OECD Economics Department Working Papers No. 462

Fiscal Relations Across Levels of Government in the United States

Thomas Laubach

https://dx.doi.org/10.1787/685856031230

OECD

Unclassified **ECO/WKP(2005)49**

Organisation de Coopération et de Développement Economiques
Organisation for Economic Co-operation and Development

29-Nov-2005

English - Or. English

ECONOMICS DEPARTMENT

ECO/WKP(2005)49
Unclassified

FISCAL RELATIONS ACROSS LEVELS OF GOVERNMENT IN THE UNITED STATES

ECONOMICS DEPARTMENT WORKING PAPERS No. 462

By
Thomas Laubach

JT00195165

English - Or. English

ABSTRACT/RÉSUMÉ

Fiscal relations across levels of government in the United States

This paper discusses the current state of fiscal relations between the federal, state and local governments in the United States and suggests directions for improvement. The significant degree of fiscal autonomy of the states and, to a lesser extent, of local governments has had several beneficial effects, including the responsiveness of public expenditure to local preferences and the comparatively high degree of accountability through the close link between revenue-raising powers and expenditure assignments. This link reflects traditionally weak support for redistribution across jurisdictions. Grants from the federal to sub-national governments are focused on achieving aims of an efficiency or paternalistic nature and are therefore all earmarked. Programme devolution to the states, notably in the welfare area, has been remarkably successful in fostering innovation in programme design, but the cost pressures in health care for the indigent are such that greater federal involvement might become necessary. The efficiency with which states raise revenues has been compromised by the erosion of their tax bases, notably for corporate income and sales taxes. Replacing these taxes with a less distorting form of indirect taxation could reverse this trend. Finally, state balanced budget requirements appear to have had salutary effects, but more extreme forms of fiscal rules have reduced state and local governments' ability to provide the desired level of public goods.

This Working Paper relates to the 2005 OECD Economic Survey of the United States (www.oecd.org/eco/surveys/us).

JEL classification: H7, H71, H72, H74, H77, H51, H52, H53, H23
Key words: Fiscal federalism, grants, Welfare reform, Medicaid, State and local taxes, fiscal rules, balanced budget requirements, tax and expenditure limitations

* * * * *

Les relations budgétaires entre les différents niveaux d'administration aux États-Unis

On fera le point dans cet article sur les relations budgétaires entre l'État fédéral, les États fédérés et les collectivités locales tout en examinant les mesures qui pourraient être prises pour améliorer ces relations. La large autonomie budgétaire des États et, dans une moindre mesure, des collectivités locales, a eu plusieurs effets bénéfiques, en particulier la réactivité des dépenses publiques aux préférences locales et une responsabilité relativement étendue du fait du lien étroit entre les prérogatives fiscales et les obligations de dépenses. Ce lien reflète traditionnellement le faible rôle de la redistribution entre les collectivités territoriales. Les subventions fédérales aux administrations infranationales sont accordées en fonction d'objectifs d'efficience ou de préoccupations à caractère paternaliste et sont donc toujours préaffectées. La décentralisation des programmes au niveau des États, en particulier pour la protection sociale, s'est révélée très fructueuse en favorisant l'innovation dans la conception des mesures, mais les coûts sont tels pour les soins de santé en faveur des catégories défavorisées qu'une plus forte participation fédérale pourrait être nécessaire. L'érosion des bases d'imposition, notamment pour l'impôt sur les sociétés et pour la taxe sur les ventes, compromet une collecte efficiente des recettes des États. On pourrait inverser cette tendance en substituant à ces impôts une forme de taxation indirecte qui créerait moins de distorsions. Enfin, l'obligation d'équilibre budgétaire au niveau des États paraît avoir été salutaire, mais les règles de discipline budgétaire sous leurs formes les plus extrêmes ont entravé la fourniture, par les États et les collectivités locales

Ce document de travail se rapporte à l'Étude économique de l'OCDE des États-Unis 2005 (www.oecd.org/eco/etudes/us).

JEL classification : H7, H71, H72, H74, H77, H51, H52, H53, H23
Mots-clés : Fédéralisme budgétaire, subventions, Réforme de la protection sociale, Medicaid, impôts des États et des collectivités locales, règles de discipline budgétaire, obligation d'équilibre budgétaire, plafonds d'impôts et de dépenses.

Table of contents

Fiscal relations across levels of government in the United States 5

- Main features and trends shaping fiscal relations across the levels of government 6
  - The current extent of decentralisation 6
  - Recent trends and future forces 11
- Issues concerning the allocation of spending responsibilities 13
  - Welfare 13
  - Medicaid 16
  - Highway spending 20
  - Education 21
  - Summary 22
- Promoting the efficiency of public funding 23
  - Personal income tax 23
  - Corporate income tax 25
  - Sales taxes 25
  - Property taxes and school finance 29
  - Federal deductibility 30
  - Summary 31
- Fiscal rules and macroeconomic stabilisation 31
  - Balanced-budget requirements 31
  - Tax and expenditure limitations 34
  - Summary 36
- Concluding remarks 36

Bibliography 38

Annex A1 Medicaid eligibility and coverage 43

Annex A2 State personal income and sales taxes 45

Annex A3 Fiscal rules of sub-national governments 48

Boxes

1. Intergovernmental transfers and Medicaid maximisation 20
2. Implementing a sub-national VAT and the destination principle 28
3. Fiscal rules in Colorado: TABOR 35
4. Recommendations regarding fiscal relations 37

Tables

1. Local government expenditures by type of government and function, 2001-02 11
2. Medicaid enrolment and expenditures by group, FY 2002.. 18
3. Average annual changes in Medicaid enrolment and spending, 2000-03.................................... 18
4. Sources of personal income, 1960-2004 24

Annexes

A1.1. Matching rates and income eligibility under Medicaid and SCHIP 44
A2.1. State personal income taxes... 46
A2.2. State and local general sales tax rates and state general sales tax revenue 47
A3.1. State balanced budget requirements... 49
A3.2. State-level tax, revenue and expenditure limitations 50

Figures

1. Government total receipts and expenditures... 7
2. Decomposition of government expenditures 8
3. Spending by sub-national governments in federal countries 9
4. Decomposition of government revenues 10
5. Sub-national government financial resources in federal countries 11
6. Federal grants to state and local governments 14
7. Welfare caseloads 15
8. State and local tax revenues... 24
9. State sales tax base... 26
10. State and local government gross credit market debt 33

Fiscal relations across levels of government

in the United States

by

Thomas Laubach[1]

The history of fiscal federalism in the United States dates back to the founding of the Union in 1789. Already prior to the establishment of the federal government, the states had exercised their powers to levy taxes and provide certain services, and the tenth amendment to the US constitution expressly reserves to “the States or to the people” all powers “not delegated to the United States by the Constitution, nor prohibited by it to the States”. Over the century following the Civil War the responsibilities of the federal government and its involvement in the fiscal affairs of lower levels of government expanded substantially. More recently, however, there has been some devolution of programmes back to the states, reflecting in part dissatisfaction with the economic effects of several large federal programmes. Besides substantial changes over time in the federal-state relationship, fiscal policies vary considerably among state and local governments, making the United States a particularly interesting case for the study of the decentralisation of fiscal functions and instruments with the aim of “combining the different advantages which result from the magnitude and the littleness of nations” (Tocqueville, 1980, p. 163).[2] The goal of this paper is to describe the salient features of these relations at the present time and to discuss several areas which have recently been the subject of policy debates and initiatives and seem to warrant efforts at further improvement.

The first section provides a brief overview of the fiscal organisation of the three levels of government, their size and role as well as their different means of funding themselves. It also sets the stage for the subsequent discussion by outlining several trends that are likely to generate the main future challenges for fiscal relations among and within the levels of government. The second section focuses on issues on the expenditure side, mostly on intergovernmental grants. While grants are clearly an important part of sub-national governments’ funding, their discussion is taken up in the context of expenditures

---

1. This paper was originally prepared for the *OECD Economic Survey of the United States* published in October 2005 on the responsibility of the Economic and Development Review Committee. The author is grateful to colleagues in the OECD, especially Andrew Dean, Jorgen Elmeskov, David Grubb, Peter Jarrett, Isabelle Joumard, Val Koromzay, Thomas McGirr, Hannes Suppanz, Douglas Sutherland and Greg Wurzburg for their helpful comments. Special thanks go to Françoise Correia and Mee-Lan Frank for technical assistance. The author can be contacted at tlaubach@frb.gov.

2. Two excellent surveys of issues related to fiscal decentralisation, mostly in the US context, are Bird (1993) and Oates (1999). Joumard and Kongsrud (2003) provides a comprehensive discussion of these issues in OECD countries.

because all grants from the federal to lower governments are earmarked, and revenue-sharing among states or between the federal and state level does not exist.[3] In view of the states' great degree of fiscal autonomy, grants are the most important mechanism for the federal government to affect lower governments' spending decisions. The third section discusses several issues related to funding, notably current efforts and options for improving or replacing states' sales taxes, and the fourth section examines fiscal rules and market mechanisms for fiscal discipline at the state and local levels. The paper concludes with some recommendations for improving on the current state of intergovernmental fiscal relations.

Main features and trends shaping fiscal relations across the levels of government

The current extent of decentralisation

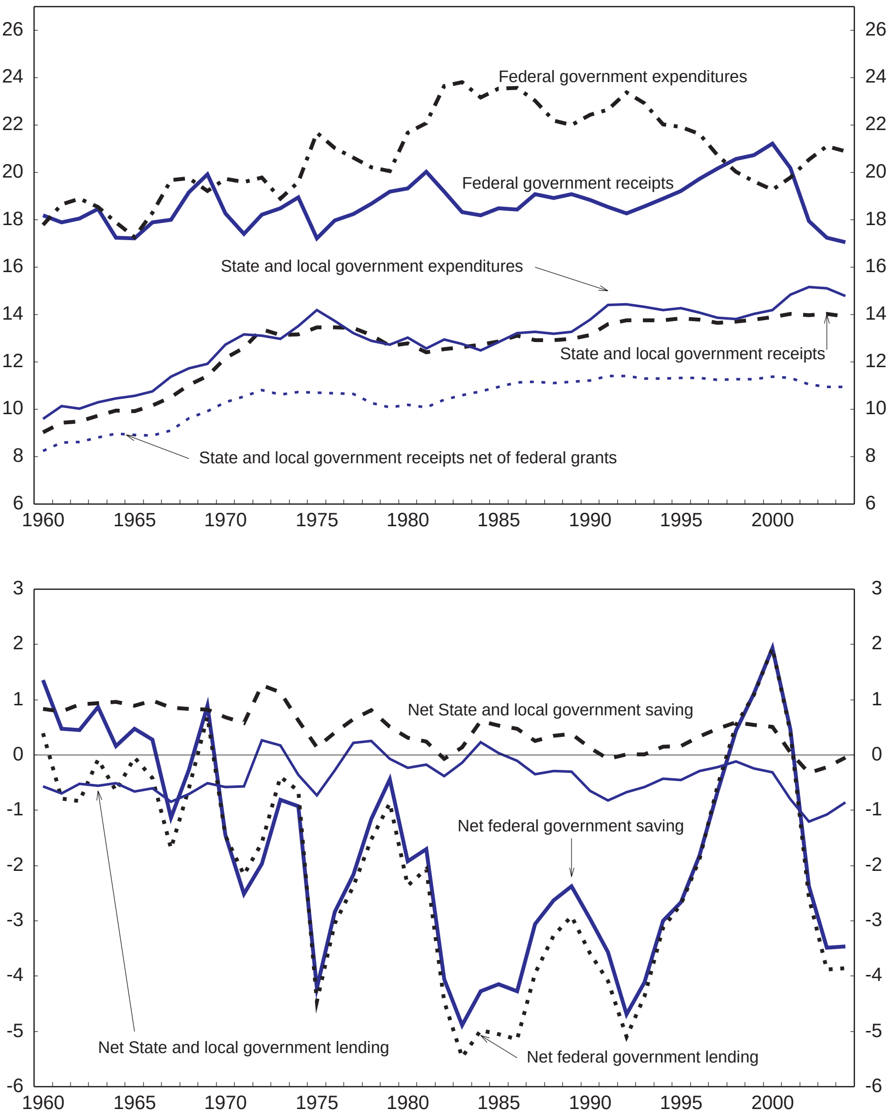
Historically, states have enjoyed a substantial degree of fiscal autonomy, as expressed in the tenth amendment, reflecting the fact that the states historically preceded, and transferred only limited powers to, the Union. States are largely free in their choice of tax bases and rates, subject to only few limitations imposed by the federal constitution, notably that taxation of exports and imports is a federal activity and that their power to tax interstate commerce is limited. On the expenditure side, most major spending functions are located at the state or local government level, important exceptions being national defence and pension and health insurance for the elderly and disabled. As in the case of taxes, allocation of expenditure functions to the sub-national level involves substantial or even complete state autonomy in programme design, as opposed to mere delegation of federally-controlled budgetary functions. Another important aspect of state prerogatives is their autonomy in organising local governments within their own boundaries. Local government structures vary greatly across states, with different functions performed by county, municipal, school district and special district governments. Moreover, several state constitutions include "home rule" clauses that confer on municipal governments the right to create their own charters as well as considerable autonomy in conducting their affairs.

Federal government total expenditures trended up until the early 1980s and have since declined to about 20% of GDP (Figure 1).[4] Except for a surge in the late 1990s and subsequent sharp decline, federal government receipts have shown little trend over the period, averaging about 18%. State and local receipts and expenditures trended up until the mid-1970s and have remained fairly stable since then at around 14% of GDP. While revenues and expenditures of sub-national governments have tended to be in balance, this has clearly not been the case at the federal level. The implications for net government saving (the difference between current receipts and current expenditures) and net government lending (which includes the balance of capital receipts and expenditures) are shown in the lower panel of Figure 1. On either measure sub-national budgets have been close to balance. Most obviously, their net saving has been almost always positive, which likely reflects discipline imposed by capital markets, and perhaps also the effectiveness of their balanced budget requirements discussed below. By contrast, since the mid-1960s the federal government has almost always run budget deficits, which may result from the combination of its greater ability to borrow in financial markets, the inability to achieve lasting deficit reduction through fiscal rules, and its greater role in and ability to achieve cyclical stabilisation.

3. Even where grants are earmarked, however, their economic incidence could be equivalent to that of revenue-sharing. This would happen if the grant were to replace spending that the jurisdiction would have otherwise done out of its own funds. There is some evidence that this is the case for federal highway funding and Title I education spending, discussed later (Knight, 2002; Gordon, 2004).

4. Total receipts and expenditures include government investment in fixed capital and related items such as capital transfers. The national accounts do not report the receipts and expenditures of the state and local government level separately.

Figure 1. **Government total receipts and expenditures**
Per cent of GDP



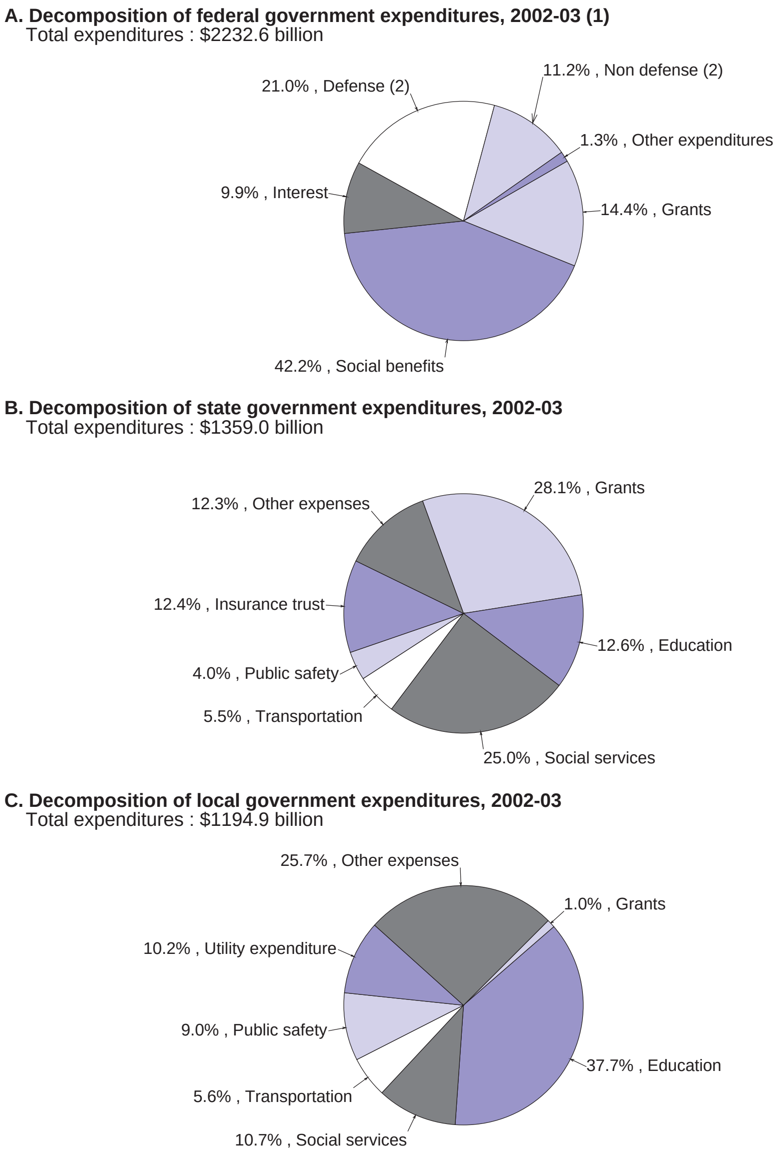
Source: Bureau of Economic Analysis.

Total expenditures of local governments are almost as large as those of state governments, while federal expenditures are nearly twice as large (Figure 2).[5] Apart from interest payments on federal debt, most of federal expenditures are for defence, social benefits (primarily pension and health benefits for the elderly and disabled) and grants to sub-federal governments. Only little more than 10% of federal

5. The data shown in Figures 2 and 4 for the state and local sectors separately are based on the US Bureau of the Census' annual survey of state and local governments. The period 2002-03 is the latest for which data are available. While the data on tax revenues are similar to those in the NIPAs, other data are less consistent across the two sources, so that, even after netting out transfers between state and local governments, the aggregate from the Census data is larger than its NIPA counterpart.

expenditures, or about 2% of GDP, is spent on non-defence consumption and investment. At the state level, grants to local governments are the single largest spending category, followed by social services such as income support and the Medicaid health-care programme for the indigent) and education, overwhelmingly higher education. Finally, primary and secondary education is by far the largest expenditure component of local governments, comprising nearly 40% of their total expenditures. Other (important local government functions are social services (such as hospitals and other health services), utilities and public safety. As shown in Figure 3, the breakdown of expenditures at the state level is broadly similar to other OECD countries with a federal structure, while at the local level the United States and Canada clearly stand out in terms of the importance of primary and secondary education spending in local government expenditures.

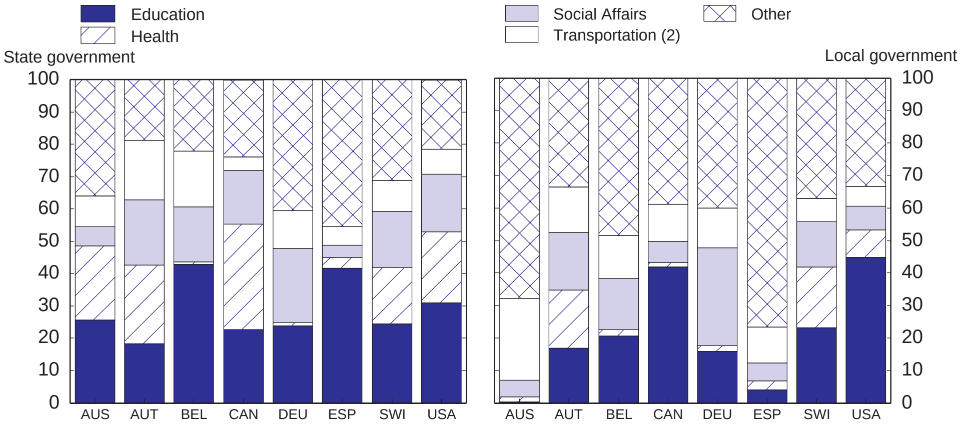
Figure 2. **Decomposition of government expenditures**



1. Fiscal year 2002 Q3 to 2003 Q2
2. Including consumption expenditures and gross government investment

Source: Bureau of Economic Analysis and Bureau of the Census.

Figure 3. **Spending by sub-national governments in federal countries**
Percentage of total sub-national governments' expenditure, 2002[1]

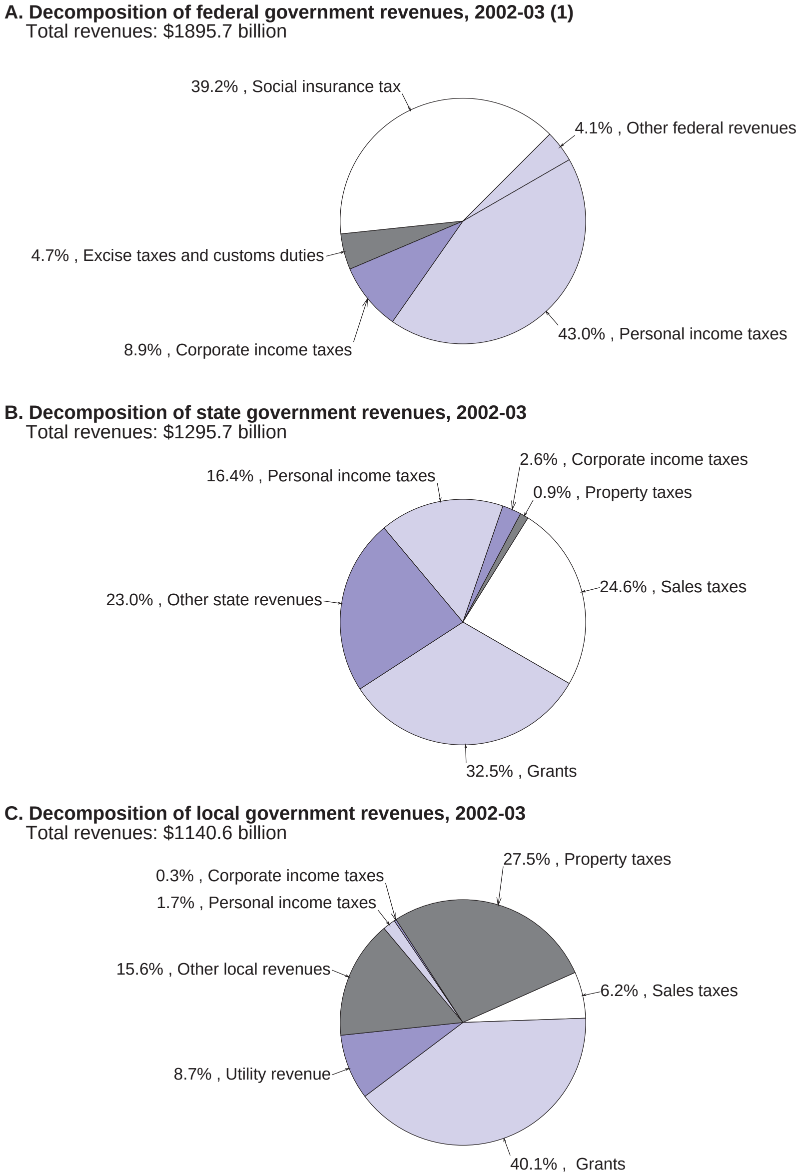


1. 2000 for Spain; 2001 for Belgium, Switzerland and United States.
2. Economic affairs for Austria, Belgium and Germany.
Source: IMF, Government Finance Statistics (2003).

The composition of revenues is quite different across the three levels of government (Figure 4). Within taxes, over time a broad division of tax bases has developed by which the federal government relies almost exclusively on income taxation in the form of personal and corporate income and payroll taxes, the states on sales and, to a lesser extent, personal income taxes, and the local government level on property taxes. Notably, the federal government does not levy a general tax on consumption, like a sales tax or value-added tax (VAT), nor a property tax, and most states' involvement in property taxation is negligible. Also, corporate income is a small revenue source for state and local governments. Thus, there are only two major tax bases that are shared between levels of government: personal income between the federal and state governments, and sales between state and local governments. While virtually all federal revenues are raised in the form of taxes, taxes account for only 44% of state revenues. Nearly one-third of state revenues are derived from federal government grants; the remaining quarter is derived from various sources, including nearly 10% from user charges, for example for hospital services and higher education. Finally, local governments raise only about one-third of their revenues in the form of taxes. Grants, mostly from state governments, account for another third of their revenues, and most of the remaining third is derived from user charges and utility revenue. The high degree of fiscal autonomy of state governments is illustrated in Figure 5, which shows that states' share of own revenues in total revenues is the third-highest among the nine OECD countries with a federal structure. Arguably even this is an understatement, because it fails to take into account that none of states' own tax revenue is derived from revenue-sharing arrangements with the federal level. Local governments' reliance on transfers from higher levels of government, by contrast, is higher than in most of the other eight countries, and their autonomy in terms of setting tax rates is much more limited.

As mentioned above, the organisation of the local government sector is at the discretion of the states. The structure of the local government sector is therefore quite diverse across states, so that it is difficult to make generalisations concerning the functions of the various forms of local government. Table 1 provides some indications as to the assignment of functions. The three major forms of local government are counties, municipalities (including cities) and school districts. Within each of these categories there is vast heterogeneity; for example, there are more than 3 000 counties in the United States,

Figure 4. **Decomposition of government revenues**

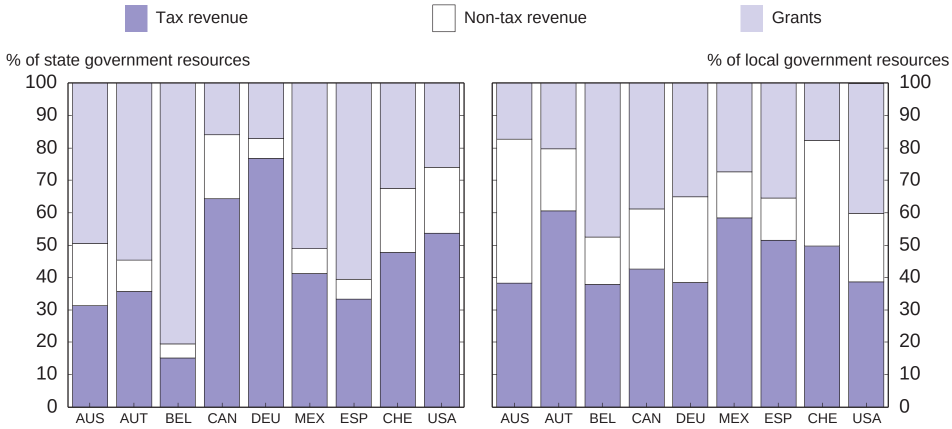


1. Fiscal year 2002 Q3 to 2003 Q2.

Source: Bureau of Economic Analysis and Bureau of the Census.

ranging in population from less than 200 to more than nine million. Counties dominate in the local government provision of social services and income maintenance, where they account for over 60% of spending in this category by all local governments. Other important county functions are transportation and public safety, but municipal governments are the most important providers in these two areas as well as in environment and housing and in utilities. Utilities are also the major role of so-called special district governments. These are organised to provide a variety of services including water, sanitation, parks and transportation. They may overlap several municipal jurisdictions or be a subset of a single jurisdiction. Finally, school district governments perform practically no other function than operating public schools, but because of the importance of this function at the local government level, they account for one-third of

Figure 5. **Sub-national government financial resources in federal countries**
Percentage of total financial resources, 2002[1]



1. 2000 for Mexico; 2001 for Switzerland and United States.
2. Tax revenues include social contributions.

Source: IMF, Government Finance Statistics.

Table 1. **Local government expenditures by type of government and function, 2001-02**

	County government	Municipal government	Township government	Special district government	School district government	% of total local government expenditure
Total direct expenditure ($ billions)	254	359	34	120	361	1 129
Per cent of total local government expenditure	22.5	31.8	3.0	10.7	32.0	100.0
Government's share in total local government spending on:						
Education	8.7	8.8	2.2	0.5	79.8	39.0
Social services and income maintenance	61.0	21.4	0.5	17.1	0.0	10.6
Transportation	30.6	49.8	6.5	13.1	0.0	5.6
Public safety	34.7	57.6	4.7	3.0	0.0	9.1
Environment and housing	18.1	53.8	4.1	24.0	0.0	9.3
Utility expenditure	5.0	52.3	1.5	41.2	0.0	10.6
Other	35.3	47.4	5.0	6.7	5.6	15.8

Source: U.S. Bureau of the Census, 2002 Census of Governments, available at http://www.census.gov/govs/www/estimate.html.

total expenditure by local governments. On the revenue side, county, municipal and school district governments share the major local own-source revenue, property taxes, roughly in proportion to their expenditures. Municipal governments receive most local sales and income taxes, while school district governments benefit from by far the largest share of intergovernmental transfers, almost all from their state government. Direct transfers from the federal to local governments, which totalled $43 billion in 2001-02, are small in comparison both to federal transfers to state governments ($318 billion) and state government transfers to local governments ($356 billion).

Recent trends and future forces

While the decades between the Great Depression and the 1980s saw several large expansions of the federal government's size and role, which to some extent entailed federalisation of functions previously performed by sub-national governments, this trend has been reversed in several areas since the mid-1980s. Programmes whose operation has been devolved to lower levels of government, however, often still require funding from the federal government. One common feature has been a change in the trade-off between lower governments' autonomy in programme design on the one hand and their financing responsibilities on the other, notably through a switch from open-ended matching grants to earmarked, lump-sum grants (referred to as block grants in the US context, despite their earmarked nature). The switch from matching to block grants suggests that the intention of these grants is of a paternalistic kind rather than to correct for spill-over effects. The most important example of this development, the welfare reform of 1996, will be discussed in the following section. While devolution of programme responsibility appears to have produced efficiency gains through experimentation at the state level, it has also shifted greater financial risk to the states, raising the question whether they would be able to avoid welfare-reducing cyclicality in spending on core services if block grants were extended into areas such as health.

Sub-national governments' capacity for setting spending and revenue levels and for bearing the risk of cyclical fluctuations in spending and revenues has been reduced since the late 1970s by the widespread adoption or strengthening of tax and expenditure limitations. Virtually all states operate under some form of balanced budget rule enacted in state laws or enshrined in the states' constitutions. However, these balanced budget rules, which will be reviewed in the fourth section, did not prevent the growth in the size of state and local government during the 1960s and early 1970s, evident in Figure 1, and the concomitant upward drift in various tax rates. The "tax revolts" of the late 1970s and early 1980s saw many states adopting rules which typically restrict the growth in state and local governments' revenues and/or expenditures from one fiscal year to the next. While the strictness of tax and expenditure limitations varies across states, in some instances they have had the effect of shrinking the size of government in relation to the economy, as intended by their proponents. Problems arose, however, because for various reasons the entire spending restraint tended to fall on a few budget items, leading to outcomes that were certainly unintended. The design of fiscal rules that properly balance a desirable degree of sub-national fiscal flexibility against the risks of undesired perpetual government expansion and potential fiscal crises and bailouts remains a challenge.

Potentially the most important forces increasingly impacting on intergovernmental fiscal relations emanate from the ageing of the population. This is most obvious on the expenditures side of the ledger, where health and other age-related spending is on the rise. While many of the most strongly affected programmes are located at the federal level, there are substantial old-age-related expenditures at the sub-national level as well, primarily through the Medicaid programme. Moreover, ageing affects not only expenditures, but also the trend growth of revenue sources at different levels of government. In particular, some retirement income that is part of the growing share of benefits and transfer receipts in personal income is sheltered from personal income taxation. Also, older people tend to spend a smaller share on goods and services that are subject to sales tax, and more on those that are exempt, notably health services and pharmaceuticals. Ageing therefore threatens to reduce the main revenue sources of both the federal and the state governments; the main own-source revenue of local governments, the property tax, is less affected. The shift towards ageing-related expenditures that are mostly redistributive in nature is particularly problematic for states. Usually the funding of redistributive spending is achieved through progressive income taxation. But because of taxpayer mobility, states' ability to levy progressive income taxes is quite limited, and their other main revenue source, the sales tax, tends to be regressive. An important challenge going forward will therefore be to adjust the spending responsibilities of the various levels of government to their capacity to raise the required revenues in a manner that is desirable both on efficiency and equity grounds.

Issues concerning the allocation of spending responsibilities

The argument for providing at the sub-national level public goods and services whose consumption is limited to the providing jurisdiction is that preferences for public services differ across jurisdictions, and that governments at lower levels know best the preferences of their constituents (Oates, 1972). Leading examples of these goods and services are elementary and secondary as well as higher education, public safety and basic infrastructure such as roads and transportation, sewerage and utilities. There appears to be considerable variation in the scope and amount of goods and services provided by local governments across the country, some of which reflects differences in population density and economic structure. However, the conclusion that decentralised governments will provide the efficient level of public goods rests on a number of assumptions. The presence of spill-over effects can lead to sub-optimally low provision of public goods, while grants from higher levels of government can have the opposite effect. The question whether the level of public goods provision by *local* governments is efficient has received considerable attention, with several studies concluding that it is (Brueckner, 1982; Gramlich and Rubinfeld, 1982).[6] These findings are consistent with the evidence that both property taxes and services benefits are capitalised into property values, as the benefits of most services provided by local government accrue to property owners (Oates, 1969; Weimer and Wolkoff, 2001). However, not all the conditions for efficient local public-goods provision under "Tiebout sorting" appear to be met, as there is substantial redistribution across local governments in the context of school finance, presumably reflecting the importance of externalities associated with basic education. There also appear to be strong spill-over effects at the *state* level, at least for certain services such as medical spending (Brueckner, 1998; Baicker, 2005). Policy responses to the risk of undesirably low provision of redistributive and health services by state governments are discussed below.

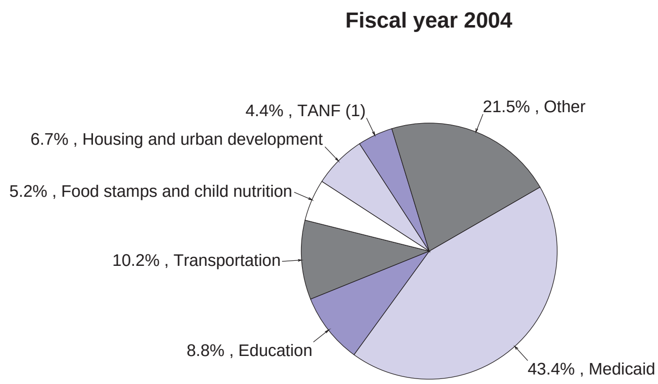
The remainder of this section discusses in greater detail four areas in which intergovernmental relations play an important role in programme design and funding. Programmes in these four areas – income support, medical care for the indigent (Medicaid), highway construction and education – illustrate the diversity of the current structure of grants. Jointly they account for about two-thirds of total federal grants to state governments (Figure 6), and education alone accounts for more than half of total grants from state to local governments. Although, as mentioned earlier, all of these grants are earmarked, there is considerable variation across programmes in the freedom the receiving governments have in allocating these funds. Related to this variation in the lower level's competence for programme design and allocation are other dimensions along which different grants are distinct, such as whether they are capped at a specific amount or open-ended, and whether they are matching grants or lump-sum "block" grants (which are nonetheless earmarked) of a fixed size.

Welfare

Federal legislation enacted in August 1996 fundamentally changed the structure of public assistance programmes to low-income families. In terms of relations between the federal government and

6. Brueckner (1982) uses the theoretical result that aggregate property value in a community that levies a property tax is an inverted U-shaped function of its public goods output. Public goods provision in the community is therefore Pareto-efficient if aggregate property value is insensitive to a marginal change in public goods output. Using data on aggregate property values and community education and non-education expenditures from a sample of 54 Massachusetts communities, he finds no systematic tendency for over- or under-provision of public goods. Gramlich and Rubinfeld (1982) use data from a survey of 2001 households in the state of Michigan on their demands for public spending, sampled randomly immediately after Michigan's 1978 tax-limitation vote. They find evidence for the Tiebout hypothesis that households sort themselves according to their demand for public spending, as well as for the median-voter hypothesis, that public spending in jurisdictions reflect the desires of the median voter.

Figure 6. **Federal grants to state and local governments**



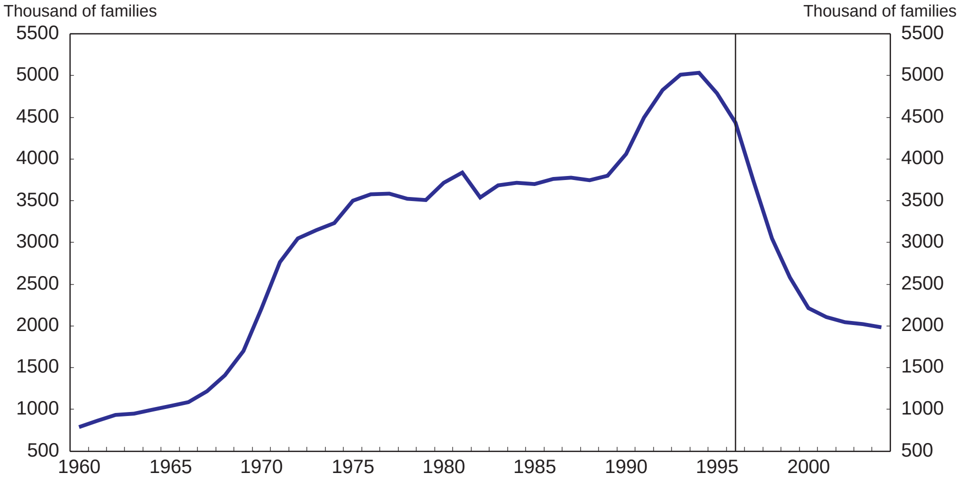
1. Temporary Assistance for Needy Families.
Source: Office of Management and Budget (2005), Budget of the US Government, Fiscal Year 2006, Historical Tables.

the states, its most important effect was to replace the previous open-ended federal matching grant under Aid to Families with Dependent Children (AFDC) by a capped block grant under Temporary Assistance for Needy Families (TANF). At the same time as imposing an upper limit on the federal contribution to welfare spending, the welfare reform removed many federal eligibility and payment rules, thus devolving to states much greater authority in programme design.[7] The 1996 reform was the culmination of a process that had started in the 1980s, when growing dissatisfaction with AFDC had led an increasing number of states to seek federal waivers from the AFDC rules (Blank, 2002). By the time that the welfare reform was enacted, 27 states had major state-wide waivers in place, most of which were designed to enforce work requirements for welfare recipients more stringently. These waiver programmes had to be approved and administered by the Department of Health and Human Services and had to be thoroughly evaluated. The experiences gained under these waivers were a critical element in shaping the 1996 reform legislation with its strong emphasis on work requirements (both work trigger rules and minimum work participation rates) and time limits. Specifically, by 2002 a state obtained the full amount of the TANF block grant only if at least 50% of all recipient families and 90% of two-parent families were working or in work preparation programmes whose design is largely at the states' discretion. However, caseload reductions were considered equivalent to work. TANF-funded benefits are limited to 60 months over the lifetime of any recipient, but states can exempt up to 20% of their caseload from this limit. The size of the federal block grant was fixed for each state at the level of its 1994 receipts under AFDC and two smaller programmes. To prevent states from substantially reducing their welfare programmes and diverting block grant funds to other purposes, the legislation included a "maintenance-of-effort" requirement by which states have to maintain at least 75% of their 1994 spending on programmes replaced by TANF, including AFDC-related child care.

The most important overall effect in terms of programme design has been the reorientation of support from non-working to working families through the combination of (federally mandated) work requirements, subsidies for work-related expenses (notably child care) and strengthening of work

7. A detailed description of the provisions of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 can be found in House Ways and Means Committee (2004), section 7.

Figure 7. **Welfare caseloads**
Total number of families, calendar years, monthly average



Source: US Department of Health and Human Services.

incentives through lower benefit reduction rates.[8] States have also made wide use of their new discretion under the reform legislation. Although the multi-dimensional character of state welfare programmes under TANF complicates the evaluation of the effects of individual welfare reform measures on recipient behaviour (Blank, 2002), the welfare reform is generally credited with being the main reason for the dramatic decline in caseloads during the second half of the 1990s (Figure 7). The nation-wide caseload, which had peaked under AFDC in March 1994 at 5.1 million families, declined through December 2000 to 2.2 million, with the bulk of this decline occurring between 1995 and 1999. During the same 1994 to 2000 period the percentage of children in families receiving AFDC or TANF benefits declined from 14.3% to 6.1%. Moreover, the decline in caseloads continued, although at a slower pace, through nearly the entire period of economic weakness during recent years, with the number of families receiving benefits in June 2004 (the latest available data) falling below 2 million. Whether caseloads should have been expected to rise during and immediately after the recession is unclear: caseloads under AFDC had shown no particular cyclical pattern, but the substantial outflow of welfare recipients into employment in the late 1990s might have suggested that some of them would reappear on welfare rolls. Overall, the experience suggests fairly stable integration of marginal populations into the labour market. Helped by the clause that caseload reductions are treated as equivalent to work participation rates, all states achieved the 50% all-family work target for 2002, and all but four states met the two-parent work target.

The traditional concern in the literature about allocating responsibility for welfare to the sub-national level is that it may lead states to engage in a "race to the bottom" with the result that welfare provision is ultimately much below the level that would prevail under a national welfare system (*e.g.* Brown and Oates, 1987). This result is more likely the more readily welfare recipients move from one jurisdiction to another in response to small differences in welfare benefits across jurisdictions. The maintenance-of-effort requirements included in the welfare reform legislation were presumably motivated by a concern that the move from a matching grant to a block grant might lead states to internalise this type of spill-over effect by cutting welfare spending. A number of empirical studies have arrived at conflicting results concerning the importance of welfare migration (see Brueckner (1998) for a survey of older

8. Another important policy measure that strengthened work incentives was the dramatic expansion of the federal Earned Income Tax Credit (EITC) in 1993. The interaction between the EITC and welfare reform is discussed in Moffitt (2003).

results). More recent studies suggest that a modest amount of welfare migration exists, but that it is unlikely to reduce significantly the level of benefits offered by states.[9] Moreover, most of the empirical work is based on data prior to the welfare reforms, when the generosity of welfare benefits was relatively easy to measure by cash benefits under AFDC. Since then, the multi-dimensional nature of state programmes mentioned above has considerably complicated direct comparison of the overall generosity of different states' programmes, which may further impede welfare migration. Consequently, there appears to be little concern at this point that states are scaling back benefits because of an actual or perceived threat of migration from other states. This may in large part reflect the still generous funding under the block grants, which were based on state spending in 1994, the year with the highest caseload in the history of AFDC. Because TANF funds not spent in one year remain available for future use, the sharp decline in caseloads over the second half of the 1990s has allowed states to accumulate substantial reserves for welfare spending while at the same time expanding their welfare benefits and shifting several programmes initially outside of AFDC under their maintenance-of-effort requirements.

The 1996 legislation had appropriated funding for the TANF block grant for six years, through fiscal year (FY) 2002, at a constant level of $16.5 billion per year without any inflation adjustment. Since then funding has been extended on a short-term basis, and separate versions of a reauthorisation bill in the House and the Senate Finance Committee propose to extend the block grant at the same level for five years. The work requirements under TANF are among the central issues in the two versions of the draft legislation. Both versions of the bill propose to raise the work participation rates by five percentage points each year for four years to 70% and to increase weekly hours of participation substantially. One concern with the proposed legislation is that it funds child care insufficiently, especially as the need for child care would rise as a consequence of the proposed strengthening of work requirements (Parrott and Fremstad, 2003). Another concern is that states met work participation targets in the past mostly or entirely through caseload reductions rather than work participation of recipients. However, the currently remaining population of recipients is increasingly difficult and, from the states' perspective, costly to integrate into the labour market; in fact, in recent years the proportion of TANF recipients who are working has fallen. Moreover, the House version of the bill would curtail states' flexibility in programme design by substantially narrowing the activities which qualify for the work requirements. In view of the success that states have had in reducing welfare rolls by exploiting the great degree of programme flexibility provided in the past, it seems advisable to resist or reverse tendencies to restrict states' ability to tailor programmes to their local needs by tightening work requirements in a way that proves impractical for states to implement.

Medicaid

Medicaid, the medical insurance programme for the indigent, is by far the largest programme shared between the federal government and the states.[10] Total Medicaid spending in FY 2003 was $275 billion (2½ per cent of GDP), of which $160 billion, or 58%, was funded by the federal government

9. Wheaton (2000) uses state-level data on benefit levels under AFDC, median household income, total population, population eligible for AFDC and several other variables to estimate migration elasticities. He concludes that his estimates are high enough that they would generate considerable welfare under-provision in model simulations. By contrast, Gelbach (2004) uses household-level data from the 1980 and 1990 decennial census to estimate probit models of out-migration of single mothers. While the results for the 1980 census data suggest that welfare benefit levels play a substantial role in state-to-state migration decisions, the results for the 1990 sample are much less clear. Using these results combined with a simple model of optimal state welfare policy determination, he finds only small reductions in optimal benefits due to migration.

10. For a general discussion of health policy in the context of federalism in the United States see Bovbjerg *et al.* (2003).

and the remaining $115 billion by state governments. The federal contribution to Medicaid accounts for slightly more than 40% of total federal grants to state and local governments. In contrast to the welfare programme discussed above, Medicaid is an open-ended entitlement under which every person meeting eligibility criteria has a right to receive services promised under the programme. Also unlike TANF, Medicaid is a matching grant under which the federal matching rate varies between 50 and 77%, depending on state income *per capita* (see Annex A1). To be eligible for federal funds, states are required to provide Medicaid coverage to certain "mandatory eligibility groups", notably low-income families who would have met a state's eligibility requirements for AFDC as of July 1996. However, states can extend Medicaid coverage to optional groups, which are divided into "categorically needy" and "medically needy" (Annex A1 provides further details). Optional categorically needy populations share some characteristics with the mandatory groups. Under a "medically needy" programme, a state can extend Medicaid eligibility to persons who may have too much income to qualify under the mandatory or categorically needy groups, with the proviso that their excess income is offset by medical expenses. This is the principal mechanism of Medicaid's involvement in financing long-term care for the elderly. Similarly, services are divided among those that are mandatory under federal programme rules for the categorically needy and the medically needy eligible groups and those that states can provide optionally. Importantly, the same matching rate applies to almost all services provided to mandatory populations or services as to optional populations or services, suggesting that the redistributive motive in Medicaid matching rates is at least as important as concerns for spill-over effects.

When Medicaid was created in 1965, it was intended as the medical care complement to income support under AFDC, and AFDC served as the gateway programme through which most beneficiaries signed up. By 2003, spending for optional services or populations accounted for almost two-thirds of total Medicaid spending, reflecting strong political pressures over past decades to extend Medicaid coverage beyond the initial target group. The importance of the shift in Medicaid's focus for the overall cost of the programme is illustrated in Table 2. Working-age adults and their children together still account for more than 70% of enrolment, but for little more than one quarter of total expenditures. By contrast, the aged and disabled, most of whom belong to optional groups, account for less than 30% of enrolment but nearly 70% of expenditures. More than half of the aged and disabled are so-called "dual eligibles", persons who are entitled to Medicare and are eligible for some level of Medicaid benefits due to low incomes and assets.[11] Although Medicare covers much of their acute-care costs, Medicaid pays for Medicare premiums, co-payments and deductibles, for prescription drugs (until 2006), and for certain services not covered by Medicare, most importantly long-term (including mental) care. Recent years have seen the combination of two major sources of cost pressure on the programme, which have greatly contributed to the fiscal distress of the states (Boyd, 2003). One source is that, as Medicaid eligibility became increasingly decoupled from welfare eligibility during the 1990s, states have extended coverage much higher up the income distribution (see Annex A1). Combined with the ongoing decline in employer-sponsored health insurance coverage (Wiatrowski, 2004), this has had the effect of sharply increasing Medicaid enrolment in the wake of the recent economic downturn (Table 3). The second source is the ageing of the population and hence the secular growth of the number of Medicaid beneficiaries with very high medical expenditures, largely because Medicaid is the only source of government assistance for long-term and nursing home care. While the discussion below focuses on issues of cost-sharing between the federal and state levels, as these are the relevant issues in the context of the present paper, it should be recognised that the problem of Medicaid cost containment against the background of an ageing society, rapidly rising medical costs and declining

11. See Bruen and Holahan (2003) for details on the definition of dual eligibles, services covered by Medicaid, and simulations of several options for shifting part of Medicaid's expenses for dual eligibles entirely to the federal level.

private insurance options for large parts of the low-income population requires much more fundamental responses than a mere redistribution of tasks among levels of government.[12]

At the same time as most states considerably expanded Medicaid eligibility during the 1990s, they searched for strategies to contain increases in costs per enrolee, principally through increased reliance on managed care. The need for cost containment measures became much more acute over the past four years, when Medicaid enrolment surged while state tax revenues dropped sharply. These measures focused on freezing or cutting Medicaid payment rates to providers (*i.e.* hospitals, physicians, managed care organisations or nursing homes), reducing optional benefits, and developing preferred drug lists (Smith *et al.*, 2004). Reductions in Medicaid eligibility have not been used extensively, however. This reflects in part the problem that populations cut off from Medicaid eligibility would usually have no other access to health insurance or necessary health services, resulting either in reduced public health or in

Table 2. **Medicaid enrolment and expenditures by group, FY 2002**

	Enrolment[1]		Expenditures[2]	
	Millions	Per cent	$ billion	Per cent
Total	39.9	100.0	214.9	100.0
Aged and disabled	11.7	29.3	147.5	68.7
Dual eligibles[3]	6.7	16.9	91.1	42.4
Other aged and disabled[3]	5.0	12.4	56.4	26.3
Adults	9.8	24.6	24.1	11.2
Children	18.4	46.1	34.3	16.1

1. Enrolment measured in person-years.
2. Items do not add up to total because the attribution of 4% of expenditures ($8.6 billion) is unknown.
3. Breakdown of enrolment of aged and disabled in dual eligibles and others was obtained by applying proportional size of these two groups estimated by Bruen and Holahan to most recent CMS enrolment data for FY 2002.

Source: Centers for Medicare and Medicaid Services, 2003 Data Compendium, available at http://www.cms.hhs.gov; Bruen, B. and J. Holahan (2003), "Shifting the Cost of Dual Eligibles: Implications for States and the Federal Government", Kaiser Commission on Medicaid and the Uninsured, Issue Paper #4152, November.

Table 3. **Average annual changes in Medicaid enrolment and spending, 2000-03**

	Enrolment (millions)			Spending per enrolee ($)			Total spending ($ billions)		
	2000	2003	Average per cent change	2000	2003	Average per cent change	2000	2003	Average per cent change
Aged and disabled	9.9	10.8	2.9	11 879	14 122	5.9	117.3	151.9	9.0
Families	22.3	29.8	10.1	1 988	2 403	6.5	44.4	71.6	17.3
All enrolees	32.2	40.6	8.0	5 023	5 512	3.1	161.7	223.5	11.4

Source: Holahan, J. and A. Ghosh (2005), "Understanding the Recent Growth in Medicaid Spending, 2000-2003", Health Affairs, Web Exclusive W5, 52-62.

12. Several reform options for the federal system of health care coverage are discussed in Weil *et al.* (2003). Issues and policy approaches related specifically to long-term care are discussed in Congressional Budget Office (2004).

increases in uncompensated care at the level of county medical facilities. Waivers under Section 1115 of the Social Security Act, which throughout Medicaid's 40-year history have provided states with room for experimentation in programme design by exempting them from certain federal standards, have also played an important role in recent efforts at cost containment. Under "comprehensive" waivers, states can make very broad changes in eligibility, benefits or cost sharing in Medicaid. Currently, 27 states have approved comprehensive Section 1115 waivers, many of which were adopted primarily to move beneficiaries to managed care (Kaiser Commission on Medicaid and the Uninsured, 2005).

Debate about reform of Medicaid finances has focused on three issues. The first concerns states' use of certain intergovernmental transfers and financing mechanisms which, although legal when taken in isolation, can be combined in ways to raise the federal share of total Medicaid funding above the statutory federal matching rate or to make federal matching funds available for purposes other than purchasing health care services covered by Medicaid for eligible persons (Box 1). Efforts to strengthen Medicaid's fiscal integrity by cutting down on these mechanisms have been under way since the late 1990s, and the Administration's FY 2006 budget proposes further steps in this direction. A second issue is whether a more fundamental reform of the programme should be achieved in a fashion similar to the change from AFDC to TANF, by combining devolution of programme design with the replacement of the current open-ended federal matching grant by a capped federal contribution. It seems questionable whether greater devolution to the state level would lead to more efficient programme design. As mentioned before, states have already great latitude to experiment with programme changes under Section 1115 waivers, and the evidence indicates that Medicaid's administrative costs are no higher than those of private insurers, while Medicaid payment rates are frequently lower. Moreover, changes to the incentive structure for recipients, which was perhaps the most important aspect of the welfare reform, are much less feasible in a health insurance programme for the indigent, where room for co-payments and deductibles is by necessity very limited. It would be difficult to design a predetermined federal contribution that takes into consideration changes in enrolment rates and in the changing nature of the enrolled population, which greatly affect the programme's cost.[13] In light of states' more limited ability to raise revenues and the difficulty of predicting the forces shaping Medicaid expenses, the *ex post* examination of past proposals suggests that a block grant for Medicaid would likely result in substantial benefit and coverage reductions over time (Lambrew, 2005). A final issue is whether to shift all services currently provided to dual eligibles by *Medicaid*, including long-term care, to the federal level (Bruen and Holahan, 2003; National Governors Association, 2005). This would imply combining in *Medicare* the provision of means-tested benefits with those that are not. The rationale would be that the federal level is the appropriate one for addressing policy challenges that are as comprehensive as the cost pressures associated with the ageing of society. Medicaid policy, which would then focus on the non-elderly population, would remain at the state level so as to exploit synergies between income support and medical insurance for the working-age poor. In fact, one important benefit to dual eligibles hitherto provided by Medicaid, namely outpatient prescription drugs, will in any case shift to Medicare at the beginning of 2006, when the new Medicare prescription drug benefit will become fully effective. However, states will have to finance most of Medicare's cost of providing prescription drugs to dual eligibles through monthly payments to the federal government, while losing the ability to determine which drugs will be covered (Kaiser Commission on Medicaid and the Uninsured, 2003).

13. In contrast to Medicaid, the federal contribution to the State Children's Health Insurance Program (SCHIP) is capped. However, many of the factors driving Medicaid expenditures, notably those associated with the aged and disabled populations, do not affect SCHIP, making its expenditures more predictable and controllable.

Box 1. **Intergovernmental transfers and Medicaid maximisation**

The practical complexities involved in operating a matching grant programme can be formidable. In the case of Medicaid, these complexities are compounded by the fact that the recipients of payments, *i.e.* health care providers, are often themselves state or local government entities, a point illustrated by the financing mechanisms discussed in this box. These mechanisms involve financial transactions among government entities which, although not improper *per se*, have at times been used to increase a state's federal matching rate in a way not intended by the law. On several occasions in the past Congress has moved to restrict their use, and further restrictions on these mechanisms are part of the Administration's current proposals to reduce federal Medicaid spending.[1]

The federal share in Medicaid payments varies by state from 50 to 77%, with the remaining share paid for by the state. By law and regulation, the state share of Medicaid spending must consist of public funds and no more than 60% of it may be financed from local funds. When local funds are used as part of the state share of Medicaid, they often result in an intergovernmental transfer (IGT) from the local to the state level. Many of these IGTs are entirely legitimate. For example, New York requires counties to pay 20% of the non-federal share of Medicaid long-term care expenses and 50% of the non-federal share of all other Medicaid services. To compensate local governments, state sales tax revenues are shared equally between the state government and the counties. However, IGTs can be employed in ways that are not in keeping with the spirit of how Medicaid was to be financed. For example, a state may order a provider (*e.g.* a hospital) to make an IGT of $10 million to the state. The state then makes a Medicaid payment of $12 million to the provider, for a net gain for the provider of $2 million. Assuming a 50% federal matching rate, the state receives $6 million in federal matching funds. Therefore, the state has a net gain of $4 million.

This example assumes that the provider did not incur any Medicaid expenses as the result of the $12 million payment from the state, but that nonetheless this payment was legitimate under Medicaid. Such payments are possible under two alternative provisions, Disproportionate Share Hospital (DSH) payments and Upper Payment Limits (UPL). DSH payments allow states to pay more to hospitals that care for a large number of low-income patients, the rationale being that hospitals that render a large volume of care to low-income persons often lose money as a result of low Medicaid reimbursement rates or, if the care was provided to uninsured persons, end up holding bad debts. Moreover, hospitals with large caseloads of low-income patients frequently have small caseloads of privately insured patients and thus less room for shifting the cost of uncompensated care to the privately insured patients. UPLs were established as a way to limit federal Medicaid expenditures by establishing that Medicaid payments (except DSH payments) can be no greater than the amount Medicare would have paid for the same service. Importantly, the UPL is not determined by the Medicare payment for a single procedure or the payment for all services a provider renders under Medicaid. Instead, it is based on the total amount that can be paid to an entire class of providers if every provider in that class were paid the Medicare rate for all services it provided under Medicaid.

While many DSH and UPL payments are undoubtedly used to raise the provision of medical services to eligible populations, there is evidence that a large fraction is being combined with IGTs to generate federal payments well in excess of the actual cost of medical services delivered to beneficiaries. Some states retain most of the federal share of DSH payments, with their hospitals receiving little, if any, additional Medicaid funds as a consequence. A survey in 1997 found that only about 40% of total DSH expenditures in that year went to hospitals to cover the cost of caring for Medicaid and uninsured patients. Similarly, a recent survey of state UPL payments revealed that in 2000 more than 80% of gains accrued to states, most of which allocated those gains to their Medicaid general fund. Thus, UPLs were used to finance the state share of new Medicaid payments, earning the state another federal matching payment.

1. For further discussion of the issues covered in this box see Coughlin and Zuckerman (2003) and Rousseau and Schneider (2004)

Highway spending

Highway construction is one of the largest areas of capital expenditures by state and local governments. Total highway expenditures by all levels of government in 2000 amounted to $127 billion, with about 62% spent by state governments and 37% by local governments. Direct federal spending on highways contributed only 1.5% of the total. However, the federal government's role in financing highway expenditures is substantially larger. In 2000, federal matching grants earmarked for highway programmes accounted for $31 billion, or 24% of total highway spending. The principal vehicle through which the federal government finances these grants is the Federal Highway Trust Fund, which is overwhelmingly financed by federal tax receipts on motor fuel. Congress has for some time passed multi-year authorising legislation, which establishes upper limits for funds that can be made available to states for highway funding.[14] About 90% of the funds are allocated to states at the beginning of each federal fiscal year according to a formula provided by law called apportionment; the remaining 10% are allocated by Congress on a discretionary basis throughout the fiscal year. The use of apportioned funds by each state is further restricted by assigning the funds to different programmes, such as interstate highway maintenance or national highway construction. States that incur expenses for qualifying projects are reimbursed afterwards at the federal matching rate which varies across programmes, but is no lower than 80% and oftentimes as high as 95%. When the Federal Highway Trust Fund was created in the mid-1950s, the intention was to provide states with an incentive to create an integrated nation-wide highway network without relying on tolls for its financing. However, this network having been established, the very low price of spending on new highways from the states' perspective creates the risk of excessively high spending on qualifying projects (Roth, 2005). At the least, it seems advisable to reduce the federal matching rate substantially. Alternatively, highway construction and maintenance should be entirely financed at the sub-national level, with states being allowed to charge tolls even on interstate highways in order to have users pay for them.

Education

All state constitutions identify the role of the state government in establishing and operating a public school system that is free to all students. While the exact arrangements differ, state governments have historically issued regulations and laws governing schools and then delegated responsibility for school operation to local governments.[15] Although there is wide variation across states, state and local governments typically share funding responsibilities; this issue will be discussed in the following section. The federal government's role in primary and secondary education has historically been small. Federal government funding in FY 2004 amounted to $38 billion, or 8% of aggregate nation-wide expenditures for primary and secondary schools of about $500 billion, while the state and local share was 83% (Department of Education, 2005). Most of the federal contribution is targeted at economically disadvantaged students under Title 1 of the Elementary and Secondary Education Act (ESEA) of 1965 and at students with disabilities under the Individuals with Disabilities Education Act. ESEA launched a comprehensive set of programmes, including federal aid to disadvantaged children, to address the problems of poor urban and rural areas. The No Child Left Behind Act of 2001 (NCLB) is the most recent re-authorisation of ESEA. Compared to previous law, NCLB drastically expands testing requirements and establishes new accountability requirements that states have to meet in order to remain eligible for federal grants. Concerning testing, the central requirement is to annually test the reading and mathematics proficiency of students in grades 3 through 8 in all public schools, not only those in schools receiving ESEA Title 1 funds, using achievement standards developed by each state and approved by the Department of Education. State accountability requirements include that states: *i*) determine whether all schools, not only Title 1 schools, are making adequate yearly progress (AYP) toward a goal of 100% proficiency according to state academic assessments for all students in 12 years; *ii*) develop annual measurable objectives and intermediate goals; *iii*) monitor whether school districts meet the required AYP goals; and *iv*) collect and

14. The current legislation, the Transportation Equity Act for the 21st Century, was enacted in 1998. Initially, it authorised funding through the end of FY 2003. Since then it has been extended several times, most recently in September 2004 for funding through May 2005. Re-authorisation legislation has been stalled in Congress for some time. An overview of federal-aid highway financing is provided in Federal Highway Administration (1999).

15. Hanushek (2002) surveys a broad range of issues related to publicly funded primary and secondary education, including issues of financing.

report on individual student, school, district and state test data. By January 2002, when NCLB took effect, every state has had an accountability plan approved; however, only about one-third of the states had fully met the standards and assessment requirements for NCLB's predecessor, the Improving America's Schools Act of 1994, which were less prescriptive and interventionist than those of NCLB. While some states were therefore reasonably well prepared to meet NCLB's May 2003 deadline for submitting final accountability plans to the Department of Education for approval, others were not.[16]

The key debate about NCLB in the context of fiscal relations is whether, and to what extent, the law is an "unfunded mandate" in the sense that it imposes financial burdens on state budgets without adequate federal funding. The Administration has argued that there exist no federal mandates in the context of federal programme obligations because states are free to forgo federal grants (Department of Education, 2005). By contrast, the National Conference of State Legislatures (NCSL) has calculated that the $12.3 billion of federal funds provided in FY 2004 for the implementation of NCLB was $9.6 billion less than the amounts for mandated activities that states must implement to comply with NCLB, bringing the cumulative under-funding up to that year to $27 billion (National Conference of State Legislatures, 2004). Considering the various degrees to which states had developed state-wide testing and accountability systems prior to NCLB, the extent of under-funding experienced by states likely differs substantially. As pointed out by the Administration, states do have the option of not participating in NCLB. However, the funds represent a substantial share of vital school spending; the absence of any 'hold harmless provision' that would protect prior funding means that opting out of NCLB would be very costly, and replacing those funds would be politically difficult. In response to an inquiry by the state of Utah, the Department of Education indicated that opting out of NCLB would cost a state not only its entire ESEA Title 1 funds, but nearly as much again in funds for other programmes. In view of the effectively compulsory compliance of states with NCLB's requirements, a task force established by the NCSL recently called for substantially increased federal funding for the law (National Conference of State Legislatures, 2005).

Summary

To summarise this section, current grants from the federal to state governments are all earmarked, but there is considerable variation concerning how specific federal rules are and how open-ended the federal contribution is. Neither revenue sharing nor fiscal equalisation across states exist, leaving differences in the size of TANF block grants and in federal matching rates for Medicaid as the only significant elements of re-distribution across states. Given the substantial degree of autonomy which states have to determine their spending patterns, grants are the main mechanism through which the federal government can influence spending decisions at the state level. But the main argument in the literature for grants serving allocative purposes, namely to correct for spill-overs of benefits across jurisdiction borders, does not seem to explain the existing federal grant structure well: where grants are matching grants, matching rates are often too high (*e.g.* Medicaid and especially highway funding) to purely reflect corrections for spill-overs. Conversely, the recent trend towards earmarked but closed-ended block grants is likely better understood as a means to make greater devolution of programme design to states politically acceptable without giving up the paternalistic motivation of inducing states to provide a minimum level of certain services, rather than as an attempt to adjust matching rates for the purpose of correcting for spill-overs (Inman and Rubinfeld, 1997). In the context of welfare reform, this devolution has contributed to the remarkable decline in caseloads by encouraging experimentation in programme design, and here, as well as in the area of education, tendencies to restrict states' flexibility in adapting programmes to their needs should be resisted or reversed. There are stronger tensions, however, between states' desire to extend Medicaid coverage to certain populations and their ability to finance their share of the resulting costs. This

16. While publicly available information about NCLB's accountability requirements is limited, a detailed survey of states' accountability plans can be found in Erpenbach *et al.* (2003).

raises the question whether coverage of some populations should be taken over entirely by the federal government in view of states' more limited ability to raise funds, which is the topic of the next section.

Promoting the efficiency of public funding

This section examines issues related to taxation at the state and local government levels, and aspects of their interaction with federal taxation.[17] While user charges should, and do, play a large role at the state and local level, taxes are quantitatively more important and raise conceptually more challenging issues and are therefore the focus of this section. Besides general characteristics of a good tax, such as a stable and predictable yield over time, fairness and visibility, two principles are important specifically in a federal context: that the tax base should not shrink over time, and that taxes should not be exported to other jurisdictions. The first of these two principles is often thought to imply that mobile bases, notably capital, should not be taxed at the sub-national level, but as pointed out by Oates and Schwab (1991), it really only implies that *non-benefit* taxes on mobile units should be avoided. It does, however, probably impose limits on sub-national governments' ability to levy progressive income taxes. The undesirability of tax exporting may also militate against non-benefit business taxes at the local level. Most of this section focuses on the main tax bases for state governments: the personal and corporate income taxes and sales taxes. The latter two in particular are increasingly beset by problems that narrow their bases. States therefore face questions how, if at all, to tax businesses and how to adapt their sales taxes to the increase in remote sales and electronic commerce. Issues of local finance, in particular the property tax as a source for education funding, and deductibility of state and local taxes at the federal level are also discussed.

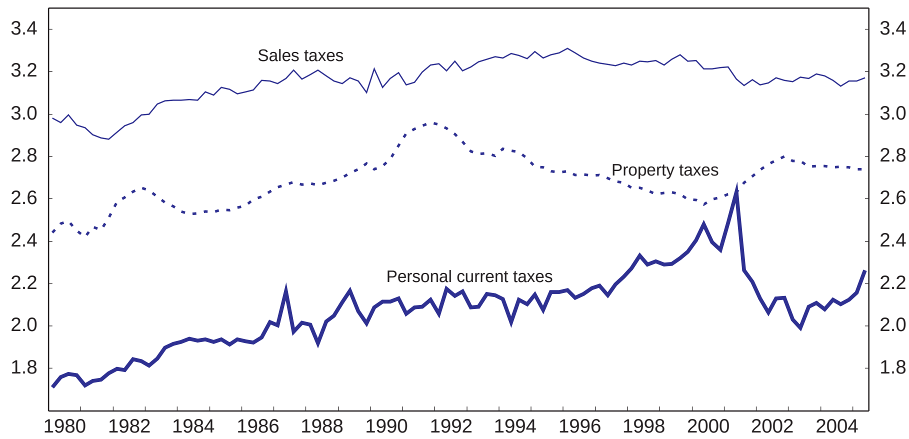
Personal income tax

As mentioned earlier, personal income taxes are the second most important tax revenue source for state governments. Seven states do not have their own income tax, and another two states tax income from dividends and interest only (Annex A2). Of the remaining 41 states, 27 use the federal definition of adjusted gross income, but then apply their own amounts for standard deductions and exemptions. Another ten states go further by also using federal deductions and exemptions, thus linking their definition of taxable income to the federal definition. Only four states that operate an income tax define their tax bases independently of the federal tax code. This widespread reliance by the states on the federal tax base means that changes in federal law affecting the tax base affect state revenues, whereas changes in federal tax rates usually do not. The substantial broadening of the federal income tax base that resulted from the tax reform of 1986 thus produced windfall gains for those states that chose not to reduce their tax rates in line with the federal rate reductions. Since then, the successive narrowing of the federal tax base has had the opposite effect. Similarly, the increase in 2003 of the federal standard deduction for married couples to mitigate or remove the "marriage penalty" resulted in revenue losses for those ten states that use federal deductions and exemptions. States have the option of decoupling their tax code from its federal counterpart, but only at the cost of complicating their taxpayers' income tax compliance. The principal difference between the federal and state income taxes is the more modest progressivity of the latter (see Annex A2). Six states operate a flat tax, and the top bracket of another 22 states starts below \$50 000. States' top marginal tax rates are clustered in the range of 5 to 7%, with six states having top marginal tax rates below 5% and 13 states above 7%. Even where states' top tax bracket starts only at high income levels, the degree of progressivity is quite small, with typically less than 1 percentage point difference between the top rate and the rate applying at a taxable income of \$50 000. The limited progressivity of state income taxes is consistent with the view that states' capacity to impose progressive income taxation is proscribed by taxpayer mobility (Feldstein and Wrobel, 1998).

17. This section draws in many parts on Snell (2004b). For a survey of issues in the design of tax policy in federal countries see Inman and Rubinfeld (1996).

Certain changes in the composition of personal income have affected, and are likely to continue to affect, the size and reliability of the income tax as a revenue source. There was an enormous run-up in state and local income tax revenues during the late 1990s, despite tax rate reductions by a number of states, followed by the largest decline during the post-war period (Figure 8). This volatility in income tax receipts was largely driven by surprisingly strong capital gains during the late 1990s, reinforced by a shift in compensation practices towards performance-related compensation such as stock options, which subsequently dried up. In conjunction with the tax and expenditure limitations discussed below, this instability in revenues led to acute problems in state budgeting, necessitating reductions in core services just as the economy weakened. A longer-term problem, largely driven by increases in the cost of health care, is the shift within personal income from taxable to tax-exempt forms of income, notably in the form of employer-sponsored health insurance. As shown in Table 4, the share of income that is partly or

Figure 8. **State and local tax revenues**
Per cent of GDP



Source: Bureau of Economic Analysis.

Table 4. **Sources of personal income, 1960-2004**

Year	Total personal income (% of GDP)	Percentage of total personal income			
		Net earnings[1]	Dividends, interest and rent	Other labour income[2]	Transfer payments
1960	78.2	78.7	13.4	3.5	6.2
1970	80.8	75.1	13.7	5.0	8.9
1980	82.7	67.2	16.0	8.0	12.1
1990	84.1	64.3	20.0	7.7	12.2
2000	85.9	65.9	18.2	7.2	12.9
2004	82.4	64.7	16.0	9.1	14.5

1. Includes wages, salaries and proprietors' income.
2. Employer contributions for employee benefits other than government social insurance.

Source: Bureau of Economic Analysis.

completely tax exempt (employer contributions for employee benefits and transfer payments) rose considerably over the period 1960 to 2004. Assuming a stable ratio of personal income to GDP, as has been approximately the case since 1980, any further shift towards tax-exempt income forms would imply a reduction in the size of the income tax base relative to GDP.

Corporate income tax

In contrast to the personal income tax, the corporate income tax plays a much smaller role at the sub-national level, and one that has been steadily declining over recent decades. Corporate income taxes currently exist in 46 states; Alaska, Florida and New Hampshire have corporate income taxes but no personal income tax.[18] From a peak of nearly 10%, the share of the corporate income tax in state tax revenues has declined to just over 5% in 2002. Part of this trend is explained by successive reductions in tax rates; top marginal tax rates in most states are currently between 6 and 10%. However, the use of corporate income tax exemptions as a development tool by states and the greater availability and more aggressive use of tax shelters by multi-state companies have also contributed to the decline. Tax credits or exemptions have been used on a categorical basis (such as credits for research and development expenses enacted in California and Texas in 1999) or as a tool to attract specific companies to locate in a particular state. The extent to which multi-state companies' income is subject to income taxation in a particular state is determined by apportionment formulas. For some time, the standard among states was to weigh equally the share of a company's property, payroll and sales in a state to arrive at the share of its income subject to taxation in the state. Recently, states have used variations in the weights on these three factors to grant favourable treatment to companies relocating to their state. Moreover, the use of tax shelters has been facilitated by Supreme Court decisions requiring a minimum level of activity, or "nexus", of a corporation in a state before it is subject to the state corporate income tax. As a result, federal law prohibits a state from levying corporate income taxes on a company that sells goods in the state if the company's presence in the state is limited to salespeople who solicit sales that are approved and delivered from outside the state. Legislation currently before Congress would further limit states' ability to collect income taxes from out-of-state companies (Mazerov, 2004). In view of the distorting nature of corporate income tax competition among states, the successive narrowing of its bases and its high administrative cost, states should consider replacing it by a more efficient form of business activity taxation, such as the value-added tax discussed below.

Sales taxes

Sales taxes are the single most important form of own-source revenue for states and are also of some importance for local governments. About two-thirds of sales tax receipts are derived from general sales taxes, with the remainder being selective sales taxes on specific items, most importantly motor fuels. All but five states levy sales taxes, and one of those five states (Alaska) levies sales taxes at the local level (see Annex A2). Thirty-two of the other 45 states have both state and local sales taxes.[19] Of those states that have a sales tax, combined state and local rates range from 4 to 11%. As shown in Figure 6, state and local sales tax revenues rose slightly in relation to GDP during the 1980s but have declined over the past ten years. However, this relative stability of sales tax revenues masks divergent developments in the size of the tax base and tax rates. Whereas tax rates have trended up, the tax base narrowed substantially from 1980 to 1995 (and has probably continued shrinking since then), mostly due to a shift in consumption

---

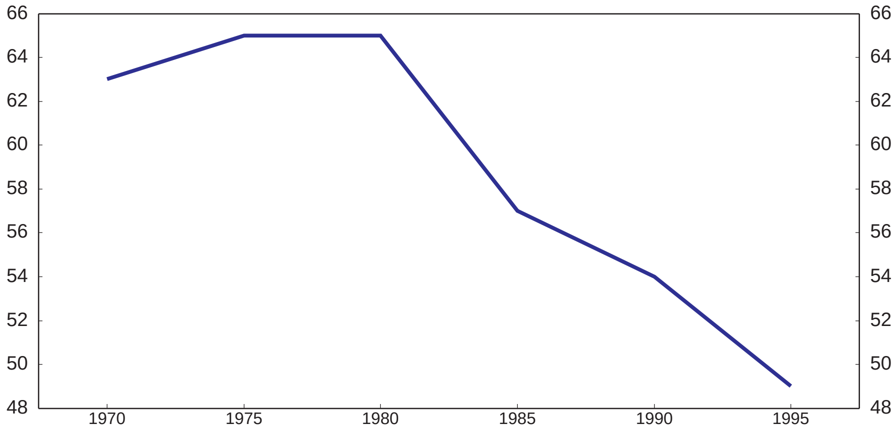
18. This count follows the Census Bureau practice of treating the Michigan single business tax as an income tax but not the Texas franchise tax of 4.5% of earned surplus.

19. The available data indicate that more than 7 500 jurisdictions levy a sales tax. However, as of 1994, state and local tax bases were virtually identical within each of the then 29 states that administered the tax for local governments. Even in the states that allow local administration, local governments tend to follow the broad outlines of the state tax bases (Congressional Budget Office, 2003).

patterns from goods towards services, many of which are exempt from the sales tax (Figure 9). Much of the shift between services and goods has been accounted for by increased medical spending, which roughly tripled as a share of consumer spending between 1960 and 2002. Efforts by states to mitigate the regressivity of the tax by reducing or eliminating sales tax on food for home consumption are another important reason for the narrowing of the tax base. Between 1996 and 2004, seven states either reduced or phased out sales tax on food, leaving only 14 states that fully tax food. Moreover, because the sales tax is intended to be a tax on final consumption, increasingly such items as agricultural and business equipment, energy and data processing services have been exempted.

Issues of federalism have arisen in the context of the taxation of goods and services purchased out-of-state. All states that levy a sales tax also have a statutory use tax, which is the equivalent of sales tax to be paid by users of goods purchased out-of-state. Enforcement of this tax would be simple if states could require remote sellers to collect use tax on their behalf, but the Supreme Court has repeatedly ruled that states cannot force remote sellers to do so as long as these lack “substantial nexus” with the state, on the grounds that compliance of such sellers with up to 45 states’ sales tax codes would pose an unjustifiable burden on interstate commerce. The use tax can therefore be enforced at acceptable cost only for items that have to be registered, such as cars and boats. The issue of taxing out-of-state purchases has gained in importance with the expansion of mail-order businesses and more recently the advent of Internet retailing. Estimates of uncollected taxes from remote sales in 2003 range from $2.5 billion to $20.4 billion (General Accounting Office, 2000). However, the Supreme Court also ruled that Congress has the power to permit states to require remote sellers to collect use taxes. A federal advisory commission established to study the related question of taxing the access charges of Internet providers was unable to reach the required two-thirds majority to issue official findings (Advisory Commission on Electronic Commerce, 2000), but the “majority policy proposals” forwarded by the Commission to Congress included the suggestion to allow the collection of use taxes on remote sales provided state and local governments met certain requirements for simplifying and standardising their tax bases or rates.[20]

Figure 9. **State sales tax base**
Per cent of state personal income



Source: Mikesell, J. (1997), "State Retail Sales Taxation: A Quarter-century Retrospective", State Tax Notes, 30 June.

20. See McLure (2002) for a discussion of alternative reform proposals for the state sales taxes. In regard to e-commerce, in October 1998 Congress passed the Internet Tax Freedom Act (IFTA), which imposed a three-year moratorium on existing taxes for Internet access and prohibited “multiple and discriminatory” taxes on e-commerce but not generally applicable taxes. These provisions have been extended several times, most recently until October 2007 by the Internet Tax Nondiscrimination Act of December 2004.

These developments have sparked a remarkable voluntary effort, the Streamlined Sales Tax Project (SSTP), by 42 of the 45 states that levy a sales tax and the District of Columbia.[21] The objective of SSTP is to encourage businesses to voluntarily collect use taxes by harmonising definitions and by simplifying the tax rate structure without imposing uniform sales tax bases or rates across states. By November 2002, 34 states and the District of Columbia had agreed on the administrative aspects of such a system and submitted the Streamlined Sales and Use Tax Agreement (SSUTA) to states for adoption by their legislatures. By early 2005, legislation bringing state sales and use tax statutes into conformity with SSUTA had become law in 22 states, and voluntary compliance of businesses will start in October 2005. The main provisions of SSUTA are that states jointly define the items included in major categories of goods and services that are subject to sales taxation, with each state composing its base from among those categories. Local governments that levy sales taxes have to use the same base as the state's. All items in a state's tax base are subject to the same tax rate, except for food and drugs to which a different rate may apply. Only one local rate is permitted, and all local sales taxes are to be administered by the state. SSUTA also establishes uniform rules for the frequency of tax filings and for changes to tax bases and rates. An important aspect of the agreement was the establishment of certified service providers (CSPs) with whom remote sellers could choose to contract to handle all the seller's sales and use tax functions, including filing all tax returns. Whether vendors would deal with their sales and use taxes on their own or through a CSP, they would use specifically designed and certified software except for large sellers who would be allowed to use their own software provided it had been approved by the states. To induce sellers to participate, all CSPs' costs would be paid from state tax revenue. Ultimately, it is hoped that the system will demonstrate how tax simplification combined with shared software can reduce compliance costs and thereby increase the likelihood of Congressional action to require remote collection.

Although simplification of state sales taxes is an important step in the right direction, the inefficiencies inherent in the sales tax are such that state governments should consider replacing sales taxes by a broad-based value-added tax. As discussed above, the intention of the sales tax to be a tax on final consumption is in practice thwarted by the fact that many goods and services are used both as business inputs and in final consumption. The problem of tax cascading is therefore inevitable, whereas a VAT sidesteps this problem and by implication makes it unnecessary to arbitrarily exclude most services from the tax base. Introducing a VAT would lead to a substantial broadening of the tax base and would therefore allow an equally substantial reduction of tax rates and deadweight losses. A VAT might also be an efficient replacement for the corporate income tax, as it is more neutral with regard to business decisions than certain other business taxes, for example by applying to all firms regardless of their organisational form. A VAT could be either in the form of an "operational" VAT, in which businesses calculate, and are taxed on, the value added in their production process, or a transactions-based, or "invoice-credit", VAT in which businesses are liable for the full VAT on all their sales but can deduct any VAT paid on its purchases from suppliers. An operational VAT is likely simpler and less costly for a state to administer than the corporate income tax (Snell, 2004b). The value added of multi-state businesses would be taxed using the same apportionment formula as under the current corporate income tax. Replacing the corporate income tax with a VAT would shift the emphasis from ability to pay to the benefits principle of taxation, as the benefits that firms receive from state and local expenditures are presumably better captured by their less volatile value added than by more volatile profits. However, if a VAT were chosen to replace a state sales tax, it would be intended as a consumption tax, not a business tax. Although it is unclear where the final incidence of an operational VAT would fall, a state-level operational VAT might be problematic as a consumption tax because it would be incompatible with the destination principle, which holds that consumption should be taxed depending on the location of consumption, not of the purchase.[22] An invoice-credit VAT can be

21. This paragraph draws on Congressional Budget Office (2003). Further information about SSTP is available at http://www.streamlinedsalestax.org.

22. Differences in tax rates among states can lead to distortions in economic behaviour and deadweight losses whether the origin or the destination principle is used. If the origin principle were used, businesses and

structured so as to implement the destination principle, and the European Union experience suggests that concerns in the literature that such a system would be excessively costly and complicated in a federal setting, are exaggerated. One interesting aspect of the SSTP discussed above is that it suggests how some of the information exchange necessary for implementing a state-level invoice-credit VAT can be achieved at acceptable cost through the combination of computer technology and some tax system simplifications without unduly restricting the fiscal autonomy of state and local governments (Box 2).

Box 2. **Implementing a sub-national VAT and the destination principle**[1]

A number of federal countries use the VAT as a major tax source, but in most of them the VAT is a federal tax which either accrues entirely to the federal government or is shared with sub-national governments according to some re-distribution formula. A shared federal-state tax is unappealing in the US context, where state fiscal autonomy is constitutionally enshrined and political support for revenue sharing has historically been low. Two principal alternatives exist for dealing with inter-state (or international) trade under an invoice-credit VAT so as to respect the destination principle, which holds that factors of production should be taxed where they are used and final goods and services where they are consumed, not where they originate. The first, called the deferred-payment system, zero-rates sales to *registered traders* in another state from VAT in the state of the vendor. The importing trader, however, receives no VAT credit on the imported good either and is therefore liable to pay VAT at the rate applicable in his state on the full value of the import. VAT is therefore collected on imports only when they are resold or incorporated into goods sold by the importing firm. This is very close to the current arrangements within the European Union (Keen and Smith, 1996). The alternative is the clearing-house method under which VAT is charged on exports by the exporting state, with a credit allowed for this VAT by the importing state. Revenue accounts then need to be balanced between states, but doing so requires either transaction records or has to be based on some form of consumption statistics. In practice, the deferred-payment system, which relies on private-sector accounting subject to VAT audits, appears to be the more practical solution.

The issues that arise because of inter-state sales to *final consumers* are essentially the same as those discussed in the main text in the context of the sales tax. There are two conceptually different issues, one being remote sales such as mail-order sales and electronic commerce, the other being cross-border shopping. The problems arising from remote sales can be addressed in the same manner as currently developed under the SSTP. In effect, for remote sales to final consumers taxation would follow the clearing-house system, with vendors withholding the VAT applicable in the state to which the good is being shipped. This principle could also be applied to electronic commerce if a physical shipping or billing address is known. Since the abolition of tax-related border formalities in the European Union in 1993, for example, firms engaged in remote selling must charge and remit VAT according to the destination principle once their turnover exceeds thresholds set by the member states. Similarly, the purchases of firms that are VAT-exempt because of their small size are subject to the destination principle once they exceed thresholds set by the member state into which they import. By contrast, for cross-border shopping up to what are deemed, according to member states' guidelines, reasonable amounts for personal use, the origin principle applies. The continued existence of widely divergent VAT rates across member states suggests that concerns about revenue losses due to cross-border shopping are limited. Finally, for purchases of digital content, at this point there seems to be no solution for imposing the destination principle except for sales to registered traders. Within the European Union, the origin principle is applied to such sales, which provides vendors of digital content with an incentive to locate in the country with the lowest VAT.

1. McLure (2002) analyses in greater depth some of the issues discussed in this box. Bird and Gendron (2001) provide an overview of experiences with the VAT in federal countries, including issues arising in the context of separate VATs at the federal and sub-national levels.

---

consumers would have an incentive to incur additional shipment costs by purchasing inputs or consumption goods in low-tax jurisdictions. If the destination principle were used, tax differentials could affect location decisions of businesses and households. Moreover, an invoice-credit VAT would raise the same questions of possible transfer price manipulations within multi-state firms that arise nowadays in an international context.

Property taxes and school finance

Property taxes are the main tax revenue source of local governments, and in 2001-02 they accounted for 45% of local governments' own-source revenues and 25% of their total revenues. By contrast, they represent less than 2% of state tax collections. The property tax is readily perceived as a benefits tax that funds primary and secondary education and other local government services whose benefits accrue to local residents. It also has the advantage of being little affected by macroeconomic fluctuations, which is important in view of local governments' limited ability to borrow, although it is not immune to fluctuations in real estate values. Property taxes are assessed by county, municipal and school district governments. Tax administration varies considerably across states, partly reflecting variations in local government structures more broadly. For example, school districts are in some states administered by county governments, which may then impose property taxes both for their own purposes and for those of the school districts. Although the property tax is therefore essential to local self-government, state legislatures play an important role in deciding on tax design and exemptions. Important examples of state involvement in property taxation are the so-called homestead exemptions, by which states mandate certain exemption amounts of the value of a property from taxation, often targeted at taxpayers on the basis of age or disability; the establishment of standards and rules for property value assessments; and the deductibility of property tax payments in the calculation of state income taxes.

More importantly, two developments over recent decades have weakened local fiscal autonomy. First, although locally-raised property taxes play a major role in financing primary and secondary education, school financing is at the same time the most important case of redistribution across jurisdictions, specifically across public school districts within states. Beginning in the 1970s, the supreme courts in several states have ruled the existing extent of financing school districts through their own property taxes as unconstitutional because the pronounced differences in the size of the tax base across school districts would imply a violation of constitutional equity principles.[23] In response, states' involvement in financing school districts, primarily through foundation aid, increased substantially.[24] Based on data from the five-yearly Census of School System Finance, the share of state funds in total school district revenues increased from 38% in 1972 to 49% in 2002, whereas over the same period the share of local funds declined from 53% to 43%. Some states have in the process centralised the property taxes designated for school districts. For example, California not only increased foundation aid in response to a court decision that its school finances were unconstitutional, but it also introduced limits on school districts' revenues. Initially, each district's revenue limit was based on the sum of its property tax revenue and state aid in 1972-73. In subsequent years, the revenue limits of low-spending districts were allowed to increase faster than the limits of high-spending districts. In another case, in 1994 voters in Michigan adopted a proposal that replaced a substantial portion of local property taxes by an increase in the state sales tax and a state-wide property tax for education combined with a formula that equalised funding

23. In the landmark case Serrano v. Priest, the California State Supreme Court ruled in 1971 that school districts' reliance on property tax finance violated the 14th amendment of the US constitution that requires equal treatment of individuals under the law. While the US Supreme Court ultimately ruled in 1973 that the state funding formula did not violate the federal constitution, subsequent decisions in the Serrano case and similar ones in a majority of states were argued on the grounds that the method of funding violated either equal protection clauses or education clauses of individual state constitutions. As of 1996, the supreme courts in 43 states had heard cases on the constitutionality of school finance systems. Systems were overturned in 16 cases and upheld in 20, with cases pending in the remaining seven (Murray *et al.*, 1998).

24. Under a foundation plan, the state sets a foundation level which equals what it views as the cost per pupil of the minimum acceptable level. It then sets a minimum uniform property tax rate and offers each district a per-pupil grant equal to the difference between the foundation level and the tax revenue the district would raise if it set the minimum tax rate. A foundation plan is therefore designed to fill the gap between need measured by the foundation level and the district's ability to fund education.

among school districts. In each case, local governments essentially lost control over school finances, even though they continued to contribute through property taxes. The evidence suggests that court-ordered school finance reform has substantially reduced within-state inequality in spending per pupil, although this has been sometimes achieved by reducing spending in the wealthier districts (by "levelling down") rather than by raising spending in the poorest districts ("levelling up") (Hoxby, 2001). However, this reduction in *within-state* inequality has only a limited impact on overall inequality given that about two-thirds of total inequality in spending per pupil among school districts nationwide is due to inequality *between* states (Murray *et al*., 1998). The second development substantially reducing local fiscal autonomy was the widespread adoption, by state legislatures or through referenda, of tax and expenditure limitations for local governments in the aftermath of the "tax revolts" of the late 1970s and early 1980s. These limitations, which will be discussed in the following section, reflect the problem that the property tax, which in the literature is often considered to be the best local tax because of the link between property ownership and locally provided services, is at the same time highly unpopular because of its visibility and the difficulty to administer it in a horizontally equitable fashion (Bird, 1993).

Federal deductibility

Before turning to fiscal rules, one link between the federal and sub-national level affecting taxes in general deserves mention, namely the deductibility of state and local taxes from federal taxable income. Historically, federal tax law has allowed taxpayers who itemise their deductions to deduct state and local property, income and general sales taxes on their personal income tax returns. The federal tax reform of 1986 disallowed state sales deductions, but continued those for other state and local taxes. The deductibility of general sales taxes was re-instated for two years in 2004, with the restriction that taxpayers must choose whether to itemise their state income or sales tax. The deductibility of state and local taxes is a major tax expense at the federal level; deductibility of state and local personal income taxes reduced federal revenues in 2004 by about $45 billion (0.4% of GDP), and deductibility of property taxes reduced them by $20 billion (0.2% of GDP). The Administration's proposal in 1985 for the tax reform recommended the complete abolition of deductibility. Apart from affecting taxpayers directly by reducing the progressivity of the federal income tax, deductibility reduces the marginal cost of additional revenues from deductible sources, which can potentially affect state and local government behaviour in three ways.[25] By reducing taxpayers' combined federal and sub-national tax liability, it could induce state and local governments to set higher tax rates than they otherwise would; it could induce them to shift their tax structure in favour of deductible sources; and, by reducing the effective price of state and local expenditures, it could induce these governments to increase them. The strength of these effects depends on the marginal federal income tax rate and hence on the level of (average) income in a jurisdiction.[26] The empirical evidence on these effects based on cross-sections of local governments is mixed but on balance suggests that sub-national governments' responses to changes in the tax price are modest.[27] Nonetheless, even though the induced distortions of state and local fiscal choices do not appear to be large, there is no

25. Based on a sample of 38 000 federal income tax returns in 1982, Feenberg and Rosen (1986) estimated that deductibility of state and local personal income taxes reduced the average federal tax rate from 15.4% to 14.1%.

26. Whose income is relevant for the strength of the effect depends on the maintained hypothesis about political decision-making. In the median-voter model it is the median voter's income, while in the bureaucratic choice, dominant party model used, for example, in the analyses referred to in the text, it is the average community income.

27. Inman (1985) finds that jurisdictions' choice of tax instruments is unresponsive to the tax price. By contrast, Holtz-Eakin and Rosen (1988, 1990) report a significant negative elasticity. Courant and Gramlich's (1990) analysis of the effects of the 1986 federal tax reform on state and local fiscal behaviour supports the view that governments' responses to changes in the tax price are negligible.

compelling argument for continuing to subsidise sub-national expenditures in this manner, whereas there is a strong case for broadening the base of the federal income tax.

Summary

The personal income tax has in the past been the states' most reliable tax source in that its base has been growing in line with expenditures. Moreover, the tax base does not seem overly mobile, as evidenced by the persistent differentials in income tax rates across states, although mobility probably limits the degree of progressivity; nor is the tax exported to any significant extent. Both of these are desirable properties in a federal context. The state corporate income tax, by contrast, suffers from high mobility of the tax base, which has led to a highly distorting use of this tax as a development tool. While its yield is shrinking, its administrative and compliance burdens are high. It constitutes a case of non-benefits taxation of a mobile unit, which should be avoided. The sales tax scores reasonably well on the two criteria mentioned above; in particular, the extent of cross-border shopping appears limited, suggesting only moderate mobility of the base, but concerns about remote sales are more acute. Its main drawback is the inability to clearly distinguish between sales to businesses and those to final consumers. In consequence, bases are undesirably narrow, and yet cascading is probably pervasive. A feasible and efficient replacement for both the corporate income tax and the sales tax would be the VAT. Finally, the property tax, which in the spirit of the benefits principle is often regarded as the ideal local tax, is costly to administer in a horizontally equitable fashion due to difficulties involved in valuing properties, and has therefore sparked strong resistance. This has forced local governments to rely more heavily on grants from their state governments and has weakened their fiscal autonomy.

Fiscal rules and macroeconomic stabilisation

Fiscal discipline at the sub-national level is an important concern in any decentralised public sector. Excessive deficits by state and local governments can adversely affect other constituencies if they lead to bailouts or other fiscal transfers by higher levels of government. Both bailouts and transfers soften sub-national governments' budget constraint and may lead to inefficient resource allocations by those governments.[28] At the same time, designing fiscal rules that do not excessively weaken state and local governments' autonomy and that leave them with an adequate capacity for macroeconomic stabilisation is a challenging task. This section reviews the two main kinds of fiscal rules in operation at the state and local level, balanced budget requirements and tax and expenditure limitations.

Balanced-budget requirements

All states except one have some kind of constitutional or statutory balanced-budget requirement (BBR).[29] State governments practice fund accounting, which means that all revenues are designated to a particular fund and every expenditure item is paid for by a particular fund. A state budget may, for example, consist of a general fund, a capital fund, an insurance trust fund, a public employee retirement fund and a budget stabilisation or "rainy day" fund. The general fund, sometimes also referred to as the operating budget, receives most tax and fee collections and interest income. It finances expenditures such as wages and salaries, aid to local governments, health and welfare benefits and other current expenditures. By contrast, state capital funds finance expenditures such as highways and buildings and are largely financed by debt as well as state motor fuel taxes. Most federal grants are earmarked and therefore do not finance general fund spending. More generally, the extent to which states create earmarked trust funds

28. See Inman (2003) for an analysis of the determinants and consequences of bailouts of sub-national governments as well as a survey of the historical experience in the United States.

29. General information on BBRs can be found in Snell (2004a). Details about each state's BBR are compiled in National Association of State Budget Officers (2002).

outside of the general fund with dedicated revenue streams varies considerably. While BBRs apply in almost all states to the general fund, in many states they apply to other funds as well. However, capital fund spending is often determined by long-term contracts and can be financed by debt. By contrast, general fund expenditures are mostly appropriated each fiscal year. The focus of "balancing the budget" therefore tends to be on the general fund, even though it is usually responsible for only about half of total state expenditures.

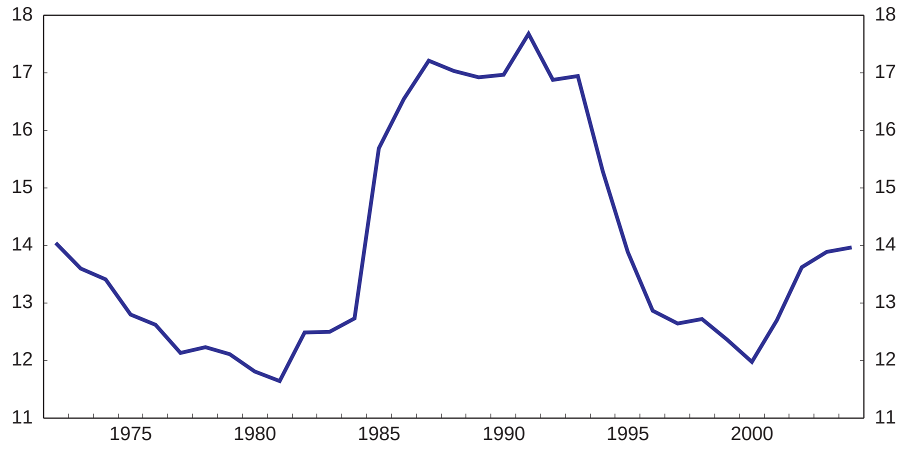
The precise nature of the requirements varies considerably across states (see Annex A3). BBRs are either directly approved by voters and thus part of the state's constitution, or by a state's legislature, in which case they are statutory. The weakest requirement, currently in force in 45 states, is that the government must submit a balanced budget to the state legislature. A stronger requirement, in place in 41 states, is that the legislature has to pass a balanced budget. Thirty-one states require that the governor sign only a balanced budget, and 43 states assign the power of a line-item veto to the governor, granting the governor flexibility to negotiate with the legislature without vetoing the entire budget. The most stringent aspect of BBRs concerns whether the budget has to be balanced only at the time of enactment, or whether it has to be balanced at the *end* of the fiscal year or (in states with bi-annual accounting) biennium. Thirty-eight states have a prohibition against carrying a deficit forward into the next fiscal year. To achieve *ex post* balance, revisions to the budget during the course of the fiscal year are frequently necessary. The legislature and the governor can jointly revise the budget at any time, but many state legislatures are not in session throughout the year. Therefore, many state constitutions allow governors or special commissions to revise budgets after they have been enacted to bring expenditures in line with revenues. The prohibition against carrying forward a deficit is enforced by restrictions on the issuance of general obligation state debt. Unlike at the federal level, issues of general obligation debt require at least the approval of the state legislature, and in many states voter approval. Such debt issues are extremely rare, with California's $15 billion bond issue, approved by voters in March 2004, the most recent example. Nonetheless, debt issuance by state and local governments, even if for purposes other than general obligations, is quantitatively important, and the increase in debt outstanding over the recent period of economic weakness suggests that the BBRs do not completely prevent sub-national governments from using debt finance in times of severe budget shortfalls (Figure 10)**.**

The effectiveness of BBRs, and the important role of budget stabilisation funds, is illustrated by the actions taken by states during their recent fiscal crisis that started in state fiscal year (SFY) 2002.[30] State general fund revenues (including transfers from budget stabilisation funds) declined from $495 billion in SFY 2001 to $464 billion in SFY 2002. Faced with such a dramatic revenue shortfall, states had several options for balancing their budgets: increasing revenues (either by raising tax rates or user fees or by broadening tax bases), reducing expenditures, drawing down reserves accumulated in the general or budget stabilisation fund, borrowing against surpluses in other budget funds, and securitising future revenues such as tobacco settlement monies.[31] States employed all of these options, but to varying degrees. One notable feature concerns the timing of actions: because revenue increases take time to enact and to implement, initially states relied heavily on their accumulated reserves, which fell from a peak of nearly $50 billion, or 10.4% of state general fund expenditures in SFY 2000, to $18 billion, or 3.7%, in SFY 2002. By contrast, legislated state revenue reductions, which had averaged $5 billion per year from

30. The aggregate state fiscal variables reported in this paragraph are taken from various issues of the semi-annual *Fiscal Survey of States* published by the National Association of State Budget Officers. Almost all states' fiscal years run from July to June.

31. Another source of flexibility in the operating budget is adjustment in the "cash capital" account. Many localities fund a portion of their capital expenditures in the operating budget. These expenditures can be moved to the capital budget, and hence debt financed, if the operating budget comes under pressure.

Figure 10. **State and local government gross credit market debt**
Per cent of GDP



Source: Board of Governors of the Federal Reserve System, Flow of Funds Accounts.

1997 to 2000, continued in SFY 2001 at the same pace, and only by SFY 2003 did revenue changes add $8 billion to general fund revenues. Even then, revenue increases were rarely broad-based tax rate increases for the main taxes (personal and corporate income and sales taxes), and more often increases in alcohol and tobacco taxes or in fees, notably tuition fees for higher education (Holahan *et al.*, 2004). States also employed a number of "one-off" measures such as borrowing from other trust funds. Yet most of the adjustment to the collapse in revenues came in the form of expenditure reductions, with general fund expenditures declining from $506 billion in SFY 2001 to $488 billion in 2002 before returning to their 2001 level in SFY 2003. While initially these reductions focused on reduced support for higher education and for aid to localities, later they shifted to reductions in state workforces and their salaries as well as to cuts in health spending out of own sources (in part by using the Medicaid maximisation strategies discussed in Box 1).[32]

The impression, based on the experience during the recent downturn, that BBRs force states to adjust policies so as to keep general fund revenues and spending in balance is confirmed by econometric analysis. Using budget data from a panel of 47 states for the period 1970 to 1991, Bohn and Inman (1996) find that states with BBRs requiring *ex post* balance have on average significantly higher general fund surpluses than states with weaker BBRs. Consistent with the recent experience, they find that these surpluses are mainly accumulated through cuts in spending, not through tax increases. While BBRs thus contribute towards achieving their stated goals, the evidence suggests that they do so by inducing undesirably strong pro-cyclical fluctuations in core expenditure areas. While state spending on primary and secondary education was largely unaffected in recent years, states had to substantially reduce higher education spending and would have had to cut health spending considerably more had it not been for a temporary increase in the federal matching rate for Medicaid in 2003 as well as the states' aggressive use of the questionable Medicaid maximisation strategies discussed earlier. To avoid volatility in core spending in the future, states should therefore regard 10% of general fund expenditures as a lower bound for the reserves they should aim to rebuild and maintain during expansions. By contrast, 35 states currently have policies in place that cap their rainy day funds at 10% or less of general fund expenditure, with these policies appearing to have restrained the growth of these funds during the 1990s (Zahradnik, 2005). In

32. The local sector was on the whole much less affected by the economic downturn, as property tax revenues increased in response to the strong housing market (Figure 6).

some states the accumulation of adequate reserves is furthermore hampered by some form of the tax and expenditure limitations discussed next. Expanding the size of reserves would be even more important if state governments were to take on increased responsibility for cyclically sensitive spending such as Medicaid, as would be the case under proposals to turn Medicaid into a block grant.

Tax and expenditure limitations

While BBRs effectively restrain sub-national governments' ability to finance general obligation spending by debt, they have no direct effect on the size of the budget. Limiting the size or the growth rate of revenues or expenditures is the objective of tax and expenditure limitations (TELs). TELs are imposed by states, either constitutionally through referenda or by state legislatures themselves. They were initially introduced in the 1880s as a restraint on local governments at a time when a number of states granted "home rule" to their local governments and imposed upper limits on property tax rates. The latest wave of TELs that started in the late 1970s (the so-called "tax revolts") differed from earlier ones in that the TELs imposed limitations on *state* budgets as well as those of their local governments, and that they went beyond limitations on property taxes and instead placed limits on the growth rates of state and local governments' general fund revenues or expenditures.[33] By 1982, TELs on state budgets had been enacted in 17 states, and by 2001 this number had risen to 31. Like BBRs, TELs vary considerably in their stringency. In many states, the growth rate of expenditures or revenues is limited to that of state personal income. Only few states go further and mandate that expenditures or revenues may grow no faster than the state's population growth and inflation combined, thus holding *per capita* expenditures or revenues constant in real terms (see Box 3 for the discussion of Colorado's TEL as an example). As with other fiscal rules, some TELs contain loopholes, such as allowing state governments to devolve functions to local governments without adjusting the size of the expenditure limit. Finally, some states' TELs require governments to immediately return to taxpayers any surplus revenues. In general, TELs passed by voter initiatives tend to be more stringent than those enacted by legislative vote (New, 2001).

There is some evidence that the effectiveness of TELs in reducing the rate of growth of state and local budgets depends on the details of their formulation. In particular, TELs that limit growth of expenditures to population growth plus inflation, or that require states to immediately refund any revenues in excess of allowed expenditures, appear to reduce per capita state and local government spending significantly (New, 2001). Thus, as in the case of BBRs, stronger formulations of TELs appear more effective in achieving their stated goal. However, in the case of TELs there is no economic foundation for the stated goal, implying a greater risk of harmful outcomes. One objection is that there is no clear rationale why government spending per capita should remain constant in real terms, and therefore decline as a share of income as long as real per capita income is growing. In fact, insofar as government provides services for which demand is rising over certain income ranges, such as education, an argument can be made that, at least within those ranges, government spending per capita ought to be increasing with income. Moreover, a simple formula such as "population growth plus inflation" does not take appropriate account of demographic changes, such as an increase in the share of school-age children or the elderly who demand more government-provided services, nor does it take account of the fact that prices in many areas of government spending, notably health, are rising faster than the price index to which the formula is tied (Bradley *et al.*, 2005). Another major weakness with any limitation formulated in terms of growth rates is that such rules induce rachet effects, by which declines below the allowable growth rate of revenues or expenditures during periods of fiscal stress imply that revenues or expenditures shift permanently to a lower path. Finally, TELs have greatly emasculated the fiscal autonomy of local governments and may

33. For a recent overview of state and local TELs see Mullins and Wallin (2004). The most recent comprehensive source on local government TELs is Advisory Commission on Intergovernmental Relations (1995). Since ACIR's discontinuation in 1996, information on local government finance has become sparse.

therefore be leading to a more centralised public sector that is less responsive to local preferences (Bish, 2002). A reformulation of TELs that replaces formulae such as "population growth plus inflation" by rules based on careful analysis of the determinants of desired government spending, that avoid rachet effects and respects local autonomy is likely to improve welfare.

While state and local governments issue general obligation debt only infrequently, they are more regularly issuing debt for funding capital spending, oftentimes secured by earmarked revenue streams. There is some evidence that the stringency of fiscal rules affects the interest rates that governments have to pay on their debt and that therefore market discipline reinforces the discipline imposed on governments by constitutional or statutory limitations. Using data on state government bond yields over the period 1973 to

Box 3. **Fiscal rules in Colorado: TABOR**

Arguably the most stringent set of fiscal rules at the sub-national level is that currently in operation in the state of Colorado. In 1992, its voters approved the Taxpayer's Bill of Rights (TABOR), a constitutional amendment designed to restrain the growth in state and local government revenues and expenditures. Like many other TELs, TABOR combines restrictions on revenue collections and on spending growth. Specifically, state government revenues are not allowed to grow faster than the sum of the growth rates of the regional consumer price index and state population, and local government revenues cannot grow faster than inflation and the value of net new construction (inflation and school enrolment in the case of school district government). Revenues collected in excess of these limits must be returned to the taxpayers in the following fiscal year by any reasonable means, unless voters approve of the government keeping or spending these revenues. Any new taxes, tax rate increases, assessment ratio increases, extensions of expiring taxes or any tax policy change leading to a revenue gain require voter approval. TABOR also locked into place a 1991 state statute that limited growth in state general fund appropriations to 6% over the prior year's appropriations. Since this limit is based on the prior year's actual, as opposed to allowed, appropriations, any shortfall in appropriations below the allowed level (for example during times of revenue shortfalls) effectively reduces spending for all future years (the "rachet effect"). Under TABOR, this statute and similar ones at the local level cannot be weakened without voter approval.

A recent study (Bell Policy Center, 2003) compared Colorado's experience to that of 10 peer states with similar economic characteristics but different TELs and found that TABOR indeed seemed to restrain the growth in government spending relative to its peers. Moreover, during the course of the decade Colorado's tax burden, defined as total tax collections as a share of state personal income, declined in comparison to others, with Colorado now ranking 43rd as compared to 28th in 1989. Beginning in 1997, state revenues exceeded limitations, leading to cumulative tax refunds over the period 1997 to 2001 of $3.2 billion. However, the limit on revenue growth has also had several undesirable side effects (James and Wallis, 2004). There is evidence that not all programmes have been equally impacted by TABOR because in some areas, for example in Medicaid and in corrections, the state legislature's ability to control the growth rate of spending is limited. Programmes in areas where the legislature has greater control, notably higher education, have therefore been disproportionately cut. In recognition of this fact, in 2000 voters passed a constitutional amendment creating a mandate for education funding, essentially exempting education spending from TABOR. This means that TABOR's limitations fall on a shrinking set of programmes.

TABOR was adopted at the beginning of a decade during which Colorado was among the fastest growing states in the nation. It was only during the fiscal crisis beginning in mid-2001 that the rachet effect of TABOR's rules became visible. General fund revenues in Colorado declined between SFY 2001 and SFY 2002 by 13%, more than twice the average decline across states of 6%. Spending was held nearly constant because, although Colorado does not have a budget stabilisation fund, it was able to draw down reserves held in the general fund. The difference compared to other states became evident in SFY 2003, at a time when other states had turned to tax and fee increases in order to rebuild their revenues. While all states' general fund revenues combined rose by 8%, Colorado's declined by another 3% as the state was unable to respond with tax policy changes. Also, whereas all states general fund expenditures combined were at about the same level in SFY 2003 as two years earlier, Colorado's remained 11% below their 2001 level, and preliminary figures for SFY 2004 indicate a further decline in Colorado's general fund spending.

1996, Poterba and Rueben (1997) find that more stringent BBRs reduce yields by 10 to 15 basis points and that limits on issuing debt reduce yields by about half as much.[34] Interestingly, TELs have opposite effects on yields depending on whether the restriction is on expenditures or on revenues. Expenditure limitations reduce yields by about 6 to 7 basis points, whereas binding revenue limitations *raise* yields by about three times as much. This latter finding might reflect a perception that states with revenue limits are more likely to turn to issuing debt in times of financial distress, whereas other states would more likely raise revenues.

Summary

Efficient resource allocations by governments require that policymakers fully internalise all benefits and costs of their own decisions. The concern in a federal system is that bailouts by, or transfers from, higher levels of government soften the budget constraints of state or local governments and lead to cost shifting by these governments and hence inefficient decisions. The BBRs discussed in this section can be interpreted as a rational response of state electorates to a situation in which the federal government has credibly established its unwillingness to bail out defaulting states. By contrast, the TELs are not concerned with state and local government solvency but are probably motivated by agency problems whereby voters try to impose constraints on elected or appointed bureaucrats that are otherwise feared to act against the voters' interest. An important question that needs to be addressed is whether these TELs can be improved upon in the sense that state and local governments can be constrained in a manner that leads to more desirable tax and expenditure decisions than are feasible under the current constraints.

Concluding remarks

The exceptionally large extent of state fiscal autonomy enshrined in the US Constitution has produced several beneficial results. In a country as economically and demographically diverse as the United States, fiscal decentralisation has allowed state and local governments to tailor public services in a number of areas to their voters' preferences. The fact that redistribution across jurisdictions is weak implies that there is a strong link between the size of state and local government budgets and the community's tax burden, which strengthens the accountability of sub-national governments and reduces incentives for exporting the cost of budget expansions to other jurisdictions. With that said, federal matching rates for some earmarked grants appear excessively high, thereby reducing the tax price paid by state and local governments for certain expenditures below what would be optimal. While state and local governments have substantial capacity for taxation, some of their tax bases have been eroding. Addressing these problems requires extraordinary coordination efforts among states in order to overcome free-rider problems. More fundamental reforms to state tax systems should be envisaged. Finally, the fiscal rules in place have effectively disciplined state and local fiscal policies and have mostly avoided bankruptcies or bailouts by higher levels of government, but some rules appear to lack an economic rationale and should be modified so as to allow state budgets to reflect the developing needs and preferences of their constituents. Some recommendations in each of these areas are set out in Box 4.

34. Because states do not regularly issue general obligation debt, and because some issues are not actively traded, the data used by Poterba and Rueben, and by many other studies on this subject, are from the Chubb Insurance Company's semi-annual "Relative Value Survey". This survey asks 20 to 25 bond traders at major brokerage houses that deal in tax-exempt bonds to estimate the current yields on general obligation bonds from 40 states. Survey participants are asked to evaluate "hypothetical" general obligation bonds with maturity of 20 years, so reported differences in yields should only be attributable to the perceived riskiness of the state's general obligation debt and should not reflect differences in call provisions or other factors.

Box 4. **Recommendations regarding fiscal relations**

The allocation of spending responsibilities

The greater devolution of welfare programme design to the states together with the shift from a matching to a block grant has proven remarkably successful in reducing caseloads. Early fears about a race to the bottom appear to have been unfounded, suggesting that, where states have the fiscal capacity, programme devolution in exchange for greater sharing of financial risk by the states can lead to superior outcomes.

- Tendencies to restrict states' ability to tailor programmes to their local needs by tightening work requirements in ways that prove impractical for states to implement should be resisted or reversed.

- Tendencies to restrict states' ability to tailor programmes to their local needs by tightening work requirements in ways that prove impractical for states to implement should be resisted or reversed.

- Given that a nation-wide highway network has been established, responsibility for highway funding should be turned over to the states, together with the right to charge tolls, and the federal highway trust fund should be dissolved.

- The costs imposed on the states by the No Child Left Behind Act need to be more precisely quantified, and adequate federal funding of those costs ensured.

- However, in some areas, notably Medicaid, the rate of expenditure growth may be such that states would not be able to assume greater responsibility for financing than they already have in view of their limited ability to raise revenues. A shift of all expenditures for the elderly and disabled beneficiaries from Medicaid to Medicare should be considered, as it would concentrate responses to the nation-wide challenge of ageing at the federal level, while Medicaid would be largely re-focussed on the working poor.

Promoting the efficiency of public funding

States' autonomy in taxation underpins their independence in making choices about expenditures. Despite pronounced differences in per capita income across states, there has never been strong political support for revenue sharing or other forms of fiscal equalisation. However, the fiscal autonomy of the states is constrained by taxpayer mobility, which limits the progressivity of the personal income tax and has undermined the corporate income tax, and by states' inability to collect use taxes on remote sales. Moreover, local tax autonomy has been eroded by tax and expenditure limitations.

- States' efforts to co-Ordinate sales tax policies through the adoption of joint definitions and rules of tax administration should be continued, and, assuming successful implementation of the Streamlined Sales and Use Tax Agreement, Congress should authorise states to require remote vendors to collect use tax on their behalf.

- Given the high administrative costs of the corporate income tax and the continuing erosion of its base, as well as the inherent inefficiencies of the sales tax, states should consider replacing both taxes by a VAT. The experience with the Streamlined Sales Tax Project to achieve greater uniformity of sales tax bases and administration might prove helpful in structuring a VAT based on the destination principle.

- The deductibility of state and local taxes from federal income tax should be abolished, as it raises the inefficiency of the federal income tax due to base narrowing, while at the same time it appears to distort state and local governments' financing and spending decisions.

Fiscal rules and macroeconomic stabilisation

States' balanced budget requirements appear to have been effective in avoiding defaults and bailouts of sub-national governments; so has financial market discipline. However, the experience during the most recent budget crisis has shown that rainy-day funds were insufficient to avoid welfare-reducing cuts in core expenditures. This issue is gaining in importance as state spending shifts further towards health and education. The strictest forms of state and local tax and expenditure limitations lead to unintended distortions in expenditure shares and are in need of fundamental reform.

- In light of recent experience, states should quantify, and accumulate, rainy-day funds of sufficient size to avoid welfare-reducing cuts in core expenditures except under exceptional circumstances. Those states that have statutory caps on rainy-day funds should adjust them if necessary.

- Tax and expenditure limitations should be formulated with reference to desired spending levels, not to growth rates of revenues or expenditures, so as to account for changes in demand for public services due to demographic developments and to avoid ratchet effects in the aftermath of recessions.

Bibliography

Advisory Commission on Electronic Commerce (2000), *Report to Congress*, April, available at http://www.ecommercecommission.org/acec_report.pdf.

Advisory Commission on Intergovernmental Relations (1995), "Tax and Expenditure Limits on Local Governments", Report No. M-194, March, available at http://www.library.unt.edu/gpo/acir/Reports/information/M-194.pdf.

Baicker, K. (2005), "The Spillover Effects of State Spending", *Journal of Public Economics*, Vol. 89.

The Bell Policy Center (2003), "Ten Years of TABOR", March, available at http://www.thebell.org/pdf/Revisedt.pdf.

Bird, R. (1993), "Threading the Fiscal Labyrinth: Some Issues in Fiscal Decentralization", *National Tax Journal*, Vol. 46.

Bird, R. and P.-P. Gendron (2001), "VATs in Federal Countries: International Experience and Emerging Possibilities", International Bureau of Fiscal Documentation, *Bulletin*, July.

Bish, R. (2002), "Local Government Finance Issues in the United States", Victoria University, June, available at http://web.uvic.ca/padm/cpss/lgi/publish.htm.

Blank, R. (2002), "Evaluation Welfare Reform in the United States", *Journal of Economic Literature*, Vol. 40.

Bohn, H. and R. Inman (1996), "Balanced Budget Rules and Public Deficits: Evidence from the U.S. States", *Carnegie-Rochester Conference Series on Public Policy*, Vol. 45.

Bovbjerg, R., J. Wiener and M. Housman (2003), "State and Federal Roles in Health Care: Rationales for Allocating Responsibilities", in J. Holahan, A. Weil and J. Wiener (eds.), *Federalism and Health Policy*, The Urban Institute Press, Washington, D.C.

Boyd, D. (2003), "The Current State Fiscal Crisis and Its Aftermath", Kaiser Commission on Medicaid and the Uninsured, Report #4138, September.

Bradley, D., N. Johnson and I. Lav (2005), "The Flawed 'Population Plus Inflation' Formula: Why TABOR's Growth Formula Doesn't Work", Center on Budget and Policy Priorities, Washington, D.C., January.

Brown, C. and W. Oates (1987), "Assistance to the Poor in a Federal System", *Journal of Public Economics*, Vol. 32.

Brueckner, J. (1982), "A Test for Allocative Efficiency in the Local Public Sector", *Journal of Public Economics*, Vol. 19.

Brueckner, J. (1998), “Welfare Reform and Interstate Welfare Competition: Theory and Evidence”, The Urban Institute, Occasional Paper No. 21, December.

Bruen, B. and J. Holahan (2003), “Shifting the Cost of Dual Eligibles: Implications for States and the Federal Government”, Kaiser Commission on Medicaid and the Uninsured, Issue Paper #4152, November.

Congressional Budget Office (2003), “Economic Issues in Taxing Internet and Mail-Order Sales”, October.

Congressional Budget Office (2004), “Financing Long-Term Care for the Elderly”, April.

Coughlin, T. and S. Zuckerman (2003), “States’ Strategies for Tapping Federal Revenues: Implications and Consequences of Medicaid Maximization”, in J. Holahan, A. Weil and J. Wiener (eds.), *Federalism and Health Policy*, The Urban Institute Press, Washington, D.C.

Courant, P. and E. Gramlich (1990), “The Impact of the Tax Reform Act of 1986 on State and Local Fiscal Behavior”, in J. Slemrod (ed.), *Do Taxes Matter? The Impact of the Tax Reform Act of 1986*, MIT Press, Cambridge, Massachusetts.

Department of Education (2005), “10 Facts About K-12 Education Funding”, available at http://www.ed.gov/print/about/overview/fed/10facts/index.html.

Erpenbach, W., E. Forte-Fast and A. Potts (2003), “State Educational Accountability Under NCLB”, Council of Chief State School Officers, Washington, D.C, July.

Federal Highway Administration (1999), “Financing Federal-Aid Highways”, Publication No.-FHWA-PL-99-015, August, available at http://www.fhwa.dot.gov/reports/finfedhy.htm.

Feenberg, D. and H. Rosen (1986), “The Interaction of State and Federal Tax Systems: The Impact of State and Local Tax Deductibility”, *American Economic Review*, Vol. 76.

Feldstein, M. and M. Wrobel (1998), “Can State Taxes Redistribute Income?”, *Journal of Public Economics*, Vol. 68.

Gelbach, J. (2004), “Migration, the Life Cycle, and State Benefits: How Low Is the Bottom?”, *Journal of Political Economy*, Vol. 112.

General Accounting Office (2000), “Sales Taxes: Electronic Commerce Growth Presents Challenges; Revenue Losses are Uncertain”, June, available at http://www.gao.gov/new.items/g600165.pdf.

Gordon, N. (2004), “Do Federal Grants Boost School Spending? Evidence from Title I”, *Journal of Public Economics*, Vol. 88.

Gramlich, E. and D. Rubinfeld (1982), “Micro Estimates of Public Spending Demand Functions and Tests of the Tiebout and Median-Voter Hypotheses”, *Journal of Political Economy*, Vol. 90.

Hanushek, E. (2002), “Publicly Provided Education”, in A. Auerbach and M. Feldstein (eds.), *Handbook of Public Economics*, Vol. 4, North-Holland, Amsterdam.

Holahan, J., T. Coughlin, R. Bovbjerg, I. Hill, B. Ormond and S. Zuckerman (2004), “State Responses to 2004 Budget Crises: A Look at Ten States”, Urban Institute, Washington, D.C., February.

Holahan, J. and A. Ghosh (2005), “Understanding the Recent Growth in Medicaid Spending, 2000-2003”, *Health Affairs,* Web Exclusive W5.

Holtz-Eakin, D. and H. Rosen (1988), “Tax Deductibility and Municipal Budget Structure”, in H. Rosen (ed.), *Fiscal Federalism: Quantitative Studies*, University of Chicago Press, Chicago, Illinois.

Holtz-Eakin, D. and H. Rosen (1990), “Federal Deductibility and Local Property Tax Rates”, *Journal of Urban Economics,* Vol. 27.

House Ways and Means Committee (2004), *2004 Green Book*, U.S. Government Printing Office, Washington, DC, available at http://www.gpoaccess.gov/wmprints/green/2004.html.

Hoxby, C. (2001), “All School Finance Equalizations Are Not Created Equal”, *Quarterly Journal of Economics,* Vol. 116.

Inman, R. (1985), “Does Deductibility Influence Local Taxation?”, National Bureau of Economic Research, Working Paper 1714, October.

Inman, R. (2003), “Transfers and Bailouts: Enforcing Local Fiscal Discipline with Lessons from U.S. Federalism”, in J. Rodden, G. Eskeland and J. Litvack (eds.), *Fiscal Decentralization and the Challenge of Hard Budget Constraints*, MIT Press, Cambridge, MA.

Inman, R. and D. Rubinfeld (1996), “Designing Tax Policy in Federalist Economies: An Overview”, *Journal of Public Economics*, Vol. 60.

Inman, R. and D. Rubinfeld (1997), “Rethinking Federalism”, *Journal of Economic Perspectives*, Vol. 11.

James, F. and A. Wallis (2004), “Tax and Spending Limits in Colorado”, *Public Budgeting and Finance*, Vol. 24.

Joumard, I. and P. Kongsrud (2003), “Fiscal relations Across Government Levels”, OECD *Economic Studies*, Vol. 36.

Kaiser Commission on Medicaid and the Uninsured (2003), “Implications of the New Medicare Prescription Drug Benefit for State Medicaid Budgets”, Issue Brief #4162, December.

Kaiser Commission on Medicaid and the Uninsured (2005), “Medicaid Section 1115 Waivers: Current Issues”, Fact Sheet #7234, January.

Keen, M. and S. Smith (1996), “The Future of Value-Added Tax in the European Union”, *Economic Policy,* Vol. 23.

Knight, B. (2002), "Endogenous Federal Grants and Crowd-out of State Government Spending: Theory and Evidence from the Federal Highway Aid Program", *American Economic Review*, Vol. 92.

Lambrew, J. (2005), “Making Medicaid a Block Grant Program: An Analysis of the Implications of Past Proposals”, *Milbank Quarterly Review,* Vol. 83.

Mazerov, M. (2004), “Proposed ‘Business Activity Tax Nexus’ Legislation Would Seriously Undermine State Taxes on Corporate Profits and Harm the Economy”, Center on Budget and Policy Priorities, Washington, D.C., October.

McLure, C. (2002), “EU and US Sales Taxes in the Digital Age: A Comparative Analysis”, International Bureau of Fiscal Documentation *Bulletin*, April.

Mikesell, J. (1997), “State Retail Sales Taxation: A Quarter-Century Retrospective”, *State Tax Notes*, 30 June.

Moffitt, R. (2003), “The Negative Income Tax and the Evolution of U.S. Welfare Policy”, *Journal of Economic Perspectives*, Vol. 17.

Mullins, D. and B Wallin (2004), “Tax and Expenditure Limitations: Introduction and Overview”, *Public Budgeting and Finance*, Vol. 24.

Murray, S., W. Evans and R. Schwab (1998), “Education-Finance Reform and the Distribution of Education Resources”, *American Economic Review*, Vol. 88.

National Association of State Budget Officers (2002), *Budget Processes in the States*, Washington, D.C., January.

National Association of State Budget Officers (2004), *The Fiscal Survey of States*, Washington, D.C., December.

National Conference of State Legislatures (2004), *Mandate Monitor*, Washington, D.C., March.

National Conference of State Legislatures (2005), *Task Force on No Child Left Behind: Final Report*, Washington, D.C., February

National Governors Association (2005), *Medicaid Reform: A Preliminary Report*, Washington, D.C., June

New, M. (2001), “Limiting Government Through Direct Democracy: The Case of State Tax and Expenditure Limitations”, Cato Institute, Washington, D.C., December.

Oates, W. (1969), “The Effects of Property Taxes and Local Public Spending on Property values: An Empirical Study on Tax Capitalization and the Tiebout Hypothesis”, *Journal of Political Economy*, Vol. 77.

Oates, W. (1972), *Fiscal Federalism*, Harcourt Brace Jovanovich, New York, NY.

Oates, W. (1999), “An Essay on Fiscal Federalism”, *Journal of Economic Literature*, Vol. 37.

Oates, W. and R. Schwab (1991), “The Allocative and Distributive Implications of Local Fiscal Competition”, in D. Kenyon and J. Kinkaid (eds.), *Competition Among States and Local Governments*, The Urban Institute Press, Washington, D.C.

Office of Management and Budget (2005), *Budget of the U.S. Government, Fiscal Year 2006, Historical Tables*, Washington, D.C., February.

Parrott, S. and S. Fremstad (2003), “The Senate Finance Committee’s TANF Reauthorization Bill”, Center on Budget and Policy Priorities, Washington, D.C., March.

Poterba, J. and K. Rueben (1997), “State Fiscal Institutions and the U.S. Municipal Bond Market”, National Bureau of Economic Research, Working Paper 6237, October.

Roth, G. (2005), “Liberating the Roads: Reforming U.S. Highway Policy”, Cato Institute, Washington, D.C., March.

Rousseau, D. and A. Schneider (2004), “Current Issues in Medicaid Financing – An Overview of IGTs, UPLs, and DSH”, Kaiser Commission on Medicaid and the Uninsured, Issue Paper #7071, April.

Smith, V., R. Ramesh, K. Gifford, E. Ellis, R. Rudowitz and M. O’Malley (2004), “The Continuing Medicaid Budget Challenge: State Medicaid Spending Growth and Cost Containment in Fiscal Years 2004 and 2005”, Kaiser Commission on Medicaid and the Uninsured, Report #7190, October.

Snell, R. (2004a), “State Balanced Budget Requirements: Provisions and Practice”, National Conference of State Legislatures, Denver, Colorado and Washington, D.C.

Snell, R. (2004b), *New Realities in State Finance*, National Conference of State Legislatures, Denver, Colorado and Washington, D.C.

Tocqueville, A. (1980), *Democracy in America*, Vol. 1, Vintage Books Random House, New York, NY.

Wachino, V., A. Schneider and D. Rousseau (2004), “Financing the Medicaid Program: The Many Roles of Federal and State Matching Funds”, Kaiser Commission on Medicaid and the Uninsured, Policy Brief #7000, January.

Weil, A., J. Holahan and J. Wiener (2003), “Improving the Federal System of Health Care Coverage”, in J. Holahan, A. Weil and J. Wiener (eds.), *Federalism and Health Policy*, The Urban Institute Press, Washington, D.C.

Weimer, D. and M. Wolkoff (2001), “School Performance and Housing Values: Using Non-Contiguous District and Incorporation Boundaries to Identify School Effects”, *National Tax Journal*, Vol. 54.

Wheaton, W. (2000), “Decentralized Welfare: Will There Be Underprovision?”, *Journal of Urban Economics*, Vol. 48.

Wiatrowski, W. (2004), “Medical and Retirement Plan Coverage: Exploring the Decline in Recent Years”, *Monthly Labor Review*, Vol. 127.

Zahradnik, R. (2005), “Rainy Day Funds: Opportunities for Reform”, Center on Budget and Policy Priorities, Washington, D.C., March.

Annex A1

Medicaid eligibility and coverage

Medicaid eligibility groups are divided into “categorically needy” and “medically needy” groups. Within the “categorically needy”, there is a further distinction between mandatory and optional groups. To be eligible for federal funds, states have to provide Medicaid coverage to the mandatory group. This includes:

- Families who meet states’ AFDC eligibility requirements in effect in July 1996;
- Pregnant women and children under the age of 6 whose family income is at or below 133% of the federal poverty level (FPL);
- Children ages 6 to 19 with family income up to 100% of the FPL;
- Supplemental Security Income (SSI) recipients (or, in certain states, aged, blind, and disabled people who meet requirements that are more restrictive than those of the SSI programme).

States also have the option to provide Medicaid coverage to other categorically needy groups, such as infants up to age one and pregnant women not covered under the mandatory rules whose family income is below 185% of the FPL or certain aged, blind or disabled adults who have incomes above those requiring mandatory coverage but below the FPL. Federal matching rates for Medicaid and income eligibility for several categorically needy groups, as well as matching rates and income eligibility under the States’ Children’s Health Insurance Programme (SCHIP) are shown in Table A1.1.

The option to have a medically needy programme allows States to extend Medicaid eligibility to additional qualified persons who may have too much income to qualify under the categorically needy groups. The individuals are allowed to “spend down” to Medicaid eligibility by incurring medial expenses to offset their excess income, thereby reducing it to a level below the maximum allowed by that state’s Medicaid plan.

Services that are mandatory under federal programme rules are more extensive for the categorically needy than for the medically needy. For both groups these include prenatal and delivery services and home health services for beneficiaries who are entitled to nursing facility services under the state’s Medicaid plan, but only for the categorically needy do states have to provide inpatient and outpatient hospital, laboratory, x-ray and a host of other services.

Table A1.1. **Matching rates and income eligibility under Medicaid and SCHIP**
Per cent

	Federal Matching rate (FMAP), FY 2006	Medicaid Infants Ages 0-1	Medicaid Children Ages1-5	Medicaid Children Ages 6-19	Pregnant women	Federal Matching rate - SCHIP programme	Income eligibility - SCHIP programme
Alabama	69.51	133	133	100	175	81	200
Alaska	50.16	175	175	175	175	70	n.a.
Arizona	66.98	140	133	100	133	77	200
Arkansas	73.77	200	200	200	200	82	n.a.
California	50.00	200	133	100	200	65	250
Colorado	50.00	133	133	100	185	65	185
Connecticut	50.00	185	185	185	185	65	300
Delaware	50.09	200	133	100	200	65	200
District of Columbia	70.00	200	200	200	200	79	n.a.
Florida	58.89	200	133	100	185	71	200
Georgia	60.60	200	133	100	200	72	235
Hawaii	58.81	200	200	200	185	71	n.a.
Idaho	69.91	150	150	150	133	79	185
Illinois	50.00	200	133	133	200	65	200
Indiana	62.98	150	150	150	150	74	200
Iowa	63.61	200	133	133	200	74	200
Kansas	60.41	150	133	100	150	73	200
Kentucky	69.26	185	150	150	185	79	200
Louisiana	69.79	200	200	200	200	80	n.a.
Maine	62.90	185	150	150	200	75	200
Maryland	50.00	200	200	200	250	65	300
Massachusetts	50.00	200	150	150	200	65	200
Michigan	56.59	185	150	150	185	70	200
Minnesota	50.00	280	275	275	275	65	n.a.
Mississippi	76.00	185	133	100	185	84	200
Missouri	61.93	100	300	300	133	73	n.a.
Montana	75.40	133	133	100	133	80	150
Nebraska	59.68	185	185	185	185	72	n.a.
Nevada	54.76	133	133	100	133	69	200
New Hampshire	50.00	300	185	185	185	65	300
New Jersey	50.00	200	133	133	200	65	350
New Mexico	71.15	235	235	235	185	82	n.a.
New York	50.00	200	133	100	200	65	250
North Carolina	63.49	185	133	100	185	75	200
North Dakota	65.85	133	133	100	133	77	140
Ohio	59.88	200	200	200	150	72	n.a.
Oklahoma	67.91	185	185	185	185	79	n.a.
Oregon	61.57	133	133	100	185	73	185
Pennsylvania	55.05	185	133	100	185	68	200
Rhode Island	54.45	250	250	250	250	69	n.a.
South Carolina	69.32	185	150	150	185	79	n.a.
South Dakota	65.07	140	140	140	133	76	200
Tennessee	63.99	185	133	100	185	75	n.a.
Texas	60.66	185	133	100	185	73	200
Utah	70.76	133	133	100	133	82	200
Vermont	58.49	300	300	300	200	72	300
Virginia	50.00	133	133	133	133	65	200
Washington	50.00	200	200	200	185	65	250
West Virginia	72.99	150	133	100	150	82	200
Wisconsin	57.65	185	185	185	185	71	n.a.
Wyoming	54.23	133	133	100	133	71	185

Source: Kaiser Commission on Medicaid and the Uninsured, State Health Facts, available at http://www.statehealthfacts.kff.org.

Annex A2

State personal income and sales taxes

The tables in this Annex provide information about personal income and sales taxes at the state level. Table A2.1 illustrates the diverse structure of states' personal income taxes. Seven states have no income tax, and another two tax only dividend and interest income. An important aspect of the structure of the remaining 41 states' income tax systems is the limited degree of progressivity in comparison to the federal income tax. Five states have a flat tax, and the top bracket in another 21 states starts at $40 000 or lower, with typically minor changes in statutory rates across brackets. The tax burden of these income taxes is accordingly modest, in most cases between 2 and 3% of state personal income. In those states that have both a personal income and a sales tax, the former usually accounts for between 25 and 40% of total state tax revenues. Table A2.2 shows not only the considerable dispersion across states in their own sales tax rates, but also the varying importance of local sales taxes in the combined sales tax rate. Two-thirds of all states use both state and local sales taxes, with local tax rates typically adding 2.5% to the overall tax rates. The average contribution of sales tax revenues to overall state tax revenues is about one third.

Table A2.1. **State personal income taxes**
Tax rates for tax year 2004, as of 1 January 2004

State	Tax Rates Low	Tax Rates High	Number of Brackets	Income Brackets Low	Income Brackets High	Income tax revenue in 2003: % of state tax revenue	Income tax revenue in 2003: % of state personal income
Alabama	2.0	5.0	3	500	3 000	31.7	1.72
Alaska	No state income tax					--[1]	0.00
Arizona	2.87	5.04	5	10 000	150 000	24.2	1.40
Arkansas	1.0	7.0	6	3 999	27 500	29.7	2.31
California	1.0	9.3	6	5 962	39 133	41.3	2.76
Colorado	4.63		1	– Flat rate –		48.8	2.06
Connecticut	3.0	5.0	2	10 000	10 000	38.3	2.42
Delaware	2.2	5.95	6	5 000	60 000	33.5[1]	2.61
Florida	No state income tax					--	0.00
Georgia	1.0	6.0	6	750	7 000	46.8	2.47
Hawaii	1.4	8.25	9	2 000	40 000	29.1	2.70
Idaho	1.6	7.8	8	1 104	22 074	36.0	2.41
Illinois	3.0		1	– Flat rate –		33.1	1.74
Indiana	3.4		1	– Flat rate –		32.5	2.04
Iowa	0.36	8.98	9	1 211	54 495	35.4	2.14
Kansas	3.5	6.45	3	15 000	30 000	35.5	2.21
Kentucky	2.0	6.0	5	3 000	8 000	33.8	2.59
Louisiana	2.0	6.0	3	12 500	25 000	25.1	1.60
Maine	2.0	8.5	4	4 250	16 950	39.8	2.84
Maryland	2.0	4.75	4	1 000	3 000	42.6	2.27
Massachusetts	5.3		1	– Flat rate –		51.4	3.16
Michigan	4.0		1	– Flat rate –		28.7	2.08
Minnesota	5.35	7.85	3	19 440	63 860	40.1	3.12
Mississippi	3.0	5.0	3	5 000	10 000	20.6	1.52
Missouri	1.5	6.0	10	1 000	9 000	40.8	2.12
Montana	2.0	11.0	10	2 199	76 199	36.0[1]	2.26
Nebraska	2.56	6.84	4	2 400	26 500	33.5	2.13
Nevada	No state income tax					--	0.00
New Hampshire	State income tax is limited to dividends and interest income only					2.8[1]	0.12
New Jersey	1.4	6.37	6	20 000	75 000	33.8	1.95
New Mexico	1.7	6.8	5	5 500	26 000	25.6	1.93
New York	4.0	7.70	7	8 000	500 000	55.8	3.25
North Carolina	6.0	8.25	4	12 750	120 000	44.7	2.98
North Dakota	2.1	5.54	5	28 400	311 950	16.9	1.10
Ohio	0.743	7.5	9	5 000	200 000	38.3	2.31
Oklahoma	0.5	6.75	8	1 000	10 000	35.8	2.27
Oregon	5.0	9.0	3	2 600	6 500	70.6[1]	3.93
Pennsylvania	3.07		1	– Flat rate –		28.7	1.70
Rhode Island	25.0% federal tax liability				--	36.6	2.40
South Carolina	2.5	7.0	6	2 400	12 300	36.7	2.15
South Dakota	No state income tax					--	0.00
Tennessee	State income tax is limited to dividends and interest income only					1.3	0.07
Texas	No state income tax					--	0.00
Utah	2.3	7.0	6	863	4 313	39.7	2.64
Vermont	3.6	9.5	5	29 050	319 100	26.4	2.18
Virginia	2.0	5.75	4	3 000	17 000	52.2	2.72
Washington	No state income tax					--	0.00
West Virginia	3.0	6.5	5	10 000	60 000	29.4	2.36
Wisconsin	4.6	6.75	4	8 610	129 150	43.1	3.12
Wyoming	No state income tax					--	0.00
District of Columbia	5.0	9.5	3	10 000	30 000		

1. State has no sales tax.

Source: The Federation of Tax Administrators from various sources, available at http://www.taxadmin.org.

Table A2.2. **State and local general sales tax rates and state general sales tax revenue**

	State tax rate, 2003 (Per cent)	Top combined state and local tax rate, 2003 (Per cent)	State general sales tax revenue in 2003, % of state tax revenue
Alabama[1]	4.0	11.0	27.5
Alaska[1]	0	7.0	0[2]
Arizona[1]	5.6	8.6	49.9
Arkansas[1]	5.13	9.88	37.9
California[1]	6.0	8.5	31.4
Colorado[1]	2.9	7.9	27.6
Connecticut	6.0	6.0	32.2
Delaware	0	0	0
Florida[1]	6.0	7.5	55.6[2]
Georgia[1]	4.0	7.0	35.6
Hawaii	4.0	4.0	50.2
Idaho[1]	5.0	8.0	35.9
Illinois[1]	6.25	9.25	28.9
Indiana	6.0	6.0	37.5
Iowa[1]	5.0	7.0	34.1
Kansas[1]	5.3	8.3	37.7
Kentucky	6.0	6.0	28.7
Louisiana[1]	4.0	9.5	33.4
Maine	5.0	5.0	31.8
Maryland	5.0	5.0	24.8
Massachusetts	5.0	5.0	23.8
Michigan	6.0	6.0	33.8
Minnesota[1]	6.5	7.5	29.1
Mississippi[1]	7.0	7.25	49.7
Missouri[1]	4.23	8.35	32.7
Montana	0	0	0
Nebraska[1]	5.5	7.0	42.6
Nevada	6.5	7.25	53.1[2]
New Hampshire	0	0	0[2]
New Jersey	6.0	6.0	29.8
New Mexico[1]	5.0	7.25	37.9
New York[1]	4.0	8.5	21.8
North Carolina[1]	4.5	7.5	25.3
North Dakota[1]	5.0	7.5	30.6
Ohio[1]	5.0	7.0	32.7
Oklahoma[1]	4.5	9.85	25.1
Oregon	0	0	0
Pennsylvania[1]	6.0	7.0	32.6
Rhode Island	7.0	7.0	33.9
South Carolina[1]	5.0	7.0	40.2
South Dakota[1]	4.0	6.0	53.4[2]
Tennessee[1]	7.0	9.75	61.4[2]
Texas[1]	6.25	8.25	49.3[2]
Utah[1]	4.75	7.0	37.6
Vermont[1]	5.0	6.0	14.2
Virginia[1]	3.5	4.5	20.8
Washington[1]	6.5	8.9	61.8[2]
West Virginia	6.0	6.0	27.2
Wisconsin[1]	5.0	6.0	30.7
Wyoming[1]	4.0	6.0	34.9[2]
Memorandum:			
United States	n.a.	n.a.	33.8

1. States in which local governments also levy sales taxes.
2. State has no personal income tax or personal income tax limited to dividends and interest income.

Source: Congressional Budget Office (2003), "Economic Issues in Taxing Internet and Mail-Order Sales", October.

Annex A3

Fiscal rules of sub-national governments

The tables in this Annex summarise information about fiscal rules at the *state* level. Table A3.1 lists the main features of states' balanced-budget requirements (BBR), progressing from the weakest (that the governor must submit a balanced budget to the state legislature) to the most stringent (that no deficit in the general fund can be carried forward and hence the budget has to be balanced *ex post*). All states except Vermont have some form of BBR in place, but there is considerable variation in terms of the combination of requirements and whether they have been adopted by legislatures or are constitutionally enshrined. Table A3.2 provides information about tax and expenditure limitations (TEL) at the state level. While limitations imposed by states on their local governments are a long-standing feature, dating back to the 19th century, state-level TELs are more recent. Before 1970, only two states had TELs in place, whereas by 2001 there were 53 limitations adopted in 31 states. As shown in the table, again there is great variation in the specifics of these rules, with the majority imposing limits on the growth rate of state budget appropriations. Information on TELs on *local* governments can be found in Advisory Commission on Intergovernmental Relations (1995) and in Mullins and Wallin (2004).

Table A3.1. **State balanced budget requirements**

State	Government must submit balanced budget	Legislature must pass balanced budget	Governor must sign balanced budget	Gubernatorial line item veto	Cannot carry over deficit
Alabama	C,S	S	—	X	X
Alaska	S	S	S	X	X
Arizona	C,S	C,S	C,S	X	—
Arkansas	S	S	S	X	X
California	C	—	S	X	X
Colorado	C	C	C	X	X
Connecticut	S	C,S	C	X	—
Delaware	C,S	C,S	C,S	X	X
Florida	C,S	C,S	C,S	X	X
Georgia	C	C	C	X	X
Hawaii	C,S	—	C,S	X	X
Idaho	—	C	—	X	X
Illinois	C,S	C	S	X	—
Indiana	—	—	—	—	X
Iowa	C,S	S	—	X	X
Kansas	S	C,S	—	X	X
Kentucky	C,S	C,S	C,S	X	X
Louisiana	C,S	C,S	C,S	X	X
Maine	C,S	C	C,S	X	X
Maryland	C	C	C	X	—
Massachusetts	C,S	C,S	C,S	X	—
Michigan	C,S	C	C,S	X	—
Minnesota	C,S	C,S	C,S	X	X
Mississippi	S	S	—	X	X
Missouri	C	—	C	X	X
Montana	S	C	—	X	X
Nebraska	C	S	—	X	X
Nevada	S	C	C	—	X
New Hampshire	S	—	—	—	X
New Jersey	C	C	C	X	—
New Mexico	C	C	C	X	X
New York	C	—	—	X	—
North Carolina	C,S	S	—		X
North Dakota	C	C	C	X	X
Ohio	C	C	C	X	X
Oklahoma	S	C	C	X	X
Oregon	C	C	C	X	X
Pennsylvania	C,S	—	C,S	X	—
Rhode Island	C	C	S	—	X
South Carolina	C	C	C	X	X
South Dakota	C	C	C	X	X
Tennessee	C	C	C	X	X
Texas	—	C,S	C	X	—
Utah	C	C,S	—	X	X
Vermont	—	—	—	X	—
Virginia	—	—	C	X	X
Washington	S	—	—	X	X
West Virginia	—	C	C	X	—
Wisconsin	C	C	C,S	X	—
Wyoming	C	C	—	X	X
Puerto Rico	C	C	C	X	X
TOTAL	**45**	**41**	**31**	**43**	**38**

Note: C = Constitutional; S = Statutory; X = Constitutional or statutory.
Source: National Association of State Budget Officers (2002), "Budget Processes in the States", January; R. Snell (2004a), “State Balanced Budget Requirements: Provisions and Practice”, National Conference of State Legislatures, March.

Table A3.2. **State-level tax, revenue and expenditure limitations**

State	Tax and expenditure limitation	Nature	Votes required to pass revenue increase
Alabama	–	–	Majority
Alaska	Appropriation limited to growth of population and inflation	C	Majority
Arizona	Appropriations limited to 7.41% of personal income	C	2/3 elected
Arkansas	Extraordinary vote required	–	¾ elected
California	Appropriation limited to personal income growth and population	C	2/3 elected
Colorado	Appropriation growth limited to 6% of prior year's appropriation.	S	Majority
	General and capital fund revenues limited to growth of population and inflation	C	
Connecticut	Appropriations limited to greater of personal income growth or inflation	C	Majority
Delaware	Appropriations limited to 98% of estimated revenue	C	3/5 elected
Florida	Revenue limited to 5 year average of personal income growth	C	2/3 elected
Georgia	–	–	Majority
Hawaii	Appropriation limited to 3 year average of personal income growth	C	Majority
Idaho	Ongoing appropriations limited to 5.33% of personal income	S	Majority
Illinois	–	–	Majority
Indiana	–	–	Majority
Iowa	Appropriations limited to 99% of adjusted general fund receipts	S	Majority
Kansas	–	–	Majority
Kentucky	–	–	2/5 elected
Louisiana	Appropriation limited to per capita personal income growth.	C	2/3 elected
	Revenue limited to a ratio of personal income in 1979	S	
Maine	–	–	Majority
Maryland	–	–	Majority
Massachusetts	Revenue limited to growth in wages and salaries	S	Majority
Michigan	Revenue limited to 9.49% of prior year's personal income	C	Majority
Minnesota	–	–	Majority
Mississippi	Appropriations limited to 98% of projected revenue	S	3/5 elected
Missouri	Revenue limited to 5.64% of prior years personal income	C	Majority
Montana	Appropriations limited to personal income growth	S	Majority
Nebraska	–	–	Majority
Nevada	Expenditures limited to growth of population and inflation	S	Majority
New Hampshire	–	–	3/5 elected
New Jersey	Appropriations limited to personal income growth	S	Majority
New Mexico	–	–	Majority
New York	–	–	Majority
North Carolina	Appropriations limited to 7% of state personal income	S	Majority
North Dakota	–	–	Majority
Ohio	–	–	Majority
Oklahoma	Appropriations limited to 95% of certified revenue	C	¾ elected
Oregon	Appropriations limited to personal income growth	S	2/3 elected
Pennsylvania	–	–	Majority elected
Rhode Island	Appropriations limited to 98% of projected revenue	C	Majority
South Carolina	Appropriations limited to personal income growth	C	Majority
South Dakota	–	–	2/3 elected
Tennessee	Appropriations limited to personal income growth	C	Majority
Texas	Appropriations limited to personal income growth	C	Majority
Utah	Appropriations limited to growth in population, inflation, and personal income	S	Majority
Vermont	–	–	Majority
Virginia	State general fund expenditures limited to growth in population and inflation	S	Majority
Washington	–	–	Majority
West Virginia	–	–	Majority
Wisconsin	–	–	Majority
Wyoming	–	–	Majority
Puerto Rico	–	–	Majority

Note: C = Constitutional; S = Statutory
Source: National Association of State Budget Officers (2002), "Budget Processes in the States", January.

WORKING PAPERS

The full series of Economics Department Working Papers can be consulted at www.oecd.org/eco/Working_Papers/

461. Assessing the value of indicators of underlying inflation for monetary policy
(November 2005) Pietro Catte and Torsten Sløk

460. *Regulation and Economic Performance: Product market reforms and productivity in the OECD*
(November 2005) Giuseppe Nicoletti and Stefano Scarpetta

459. *Innovation in the Business Sector*
(November 2005) Florence Jaumotte and Nigel Pain

458. *From Innovation Development to Implementation: Evidence from the Community Innovation Survey*
(November 2005) Florence Jaumotte and Nigel Pain

457. *From Ideas to Development: the Determination of R&D and Patenting*
(November 2005) Florence Jaumotte and Nigel Pain

456. *An Overview of Public Policies to Support Innovation*
(November 2005) Florence Jaumotte and Nigel Pain

455. *Strengthening Regulation in Chile: The Case of Network Industries*
(November 2005) Alexander Galetovic and Luiz de Mello

454. *Fostering Innovation in Chile*
(November 2005) José-Miguel Benavente, Luiz de Mello and Nanno Mulder

453. *Getting the most out of public sector decentralisation in Mexico*
(October 2005) Isabelle Joumard

452. *Raising Greece’s Potential Output Growth*
(October 2005) Vassiliki Koutsogeorgopoulou and Helmut Ziegelschmidt

451. *Product Market Competition and Economic Performance in Australia*
(October 2005) Helmut Ziegelschmidt, Vassiliki Koutsogeorgopoulou, Simen Bjornerud and Michael Wise

450. *House Prices and Inflation in the Euro Area*
(October 2005) Boris Cournède

449. *The EU’s Single Market: At Your Service?*
(October 2005) Line Vogt

448. *Slovakia’s introduction of a flat tax as part of wider economic reforms*
(October 2005) Anne-Marie Brook and Willi Leibfritz

447. *The Education Challenge in Mexico: Delivering Good Quality Education to All*
(October 2005) Stéphanie Guichard

446. *In Search of Efficiency: Improving Health Care in Hungary*
(October 2005) Alessandro Goglio

445. *Hungarian Innovation Policy: What’s the Best Way Forward?*
(October 2005) Philip Hemmings

444. *The Challenges of EMU Accession Faced by Catch-Up Countries: A Slovak Republic Case Study*
(September 2005) Anne-Marie Brook

443. *Getting better value for money from Sweden's healthcare system*
(September 2005) David Rae

442. *How to reduce sickness absences in Sweden: lessons from international experience*
(September 2005) David Rae

441. *The Labour Market Impact of Rapid Ageing of Government Employees: Some Illustrative Scenarios*
(September 2005) Jens Høj and Sylvie Toly

440. *The New OECD International Trade Model*
(August 2005) Nigel Pain, Annabelle Mourougane, Franck Sédillot and Laurence Le Fouler

439. *The French Tax system: Main characteristics, recent developments and some considerations for reform*
(July 2005) Willi Leibfritz and Paul O'Brien

438. *The Effects of EMU on Structural Reforms in Labour and Product Markets*
(July 2005) Romain Duval and Jørgen Elmeskov

437. *Product Market Competition andEconomic Performance in New Zealand*
(July 2005) Annabelle Mourougane and Michael Wise

436. *Getting the Most out of Public Sector Decentralisation in Spain*
(July 2005) Isabelle Joumard and Claude Giorno

435. *Sources of Inflation Persistence in the Euro Area*
(July 2005) Boris Cournède, Alexandra Janovskaia, Paul van den Noord

434. *Measuring Cyclically-Adjusted Budget Balances for OECD Countries*
(July 2005) Nathalie Girouard and Christophe André

433. *Product Market Competition and Economic Performance in the United Kingdom*
(June 2005) Maria Maher and Michael Wise

432. *The Benefits of Liberalising Product Markets and Reducing Barriers to International Trade and Investment: the Case of the United States and the European Union*
(June 2005)

431. *Boosting Growth through Greater Competition in Denmark*
(May 2005) Martin Jørgensen

430. *Fifteen Years of Economic Reform in Russia: What Has Been Achieved: What Remains to be Done?*
(May 2005) Rudiger Ahrend and William Tompson

429. *Assessing the OECD Job Strategy: Past Developments and Reforms*
(May 2005) Nicola Brandt, Jean-Marc Burniaux and Romain Duval

428. *Ageing, Welfare Services and Municipalities in Finland*
(May 2005) Jens Lundsgaard

427. *The Impact of Structural Policies on Trade-Related Adjustment and the Shift to Services*
(April 2005) Per Mathis Kongsrud and Isabelle Wanner