by provincial governments and are available at the same quality level for all provinces.

More generally, equalization schemes of all nations have to deal with horizontal redistribution in order to equalize (i) standard own taxable capacity; (ii) standard expenditure needs; and (iii) effects of population density and agglomeration on local expenditure needs.³⁶ Some countries have formally adopted this approach by equalizing the

³⁶ Cost differentials for supplying specific public services could also give rise to equalization provisions (as in Australia). Such differentials are however of minor impor-

Spahn, Paul Bernd (1995), "China's Reform of Intergovernmental Fiscal Relations in the Light **45** of European Experiences", in Jayanta Roy (ed.), *Macroeconomic Management and Fiscal Decentralization*, EDI Seminar Series, The World Bank, Washington D.C., 125-162.

difference between standard own fiscal capacity and expenditure needs, correcting it by factors that account for density and agglomeration effects (Germany). Others, like Australia, attempt to incorporate population density and agglomeration into the definition of needs.³⁷

Both European federations discussed emphasize revenue equalization. Revenue has to be standardized in order to define the fiscal capacity of each region. This standard must be independent from provincial policy in order to avoid strategic behavior. If provinces are allowed to vary tax rates of their taxes, a standard (average) rate should be used. If they prefer not to exploit a tax source which is assigned to them, potential revenue from that source should be added into the capacity yardstick whether collected or not. Once standard revenue capacity is defined for all provinces, the variations from average standard capacity can be equalized to a predetermined degree. Revenue capacity equalization by itself is a very powerful tool although it can be argued that it fails to account for differences in needs and agglomeration.

As demonstrated in the paper, Germany and Switzerland make some standard corrections to the fiscal capacity yardstick by including needs and agglomeration criteria in a condensed fashion. Needs and cost differentials are taken care of by simple weighting procedures (for population density, for farmland of a certain geographical altitude, etc.) rather than by effective statistical sampling methods. Some lump-sum adjustments for different levels and composition of outlays are also effected for city states (agglomerations). However no attempt is made to standardize regional budgets explicitly--item by item--as in Australia. The simpler European approach can be regarded as a proxy to achieving the

tance in a fully integrated market economy. This is true even for Australia (except for the Northern Territory with its sparse population). Where they are important they could be dealt with specifically and not within the generalized formula since the information requirements would be high. It is also not easy to standardize costs. If a formula fails to standardize costs, however, this must encourage inefficient spending and should be considered with great care.

³⁷ The distinction made between effects (ii) and (iii) is, of course, artificial. It is however warranted on grounds that agglomeration does not only affect the level of public services, but also the composition of the "basket" of public services. For instance, a smaller town may not need a subway system while a metropolitan area will. Agglomeration effects are also more important at the level of municipalities and are somewhat "evened out" at the provincial level. However, China has important "city provinces" like Shanghai and Beijing that need special considerations. A two-stage approach to regional equalization may thus be commendable as in Germany where the formula distinguishes between the state and the local level of government with according ponderations for population size and density. For a specific discussion of the German formula see Spahn (1994).

more ambitious goal of full budget equalization. It is viable as long as all participating governments politically accept it.

To the question whether equalization requires the standardization of budgets (as in Australia), the answer of a European scholars of federalism would thus be negative. Although the Australian approach seems to offer a "scientific formula" which must appeal to those in search of an objective basis for equalization, the approach is not without risks for China. These are mainly related to the immense information requirements for budget standardization. It is doubtful whether China will be in a position--at least in the short run--to supply all the data needed for all provinces at the same level of quality. Even a simpler set of parameters bears risks, as statistical criteria tend to proliferate over time when selfish political pressure is exerted to "look into more detail".

It is also questionable whether Australia has indeed found the objective magic formula for equalization--even for herself. The approach remains essentially political as to key elements (like the share to be distributed and the degree of equalization) and many parameters must be based on "informed insights" which are judgmental. It must be stressed that equalization is essentially a political undertaking and that distributional questions cannot escape value judgments. Moreover, the Australian grants formula is used for distributing unconditional general revenue. It is doubtful whether such formula should indeed be so explicit as to specify different needs of providing crocodile or shark protection for instance. This means overstressing the exactitude of distributional justice, which is likely obtained at much lower costs with a similar degree of "accuracy".

Whatever the equalization arrangements are, they must be based on firm statistical criteria. Too complicated formulae are likely to blur the political issues; they may meet statistical difficulties, and involve complicated conceptual measurement problems to which there is no conclusive answer.

In the end, equalization is a matter of value judgments and political compromise. Europeans would prefer simple formulae that serve as proxies to the equalization problem. In practice, these simple methods have reached a high degree of equalization and are deemed to be largely successful in achieving their policy goals. The quest for a scientific formula of Chinese intergovernmental fiscal relations is probably mainly the quest for a stable, transparent, and objective transfer system that is based on independent statistical information for all provinces. If this is the case, a less ambitious equalization project is preferable to one that

requires full budget standardization. The simpler the formula the higher will be its transparency and political message.

The formula should, however, stress the fact that what is gained by one province, has to be borne by other region(s), in other words, the shared pool or the equalization means should be closed-ended and distribution is a fixed-sum game. This by itself assures that the mechanism is deemed to be equitable by all participants.

4.8 Capital expenditures

Capital expenditures might remain somewhat outside the normal arrangements for various reasons. In particular, their financing may be tied to borrowing, and only indirectly to taxation. If regional governments are allowed to borrow (as in Switzerland and Germany), there must be policy coordination of borrowing at the national level in order to avoid capital markets disturbances. If lower levels of government are not allowed to borrow, as in China, their capital expenditures must be borne mainly by the central government through capital grants.³⁸

European arrangements prefer tied (or conditional) grants for dealing with public investments at lower levels of government. Typically, grants by the central government have to be matched with own resources at the lower level. This is in order to unveil local preferences more clearly, and to enhance accountability.³⁹ This idea is firmly entrenched in the Swiss and the German arrangements, and it is also found at the level of the Union.

Germany (and to some extent Switzerland) goes, however, beyond the idea of matching grants. The regions and the central government take decisions of regional public investment projects jointly. This is in view of the bulky nature of some investment projects. It also avoids patronage of some regions and a fair ordering of projects through time given the limitation of resources at *all* levels of government. Germany has created various task-oriented institutions for coordinating intergovernmental decision-making relating to infrastructural investments. A more formal joint-decision making machinery for provincial infrastructural invest-

³⁸ Unfortunately, this conclusion is blurred by the fact that Chinese local governments and provinces often act as entrepreneurs through their holding of state enterprises. State firms can, of course, borrow which gives regional governments access to capital markets indirectly as budgets are not strictly separated.

³⁹ The idea of accountability is also blurred by "entrepreneurial government" (see Spahn 1994 in this volume).

ment and regional economic development may also be an option to be considered in China.

References

- Ahmad. Etisham, Kye-Sik Lee and Maurice Kennedy (1993), *China: The Reform of Intragovernmental Fiscal Relations, Macroeconomic Management and Budget Laws*, International Monetary Fund, Fiscal Affairs Department, October.
- Ahmad. Etisham, Jon Craig and Dubravko Mihaljek (1994), *China: On the Determination of a Grants System*, International Monetary Fund, Fiscal Affairs Department, February.
- Ahmad. Etisham, Jon Craig and Bob Searle (1994), *China: Formulating and Estimating Grants*, International Monetary Fund, Fiscal Affairs Department, May.
- Anonymous (1994), *Intergovernmental Fiscal Relations in China: Reform and Reality*, Background Paper for the Senior Policy Seminar on Intergovernmental Fiscal Relations in China at Dalian, September 12-17, 1994, prepared by Dongbei University. Faculty of Economics (DUFE) and cleared by the Chinese Government.
- Anonymous (1994), *Constraints and Choices in the Establishment of a Standard Fiscal Transfer Payment System in China*, Microeconomic Department, State System Reform Committee, 22 June 1994 (unpublished).
- Bieri, S. (1979), *Fiscal federalism in Switzerland*, Research Monograph No. 26, Canberra (Australian National University, Centre for Research on Federal Financial Relations).
- Bird, Richard (1986), *Federal finance in comparative perspective*, Toronto (Canadian Tax Foundation).
- Dafflon, Bernard (1977), *Federal Finance in Theory and Practice--With Special Reference to Switzerland*, Bern and Stuttgart.
- Dafflon, Bernard (1986), "Fédéralisme, coordination et harmonisation fiscales: étude du cas suisse", *Recherches Economiques de Louvain*, Vol. 52/1.
- Dafflon, Bernard (1989), "Calcul de la capacité financière des cantons: synthèse et évolution", *Wirtschaft und Recht*, Zürich, 210-220.
- Dafflon, Bernard (1991), "Revenue sharing in Switzerland", in *Financing Federal and State Governments*, edited by the OECD, Centre for Coop-

Spahn, Paul Bernd (1995), "China's Reform of Intergovernmental Fiscal Relations in the Light of European Experiences", in Jayanta Roy (ed.), *Macroeconomic Management and Fiscal Decentralization*, EDI Seminar Series, The World Bank, Washington D.C., 125-162. **49**

eration with European Economies in Transition, Committee on Fiscal Affairs, Paris, (unpublished).

Deutsche Bundesbank (1993), "Die Bedeutung von Nebenhaushalten im Zuge der deutschen Vereinigung", *Monthly Report*, May 1993, Frankfurt.

DIW (1993), Deutsches Institut für Wirtschaftsforschung, *Wochenbericht*, 20/93, Berlin.

Federal Ministry of Finance (1992), *Finanzbericht 1993* and *Finanzbericht 1994*, Bonn.

Föttinger, Wolfgang and Paul Bernd Spahn (1994), "German unification and its consequences for intergovernmental financial relations", *Current Politics and Economics of Europe*, (forthcoming).

Frey, René L. (1977), "The interregional income gap as a problem of Swiss federalism", in *The political economy of federalism*, edited by Wallace Oates, Lexington, Mass., 93-104.

Gemeindefinanzbericht (1993), *Gemeindefinanzbericht 1993*, Köln.

Gao Qiang (1993), *Problems in Chinese Intergovernment Fiscal Relations and the Main Difficulties in Future Reform*, Background Paper for a Conference on Intragovernmental Fiscal Relations in China, October, Budget Control Department, Ministry of Finance (unpublished).

Gao Qiang (1993), *China's Tax Sharing System: Policy Orientation*, Background Paper for a Conference on Intragovernmental Fiscal Relations in China, October, Budget Control Department, Ministry of Finance (unpublished).

Gygi, Ulrich (1994), "Die Bundesfinanzen nach dem Mehrwertsteuerentscheid", *Die Volkswirtschaft*, Vol. 67, Nr. 2, 14-20.

Higy, Camille (1973), Le système fiscal suisse, *Administration fédérale des contributions*, Berne.

Instituts der deutschen Wirtschaft (1993), *Informationsdienst*, Nr. 13/1993. Nr. 15/1993, Köln.

Laufenburger, H. (1961), *Economie des finances suisses*, Librairie de l'Université, Geneva.

Mathews, Russell L., ed. (1977), *State and Local Taxation*, Australian National University Press, Canberra.

Müller, Lothar (1993), "Probleme der Staatsverschuldung vor dem Hintergrund der deutschen Vereinigung", *Wirtschaftsdienst*, 1993/III.

Spahn, Paul Bernd (1995), "China's Reform of Intergovernmental Fiscal Relations in the Light of European Experiences", in Jayanta Roy (ed.), *Macroeconomic Management and Fiscal Decentralization*, EDI Seminar Series, The World Bank, Washington D.C., 125-162. **50**

OECD (1992 and 1993), *Economic Surveys – Switzerland*, Organization for Economic Co-operation and Development, Paris.

Reissert, Bernd (1978), "Responsibility Sharing and Joint Tasks in West German Federalism ", in: Spahn (1978a), pp. 24-41.

Spahn, Paul Bernd (1977), "The Pattern of State and Local Taxation in the Federal Republic of Germany", in: Mathews (1977), pp. 190-241.

Spahn, Paul Bernd (1978b), "The German Model of Horizontal Federal Decentralisation", in: Spahn (1978a), pp. 3-23.

Spahn, Paul Bernd (1993), *The Community Budget for an Economic and Monetary Union*, Houndsmill, Basingstoke, Hampshire: Macmillan.

Spahn, Paul Bernd (1994), *Country Experience: Switzerland and Germany*, Conference paper given at the International Conference on Fiscal Transfer Systems organized by the Chinese Ministry of Finance and the International Monetary Fund with support of the World Bank, held on July 25 – 29, 1994, in Qingdao, China (also available in Chinese).

Spahn, Paul Bernd, ed. (1978a), *Principles of Federal Policy Co-ordination in West Germany: Basic Issues and Annotated Legislation*, Research Monograph, Centre for Research on Federal Financial Relations. The Australian National University, Canberra.

Wischar, Jean-Pierre (1994), "Die Voranschläge von Bund, Kantonen und Gemeinden für das Jahr 1994", *Die Volkswirtschaft*, Vol. 67, Nr. 2, 37-45.