

CHAPTER 8

TAX ASSIGNMENT

CHARLES E. MCLURE, JR.

“Tax assignment” answers the question, “Who (which level of government) should tax what, and how?”¹ The previous chapter described the objectives of tax assignment, impediments to the achievement of those objectives, and problems potentially created by tax assignment. The first section of this chapter discusses other considerations to keep in mind in formulating a system of tax assignment. It provides criteria against which to judge whether one assignment is better than another, and why. While the discussion uses examples from the system currently prevailing in Kazakstan to illustrate problems, it should be recalled that (for reasons explained in Chapter 7) these problems do not actually occur (or occur only in attenuated form) in the present system, in which the division of tax revenue among *oblasts* is essentially irrelevant.

The second section describes two methods of tax assignment: independent legislation and administration by a given level of government, and surcharges imposed by one level of government on a tax legislated and administered by another (usually higher) level. Tax sharing is included for comparison. As explained in the previous chapter, tax sharing is not appropriately seen as a method of tax assignment.

The next section explains why much of the present system used to divide revenues among *oblasts* should be swept away in favor of a more rational system. This discussion sets the stage for the appraisal of alternative proposals for tax assignment based on surcharges in the last section.

¹ This is the formulation in Musgrave (1983).

CONSIDERATIONS IN TAX ASSIGNMENT

Role of Benefit Taxes in Tax Assignment

It is desirable that, where possible, there be a close relationship between taxes paid and benefits from public services. Benefit-related taxes have several desirable features. First, it is fair that people and enterprises pay for the services they receive—and receive the services they pay for. Moreover, the provision of public services is likely to be more efficient if taxes are related to benefits than if they are not. If there is no relationship between taxes and services, there is a tendency to want to pay too little taxes and to demand too many services. Benefit-related taxes play the same role with regard to the provision of public services that prices play with regard to the provision of goods and services by the market. (See also the discussion of user charges below.) Unfortunately, the link between major taxes (income taxes and VAT) and the benefits of public services is often rather tenuous. This limits the feasibility of relating taxation to benefits received.

Benefit-related Excises

In some case excises can be justified as payments for public services. This is true, for example, if excises on tobacco products and alcoholic beverages are used to finance health care facilities made necessary by the taxed consumption, and if taxes on motor fuels are used to finance construction and maintenance of streets, roads, and highways. Such close links between taxes and benefits also shed light on tax assignment. Revenues from taxes related to benefits of public services should flow to the level of government providing the services for which benefit-related taxes are levied.

User Charges

User charges are the extreme form of benefit tax; charges are imposed directly for the enjoyment of public services, as prices are charged for goods and services provided by markets. There is substantial room for expansion of the application of user charges in Kazakhstan, especially by subnational governments. Among the obvious examples of charges that fall short of covering costs of providing benefits, or are nonexistent, are those for housing and

communal services. Consideration should also be given to expanded application of charges for the use of roads and highways, where this is administratively feasible.

It is important to distinguish between the various potential benefits of user charges. Consider fixed monthly charges for heating. Such charges can help local governments defray the cost of providing this service, and thus reduce the need to rely on revenues from other sources. Given the paucity of appropriate revenue sources for subnational governments and the vertical fiscal imbalance that results, this is a crucial advantage. Moreover, many presumably think it fair that beneficiaries pay for the heating they receive. Of course, others may disagree; this is especially likely, given the precedent of free access to housing and communal services under the Soviet system. Note, however, that fixed monthly charges for heating are defective in one important respect. In addition to their financial role, market prices send important signals to suppliers and consumers about demand for various goods and services and the cost of additional consumption. In a market economy, the need to pay more for the consumption of additional energy constrains demand and stimulates production. By comparison, if monthly charges are fixed, and do not depend on the amount of service consumed, they provide neither of these signals. This role can be fulfilled only if it is possible to measure usage of energy, as when gas is piped to houses and metered.

Environmental Charges

A few governments, especially in Europe, have begun to levy taxes and fees on those who degrade the environment. While subject to formidable technical problems of measurement and valuation of damage, this is a potentially promising source of revenue. It is far better to tax a “bad” (pollution) than a “good” (ordinary goods and services), because environmental charges discourage activities that damage the environment. Moreover, it is fair that those who spoil the environment should pay, either to rectify the damage they cause, or to compensate those harmed by their actions. There may, as yet, be little latitude for the use of environmental charges in Kazakstan, but this should not be discounted as a future source of revenues. Just as benefit-related taxes and user charges should go to the jurisdiction providing services, environmental charges should go to the jurisdiction where degradation of the environment and its costs are being experienced.

Generalized Benefits

Although the direct links between the most important taxes (VAT and the income taxes) and the benefits of public services may often be weak, it is possible to use the reasoning underlying the benefit principle of taxation to shed light on the assignment of these taxes. Consider whether, in principle, revenues from a general sales tax such as VAT should, as a matter of equity and efficiency, flow to *oblasts* where production occurs, or to *oblasts* where consumption occurs.² (This requires ignoring for the moment the administrative problems that make either approach almost impossible to implement satisfactorily.) The answer depends, in principle, on whether the consumption of public services is more complementary with the consumption or the production of goods and services exchanged in the market and subject to tax.

There is no clear-cut answer to this question, but most informed Western opinion would probably favor consumption-based taxation over taxes based on production. This reflects the view that most public services are provided to people where they live, rather than where they work, and not to enterprises. Moreover, if consumption-based taxation exceeds the value of benefits of public services, the resulting distortion of residential choices is likely to be minor, especially in a country such as Kazakhstan, where residential choices remain relatively limited. By comparison, production-based taxes that are not related to benefits are more likely to distort the location of economic activity. This reasoning suggests that, if feasible, revenues from VAT should be allocated to the *oblasts* where consumption occurs, instead of to the *oblasts* where production occurs.³ Similar reasoning suggests that if people do not work where they live, for example, because they commute, they should, if feasible, pay individual income tax where they live, and not where they work.

Locational Issues

Locational Distortions

Taxes have the power to distort the location of economic

² Note that this choice subsumes the treatment of imports and exports.

³ Some may argue that, because of the importance of government services provided to enterprises, and the close links between employment and residence in the FSU, the “company town” being the extreme example, this choice is much more uncertain than in the market economies of the West. This argument is not convincing, and will increasingly become less relevant in the future, as the link between production and the provision of public service becomes weaker.

activity, unless they reflect benefits received.⁴ Because taxes on production are more likely to distort locational decisions than are taxes on consumption, they are more appropriately assigned to the central government while taxes on consumption are more properly assigned to subnational governments. Where taxes on production must be assigned to subnational governments, uniform taxation minimizes locational distortions. However, if imposed from above or by agreement among subnational governments, uniformity runs counter to the objective of giving subnational governments increased fiscal choice, and it undermines tax competition. By comparison, uniformity in the taxation of production that results from tax competition is more benign. (Such uniformity is likely to be reached at a low level of tax rates, near the value of services provided to state-owned enterprises). Some observers decry the loss of progressivity that low enterprise taxation implies. That subnational taxes are not progressive is not a problem, according to the traditional literature of fiscal federalism, which assigns responsibility for income redistribution to the central government.

Tax Competition

Some Western literature emphasizes the role of competition between subnational governments as a salutary disciplinary force restraining mismatch between the provision of services and taxes levied to pay for them—especially as manifested in the overexpansion of government (McLure 1986). Both individuals and enterprises are seen as ready to leave any jurisdiction where the level or structure of taxes and services departs radically from the benefit principle. This model of “voting with the feet” does not now ring true in the FSU, for several reasons.⁵ Most important, residential mobility is far less than in the West, in part because of rigidities in the housing market (the prevalence of housing provided by employers and the generally underdeveloped state of the market for housing). Moreover, the affairs of enterprises and governments are much more closely intertwined than in the West. Besides providing housing and social services for employees, enterprises may pay substandard wages, but retain employees rather than discharge them, receive below market prices for their products,

⁴ Not much emphasis should be placed on the arrangement of topics under headings in this section, which is somewhat arbitrary. Many of the topics could as well be discussed under other headings.

⁵ Indeed, this distinctly US view has been criticized as not describing the situation in Western Europe accurately. See, for example, Bewley (1981).

and require subsidies from the public sector to stay afloat. Even so, one can observe a notable desire for subnational governments to use tax instruments to try to attract investment, for example, in their interest in free economic zones. This suggests that even in the near term, the tax competition model may be an important factor conditioning the behavior of subnational governments in Kazakhstan. Over time one would also expect greater residential mobility, and thus more relevance for the model of “voting with the feet.”

Tax competition can take a number of forms. Most obviously, jurisdictions can offer lower tax rates to attract business—or to avoid repelling it. Alternatively, in a system in which subnational governments determine their own tax laws, they can provide various types of investment incentives, such as accelerated depreciation and investment credits. Finally, even if tax laws and rates are the same in all jurisdictions, subnational governments can vary in the diligence with which they enforce the laws, if this is allowed.

Tax competition effected via lower rates is clearly the most desirable, as it is transparent and simple to understand, and it is economically neutral except as regards locational decisions. By comparison, the economic benefits of investment incentives are generally far from transparent; their evaluation often requires the application of fairly sophisticated economic analysis. Moreover, investment incentives are generally not neutral in their economic impact. Tax competition effected through differences in administrative effort is even worse. Besides being almost totally opaque and inherently nonneutral, it provides an open invitation for corruption.

One must be especially wary of tax competition undertaken at the expense of the central government. In the West, when subnational governments want to engage in tax competition, they must cut spending or raise other taxes to compensate for lost revenue; this enforces fiscal discipline.⁶ “Free economic zone” may be just a fancy term for tax competition, if business activity in the zone benefits from lower taxation of profits earned in the zone. The question is whether residents of a subnational jurisdiction that provides a free economic zone (who presumably benefit from enhanced economic activity in the zone) levy higher taxes on themselves to finance public services, accept a lower level of

⁶ An exception in the US is the ability of state and local governments to issue debt that pays interest that is exempt from federal tax and use the proceeds for industrial development projects. Over time, the latitude for such activities has been restricted.

services, or expect increased grants from the central government, as appears to be the case in Kazakstan. If the central government subsidizes free economic zones by, in effect, paying the taxes forgiven in the zone, there will be “a race to the bottom” in which each jurisdiction attempts to be more generous than the others, to attract economic activity, at the expense of the budget of the central government.⁷ This is a sure recipe for fiscal disaster.

Distributional Issues

Income Redistribution and Progressive Taxation

Another tenet of Western literature on fiscal decentralization is the assignment of responsibility for income redistribution (via progressive taxation and transfer payments to individuals) to the central government.⁸ In part, this view also depends on the presumed mobility of labor and capital: subnational attempts to use progressive taxes to redistribute income will drive out investment and geographically mobile high-income, highly productive individuals, leaving the incidence of progressive taxation to fall on immobile factors, especially land and low-income, relatively immobile workers. While this conventional wisdom may need to be rethought in the context of the former Soviet Union, the general conclusion seems valid, and will probably become increasingly relevant as time passes.

This economic argument must be supplemented by philosophical considerations. Should income redistribution occur primarily across the nation as a whole, or should it be on a regional basis? This depends, in part, on the “domain of concern” that motivates income redistribution. Some may opt for regional policies of redistribution, perhaps on ethnic grounds, while others may prefer to avoid such potentially divisive policies, by lodging redistribution at the national level. While this is not a question foreign advisers can answer, this study assumes that redistribution should be primarily an activity of the central government.

⁷ A similar problem can occur if subnational governments administer taxes of the central government, as under a system of dual subordination; in this case, the “race to the bottom” involves giving away revenue of the central government via lax tax administration. This should obviously be avoided; neither subnational administration of taxes of the central government nor dual subordination of the tax administration generally makes sense.

⁸ This issue is separate from the question of whether the central government should undertake policies that would reduce horizontal fiscal disparities, discussed in the previous chapter. The proposals outlined in the next chapter assume that such a policy would be undertaken.

Taxation of Natural Resources

Where economically important deposits of natural resources are unevenly distributed across a country, as they are in Kazakhstan, it is important to decide whether revenues from taxing their exploitation should flow primarily to the central or subnational governments. Again, economic and philosophical issues are involved.⁹

First, as indicated in the previous discussion of benefit taxation and charges for environmental degradation, subnational governments should clearly be allowed enough revenues to cover costs associated with exploitation of the resources. Such costs include the costs of environmental degradation, as well as the extraordinary costs of providing public services to the resource sector. The relevant question is which government should get the revenues in excess of compensation for such costs?¹⁰

If subnational governments get the revenues, economic efficiency may suffer. This may occur because governments of resource-rich areas substitute revenues from taxes on natural resources for other taxes, or they may provide a higher level of public services than governments of other areas, for a given level of taxation. In either case, the fiscal advantage made possible by resource wealth may result in the attraction of more people and more investment than is economically desirable (because they might be more productively employed elsewhere). In addition, such governments may spend relatively plentiful revenues from natural resources on projects that have lower social value than projects foregone by other jurisdictions that cannot afford them; “downstream” processing is often undertaken by resource-rich areas, without regard for its economic viability (Gelb and Associates 1988). Again, some of these potentially adverse economic effects may be attenuated by the relatively low mobility of labor and capital in Kazakhstan, as well as the harsh environment in resource-rich areas. In assessing the mobility of labor and capital, it should be remembered that mobility will increase over time, as the socialist system is replaced by a market-based system. Especially important in this regard is the mobility of foreign capital considering investment in Kazakhstan. Of course, capital flowing into the country is quite mobile.

⁹ This discussion draws from McLure (1994).

¹⁰ As argued in Chapter 3, such taxes should be based largely on economic rents. National governments may be more likely able to implement such taxes than subnational governments.

Subnational governments need revenue that is predictable. Central governments throughout the world, not to mention subnational governments in some countries, have failed to deal with the vagaries of fluctuating prices for natural resources (Gelb and Associates 1988). While the central government of Kazakhstan may not do much better, it certainly seems preferable to place this unstable source of revenue there than at the subnational level.

Whether or not these economic effects occur, there is the question of equity: should taxpayers in resource-rich areas pay less tax, or enjoy greater benefits, simply because they live in such a region? Economic effects and considerations of equity suggest to most observers that taxation of natural resources, over what is needed to compensate subnational governments for costs related to exploitation of the resources, should be left primarily to the central government.

These economic considerations must be supplemented by philosophical considerations. It is common for residents of resource-rich areas to claim the right to tax natural resources, as their “heritage.”¹¹ But others ask why the resources in question are the heritage of the area where the resources are located and not of the entire nation. This, along with the issue of equity discussed above, brings to the forefront a fundamental question about the nature of the country: are “we” the people of the producing region (for example, Atyrau) or the people of the nation (Kazakhstan)?¹² Should access to revenues from taxes on natural resources divide the country or unite it?¹³

Tax Exporting

Chapter 7 explained that tax exporting, a situation in which the residents of one subnational area bear the economic burden of taxes imposed by another subnational jurisdiction, is generally undesirable. It is unfair, it undermines accountability, and it may

¹¹ This argument is encountered most commonly with reference to exhaustible resources. But, like the other arguments outlined above, it is equally applicable to other resources, such as forests, game, beaches, mountains, and hydroelectric power.

¹² There is a strong presumption that excise taxes levied on refined petroleum products should flow to the government where consumption occurs. Thus, one can have considerable sympathy with oil-producing regions, which see taxes on petroleum products that they consume go to *oblasts* where refineries are located.

¹³ It is interesting to contrast this situation with that in Russia, where failure to allow the *oblasts* access to revenues from taxes on natural resources might have aggravated secessionist tendencies (McLure 1994).

encourage overexpansion of the public sector. Contrary to the situation in a federal system that allows “independent legislation and administration,” it should be fairly easy to limit exporting in a unitary system of government (see Box 8.1).

Box 8.1. Tax Exporting in the United States - Lessons for Kazakhstan

The constitution of the US provides the states with virtually unlimited authority to impose any tax they wish, subject only to quite limited and general restrictions, the most important of which involve noninterference with interstate and foreign commerce and compliance with due process. This broad authority has been circumscribed in only minor ways by federal legislation. Although taxpayers have recourse to the courts if they believe their constitutional or legal rights have been violated, federal courts have been extremely reluctant to limit the states’ taxing authority, absent clear and flagrant violations. One of the many undesirable results of such a system of independent and uncoordinated legislation is the high degree of tax exporting that can occur.

Tax exporting, the shifting of tax burdens to nonresidents of the taxing jurisdiction, is generally undesirable. It is unfair, it undermines the accountability of government, and it may induce overexpansion of the public sector. However, tax exporting is not problematic in some cases, e.g., when tourists pay higher taxes to cover the costs they create for extra police protection.

Tax exporting can take many forms, reflecting the interplay of market forces in determining the incidence of taxation (who bears the burden of taxation). Under certain conditions, especially state domination of the relevant market for the taxed product, taxes can be exported to nonresident consumers. More commonly, they may be exported to nonresident owners of the factors of production (land, labor, and capital).

In the US, tax exporting takes many forms. States that are especially popular with tourists (for example, Florida, Hawaii, and Nevada) do, indeed, impose taxes intended to be paid largely by tourists; these include taxes on hotel occupancy and on gambling.

In the US, much ownership of land and natural resources is in private hands. Taxes on land and natural resources, including property taxes, are exported, to the extent that they are borne by nonresident owners.

Delaware imposes extremely high corporate franchise taxes equal to some 20 percent of state revenues, to extract revenues from corporations that take advantage of the state’s relatively lax incorporation statutes. (In the US, a corporation incorporated in one state can operate in other states.) More generally, state corporate

income taxes may be borne by nonresident owners of corporate shares.

Quantitatively, the most important form of tax exporting in the US results from the ability to deduct income and property taxes, as well as other taxes that constitute a cost of business, levied by state and local governments in calculating federal taxable income. Because the deduction reduces federal taxable income, the federal government, in essence, pays a fraction of state and local taxes equal to the marginal tax rate of the taxpayer. The important lesson for Kazakhstan from this experience is that surcharges levied by *oblast* (and *rayon*) governments should not be deductible in calculating liability for the income tax of the central government, unless they constitute a business expense.

In a federal system in which the states retain the authority to impose taxes of their choosing, it is very difficult to prevent tax exporting. In the US, the only remedy is to be found in the courts. (Of course, taxpayers may also attempt to have tax laws changed legislatively.) In the early 1980s, the US Supreme Court rejected the view that tax exporting was sufficient ground to find that a tax on coal—argued to be borne by nonresident consumers—violated the constitutional provision prohibiting interference with interstate commerce. The Court noted, among other things, that it could not be expected to undertake the complex economic analysis needed to determine the incidence of taxation.

It is much easier to address the issue of tax exporting in a unitary system of government. The rules of tax assignment can be designed to minimize the likelihood of tax exporting. For example, excise taxes can be assigned to the *oblast* where consumption occurs, instead of to the *oblast* where production or importation occurs. Similarly, revenues from individual income taxes should go to the *oblast* where people work or live, and not to the place where the employer is registered or the location of the primary place of business (as occurred with the transport tax previously levied by Almaty City). It may also be appropriate not to allow subnational surcharges on the enterprise income tax because of the possibility of tax exporting.

Among apparent examples of tax exporting in Kazakhstan are the sharing of revenues from excises with the *oblast* where production or importation occurs, instead of the *oblast* where consumption occurs.¹⁴ In a Western system based on tax assignment,

¹⁴ A similar but more complicated story could be told about VAT and the enterprise income tax, both of which are shared with the *oblast* where the taxpayer is registered. State ownership makes it difficult to think clearly about tax exporting if the tax is actually borne by the enterprise, instead of by easily identifiable groups, such as consumers or workers.

a similar arrangement would result in exporting of tax to consuming *oblasts*. While in the long run such a system would probably cause the taxed industry to locate elsewhere, in the short run it would be unfair. It would probably accentuate horizontal disparities, given the concentration of economic activities in Almaty City. Prevention of tax exporting is essential if subvention *oblasts* are to have adequate revenues from own-sources. But in the system presently in use in Kazakhstan, tax exporting is an ambiguous concept. Because tax-sharing rates and subventions are adjusted to provide the funding needed to finance target expenditures, it makes little difference, *ex ante*, whether or not taxes are exported. Even *ex post*, tax exporting does not matter, as long as exported taxes are no greater (or no less) than anticipated during the budget process. If exported taxes are greater than anticipated, equity suffers. But the efficiency of public decision making does not.

Taxes imposed to provide revenues for extrabudgetary funds are more problematic if they are exported. Because such funds fall outside the system of target budgets, regulating taxes, and subventions described in Chapter 7, such taxes do matter *ex ante*, as well as *ex post*; tax exporting is real in such cases. Perhaps the best example of such an exported tax in the context of Kazakhstan is the 20 percent transport tax imposed by Almaty City on the wage fund of enterprises headquartered in Almaty (which has since been abolished).¹⁵

Macroeconomic Stability

Responsibility for macroeconomic stability (high employment, price stability, exchange rate policy, and so on) is almost universally attributed to the central government by Western economists.¹⁶ It is the only government that has (or should have) the ability to borrow to finance deficits required by the exercise of expansionary fiscal policy. Moreover, because of “leakages” of the effects of macroeconomic policy into imports from beyond their territory,

¹⁵ In a competitive market such a tax would place downward pressure on wages throughout the country, assuming firms could not easily change where they are headquartered. Thus, part of it would be exported to workers living outside Almaty. Under the present system, it is hard to know the incidence of the tax. It might be reflected in higher prices and exported in part to consumers not living in Almaty.

¹⁶ Some would include policy for economic growth in this list. If such a policy is justified, which is far from obvious, it should be a responsibility of the central government. This should not, however, stand in the way of subnational tax competition, provided that subnational governments bear the costs of such a policy.

subnational governments lack both the ability substantially to influence macroeconomic conditions in their areas of jurisdiction and the incentive to try.¹⁷

Individual and enterprise income taxes are commonly seen to be the most powerful instruments of countercyclical fiscal policy. Thus, their use for macroeconomic stabilization should be assigned to the central government. However, this does not, mean that subnational governments should be denied access to revenues from these taxes—only that they should not use them for this purpose. Whereas the national government may levy an individual income tax with personal exemptions and graduated rates, subnational governments might more appropriately employ a flat rate tax with no (or lower) exemption. Similarly, whereas the central government may adjust tax rates for countercyclical reasons, subnational governments should not. This is also easily accomplished by the flat rate surcharge proposed below. The primary arguments against subnational use of the enterprise income tax are administrative difficulties, to be explained below, and the possibility of tax exporting.

METHODS OF TAX ASSIGNMENTS

One can readily identify two methods of tax assignment for analysis, plus tax sharing. (Tax sharing is included in this list, despite the assertion in the previous chapter it is *not* a type of tax assignment and should be replaced by a system based on true tax assignment.) This section appraises these methods on the basis of the following criteria: cost of administration and compliance, transparency and simplicity, subnational choice, tax exporting, and ability to deal with horizontal fiscal disparities.¹⁸

Subnational choice can exist in four areas: (i) the decision of which taxes to levy; (ii) the definition of the tax base; (iii) the setting of tax rates; and (iv) tax administration. Choice of tax rates

¹⁷ In standard Keynesian macroeconomic analysis of a small closed economy, T100 of government spending might have a second-round impact of T80 and a third-round impact of T64 (80 percent of T80). If however, 60 percent of second- and third-round spending is on imports into the region, the aggregate effect on the regional economy of these two rounds of spending is only T71 (T48 + T23), compared to T144 under the standard closed economy analysis.

¹⁸ Bahl and Linn (1992, Chapter 13) also suggest certainty and enhanced fiscal planning as objectives of tax assignment. Surcharges and independent subnational action do not appear to differ substantially with regard to these, as long as subnational governments can rely on the central government to remit the subnational portion of the revenues it collects. Judged by these criteria, both are superior to tax sharing, especially in its present form, for reasons explained in the previous chapter.

is by far the most important of these; it determines the level of government spending that can be financed, which is crucial for decentralization of decision making. By comparison, the powers to choose which taxes to levy (provided there is access to *some* marginal source of revenue that is adequate and appropriate) and to define the tax base are far less important; carried to extreme, these powers can create both economic and administrative chaos, as well as tax exporting, in some cases. Finally, administrative autonomy almost always implies costly duplication of administration and compliance, which Kazakhstan can ill afford.

Independent Legislation and Administration

Maximum subnational autonomy occurs when subnational governments enact their own tax laws independently of higher levels of government (subject only to broad restrictions, such as a prohibition on discriminatory taxation of international trade) and administer their own taxes. This is the system that prevails in the US. It is generally not appropriate for Kazakhstan because of the duplication of effort, complexity, tax exporting, and economic distortions it entails. Beyond that, it is inconsistent with Kazakhstan's unitary system of government.

Independent subnational administration of nationwide taxes would entail duplication of administrative structures; carried to the extreme, as in the US, it might even imply duplication of administrative functions and compliance efforts. In Kazakhstan, the administrative talent required for tax administration and compliance is too scarce to waste in this way.

Independent legislation could produce vastly different tax laws in each *oblast*. For some taxes, such as for dog licenses, this does not matter. But for major nationwide taxes, such as VAT and the enterprise income tax, substantial differences in the laws applied in various *oblasts* cannot be tolerated because of the complexity that would result. Such a system is far from transparent. Moreover, if the laws governing major taxes are not uniform, there can be gaps and overlaps in the tax bases which distort economic decisions on the location of economic activity. Box 8.2 describes the chaotic situation that results from independent legislation and administration of the state enterprise income tax in the US.

Independent legislation and administration would also lead to tax exporting. Moreover, it would make it impossible to implement a coherent national policy, as in the taxation of natural resources. For all these reasons, independent legislation and administration is not appropriate for Kazakhstan.

Box 8.2. Formula Apportionment in the United States

In the formula for an apportioned income tax, as commonly applied in the US, virtually everything is left to be specified in the law and regulatory practice of the individual states. Therefore,

$$T_i = t_i \times I [(W_i/W) + (P_i/P) + (S_i/S)]/3,$$

where:

T_i is tax liability in state I,

t_i is the tax rate in state I,

I is the company's taxable income,

W_i , P_i , and S_i are payroll, property, and sales in state I,
and W , P , and S are total payroll, property, and sales.

The tax rate and the ratio of in-state to out-of-state payroll are the only parts of this formula not subject to considerable controversy. Within quite broad limits, each state can adopt its own definition of taxable income. States need not treat sales consistently; most measure sales at destination, but others measure them at origin. An increasing number depart from the typical formula, double-weighting sales. Some states that generally measure sales at destination include sales originating within their boundaries if made to a state not taxing corporate income.

Also, there is no agreement on the entity to which the formula is applied. Some states adopt a strict legal entity approach. This opens the door for abuse through manipulation of transfer prices. Others combine related companies deemed to be engaged in a "unitary business," but there is no accepted definition of a unitary business. Some states apply unitary combination on a worldwide basis, whereas others restrict combination to "the water's edge," apportioning only profits deemed to be earned in the US. The treatment of intercorporate dividends is particularly troublesome. Dividends flowing between firms filing combined reports are eliminated from the calculation. Some other dividends are taxed, but still others are exempt; this varies by state.

Apportionment based on payrolls and property attributes corporate income to states where production occurs. Including sales in the apportionment formula gives weight to the consuming jurisdiction, but introduces an element of turnover taxation, because the formula does not distinguish between sales of final products to households and sales of capital goods and intermediate products. Double-weighting sales increases this undesirable tendency.

There is an important exception to this rule. Subnational governments in Kazakhstan should be allowed to implement taxes on real estate, as is often the case in other countries. Local people may be better able to appraise real estate than outsiders, and this is the type of tax that can be administered locally. Moreover, quirks in the taxation of real estate (especially land) in one jurisdiction, such as differences in rates and administrative practices, are largely irrelevant for other jurisdictions, contrary to the situation with regard to the enterprise income tax and VAT.¹⁹ There is, moreover, no reason that rates for these taxes should be set by the central government, as is the case now for the land and property taxes. (The former allows local departures from rates set nationally, within certain limits.) The taxes on land and property should remain local taxes, and local jurisdictions should be given a greater role in administration and the determination of rates. The conclusions of this paragraph do not apply to the taxation of natural resources, for reasons stated earlier.

In summary, independent legislation and administration of major taxes is almost totally inappropriate for Kazakhstan; it can be tolerated only for taxes primarily of local relevance, including taxes on real estate. Local business taxes also deserve attention. Because dual subordination of the tax administration involves an extralegal element of decentralized legislation and administration, its prohibition should be strictly enforced.

Tax Sharing

A system that avoids the problems just described is tax sharing, under which the central government collects taxes and shares revenues with subnational governments. In most systems of tax sharing, the sharing rates may be different for particular taxes, but they commonly do not differ between jurisdictions, as in the FSU. Even different sharing rates for different taxes can create problems, as tax administrators subordinate to the central government may have incentives to devote relatively more resources to collecting taxes for which the central government's share is greatest; subordination to subnational governments may produce the

¹⁹ Note, however, that if real estate tax is based on value, instead of land surface, problems arise in valuing assets used in multijurisdictional production, such as railroads and pipelines. It is customary in the US to use formulas to apportion the aggregate value of such assets among jurisdictions.

opposite results.²⁰ If tax-sharing rules, including sharing rates, are predictable (an advantage, from the point of view of subnational governments), tax sharing is inflexible (from the viewpoint of the central government). While tax sharing ranks high because of low administrative costs, economic neutrality, transparency, and simplicity, it does not provide subnational governments control over the level of taxation and expenditures, because such governments cannot determine their own tax rates. For this reason, it is more accurately considered a special form of subvention than a method of tax assignment. Issues of terminology aside, it is easily dominated as a policy option by tax surcharges, which involve only slightly more administrative effort.

Tax Surcharges

Tax surcharges provide the optimal combination of administrative ease, transparency, simplicity, and subnational control.²¹ Under this approach, the tax administration of the central government implements surcharges imposed by subnational governments on the tax base defined by the central government. Unlike tax sharing, surcharges provide subnational governments with fiscal control in a transparent manner where it matters, in the setting of tax rates, while avoiding the problems inherent in independent legislation and administration (inevitably duplication of effort and perhaps complexity, tax exporting, and economic distortions).

Figure 8.1 summarizes the advantages and disadvantages of these three approaches to the division of revenues. It is important to recognize, however, that it is not equally easy to impose subnational surcharges on all taxes of the central government. Tax sharing suffers from essentially the same problems.

Given the lack of experience with surcharges in Kazakhstan, it may be useful to contrast the administration of surcharges with the

²⁰ For example, in India, the constitution provides that 85 percent of revenues from the federal income tax must be shared with the states. It is claimed that this helps explain the relatively poor administration and low revenue performance of this tax. Moreover, to circumvent the intent of this provision, the central government imposed an income tax “surcharge,” arguing that revenues from the surcharge need not be shared.

²¹ It may be worthwhile to note that the term “surcharge” can appropriately be used in at least two ways: (i) as a subnational addition to the tax rate of the central government used to provide revenue to subnational governments; and (ii) as an increase in the tax rate of the central government commonly used to combat deficits of the central government. In the remainder of this book only the first meaning is intended.

**Figure 8.1. Advantages and Disadvantages of
Three Methods of Revenue Assignment**

Method of Revenue Assignment	Advantages	Disadvantages
Separate Legislation and Administration	Choice of tax base Choice of tax rate Control of administration	Duplication of administration Administrative/compliance costs Susceptible to tax exporting
Subnational Surcharges	Choice of tax rate Uniform tax base Unified administration Tax exporting can be minimized	No choice of tax base
Tax Sharing	Unified administration Uniform tax base	No choice of tax base No choice of tax rate

administration of tax sharing. In tax sharing, the *revenues* from a given tax are divided between the central government and *oblasts* (and perhaps *rayons*), and among *oblasts* (*rayons*) on the basis of rules intended to reflect the derivation of revenues; a crucial distinguishing feature of tax sharing is lack of subnational control over tax rates. (In Kazakhstan, a formula has been used to divide revenues from the enterprise income tax among *oblasts* since January 1996. While the derivation rules currently employed in Kazakhstan are administratively feasible, they would generally be inappropriate in a system of tax assignment.)

By comparison, in a system of tax surcharges, the national *tax base* is divided among *oblasts* (and perhaps *rayons*), if necessary using formulas or other rules or administrative techniques. The central government applies its tax to the entire tax base and each *oblast* imposes a tax rate of its choosing (perhaps within limits) on its share of the total base. To simplify administration, the central government may, of course, collect both its tax and *oblast* (and *rayon*) surcharges.

The use of surcharges administered by the central government provides subnational governments with somewhat less control over their fiscal destiny than does a system based on independent legislation and administration. Subnational governments can exercise “fiscal effort” only in the choice of tax rates; they have no (or little) control over the tax base; absent dual subordination, they cannot exert increased (or decreased) effort in administration, which is not under their control. These limitations on fiscal effort are perhaps unfortunate, but are a reasonable price to pay to avoid the duplication of effort and the potential for complexity and tax exporting inherent in independent legislation and administration.

It is often claimed in other parts of the FSU, as elsewhere, that the central government devotes most administrative resources to those taxes where its share is greatest and least to those where it keeps relatively small shares of revenues. On the other hand, it is often claimed that subnational governments are able to exercise implicit dual subordination—that is, to exert undue influence over the administrative efforts of tax officials who are ostensibly under the control of the central government, perhaps because they provide discretionary funds, office space, computers, communications, repairs, housing, and various other perquisites. The result may be either unduly favorable treatment of local enterprises (presumably those competing in national markets), or a bias in administrative efforts toward revenue sources with the largest subnational shares. Although the Mission heard some of these concerns in Kazakhstan, the level of concern seemed to be much less than, for example, in

Russia several years earlier. All of these problems should be avoided. Implicit dual subordination should not be tolerated. It might be appropriate to appoint a committee that includes *oblast* officials to advise STC on administrative priorities, such as which taxes to monitor most closely. National legislation should specify clearly the legal priority of the central and subnational governments' claims to revenues.

A number of steps should be taken to minimize local influence over tax authorities. First, all necessary steps should be taken to enforce the lines of authority specified in the tax code. Second, tax officials should be rotated between *oblasts*, as well as between enterprises. Third, subnational governments should not provide office space, housing, or other perquisites—or they should do so on the basis of contractual arrangements with STC, not its local personnel, so as to minimize local influence over the tax administration. Fourth, heavy sanctions should be imposed on those who attempt to influence tax administrators not to follow the law, as well as on the administrators themselves. Some of these steps may, of course, require increasing the budget of STC.

Conversely, if Kazakhstan is to rely on a system based on either tax sharing or tax surcharges, STC must enforce all tax laws in an even-handed manner, regardless of which level of government receives the revenue. This does not, however, mean that revenue consequences should be ignored in determining priorities of the tax administration. The allocation of administrative resources should be based on the expected increase in revenues of *all* levels of government, not only central government revenues.

Synthesis: Adding Grants

Where feasible, tax surcharges are the optimal way for the subnational governments of Kazakhstan to obtain revenues from major taxes on economic activity occurring within their borders. Like other methods of tax assignment and tax sharing, surcharges generate revenues for the subnational jurisdictions where economic activity occurs. As a result, they can lead to horizontal fiscal disparities. Jurisdictions with substantial economic activity receive substantial revenues, and those with little economic activity receive little revenue. The problem is aggravated when economically important natural resources are concentrated geographically; channeling 30 percent of revenues from royalties to subnational governments, as provided in the draft law on the taxation of mineral

resources, could clearly have this effect. Moreover, there is no guarantee against vertical fiscal imbalance. For this reason, surcharges should be complemented with a system of grants, which can be used to fill in the vertical and horizontal gaps in the revenue-raising capacity of various jurisdictions. Such a system is explained in the next chapter.

It might seem anomalous to have two very different flows of revenues in the same system. This criticism is valid for a system that combines tax sharing with grants, such as the present system in Kazakhstan. Because both are forms of subvention, there is no reason to have both; it is simpler and more transparent to have only one subvention. The same objection cannot be made against a system that combines tax assignment and grants. The explanation is simple. Unlike tax sharing, tax assignment is not a form of subvention. It provides subnational governments with a marginal source of revenue they can control; this is needed to provide fiscal choice. Grants are needed to overcome horizontal fiscal disparities and vertical fiscal imbalance; they should not be the marginal source of revenue for subnational governments. In the system proposed, revenues from surcharges would go to all jurisdictions, but be concentrated in *oblasts* with substantial tax bases. In a system of “weak” subnational governments, all would receive grants; in a system with “strong” subnational governments, grants would go primarily to *oblasts* lacking substantial tax bases. This is explained further in the next chapter.

WHY THE PRESENT RULES CANNOT UNDERPIN A NEW SYSTEM OF TAX ASSIGNMENT

Any method of tax sharing or tax assignment involves detailed rules that determine the division of tax revenues or tax bases among jurisdictions (for example, rules for determining the place of origin of revenues shared on a derivation basis), as well as constitutional or statutory restrictions on the actions of subnational governments. Kazakhstan’s present system of dividing tax revenues among the *oblasts* (and *rayons*) cannot form the basis of a rational system of tax assignment based on surcharges. Judged by commonly accepted standards of tax assignment (as well as common sense), the present system assigns tax revenues to the “wrong” *oblasts*, except in the case of the individual income tax. Whereas this can be tolerated in the present system, in which the division of tax revenues among *oblasts* is essentially irrelevant, it cannot be tolerated in a system

where tax assignment actually matters. Moreover, if carried into the new system, the present rules for tax assignment would create opportunities for abuse and administrative headaches.

Enterprise Income Tax

Present Practice²²

In the case of enterprises operating in more than one jurisdiction, it is necessary to divide the base of the enterprise income tax (or revenues from the tax of the central government, in the case of tax sharing) among the subnational jurisdictions where income is earned. Under present practice, revenues from the enterprise income tax are shared with the *oblast* (and the *rayon*, where relevant) where the enterprise is registered.²³ This is true even if the enterprise operates in more than one *oblast*, as long as it operates as only one legal entity.

The Problem

Income is not generally earned only where an enterprise is registered, as is implicitly assumed in the residence-based tax-sharing rules Kazakhstan inherited from the Soviet Union, and it

²² The “present practice” described here, in effect when the Mission visited Kazakhstan in August 1995, has been replaced by a system of tax sharing among *oblasts* based on formula apportionment of revenue (see Chapter 3). Despite being out of date, this description is retained because it explains problems inherent in the previous system and clarifies benefits of the new approach.

²³ Before 1994, only income taxes on enterprises of republic subordination were shared. All revenues from the tax on the income of enterprises subordinated to either *oblasts* or *rayons* went into the coffers of the respective *oblast* or *rayon* administrations. In the case of enterprises subordinate to the republic, 16 percentage points of the 25 percent tax went to the republican budget; the other 9 percent went to the *oblast* where the enterprise was registered. Under this system, an enterprise of republican subordination would submit two separate payment invoices to its bank, splitting its tax payments in the ratio of 9 to 16 between *oblast* and central budgets.

Under the system prevailing in 1995, all enterprises are subject to one set of rules for the application of tax sharing; the central government shares revenues with the *oblast* where the enterprise is registered. Enterprises make payments only to the account of the central government. STC applies a uniform sharing rate to payments from all enterprises registered in a given *oblast* and instructs NBK to transfer the appropriate amount of funds to the account of each *oblast*. The *oblast* applies the proper *rayon*-sharing rates to share its funds with the *rayons* where enterprises are registered.

would be unfair to base tax assignment on the premise that it is. If a residence-based rule were to be used in a new system involving tax surcharges, far too much of the tax base would be attributed to some *oblasts* (notably Almaty City), and far too little to others.²⁴ Tax exporting would be rampant.

These problems would not be solved by treating each separately registered entity as a distinct taxpayer or by requiring that enterprises register in each jurisdiction where they do business. Such forced fragmentation would increase administration and compliance costs dramatically, without addressing the fundamental problem that any business entity operating in more than one jurisdiction generally earns income in all. Indeed, if tax rates are not uniform across *oblasts*, fragmentation would increase the likelihood that transfer prices would be manipulated to place taxable income in low-rate *oblasts* and necessitate resort to combination of affiliated firms deemed to be engaged in a unitary business, (a commonly followed practice in the US; see the next section). Moreover, in some cases, forced fragmentation would clearly give inappropriate results. For example, a single highly integrated firm might report losses in one *oblast* and profits in another; this might be especially relevant in the case of foreign investors that have administrative offices in Almaty, as well as production facilities elsewhere. Given the difficulties with the use of “separate accounting” to determine the geographic source of enterprise income, it is common to use formulas to apportion income of multijurisdictional enterprises among the subnational jurisdictions where they operate. Kazakhstan has recently adopted this approach as the basis for tax sharing.

Quantification of the Problem

Table 8.1 provides a variety of indicative quantitative information on this issue. The first three sets of columns show the

²⁴ Moreover, in a system in which *oblasts* can choose the rate of surcharge to apply to their share of the tax base of the central government, there would be an incentive for some *oblasts* to select a very low (even zero) surcharge rate, to attract registration of multi-*oblast* enterprises. In the US, the small state of Delaware has traditionally been the site of incorporation of a disproportionate number of corporations, in part because of its lax incorporation statutes. (In the US, corporate registration is the subject of state law, not federal.) Historically, Delaware has been able to finance a substantial portion of its expenditures through taxes and fees on corporations that do relatively little business within its boundaries. The Delaware corporate franchise tax currently accounts for about 20 percent of state tax revenues.

Table 8.1. Distribution of Enterprise Income Tax Revenues - Comparison of Current Law Collections and Retentions with Distribution by Payroll

<i>Oblast</i>	CURRENTLAW				DISTRIBUTION BY PAYROLL			
	Collections (tenge 000)	Percentage of Total Collections	Retentions (tenge 000)	Percentage of Total Retentions	Total (tenge 000)	Percentage of Total	Percentage Change Compared to Collections	Percentage Change Compared to Retentions
Akmola	1,824.40	7.50	1,642.00	12.90	1,343.50	5.50	26.4	18.2
Aktubinsk	1,653.30	6.80	848.20	6.70	861.30	3.50	47.9	1.5
Almaty	429.80	1.80	429.80	3.40	495.60	2.00	15.3	15.3
Atyrau	1,160.10	4.80	458.20	3.60	485.70	2.00	58.1	6.0
East Kazakhstan	1,115.80	4.60	1,115.80	8.80	1,878.80	7.70	68.4	68.4
Jambyl	487.00	2.00	487.00	3.80	796.10	3.30	63.5	63.5
Jezkazgan	263.40	1.10	263.40	2.10	1,599.20	6.60	507.1	507.1
West Kazakhstan	640.20	2.60	640.20	5.00	596.10	2.50	6.9	6.9
Karaganda	1,878.50	7.70	1,014.40	8.00	4,473.10	18.40	138.1	341
Kzyl-Orda	370.80	1.50	370.80	2.90	282.40	1.20	23.8	23.8
Kokshetau	442.50	1.80	442.50	3.50	544.40	2.20	23.0	23.0
Kostanai	2,997.80	12.30	881.30	6.90	1,684.20	6.90	43.8	91.1
Mangystau	847.00	3.50	166.90	1.30	1,015.10	4.20	19.9	508.4
Pavlodar	2,152.00	8.80	563.80	4.40	3,191.70	13.10	48.3	466.1
North Kazakhstan	271.90	1.10	271.90	2.10	681.10	2.80	150.5	150.5
Semipalatinsk	494.40	2.00	494.40	3.90	852.10	3.50	72.3	72.3.0
Taldykorgan	173.10	0.70	173.10	1.40	454.00	1.90	162.3	162.3
Torgai	128.00	0.50	128.00	1.00	267.60	1.10	109.1	109.1
South Kazakhstan	1,878.80	7.70	1,878.80	14.80	1,089.10	4.50	42.0	42.0
Almaty City	5,166.30	21.20	459.80	3.60	1,783.80	7.30	65.5	287.9
TOTAL	24,375.10	100.00	12,730.30	100.00	24,375.10	100.00	n/a	

Notes: n/a = Data not applicable.

Payroll is defined as monthly wage "12" total employment in the industrial sector.

Source: Data provided by USAID/Barent.

distribution among *oblasts* (in both tenge and percentage terms) of (i) total tax collections from the enterprise income tax, that is, collections before application of sharing rates; (ii) retentions of this tax after application of sharing rates; and (iii) total enterprise income tax revenues distributed between *oblasts* in proportion to industrial payroll. The last of these is included to show the results of one method of formula apportionment.²⁵ The last two columns show how distribution of enterprise income in proportion to industrial payrolls differs from the existing distributions of collections and retentions. Distribution of tax revenues in proportion to payrolls would reduce substantially the amounts of collections from the enterprise income tax attributed to several *oblasts*: Akmola (by 26 percent), Aktubinsk (by 48 percent), Atyrau (by 58 percent), Kzyl-Orda (by 24 percent), Kostanai (by 44 percent), South Kazakstan (by 42 percent), and Almaty City (by 65 percent). It would increase revenues from this source by even larger percentages in several *oblasts*: East Kazakstan (by 68 percent), Jambyl (by 63 percent), Jezkazgan (by more than 500 percent), Karaganda (by 138 percent), Pavlodar (by 48 percent), North Kazakstan (by 151 percent), Semipalatinsk (by 72 percent), Taldykorgan (by 162 percent, and Torgai (by 109 percent).²⁶ It is possible that an alternative allocation, in proportion to sales at destination, would shift more revenue to poorer *oblasts*, but data needed to confirm this are lacking. Allocation in proportion to capital stock in the various *oblasts* would probably not be very different from allocation in proportion to payrolls.²⁷

Potential Abuses

The present system contains several avenues of abuse, especially if enterprise managers and subnational government officials work

²⁵ At best, this gives only a rough indication of how revenues might shift if enterprise income taxes were apportioned according to payrolls. It assumes implicitly that the ratio of enterprise income to payrolls is uniform across enterprises and *oblasts*. Moreover, it ignores nonindustrial payrolls.

²⁶ The changes relative to current retentions would be quite different, but also seem less relevant, because of (i) the larger amount of revenue being distributed (roughly twice as much), and (ii) differences in 1995 retention rates across *oblasts*. Compared to 1995 retentions, revenues would rise in all but four *oblasts*, and by substantial amounts in several, including Almaty City.

²⁷ Experience under the new apportionment formula will provide far better data.

together to “beat the system.” Most obviously, an enterprise with separately chartered affiliates in several *oblasts* could manipulate transfer prices and charges for interfirm finance to understate profits in high-tax *oblasts* and overstate them in low-tax *oblasts*. Manipulation could be attractive even if tax rates did not differ between *oblasts*, but the enterprise (or its managers, owners, or employees) received untaxed benefits in the home *oblast*, as is likely. In principle, STC might be able to prevent such abuses. But it lacks the administrative resources and perhaps the incentive and legal authority to attack such abuses. The misallocation of tax revenues between *oblasts* would not affect total revenues of the central government; thus, there would be little incentive to adjust transfer prices, unless *oblast*-sharing rates were different. Moreover, the new tax code provides for the adjustment of transfer prices between affiliated firms only for transactions with a foreign firm or a firm benefiting from tax preferences; neither of these is assumed in the example.

Value-added Tax

Present Practice

Under present practice, revenues from VAT are assigned to the *oblast* (and to the *rayon*, where relevant) where the enterprise is registered. Contrary to the situation under the enterprise income tax, enterprises have the option (subject to approval by STC) of registering branches for VAT purposes where they operate, even if there is only one legal entity. VAT on imports is shared with the *oblast* where importation occurs.²⁸ Credits (and rebates) for VAT resulting from exportation are made at the expense of the budget of the *oblast* where the exporting enterprise is registered.

The Problem

In principle, value added might be a reasonably good measure of the generalized benefits of public services provided by subnational jurisdictions. (Destination-principle tax sharing or surcharges on VAT would be appropriate for financing services to

²⁸ The new tax code provides for the deferral for 30 days of VAT due on imports of manufacturing inputs. It is unclear which *oblasts* would share in these revenues.

consumers; origin-based sharing or surcharges would be more appropriate for services provided to producers.) But the present system of sharing VAT revenues on the basis of registration of legal entities (or of branches, at the option of the taxpayer, with approval of STC) has little to recommend it. An enterprise is not necessarily registered where its economic activity occurs, (as measured by where value added occurs) or where the provision of public services occurs. Thus, basing surcharges on the place of registration could lead to substantial tax exporting, especially from Almaty City to the rest of the country. Attributing all the value-added tax base to the *oblast* of registration (and especially to *rayons*) probably accentuates horizontal fiscal disparities. The option to fragment an enterprise for the purpose of reporting VAT may reduce these problems, but at the expense of greatly increasing the administrative burden on enterprises that choose this option—and on STC.

International trade with non-CIS countries would be especially problematic if tax surcharges were based on the present rules. *Oblasts* where imports occur, rather than *oblasts* where consumption occurs, would tax imports. This would cause tax exporting by *oblasts* where importation occurs. When imported goods are sold to consumers, the *oblast* where the retailer is registered would be responsible for the credit for the prior *oblast* VAT, even if the tax was paid to another *oblast*, or, indeed, to another member of the CIS. In the case of exports to non-CIS countries, which are zero-rated, the *oblast* where exports occur (or the *oblast* where the exporter is registered) would be required to provide credits for tax that may have gone to another *oblast* or another CIS country. While the effects on imports and exports might tend to balance out, there is no guarantee of this, as evidenced by the case of triangular trade in Brazil, described in the next section.

Quantification of the Problem

Because there are no data on consumption of goods subject to VAT and excises, by *oblast*, it is difficult to determine how much difference it would make if revenues from these two taxes were shared on the basis of consumption, instead of being shared under current rules. However, the data on collections per capita of these taxes, by *oblast*, in Table 8.2 shed some light on this issue. VAT collections per capita are more than twice as high in Almaty City as in any other *oblast*, as are excise collections, if we leave Atyrau out of the comparison. (Presumably the abnormally high excise tax collections in Atyrau reflect manufacturing of tobacco products and

Table 8.2. Per Capita Collections and Retentions
(by *oblast*, tenge)

<i>Oblast</i>	Individual Income Tax Collections	Enterprise Income Tax		VAT		Excise Tax	
		Collections	Retentions	Collections	Retentions	Collections	Retentions
Akmola	1,061	2,098	1,888	2,454	1,227	268	268
Aktubinsk	1,801	2,175	1,116	2,356	1,178	429	429
Almaty	676	446	446	388	388	38	38
Atyrau	2,310	2,535	1,001	12,461	246	2,503	250
East Kazakstan	1,521	1,161	1,161	1,183	1,183	596	596
Jambyl	522	463	463	456	456	318	318
Jezkazgan	2,691	534	534	1,249	1,249	85	85
West Kazakstan	1,114	949	949	932	932	411	411
Karaganda	1,972	1,439	777	2,343	1,171	190	190
Kzyl-Orda	575	612	612	532	532	132	132
Kokshetau	810	656	656	1,067	1,067	339	339
Kostanai	1,645	2,769	814	1,450	725	85	85
Mangystau	3,823	2,502	493	2,242	224	53	5
Pavlodar	2,155	2,228	584	1,623	325	402	201
North Kazakstan	933	438	438	865	865	533	533
Semipalatinsk	685	589	589	1,222	1,222	137	137
Taldykorgan	456	235	235	278	278	11	11
Torgai	796	409	409	664	664	78	78
South Kazakstan	488	954	954	751	751	583	583
Almaty City	2,517	4,358	388	5,286	1,057	1,326	265

Note: The sharing rate for the individual income tax is 100 percent in all *oblasts*; therefore, collections and retentions are the same.

Sources: Level of budget revenue by *oblast*, USAID-Barents Group; Population, 1993 Statistical Yearbook (1994 population figures).

refining of petroleum products. This further highlights the defects of the present system.) Even allowing for differences in average incomes across *oblasts*, this difference seems extraordinary. The average monthly wage in Almaty City is 112 percent of the national average, and individual income tax collections per capita are 185 percent of average. One would not normally expect expenditures per capita on goods subject to VAT and excises, relative to the national average, to exceed these figures. Revenue from these taxes is clearly being allocated to the “wrong” *oblasts*. Assignment of taxes on this basis would produce substantial tax exporting. A comparison of collections per capita of enterprise income taxes in Almaty City and elsewhere (almost 60 percent greater in Almaty than the next highest *oblast*) seems to tell pretty much the same story. If revenues from the enterprise income tax were distributed in proportion to payrolls, revenues would be barely 35 percent as great as current collections in Almaty City.

Potential Abuses

Enterprises engaged in exportation to non-CIS countries could arrange their affairs in such a way as to burden *oblasts* where they are not registered. In particular, they could register an affiliated enterprise in another *oblast* (presumably at the point of exportation), to assure that the other *oblast* would share in the rebate of VAT required by application of zero-rating to such exports. While perhaps abusive of the spirit of the law, this scheme appears clearly to be legal, and thus beyond the ability of STC to correct.

Subnational authorities might pressure enterprise managers to exercise the option that allows each branch to report VAT to the *oblast* where it conducts business. While this might produce a somewhat more rational division of revenues than a system based entirely on the place of registration of the enterprise, it could impose enormous reporting requirements on business and administrative problems on STC.

Excises

Present Practice

Revenues from excises are shared with the *oblast* where production or importation occurs.

The Problem

Excises can usefully be divided into categories: (i) benefit-rated taxes that are levied to provide revenue to cover the costs of particular public services that are closely related to the consumption of the good subject to excise; and (ii) excises that simply provide revenue. Examples of the former include taxes on motor fuels intended to cover the cost of building and maintaining streets, roads, and highways, and taxes on alcoholic beverages and tobacco products intended to cover the costs associated with consumption of these products (for example, automobile accidents, liver problems, and lung diseases). Revenues from these taxes should ideally be assigned to the jurisdiction that is assigned responsibility for the postulated costs. In general, this is probably most commonly the *oblast* where the taxed consumption occurs. To reduce vertical fiscal imbalance, revenues from excises not closely related to costs of providing particular public services might best be assigned to subnational governments. As argued earlier, this ideally would be the jurisdiction where consumption of the taxed good or service occurs, if possible.

By these standards, the present rules for sharing revenues from excises with the *blasts* where production and importation occurs is inappropriate. If this assignment were carried over to a new system, *oblasts* where these activities are concentrated (such as Atyrau, Pavlodar, and South Kazakhstan in the case of oil refineries and Almaty City and South Kazakhstan in the case of cigarette factories) would receive too much revenue and *oblasts* where consumption occurs would receive too little. Taxes would be exported from producing and importing *oblasts* to consuming *oblasts*. Besides being unfair, the ability of the former *oblasts* to export their taxes would alter the “tax prices” at which they can acquire public services and encourage them to over provide such services.

Quantification of the Problem

Table 8.3 compares current law collections and retentions of excises (based on 1995 extension rates) with retention rates under a system in which excise tax revenues are distributed among *oblasts* in proportion to national income originating in the *oblast*.²⁹ They show that substantial amounts of the tax base would be distributed

²⁹ National income originating in the *oblasts* is not an ideal series to use for this purpose; it is the best available and is indicative of the problem.

Table 8.3. Distribution of Excise Revenues - Comparison of Current Law Collections and Retentions with Distribution by National Income
(tenge million)

<i>Oblast</i>	Current Law		Total Revenues Distributed by National Income	Percentage Change from Current Law	
	Collections	Retentions		Collections	Retentions
Akmola	233.40	233.40	418.9	79.50	79.50
Aktubinsk	326.50	326.50	339.4	4.00	4.00
Almaty	36.20	36.20	281.7	678.10	678.10
Atyrau	1,145.70	114.60	223.9	-80.50	95.40
East Kazakhstan	573.20	573.20	546.9	-4.60	-4.60
Jambyl	334.50	334.50	339.4	1.50	1.50
Jezkazgan	41.80	41.80	317.8	660.20	660.20
West Kazakhstan	276.80	276.80	209.4	-24.30	-24.30
Karaganda	248.10	248.10	780.0	214.40	214.40
Kzyl-Orda	80.20	80.20	158.9	98.20	98.20
Kokshetau	229.00	229.00	317.8	38.80	38.80
Kostanai	92.10	92.10	592.2	543.00	543.00
Mangystau	18.10	1.80	245.6	1,256.90	13,544.40
Pavlodar	388.10	194.10	693.3	78.60	257.30
North Kazakhstan	330.80	330.80	281.6	-14.90	-14.90
Semipalatinsk	114.90	114.90	252.8	120.00	120.00
Taldykorgan	8.20	8.20	209.4	2,453.70	2,453.70
Torgai	24.50	24.50	158.9	548.50	548.50
South Kazakhstan	1,148.60	1,148.60	563.3	-51.00	-51.00
Almaty City	1,571.50	314.30	288.9	-81.60	-8.10
Total	7,222.20	4,723.60	7,220.10		

Sources: 1995 Amended Budget of Kazakhstan (Ministry of Finance); authors' calculations; and USAID-Barents.

away from Atyrau, South Kazakstan, and Almaty City in 1995. But because of the low sharing rates in Atyrau and Almaty City, Atyrau would actually gain revenue, and the loss of retentions by Almaty City would be small. Because South Kazakstan currently retains all excise revenues, its revenues from this source would fall by more than 50 percent. At least half of the *oblasts* would experience large percentage gains in revenues from excises; in monetary terms some of these are relatively modest. In the aggregate, *oblast* revenues from excises would increase by about 50 percent under this alternative.

SURCHARGE-BASED SYSTEM OF TAX ASSIGNMENT ON POTENTIAL ABUSES

A system of financing subnational governments based on surcharges on the major taxes of the central government is a reasonable long-range goal for Kazakstan if fiscally strong *oblasts* are thought to be desirable. Under such a system, the central government would determine the tax base and the basic rules needed to divide the base among *oblasts*. (The sum of the bases for *oblast* surcharges would be identical to the base of the central government's tax. Some derivative rules for dividing the base might be promulgated by regulation.) STC would administer *oblast* surcharges, as well as the basic tax of the central government.

This section provides a brief overview of the conceptual strengths and weaknesses of surcharges on the major taxes, as well as the information and administrative requirements of a system based on surcharges. Surcharges on the individual income tax could probably be implemented fairly quickly. While surcharges on the enterprise income tax and excises are reasonable long-run objectives, it might not be feasible to implement them immediately. It would be virtually impossible to impose a subnational surcharge on VAT that would be satisfactory in the long run. VAT should become a solely national tax, not subject to tax sharing or surcharges.

Individual Income Tax

The individual income tax would ideally be subject to a surcharge levied by the taxpayer's *oblast* of residence, as a form of tax related to generalized benefits of public services. This will be difficult to achieve in its pure form in the near future. For taxpayers who complete declarations, this should be relatively easy to

implement. Because most individuals will not complete income tax returns (and should not be required to do so, for reasons spelled out in Chapter 3), they will pay tax where they work, through a final withholding tax, and not where they live. Given the large distances separating major municipalities in Kazakhstan, the possibility that taxpayers might live in one *oblast* and work in another does not seem to be a major concern, except in the Almaty region.

Commuting between *rayons* within cities is likely to be a far greater problem; even here the prevalence of employer-provided housing probably reduces the seriousness of the problem in the short run. In the long run, it might be appropriate to consider a system of transfers between *rayons* based on taxpayer certification of place of residence.

If surcharge rates were to differ widely between *oblasts* (*rayons*), some taxpayers may be expected to try to pay income taxes in low-tax *oblasts* (or low-tax *rayons*) where they do not actually live. At the *oblast* level, this would seem to be primarily a problem for those with income from business and other nonemployment income, because most taxes on wages and salaries would be collected through retention at source. It would be necessary to verify residential addresses for such taxpayers.

Despite the potential problems identified here, the individual income tax is probably a candidate for relatively early application of subnational surcharges. It could build rather naturally on the present system of tax sharing. It would generally be appropriate for *oblasts* (and *rayons*) to apply flat rate surcharges to the base (not the revenue) of the central government. These rates might be limited, to prevent subnational governments from taking undue advantage of taxpayers who have substantial income, but relatively little political power in the jurisdiction like expatriate workers. This would leave the central government free to impose graduated rates on the same base, for distributional reasons. Presumably, the sum of tax rates imposed by the central government and the maximum rates allowed *oblasts* and *rayons* should not, on average, exceed the rates under current law. To accomplish this, it would be necessary to reduce the tax rate of the central government, to provide “room” for the tax surcharges imposed by *oblasts*.

Table 8.4 illustrates how this might be achieved. Column (a) shows the marginal rate schedule under current law. In Column (b), each marginal tax rate has been reduced by 5 percent to make room for *oblast*-level surcharges. If an *oblast* were to charge a surcharge rate of 5 percent, the aggregate central and *oblast* tax rates would be as shown in Column (a).

Table 8.4. Decomposition of Current Individual Income Tax into “Basic” and “Progressive” Elements

Taxable Income in MCIs	Marginal Tax Rate		
	Current Law	Progressive Component	Aggregate ^a
	(a)	(b)	(c)
0-10	5	0	0-10
10-20	10	5	5-15
20-30	15	10	10-20
30-40	20	15	15-25
40-50	30	25	25-35
50+	40	35	35-45

Note: MCI = minimum calculation index.

^a Aggregate tax rate assumes that a basic rate of zero to 10 percent is applied to all taxable income.

If *oblasts* are to have enhanced autonomy, as well as greater revenue, they should not be constrained to a level of surcharge equal to the reduction in the tax rate of the central government. They might, for example, be allowed to levy any surcharge of their choosing, within a certain range, say zero to 10 percent. Column (c) indicates the range of aggregate tax rates that result from exercise of this option. The present rate structure, shown in Column (a), falls at the midpoint of the ranges under this option.

It might be objected that, because of the paucity of satisfactory tax bases that can be tapped by *oblast* governments and to tighten the link between taxes and benefits of public spending, *oblasts* should be given all revenues from the individual income tax, as before July 1995. While this view has merit, it deserves the following comments. Assigning the progressive (column b) portion of the tax to the *oblasts* runs counter to the usual assignment of progressive taxes to the central government. Assignment to the *oblast* could have one or more of the following undesirable effects: elimination of the progressive element through tax competition among *oblasts*; distortion of the location of economic activity or residence (if a strong progressive element remains); exploitation of high-income individuals, such as expatriate employers in the natural resource sector; and accentuation of horizontal fiscal disparities. It would be possible to avoid the first three of these effects by splitting the (purely local) income tax into two components, as in Table 8.4: a

required “progressive” element (shown in column b) and a “basic” component to be levied at a flat rate of, for example, zero to 10 percent. Tax competition could thus prevail only with regard to the “basic” rate. Because all taxpayers would pay this rate—which should be constrained to be a flat rate, it can be expected to reflect marginal benefits of public services; thus, destructive tax competition should not be important. Because *oblasts* would have no control over the progressive part of the tax structure, there would be no opportunity for destructive tax competition or for exploitation of high-income taxpayers. Similarly there should be little distortion of the location of economic activity or residence, if the basic rate reflects benefits of public spending and the progressive structure is common to all *oblasts*.

Enterprise Income Tax

The enterprise income tax is not an ideal subject for subnational surcharges. Enterprise income is not a satisfactory measure of benefits of public services; there is little reason to believe that profitable enterprises benefit from public services, but unprofitable ones do not, or that benefits are proportionate to profits. Subnational taxes on enterprise income that do not reflect benefits of public services distort the location of economic activity and they can result in tax exporting. Finally, the tax base cannot generally be divided among jurisdictions, except arbitrarily. Even so, because of the paucity of more appropriate tax bases, it may be thought desirable eventually to assign revenues from the enterprise income tax to subnational governments in Kazakhstan. This depends on whether there is a desire for fiscally strong *oblasts* (Box 7.1).

It is generally inherently impossible to divide the income of a single enterprise scientifically between the jurisdictions where the enterprise operates because of the economic interdependence of the various parts of the enterprise.³⁰ Moreover, if tax rates were to vary between jurisdictions, as they might if the *oblasts* were allowed to impose surcharges, the attempt to use separate accounting to divide income between *oblasts* would open the door for enterprises to manipulate the division of income to place taxable income in the *oblasts* with the lowest rates. They can do this, for example, by manipulating transfer prices and interest rates for intrafirm transactions.

³⁰ The discussion that follows is based on ideas expressed more fully in McLure (1984).

As a result of these problems, virtually all advanced countries that impose subnational taxes on the income of enterprises employ formulas to divide such income among the jurisdictions in question. It is thus appropriate that Kazakhstan has replaced residence-based attribution of income for purposes of tax sharing with a system of formula apportionment. Beginning in 1996, STC now uses a single formula to divide enterprise income among the *oblasts* where they operate.³¹ Formula apportionment could also underpin a system of surcharges on the enterprise income tax.

Economic interdependence is often as great between members of a group of affiliated enterprises (for example, between the parent and its subsidiaries) as between branches of a single enterprise, as is the possibility of manipulating transfer prices and interest rates. Recognizing this, many US states “combine” the activities of affiliated firms deemed to be engaged in a “unitary business.” In “unitary combination,” the profits and apportionment factors of related firms deemed to be engaged in a unitary business are aggregated, with intragroup transactions, including dividends, netted out. Kazakhstan should probably consider such an approach if it adopts formula-based tax assignment, and even if it continues the present system of formula-based tax sharing.³²

Any apportionment formula is inherently arbitrary, and opinions can differ on the best formula to use.³³ In the US, such formulas have commonly (but not universally) used a three-factor formula that gives equal weights to the percentage of the payroll, property, and sales (at destination) of the enterprise that occur in the taxing state.³⁴ In Canada, the division of income among the provinces is based on only payroll and property. Kazakhstan’s choice of a three-factor formula is a reasonable one, but not without problems.

³¹ In actuality, it might be necessary to employ different formulas for certain industries, such as banking and finance and telecommunications. This issue is not discussed further. Note the importance of a single definition of taxable income and uniform rules for the division of income among subnational jurisdictions. Box 8.2 indicates the problems that can arise if, as in the US, subnational governments are allowed to go their own way in these matters.

³² Some US states go so far as to apply combination to the worldwide income of groups of affiliated enterprises, much to the dismay of multinational enterprises and foreign governments. There seems to be no reason for Kazakhstan to do this simply to determine the division of income among *oblasts*; rather, enterprise income subject to tax in Kazakhstan would simply be divided on the basis of a formula.

³³ On this issue, see Musgrave (1984).

³⁴ Sales have historically been attributed to the state of destination. In recent years, there has been a tendency to give sales double weight in the apportionment formula, to reduce taxation related to local production, which is represented by payroll and property (and in some states by sales at origin).

Payroll, property, and sales at origin all provide measures of production. While the choice between them is by no means irrelevant, it is much less important than the decision of whether the formula should include sales at destination. This last factor attributes enterprise income to the jurisdiction where consumption occurs. Leaving aside theoretical and conceptual arguments, in the case of Kazakhstan, inclusion of sales at destination in the formula would have the effect of providing badly needed tax revenues to the poorer nonindustrial *oblasts*, and thus reducing horizontal fiscal disparities and the need for transfers from the central government. This may be enough to offset disadvantages of this approach.³⁵ Thus, the receipts factor should be shifted from origin to destination as soon as feasible.

It is unclear whether the data needed to implement a formula such as this currently exist in Kazakhstan. The data needed to implement a formula based on payrolls and sales (at either origin or destination) may exist; but satisfactory data of the type needed to add capital stock to the formula are probably lacking.³⁶ Ideally, figures on capital stock would reflect current market values; such figures are generally not available. In normal times it might be possible to approximate market values by applying an inflation factor to the depreciated book value of capital goods. Such an approach is likely to be unreliable during the current period of transition to a market economy, for a variety of reasons: the initial book value assigned to capital created during the socialist era is not likely to reflect true economic values prevailing at the time; and, even if it did, depreciation is unlikely to capture the effects of obsolescence related to the transition to a market economy; there is a problem of adding rubles and tenge; finally, rates of inflation have been high, variable, and difficult to measure.

Despite these problems, the use of formula-based *oblast* surcharges on the enterprise income tax is a reasonable option. But, even more than in the case of the individual income tax, there should be a cap on *oblast* and *rayon* tax rates because of the risk that taxes would be exported or interfere with national economic policy. Again, the tax rate of the central government should be

³⁵ One disadvantage is that inclusion of the sales factor attributes tax base according to gross receipts from all sales, instead of the value of retail sales to households. This probably is not a major disadvantage in the present context.

³⁶ Note that the approach used in the US to measure the property factor lacks logic. Capital assets are valued at their initial acquisition value, with no adjustment for inflation, depreciation, or obsolescence unless the asset is removed from service, in which case it is eliminated from the property factor. Kazakhstan should not use this approach.

reduced enough to allow *oblasts* and *rayons* to levy the maximum surcharge rates, without exceeding current rates.

It is possible that some subnational governments would choose to impose low surcharge rates on enterprise profits attributed to them, to attract economic activity. Such tax competition is generally healthy, for reasons stated earlier. But intense tax competition would defeat the purpose of assigning part of the tax base to the *oblasts* and, if other sources of revenue were not available, aggravate vertical fiscal imbalance. In the extreme case, transfers from the central government would need to be increased to offset the effects of tax competition. Tax competition and vertical fiscal imbalance could be avoided by placing a lower limit on surcharge rates, but this would sharply reduce the fiscal discretion of the *oblasts*, and thus the advantage of the system proposed. A system that does not allow *oblasts* to set rates is essentially equivalent to the present system in which subventions masquerade as tax sharing. In any event, subventions should be based on a standard enterprise income tax rate, not rates actually chosen; thus, jurisdictions would be forced to make up revenues lost in tax competition by raising other taxes or by reducing public spending (see also Chapter 9).

Excises

Excises are, in principle, excellent sources of revenue for subnational governments. As indicated earlier, revenues from subnational surcharges should generally be assigned to the jurisdiction where consumption occurs. The problem, as with other taxes, is to devise administrative means of implementing such surcharges, allowing for the possibility of tax rates that differ between jurisdictions. The following are some of the problems that arise in attempting to attribute revenues from major excises (plus registration fees on automobiles) to jurisdictions where consumption occurs.

Various taxes related to the *ownership and use of motor vehicles* are excellent candidates for use by subnational governments, including governments of urban areas. They charge those who create costs for society (pollution and congestion, as well as the costs of building and maintaining streets, roads, and highways), they respond positively to economic growth, they increase the progressivity of taxation, and, in some cases, they are relatively easy to administer.³⁷

³⁷ See Bahl and Linn (1992, Chapter 7) for an exhaustive discussion of these taxes.

In the case of annual *license fees on motor vehicles*, this is relatively easy to accomplish. The primary constraint is that license fees cannot differ too much from one jurisdiction to the other. If fees do differ substantially, owners of vehicles may attempt to register their vehicles in the jurisdiction where fees are lowest. It may be fairly difficult to prevent this abuse, because the authorities of subnational governments with low registration taxes have an incentive to cooperate with the owners of the vehicles. It can be combated by requiring that a vehicle that is present in a given *oblast* for more than a specified number of days during a given period must be registered there.³⁸

It is substantially more difficult to channel revenues from *excise taxes on the purchase (or import) of automobiles* to the jurisdiction where their services will be consumed. Self-declaration by the purchaser of the jurisdiction where the vehicle will be operated will not work satisfactorily if excise tax rates differ substantially between *oblasts*, due to the incentive to claim use in the jurisdiction with the lowest excise rate. This is an important reason to rely relatively more heavily on vehicle registration fees than on excises or import duties.³⁹

In principle, revenues from *taxes on motor fuel* should also go to the jurisdiction where consumption occurs. This is clearly true to the extent that such taxes are seen as benefit taxes intended to defray subnational costs of building and maintaining roads and highways.⁴⁰ It is also probably true if the tax is seen merely as a means of financing public services that entail more general benefits.

Under present conditions in Kazakstan it may be difficult to achieve this tax assignment, even though the retail-level road fund tax on motor fuels is shared with *oblasts* where it is collected. In advanced Western countries, consumption-based assignment of revenues from motor vehicles is commonly achieved through retail-level taxes implemented by the use of sealed meters that record the quantity and value of sales by each vendor; vendors almost

³⁸ To overcome the effects of corruption, incentive payments might be paid to citizens who report violators.

³⁹ An additional reason is that incentives for vehicle theft are less if relatively greater emphasis is placed on annual registration fees, instead of excises. If there is a high excise on motor vehicles, the value of vehicles (at least for use in Kazakstan) includes the excise. If, however, tax revenue that is equal in present value to the excise is obtained through annual registration fees, the value of the vehicle does not include a tax component. Running counter to this argument is the administrative advantage of getting revenue at the time of import.

⁴⁰ It may, however, be preferable to rely more heavily on charges for the use of roads and highways. This deserves further attention.

always have fixed business locations. In Kazakhstan, the use of sealed meters is not common. Collections of retail-level motor fuel taxes to support the road fund under prior legislation was only 20 to 30 percent of what had been expected. There is little reason to believe that experience under the new legislation (described in Chapter 3) will be better. Moreover, if motor fuel taxes are not uniform throughout the country, there will be an incentive to pay only the lowest of the *oblast*-level taxes.

Substantial amounts of fuel are sold from mobile units; owners of such units would have an incentive to report sales in jurisdictions where tax rates are lowest, instead of where sales actually occur. This would be a problem primarily if motor fuel surcharges were assigned to *rayons*; it would be less problematic at the *oblast* level. The alternative of relying on records of bulk delivery to vendors in each jurisdiction is not reliable, especially if excise tax rates differ greatly between jurisdictions. Most obviously, such records can be falsified to shift reported bulk sales to the jurisdictions with the lowest tax rates. Beyond that, once delivered to vendors in low-tax jurisdictions, fuels can perhaps be reshipped to high-tax jurisdictions for sale to consumers, with relatively little chance of detection. Finally, where the tax rates in neighboring jurisdictions differ substantially, there is an incentive to drive to the jurisdiction with the lower tax rate to purchase fuel. This problem is not unique to Kazakhstan. It would be significant only where major cities are located near low-tax *oblasts*.

It would be possible to share revenues from motor fuel excises on the basis of estimated consumption by *oblast*. While this would channel revenues to the “right” *oblasts*, it would not achieve the purpose of giving *oblasts* the choice of tax rates.

Analogous problems arise in the case of *alcoholic beverages and tobacco products*. But the rewards for, and ease of, subverting a system of tax assignment based on the place of consumption may actually be greater than in the case of taxes on motor fuels. First, the ratio of tax to volume and weight of these products is substantial; this makes evasion relatively easy and profitable. Second, unlike motor fuels, transport of these products is not hazardous and they require little special handling. For these reasons, it would be totally futile to rely on records of bulk delivery for the determination of sales that should be subject to tax in each jurisdiction, unless tax rates are essentially identical; all bulk sales would be channeled through low-tax jurisdictions and then reshipped for sale to consumers elsewhere.

This problem is commonly addressed in Western market economies through the use of tax stamps that identify the jurisdiction to which tax has been paid. (While tax may be imposed legally on entry of taxed products into the state, it is commonly collected on exit from bonded facilities.) Possession of substantial amounts of products subject to excise not bearing the tax stamp of the relevant jurisdiction, except for shipments in bond, is *prima facie* evidence of tax evasion. While such a scheme may eventually be utilized in Kazakstan, its effective use in the short run seems unlikely.

Value-added Tax

VAT is not a suitable object of taxation by subnational governments, whether by surcharges or otherwise. Brazil, the only country ever to impose a subnational VAT, has had enormous administration difficulties, and has periodically considered abolishing its state VAT. The problems that plague subnational imposition of a VAT are also present in subnational surcharges on a national VAT (although in principle somewhat easier to overcome), and even in sharing of revenues of a VAT levied by the central government with subnational jurisdictions where value added occurs (which, of course, is not the registration-based system in Kazakstan).

The chief problem is what to do about trade between subnational jurisdictions. At the national level, this problem is commonly solved by using the destination principle for international trade. That is, tax is imposed on imports and rebated on exports. The obvious exception to this general rule involves trade within the CIS; the origin principle is employed for trade internal to the CIS. As noted earlier, the destination principle has the substantial conceptual advantage that revenues from VAT go to jurisdictions where consumption occurs.

As traditionally implemented, the destination principle would require fiscal border controls between subnational jurisdictions; this can create a substantial barrier to the flow of internal trade. In principle, it is possible to achieve the same objective through a system of deferred payments based on the books of account of enterprises, instead of physical border controls. The European Union is just now moving to such a system, despite having recognized the existence of the problem described above for more than three decades. It is unlikely that Kazakstan can implement such a system anytime soon.

The alternative is to employ the origin principle for trade within Kazakhstan. This has the conceptual disadvantage of channeling revenues to jurisdictions where production occurs, instead of where consumption occurs. Moreover, in the context of Kazakhstan, this would probably mean aggravation of horizontal fiscal disparities.

Unless levied at a uniform rate, an origin-based VAT would distort the location of economic activity toward *oblasts* with low VAT rates. (Being based on consumption, rather than production, a destination-based tax would not have this effect, except in the case of cross-border shopping.) Moreover, such a tax creates incentives for enterprises to manipulate transfer prices to allocate value added to low-tax jurisdictions. Border controls are likely to be needed to prevent this abuse. Indeed, they would need to be even more strict than those under a destination-based VAT. A geographically uniform VAT rate would eliminate these problems, but it would also eliminate the fiscal control of tax rates that is the reason to seek subnational surcharges on VAT.

Brazil has experienced yet another problem with the use of the origin principle for internal trade. Brazil's trade is "triangular," in the sense that imports enter the country through the relatively prosperous south and exports leave through the poor northeast. Under the Brazilian VAT, the southern states receive revenues from VAT levied on imports and the states of the northeast provide the funds needed to make refunds on VAT on exports. This system is clearly unfair, and a number of complicated ad hoc arrangements have been attempted to overcome this problem. The same problem currently exists in Kazakhstan (as in Russia and Ukraine), because of the way non-CIS trade is treated for the purpose of sharing VAT revenues with the *oblasts* (Martinez-Vazquez, McLure, and Wallace 1995). (See also the discussion of this problem in the previous section.) It would continue under an origin-based system for taxing internal trade. It may be possible to overcome this problem by eliminating *oblast* sharing of VAT on imports and the effects of zero-rating on exports. It is likely, however, that this would greatly complicate administration. And, of course, it would do nothing to overcome the other problems identified above.

In short, it appears that VAT should be reserved for the central government and not made the object of *oblast* surcharges or tax sharing.

Use of Formulas

Formulas of various types can be used to divide tax bases among jurisdictions, as in the case of the enterprise income tax.

Note, however, that certain types of formulas do not have the intended results. Suppose that revenues from an excise on vodka (or on motor fuels) are to be divided among jurisdictions on the basis of survey evidence on household consumption of vodka (or total road use). A fundamental problem arises, even if the survey results are accurate: this is a form of tax sharing, not tax assignment. It is true that jurisdictions where consumption is highest would get relatively more revenues from such a system. But there is no way that a subnational government can vary the tax rate applied to consumption within its jurisdiction, which is an important objective of tax assignment. Formula-based assignment of *revenues* is equivalent to a single nationally uniform tax rate. By comparison, formula-based division of the *base* of the enterprise income tax would open the way for subnational control of tax rates.

Despite these shortcomings, dividing revenues from excises among *oblasts* in proportion to estimated consumption could provide a substantial improvement over the present system, which assigns collections to these *oblasts* where production or importation occurs. Even though the present system could be modified to allow *oblasts* to choose their excise tax rates, it would be a mistake to do so, because revenues would go to the “wrong” *oblasts*, and taxes levied by producing and importing *oblasts* would be exported to consuming *oblasts*. Formula-based division of revenues might be seen as an interim measure to be taken until the capacity to levy consumption-based surcharges can be developed. At least revenues would flow to the “right” (consuming) *oblasts* and tax exporting would be minimized. If, however, reliable data on the consumption of goods and services subject to excises do not exist, it might be better simply to make excises a nonregulating source of revenue of the central government (like VAT) during the interim period.

Sources of Revenue for Local Governments

It appears inappropriate, and perhaps infeasible, to allow local (*rayon*) governments to levy surcharges on the enterprise income tax. Using payrolls, property, or sales at origin to apportion income among *rayons* would create large horizontal disparities within *oblasts*. Basing apportionment on sales at destination might produce a more satisfactory result, but is probably not feasible. It is also unlikely that revenues from excises could accurately be divided among *rayons* on the basis of consumption, whether via surcharges or a formula.

In theory, local (*rayon*) surcharges on the individual income tax are also questionable, given that people may not live where they work. Even so, such surcharges would provide badly needed discretionary revenue for local governments and are probably administratively feasible. Beyond that, increased reliance on exclusively local revenue sources, including land and property taxes, should be considered. Local governments should be free (perhaps within limits) to choose the level of such taxes and to administer the taxes.

Summary

In summary, it appears to be extremely difficult, for administrative reasons, to levy excise taxes that are differentiated by jurisdiction on the most important goods commonly subject to excises. Because assignment of revenues from VAT to subnational governments is totally unworkable, this means that, for the foreseeable future, only the individual income tax, and perhaps the enterprise income tax, can realistically be subject to subnational surcharges. Only the individual income tax and taxes on land and property are available to provide local governments with marginal own-revenue.