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Chapter Four

The Allocation of Specific Tax and Revenue Sources

4.1 Types and value of revenue sources

The size of government revenues relative to the economy varies greatly across federations, reflecting different levels of economic development, resource endowments, and philosophies of taxation and government. A few major revenue sources typically dominate government incomes, but the importance of individual sources differs markedly between federations. Typically, the federal government has access to all major revenue sources, while the constituent units may be limited to less lucrative sources; but there are important exceptions.

The level of government revenues in federations reflects a country's economic development, the philosophy of government and taxation, and, in some cases, natural resource endowments. The revenue shares of all governments in federations range from less than 20 to almost 50 percent of gross domestic product: the highest yields are in certain European federations, which are both rich and supportive of a strong welfare state, while the lowest yields are in certain developing country federations with weak public infrastructure and few natural resources. Seemingly similar countries can have very different levels of government revenues: Austria's 43 percent versus Switzerland's 29 percent; Canada's 34 percent versus the United States' 25 percent; Brazil's 37 percent of GDP versus Mexico's 19 percent.

While societal factors have a broad influence on the size of government in federations, the actual performance of a particular federation can

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change rapidly. Tax revenues grew dramatically in Australia, Canada, and the United States to meet the needs of World War II. Since 2000, government tax revenues have declined slightly on average in OECD countries, but experience varies from countries that continued to rise to those, such as Australia and Canada, where there have been substantial drops after successive rounds of tax cuts. In some cases, a new tax regime can have a dramatic impact. Argentina, for example, had a long history of low tax yields (less than 15 percent of GDP), but in less than ten years it doubled its yield with economic recovery and the imposition of export and financial movement taxes. Of course, federations that are very dependent on natural resources have seen dramatic swings in total revenues because of highly volatile petroleum and other commodity prices.

Income taxes are very lucrative in all industrialized federations and are often the most important single revenue source; they are much less important in federations with developing economies. Value-added, sales, or turnover taxes are important in all federations. Social insurance contributions, which are typically a payroll tax, vary from being the largest single revenue source in some industrialized federations to non-existent in others; payroll taxes for other purposes tend to be minor. Natural resource revenues can vary from being by far the dominant source to non-existent. Import and export taxes are usually quite minor, though they are significant in a few federations with developing economies. Property taxes are a common feature of taxation systems, but their value is usually a small fraction of more important sources and varies a good deal among federations.

Federal governments typically have significantly greater revenue-raising power than do constituent units: they usually have access to all the most important revenue sources, while constituent units can be significantly more restrained and limited to less lucrative sources. There are, however, cases where the *federal* government has significantly constrained access to a potentially important revenue source: sales tax in India; income tax in Nigeria, Switzerland and the Basque country in Spain; VAT in Brazil; resource revenues in Australia and Canada. This lack of full access may result in the federal government's adopting taxes that are less efficient than those it would have chosen if it was not constrained.

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4.2 Personal income taxes

Personal income taxes are generally very important in industrialized economies, but much less so in developing countries. The federal government usually has the largest share of them, but many federations permit the constituent-unit and local governments to levy them as well. When constituent-unit governments levy income taxes, there are strong advantages to their operating within the framework of the federal government's tax regime.

Personal income taxes are the largest revenue source, representing 40 to 50 percent of total government revenues in Australia, Canada, Germany, and the United States. The taxes can be quite progressive, with higher rates on higher incomes, and therefore serve as effective instruments of redistribution. Income taxes are usually limited in less developed societies because of lower cash incomes and difficulties with a system based on widespread voluntary reporting (which requires a largely literate population); as well, extensive tax evasion may discredit income taxes as a redistributive tool. South Africa is an exception among developing countries and manages to raise one-third of revenues through a federal income tax.

Where the federal government is seen to have a strong lead role on "equity" within a federation, the redistributive potential of income taxes (which can include refundable tax credits for the poor) is an argument for their centralization. This case is even stronger if taxable income is defined to include more mobile sources of income such as income from capital. The mobility of the income tax base will vary with the geography of the federation (it may be easy to reside in one constituent unit and work in another), language and culture (citizens are often attached to their linguistic or cultural region), and employment opportunities. While the case for a federal lead on the income tax is strong, the potential importance of this revenue source is itself an argument for constituent units having access to it. As well, some constituent units may have their own equity objectives that they would wish to pursue through the income tax.

In practice, constituent units often have a constitutional right, along with the federal government, to levy personal income taxes. In some

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federations, cities may also be permitted to levy an income tax. When both (or all three) orders of government occupy this field, there are strong economic arguments for harmonizing the base while permitting the constituent units (some) flexibility on the rate structure. However, there have been federations, notably Switzerland, where some constituent units have used aggressively low rates to attract high-income earners as residents, which may have eroded the income-tax base across the country.

Income-Tax Assignment in Various Federations

In the **United States**, the federal government dominates income taxes, but some states also levy them on their own bases (and some states permit municipal income taxes). In **Mexico**, too, the tax is, in principle, concurrent but overwhelmingly federal, though states have a special small-taxpayers tax. In **Brazil**, all three orders have the constitutional right, but in practice the states are allowed a supplementary rate on the federal tax (but inheritance and some capital gains are state taxes). In **Canada**, income tax is concurrent and the provinces, except Quebec, once levied their share through a surcharge; recent reforms give them greater flexibility to tailor rates and rebates, which has made the system more complex. In **Australia**, **Russia**, **South Africa**, and **Belgium** (with a very small, local income tax), the federal government sets and collects income taxes (though they may be shared, as in Russia). In **Germany**, income tax law is federal but requires the consent of the Bundesrat representing the Länder. Income taxes account for 30 percent of total government revenues in **India**, where the central government taxes non-agricultural income and states tax agricultural income. The **Nigerian** federal government has access only to income taxes on its own employees and residents of the capital territory while states have the rest; the tax is underdeveloped. Income taxes in **Switzerland** are collected about equally by communes, cantons, and the federal government, and the system is quite competitive.

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4.3 Corporate income taxes

Corporate taxes have been a significant source of revenue, but, in many cases, a declining one. There are strong reasons for centralizing these taxes or ensuring they are part of a closely harmonized regime.

Taxes on corporate profits are linked to personal income taxes, in that they are a tax at source on profits that could be distributed to shareholders or capitalized and taxed as income (including capital gains). Thus, governments should design their taxes on personal income, dividends, and corporate profits in relation to one another. Corporate taxes also permit governments to extract a tax on profits that would go to foreign shareholders, but other mechanisms, such as withholding taxes, can achieve the same result. In most countries, corporate taxes have been tending downwards in importance because the international mobility of much corporate investment is forcing governments to be competitive in this regard.

Given the typically strong role of federal governments in personal income taxes and the links between personal and corporate taxes, it is logical that central governments play a key role in corporate taxes. The administrative complexity of dealing with corporations that operate in many parts of the federation further strengthens the case for centralized, or strongly harmonized, design and administration of corporate taxes. Such centralization will reduce the costs of compliance by firms, establish rules about the deemed allocation of profits to various constituent units (if needed), and protect the integrity of internal capital markets. In practice, most federations in the developing world have centralized corporate taxation. While some of the older federations—notably Canada, Switzerland, and the United States—do permit both orders of government access to corporate taxes, this has necessitated measures, of varying success, to harmonize the system.

4.4 Sales, value-added, and turnover taxes

Value-added taxes have been widely adopted to replace less efficient sales and turnover taxes. The VAT has proven to be

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lucrative and economically efficient, but, unlike sales taxes, is difficult to design and administer on a devolved basis.

Many federations used to have provisions permitting constituent units to levy sales and turnover taxes of various kinds. These conventional sales and turnover taxes were imposed on the total value of a sale or transaction and revenues from them were usually significant. They were quite simple to administer and easy to manage on a devolved basis in federations. As well, sales and turnover taxes are usually not a significant redistributive tax, so central governments concerned with equity did not always see a major need to influence them (though in many developing countries they were the most important source of taxation).

There were a number of problems with conventional sales and turnover taxes:

- If they became too onerous (say 10 percent), they seemed to induce a good deal of tax evasion and even smuggling.

- Taxing goods and services that were inputs to further production added to the cost of final products, especially those with long production chains, and destroyed the level playing field.

- Domestic production suffered relative to imports, whose inputs were not taxed.

- Finally, in a federal system, these taxes could encourage cross-border shopping to evade taxation, or to find lower rates.

In the 1950s, a French tax official invented the value-added tax, which was a new kind of consumption tax designed to address the inefficiency of sales taxes. Since then, the majority of advanced- and middle-income countries (and several less-developed countries) have adopted this form of taxation and, in many cases, it is the largest, or one of the largest, sources of revenue. While a value-added tax has advantages, it poses special challenges in federations when constituent units can set their own bases and rates.

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A value-added tax is ultimately a tax on the consumption of a final product or service. However, it is levied at each transaction in the chain of production as businesses buy inputs and sell their outputs onward to other businesses until the final product reaches the consumer. Each business collects the VAT at its point of sale, but is credited for VAT it has already paid on its inputs; thus, on any one transaction, the net new tax is only on the "value added" at that stage in the chain. The final consumer pays the last business the full amount of the VAT. This system ensures a neutral tax regime (unless there are exemptions) that taxes all final products the same, however many steps they may have gone through in production. The final feature of the VAT is that it is normally refunded when a product is exported so it is not a "tax on exports." And the VAT applies to all imports.

It is evident that this system depends on a high level of compliance by businesses all along the chain. When it works well, it permits much higher levels of efficient taxation than conventional sales taxes because it is non-distortionary in not favouring products or services with shorter production chains. The system can also increase other tax payments, such as business and income taxes, because it brings greater transparency to what is happening in the economy.

All major federations, except the United States, have adopted a VAT, at least in part. (In the United States and some other federations, constituent-unit sales-tax regimes are being eroded by mobility and the Internet.) Brazil combines a federal tax on industrial goods with a state VAT on other goods. Brazil and Argentina have maintained significant turnover taxes alongside the VAT because the federal government in Brazil and the provinces in Argentina have limited alternatives for raising own-source revenues that they do not have to share. These turnover taxes are economically less efficient that a VAT because they do not involve credits.

The European Union, which has quasi-federal features, demonstrates the problems of a highly devolved VAT regime. It promoted an EU-wide VAT by defining a common floor of tax rates to escape the distortions created by cascading sales taxes in its internal market. However, there is no central taxing authority, so the EU has gone through several stages and still has only a "transitional" VAT regime. Its central problem is that

each member state can vary the base rate and create special provisions and exemptions. With the abolition of fiscal border controls, the European Commission wanted to move to an **origin-based** regime where the VAT rate would depend on the location of the supplier, not a **destination-based** regime that depended on the location of the buyer. However, because rates differed so much, member states would have received very different benefits from these alternatives. As they could not agree, a hybrid regime with many special arrangements was adopted. The EU has also had major fraud problems with the VAT, which arose with the elimination of border controls. The EU's experience contains valuable lessons for federations.

While an origin-based system is easier to administer in that it does not require cross-border sales to be closely monitored, it has the disadvantage of taxing production rather than consumption, which can distort the location of production activities. A destination-based system avoids these distortions, but requires self-assessment by firms buying and selling across internal borders when there are distinct VATs in the constituent units. A federal administration is a virtual necessity as part of such a regime, but, even so, the administrative complexity can be very expensive for governments and taxpayers. A purely federal regime is a great deal simpler and cheaper.

One final complexity with value-added taxes is the sharing of proceeds. This has been a major stumbling block to progress in Europe and Brazil because origin-based and destination-based regimes can have very different results in terms of where the taxes are collected. This matters if constituent units have a claim on their "own-source" revenues, especially if the federation has weak equalization arrangements. Australia, which has a very strong equalization regime, allocates all of the VAT to the states, but does not do so on the basis of either origin or destination; instead, the VAT proceeds are part of the funding of the country's general-transfer regime to the states, including transfers to achieve equalization. Germany is similar.

Some federations don't permit constituent units to levy consumption taxes; however, many do because sales taxes were once viewed as principally local. Where this right to levy sales taxes has been devolved, the successful introduction of a VAT in a federation requires political will

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and consensus, strong administrative systems, and simplicity of approach. Perhaps the most successful example is Australia, where the states were persuaded to buy into a new, federally run VAT regime, partly because the courts had defined their taxing powers very narrowly; in exchange, the states keep the VAT proceeds. Canada and India have made modest progress, while Brazil has a seriously distorting VAT system that cannot be changed without unanimous consent.

Value-Added Taxes in Various Federations

In **Nigeria**, **Russia**, **Switzerland**, and **South Africa**, only the central government can levy a VAT or special-consumption taxes, and all have some form of VAT. (**Spain's** situation is similar, except in the Basque country.) In **Malaysia**, this tax is also a federal prerogative, and there are plans to replace the current sales and services taxes with a VAT. In **Canada**, the federal government persuaded some provinces to give up their provincial sales taxes in exchange for a VAT that the federal government administers on their behalf; Quebec has accepted the structuring of its taxes along these lines, but administers its own (not fully harmonized) VAT as well as the federal VAT on a delegated basis with a system of credits. **Germany** has a national VAT decided by the federal government and the Länder, and administered by the Länder.

In **Brazil**, the federal government can apply a manufacturing tax on a narrow base of industrialized goods, and must share revenues with state and local governments; the states and local governments can apply a VAT on other goods and are free to set their own rates on a base defined in the constitution. This has led to intense competition to attract investment and greatly eroded their tax base. Moreover, as the VAT is collected at origin, the poorer northern states have done less well, so there are now different rates for northbound and southbound goods, which has resulted in tax evasion.

Argentina introduced a federal VAT as part of major reform in 1974. In the 1990s, it promoted a fiscal pact that prompted the

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elimination of the provincial turnover sales tax on the manufacturing and primary sectors, and managed to greatly increase returns. With modernized administration, the VAT goes into a pool with certain other taxes that are shared with the provinces. VAT revenues collapsed in Argentina's economic crisis and have only slowly approached their former level, despite the high rate.

Since 2005, **India's** states have progressively agreed to replace the sales tax with a harmonized VAT, but the destination-based regime is weak in terms of compliance and design, with many distorting taxes still not integrated into the VAT, and no tax credits on interstate trade services included.

4.5 Social insurance contributions and payroll taxes

Social insurance contributions, which may be administered as a deduction from payroll, can be a major revenue source and are a broad-based alternative to consumption and income taxes. Other payroll taxes are typically minor and their revenues can be used for general purposes. They can be managed effectively by both orders of federal governments.

Payroll taxes in the broadest sense are taxes deducted at the point of employment and they can include income taxes, social insurance contributions, and non-income-related taxes on employment. Income taxes are usually considered separately. However, social insurance contributions are often considered a payroll tax when deducted at source, and they are used in many federations to fund social insurance, health insurance, unemployment insurance, workers' compensation, and pension schemes. In some federations, such as Germany, these taxes are essentially a charge on employment, unrelated to income, and serve as a general-purpose tax. In a few federations, such as Belgium and Austria, payroll taxes for social insurance are the largest revenue source and are almost always administered by the federal government. Payroll taxes for social security are very high in Brazil and have encouraged a black-labour economy; however, the major growth in earmarked contributions for social security programs has come from turnover taxes. Most other federations make limited use of payroll taxes.

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While payroll taxes are typically heavily federal—Australia is an exception—they are, in principle, good candidates for devolution to constituent units because they are relatively simple to administer. Where constituent units use them to fund social insurance programs, issues such as the portability of benefits between constituent units need to be addressed.

4.6 Property taxes

Property taxes are very suitable to be a local or constituent-unit tax and are typically decentralized in federations, often being the most important source of tax revenues for local governments. The importance and design of property taxes vary widely.

Property taxes are the classic local tax for a number of reasons. The tax base is immobile, benefits are often tied to the tax, the yield is quite stable, and the taxes are effectively administered at the local level. While in most federations these taxes are predominately local, in some, such as Russia, the constituent units have a role as well. In Brazil, urban local governments control taxes on their property, while it is a federal responsibility in rural areas. In Argentina, all three orders of government collect property taxes: the federal government on personal assets, including property; the provinces on rural property; the municipalities on urban property. Administratively, constituent-unit governments (and in South Africa, the central government) may specify the tax base (normally in terms of the value of properties), while local governments then set their own rates.

Property taxes are the primary source of local finance in federations such as Australia, Canada, and the United States, but are much less significant, in absolute or relative terms, in continental European federations, where local governments typically have much larger responsibilities. Because municipalities in some federations rely so heavily on the property tax, there is some speculation that property (especially business property) is overtaxed, but the evidence is unclear. Some US states have experimented with alternate sources of local revenue, such as sales or personal income taxes that piggyback on state administration and collection. Some developing countries have had real difficulties effectively implementing a property tax because of weak capacity and expertise at the local level.

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Because local governments may have very different abilities to raise revenues from property, their constituent-unit government may have some arrangements for equalization among local governments.

4.7 Natural resource revenues

Natural resource revenues vary from negligible to dominant in federations, and can be collected in many ways. Where they are significant, a key issue is the control and sharing of these revenues between the central government, and the producing and non-producing constituent units. These revenues can be either highly centralized or very decentralized.

Natural resource revenues are very different from those from other sources because they can be so variable among federations as well as among constituent units within federations. In federations, the most important natural resources are oil and natural gas, which can produce huge government revenues, but coal, metallic minerals, and diamonds (South Africa) are significant in some federations. Timber and water (especially when developed as hydroelectric power) can also produce significant revenues, especially at the constituent-unit level. What all these resources have in common is that their extraction or development costs may be a small fraction of their market value, so that what is known as a **resource rent**, which is the extra margin of value beyond normal returns, is available for the resource owner or governments to extract and distribute in some way.

In such federations as Nigeria, Russia, and Venezuela, natural resource (especially petroleum) revenues dominate or are the largest source of public receipts; they are also very important in Australia, Brazil, Canada, Malaysia, and Mexico. (They are critical in the emerging federations of Iraq and Sudan, but neither has truly resolved how they will be managed and shared.) Even in federations, such as Argentina, India, and the United States, where they are not of major significance nationally, natural resource revenues can be very important for some constituent units. Against this, there are the resource-poor federations in Europe where natural resource revenues are of no significance.

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Resource-rich countries face special challenges of economic and political management. A booming petroleum industry can cause the currency to rise and undermine the competitiveness of other industries (the so-called **Dutch disease**). The large potential rents for government can be an invitation to **corruption**. These are the "curse of oil" and potentially the curse of other valuable resources too. As well, because resources are almost always concentrated in only some parts of the country, there are frequently tensions around the roles of the central and regional governments over who controls the pace of development, local environmental protection, and the sharing and spending of revenues. High and volatile prices and the issue of climate change add to this brew.

Because natural resources are immobile, there are few technical difficulties with their being controlled and predominantly taxed at the local level. However, local control can give rise to conflicts if resource-rich jurisdictions are aggressive in driving the pace of development or in offering incentives that make other sectors elsewhere in the country less competitive. The greatest difficulties with local control and taxation arise around sharing when resources are very large and regionally concentrated. In principle, inequities can be remedied by equalization transfers, but this may be difficult if the federal government has limited access to natural resource revenues and there is no sharing between constituent units. While there are strong arguments for a significant federal role in relation to natural resources that have a major importance in an economy, there are also important local interests—in terms of economic and environmental impact—that need to be accommodated.

Whatever the principles, the practice in federations varies considerably. The federations with very old constitutions—Australia, Canada, and the United States—give control of natural resources and revenues predominantly to the constituent units (though the United States government controls extensive petroleum-rich "federal lands" within some states). The more modern constitutions typically give the exclusive or greater role to the federal government, though in Russia this was achieved only recently. Where the federal government does control onshore resources (India, federal lands in the US), there may be some sharing arrangements with the constituent units where production

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takes place and even with local municipalities (Brazil). In Argentina, the provinces' natural resource ownership was constitutionally reinforced in 1994, though the federal government still has significant management levers and access to revenues.

Offshore resources are almost always federally owned because they lie outside the boundaries of constituent units. Arrangements vary: often there is no sharing of offshore revenues (United States, India), but a few federations (Australia, Nigeria) have made some sharing arrangements with the contiguous constituent units and even with local governments as well (Brazil). While the federal government in Canada has retained formal ownership, it has ceded all these federal resource revenues to the contiguous provinces.

The owner of the resource has the right to royalties, but may impose licence fees, production sharing, local content regulations, and equity arrangements (e.g., through state oil companies). While "ownership" of natural resources is important, other constitutional powers and levers matter as well. For example, in India, the states own onshore minerals, but the federal government extracts the larger revenues and has management control. Federal export controls, price controls, and taxes can be critically important in determining the value of a commodity within the country.

Governments can strongly influence the pace of development and also determine the manner in which they extract rents:

- Some petroleum-exporting countries have imposed restraints or taxes on exports to create protected, below-market prices for local consumers, to slow development, to raise revenues, or to protect energy security. In Malaysia, Pakistan, and India, governments have fixed prices to consumers and been caught having to cover large subsidies (over $20 billion in Venezuela when oil was well over $100).

- Alternatively, the federal governments in the United States and Canada controlled or taxed petroleum imports for many years to promote the development of their domestic industries.

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- Corporate, local, and environmental taxes can also affect the pace of development and revenue shares (though typically governments have not used them aggressively).

- Local land-use and environmental controls have been used to stop development, e.g., by some US states in relation to the federally controlled offshore.

Many developing countries make extensive use of government-owned oil companies, and they may receive significant (or even all) of the government's petroleum revenues as payments from these companies. (For example, Pemex's payments to the Mexican government have reached around $100 billion annually.) These companies may not operate on a normal commercial basis or be subject to tax. Arrangements in such cases can lack transparency.

When resource revenues are very large, there can be questions about trying to stabilize their impact on budgets and perhaps about longer-term saving:

- **Stabilization funds** or procedures may be established to deal with the swings in petroleum revenues. Government spending in a particular year can be based on average prices over a preceding period or some nominal price, rather than actual revenues, with any surplus being saved and any deficit being drawn from savings.

- **Longer-term savings funds** may be set up to provide future generations with income once the resource is depleted.

- As well, holding resource revenues as **offshore savings** can limit their impact on inflation, the exchange rate, and the competitiveness of other sectors of the economy.

Stabilization and longer-term savings funds are more typically found at the federal level, but Alaska and Alberta are examples of constituent units that have versions of them.

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Onshore Oil-and-Gas Revenue Arrangements in Various Federations

In **Russia**, the world's largest oil-and-gas producer, most of the producing regions' governments get a 5-percent share of oil revenues and none of gas revenues. The federal government has established two petroleum-revenue funds for stabilization and longer-term saving respectively. In **Nigeria**, where petroleum revenues typically represent over 80 percent of all revenues, producing states get 13 percent of government oil revenues from their state on top of whatever revenues they would receive otherwise; the federal government retains revenue above a moving average-price target in a stabilization account, but some states are contesting this arrangement. **Venezuela** also normally depends on petroleum for over 50 percent of public revenues; these are controlled by the federal government in a highly centralized regime, but a share is reserved for the states. **Mexico** channels surplus oil revenues initially towards any emergency or disaster relief deficits, and then into a federal stabilization fund (40 percent), a state oil company fund (25 percent), a states' revenue stabilization fund (25 percent), and a states' infrastructure fund (10 percent) up to a ceiling: beyond that, surplus revenues are allocated equally to four other funds (for federal, state, and oil-company infrastructure investment, and the national pension scheme). In **India**, the union government controls major oil projects, but provides a share of revenues to the producing state, as is the case in **Malaysia**. **Brazil's** central government shares both onshore and offshore resources with the producing states and local municipalities (some of which have benefited greatly).

Hydro power is a renewable resource that produces high-quality electricity. It has frequently been developed by federally or constituent-unit owned or regulated corporations, with a policy objective of providing cheap electricity for consumers and industry rather than swelling government revenues. Thus, the policy may be to charge only what is needed to cover the costs of capital and operations, not to realize the full value from the market (especially when export prices might be high). In Quebec, for example, it has been estimated that the

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province could generate an additional $5 billion in revenues by moving to market prices. Such diversion of revenues from governments to consumers is usually not captured in fiscal arrangements that make transfers to constituent units based on their fiscal capacity, though a case could be made for doing so.

4.8 Licences and user charges

There has been a shift to "user pay" as part of the new public administration. User fees have been adopted by all orders of government, especially those providing local services. Such fees are usually modest revenue producers, often yielding less than the full cost of the service.

User fees and licences can be important revenue sources for local or constituent-unit services that are private in nature, such as water, telecommunication and electricity utilities, garbage, and recreational facilities—in South Africa, for example, they account for 40 percent of municipal revenues. Tolls on roads and bridges can be significant. These fees are also called **benefit taxes** since they pay for a specific benefit provided. User fees can recover costs and promote efficiency, though they might be burdensome for poorer residents. They are also easy to administer since it is a simple fee-for-service principle. Historically, many municipalities and local governments did not recover the full costs of such services, but in recent years a number of federations have encouraged this.

Charging for public services is not appropriate when it results in problems of access to a public service that is considered a right or an important long-term investment. Health care and education have both been viewed this way in many federations. That said, user fees are sometimes imposed to avoid overuse of a service that is relatively discretionary or of longer-term economic benefit to the user. As well, in developing countries, user fees can be imposed as a revenue-raising measure even on basic services such as health and primary education.

4.9 Other revenue sources

Various other revenue sources can be important for governments in federal systems: import levies; export levies, especially where

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there are large resource exports; excise taxes; environmental levies, which could become increasingly significant because of climate change; payments from publicly owned corporations; and receipts from the sale of assets.

Historically, import levies were important in many federations, but there has been a move to lower or eliminate them because they undermine the efficiency of the economy by encouraging production that is not to a country's comparative advantage. Export levies result in domestic prices that are lower than open-market prices for a good, which creates distortions through an inefficient subsidy for consumers and lower prices for producers of the product. Russia's largest source of oil-and-gas revenues is an export tax. As a result of its economic crisis, Argentina's federal government greatly devalued the peso in 2001 and introduced large export taxes, which fell heavily on the big producers of agricultural and energy commodities in certain provinces. The export tax was meant to be transitional, but has become part of the established structure of Argentina, in part because such revenues are attractive to the federal government in that they are not legally shared with the provinces. The extent of the export tax on agricultural produce has been a major political issue, pitting producers and consumers, as well as different provinces, against one another.

Excise taxes are specific to particular products or services, such as alcohol, tobacco, gasoline, luxury goods, entertainment, hotel rooms, parking, and gambling. As these examples show, they are usually targeted at a particular type of consumption that is deemed unhealthy, anti-social, or insensitive to price. Environmental taxes are also a type of excise tax, in this case targeted at a specific environmental pollutant. Excise taxes can be criticized if they are seen to create unjustified distortions in consumption or activity. If the taxes are too high, they can also promote cross-border shopping and tax evasion, or, in the case of environmental taxes, the "export of pollution" to less demanding jurisdictions. Given the policy purposes of such taxes, they can be appropriately levied by both orders of government. But, in some cases (climate change), these may better be federal, while, in others (gambling), the constituent units, or even local governments (hotels, entertainment, parking) are more suitable. Some federations are also discussing cap-and-trade regimes for greenhouse-gas emissions;

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companies may have to pay for emission permits, which could in due course become a significant source of government revenue.

Finally, sales of assets (corporations, land, etc.) and of some public goods (broadcasting spectrum) can result in significant revenues, as can payments to governments from corporations they own: these may or may not be included in the calculation of rights and obligations for fiscal sharing and transfers. An important federal dimension to public corporations is whether one order of government can tax a corporation owned by the other order. Where this is not possible, there can be an incentive for a government to maintain ownership of the corporation because it would lose the value of the tax benefit should the asset be sold.