Establishing Tax Expenditure Accounts --Towards\textsuperscript{1}  
Better Fiscal Accountability and Transparency

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\textit{Establishing an adequate tax expenditure framework would promote fiscal accountability and transparency.} Inadequate treatment of tax expenditures is a concern for fiscal accountability and the transparency of governance. A basic requirement of a public sector budget is comprehensiveness, that is, the budget should cover all resources available to the government and expenditure allocations to all functions on which the government has discretion to make expenditures. Tax expenditures often represent the equivalent of a major share of the discretionary expenditures of a government. Without the inclusion of tax expenditures in the budget process, the tradeoffs in allocations across functions, sectors, regions and other target groups are limited to expenditures financed by the net revenues. Such net revenues are already reduced by the tax revenues forgone as a result of a range of incentives and preferences offered to taxpayers through the provisions of the tax laws. Without inclusion of tax expenditures in the budget process, they do not get the same level of strict budget scrutiny as normal budget expenditures. Accordingly, to make the budget process more complete and subject all expenditures to the same level of transparency and budget scrutiny, governments in OECD countries over recent decades have been estimating the revenue cost of tax expenditures, publishing tax expenditure accounts and including estimated expenditures in the budget processes.

\textit{(i) Tax Benchmarks and Tax Expenditures}

\textit{Estimating tax expenditures requires establishing tax benchmarks.} Tax expenditures, in broad terms, are tax provisions that deviate from a normative or benchmark tax system. Tax expenditures may take a number of forms: exclusions, exemptions, allowance, deductions, credits, preferential tax rates, or tax deferrals. In order to identify tax expenditures, a normative or a benchmark tax structure has to be established. The normative or benchmark tax structure does not contain any tax provisions, which are used to implement government spending programs for favored activities and groups. The tax benchmark reflects decisions taken by the authorities in a country that take into account considerations of the ability of persons to pay the tax, and the economic, administrative and compliance costs of the tax.

\textit{Establishing tax benchmarks in Turkey is not as straightforward as in many OECD countries that have used the standard guidance} (Box 1). Contrary to many other OECD countries, Turkey’s tax bases and economic structures have led to tax structures specific to its circumstances being used. Turkey has a high share of employment in the agricultural sector (about 32 percent); and because of extensive informality in agriculture

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and services, it has a large share employed in the informal and unrecorded sectors (about 53 percent of total employment). There is also a large share of employment at the minimum wage. Data on employment earnings from the social insurance system for 2003, for example, show that of the 5.4 million employees in the private sector 59% were reported to receive minimum wages and of the 0.67 million in the public sector 4% received minimum wages. Even if there is significant underreporting of employment earnings for social insurance purposes, it would still leave a significant share of low wage workers.

Box 1. Guideline to Identify Normative Tax Structure

Identification of the normative tax structure can best proceed by determining whether a given provision responds to one of the following questions:

1) Is the provision necessary to determine the base of the tax, normatively defined, in accordance with the fundamental nature of the tax?
2) Is the provision part of the generally applicable rate structure?
3) Is the provision necessary to define the taxable units liable for the tax?
4) Is the provision necessary to assure that the tax is determined within the time period selected for imposition of the tax?
5) Is the provision necessary to implement the tax in international transactions?
6) Is the provision necessary to administer the tax?

Seven developed countries (Canada, Germany, France, the Netherlands, Sweden, United Kingdom and United States) have practically used this guideline to identify their normative tax structures and tax expenditures.


The peculiar economic structure, together with the past economic instability, has led to specific choices of tax structures in Turkey.  These include:
  (i) reliance on indirect taxation through the VAT (with limited refunds of input taxes) and the Special Consumption Taxes in contrast to most high-income OECD countries that receive a majority of tax revenues from direct taxes on income and payrolls;
  (ii) significant reliance on withholding taxes in the income tax on financial instrument income, sales of goods and services to trades persons, self employment gross earnings, and wages and salaries, including final withholding taxation of interest deposits and employment income;
  (iii) heavy reliance on employers as major tax agents for administering the taxes of employees including PayAsYouEarn income taxes (please clarify PAYE),
  (iv) special credits for expenditures on health, education, basic food and rent, social security premiums, and pension contribution deductions;
(v) exemption of many self-employed, rural, household and agricultural workers based on occupations rather than levels of income;
(vi) a low level of declaration of income limited to non-exempt corporations (numbering about 360,000 per year), which excludes, for example, the companies in Free Trade Zones, and individuals with larger amounts of self employment and investment income; and
(vii) a complex set of inflation adjustments, investment incentives and offsetting taxes on these adjustments and incentives that reduced the tax burden on investors in real and financial assets.

This complex structure has supported revenue collections over recent years, but it has left the authorities in a weak position to analyze the tax system and its impacts on economic performance. This lack of information about the tax bases weakens the ability of the authorities to formulate tax and economic policy, and, in the context of tax expenditures, creates challenges for defining tax benchmarks and estimating the tax expenditures arising from the various tax incentives and the tax assistance provided to various disadvantaged groups.

Aware of the challenges, the Government has initiated work to analyze and estimate tax expenditures. The authorities, with support by the World Bank, have initiated a review of the tax provisions of the personal income tax (PIT), corporate income tax (CIT), value-added tax (VAT) and special consumption tax (SCT). Some 290 tax provisions (articles and items) were identified by the authorities in these legislations requiring consideration as to whether they should form part of the tax benchmark or be regarded as tax expenditures. The major features of the tax benchmarks for each of the tax types and the draft tax benchmarks are presented in Annex I.

Based on the draft tax benchmarks, out of the 290 tax provisions, initially some 186 items were identified as potential tax expenditures. Currently, the authorities have identified a list of 84 tax provisions as tax expenditures and included this list in the Medium Term Fiscal Plan. The most significant of those tax expenditures can be divided into seven different categories: (1) Free zones; (2) Investment incentives; (3) Financial instruments; (4) Regional employment incentives; (5) Agricultural sector support; (6) Social insurance and pension contributions; and (7) Assistance to low-income and disadvantaged persons. These categories are not exhaustive and sometimes overlap.

Tax expenditures are primarily delivered through the Personal and Corporate Income Taxes. By type of tax, the list of tax expenditures is outlined in Box 2. Some of the major tax expenditures are granted with the aim of promoting: investment, employment, regional development, R&D, and trade incentives primarily delivered through the CIT. A range of tax expenditures aims to assist low-income individuals, in support of social policy. These are delivered primarily through the PIT and CIT and to a lesser extent through the VAT. Some major tax expenditures in this latter group include the deductibility of contributions to the social security system for pensions, disability, unemployment and health benefits as well as contributions to private pension and insurance company-based pension and health policies.
Box 2: Tax expenditures by type of tax

Personal and corporate income tax

- Assistance to disadvantaged and low-income persons
  Tax credit for basic needs expenditures (VAT-invoiced expenditures on education, health, basic foods, clothing and rent) by employees
  Exemption of income small trades persons; professional income of writers, translators, sculptors, painters, computer programmers, composers and inventors; non-diplomatic staff of embassies; wages of workers in small villages; wages of farm workers; wages paid to students, convicted and detainees and indigent people working at workshops of school of art and similar institutes, correctional institutions and reformatories, and alms’ houses;
  Exemption for income earned from new educational and training schools over first 5 years

- Preferential treatment of certain employee benefits of civil servants and other workers
  Exemption for aid for fuel purchases by civil servants and certain self employed workers
  Exemption for child allowances, marriage and nuptial supports, severance payments (up to 24 months pay) paid to civil servants and workers
  Exemption for allowances and expenses paid to civil servants and other workers undergoing education and training programs
  Exemption for wages of apprentices

- Social insurance and pension contributions, investment income and benefits
  Deductibility of contributions to social insurance, pension and unemployment schemes
  Deductibility of employer sponsored contributions to state social insurance and private insurance health schemes.
  For individually sponsored tax assisted pension savings, tax deductible contributions are limited to 10% of earnings up to a maximum contribution of the annual minimum wage. In addition, tax-deductible premiums are permitted to individual purchases of non-pension non-property insurance (life, disability, health, etc insurance) up to 5% of earnings.
  Tax treatment of private pension savings: exemption of 25% of pension income from pension savings investment for 10 or more years
  Exemption of social security pensions, death, disability, illness and unemployment compensation and aid.
  Exempt investment income in pension plans, except that a 10% capital gains tax is charged on gains in employer-sponsored pension funds. For individually and state sponsored social security pensions require contributions of 11% from the employer and 9% from the employee aside further contributions to health, maternity and disability insurance. These insurance contributions are subject to a maximum pensionable or insured earnings limit based on the salary of a senior civil servant. Employees of banks, police, military etc have access to employer-sponsored tax assisted pension savings managed by some 21 foundations. The tax-deductible contributions are subject to the same limits as social security contributions. Employer contributions to group life, health and pension plans are tax deductible up to the social security limits.
sponsored tax assisted pension savings, all investment income and gains are tax exempt.

Exemptions for charitable donations and sponsorship of sportsmen and donations to Izmir University Games Preparation and Regulation Board

Exemption of enterprises of sub-national government in agricultural, water, electricity, transportation, cold storage and slaughterhouse businesses

Exemption of organizations involved in development of industrial zones.

- Preferential treatment of income on selected financial instruments
  Exemptions for government bond income up to TL 50 billion and certain mutual fund income through end of 2004.
  Exemption (except for withholding taxes) up to global limit of YTL 12,000 for total declared investment income from
  i. Interest on deposits and repos
  ii. Inflation-adjusted TL bond income
  iii. FX bond income
  iv. TL bond income, including government bonds
  v. Mutual fund income
  vi. Capital gains on shares of listed companies held for less than 3 months and amounting to more than YTL 10,000
  vii. Capital gains on unlisted shares held for less than one year.
  viii. Inflation-adjusted capital gains on immovable property. Real estate held for more than 4 years is exempt.

- Investment incentives
  40% tax allowance on depreciable assets in addition to regular depreciation allowance; indexed and indefinite carry forward of unused allowances, but as of 2006 carry-forwards of allowances that cannot be deducted will be limited to 3 years.
  40% tax allowance on R&D investments in new technology and know-how

Regional employment and investment incentives in regions below $1,500 per capita
5 year tax holidays for companies increasing employment by at least 10 employees till 2007
New measure of up to 100% of PIT and Social Security premiums on minimum wage for additional workers

- Technology Development Regions
  Tax exemption from income from R&D activities of businesses in region for 5 (extendable to 10) years
  Employment tax exemption for R&D employees

- Free Trade Zones (wage and profits taxes)
  Prior to 2004, tax holiday for corporate and wage income taxes
  Since 2004, phasing out of old licenses by 2008 and only granting CIT exemption to income from export production.
  Earnings received from construction, repair, assembly works carried out and technical services rendered abroad and transferred to general accounts in Turkey

VAT
Zero rating of specified mining and petroleum exploration
Zero rating of military equipment supplies
Zero rating of deliveries, operation, construction and servicing of various craft; supplies
and services in the construction of ports; servicing of craft at ports
Exemption of imports for military purposes; presidential use; for donations for health,
education and social purposes
1% VAT items and 8% items other than items appearing in EU Annex H, including
textiles, clothing and leather articles rebated to 8%
Exempt raw minerals
Exempt services provided in a Free Trade Zone.
Exempt sale of assets in case of winding up of financial institutions

Special Consumption Tax
Exemptions for fuel and weapon supplies to security and intelligence agency
Exemption for fuel supplies for petroleum exploration
Exemption for vehicles for disabled
Exemption for airplanes and helicopters for Turkish Air Foundation
Exemption of imports for military purposes; presidential use; for donations for health,
education and social purposes

Note: 1. In addition to tax expenditure estimates, it is also useful to provide tax revenue change
estimates as memorandum items for various structural items even where considered part of tax
benchmark. Examples of memorandum items that are useful to present for information purposes
would be the tax revenue losses from all reduced VAT rates, and dividend deductions.
2. Given significant changes in tax policy starting in 2001, the tax expenditures noted above
focus on the current tax expenditures, and omit tax expenditures removed or phased out in recent
years.

(ii) The Size of Tax Expenditures

The estimation of tax expenditures is still in its early stage in Turkey. The estimation of
tax expenditures is highly demanding, more so than revenue forecasting. Estimating the
incidence of tax expenditures on tax revenues requires detailed analysis of the individual
tax measures. This requires detailed information on the tax base, including that related to
exempt persons and activities. Existing tax databases are still very incomplete because of
the limited tax return information. The current status of tax databases and models is
described in Annex II. The starting point for tax expenditure accounts are the estimates
for the actual tax expenditures in past years which then form the basis of forecasting
future tax expenditures to be incorporated into the medium-term budget process.
Databases and tax simulation models for 2003 are used as the starting point of assessing
the size of tax expenditures.

Authorities estimated tax expenditures for 15 out of 84 tax expenditure provisions for
2006-08 as part of the Medium Term Fiscal Plan largely based on 2003 databases and
models. Here the estimates for these 15 tax expenditure provisions are presented in
Panel A of Table 1. The combined effect of these tax expenditures is a revenue loss of
1.56% of GDP. The largest tax expenditure at 0.66% of GDP in Panel A arises from the
investment tax allowance, and the second largest at 0.33% of GDP is from the tax credit
for personal expenditures on basic needs items. The PIT and CIT tax expenditures are based on micro-simulation models which capture the distribution of marginal tax rates across individuals and the partial value of deductions and exemptions arising from a lack of taxable income due to losses in the year or carry forwards of losses from prior years, as discussed in detail in Annex III. In fact, comparison of these estimates, which reflect partial capture of the tax value of deductions and exemptions, with those that would arise using the data from the summary company tax returns for 2003 show the actual CIT tax expenditures are some 28% smaller, ignoring the effects of carry forwards of unused tax expenditures.

*Additional tax expenditure estimates can be approximated for other items in the summary CIT and PIT tax returns for 2003 and for the amount of social security contributions.* Panel B contains estimates of the other CIT deductions and the revenue cost of social security contributions in 2003. In addition, assuming 25% of the loss carry forwards are caused by preferences in prior years that would have been absorbed, the impact of the transfer of preferences between years is roughly approximated. The need for further work to estimate the impact of prior year tax preferences on current year tax expenditure estimates is discussed in Annex III. Panel B tax expenditure estimates add a further 1.66% of GDP to the total tax expenditures in 2003.

*Other tax omitted tax expenditures would raise total tax expenditures to at least 5% of GDP or about 18% of government revenues in 2003.* Panel C in Table 1 estimates the tax expenditure from a number of preferences for employee benefits for civil servants and other workers. The combined estimate of tax expenditures in Table 1 for 2003 amounts to 3.72% of GDP. While most of the major tax expenditures are included, no estimates are included on the tax expenditures for exemptions of income from a wide range of trade, service and farm activities, as well as most of the VAT and SCT tax expenditures. Tax expenditures in OECD countries have fallen in the range of 4% to 35% of gross expenditures. It appears that tax expenditures in turkey are in about the middle of the OECD country range of experience.

*A major effort is required to upgrade the tax databases and related tax simulation models to obtain more accurate and reliable tax expenditure estimates.* Annex II details the current status of the tax database and models by tax type and the required work to upgrade them for reliable tax expenditure estimates.

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3 Zicheng Li Swift, “Managing the Effects of Tax Expenditures on National Budgets,” Tax Notes International, 41(10), March 13, 2006 reports tax expenditures as shares of gross expenditures for Canada, Netherlands, US, and UK in Table 1.
### Table 1. Selected tax expenditures for Turkey in 2003

<table>
<thead>
<tr>
<th>Panel A: Authorities estimates</th>
<th>Tax expenditure in 2003</th>
</tr>
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</table>
| **Corporate Tax Law No.5422** | |%
| C.T.L. Art. 8/4 | Exemptions for certain investment income earned by corporations from mutual funds. | 935.03 | 0.26% |
| Art. 8/5 | Exemption for sale of preference rights certificates and issuance premiums | 20.83 | 0.01% |
| Art. 8/7 | Exemption for gains earned in construction, repair, installation works and technical services in other countries and transferred to general accounts in Turkey. | 71.04 | 0.02% |
| Art. 8/12 | Exception for gains arising from the sale of participation shares and real estates that companies have had under their assets and decide to add to their capital (revised form of C.T.L. Provisional Article 28) | 259.73 | 0.07% |
| Art. 19 of IT Law | Investment tax allowance | 2,367.56 | 0.66% |
| 3218 S.K. Art. 3 | Exemptions provided under the Free Trade Zones Law no.3218 | 159.43 | 0.04% |
| 4691 S.K. Art. 8 | Exemption for income in the Technology Development Regions | 54.00 | 0.02% |
| **Income Tax Law No.193** | |%
| I.T.L. Art. 89/1 | Deduction for individual insurance premiums and contributions to individual pension system | 8.48 | 0.00% |
| I.T.L. Art. 89/4 | Deduction for charitable donations and grants. | 2.77 | 0.00% |
| I.T.L. Art. 121-bis | Tax credit for expenditures on education, health, food, rent, and clothing of the taxpayer, spouse and children provided against taxes on wage income | 1,201.00 | 0.33% |
| 4325 S.K. Art. 3 | Exemptions provided for income for employers that employ ten or more workers in the provinces indicated in the Law | 30.27 | 0.01% |
| 5084 S.K. Art. 3-4 | Exception indicated in the Law no. 5084 on Encouraging Investments and Employment and Amending Some Laws | 43.82 | 0.01% |
| **Value Added Tax Law No. 3065** | |%
| VAT Art. 13 | Exception for vehicles, search of precious mines and petroleum and national security expenditures and investments (subparagraph (6) covered under the basic taxing system) | 166.13 | 0.05% |
| VAT Provisional Art. 15 | Exception for construction contracts made with housing construction cooperatives and social security organizations established by law exclusive to housing units not exceeding 150m² and construction contracts made to municipalities regarding the constructions for which building construction licenses were obtained prior to 29/7/1998 | 123.72 | 0.03% |
| **Special Consumption Tax Law No. 4760** | |%
| 2003/5868 B.K.K | Reducing the fuel excise rate to “0” for ships carrying cargo and passengers within the cabotage lines registered with the Turkish International Ship Registry and National Ship Registry, commercial yachts, service and fishing ships. | 152.71 | 0.04% |
| Total A | | 5,596.52 | 1.56% |
| **Panel B: Additional estimates based on 2003 returns** | |%
| Other CIT deductions | 1,773.86 | 0.49% |
| Deduction of social security contributions for pensions, unemployment insurance and health benefits | 3,300.00 | 0.92% |
| Preferences in loss carry forwards absorbed in year in CIT and PIT | 915.29 | 0.25% |
| Total | | 5,989.15 | 1.66% |

### Panel C: Approximate estimates for selected other tax expenditure provisions

- Exemption for aid for fuel purchases by civil servants and certain self employed workers; exemption for child allowances, marriage and nuptial supports, severance payments (up to 24 months pay) paid to civil servants and workers; exemption for allowances and expenses paid to civil servants and other workers undergoing education and training programs; exemption for wages of apprentices | 0.50% |

| Total A + B + C | | 3.72% |

Notes: In Panel A, PIT and CIT are estimates by authorities, and VAT and SCT estimates are based on estimates by authorities for 2006 adjusted for growth in nominal GDP.

In Panel B, bank staff estimates are based on summary tax return data for 2003 assuming 82% absorption of exemptions and deductions, and 25% of loss carry forwards being tax preference carry forwards. Social security data base used to obtain effective marginal tax rate for social security deductions.

Panel C based on IMF and Bank staff estimates.
(iii) Refining the framework for the analysis of tax expenditures—key steps ahead

As detailed in Annex IV, the following are the key steps to develop and implement a full framework for publishing tax expenditure accounts and incorporating tax expenditure estimates into the annual budget appropriations and the medium-term budgeting framework to achieve fiscal accountability. Work on steps “a” through “d” below is largely complete.

a. Development of benchmark taxes for each tax type and identification of tax expenditures in each tax type
b. Sector/functional classification of tax expenditures
c. Estimation of some major tax expenditures as illustrations of size and importance of tax expenditures.
d. Development of tax expenditure discussion documents
e. Development of tax expenditure estimation methodologies for all tax types and tax expenditures
f. Choice of initial year to start publication of initial tax expenditure accounts
g. Development of tax expenditure projection procedures for multi-year forward budgets
h. Discussion and decisions about how tax expenditures will enter budgeting system
i. Integration of tax expenditures into comprehensive budget allocation process

Tax expenditures should become an integral part of governmental spending programs. To achieve this a major and sustained work effort is required over the medium term. The above analysis provides a road map for establishing the tax benchmarks and identifying tax expenditures, for establishing “reasonable” databases and “good” databases and the related tax simulation models for estimating tax expenditures. The analysis further outlines the steps in development of tax expenditure accounts and integration of accounts into budget system in order to achieve fiscal accountability in such spending. In addition, tax expenditures have to be evaluated and audited for performance and procedural compliance. Tax expenditure accounts and their evaluations and audits should be published to achieve fiscal transparency.

A tax expenditure framework, similar to what is described above, is widely used in the EU for fiscal accountability and transparency. In particular, the EU has adopted “State Aid Rules”\(^4\) and a “Code of Conduct”\(^5\) for its member states. The “State Aid Rules” restrict or prohibit state assistance to industry, the scope of which is broad enough to cover many types of tax expenditures. The “Code of Conduct” requires member states to eliminate 66 identified special tax incentives in order to refrain from certain types of tax expenditures.

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competition. Turkey, in connection with EU accession, would be ready to conform to the EU’s “State Aid Rules” and “Code of Conduct” should it have a tax expenditure framework.
Draft Tax Benchmarks For Tax Expenditures

A tax benchmark identifies the normal tax arrangements that apply to similar classes of taxpayers or types of activity. Tax expenditures are defined as deviations from the benchmark.

The principal criterion of benchmark design is that the benchmark
- represents a consistent tax treatment of similar activities or classes of taxpayers and neither favors nor disadvantages similarly placed activities or classes of taxpayers.
- includes certain tax provisions (such as exemptions, deductions, tax credits, and other tax preferences) to adjust taxable income in order to:
  - comply with the ability-to-pay principle
  - enhance the economic and collection efficiency of taxation
  - simplify or make feasible tax administration with respect to a class of taxpayers or type of activity
- ensures that tax expenditure report provides sufficient information for policy formulation.

In addition, each country will have its own purposes or demands for a tax expenditure report so that the benchmark should reflect such purposes or demands.

The following benchmarks summarize some of the basic features that could be consider forming the benchmarks of the personal income tax (PIT), corporation income tax (CIT), Value-added tax (VAT) and special consumption tax (SCT) in Turkey.

**Personal Income Tax Benchmark**
- Tax period, calendar year (as given by the personal income tax law)
- Tax unit: individual (as given by PIT law)
- Residents taxed on world wide income, non-residents on income sourced from Turkey
- Taxable net income is gross income reduced by the allowable costs of earning income (allowable deductions)
- Gains and losses realized on movable and immovable property
- Losses carried forward for five years (given by the law)
- Inflation. Tax base is partially adjusted for inflation (as given by the law)
- Tax rate schedule and income brackets for individual income earners as applicable to a tax year (as given in the law)
- Final withholding taxes (no declaration of income) (as given in the law)
  - Final withholding on specified types of investment income
Final PAYE taxes paid on employment income (including the special tax credit for basic expenditures)

- Provisions to reduce or eliminate double taxation (50% dividend deduction)
- Foreign tax credit: Credit is available to residents for income tax paid or incurred to any foreign country (as given by the law)
- Lump-sum method for selected types of small taxpayers (as given in the law)
- Exemptions provided for persons subject to diplomatic privileges on a reciprocal basis
- Exemption provisions for central and local governments and non-government organizations of a public nature in the context of providing services of a public nature on a non-commercial basis

**Corporate Income Tax Benchmark**

- Tax period: calendar year /end of the financial period of the company (given by the law)
- Tax unit: legal entity (given by the law)
- Resident entities taxed on world wide income, non-residents on income sourced from Turkey
- Taxable income as calculated on the basis of balance sheet methods
- Gains and losses realized on movable and immovable property
- Tax rate: General standard rates applicable to year (given by the law)
- Valuation: inflation adjustment policies as applicable (given by the law)
- Depreciation: depreciation based on the economic life, using the straight-line method or declining balance method.
- Capital revaluation exemption (given by the law)
- Losses carried forward for five years (given by the law)
- Intercorporate dividends are exempted (given by the law)
- Deductible distributions of surplus of cooperatives as part of tax integration
- Up to 50% deduction of repatriated profits as part of tax integration
- Foreign tax credit: Credit is available to domestic corporations for income tax paid or incurred to any foreign country (as given by the law)
- Tax deferred on capital gains arising from mergers and acquisitions or (detail see the law)
- Tax exemption for income transfer due to corporate restructure or merger (given by the law)
- Exemption provisions for central and local governments and non-government organizations of a public nature in the context of providing services of a public nature on a non-commercial basis

**VAT Tax Benchmark**

- Tax period: month for domestic deliveries (supplies) and quarter for imports
- Valuation of domestic deliveries and imports (given in the law)
- Timing of recognition of domestic deliveries and imports (given in the law)
• Tax rate: two-rate system, a nominal rate at 18% and a reduced rate (8%) for items on Annex H of the EU Directives (see below) that permits VAT at a reduced rate.
• Destination-based tax on domestic deliveries and imports (exports and related international transport services are zero-rated)
• Multi-stage tax with deduction of input VAT and refund of excess VAT only in case of exports, and supplies at rates below standard rate; excess input VAT carried forward.
• Exemptions related to normal customs treatment of transit trade, free zones, bonded warehousing, temporary importation, change of residence, etc
• Deferment mechanisms (or equivalent structures) for VAT on imported and domestically supplied machinery and equipment
• Exemption provisions for government and its agencies and non-government organization providing services of a public character and on a non-commercial basis (as specified in the law)
• Exemption for self-employed businessmen, tradesmen and farmers (as specified in the law)
• Exemption of mergers and acquisitions, delivery and rental of non-commercial immovable property; financial sector; delivery of financial instruments.
• Deliveries to persons with diplomatic privileges are fully exempted (zero rated)

**Special Consumption Tax Benchmark**

• Destination based single stage tax
• Tax period: monthly
• Valuation of imports and domestic deliveries at factory gate, dealer or retail level as specified in law for the different specified commodities
• Timing of payments (as specified in the law)
• Tax rates as specified for lists of goods
  o List I: tax rates specified for petroleum products
  o List II, tax rates specified for vehicles
  o List III
    ▪ tax rates specified for tobacco products
    ▪ tax rates specified for alcoholic products
  o List IV. Tax rate at 6.7% on specified luxury items
• Exemptions for exports and for persons with diplomatic privileges
• Exemptions related to normal customs treatment of transit trade, free zones, bonded warehousing, temporary importation, change of residence, etc
• Exemption for donations to government and its agencies
Annex II

Status and Prospects of Development of Tax Databases and Models for Estimating Tax Expenditures

This annex investigates the current status of tax databases and models in Turkey and looks at the medium-term needs and prospects of further developing these databases and models to produce tax expenditure estimates and forecasts.

Table II.1 provides a summary of the status of the tax databases currently actually and potentially available to the GDR and the corresponding tax models currently available to estimate tax expenditures. It also gives the expected developments in tax data collection with the implementation of e-filing starting in 2004 for the various taxes and notes some of the possible amendments required to tax returns to improve the identification and measurement of tax expenditures.

Table II.2 summarizes the prospects for establishing “reasonable” databases (some, but not all tax expenditures can be estimated with reasonable accuracy) and “good” databases (most important tax expenditures can be directly estimated). With current separate operation of the taxation of employment income, these tables indicate that seven databases are required:

a. Social Security database
b. PIT
c. CIT
d. Withholding tax
e. VAT
f. SCT
g. Customs (for SCT and VAT exemptions of imports)

The most current experience with establishing and analyzing the databases is with the first three (Social security, PIT and CIT). Significant experience also exists with VAT analysis, but this is based on 1997 data and no recent data analysis has been undertaken.

The current implementation of e-filing offers a golden opportunity to improve the timeliness and accuracy of the data, but the requirement for compulsory e-filing which is being implemented under larger PIT and CIT filers will need to be extended to VAT, SCT and withholding returns as well if these databases are to become reliable bases for estimation. Clearly, also considerable effort will be required to test the consistency and accuracy of these new databases to confirm their usefulness in tax analysis and estimation.

To allow better estimation of the tax expenditures it is highly recommended that all tax return forms be reviewed to identify changes in reporting that will facilitate the identification and estimation of tax revenues. It is also understood that tax returns may undergo revisions simultaneously to improve reporting for tax audit purposes. Table II.1 identifies some critical improvements in tax returns such as the inclusion of Investment
Tax Allowance (ITA) carry forwards, social security contribution deductions, coding of VAT and SCT exemptions. In addition, if a move is made to more global taxation and declaration of personal income, the prospects of identifying and estimating tax expenditures will be significantly improved. Without such a change, consideration should be given to requiring more detailed reporting by employers (at least for the larger ones with computerized accounting systems) to file more detailed annual returns of the withholding of taxes from employee incomes. This would not only improve tax expenditure accounting, but would also open up opportunities to cross check PIT and social security withholding against CIT tax returns.

In the short-term, the current status of tax databases and tax modeling capacity gives the best prospects of estimating the major tax expenditures related to (i) income tax investment incentives for investment, R&D, export promotion, and regional employment and (ii) social security premium deductions.
<table>
<thead>
<tr>
<th>Type of tax</th>
<th>Databases immediately available to GDR</th>
<th>Databases currently potentially available to GDR</th>
<th>Databases expected to available over short &amp; medium term</th>
<th>Amendments required to tax returns for tax estimation</th>
<th>GDR tax models currently available for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIT – PAYE or employment final tax</td>
<td>2003 (Social security based employment data)</td>
<td>2004 (Social security based employment data)</td>
<td>After March 2005, compulsory e-filing of 2004 for large taxpayers a</td>
<td>Declaration of employment income as part of global income tax return and/or disaggregated reporting by employers of tax of employees; tax credit</td>
<td>Social security based Excel PIT micro-simulation model</td>
</tr>
<tr>
<td>PIT – Non-employment taxes (declared income)</td>
<td>2001 2002 (7055 sample)</td>
<td>Full data sets available from at least 2000 through 2003 at central information processing center</td>
<td></td>
<td>Global income declaration Sector, turnover and costs of earning income (especially employee &amp; SS costs) generating book profits ITA carryovers and indexing Pension contribution and withdrawals</td>
<td>Excel based and database PIT micro-simulation models for tax analysis</td>
</tr>
<tr>
<td>Income tax withholding tax returns</td>
<td>1998</td>
<td>From 2001, automated tax offices have basic return information; from 2003, number of employees captured</td>
<td>From Oct 2004, voluntary monthly e-filing</td>
<td>Tax credit for expenditures on basic needs</td>
<td></td>
</tr>
<tr>
<td>Special Consumption Tax (SCT) – domestic collections</td>
<td>None</td>
<td>From Jan 2003, monthly declarations sent to central information processing center</td>
<td>After March 2005, compulsory e-filing of monthly returns and declarations by all taxpayer</td>
<td>Separate coding of exemptions (exports and diplomatic purchases already recognized)</td>
<td></td>
</tr>
<tr>
<td>VAT and SCT – import VAT and SCT (Customs)</td>
<td>None</td>
<td></td>
<td></td>
<td>Customs has computerized import data in recent years</td>
<td></td>
</tr>
</tbody>
</table>

a. Compulsory e-filing is required for businesses with assets over 200,000 YTL in Dec 2004 or sales over 400,000 YTL in 2004.
<table>
<thead>
<tr>
<th>Type of tax</th>
<th>Reasonable data base</th>
<th>Work required</th>
<th>Good data bases</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIT – PAYE or employment final tax</td>
<td>Social security based employment data combined with withholding tax returns allows limited estimations: items such as SS premium deductions but no direct estimation of tax credit or pension contributions etc. This type of data is available from at least 2003 onwards for SS but only from 2005 for withholding taxes and tax credits</td>
<td>Establish SS-based data bases for <strong>2004 onwards</strong> and modeling capacity</td>
<td>Good PAYE data base would require either employers to file disaggregated returns giving individual detail of income, deductions, tax and credits (feasible for large computerized employers) or filing of returns by at least middle and upper income employees in order to identify use of deductions and credits. Earliest this would be feasible would for <strong>2006 tax year</strong></td>
</tr>
<tr>
<td>PIT - Non-employment taxes (declared income)</td>
<td>Annual samples of returns are possible from 2000 onwards and e-filing of 2004 by April 2005 for larger tax payer</td>
<td>Establish PIT data bases and update model from <strong>2004 onwards</strong></td>
<td>Amended tax return could be issued in 2005 for filing in <strong>April 2006 for 2005 tax year</strong></td>
</tr>
<tr>
<td>Income tax withholding tax returns</td>
<td>From 2001, automated tax offices have basic return information and voluntary e-filing from Oct 2004</td>
<td>Establish withholding data base for <strong>2004 onwards</strong></td>
<td></td>
</tr>
<tr>
<td>CIT – declared income</td>
<td>Annual returns possible from 2000 onwards and e-filing of 2004 by April 2005 for larger tax payer</td>
<td>Establish CIT data bases and update model from <strong>2004 onwards</strong></td>
<td>Amended tax return could be issued in 2005 for filing in <strong>April 2006 for 2005 tax year</strong></td>
</tr>
<tr>
<td>Special Consumption Tax (SCT) – domestic collections</td>
<td>Annual declaration and return data available from Jan 2003 onwards; compulsory e-filing from March 2005</td>
<td>Establish SCT data bases from <strong>2004 onwards</strong> and establish models</td>
<td>Amend return to disaggregate and code different exemptions during 2005 for <strong>2006 onwards</strong></td>
</tr>
<tr>
<td>VAT – domestic VAT</td>
<td>Gap in VAT data till Jan-Jun 2003 and voluntary e-filing of returns from Oct 2004 (about 10%) make establishing data bases for 2003 and 2004 questionable</td>
<td>Require compulsory e-filing of VAT returns and establish VAT data base for <strong>2005 onwards</strong></td>
<td>Amended VAT return in 2005 for <strong>2006 onwards</strong></td>
</tr>
<tr>
<td>VAT and SCT–import VAT and SCT (Customs)</td>
<td></td>
<td>Establish Customs data base for <strong>2004 onwards</strong></td>
<td></td>
</tr>
</tbody>
</table>
Annex III

Some Issues in the Estimation of Tax Expenditures in the Personal and Corporate Income Taxes

1. This Annex addresses some of the issues involved in the estimation of tax expenditures in the context of the Personal and Corporate Income Taxes (PIT and CIT) arising because of difficulties in estimating the appropriate effective marginal tax rate in the PIT, the effects of deductions only being partially available because of limited available taxable income, and the effects of tax loss carryovers in both limiting the size of available taxable income and in resulting tax losses being transmitted from one tax year to the next. All these difficulties require sophisticated micro-simulation models of the PIT and CIT that can simulate the effects of changes in tax structures (including tax expenditure provisions) based on detailed representative samples of actual taxpayers. In addition, there is a need to link the use of tax expenditures between years to the extent that their use results in increased loss carry forwards. These issues are expanded upon below and some are drawn examples from the summary tax returns available for 2003 and selected earlier years.

2. A general problem with tax expenditures in the income tax arises from the changes effective tax rate depending upon the (a) the income level, (b) the size of the exemption or deduction, and (c) the difference in timing of accrual and realization of the exemption or deduction:

a. Where there are different tax rates in different tax brackets, the income level of the beneficiary of the exemption or deduction affects the marginal tax rate (MTR) applied to the exemption or deduction. Ideally, a weighted average MTR is required to apply to the amount of the exemption or deduction. This is clearly an issue in estimating tax expenditures in the PIT, including any flow through of dividends and other investment income from the company to personal levels. This is typically solved by calculating tax expenditures using a micro simulation tax model based on a representative sample of taxpayers so that the appropriate weights and MTRs are applied depending on the distribution of taxable income.

b. The size of exemptions and deductions affects tax expenditure estimates in two ways:

i. In the PIT, the MTR is affected by how many tax brackets are covered by the exemption or deduction. This is most important if tax expenditure items are considered collectively rather than individually or one-at-a time. The best-practice tax expenditure convention is to consider each one-at-a-time as a marginal decision. Even then a deduction may straddle one or more tax brackets and an average MTR is applicable. Again the use of micro simulation tax models with a sample of representative taxpayers in terms of taxable incomes and deductions allows the accurate estimation of
each tax expenditure item depending upon the distribution of usage across income groups.

ii. An exemption or deduction may make a taxpayer move from being taxable to non-taxable such that only part of the exemption or deduction has current cash flow consequences. The tax value of the remainder may be (a) lost forever, (b) captured immediately as a refund or loss carry back against prior year taxable income, (c) carried forward as an identifiable exemption/deduction with or without indexation (for example, in Turkey, unusable investment allowances are carried forward indefinitely with indexation), or (d) carried forward as a general loss of taxable income to be deducted against future taxable income that may arise within a limited time period (such as the next five years, in the case of Turkey). From a tax flow perspective, the potential tax value of an exemption or deduction in the current year is reduced in all cases except (b). In cases (c) and (d) additional tax value may be captured in some future year. Alternatively, the tax flow consequences in the current year arise from a combination of the new deductions in the year plus the carry forwards of deductions taken but not used in prior years. This issue of the timing of when tax expenditures are realized is a major and difficult problem. It is discussed at some length below.

As noted above in b.ii, exemptions and deductions may not be usable in the current year for lack of taxable income. This problem is treated in two different ways as discussed in cases (c) and (d) above in point b.ii. These two types are found in the tax returns in Turkey as “exemptions to be deducted even when there is a loss,” which generate either traceable carry forwards or general (untraceable) loss carry forwards, and as “exemptions deducted when there is a profit,” which have to be carried forward separately when there is not a profit. The actual cash flow tax expenditure cost of the former is difficult to determine in any current year. In addition to some of the exemptions or deductions not being claimable in the current year, unused amounts from prior years may be carried forward into the current year, and furthermore, the removal of the exemption or deduction in an earlier year affects the loss carry forwards into the current year, and hence, affects the current tax value of current exemptions or deductions. The tax expenditure treatments of exemptions that do not cause a loss carry forward (but unused amounts are carried forward separately) are treated subsequently below.

6. The cash flow tax cost can be broken out into two main components.
   i. The actual amount of the exemption or deduction that can be absorbed in the year against current taxable income. This typically requires a tax micro-simulation model to calculate the amount of the exemption or deduction used in the year. Alternatively, the amount of the current deduction is limited by the amount of total loss carry forwards from the current year to the next year ($LCF_{\text{next}}$). This $LCF_{\text{next}}$ is the total of traced and untraced LCFs and the unused amounts of the taxable income limited deductions (such as the
investment allowance). Unless the current deduction exceeds the LCF_{next}, its removal will result in no current tax, but merely a decrease in LCF_{next}.

ii. The removal of the exemption or deduction of the tax expenditure type in previous years could have resulted in lower loss carry forwards into the year, and hence the amount of the current exemption or deduction that would have been claimed in (i) above increases. The amount of carry-forwards of unused deductions or exemptions of the same type used in the year is defined here as D_{prior}. This can be precisely determined if the amount of the unused exemptions or deductions are traceable (or are in type-specific pools carried forward). Otherwise some share of the loss or exemption carry forwards has to be attributed to the type of tax expenditure. Based on the 2003 CIT summary return, YTL 740 millions in exemptions were carried forward and claimed in 2003. In addition, some share of the YTL 11.922 billion in general losses carried forward into 2003 may be arising from untraced exemptions and deductions in earlier years rather than economic losses. Where use of carry forwards of traced deductions is known, the impacts of changes in these deductions on the carry forwards of the unused income limited deductions (such as the unused investment allowances) also has to be accounted for. Any tax expenditure estimate has to bring into the picture the total losses carried into the current year as well as the total losses carried forward to the next year.

Table III.1: Tax expenditure (TE) cases for current deduction (D) and marginal tax rate (t in terms of tax payable in year (T), loss carry forward (LCF) and unused prior deductions of the same type (D_{prior})

<table>
<thead>
<tr>
<th>Loss carry forward, LCF = 0</th>
<th>Tax Payable, T = 0</th>
<th>Tax Payable, T &gt; 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Partial TE for cases where (D – LCF_{next}) t &gt; 0</td>
<td>B. Full TE = Dt</td>
<td></td>
</tr>
<tr>
<td>Loss carry forward, LCF &gt; 0</td>
<td>D_{prior} &gt; LCF</td>
<td>C1. Partial TE for cases where (D +LCF – LCF_{next}) t &gt; 0</td>
</tr>
<tr>
<td>D_{prior} &lt; LCF</td>
<td>C2. Partial TE for cases where (D + D_{prior} – LCF_{next}) t &gt; 0</td>
<td></td>
</tr>
<tr>
<td>D1. Partial TE = (D -LCF) t</td>
<td>D2. Full TE = (D + D_{prior} ) t</td>
<td></td>
</tr>
</tbody>
</table>

Definitions:
LCF = total loss carry-forward from prior to current year of all traceable and untraceable losses plus unused deductions carried forward separately
LCF_{next} = total loss carry-forward from current to next year of all traceable and untraceable losses plus unused deductions carried forward separately
D_{prior} = Cumulative amount of unused deductions of same type as D in prior year and each successive earlier year where no tax was payable or loss carry forwards to the next year were generated up to the legal limit for carrying forward losses of the type, generally 5 years except for investment allowances.
T = tax payable on the tax base after all exemptions, deductions, allowances and preferential tax credits, but before any withholding, installment or advance taxes are credited against the tax payable.
These effects are jointly analyzed in Table III.1. Here the tax expenditure is shown to depend critically on (i) whether the taxpayer has tax payable in the year (T>0) or not and (ii) whether any losses are carried forward into the year. A taxpaying person will not be generating loss carry forwards to the next year and will get the full value out of current deductions and will have used up all LCF into the year. The total LCF into the year determines the maximum carry forward of unused deductions into the year and put an upper limit on how much of prior year unused losses can affect the tax flows in the current year. Where no tax is payable in the year and losses are carried forward into the following year, then any increase in current year taxable income, because of the removal of a specific deduction, may not result in the full value of this deduction being captured as a tax increase to the extent the loss carry forward to the next year first has to be covered before any tax comes payable. Table III.1 provides a useful way of cross tabulating the tax returns in order to analyze and estimate the tax expenditures.

7. What are the implications of the above analysis of estimating tax expenditures on a cash flow basis? First, that an annual micro simulation model is necessary, but not sufficient to estimate tax expenditures where there are loss carry forwards or losses created by exemptions or deductions. Second, added information is required to estimate “TE”, namely, total LCF, LCF_{next} and D_{prior}. LCF and LCF_{next} should be knowable for each tax return and should be added to any tax return report, but D_{prior} requires the further work of linking tax returns over the years. Finally, it is useful to cross-tabulate estimates of tax expenditures by the taxpayers’ status in terms of being taxpaying or not (taxes payable in the current year > 0 or not) and whether the taxpayer has total losses carried forward.

8. Some special comments are necessary about the carry forward of unused income-limited deductions and special deductions where any losses generated and carried forward are traced as a special pool of losses:
   a. In the case of income-limited losses, the actual amount of losses used in the current year from current deductions and unused carry forwards gives the correct TE estimate. It is automatically the sum of D + LCF – LCF_{next}.
   b. In the case of traced deductions, the sum of the current deduction taken (D) plus the amount of any LCF of that type used in the year has to corrected for any changes in the stock of unused income-limited deductions over the current year to be an accurate estimate. Alternatively, the methodology in Table III.1 based on the current deduction and changes in the stock of total LCF over the current year can be used.

9. Are these concerns about loss carry forward quantitatively important or not in tax expenditure estimates. Table III.2 provides some clues. It is based on the summary tax return data readily at hand for 1998, 1999 and 2003 for companies. It shows that tax losses are extremely high, even excluding the impacts of investment allowances, which are only taken when there is available taxable income and do not generate explicit loss carry forwards. The following is evident:
a. Loses in a year vary between 21% and 54% of taxable profits
b. Combined current year losses and losses carried forward vary between 83% and
99% of losses
c. Loss carry forwards are absorbed relatively slowly. This can be found by
comparing the new losses generated in 1998 and 1999 with the losses carried into
year 2003 from these years. These indicate that these stocks of loss carry
forwards have declined at the rate of 23% per year through use or companies
folding. This means that at least 26% of the original losses are lost because of the
five-year carry forward restriction. Overall there is a relatively low probability
(less than 23%) that a loss generated in one year will be used in the next.
d. Losses absorbed in a year reduced between 10% and 33% of taxable income.
e. In addition, exemptions that are taken only when there is a profit (essential
investment allowances) have eliminated another 27% to 35% of taxable income in
the year. Unfortunately, no information is available on the investment allowances
created by vintage year and the outstanding stocks of these vintages in order to
find out how rapidly they are absorbed. The large size of the investment
allowances claimed each year (a similar magnitude to the new losses) would
suggest that investment allowance carry forwards are more rapidly absorbed.
This coupled with their indexation and indefinite carry forward makes the
analysis of the stocks of unused investment allowances a source of serious
concerns to both tax revenue and tax expenditure analysis.

10. Next, which exemptions or deductions that generate losses are important? From the
2003 CIT summary return, the major item of deductions is “other exemptions and
deductions” amounting to YTL 7.211 billion. Other contributors to loss carry
forwards include the exemptions for companies in less developed regions, technology
regions and the large “other” group. To get an upper bound on the potential values,
following Table II.1, the sample of companies in 2003, if divided into those with and
without these exemptions, and then into the four cells in Table III.1 assuming the case
of $D_{prior} > LCF$. In 2003, LCF was at least YTL12.66 billion. An accurate estimate
would require knowing the exemption claims ($D_{prior}$) of these companies currently
with $LCF > 0$ in 2003 over the previous 5 years. The LCF itself would be the upper
bound on the amount of the exemption carried forward into 2003. Studies of time
series of tax returns is required to find $D_{prior}$ and estimate useful probabilities such as
the probability of claiming the same type of deduction in prior years and also being
not-taxpaying and generating LCF.

11. Finally, the tax expenditure for investment tax allowances (ITA) is a dominant item
and clearly very important. ITA claimed in 2003 amounted to YTL 10.05 billion.
The amount of unused investment allowances, however, which are carried forward
indefinitely with indexation is unknown. If the amounts of deductions, losses and
loss carry forwards declines in the future these investment allowances could grow in
the future as the available taxable income grows, even if the investment allowance
were limited or used less. It is important to get estimates of the amount of unused
investment allowances by companies broken out into the cross tabulations of Table
III.1.
<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year Loss</td>
<td>59,275,270</td>
<td>295,132,666</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994 Year Loss</td>
<td>165,811,023</td>
<td>377,834,460</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995 Year Loss</td>
<td>295,054,163</td>
<td>859,142,529</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996 Year Loss</td>
<td>523,329,845</td>
<td>2,130,255,976</td>
<td>816,868,186</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997 Year Loss</td>
<td>1,554,065,087</td>
<td>3,811,251,522</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998 Year Loss</td>
<td>2,130,255,976</td>
<td>3,811,251,522</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999 Year Loss</td>
<td>2,332,369,545</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000 Year Losses Resulting From Exemptions</td>
<td>470,680,130</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000 Year Other Losses</td>
<td>3,811,251,522</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001 Year Losses Resulting From Exemptions</td>
<td>1,335,827,282</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001 Year Other Losses</td>
<td>15,691,193,068</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002 Year Losses Resulting From Exemptions</td>
<td>1,421,610,998</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002 Year Other Losses</td>
<td>10,694,134,141</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total loss carry forwards into current year</td>
<td>2,997,535,388</td>
<td>3,858,107,351</td>
<td>36,573,334,852</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate income -- Balance sheet profit</td>
<td>8,531,191,021</td>
<td>11,415,537,880</td>
<td>52,017,655,718</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate income -- Balance sheet loss</td>
<td>5,670,315,410</td>
<td>5,342,585,456</td>
<td>12,613,998,868</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit (39 - 40)</td>
<td>5,959,746,552</td>
<td>9,554,319,132</td>
<td>47,047,726,377</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B/C</td>
<td>40%</td>
<td>54%</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exemptions to be deducted if a profit (52)</td>
<td>1,950,500,186</td>
<td>2,566,081,897</td>
<td>10,262,709,944</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Previous Year Loss to be Deducted (43+44)</td>
<td>602,261,610</td>
<td>877,287,536</td>
<td>12,661,978,627</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base for Deductions (42 - 45)</td>
<td>5,599,866,084</td>
<td>8,861,448,776</td>
<td>38,210,013,322</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E/G</td>
<td>35%</td>
<td>29%</td>
<td>27%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F/G</td>
<td>11%</td>
<td>10%</td>
<td>33%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex IV

Steps in development of tax expenditure accounts and integration of accounts into budget system

While the work on developing tax expenditure accounts is already underway, this annex lays out the steps need to be undertaken over the coming years to fully implement and integrate tax expenditure accounts into annual budget appropriations and the medium-term budgeting framework to achieve fiscal accountability.

a. Development of benchmark taxes for each tax type and identification of tax expenditures in each tax type
   1. Completion of draft benchmarks in Appendix I. Comparison with OECD country tax benchmarks.
   2. Completion of detailed matrix of tax expenditure provisions in matrix along with sector/function classification and estimation procedures (data sources and models) as elaborated below.

b. Sector/functional classification of tax expenditures

c. Estimation of some major tax expenditures as illustrations of size and importance of tax expenditures.
   Recommend estimating tax incentives in CIT and related to social security premium contributions given importance and current availability of tax databases and models at least for 2003. This will require some development of methodologies and actual estimations for dealing with loss and ITA carry forwards. In addition some items such as tax losses on interest on government bonds could be roughly estimated by indirect means.

d. Development of tax expenditure discussion documents
   1. Public Expenditure Review with a chapter on Tax Expenditures
   2. Government report or discussion document for internal and/or external discussion. At a minimum government will need to have the matrix of tax expenditures and estimation methods (mentioned above).

e. Development of tax expenditure estimation methodologies
   1. Identification of existing data and tax models
   2. Amendments to tax returns and requirements to file and/or e-file returns
   3. Identification of alternative data sources (capital market data, social security data, corporate accounts, etc)
   4. Development and testing of new tax data sources, especially e-filed returns for PIT, CIT, withholding taxes, VAT and CIT.
   5. Develop/update/upgrade tax modeling procedures to analyze each database
6. Gain access to customs import data base and develop modeling and analysis procedures for SCT and VAT exemption estimates
7. Development of tax expenditure projection procedures for multi-year forward budgets

f. Choice of initial year to initiate tax expenditure accounts (2005 or 2006) and decision of timing of preparation of first set of accounts (possibly sometime in 2006)

g. Development of tax expenditure projection procedures for multi-year forward budgets
   Tax revenues and tax expenditures need to be forecast simultaneously to form part of medium term budget process. Forecasting methodologies need to be developed that build upon the tax simulation models developed to estimate the actual tax expenditures on completed financial year data.

h. Discussion and decisions about how tax expenditures will enter budgeting system
   1. Initially, tax expenditure accounts need to be published for completed years to provide as basic information and raw material for tax policy reforms and to build understanding and confidence in these accounts so that they can incorporated into the budget process.
   2. Identification of tax expenditures that are feasible to collect if withdrawn and replaced by direct expenditures – essential ingredient to consideration of the possible trade off between tax and direct expenditures to achieve target policy purpose.
   3. Tax expenditure account should provide information to analyze the effects of tax expenditures on budget regarding fiscal accountability. The basic effects are on the budget balance and resource allocation. The accounts could contain added information to assist the evaluation of: (a) the effectiveness and efficiency of tax expenditures including whether they are overlap with budget allocations; they are outdated; or they are coordinated with other spending items as well as information of the users and effects of the provisions; and (b) the impacts of tax expenditures on tax administration (such as whether tax expenditure provide opportunity to be abused or evaded, or the cost of tax administration is increased because of tax expenditures).

   4. Legal and procedural issues in making tax expenditures part of allocation of gross of tax-expenditure revenues. Review of OECD country experience in integrating tax expenditures into budget systems.

i. Integration of tax expenditures into budget allocation process