INTERNATIONAL STUDIES PROGRAM

International Studies Program
Working Paper 08-07
December 2008

Pakistan: Provincial Government Taxation

Roy Bahl
Sally Wallace
Musharraf Cyan

Georgia State University

ANDREW YOUNG SCHOOL OF POLICY STUDIES

International Studies Program
Working Paper 08-07

Pakistan: Provincial Government Taxation

Roy Bahl
Sally Wallace
Musharraf Cyan

December 2008

International Studies Program
Andrew Young School of Policy Studies
Georgia State University
Atlanta, Georgia 30303
United States of America

Phone: (404) 651-1144
Fax: (404) 651-4449
Email: ispaysps@gsu.edu
Internet: http://isp-aysps.gsu.edu

Copyright 2006, the Andrew Young School of Policy Studies, Georgia State University. No part of the material protected by this copyright notice may be reproduced or utilized in any form or by any means without prior written permission from the copyright owner.

International Studies Program
Andrew Young School of Policy Studies

The Andrew Young School of Policy Studies was established at Georgia State University with the objective of promoting excellence in the design, implementation, and evaluation of public policy. In addition to two academic departments (economics and public administration), the Andrew Young School houses seven leading research centers and policy programs, including the International Studies Program.

The mission of the International Studies Program is to provide academic and professional training, applied research, and technical assistance in support of sound public policy and sustainable economic growth in developing and transitional economies.

The International Studies Program at the Andrew Young School of Policy Studies is recognized worldwide for its efforts in support of economic and public policy reforms through technical assistance and training around the world. This reputation has been built serving a diverse client base, including the World Bank, the U.S. Agency for International Development (USAID), the United Nations Development Programme (UNDP), finance ministries, government organizations, legislative bodies and private sector institutions.

The success of the International Studies Program reflects the breadth and depth of the in-house technical expertise that the International Studies Program can draw upon. The Andrew Young School's faculty are leading experts in economics and public policy and have authored books, published in major academic and technical journals, and have extensive experience in designing and implementing technical assistance and training programs. Andrew Young School faculty have been active in policy reform in over 40countries around the world. Our technical assistance strategy is not to merely provide technical prescriptions for policy reform, but to engage in a collaborative effort with the host government and donor agency to identify and analyze the issues at hand, arrive at policy solutions and implement reforms.

The International Studies Program specializes in four broad policy areas:

- Fiscal policy, including tax reforms, public expenditure reviews, tax administration reform
- Fiscal decentralization, including fiscal decentralization reforms, design of intergovernmental transfer systems, urban government finance
- Budgeting and fiscal management, including local government budgeting, performance-based budgeting, capital budgeting, multi-year budgeting
- Economic analysis and revenue forecasting, including micro-simulation, time series forecasting,

For more information about our technical assistance activities and training programs, please visit our website at http://isp-aysps.gsu.edu or contact us by email at ispaysps@gsu.edu.

ACKNOWLEDGEMENTS

These working papers are the reports that were a joint product of a team from the Federal Board of Revenue (FBR), Government of Pakistan, the Andrew Young School of Public Policy (AYSPS) at the Georgia State University, and the World Bank. The views, expressed in the reports, are of the authors and not of the Government of Pakistan.

The FBR team was headed by Mr. Ahmad Waqar, Secretary Revenue Division and Chairman FBR, and Mr. M. Abdullah Yusuf, former Chairman FBR, and included Mr. Mumtaz Haider Rizvi, Member Fiscal Research and Statistics, Dr. Ather Maqsood Ahmed, former Member Fiscal Research and Statistics, Mrs. Robina Ather Ahmed, Chief Fiscal Research and Statistics, Mr. Umar Wahid, Secretary Fiscal Research and Statistics, Mr. Mir Ahmed Khan, Second Secretary Fiscal Research and Statistics, and Mr. Naeem Ahmed, Second Secretary Fiscal Research and Statistics.

The final report was prepared by Kaspar Richter (World Bank), and Jorge Martinez-Vazquez (AYSPS). The background studies (listed below), were drafted by Robina Ather Ahmed, James Alm, Roy Bahl, Musharraf Cyan, Mir Ahmad Khan, Jorge Martinez-Vazquez, Geerten Michelse, Mark Rider, Wayne Thirsk, Umar Wahid and Sally Wallace. The tax revenue simulation results in the report are based on micro-simulation models developed by Mark Rider and Sally Wallace with Harini Kannan. The GST chapter draws extensively on a review of Pakistan's sales tax by Rebecca Millar and Christophe Waerzeggers from June 2008. The final report also benefited from the Pakistan tax administration review by Carlos Silvani, Edmund Biber, William Crandall, Wyatt Grant, Orlando Reos and Geoff Seymour from September 2008. Peer reviewer comments from Kai-Alexander Kaiser, Senior Economist, World Bank; Michael Keen, Advisor, International Monetary Fund; Dr. Ahmad Khan, former Member FBR; Russell Krelove, Senior Economist, International Monetary Fund, and Eduardo Ley, Lead Economist, World Bank greatly enhanced the quality of the report. Dr. Ahmad Khan and Dr. A. R. Kemal reviewed the background studies, and Ehtisham Ahmad commented on the concept paper. Anjum Ahmad, Shamsuddin Admad, Mihaly Kopanyi, Hanid Mukhtar, and Saadia Refaqat from the World Bank provided useful feedback. Mirafe Marcos helped greatly by providing the draft chapter of the provincial background study. The team would like to thank Satu Kahkonen, Lead Economist, Miria Pigato, Sector Manager, Ijaz Nabi, former Sector Manager, Yusupha Crookes, Country Director, and Ernesto May, Sector Director, for continued support and guidance throughout all stages of this report. Muhammad Shafiq, Nimanthi Attapattu, and Irum Touqeer handled with great ease all arrangements for the missions and for the processing of the report.

The team benefited enormously from the close collaboration of the Government of Pakistan ever since this work was launched in January 2007. The team is very grateful to Mr. M. Abdullah Yusuf, who conceived the idea for this report, and to Dr. Ather Maqsood Ahmed, who developed the framework and coordinated the inputs of the FBR team. The team is greatly indebted for the outstanding support and assistance of FBR's Fiscal Research and Statistics Wing. Its contribution is immense: it co-authored three background studies; provided comments, feedback, and guidance to the team throughout the analysis and report preparation; and facilitated the interaction with other departments, including the Budget Wing, Debt Office, and the Economic Affairs Division of the Ministry of Finance.

Background Papers for the Pakistan Tax Policy Report

08-07 Bahl, Roy, Wallace, Sally and Cyan, Musharraf. *Pakistan: Provincial Government Taxation*.

08-08 Thirsk, Wayne. *Tax Policy in Pakistan: An Assessment of Major Taxes and Options for Reform.*

08-09 Michelse, Geerten. *Pakistan – a Globalized Tax World – An Analysis of its International Tax Practice.*

08-10 Alm, James and Khan, Mir Ahmad. *Assessing Enterprise Taxation and the Investment Climate in Pakistan*.

8-11 Ahmed, Robina Ather and Rider, Mark. *Pakistan's Tax Gap: Estimates by Tax Calculation and Methodology*.

08-12 Sally Wallace and Harini Khan. Pakistan: Comprehensive Individual Tax Reform: Round 2

08-13 Wahid, Umar and Wallace, Sally. *Incidence of Taxes in Pakistan: Primer and Estimates*

Pakistan:
Provincial Government Taxation

Roy Bahl, Sally Wallace and Musharraf Cyan
International Studies Program, Andrew Young School of Policy Studies, Georgia State University

TABLE OF CONTENTS

FIGURES

BOXES

TABLES

EXECUTIVE SUMMARY

Pakistan's intergovernmental fiscal system is out of balance. Provincial governments account for 35 percent of all government expenditures but only 7 percent of all taxes. It is doubtful that local residents see much connect between the level of taxes they pay to provinces and the expenditure benefits they receive. This means that the government misses out on one of the most important advantages of fiscal decentralization – taxpayers holding their elected provincial officials accountable for the quality of services delivered.

A second dimension of fiscal imbalance is the mismatch between the weak tax administration skills of the provincial governments and the hard-to-collect taxes that they have been assigned. The latter include taxes on agriculture, professions, property and the consumption of services. The result of this mismatch (and politics) is that the level of taxes is equivalent to approximately 0.2 percent of regional GDP in each province by comparison with about 10 percent at the federal level.

The purpose of this study is to review the status of revenue mobilization by sub-national Governments in Pakistan, and to identify reform options that might lead to a higher level of revenues and a better functioning fiscal decentralization. This analysis is based on case studies of Punjab and NWFP provinces, and on data gathered in the course of field work in the two provinces.

Revenue Targets and Comprehensive Reform

What level of taxation should the provinces seek to reach? The federal government has suggested a target of one percent of GDP, which would call for increasing the level of revenues by more than four times in both provinces. Both provinces are carrying structural fiscal deficits that they finance by drawing from balances created by unfilled positions and by slow disbursements of project funds. These deficits are not sustainable in the long run. To eliminate them would require an increase of provincial taxes equivalent to 300 percent in NWFP and 137 percent in Punjab. This would lead to a level of taxes that would exceed one percent of GDP in both provinces. If an international average for developing countries was used to set the revenue target, it would imply a 179 percent increase in taxes in NWFP and a 111 percent increase in Punjab, and both provinces would reach the one percent of GDP target set by the federal government. The important point to be made here is that any of these targets would call for a significant restructuring of the tax system. So, this report focuses first on a comprehensive reform, and then secondly on piecemeal adjustments to the present system.

Some might say that tax increases of this magnitude would introduce too much of a shock to taxpayers to be feasible. One of the two answers to this concern is that the increases might be phased in over a period of time in order to cushion the shock. The other is that taxes are presently so low that there is now a window for complete restructuring that may not open again. Moreover, this might be an opportune time to build an administrative infrastructure that supports a more rational provincial tax system. Arguably, the shock that comes with comprehensive reform is exactly what is needed.

The economic, administrative and political constraints that have kept provincial tax revenues so low in Pakistan will continue to inhibit revenue growth. These will need to be addressed.

- Provincial taxable capacity is low, and much of the tax base (rural and a large informal sector) is hard to reach.
- Tax administration is weak. Records are out of date, tax bases are undervalued and incomplete, and skilled tax staff are in short supply. Collection rates are low in both provinces.
- Tax exemptions and preferences have narrowed existing tax bases, and many taxes are subject to specific rates.
- The federal government has indirectly slowed revenue growth by encroaching on the provincial tax base in the areas of motor vehicle taxation and the sales tax on services.
- Provincial politicians have felt pressure from strong interest groups (e.g., agriculture, property owners) to hold off on increasing taxes, and in a sense they have been "protected" by growing allotments under the NFC.

Urban Immovable Property Tax (UIPT)

The UIPT is not yielding very much revenue, and probably has a negligible effect on land markets. This suggests that it could be a good time to overhaul the entire structure of the tax. In this analysis, a revenue "target' is set that would bring both provinces to the international average for developing countries (0.5 percent of GDP). A multi-year plan to increase property tax revenues by ten times the present level would be required to reach this target.

We would propose that these revenue increases be obtained from four measures. First, bring in a new valuation roll, which assesses market rental value and puts the correct relative values on properties. Such a new roll is ready for implementation in Punjab, but has not yet been prepared in NWFP. Second, the numerous preferential treatments in the present system should be eliminated, and property tax relief should be limited to low valued properties. This would include eliminating both the 5 marla exemption and the preferential treatment of owner occupiers. It also would require that federal and provincial government properties make a payment in lieu of property tax for services received. Vacant properties would be taxed, and industrial properties would be moved to the commercial valuation table. Third, the property tax base could be indexed during the period between valuations. Fourth, the statutory tax rate could be increased to compensate for undervaluation. These four measures and administrative improvements could raise enough revenue to nearly meet the revenue target in both provinces.

Motor Vehicle Taxes

Increased emphasis on the taxation of motor vehicles offers good opportunities for increased revenue mobilization. A revenue target equivalent to the cost of provincial roadway expenditures would imply a 90 percent increase in motor vehicles tax revenues in NWFP, and a 50 percent increase in Punjab.

The comprehensive reform that is proposed here would replace the present system (a one-time registration tax and an annual "token" tax) with a unified annual license tax based on vehicle type (a rough proxy for engine capacity). All motor vehicles could be grouped into three classes, and each would be subjected to a specific (indexed) rate. This new structure would be more simple to administer and more revenue productive than the present system, and would not heavily burden low income households.

Another element of a comprehensive reform would be the adoption of a provincial motor fuel tax. While the token tax is meant to be a user charge for road use, it does not reflect the amount of road use. A tax on motor fuels would better serve this objective, and would mobilize significant revenues. The tax would be levied on an ad valorem basis with the rate set by the province, and collection would be by the oil marketing companies. Revenues would be returned to the provinces on a basis of origin of collection. At a rate of approximately 2 percent of the cost of a litre of motor fuel in Punjab and 1 percent in NWFP, the revenues would exceed the present yield of the registration tax and the token tax in both provinces.

Tax on Professions, Trades, and Callings ("Professions Tax")

The professions tax is levied at such low rates, and enforcement is so weak, that it is almost guaranteed to fail on the revenue raising objective. The sheer number of professionals would make an efficient administration of the tax a very costly proposition, especially with the current complicated rate structure.

There would seem to be two routes to comprehensive reform of this tax. One is to take the view that this tax is more a nuisance than a revenue productive levy, so it should be abolished as a provincial tax. It would be better to invest the administrative resources used in potentially more productive areas of revenue mobilization. Under this scenario, the professions tax might be turned over to the local governments where some of the administrative difficulties may be overcome by local knowledge of the tax base.

The other route is for the professions tax to be converted into a piggyback tax on the federal individual income tax. Provincial governments could choose a piggyback rate within a prescribed range and the federal government would collect the tax. A three percent piggyback on collections for individuals and self employed in Punjab and NWFP could yield substantially more than current collections from the professions tax in either province.

Property Transfer Taxes

Collections of rural land taxes and property transfer taxes account for less than one percent of GDP in both provinces. In light of the fact that agriculture accounts for about 27 percent of provincial GDP in Punjab and 30 percent in NWFP, this is a surprisingly low revenue share.

The underlying problem is that property transfers are not being taxed at their market values. The only objective evidence used in the valuation process would appear to be the average declared sales values computed by the Patwari for rural areas, but this is almost certainly much below the true market value. Neither is there confidence that the urban area valuation tables recognize full market value. Observers speculate that taxed values are probably in the range of 25 – 50 percent of true values. Since sales ratio studies are not carried out, the true coverage of the tax base is unknown. In addition, there is a significant problem with record keeping. An updating of the "record of rights" is required every fourth year, but is reported to be much more dated.

Comprehensive reform of the system of property transfer taxes must be led by improved administration. Only then can restructuring be successful. The administrative reform, which needs to be done whether there is a restructuring or not, would center on developing an accurate and up-to-date census of all rural properties, their ownership and their use. This survey would be accompanied by the development of a more modern valuation method, regular sales ratio studies, and appropriate upgrades in staffing.

A comprehensive restructuring of the taxation of rural land might pull back from taxing property transfers altogether. This regime could be replaced with an annual tax on land in rural areas that would parallel the UIPT. This could be done by merging the various taxes on property transfers into a single levy on land values in rural areas. The revenue impacts of this package of administrative reforms are not easily estimated, but a 15 percent increase in taxable values, and tax collections would seem to be well within the reach of provincial governments if they chose to make the necessary administrative improvements. A capital gains tax on immovable property also should be considered.

Agricultural Income Tax (AIT)

The effective rate of agricultural income taxation is very low, despite the fact that agriculture is one of the largest sectors in the provincial economies. The potential revenue under current law is estimated to be more than 4 times the actual collections in Punjab and more than 10 times the current level of collections in NWFP. The major reasons for this poor revenue performance (in both provinces) is that the tax base has been significantly eroded by exemptions, there is no allowance made for the different profitability of the various crops, and the tax is not well administered.

There are a number of options for reforming the agricultural income tax. Administrative reforms to be considered include, (a) Creating a withholding system for the AIT, where tax is withheld on the purchase of agricultural inputs, with an exemption limit for small farmers, (b) Creating a withholding system on the sale of cash crop outputs, (c) Introduction of a self assessment scheme, (d) Expansion of the information kept in the base records (*Khasra Girdawari*) to include the Produce Index Unit System (estimates of costs of inputs and gross receipts by crops).

With respect to structural reform, the options include land-based (farm size) scenarios with progressive rates by farm size, and a flat rate structure with different rates for different crop types. A comprehensive income-based reform could involve taxing presumptive net income based on crop yield and profitability, with an exemption of 100,000 rupees and progressive rates from 5 to 15 percent. Our simulations show that under this income-based reform, revenues would increase by 20 percent in NWFP and 10 percent in Punjab. The revenue impact would be much greater if a more complete and accurate tax roll was in place.

Sales Tax on Services

There are some significant challenges to ratcheting up revenues from the GST on services. First, the provincial governments would need to be willing to expand their tax base to include more services. Second, the service sector is not easily taxed because it is composed of many small firms that are difficult to reach because of problems with indentifying these firms and with accessing accurate records. In addition, there is a "headquarter" problem, i.e., the tax may be paid at the headquarter location rather than at the point of consumption. Finally, administration poses a constraint. Why should the federal government aggressively pursue collections against a broader services base, when 98 percent of the revenues accrue to the provincial government? In fact, the ten services now taxable as federal excises yield Rs 28.2 billion in federal revenues vs. Rs 4.2 billion in collections under the provincial ordinances. About 98 percent of total national collections are made in Punjab and Sindh.

A comprehensive reform could take one of two broad paths. The most obvious reform option is for the provincial government to expand its base by bringing more services into tax. A disadvantage of this proposal is that the tax base could become more complicated as additional services are added, and the central government may not be willing to expand its administrative efforts so as to reach the hard-to-tax services area. This disadvantage could be erased by transferring administrative responsibility to the provincial government. It would however, be difficult to protect revenues during the transition period while the province was learning to administer the tax. In the long run, however, a provincially administered sales tax on services is a viable option in a federal country such as Pakistan.

Another comprehensive reform option is to convert the GST on services to a shared tax with a significantly broader base. Both the federal and the provincial governments would tax the same services, with assessment and collection carried out by the federal government. The services to be taxed would have to be the same under such a regime, but the provincial tax rate could vary according to the decision of the provincial government. Revenues would thus be shared between the two levels of government, hence there would be more incentive for aggressive tax administration. The revenue potential is considerable, but because of data limitations, we can only suggest indicative amounts. The services sector now accounts for more than 10 percent of GDP in Punjab, which suggests that a doubling of the present level of revenues should be easily accomplished.

Other Taxes

The "other taxes" levied by the provinces do not generate much revenue, and are poorly administered. The sum of hotel tax, entertainment tax, excises, and tobacco and cotton levies and other agricultural cesses, yielded an amount equivalent to only 6.97 percent of total tax revenues in Punjab and 4.67 percent in NWFP. A reform program might abolish the hotel tax and electricity duty in favor of their inclusion in the sales tax on services. The agricultural cesses could be folded into the reformed agricultural income tax. The entertainment tax might be passed down to the local governments, since they are in a better position to administer the tax efficiently.

Revenue Adequacy and Implementation

We estimate that this package of comprehensive administrative and structural reforms can raise provincial taxes to one percent of GDP in Punjab. The same package will fall short in NWFP, even though revenue mobilization would be significantly increased. This suggests the need for more emphasis on equalization in the National Finance Commission (NFC) awards.

This reform package does imply a very large increase in taxation in both provinces. But, it also addresses both problems of fiscal balance that the government faces. On the issue of vertical balance, the result would be that provincial governments in Pakistan would now match a 35 percent expenditure share with an 11 percent tax revenue share (vs. the present level of 7 percent). This would move the intergovernmental fiscal system in the direction of more accountability at the provincial level, though the imbalance would remain large. The tax administration mismatch would also be addressed. With tax base revenue sharing under the sales tax on services and the professions tax, and with significant administrative improvements in the land and property tax areas, the tax administration mismatch would be addressed in a significant way.

Implementation of such a sweeping reform will be no easy matter, in terms of the upgrades in administrative capacity needed to absorb the restructuring, the timeline for bringing the reforms on stream, and managing the politics. The provincial governments need to develop an implementation plan that takes all of this into account.

Improvements in the system of tax administration will be a difficult matter and will take time to develop. The completion of an accurate survey of all lands in the province and putting in place new methods of valuation will necessarily precede the complete restructuring of property and land taxes. These administrative upgrades will be expensive, but they are essential.

One administrative reform that can be moved on quickly is to create a unified tax authority. The present bifurcation of responsibility for tax administration between the Board of Revenue and the Excise Tax Department is not productive. The opportunities for eliminating duplication in assessment, information sharing and for economies in recordkeeping are missed in the present system. A unified tax administration would create a much better umbrella for enforcement of the kind of tax system that is envisioned here.

The reform program outlined here could only be implemented over a period of years. One constraint is the need for some tax administration improvements to lead the way. Other important considerations are gaining the necessary legislative approval, working out the detail of the new laws and regulations, and navigating the politics of tax reform. In the last analysis, though, the speed of the reform is dependent on the willingness of the provincial government to push for changes in tax administration and tax structure and for increased revenue mobilization. In fact, work on most of the restructuring could begin immediately. The implementation timetable could be very fast on some items, including: the introduction of new valuation table for Punjab, and the preparation of a new table in NWFP; elimination of preferential treatments and exemptions under UIPT; indexation of the UIPT; unification of a motor vehicle taxes and introduction of a motor fuel tax, and piggybacking of the sales tax on services and the professions tax on the federal sales and income tax bases.

Rethinking the Federal Role

To encourage provincial governments to undertake what they will perceive as unpopular tax measures, the NFC awards might be restructured to introduce an incentive for increased revenue mobilization. To be successful, the incentive would have to be large enough to draw out a greater tax effort, but not so large as to significantly harm equalization. This will call for some rethinking of the formulas used in the intergovernmental transfer system.

There are two other areas where the federal government might rethink its fiscal philosophy and rules. One is about the interpretation of the constitution as holding to a separation of taxing powers between the federal and subnational levels of government. If this interpretation is firm, it limits the possibilities for tax base sharing between levels of government, and therefore limits the possibilities of provincial governments taking advantage of the stronger federal tax administration infrastructure. The second area is the requirement that the NFC formula gain agreement from all provinces before it can be implemented. This requirement severely limits the NFC from ever reaching agreement on any formula. If the agreement clause can be interpreted to allow more flexibility in formula design, the NFC might begin rethinking the balance in the present system between revenue mobilization incentives and equalization.

What to do Next?

If this work is to become part of a national dialogue about provincial tax reform, the next step is to carry out a similar study for the other two provinces. Then, the federal government should appoint a blue ribbon commission to consider two tasks: a rethinking of the efficacy of the present system of tax assignment, and the development of an incentive feature in the NFC awards. Finally, the provinces should appoint commissions to begin work on developing a blueprint for tax restructuring and implementation. This study can be a starting point for the provincial commissions.

PAKISTAN: PROVINCIAL GOVERNMENT TAXATION*

The purpose of this study is to review the status of revenue mobilization by sub-national governments in Pakistan, and to evaluate reform options that might lead to a higher level of revenues and to a better functioning decentralization. This analysis is based on case studies of two provinces: Punjab and North-West Frontier Province (NWFP).

A central issue of provincial finance in Pakistan is the significant vertical imbalance in the intergovernmental fiscal system. The four provincial governments account for 35 percent of all government expenditures but only 7 percent of all taxes[1]. At a time when central government taxes are only about 10 percent of GDP, there is a premium on increased revenue mobilization by provincial governments. The federal government has called on the provinces to double their tax-to-GDP ratio in the medium term (Government of Pakistan, 2007).

The barriers to such an increase in revenue mobilization by provincial governments are formidable. They range from structural problems with the present tax system, to administrative shortcomings, to the absence of incentives for provincial governments to increase their tax effort. There also would appear to be some murkiness in revenue assignments between levels of government, and some important constitutional limitations on the choices that provincial governments might make. All of these barriers,

---

* The Government of Pakistan has requested the assistance of the World Bank and the Andrew Young School of Policy Studies of Georgia State University on developing a roadmap for tax policy reform. The objectives of the 2008 Pakistan Tax Policy Report are to understand the constraints to raising tax revenues and propose policy options on how to improve tax collection in an efficient and equitable manner. This draft policy paper is one in a series of background papers prepared as input into this report.

[1] Calculated from Table 4.2, Statistical Appendix in Government of Pakistan, 2007.

and the way around them, are discussed below.

The goal here is to identify options for reform rather than to make hard recommendations. While the magnitude of the revenue increase causes us to stress the need for comprehensive reform, we also lay out a program of piecemeal adjustments to the present system. Where possible, the revenue impact of each reform is estimated.

The emphasis in this study is on structural reform and revenue mobilization. We do not provide a detailed analysis of the tax administration system in the two provinces, nor do we propose specific changes in staffing, management and organization. To be sure, these are important issues, but they are beyond the scope of this work.[2] Moreover, our view is that administrative improvements can have a better impact if implemented in the context of a well designed tax structure.

There are other areas that we do not study, including the budgetary choices of subnational governments. This study is focused on the tax side rather than on expenditure side of the budget. This means that we do not study the efficiency of user charges, and that we take the present revenue assignments as fixed.

Finally, politics is a key determinant of the level and structure of taxes in Pakistan, as it is in most countries. We offer no remedies for removing political constraints to good tax structures other than to argue that more transparency and a better appreciation of the gains to be had from good tax policy might lead to better outcomes. We do not provide an analysis of the politics of tax reform. To constrain this analysis by considering only reforms that would find political favor in Pakistan would have led to a very brief report.

---

[2] Others have carried out such analysis. See, for example, Khan (2004).

The Provincial Economies

Government Finance in Pakistan is the responsibility of the federal government, four provincial governments and a national capital district.[3] There are sizable differences between NWFP and Punjab in their economic condition (Table 1), and therefore sizable disparities in both their capacity to raise resources and their expenditure needs.

The most commonly used index of the level of economic development of a country (or a province) is per capita GDP. From the province-level estimates of GDP, we can learn that Punjab has a much stronger economy than does NWFP.[4] Whereas per capita GDP in Punjab is reported to be about equal to the national average level, that in NWFP is more than 30 percent lower. From this we can infer that the taxable capacity of NWFP is well below that of Punjab.

Not only is the tax base larger in Punjab, but it should be easier to reach. Another indicator reported in Table 1 is the percent of population living in urban areas. Over 80 percent of population in NWFP is rural, employed in agriculture or self-employed in family businesses (World Bank, 2005a). Only 18 percent of the population lives in urban areas, compared to one-third of the population in Punjab. Presumably, tax collections in urban areas are easier than collections in rural areas. NWFP also has a heavy concentration of subsistence farming in its economy, which further weakens taxable

[3] The federal government administers the Federally Administered Tribal Areas and the Federally Administered Northern Areas. These are not subjects of this report.

[4] In Pakistan, provincial GDP is not estimated directly but is pegged to national GDP estimates and to assumptions about regional shares and growth rates. The approach in Punjab involves using sectoral data on GDP where available, but is still thought to be a rough approximation of provincial GDP (Government of the Punjab, et. al. 2005). NWFP has set its estimates at 6.7 percent of GDP growth (for 2007-08), an estimate which is based on the assumption that provincial growth will be 93 percent of the national GDP growth rate. It is projected by provincial officials that NWFP output will reach 97 percent of the national growth rate by 2010-11 (Government of NWFP, 2007a).

capacity.

While the potential for revenue raising from local taxes and charges is considerably greater in Punjab than in NWFP province, it is no easy matter to assess and collect provincial and local taxes in either province. According to the Pakistan Labor Force Survey (Federal Bureau of Statistics, 2006a, Table 17), the non-agricultural informal sector accounts for 77 percent of total employment in Punjab. The comparable shares of this hard-to-tax sector are 72 percent in NWFP and 73 percent in all of Pakistan.

Are there trends in play that might, over time, reduce these income disparities? Note that the two provinces have grown at about the same rate over the last decade. Agricultural output has shown a significant increase in the 2000s and this has contributed to the per capita real growth in both Punjab and NWFP, as shown in Table 1. Moreover, there was some decline in rural poverty in Pakistan during this period (World Bank, 2007). It is not clear, however, that these improved conditions in rural areas have significantly increased taxable capacity or reduced expenditure needs in either province. Note there has not been an uptick in the rate of revenue mobilization in either province during this decade. Note also that NWFP continues to rank worst among the provinces in terms of the perception of investment climate (FIAS, 2007).

There are substantial differences in the socio-economic makeup of the two provinces. Punjab's economy is much larger (population and land area) and it is significantly more urbanized. Some analysts estimate that there is not much difference between the two provinces in the percent of population living below the poverty line (Table 1).[5] Can we infer differences in expenditure needs from these disparities? The

---

[5] World Bank estimates (2005), however, show the poverty rate in Punjab to be much below that in NWFP, and the backlog of public services to be much less.

answer is that we cannot. The percent of high-cost, poverty level population certainly pressures budgets upward. NWFP is more rural, suggesting a higher cost of getting services to people, but Punjab has three times as much land area and four times as many people to serve.

What might be concluded from this pattern of disparities is that the per capita cost of providing the same level of services may not be so different between the two provinces, but the present level of services and the capacity to finance these services is much lower in NWFP.

Deficits and Fiscal Weakness

As we demonstrate below, both Punjab and NWFP face a structural fiscal deficit, i.e., they must borrow and postpone certain planned expenditures to eliminate the gap between revenues and expenditures. The situation is not dire in that the size of the deficit is only 0.85 percent of GDP in Punjab and 1.11 percent in NWFP. This is in contrast to the India experience where the aggregate deficit of the state governments reached 4 percent of GDP by the end on the 1990s (World Bank, 2005b). Still, these amounts are not inconsequential and could grow if corrective fiscal measures are not introduced.

Budgetary Position: Punjab

The budgetary position of Punjab Province, as reported by the government, is described in Table 2 for 2006-2007. The current account position (row 3) is shown to be in surplus, primarily because of the large inflow of federal transfers. The amount of the current surplus is equivalent to more than 25 percent of general revenue receipts. After accounting for capital spending (rows 4 and 5) and capital receipts (row 10), there is reported to be an overall fiscal deficit of Rs 43 billion (row 11). This deficit is covered from existing balances. This statistical picture of fiscal health may be misleading. The format in which the Province presents its budgetary position calls for some explanation.

In the Pakistan budget nomenclature, there is a category of "current capital expenditures" (row 4). The largest components of these expenditures are debt repayment, expenditures made for the wheat subsidy program, and transfers to local governments. These outlays might be viewed as more current than capital expenditures because they represent amounts "consumed" in the current fiscal year. As shown in Table 2, the total of current capital expenditures exceeds the current surplus available, suggesting a current account deficit.

The third general category, development expenditures (row 5), includes two components. The first is development revenue expenditures (row 5.1), which are akin to current expenditures in that they include items of government consumption expenditure, e.g., staff salaries, books for school children, feasibility studies, and provision of contraceptives under the population control program. However, they are viewed by the government as developmental in that they include start up costs for capital facilities, project management for capital projects, etc. The second component (row 5.2) is the more traditional capital expenditures, i.e., outlays for the creation of long-lived physical assets. When these expenditures are included in the calculus, the overall deficit against recurrent revenues rises to about Rs 149 billion for Punjab (row 6).

The financing of this deficit (rows 7, 8 and 9) is primarily from loans, and revenues from wheat sales. The remaining amount of deficit is about Rs 43 billion, which is financed from existing cash balances.

We might recast this budget format to get a better picture of the budgetary health of the province. Our primary goal in this restatement is to estimate the balance between recurrent revenues and current expenditures, where the latter are those outlays that are "consumed" during the current fiscal year. In Table 3 we combine all current revenues, including general revenue receipts. We then combine all current expenditures to include current revenue expenditure, current capital expenditure, intergovernmental grants and development revenue expenditure. We have treated wheat trading operations as a separate enterprise account and we show its fiscal position to be in balance (row 3).

This restatement reveals a current budget deficit of Rs 9 billion (row A, Table 3). When capital expenditures are accounted for, the overall deficit is equal to Rs 78 billion, or 1.5 percent of provincial GDP. About 44 percent of this deficit is financed from borrowing, and the remainder from a drawing on reserves. We can say that Punjab does pass the golden rule in capital finance, because the amount borrowed (row 5) does not exceed the amount spent for capital purposes (row 4).

Punjab is not in a financial crisis, but neither is it in a sustainable budgetary position. The State Bank of Pakistan has noted that the province has been following an expansionary fiscal policy combining a meager growth in revenues with a drastic rise in expenditure, substantially reducing the revenue surplus[6]. Among the vulnerabilities brought on by these policies are the following:

[6] State Bank of Pakistan 2007a, Vol I. p.54

- The recurrent budget deficit of Rs 9 billion might be thought of as the structural budget deficit of the Province. It is equivalent to about 3 percent of total general revenues, and about 14 percent of provincial own source (tax and non tax) revenues. A 29 percent increase in provincial tax revenues would be required to eliminate this component of the deficit.

- At present, reserves are adequate to cover the current deficit. These reserves accumulate because of unfilled positions or lagging expenditures for various projects. When these reserves are exhausted (e.g., by using the funds from unfilled positions), the province will be in a position of having to cut spending, raise own revenues, or increase borrowing.[7] If the government chose to finance its full current deficit from loans, then the result would be tantamount to rolling over debt repayment with additional loans. If we assume that the Provincial Government is currently borrowing the maximum amount that it can afford, we might think of Rs 43 billion financed from reserves as the structural deficit. Taxes would need to be increased by 137 percent to cover this deficit.

- The equivalent of about one-third of capital spending by the province is directly financed from foreign loans.

- About three-fourths of all current revenues are received in the form of intergovernmental transfers from the federal government.

- The finances of many public enterprises and other contingent liabilities are off-budget. Contingent liabilities had been estimated to have risen significantly, from Rs 1.7 billion in 1990-91 to Rs 7.8 billion in 1999-2000. (World Bank 2001, p. 57). The provincial government's outstanding loans to autonomous bodies, nearly all of them non-performing, were Rs 35 billion, with an additional Rs 6 billion in non-performing bank loans and Rs 500 million in unfunded pension liability of their employees (World Bank, 2001, p.58). The government has not yet completed a financial analysis of the large number of autonomous bodies of the Government of Punjab (Government of the Punjab, 2007c).

Finally financial condition must always be weighed against the level of public services offered. In Punjab, there are serious deficiencies, as cited in the annual

[7] On the question of these funds becoming exhausted, it should be pointed out that the practice of covering capital expenditures with funds from unfilled positions was already an issue in the 1990s (World Bank, 2000, page 51).

presentation of the Chief Minister (Government of Punjab, 2007e). For example, only 19 percent of the rural population has access to piped water, and infrastructure in general is deficient. Such public service needs can always be seen as a vulnerability.

Budgetary Position: NWFP

The budgetary position in NWFP is described in Table 4. These data and this reporting format show a current account surplus (row 3) of about Rs 11 billion (17 percent of general revenues). As in the case of Punjab, however, expenditures for "current capital" purposes (row 4) exceed the current surplus. The overall deficit of Rs 33 billion, calculated as the difference between total revenues and total expenditures, is reported in row (6).

Borrowing is approximately equal to expenditures for creation of long-lived assets, hence over-borrowing would not seem to be an issue. However, capital expenditures are closely tied to the level of foreign loans, either directly or indirectly. This is a point of vulnerability in the spending plans of the province.

As in the case of Punjab, this reporting might result in a misleading interpretation of the budget condition of the province. As described above for Punjab, the financial accounting might be recast to compare current expenditures with current revenues (Table 5). Under this format, NWFP shows a current deficit of about Rs 3 billion, equivalent to about 5 percent of total general revenues.[8] This structural deficit of the province in 2006-2007 is almost equivalent in amount to provincial tax revenues. When capital expenditures are accounted for, the overall deficit rises to about Rs 27 billion, or about

[8] This includes the trading deficit of the wheat subsidy program.

3.5 percent of provincial GDP.[9] This is financed by borrowing (66 percent) and by a drawdown of existing balances (34 percent). The State Bank of Pakistan has noted that the deficit would have been much larger if the expenditures growth had not slowed.[10]

Borrowing is a drain on current resources available in that interest and repayment account for about 9 percent of current expenditures. There are prospects for reducing this amount. Prior to 2000, the province obtained cash development loans from the federal government at high interest rates as budgetary support for capital spending, but these have decreased significantly. World Bank borrowing ($130 million annually) is being used to retire these high interest rate loans. Currently the only federal loans to the province are project funds for salinity and logging reclamation.[11]

Is this budgetary performance of NWFP sustainable over the long run? Some questions might be raised. First, the current account deficit is equivalent to only about 5 percent of general revenues, but this does constitute a kind of structural imbalance. To cover it would require an increase in provincial own taxes equivalent to about 96 percent based on 2006-2007 levels. And then, there is the question of whether this higher level of provincial taxes could be structured so as to grow in step with current expenditures.

Second, about Rs 9 billion of the overall deficit is now being financed from existing balances (row c). There are reasons to believe that these balances could

[9] NWFP GDP for 2006-2007 is projected here from GDP in 2005-06 using the average growth rate for the last six years.

[10] State Bank of Pakistan 2007a, p.55.

[11] Proposals for project funding originate in the line departments (education, health, etc.). The total development budget for 07-08 is Rs 39.462 billion: Rs 7.975 billion from foreign support, Rs 23 billion from provincial resources, and Rs 9 billion from federal funds. Large projects are funded with a 3 year time frame. Capital expenditures comprise most of these outlays. Currently about 80 percent of funding is for on-going programs and 20 percent for new programs. The expectation is that many old programs will be completed in 2008.

disappear in the long run. One reason is that the balances have accumulated in part because of unfilled positions. If these positions are filled, the balance will be depleted. Another is that development projects have been slow in absorbing funds; i.e., the utilization rate is very low when compared to the budgeted amounts. Toward the end of the fiscal year these unspent balances are taken as 'surrenders' from the implementing departments and are used to help balance the budget. These intra-budget transfers, which fund about one-third of the deficit, will not likely continue over a long period of time. If we assume that the provincial government is currently borrowing the maximum amount that it can afford, we might think of the Rs 9 billion as the structural deficit. Taxes would have to increase by three times to cover this deficit.

A third question has to do with whether the present budgetary condition is in step with the provincial government's plan to reduce its fiscal deficit from 0.5 percent of GDP to 0.2 percent by 2011 (Government of NWFP, 2007a). On the financing side, provincial own revenues are small. During the 2006-2007 budget year, increases in federal transfers and a windfall in collection of arrears had a significant effect on budget balance. NWFP's share of the NFC award increased from 13.82 percent in 2005-2006 to 14.95 percent in 2006-2007. This one-year increment is equivalent in amount to about 11 percent of 2006 expenditures. This revenue inflow plus debt retirement has created some fiscal space for the Province.

The provincial government's projections are optimistic about the prospects of holding the line on expenditure growth and continuing to realize significant revenue increases from the transfer system. On the expenditure side of the budget, NWFP proposes to keep the wage bill at 4 percent of GDP and proposes to reduce interest payments to 0.4 percent of GDP. Baseline expenditures for operations and maintenance will increase between 4 percent and 10 percent over the period, and transfers to districts will increase by 10 to 15 percent. The development budget will increase from 3.4 percent to 4.5 percent of GDP. For this fiscal plan to work, NWFP will need to be accurate in their estimate of a 15-18 percent growth in revenue from 2008 to 2011. According to the NWFP White Paper[12] 15-18 percent overall (nominal) revenue growth in the next three years is a reasonable estimate. This may be an ambitious target. Revenue (own source) is currently equivalent to about 0.7 percent of provincial GDP, and has shown an income elasticity of 0.72 in recent years. Revenues from the NFC awards should grow in step with the growth of Federal Government tax revenues.

Finally, we might take the broader view of the structural deficit, and consider that it should include service level deficiencies. In this case, the structural deficit could be thought of as much larger. The literacy rate is well below that in the other provinces, as is the percent of population that has access to safe drinking water. School enrollment rates for women are among the lowest in Pakistan (World Bank, 2005).

Fiscal Profile

A fiscal profile of the provinces is presented in Table 6. Since there are wide inter-province variations in per capita GDP, and since the NFC awards are distributed among provinces according to population, significant fiscal disparities might be expected. Surprisingly, that is not what we observe. The level of per capita provincial government expenditures in NWFP is only about 3 percent lower than that in wealthier Punjab in

[12] Government of NWFP, 2007a, p.7

2006-2007 (Table 6). The explanation for this relatively small expenditure disparity is that the NFC awards are distributed on an equal per capita basis,[13] tax effort is about the same in the two provinces (see below), and access to loan funds is about proportional to population.

All four provinces receive most of their revenues from central government transfers[14], but NWFP and Balochistan are most dependent on intergovernmental transfers relative to own source revenues.[15] The heavy reliance of provinces on federal transfers has been noted with concern by the State Bank of Pakistan (2007a, p.54). It also has been noted that the overall level of revenue mobilization has shown little growth in either province. The provincial dependence on transfers has been increasing since 1974 (Pasha, et. al. 1992).

The picture is also surprising when it comes to Provincial revenue effort (measured in Table 6 as the ratio of own source revenue collections to GDP). The expectation is that the poorer, more rural province (NWFP) would have fewer good "tax handles", and would raise even less than its lower GDP would suggest. However, note from Table 6 that revenue mobilization in Punjab and NWFP (tax and non tax sources) are about the same, and in both cases the ratio is less than 1 percent of provincial GDP.[16] This finding must be qualified because some transfers have been classified as non tax revenues so revenue mobilization is overstated for both provinces in Table 6. The proper

[13] Since 1974, equal per capita shares has been the basis for distributing revenues among provinces.
[14] Asian Development Bank, et. at. (2004). Vol. II, pp.18-19.
[15] The dependence on intergovernmental transfers may be understated in Tables 2-5 above. Some non-development and development grants outside the NFC arrangement are classified as non-tax revenue receipts. In Punjab these amounted to Rs 18,348 million in 2006-07 (Government of Punjab, 2007b) and in NWFP they were Rs 9,713 million in the same year. NWFP reports the royalty on hydro-electricity, Rs.6000 million, as a non-tax receipt (Government of NWFP, 2007c).
[16] Earlier estimates had placed the level of tax effort in Punjab well above that in NWFP (World Bank, 2000, page 37).

conclusion to draw here is that neither province extends itself very much to mobilize resources from its own tax bases. Provincial revenue mobilization in general has been weak and has steadily declined (World Bank 2004, p. 26).

Are Punjab and NWFP different from provincial level governments in other countries in terms of the role they play in the intergovernmental fiscal system? International comparisons are not easily made because the assignment of expenditure responsibilities to the provincial level varies greatly across countries. Two dimensions of fiscal structure that can be assessed, however, are (a) the share of total government spending that is made by the provincial governments, and (b) the reliance of provincial governments on transfers from the center as a source of finance. The results of such comparisons, shown in Table 7, reveal that Pakistan's expenditure decentralization of 35 percent is not so unusual by comparison with some other large federations. The limited reliance of provincial governments on their own sources of revenue does defy best practice in terms of fiscal decentralization, but it is also the model of choice in countries such as Russia, Indonesia and China. On the other hand, countries such as Argentina, Brazil and India follow the more conventional advice and decentralize significantly more revenue raising power to their state governments. The international practice, even among large countries, is quite mixed.

Revenue Assignment and Structure

The Constitution in Pakistan lays down a separation of taxing powers. This assignment system is described in some detail in Appendix A. In general, the provinces are denied access to the broad-based and more revenue productive income and consumption taxes. These tax assignments have left the provinces with bases that are hard to reach (the income tax on agriculture and the sales tax on services), or costly to administer (the property tax). Some would argue that the Constitution also closes off possibilities for tax base sharing by the federal and provincial levels of government, but not everyone agrees with this interpretation. India's intergovernmental system is also built around the constitutional principle of separation of tax bases (vs. concurrent taxing powers, as are allowed in many federal countries) (Bahl, Heredia-Ortiz, Martinez-Vazquez and Rider, 2005).

Provincial and local government taxes are authorized by provincial acts and the provincial governments have some authority to alter tax rates and bases and to administer their own taxes. The tax structure and administration in Punjab and NWFP are similar in many respects suggesting either a heavy central influence or some "copycat" behavior.[17] There also is a method for dispute resolution on tax assignment issues (See Box 1).

The structure of taxes is summarized for Punjab and NWFP provincial governments in Table 8. Data on local government taxes are not available. It should be kept in mind that in both provinces, total own source revenues are so small that they play only a minor role in financing. While there are more than 15 tax sources available to the provincial governments, most revenues in Punjab are derived from taxes on property transfers (including stamp duties, mutation and registration fees) and from taxes on motor vehicles. In the case of NWFP, motor vehicle taxes, property transfer taxes and the GST on services are the most important own source revenues. The concentration of tax revenues may be illustrated by the following. In Punjab, 8 of the 14 tax sources listed in

[17] Since the abolition of "one unit" governance in 1970, the provinces have adopted Punjab tax laws and followed the tax policy of Punjab. The Inter-provincial Coordination Committee also seeks tax harmonization.

Box 1. Inter-Provincial Coordination Committee

The inter-provincial Coordination Committee (IPCC) is a mechanism for intergovernmental dispute resolution. It is chaired by the Minister for Interprovincial Coordination. All provincial Chief Ministers are members. Any federal minister can be invited for a meeting when the subject relates to his sector. The Cabinet Secretariat organizes the meetings.

In recent years the federal government and the provinces have used IPCC meetings for coordination of tax policies. The IPCC mandate, according to the Cabinet Division, is:

1. General Coordination between the Federal Government and the Provinces in economic, social and administrative fields.

2. Promoting uniformity of approach in the formulation of policies and their implementation by the Provinces and the Federal Government in all fields of common national concern.

3. Discussion of policy issues emanating from the Provinces that have economic, social or administrative implications for the country as a whole.

4. Coordination with Ministries/Agencies concerned to develop a suitable response to criticism of Government policies, so as to project a proper image of the Government.

5. Any other matter referred by the Province or any of the Ministries or Divisions of the Federal Government.

IPCC is not a constitutional body. The Council of Common Interests, which is a constitutional body with a similar mandate, has met infrequently at least by default, IPCC performs an important role.

Table 8 account for only 14 percent of the tax revenues. In NWFP, 8 of the tax sources listed account for only 10 percent of the collections. Administrative effort seems to be spread quite widely. This suggests that a less complicated tax structure might allow more administrative effort to be directed toward those taxes that have a greater revenue potential. This recommendation has also been made in earlier reports (World Bank, 2000).

While the tax structures described in Table 8 outline the current practice, they do not show the structure that would arise if full revenue potential was reached. The provinces do have access to some taxes that have broad enough bases and potentially enough built-in growth to form a more revenue productive tax system. This list would certainly include the property tax, motor vehicle taxes and the sales tax on services.

However, all of these taxes presently are levied at very low effective tax rates, so that they yield a relatively low level of revenues. In the analysis presented in the report, we look for the determinants of this underperformance.

It is no easy matter to compare tax structures among provincial-level governments in developing countries. Different countries give different names to subnational government taxes and there is no ready source of international comparison. The following examples give some feel for the variation, and for the possibilities.

- Both Argentina and India allow states to levy broad based sales taxes, though local rate-setting discretion is not allowed in the India case.

- Russia experimented with a subnational sales tax from 2001-2004, which raised substantial revenue. Subnational governments were allowed some rate setting authority.

- The principal revenue source of Colombia's departments (provinces) are excises, principally on alcoholic beverages, tobacco and gasoline. (Bird and Acosta, 2005).

Punjab and NWFP follow almost exactly the same pattern of tax administration, owing to the fact that a uniform system was in place for all provinces between 1954 and 1970. The Excise Tax Department is responsible for collection of most taxes, including the taxes on urban property, motor vehicles, excises, and entertainment. The Board of Revenue collects the taxes on rural properties, agricultural income, property transfers, and other stamp duties. There appears to be little coordination between the two arms of the provincial tax administration and this compromises collection efficiency. The sales tax on services is assessed and collected by the central government on behalf of the provinces, but there is little cooperation between the two levels of government in terms of information sharing.

Revenue Mobilization

The time pattern of revenue mobilization for the two provinces, by major revenue source, is described in Table 9. The results for both provinces show little change in the rate of revenue mobilization (relative to GDP) over the 2002-2006 period. In fact the overall level has declined between 2002 and 2006 in both provinces (bottom row of Table 9). One could offer six reasons to explain this weak revenue – GDP elasticity (buoyancy). [18]

First, provincial taxable capacity is low and the tax base is hard to reach. NWFP is the poorest province in Pakistan and has a high concentration of poverty, leading provincial officials to argue that "it is tough to expect to get much more out of the system". A similar argument is made in Punjab. Per capita GDP is higher, but there also is a high concentration of poverty and large informal sector. Even so, many would argue that the economic base is strong enough to give up more in provincial government tax revenues than the 0.36 percent and 0.42 percent of GDP that were collected in Punjab and NWFP respectively in 2005-2006. Moreover, both provinces have shown significant growth in GDP in recent years. The "low taxable capacity" argument for low revenue buoyancy is not persuasive.

Second, the tax administration machinery has not been effective in either province.[19] Both provinces are plagued by incomplete and out of date records,

---

[18] Technically, the revenue–GDP elasticity is the percent change in revenue divided by the percent change in GDP, assuming that all revenue increases due to discretionary changes have been removed from the numerator. If the revenue impacts of discretionary changes have not been removed, the term "revenue buoyancy" is used. In Punjab and NWFP, discretionary changes have been so infrequent that the buoyancy and elasticity coefficients are about the same.

[19] The collection *cost* for all taxes in Punjab is reported (by Provincial officials) to be equivalent to 4 percent of collections. The collection *rate*, which would take into account the difference between the base assessed and the true tax base, is much smaller.

suggesting that there is not a good sense of the true tax base. Moreover, most tax subjects (e.g., professions tax, land taxes) have not been recently surveyed, hence tax bases are understated. Most of the recordkeeping system in both provinces is manual.

Particularly in NWFP, there are serious constraints on assessment and collection. Revenue collections, except for some excises, take place only in urban areas. For example, there are 24 districts in NWFP but 70 percent of all property tax collections are from Peshawar. Over 50 percent of excises come from 7 districts. In fact, some districts in NWFP are all but excluded from the tax system. About one-third of the NWFP is made up of provincially administered tribal areas (PATA). Only a few taxes are collected in these districts, e.g., tax on the transfer of property, stamp duty and the local rate. UIPT is collected in only 16 of 24 districts. While there is no question about NWFP facing a challenging environment for tax collection, the situation is by no means hopeless. A thorough review and analysis of the tax administration system in NWFP (Khan 2004) points out numerous approaches to overcoming some of these obstacles.

In Punjab, the tax administration does not appear to be effectively mining the significant taxable capacity in urban areas. Property values have grown but property tax collections have not, the number of motor vehicles has grown but motor vehicle tax revenues have not kept pace, and so on. Part of the problem is that the province has given away much of its tax base in the form of preferential treatment, but another part of the problem is that underassessment is considerable and collection rates are low. With respect to rural areas in Punjab, the story of underassessment and low collection rates is much the same.

The two provinces have a common administrative problem of not being able to effectively reach the agricultural sector. Neither of the provinces do a particularly good job with collection of agricultural income tax or with property transfer taxes. Certainly part of the problem is with the structure of these taxes, but there also are major administrative failings. These include poor recordkeeping and surveillance, exclusion of part of the tax base, and a failure to update valuation information.

Third, the structure of taxes is such that significant increases in revenue relative to GDP should not be expected. One reason for this is that the tax structure is partly based on specific rates. Another is that land is being acquired by government and non-profits, thereby taking it off the tax rolls. It is also the case that provincial governments are not taking discretionary action to increase the effective rate of tax collection, such as revaluation of property or increases in nominal rates. Finally, the growth in tax revenues might have been slowed because some faster growing components of the tax base are not taxed or are given exemption or preferential treatment, e.g., owner-occupied property, industrial property and vacant land, and the consumption of services.

Fourth, increases in intergovernmental transfers from the center have been large enough to allow a slowing of the effort exerted to collect provincial taxes. In Figures 1a and 1b, we describe the pattern that has occurred between 2001 and 2006. The increase in central government assistance has been significant in both provinces while the growth in own source revenues has been nearly flat. This pattern should come as no surprise. There is no incentive built into the transfer formula that would reward provinces for increasing their tax effort, or penalize them for not doing so.

Fifth, the central government has encroached enough on provincial tax bases that potential revenue growth has been dampened. Many provincial officials feel that the Provincial Government is too limited by the federal government in terms of the fiscal space it has been given. Some of these limits stem from the Constitution, but there also are limits imposed by federal government policy. Five examples are regularly mentioned by provincial officials.

- The only tax which provinces alone are specifically empowered to levy is the tax on professions, trades and callings[20]. In theory, this is the only tax on which the federal government cannot encroach. The fact that more revenue productive taxes are not assigned exclusively to the subnational governments is seen as a limiting factor on revenue growth.

- The urban immovable property tax is a provincial government tax, but most of the revenue collected is assigned to local governments.[21]

- Motor vehicle registration and licensing taxes (MVT) belong to the provincial governments. The collection rate is only about 70 percent. Some argue that the collection rate is this low because there is mandatory collection of the (federal) presumptive income tax at the time of vehicle registration. This additional tax payment stiffens resistance to payment of motor vehicle taxes, and would reinforce opposition to any proposed increase in the provincial levy on motor vehicle taxes. It is in this sense that the federal government is seen as encroaching on the provincial tax base.

- The federal government imposes a 2 percent capital value tax on property transfers, raising the total rate on each transfer and arguably reducing the rate of compliance with provincial stamp duty and registration taxes.

[20] We qualify this statement by presentation in Appendix A.

[21] This assignment was made under the Local Government Ordinances 2001, which some of the provinces perceive to be a result of a federally driven reform.

Figure 1a. Revenue Growth by Source in Punjab

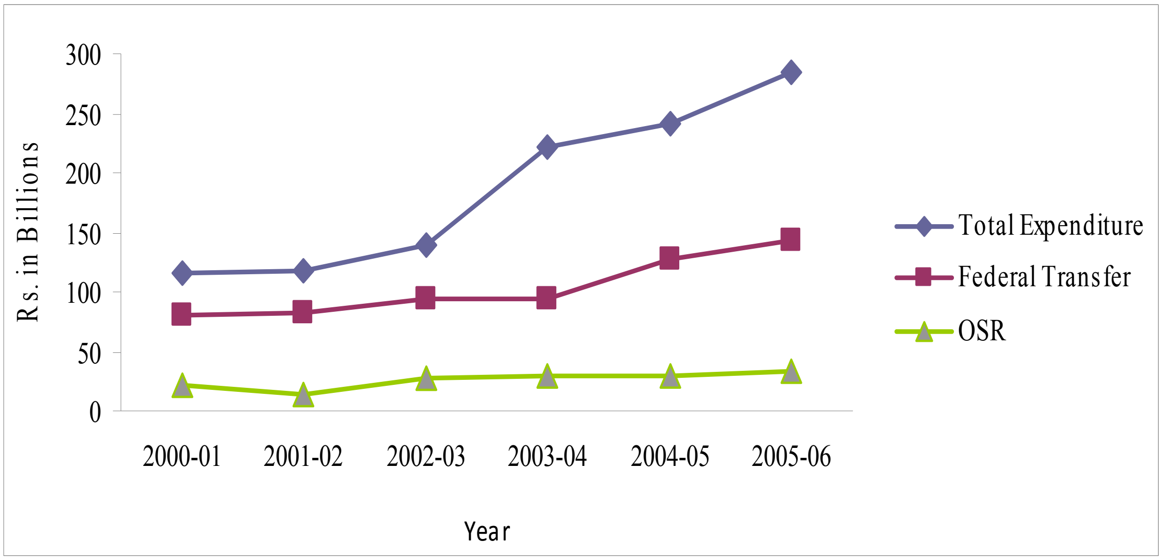
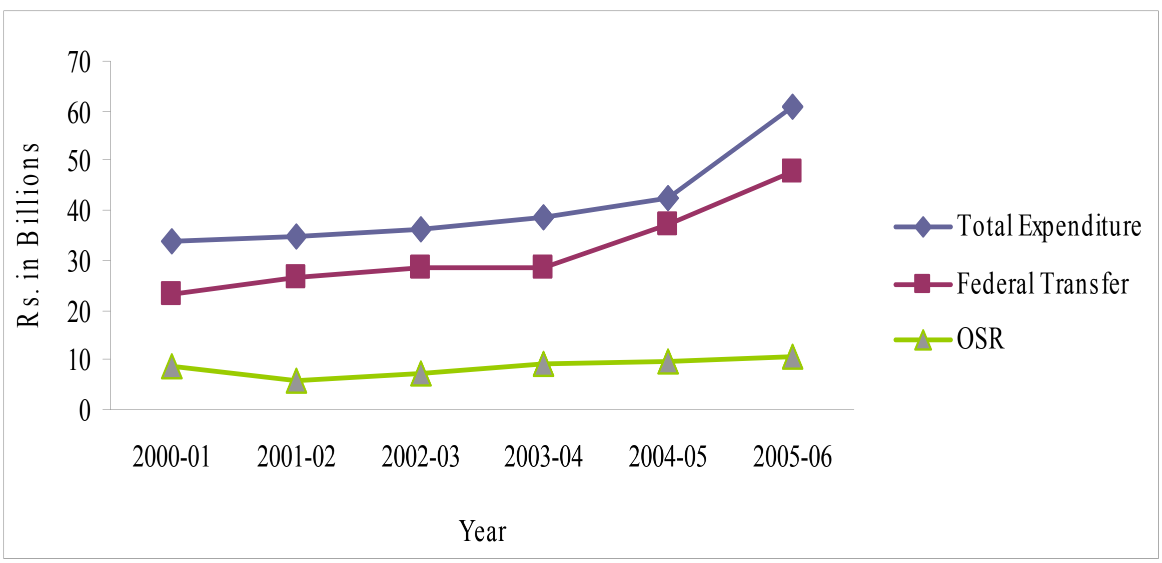


Figure 1b. Revenue Growth by Source of NWFP



Finally, elected local officials are hesitant to increase tax effort for fear of losing political support. There have been no increases in tax rates or expansions in tax bases for 8 years in NWFP and 5 years in Punjab. The provincial government in Punjab postponed the introduction of the new property tax valuation roll, due in 2007, in part because of upcoming elections. Enforcement is lax in both provinces. Politics has been perhaps the major reason why provincial tax structures have not developed. Clearly politicians have felt pressure from strong interest groups (agriculture, property owners) to hold off on increasing taxes, and in a sense they have been "protected" by increased allotments under the NFC. In NWFP, political leadership has not insisted on an aggressive administration in areas of civil unrest. There is of course much more than this to the political economy story, but a thorough analysis of the politics that led to the present state of affairs is well beyond the scope of this work.

Intergovernmental Transfers

The system of (three) NFC transfers to provinces in Pakistan is quite transparent. The NFC award is by far the largest of the three transfers in the system[22]. The National Finance Commission is charged with making a decision every fifth year on the size of the sharing pool and on the distribution of this amount among the four provinces.

In practice, the NFC awards have not been so simple to execute. In the last iteration, the NFC was not able to reach agreement on the sharing formula. The NFC distribution formula decided in 1996, initially valid for five years, was continued through 2005. The 7th NFC Award was finalized only in January 2006 after the NFC could not

[22] Actually, there are five types of federal transfers: (1) shared tax revenues; (2) GST financed pass-through grant for local government; (3) subventions; (4) natural resource royalties; (5) discretionary federal grants.

reach a consensus on the sharing arrangement despite 11 meetings after July 2000.[23]

The fundamental issue with the NFC award is that the Constitution mandates that the four provinces must agree on the proposed formula. Given the great differences in wealth, needs and demographic conditions in the four provinces, agreement is quite unlikely. This consensus requirement has held up the final decision of the NFC. In January 2006, the President announced a formula for sharing of resources, which is technically not an NFC award.[24]

At present, the provincial pool for the NFC award is 41.5 percent of the federal divisible pool and is scheduled to increase by 1 percent per year up to 46.25 percent by 2011. The distribution of this pool among provinces is by population shares: NWFP receives 13.82 percent and Punjab receives 52 percent. The pattern of distribution of intergovernmental transfers to the two provinces is described in Table 10. From the data presented here, we can see that the shares of Punjab and NWFP have remained approximately constant since 1999. According to the structure of the NFC grant program, the only revenue growth for a province during an award period comes from increases in the rupee amount of the vertical share. This in turn depends on the growth in federal government tax revenues. So, there is stability in the distribution system that helps long term fiscal planning.

The largest increases in the real per capita amounts received came at the time of the formation of the new award, in 2004-2005, because of the increased vertical share for

---

[23] The finalization came as a presidential decision. (Ahmad, et. al. 2007).

[24] NFCs in the 1990s always finalized the awards during “caretaker” setups when Provinces were not represented by elected governments. So, arriving at a consensus was easier. Since 2002, elected governments have been in place in the provinces. The 2001 award was held up largely because the provinces did not agree on a distribution formula. The current formula was promulgated in January 2006 by the President (and per se is not an NFC Award). Technically, an NFC Award is an outcome of the NFC deliberations.

provincial governments. We might look back at the 2000-2006 period and ask whether the growth in revenues from the NFC awards has been buoyant. The answer we get is that for every one percent increase in provincial GDP over this period, NFC revenues increased by 1.01 percent in Punjab and 1.18 percent in NWFP. Certainly for NWFP, the balance between transfers received and own source revenues has changed in favor of transfers during the past seven years. This pattern holds for all provinces taken together. (See Figures 1a and 1b).

The other two types of NFC transfers are much smaller. The sharing pool for the GST transfer is 1/6 of national GST collections. The distribution of this pool is determined by baseline octroi and zila tax collections (the two taxes were abolished in 1998 and the "baseline collection" refers to the collections in the final year). NWFP receives 9.93 percent of this pool which was its share of baseline collections and Punjab receives 50 percent of the pool according to the same principle. This transfer is designated for pass-through to local governments.

The third transfer is for grants-in-aid to provinces ("subventions"). In the first year the total allocation was Rs 27.75 billion with NWFP (35 percent) and Balochistan getting larger shares. The size of the overall pool is mandated to grow at the rate of growth in federal taxes.

We examine the stability in the composition of the flow of NFC transfers to Punjab and NWFP and report this in Table 11. The considerable stability that we find suggests that Provinces can rightly view this flow as an annual entitlement.

In the top panel of Table 11 we can see.

- Transfers received as a percent of provincial GDP have remained constant for both provinces. Note that the transfer share of provincial GDP in NWFP remains above that in Punjab. The equal per capita distribution of the NFC awards makes the system implicitly equalizing because per capita GDP is lower in NWFP and Balochistan.

- The dependence on the NFC award as a source of financing total expenditures has fallen in both Punjab and NWFP because of the significant increase in loan-financed projects, debt retirement, and structural adjustment credits. Since loans to provinces are allocations that are either made by or approved by the central government, they also might be viewed as transfers. If we had used this metric, the importance of transfers in financing provincial expenditures would have shown an increase over this period.

We might ask whether the federal government's emphasis on intergovernmental transfers has changed in the past few years. We can study the determinants of changes in the federal government's emphasis on transfers to provincial governments with the data presented in the bottom panel of Table 11. The determinants of federal transfers to provinces (FT) as a percent of GDP (FT/GDP) are the product of: (a) the federal expenditure share of GDP (FE/GDP) and (b) the federal transfer share of federal expenditures, (FT/FE), i.e.,

$$FT/GDP = (FE/GDP)\,(FT/FE)$$

As may be seen in Table 11, the federal government has held the level of transfers to provinces between 3.3 and 3.7 percent of GDP, i.e., the GDP elasticity of transfers is about 1.0. Neither have the components of this growth changed very much. NFC awards have remained within a narrow band between 32 and 35 per cent of federal expenditures, and federal expenditures have remained at a level equivalent to about 10 percent of GDP.

Urban Immovable Property Tax: Punjab[25]

The property tax in Punjab is levied by authority of *The Property Tax Act of 1958*. Following the Local Government Ordinance of 2001, it is designated a local government tax and the city districts and TMAs have the authority to set the rate. Assessment and collection can be at the district level. In terms of the actual practice however, the UIPT is a provincial level tax subject to revenue sharing with the city districts and TMAs.

Recently, the provincial government approved a medium term policy framework to decentralize the property tax administration to local governments and carry out other reforms (Government of Punjab, 2007a). According to the framework, by 2012 the provincial government will assign tax policy and collection to five city district governments and Tehsil Municipal Administrations in other districts, while it will retain a role for itself for oversight and policy advice. The assignment of powers and functions to TMAs will follow a “readiness” criterion. Details of the new legislation, staff assignment from provincial government to local government and guidelines on valuation will be worked out as this framework in implemented. The provincial government will continue to provide the legislative framework for levying property tax, i.e., questions relating to defining the tax base and the basic methodology for calculating tax liability will stay with the province for now.

The UIPT is an old tax in Pakistan, but it has never generated significant amounts of revenue. For instance, the national property base was estimated to be Rs 70 billion in 1996 and if the statutory tax rate were only 10 percent, the national collection would have

[25] There is enough difference between the practice in Punjab and NWFP that we have chosen to treat them in different sections in this report. Still, much of what we say about the practice for Punjab also applies to NWFP.

been Rs 7 billion in that year.[26] Property tax collection in all four provinces in 1995-1996 was only Rs 506 million. In 2002-2003 it had increased to Rs 2.795 billion, still much below Rs 7 billion. With the new medium term policy framework, and the overall decentralization initiative in Pakistan, there is an imperative to upgrade the property tax to a significant revenue source (Cyan, 2007). As is discussed below, there is ample revenue potential, but implementing structural and administrative reform will be no easy task. In particular, there is a question about when the TMA's and city districts will be able to effectively administer the UIPT.

Revenue Performance

The urban property tax in Punjab produces a very modest amount of revenue, even by developing country standards. In per capita terms, the yield was less than Rs 13 ($US 0.31) in 2006. Collection fell in 2005-2006, to a level equivalent to about 4 percent of own source revenues and 0.03 percent of GDP (Table 12).[27] This level of collections is low in the absolute, and it is low by comparison with other developing economies, where the average is about 0.5 percent of GDP (Bahl and Martinez-Vazquez, forthcoming). We note, however, that there is great variation among developing and transition countries in the level of property taxation that they choose (See Table 13 and Box 2).

[26] Ghaus-Pasha et. al. (1998), p.11

[27] A new valuation method was introduced in 2001-02. It met legal challenges with the result that collections were low in 2001-02. Collections surged in 2002-03 as arrears were collected, but were lower again in 2003-04 as arrears petered out.

The revenue elasticity of the property tax can be calculated as the ratio of the percent increase in property tax revenues to the percent increase in GDP.[28] Ideally, the elasticity of the property tax would track the GDP elasticity of local government expenditures, which would appear to be close to unity in Punjab. The year-to-year pattern of collections in Punjab has been too erratic to allow meaningful point estimates of the revenue-income elasticity.[29] The arc elasticity during the period 2003-2006, when the 2002 roll was in effect, is 0.24, i.e., revenues from the property tax grew at about one-fourth the rate of provincial GDP. The major source of revenue growth, the introduction of the new valuation roll, has been postponed. Thus it is almost certain that property tax revenues did not keep pace with the demand for provincial and local government public services during this period.

Box 2. International Practices in Property Taxation

A remarkable feature of the practice of property taxation in developing and transition countries is its wide variation. Countries have chosen to tax rental value (Columbia), site value (Jamaica) and capital value (Philippines), and in some cases the local governments are free to decide on their own base (South Africa). Exemption policies vary widely, e.g., Thailand exempts owner-occupiers and Tanzania taxes only buildings. Some countries have progressive rate systems while others choose flat rates. Central governments levy the property tax in some countries (Indonesia), state governments in some cases (India) and local governments in other countries (Hungary). Fiscal planners in Pakistan will not have much luck in looking for a generally accepted "best practice".

With respect to problems, however, there are some commonalities. Most developing and transition countries are plagued by weak administration, which leads to undervaluation, incomplete cadastres and low collection rates. A commonly cited underlying problem is an acute shortage of skilled staff.

For discussion of the international practice, and of individual country practices, see Bahl, Martinez-Vazquez and Youngman (forthcoming) and Bird and Slack (2004).

[28] There were no discretionary rate or base changes during this period.
[29] The revenue flow is erratic because of late payments and collections of arrears.

Rent and Base

In, Punjab, the property tax is levied on a base of annual rental value at a flat rate of 20 percent on properties with an annual value of Rs 20,000 or less.[30] If annual rental value is greater than Rs 20,000, a flat rate of 25 percent is applied. Section V of *The Act* defines annual rental value (ARV) as the amount of rent that could be obtained in an unencumbered market transaction, less an allowance for maintenance and repairs. A large number of "special treatments" of properties, however, have moved the assessed base to one that barely resembles this definition of annual rental value.

Exemptions and preferential reductions in tax liability include:

- A 10 percent reduction in taxable value is allowed for every property, to provide for maintenance expenditures ("depreciation"). This would seem to be in keeping with the defined tax base.

- Owner-occupied units are assessed in a way that the imputed ARV is about one-tenth of the ARV of a comparable rented unit. So, owner occupiers pay 10 percent of the normal tax liability. One might speculate that since two-thirds of housing units are owner occupied, this preferential treatment was driven by political considerations.

- Owner-occupied, residential properties with a lot area less than 5 marla (125 square yards) are exempt. Vacant properties are not taxed. The results of this preferential treatment are that an estimated 300 thousand of 750 thousand properties in Lahore are not taxed.

- Retired government employees who are owner occupiers enjoy an exemption if they live on plots up to 500 square yards of land.

- Widows, orphans and the disabled receive a deduction of Rs 48,000 in ARV.

- Government properties are not taxed. Properties in cantonment areas are not taxed.

---

[30] Prior to the *Property Tax Act* of 1958 there was a house tax, and a separate property tax, each levied at 10 percent of rental value. Later, through an amendment to the Act of 1958, these two taxes were unified into a tax on rental value at 20 percent.

- Other exemptions (charities, religious use, etc,) seem to follow normal practice.

Valuation

Valuation is the responsibility of the provincial excise tax department (ETD) and the devolved district excise tax departments. Under the new framework, valuation will be given to local governments over time. Leadership in this work (methodology and overall guidance) remains with the Provincial E&T department. A valuation table is developed using a combination of market data and expert judgment about rental values. This table serves as the basis for valuing all properties in the province.[31] The methods employed to arrive at taxable value are somewhat similar to those used in other low income countries that follow the area method.

The department issues a valuation table that shows value per area unit[32] in various "value zones", with differentials for on "main roads" and "off main roads". The valuation rate per area unit falls after a threshold level of land area, or structure area, is reached. There also is a use factor in that different valuation tables apply to residential and commercial properties, with the latter carrying higher rates. When one takes account of all the different categories of property use and value-determining characteristics, there are 392 different valuation classes (The Urban Unit, 2006).

[31] This is the approach taken in most developing and transition countries where reliable data on market rents or property sales values are not available.

[32] The system is different in Pakistan vs. most other countries using the area method in that it defines an "area unit" as the sum of land area in square yards and covered area in square feet.

Determination of Tax Liability

The determination of tax liability for a property might be best understood by tracking through the steps taken by the excise tax department.

- A location zone (A-G) must be selected from the valuation table, and on-road/off-road character of the property must be designated. The "A" areas are the prime locations, usually closer to the city center.

- The property must be classified as residential or commercial, and if residential, as owner occupied or rented. Industrial properties are classified as residential for purposes of property tax.

- The property tax base (ARV) is calculated as the number of square yards of land multiplied by the valuation coefficient for land, plus the number of square feet of covered area multiplied by the valuation coefficient for structures. A 10 percent reduction for maintenance is applied to all properties.

- Residential, owner-occupied properties with a lot size of less than 5 marla are exempt. Vacant land is exempt.

- Rent control creates a distortion in the rental value market and would depress the ARV (The Urban Unit 2006, p.18).

- Other exemptions, as noted above, are taken account of.

- A tax rate of 20 percent is applied if ARV is less than or equal to Rs 25000. If the ARV is greater than Rs 25000, a tax rate of 25 percent is applied to the full value of the base. Preferential rate reductions are taken into account at this point in the process.

Appeals and Collections

After a draft valuation list is prepared, it is opened for review and objection. The final list is reported in the PT- 1 file. The other controlling document is the PT-8, which shows the tax payment history for 5 years, and all outstanding arrears.[33]

The Excise Tax Department demands payment by sending a notice, and then a

[33] For a discussion of the record keeping system, see The Urban Unit (2007).

follow up notice. If payment is not made, ETD has the power to attach a property. In fact, this is rarely done. The owner is liable for payment, but collection may be taken from the tenant. Payment may be made directly at designated banks (branches of the State Bank and the public owned National Bank), and a 5 percent discount is allowed if payment is made early. Total delinquent taxes are equivalent to about 10-15 percent of annual liability. This is not an unusual level for developing or transition countries.[34]

Intergovernmental Dimensions

As it operates now, Punjab's urban immovable property tax is an intergovernmental transfer rather than a local government tax. The tax rate and base are set by the province, and tax administration is carried out under the leadership of the Province. The revenues are mandated for distribution to the districts and TMAs as specified in the Local Government Ordinance 2001:

Province	15 percent
TMAs	85 percent

Until very recently, the distribution did not work out this way. The actual distribution has been:

Provincial Government Collection Fee	5 percent
Provincial Government Revenue Share	15 percent
Utility Payments of Local Governments	58 percent
TMAs	22 percent

[34] In Argentina, about 20-25 percent of taxpayers fail to pay their property taxes. In Tamil Nadu, a relatively well-managed Indian state, arrears were equivalent to about 50 percent of demand. In Poland, arrears were equivalent to less than 10 percent of taxes billed. (Bird and Slack, 2004; and Bahl and Martinez-Vazquez, forthcoming).

The controversial elements of this revenue sharing were the 15 percent that was retained by the province and the 58 percent that was intercepted by the province to cover the utility bills of local governments.[35]

According to the Local Government Ordinance (2001), the property tax is to be fully devolved to the local governments. In theory, the TMAs have the authority to set the tax rate and to administer the tax. In fact, neither the province nor the TMAs have been willing to use their taxing power. Under the medium term policy framework approved in December 2007, the provincial government will prepare new legislation to reconcile the property tax legislation and the Local Government Ordinance. Tax policy and valuation will be given to five city district governments initially. In time, the Tehsil Municipal Administrations will be allowed to choose tax rates from a range set by the province. Implementation will rely on a "readiness" criterion. The Province will continue to perform an oversight function, lay down acceptable ranges of tax rates, and review valuation and tax collection procedures. After decentralization, local governments will continue to use uniform methodologies for valuation and tax collection.

Issues and Problems

The UIPT in Punjab is beset by a number of problems. For implementation of the medium term policy framework, a number of issues will require attention. Some are structural and some are administrative, but none are insurmountable with present levels of technology and with some upgrading of staffing numbers and skills.

---

[35] Revenue sharing of the property tax certainly is not unheard of. For example, the central government property taxes in Indonesia and Chile are shared by formula with subnational governments.

The Tax base. The legal basis for property taxation is annual rental value. Many observers take the position that this tax base is not appropriate for Pakistan. One reason is that most residential properties in urban Pakistan are owner-occupied vs. rented, so the capital value of a premise would be a more compatible base. Advocates argue that it would be more acceptable to taxpayers. Another issue is that vacant properties are not taxable under the present system because they "have no rental value". A capital value base presumably would allow taxation of vacant properties. Finally, the valuation of industrial properties is uncertain under a rental value system, because a capitalization rate must be assumed. Under a capital value system, a reconstruction cost method of assessment, or even a book value approach, could be used. These latter two problems are longstanding criticisms of the annual value system that might be remedied by adopting a capital value base for property taxation.

There are, however, problems with the capital value base. Most of these have to do with valuation. One assessment approach is to estimate the market value of the total property (land and structure). This is a very expensive process that requires a cadre of skilled valuers. It does not lend itself well to mass appraisal in most developing countries.[36] The basic problem is that valuation under a capital value system requires accurate data on sales of properties. With the high property transfer tax rates that now exist, accurate reporting of sales values is not likely.

The alternate approach to valuation is to separately estimate the market value of land and structures, probably using some notional approach to valuation. If this took the

---

[36] Eckert (forthcoming) argues that computer assisted mass appraisal can be applied in transition and developing countries, and cites evidence of its successful use in both Kosovo and South Africa. He also argues that the use of computerized mass appraisal can accelerate the development of real estate markets.

form of land value coefficients and a construction cost table for structures (as is done in many developing countries), the system would not be very different from that presently in force in Pakistan. Other than resolution of the vacant land issue, there might be little to gain from switching to a capital value base.

A third approach is to tax only the land. The advantage here is that assessment is not very different from what is done now (establishing location values within urban areas), and landowners are given no disincentives to develop the land in its optimal use. Assessment would be easier since buildings would not be valued, and the tax roll would be easier to keep current since land-related characteristics change less often than buildings. The disadvantage is that nominal rates must be higher to yield the same revenue, and there is a perception of unfairness in that higher valued structures go untaxed.

Are any of these three tax base choices most suitable to Punjab? The argument for capital value is that it offers a way to include vacant properties in the base, and it offers a reasonable way to view the taxable value of industrial properties. It also may be more acceptable, in concept, to taxpayers. Adopting a capital value base would do little harm, and it would be in step with international practice. However, with respect to gaining a better estimate of the market value of residential properties, the switch to a capital value approach may not make much difference. In fact, there is an equivalence between the capital value and the rental value systems. Capitalized rental values and capital value are approximately equivalent, if the data underlying the valuation process are accurate. If a capital value base were adopted, and a notional assessment instituted, not much will have changed for residential properties and most commercial properties.

The government of Punjab needs to make a decision either to stay with the rental value approach or to adopt a capital value approach (if it is constitutional to do so). Either way, it will be necessary to develop a method for taxing vacant properties and properly assessing industrial properties, and finding a way to value residential and commercial property at more nearly their market rates.

Tax rate. There is some discussion that a statutory tax rate of 20-25 percent of annual value is too high, and presumably is above the international average. There was discussion at one point to roll the tax rate back to 4 percent upon introduction of the new valuation list. The fact is however, that the statutory rate in Punjab (or in most countries) has little meaning because it is levied against a base that is well less than market rental value. If the base were to be fully assessed, the proper level of the normal tax rate would depend on the revenue target chosen (See below). In the absence of an accurate sales-assessment ratio study, we cannot estimate the size of the base that would result from a full market valuation.

Neither is there much merit to the argument that the property tax rate in Punjab is "too high". If anything, the statutory tax rate of 20-25 percent in Punjab is low. The ratio of UIPT collections to GDP is 0.026 in Punjab and the ratio of property tax collections to GDP averages about 0.5 in developing countries.

Low revenues. The revenue yield is very low (about 0.026 percent of provincial GDP in 2006 and about 2 percent of provincial government expenditures). We can conclude safely that there is little connect in the eyes of taxpayers between the level of local public services provided and the amount of property taxes paid. Thus Punjab misses the opportunity to charge property owners/users for the public service benefits they receive and by so doing it takes a step back from a central tenant of successful fiscal decentralization.

The low revenue yield might be attributed to a number of factors: (a) taxpayers do not see adequate value in the services they receive from local governments, hence they are not willing to tax themselves at a higher rate, (b) the property tax is an inherently unpopular way to raise revenues and elected politicians are loathe to force it on to voters, (c) the many who receive property tax preferences resist giving these up, (d) intergovernmental transfers provide subnational governments with adequate revenues at low political cost with the result that there is no incentive for increased property tax effort and (e) there is weak enforcement. The fact that Punjab officials postponed introduction of the new valuation roll in 2007, because elections were near, is some evidence of the political sensitivity of property tax policy. To move property tax revenues to a higher level, all of these barriers will need to be addressed.

Undervaluation. The evidence available suggests that properties that are in the tax base are dramatically under-assessed. Unfortunately, there are no independent estimates of property values or rental values, so it is not possible to get a fix on the true tax base. Moreover, the government does not carry out an assessment-sales ratio study that would allow calculation of the degree of underassessment, so it is not possible to make an objective estimate of the revenue cost of underassessment. Educated guesses, anecdotal evidence and some available data however, suggest that the degree of underassessment is quite large. One senior official in ETD gave an example of a “good” area of the city where one marla of land (25 square yards) would sell for Rs 12 million. Based on the valuation table presently in use, the property tax assessment in that area would be equivalent to less than one percent of market value. Another anecdotal example is outlined in Box 3, and gives a similar result. Even if such judgments about market value are reasonably accurate, they relate to only one location and variations in the assessment ratio are likely to be quite large within the province. One could not use such anecdotal evidence to infer the average level of undervaluation.

We might also look for evidence of undervaluation using data related to the sales of property. Declared values for land transfers are notorious for being understated in developing countries, and the degree of understatement in Punjab might tell us something about the degree of undervaluation in the case of the urban property tax. An evaluation of the stamp duty in Punjab involved comparison of the taxed value with "indicative market value" in selected areas in Lahore district (Government of Punjab, 2007f). The results show assessment ratios (assessed value to market value) that ranged from 55 to 79 percent. This evidence is based on stamp duty assessments, and it is not based on a scientific survey, so it is only an indication of the degree of undervaluation for the urban property tax.

Perhaps better evidence on the degree of undervaluation in the present (2002) valuation tables comes from comparison with the 2007 valuation table. Though the latter has not yet been released, ETD officials estimate that it would result in a fivefold increase in values for some properties, i.e., the present system is capturing only about 20 percent of true market value in the case of those properties. Other provincial government estimates of the increase in property taxes that would result from adopting the new valuation table suggest a 180 percent increase in values with the new roll. This implies that the average property is undervalued by about 45 percent.

Box 3. An Example of Undervaluation

A one kanal house in Gulberg, with a covered area of 3500 square feet is rented for Rs 40,000 per month. Its market annual rental value is Rs 480,000. (These values are based on "expert judgment" evidence provided by Punjab ETD officials).

According to the ETD classification, Gulberg is an A area. Applying the rates under the rented residential property category from the ETD Valuation Table we calculate the ARV of the property to be Rs 15,815 as shown below.

Property Components	Valuation rate	Value
Land area		
First 500 square yards	4	2000
Next 105 square yards	3	315
Covered area		
First 3000 square feet	4	12000
Next 500 square feet	3	1500
Total ARV		Rs 15,815

Using the assessed ARV, we then calculate the ratio of the assessed value (Rs 15,815) to the market value (Rs 480,000) as 3.2 percent.

An assessment ratio[37] of 55 percent would not be out of line with the experience in many developing countries. The ratio of assessed to market value is reported to be 25 percent in Indonesia, and to range between 20 and 70 percent in Kenya, 45 to 85 percent in Chile, and 20 to 50 percent in Mexico (Bahl, Martinez-Vazquez and Youngman, forthcoming; and Bird and Slack, 2004).

ETD officials also stated that even the new roll will not capture the full market value of the property. This implies that the current degree of undervaluation is well more than 45 percent. The undervaluation is thought by some ETD officials to be greater for commercial than that for residential property.

In sum, we cannot find evidence that will allow us to name the exact degree of undervaluation. We can say that property tax revenues increased by 14 percent in

[37] The assessment ratio is assessed rental value expressed as a percent of true market rental value.

nominal terms, between the time when the 2002 tax roll came into effect and 2006. Over the same period, property values are thought to have increased at a faster rate. One service reports an increase of 36 percent for the 2002-2007 period (State Bank of Pakistan 2007b; Table 8.1, p208).

Some observers are interested in the possibility of self-assessment as a way of reducing assessment cost and gaining a better estimate of true market value. In fact, a number of developing countries practice self assessment. These include Indonesia, Bangalore (India), The Philippines, and Hungary among others. In most cases self-assessment means reporting the physical characteristics of the property. In Columbia, however, self-assessment includes a declared value of the property and the government puts in place a safeguard against underassessment. Self assessment is not a panacea for Pakistan. It can provide additional information but in the near future, it cannot be a substitute for independent property valuation.

Revenue growth. There has been little growth in property tax revenues in recent years. The revenue-GDP elasticity is only 0.24 for this valuation period. Should we have expected a greater rate of natural increase during this period? Property tax revenues can increase for several reasons. The most obvious is an increase in taxable property values. The new valuation table was due in 2007, and is ready for implementation, but has been postponed. In the meantime, the 2002 valuation roll remains in effect. The introduction of the new table in 2007 would have led to a significant increase in revenues, though, as discussed above, it is difficult to estimate the exact amount.[38]

[38] It takes about one year to develop a new valuation table.

Even without a new valuation list, taxable property value could increase because of new construction. In fact, newly developed properties are not being brought on to the tax roll and there is no annual revenue pickup due to expanding economic activity. The ETD attributes this to the unwillingness of the TMAs to assign a tax rate to the new properties. Another side of the story, that is discussed below, is that TMAs (until very recently) have had little incentive to assign a tax rate in these areas.

Under the Local Government Ordinance, since 2001, all newly built up areas have been declared zero rated areas. Under the *Property Tax Act of 1958* an area had to be declared 'urban' by the provincial government before ETD could carry out an assessment and levy a property tax. The Local Government Ordinance removed this step and made provisions for the TMA councils to increase the rate from zero to a positive one through a resolution. This can be interpreted in the following way: ETD can carry out assessments for any built-up area because the legal bar has been removed; but for the department to collect property tax, a TMA resolution naming a positive tax rate is required. Another provision in the Local Government Ordinance requires that 85 percent of property tax collection should be given to the TMA where the tax is collected. However, the province did not transfer responsibility for property tax collections or revenue to the TMAs in this manner in the first years after the creation of the new local government system. This led to low credibility of the system, and certainly provided no incentive for TMA councils to pass a resolution increasing the tax rate from zero upward. By doing so, the TMAs would have earned political problems without any assurance of monies flowing into their accounts. More recently, the 85 percent payment to districts and TMA's has been made.

Changes in the location value of properties (due, for example, to new public improvements) also could lead to a revenue increase. However, as a matter of practice, changes in assessed location value do not occur between valuation periods. So, the structure of the property tax, and its administration, cause us to expect little revenue increase between valuation periods. A revenue – GDP elasticity of 0.24 confirms this expectation.

Tax preferences. The legal base for taxation is dramatically narrowed by exemptions and other preferential treatments. The government does not keep a record of the revenue cost of the exemptions, but an impressionistic judgment by excise tax officers is that the cost is equivalent to about 20 percent of tax collections. This is almost certainly a very conservative estimate, given that nearly one-half of all properties in Lahore alone are outside the net. These preferential treatments also create great inequities in the distribution of property tax burdens and thereby contribute to noncompliance, and resistance to increasing the statutory rate and improving valuation.

Our estimates of the revenue cost of preferential treatments is Rs 3.7 billion, an amount equivalent to 132 percent of the current level of demand for collections. If the new tax roll were brought on line, the revenue cost of preferential treatments would rise to Rs 7.6 billion. The estimates of this revenue cost are reported in Table 14 and the methodology used to derive this estimate is spelled out in Appendix B. These estimates are made with the help of some simplifying assumptions, but the results suggest that even other reasonable assumptions would yield a similar result. This is an important finding if one wants to estimate the revenue potential of the property tax in Punjab. Bringing in a new valuation roll and eliminating preferential treatments alone could lead to more than a tripling of revenues.

Sticky Nominal tax rates. Revenue increases also could be the result of nominal tax rate increases. However, there have been no rate increases imposed by the province since 2002. TMAs have been empowered to alter the rates since 2001, but none have chosen to do so.

Incentives for Inefficient Land Use. The UIPT is structured to fall more heavily on improvements than on land. This is built into the system because the same tax rate is applied to square yards of land and square feet of covered area. This feature of the tax structure might be seen as discouraging efficient land use and encouraging a less intensive use of land. This disincentive to a more efficient use of land is reinforced by the full exemption of vacant properties. At current low levels of property tax, these disincentives to more intensive land use may not matter very much, but under an upgraded property tax they would be of greater importance. (See Box 4)

Administration. Property tax records are manually recorded, in Urdu, and there is no automation in billing or in tracking collection rates. This makes an efficient collection process very costly and likely dampens the collection rate. Payment records are said to be out of date, and the matching of property tax payment with motor vehicle registration and other third party information cannot be done. A World Bank financed project is now undertaking computerization of rural land records. It aims to complete work in 8-10 years. Currently, it is not mandated to prepare computerized records for urban areas.

On the assessment side, there is little or no evaluation of the effectiveness of the process as it now operates. Three points in particular require special note. First, there are

Box 4. Taxing Land and Structures

Does this system of taxing property imply a differential tax treatment of land and improvements? We cannot answer this question directly because values of land and structures are not separately reported. If the present system does not intend to treat land and structures differently under the property tax, there is an important assumption that a "value unit" is one square foot of land and nine square feet of structure. We can say that under the present system,

$$\left(\frac{1}{9}L + S\right) \times a = ARV$$

Where

L = Land area in square feet
S = Covered area in square feet
a = Valuation factor (location factor)

In other words,

$$\frac{1}{9}V_l + V_S = ARV$$

and

$$\frac{T_L}{T_S} = \frac{1}{9}\frac{V_L}{V_S}$$

Where T_L = the tax rate on a square foot of land
T_S = the tax rate on a square foot of structures
V_L = value per square foot of land
V_S = value per square foot of structures

Since $T_L = T_S$,

$V_L = 9V_S$

It is not clear how this equivalence was developed or justified.

If encouraging a more efficient use of land is a goal of property tax policy, which is true in some countries, a consistent structural reform would be to tax land more heavily than improvements. In the case of Pakistan, a first step toward this goal would be to tax land and improvement value equally, hence the area unit would become square feet of land plus square feet of buildings. The impact would be increased revenue, a shift in burden toward those who own more land relative to improvements, and a more progressive distribution of burdens (to the extent land owners are higher income).

no sales-ratio studies hence it is not possible to grade the effectiveness of the valuation process in estimating market value. Only anecdotal evidence (and small area studies) is available regarding underassessment, and about whether the process is fair in assigning the same values to similarly situated properties. Second, the government does not systematically evaluate the impacts of the various exemptions that have been given. For example, estimates of the revenue cost of the important 5 marla exemption have not been made by the Government. Third, there is no up-to-date survey of all properties in urban areas. Therefore, the completeness of the tax roll is suspect.

Intergovernmental Issues. A major problem is that the Provincial Government has not come to grips with the fundamental question of whether it wants the property tax to be a provincial levy or a local levy. The medium term policy framework approved by the provincial government attempts to remove this ambivalence by committing to pass this responsibility to local governments by 2012. The legal authority is in place, but provincial actions in the past suggest a reluctance to release this authority. For example,

- TMAs are not regularly notified of their revenue entitlements,
- Property tax revenues have until recently been intercepted for payment of local utility bills, and
- No significant fiscal incentives have been put in place to encourage local governments to impose higher rates.

Neither have the local governments shown a willingness to take on the property tax as a major local revenue source. Certainly they have not used the rate setting power that they have been given. This is probably due to some combination of the significant rate of inflow of intergovernmental transfers from the province, the fact that elected local politicians are close to those who would pay the tax, and a suspicion on the part of local officials that the revenues would not flow to them even if they did raise the rate. As the implementation of the medium term policy framework begins, the provincial government plans to closely monitor the property tax actions of the local governments. Presumably this will include an assessment of the extent to which they are prepared to assume their new administrative responsibilities.

Reform Options

Two basic, underlying issues must be faced in property tax reform in Punjab. The first is whether this tax will become an important source of financing for government services. If a significantly higher level of revenue is to be reached, a comprehensive reform of the property tax is called for. The base and rate structure, the administration, and the intergovernmental arrangement all should be changed (The Urban Unit 2006). Coordination of these changes and a phasing in plan will necessarily be part of the reform program. Administrative issues alone would likely require an overhaul of the law. Whether the needed fixes are politically feasible, and whether there is any incentive to adopt them, are the more important issues.

The second underlying issue is whether it will be left to local governments (city districts and TMAs), or to the provincial government, to govern the tax so as to reach the target level of revenue. This question has been answered to a considerable extent by the approval of the medium term policy framework (Government of Punjab, 2007a). The framework lays down a timeline for assignment of tax policy and valuation functions to local governments, beginning with the five city districts. Simultaneously, the framework indicates addressing other policy issues.

There are a number of reform options open to the Punjab government to make the property tax more revenue productive, and arguably more fair. Some, but not all, of what we propose here has been discussed in other research reports (The Urban Unit, 2006, 2007) and is also contained in the recently approved medium term policy framework.

Revenue Target. The first reform decision to be taken is the revenue target for the property tax. Ideally, this will be determined with reference to the amount of expenditures to be covered by the tax, or by all own source revenue. Under the new intergovernmental arrangement, the property tax rate, and therefore the revenue target, will be set by the local councils by 2012. Until then, the provincial assembly will play a major role in determining the revenue target. In order to develop revenue estimates for the short run, we will assume UIPT to be a provincial tax with a uniform province-wide practice and a target revenue yield set by the provincial government.[39]

For purposes of illustration, we arbitrarily set the level of target revenue at the international average for less developed countries of approximately 0.5 percent of GDP.[40] At 2006 levels of provincial GDP, this would imply a rupee target of Rs 25 billion for property tax revenues.[41] Achieving this target would require an increase of about Rs 23 billion in property tax revenues. (See rows 1-3 of Table 15). This tenfold increase is more than a little ambitious. Still, this target can be achieved with a combination of structural reforms, rate increases and administrative improvements. The economic impact of this increase --- Rs 255 ($4.24) per capita or 0.45 percent of GDP --- is

[39] An interesting idea that has become part of the discussion is that the cost of property tax exemptions will be estimated, and will act as an offset to the inflow of intergovernmental transfers.

[40] See Bahl and Martinez-Vazquez (forthcoming). Calculations by Roy Bahl and Bayar Tumennasan (Georgia State University, reported in Bird and Slack (2004, p5), place the developing country average at 0.42 percent of GDP in the 1990s, and the transition country average at 0.54.

[41] After the implementation of the medium term policy framework, the targets could be assigned to local governments according to their shares in provincial GDP or other measures of tax base.

probably in the acceptable range.[42] The political feasibility of so large a tax shock might be quite another question. Note that the provincial government has set a much more modest target of Rs. 6.1 billion for 2007-2008. (Government of Punjab 2007b, p.15)

Valuation, revaluation and indexing. The most obvious revenue-raising (and fairness) measure is the introduction of a new valuation roll. If fully implemented under the present rate structure, it could lead to a significant one-time increase in revenues. This could be perceived to cause enough “tax shock” that it might need to be phased in, but it should be introduced as soon as possible.[43] The new valuation roll would lead to a revenue increase of Rs 2.9 billion with the present tax rates and tax base and with current rates of compliance (row 4 of Table 15). In terms of revenue target, however, the per capita tax burden would rise only to Rs 32 ($US 0.53). As welcome as revaluation would be, its introduction without other changes would cover only about 12 percent of the gap between the current level of property taxes and the target level.

Base Broadening Measures. Revenues could be markedly increased, and the tax burdens could be made more fair, if the present package of exemptions and preferential treatments were to be significantly reduced. The reform argued here is to tax all property at the same rate, except that which is exempt by normal convention (e.g., places of worship, charities) and that which is exempt to protect low income families. There is some question about whether the exemption of low valued properties will protect low income families from property tax overburdens. The implicit assumption made here, that low income families will reside in low-valued premises, has not been tested in Pakistan.

[42] The major potential impacts are a capitalization into lower real estate values, and a shift of investment away from the real estate sector as after-tax rates of return fall in that sector.
[43] “Tax shock” refers to taxpayer reaction to a large one time increase in taxes, irrespective of the amounts involved.

In addition, we can note that the exemption of low valued properties would provide administrative relief, because the assessment of such properties and collection from their tenants can be eliminated without much revenue loss.

The view here is that the temptation to use property taxation as an instrument of social or economic policy should be resisted in favor of other, more appropriate policy instruments. Let property tax policy be centered on the goal of raising a target amount of revenue in the most fair and least distortionary way possible.

We have made estimates of the revenue gains from eliminating five types of preferential treatments: The 5 marla exemption, owner-occupied preferences, the vacant property exemption, the taxation of industrial property at residential rates, and the exemption of provincial government properties. The results from this analysis are shown in Table 14.

The five marla lot size exemption for residential properties is arguably the most egregious of the present preferential treatments. It is difficult to see what social goal, if any, the architects of this preferential treatment had in mind in designing this exemption. Almost all reform studies of property taxation in Punjab have recommended elimination of this exemption, and most government officials interviewed have agreed.[44] The problem is, as might be expected, the political sensitivity. Even tax policy mistakes, as the 5 marla exemption clearly is, do not go away quietly once they become entrenched in the system. We have made an independent estimate, as reported in Table 14, of a revenue cost of the exemption of Rs 2.1 billion, or an amount equivalent to nearly 75

[44] See also The Urban Unit (2006), p18.

percent of the level of current demand.[45] We also estimate that under the new valuation roll, the cost of the 5 marla exemption will rise to Rs 3.8 billion.[46] If this policy change were offset by a general exemption for low value properties (which is arguably a better way to protect the low income from heavy tax burdens), the net revenue gain would be only slightly less.

The preferential tax rates given to owner occupiers (residential and commercial) also could be eliminated. This would yield a revenue increase of about Rs 1.3 billion, an amount equivalent to about 50 percent of current collections. If the preferential rate treatment were reduced so that there would be parity between taxes paid by owner occupiers and renters, the revenue gain to government under the new valuation roll would be Rs 3.3 billion (Table 14). Again, however, there is the social engineering issue and the argument made by some that the tax system should be used to encourage owner-occupancy.

Vacant properties should be brought into tax, for two reasons. First, there would be a revenue gain. Second, it would remove the disincentive to property development that is in the present system. There are no data available on the value of vacant properties, or even estimates of the number of such properties. We assume, arbitrarily, that the value of vacant properties is equivalent to 5 percent of the value of properties in the residential sector. From this, we estimate the revenue cost of the exemption as equivalent to Rs 158 million (Rs 286 million with the new roll). Note, however, that there is some question about whether the taxation of vacant land under a rental value system would be allowed under the current law.

---

[45] For a discussion of the methods used to make this estimate, see Appendix B.

[46] This estimate is made assuming the tax rate on a 5 marla premise is equal to one-half the average rate on a rented residential unit.

Industrial properties should be valued separately, and should not be subject to the residential value coefficients as is now the case. Unfortunately there are no readily available data on the number of industrial properties included in the valuation roll for residential properties. For purposes of illustration, we will make the assumption that the number of industrial properties is equal to 5 percent of the total number of rented residential properties. We convert this to a demand for property tax payment from the industrial sector under a reformed system, using the average commercial (rented) demand per unit to estimate total taxable value. The result is an estimated revenue cost of Rs 170 million with the new roll.[47]

Provincial government properties are also exempt from tax. Exemption is appropriate for local government properties (city district governments or TMAs), because the revenues are assigned to this level of government. Provincial and central government properties should be taxed, or at least should make a payment in lieu to recognize the value of services received. In some countries, government properties are taxed. Gujarat and Maharastra states in India tax government properties at 35 to 75 percent of full liability depending on public services provided. South African governments are given a 20 percent rebate against full tax liability and in Poland, government properties are taxed in the same way as are private sector properties (Bahl, Martinez-Vazquez and Youngman, forthcoming; and Bird and Slack, 2004).

There are no data available on the value of provincial government properties in Punjab, hence we cannot directly estimate the revenue cost of this preferential treatment.

[47] This is really an illustration rather than an estimate because we have no basis for estimating the share of industrial properties in the base. The ET department, however, does have the necessary data to make a more accurate estimate of the revenue to be gained from such a reform.

We use the following method for purposes of illustration. (See also Appendix B.) We assume that the share of provincial government property in total taxable value is equal to the share of provincial government expenditure in provincial GDP. We then assume that a reasonable tax in lieu would be equivalent to 75 percent of the full demand. The result is an estimated revenue cost of Rs 611 million.[48]

If all of these base-broadening measures were adopted, the additional annual revenues at 2006-2007 levels would be Rs 8.2 billion (rows 5 and 7 of Table 15). This base broadening would cover about one-third of the needed amount of additional revenues to reach the Rs 25.5 billion revenue target (Table 15).

Indexation. Another reform option to be considered is indexation. Some developing countries do try and resolve the revenue growth problem by indexing the property tax base (or rate) for inflation. Examples are Colombia, Poland, Mexico and Nicaragua. Most countries that index are trying to deal with both the problem of revenue flatness in the period between revaluations and the problem of revenue shock when the new roll is introduced. Indexing provides some interim revenue growth and cushions the shock when the new roll is introduced. How much revenue growth in the interim period would Punjab want from indexation? We estimate that the expenditure-GDP elasticity of local governments in Punjab is 1.03.[49] For purposes of this exercise, we might set the

---

[48] We estimate the provincial government payment in lieu of property tax (GPT) as

$$GPT = 0.75rg\,(ARV)$$

where

r = statutory rate, which is assumed to be 22 percent

g = provincial government annual ratable value as a percent of the present level of ratable value, as estimated above. We estimate g = 6 percent, which is the ratio of provincial government expenditures to provincial GDP.

ARV = annual ratable value estimated above at 2006- 2007 levels as Rs 3.7 billion.

[49] The expenditure elasticity was calculated by assuming that local government expenditures remain constant at 27 percent of the total provincial expenditure (local government transfers in 2005-06 were 27

goal for a property tax revenue-GDP elasticity of 1.0. At present, the property tax elasticity is about 0.24, so the gap is very significant.

The revenue growth issue might be addressed in one or both of two ways. First, the government might introduce the practice of indexing the tax rates in the period between revaluations. This would generate more revenue between revaluation periods, would cushion the fifth year shock associated with the mandated five-year revaluation, and would raise the GDP elasticity of the property tax. We might illustrate the possible effects of indexing using historical data from Punjab. In column (2) of Table 16, we show the actual amount of property tax collected for each year during the 2002-2006 period. Let us assume that beginning in 2003, the first year that the new valuation table was used, the property tax had been indexed by the general rate of inflation in the preceding year (column 1). The resulting (hypothetical) level of indexed collections under this scenario is as shown in Column (3) of Table 16, and the revenue differential due to indexing is shown in column (4).

We can draw the following conclusions from this empirical demonstration.

- The government would have gained Rs 1.4 billion in additional revenue during the period between revaluations.[50] This is equivalent to about 20 percent of the amount actually collected during this period.

- The amount of the revaluation shock is cushioned. By these estimates, instead of facing a 125 percent increase in taxes with the 2007 revaluation, they would have faced a 66 percent increase. A higher index rate would have lowered the shock even more. Indexing at the rate of inflation will fall short of achieving a revenue – GDP elasticity of 1.0. Had the tax rate been indexed as shown in Table 16 , the revenue-income elasticity would have been 0.51 over the period (compared to the actual elasticity of 0.24).

---

percent of the total provincial expenditure). The own source revenue of the local governments also contributes to their expenditure, so this estimate represents a lower bound for the elasticity.

[50] This is calculated as the sum of column (4).

- How much of the gap between the revenue target (Rs 25.4 billion) and actual collections (Rs 2.3 billion) would be covered by indexing? We estimate that it would contribute an annual amount of Rs 827 million at 2006 levels (Table 16), hence would cover only about 4 percent of the revenue gap (row 6 of Table 15).

Indexing is not without problems. The most important is that it treats all properties as if they grow in value at the same rate between revaluation periods. Of course this assumption is not true, because property values grow at very different rates depending on location and use. With indexing, these relative values are adjusted to actual market values when the new valuation roll is introduced (every fifth year). Therefore the shock will vary from property–to-property. This kind of imputation in determining taxable property values between valuation periods, flawed as it is, still may be an improvement over the present system. In fact, by not revaluing for five years, the present system also does not recognize that some property values are growing faster than others between revaluation periods. Indexation makes the same error but yields more revenue and reduces the average valuation shock. It would seem a reasonable measure to consider for now, until a more suitable approach to timely valuation can be worked out.

A second approach under consideration by government is to shorten the time between revaluation periods from five to three years. There is much to recommend this: it better captures increases in the tax base than does a five year cycle, it provides a greater flow of revenue in the long run, and it reduces the shock associated with the introduction of a new tax roll. In the numerical example shown in the right column of Table 16, we begin with 2002-2003 as the first year of the valuation table. We assume a new table will take effect in 2005-2006 and that the rate of value increase is the same as that projected for the 2007 revaluation. By these data, the shock upon introducing the 3 year table (with no indexing) is only an 80 percent increase in taxes, by comparison with a 125 percent increase for the 5 year revaluation.[51]

But, there are problems with this approach. First, it can be postponed. If the five year cycle is postponed, why not the three year cycle? Second, it is more costly than the five year cycle since the roll must be prepared more frequently, objections must be dealt with more frequently, etc. It takes about one year to prepare a valuation roll, hence a three year cycle would make the revaluation process nearly continuous.

Rate Adjustments. Even with the introduction of all of these measures, a gap of Rs 11.2 billion would still remain (row 8 of Table 15). The difference could be made up by increasing the nominal tax rate from the present average of about 22 percent to 40 percent (row 9).

One should not jump too quickly to the conclusion that a 40 percent statutory tax rate is exorbitant or approaching confiscation level. What really matters is the effective rate, i.e., the ratio of tax paid to market rental value. A 40 percent nominal rate translates into a much lower effective rate, depending on the assessment ratio. We have no sales ratio study to estimate the assessment ratio, but suspect from anecdotal evidence that it is quite low. Note that the combination of a 50 percent assessment ratio and a nominal tax rate of 40 percent yields an effective tax rate of 20 percent on market rental value. One would not want to entertain increases in the statutory rate to such a level unless a good sales-ratio study was in place. That said, the following table provides some illustrations of the conditions under which a nominal rate of 40 percent would not be unduly

[51] The percentage estimated here is biased downward because of the unusually low level of collections in 2005-2006.

burdening.

Assessment ratio (percent)	Nominal rate	Effective rate
10	0.4	0.04
20	0.4	0.08
30	0.4	0.12
40	0.4	0.16
50	**0.4**	**0.20**
60	0.4	0.24
70	0.4	0.28

Organizational Issues

The responsibility for valuation should be separated from the political decisions regarding rate levels and exemptions. The valuation job is to correctly determine the market value of real property, and to set the relative levels of the tax base across properties so as to insure fairness. The valuation roll should be brought in every fifth year (or third year), independent of political circumstances. The political leadership can then decide how to adjust rates, etc., if they choose to cushion the tax shock. The present situation, where the new valuation roll is not being introduced for political reasons is an example of what can happen if these two missions are not separated. A better route would have been to bring in the new roll and then to reduce tax rates to the level that was politically acceptable. Revenue may not have increased, but at least the tax roll would more nearly reflect the current market values of all properties, and the tax system would be more fair.

A related issue is the valuation of exemptions from the property tax. All properties should be valued and the total potential base should be reported. Political decisions might provide for exemptions, but this does not negate the need for full valuation of each property. If this were done, a process could be put in place to estimate the revenue cost of preferential treatments. The provincial government could make these estimates under the proposed new framework for property taxation, though presumably, the local governments would be allowed to decide on exemption policy. The level of exemptions given by local governments might then be reflected in the size of the PFC award to that local government. Also it is arguably true that reporting the revenue costs of such preferential treatments and taking them into account as offsets to the PFC award, might curb their adoption.

Urban Immovable Property Tax: NWFP

The property tax is effectively a provincial government levy in NWFP, just as in Punjab. TMAs have property taxing powers, including power to set the tax rate and power to administer the tax. They do not use these powers. Before 2001, the provincial government was required to notify an area as 'urban' in order for property tax laws to be applicable to it. Since the 2001 local government legislation, this requirement is no longer needed. All previous urban areas continue to be assessed for property tax but the remainder have been declared as zero rated areas. TMA councils have chosen not to levy the property tax in these areas.

Revenue Performance

The property tax yields very little revenue, only about 6.5 percent of own source revenue and 0.04 percent of provincial GDP. Surprisingly, it is used more intensively in NWFP than in Punjab, in that it yields a higher per capita amount and accounts for a larger share of own source revenues (Table 12). But, as in the case of Punjab, the level of property taxation is still well below the international average. There has been some growth in revenues since the new valuation roll was introduced in 2003, both in real per capita terms and relative to GDP. We estimate the revenue-income elasticity to be 1.13 for the 2003-2006 period. However, revenue flow has been very erratic during this period (see Table 12), and includes substantial collections of arrears.[52] During this period there were no changes in tax rate or valuation, so the sources of growth are additions of new properties to the tax roll, and administrative improvements which could include more vigorous efforts to collect arrears.

Base for Taxation

The UIPT in NWFP is an area-based system of taxation. It is reported by provincial officials to have replaced an annual rental value system in 1997. As is discussed below, there is only a very subtle (but very important) difference between the area-based system as practiced in NWFP and the rental value system as practiced in Punjab.

The base of the tax is the sum of land area in square yards and covered area in square feet. The implication of this method of determining the base is that more intensively used land will be taxed at a heavier rate than less intensively used land. (Some would argue that good tax policy would do exactly the opposite). There is no attempt to directly value either the land or the buildings on an individual parcel basis.

[52] We are not able to separate collections of arrears from collections of current year liability.

Tax Rates and Valuation

The different, and most problematic feature of the area-based system used in NWFP is that there is no distinction between the tax rate and the tax base. The two are combined into a location coefficient, of which there are eight in the province (See Table 17). The size of these coefficients depends on the location of the property and its use. The province is divided into four location classes based on the desirability of the location, availability of amenities, etc. Peshawar city is the only place in the province with an A class location, though the city also contains properties that are classified as B and C. The determination of location class is done by field inspectors who possess knowledge of the areas, and this determination is reviewed and eventually validated by the provincial government. One might characterize the approach as being based more on expert judgment than on systematic analysis. The exercise of classification of each property according to location and use was carried out in 2001 and has not changed since. Khan (2004) points out that a formal property survey was carried out only in Peshawar.

The actual tax rates (location values) are notional, but appear to be an attempt to reflect both relative values and a policy choice that commercial land use should pay more property tax than residential land use. For example, note from Table 17 that a residential property in location (A) pays Rs 1.5 per area unit, while a commercial property in location A pays Rs 9 per area unit.

Exemptions and Concessions

The product of base and rate gives the potential tax liability in rupees. This liability may be reduced by certain concessions:

- If the age of a property is more than 10 years, there is a 10 percent reduction in tax liability; if more than 20 years, a 20 percent reduction; and if more than 30 years, a 30 percent reduction. This age test is independent of location.
- Owner-occupiers receive a 50 percent reduction. In addition, owner-occupied properties may receive the age deduction for their buildings. For example, an owner occupied property that is more than 30 years old will pay only 20 percent of full tax liability.
- Properties with lot sizes less than 5 marla are fully exempt from property tax.
- No tax is levied on property owned by widows.
- There is no tax on government properties (except local government property). The interesting history here is that when UIPT was solely a provincial tax, provincial government properties were exempt, but local government properties were taxable. Now that the tax has been declared a local government (TMA) revenue source, the TMAs are making the argument that this situation should be reversed, i.e., TMA properties should be exempt and provincial government properties should be taxable.
- Cantonment areas levy their own property tax (and entertainment tax) and pay 15 percent of this amount to the provincial government. Cantonment areas provide much of their own public services.

Effective tax rates

The underlying intent in this “area-based” system is to assign a property tax liability to each parcel. So, we might define an *effective tax rate* as the ratio of the tax assigned to the actual market value of any given parcel. The provincial government does not make such a calculation, because there is no formal concept of market value in the new system. But, the concept is implicit to the system. ETD officers recognized that the market values of many properties has risen to a point where the effective tax rates are probably very low. However, this is only anecdotal evidence and is based on one specific area of Peshawar, so it cannot be used to infer anything about the average effective tax rate. But it does suggest how dramatic the rate of underassessment can be.

We might think more generally about the degree of undervaluation. The formula presently used in NWFP calculates tax liability (T_L) as the product of the locality coefficient (C) which is measured in Rs per area unit, and the number of area units (A) which is the sum of square yards of lot size and square feet of covered area.

$$(T_L) = C * A \qquad (1)$$

However, the locality coefficient (C) is implicitly the product of the tax rate (r) and the assessed property value per area unit (v). So,

$$T_L = r * v * A \qquad (2)$$

Since the statutory rates of all provincial taxes have been constant for the past decade, we can assume that the hypothetical r would have been constant over this period. We also know that C has not changed since 2001, so v has been constant. From this we can conclude that none of the property value increase in the past 6 years has been captured in the tax base, and the only source of increase in property tax revenues has been new construction and the addition of new property to the tax roll (A), and collections of arrears. Based on this we can speculate that the degree of under-valuation of properties already on the tax roll is quite significant.[53]

Tax Administration

The administration of the property tax remains the responsibility of the provincial government. It involves four steps: identification of property, recordkeeping, valuation, and collections.

ID of Properties and Property Characteristics. There is a roll (registry) showing all parcels and names of owners, but there are questions about the completeness of the roll. Properties are identified by a survey, carried out once every three years and updated quarterly. The survey includes the basic information needed for property taxation: address, name of owner, land area, land use, covered area, age of property. The present tax roll was introduced on July 1, 2005, but the basic survey work was done in 2001.

The survey was carried out by inspectors. In the old city of Peshawar, the urban area is divided into 28 zones, and each has between 5 and 10 thousand properties and is the responsibility of one inspector. More specifically, in Peshawar, 32 inspectors handle 190 thousand properties, though it was emphasized by ETD officials that these inspectors have other tax-related jobs as well. Almost certainly, the method of determining the location values is based on a mass appraisal and relies more on judgment than on inspection. There is likely a large backlog of properties that have not yet been brought on to the tax rolls.

With respect to gathering data for valuation purposes, an estimated 5 percent of taxpayers take advantage of an option to self-report the particulars of their property. In

[53] We have no independent data on actual property value increases, and no sales-assessment ratio study is carried out by the government.

the case of commercial and industrial properties, there is reported to be a more detailed inspection of the property. The inspector takes measurements, interviews the owner, etc. In the case of residential properties the inspection is less detailed, owing to a shortage of qualified inspectors. Information is available on property registries dating back to 1958, so there is a basis for estimating the age of a building, land area, etc. A general impression is that the workload is large relative to the number of inspectors, suggesting that the field inspection may not be on-site for most properties.

Number of Parcels. At present, there are 142,191 properties on the tax roll in old Peshawar. The breakdown is: residential (75142) and commercial (67049). However, the total number of assessees is only 74,908 suggesting a large amount of multiple ownership and possibly an incomplete tax roll. The number of residential and commercial structures is heavily dominated by Peshawar district.

Numbering System. There is a unique numbering system for properties. Properties are numbered sequentially within each ward. This becomes the tax number for the property. The number may change as the characteristics of the property change, e.g., subdivision. The important implication of this numbering system is that it is unique to UIPT, and it may not be linked to any other numbering system, e.g., land registration or public utility billings, etc. Land registration numbers do not even match property tax numbers. The same numbers do not necessarily remain for the life of the property.

Titling. Apparently, most owners hold some form of deed to properties. There are reported to be few disputes on this count. Sales of property are not reported by the registration office to the tax office. It is the responsibility of the buyer to declare any change in ownership. Urban property cadastral maps are not prepared. Compared with urban areas, agricultural property in most districts is well documented with cadastral maps and unique numbering of parcels of lands.

Collection. A demand notice is delivered to each owner by a constable. Payment may be made at the bank, and there is a 10 percent discount for early payment. A follow up notice is sent to those who do not pay. The Government can arrest non-payers (provincial officials reported that 400-500 property owners were arrested in 2006), and it can seize property. Khan (2004) however, notes that the local police in NWFP are generally non-supportive in honoring ETD arrest warrants.

The estimated collection rate in the Province is about 60 percent.

Intergovernmental Dimensions

Property tax revenues are allocated 85 percent to the TMAs on a basis of origin of collections, and 15 percent is retained by the provincial government. Unlike the situation that existed previously in Punjab, this revenue sharing scheme has been implemented, i.e., there is no formal program of intercepting for delinquent utility payments. There is, however, a dispute between the provincial and local governments about whether provincial government and TMA properties should be taxed.

According to the local government code, the administration of the tax and the power to set the tax rate, are decentralized to the TMAs. In practice, this has not happened. TMAs have not chosen to set tax rates and responsibility for rate setting and administration remains with the provincial government.[54]

[54] It is reported that the property tax was handed over to two districts for one year, but they "turned it back". However, the handing over did not involve transfer of administrative controls of tax staff to the districts, collections were to be deposited in provincial accounts, and the province did not provide any substantive mentoring to the districts.

Problems with the Present System

The major issue to be addressed with property tax policy in NWFP is the need to raise the level of property tax revenue. The collection in 2006 was about Rs 14 per capita ($US 0.23) which is a very nominal amount when compared with per capita provincial government expenditures of Rs 4086. There are two reasons why the currently low level of revenue is problematic. First, there is need for more revenue to cover service level deficiencies in the province. Second, local residents/voters need to see a more meaningful match between the burden of taxes they pay and the quality of services they receive, if the decentralization strategy is to work in Pakistan. A property tax burden equivalent to 0.04 percent of provincial GDP will not address either problem.

A major constraint to a more productive property tax in NWFP is the undervaluation of properties – which limits the yield of the tax -- and the absence of a mechanism to allow growth in this base. Some method must be found to provide for an annual growth in property tax revenues. At present, there is no provision for regular revaluation of properties and tax rates have been (implicitly) held constant. There has been some growth from new properties being brought on to the tax rolls and from collections of arrears, but none of the post-2001 increase in values for properties already on the roll has been captured. There has not been a survey/recalculation of location values since 2000, and even that was done only in Peshawar. This means that the measurement of built-up areas, land use, and the condition of the surrounding infrastructure are all based on outdated information.

There are major exemptions from the taxable base. Significant preferential treatment is offered to owner occupiers, industrial properties, and vacant plots. And, as in Punjab, there is a tax exemption for properties having a plot size of 5 marla or less. These preferential treatments impose a significant revenue loss. Our estimate is that the loss due to all tax preferences is about Rs 611 million, which is equivalent to more than 100 percent of actual collections in 2006 (Table 18). This and an outdated valuation roll go a long way toward explaining the weak revenue performance of the property tax in NWFP.

Finally, there are problems associated with the intergovernmental arrangement for levying the property tax. In theory, the TMAs are empowered to levy the tax and choose the rate. In fact, the province has assumed this responsibility, and the TMAs seem to have willingly ceded their powers. More to the point, local governments in NWFP have lobbied the provincial government on behalf of their constituents for lower property valuation classifications (Khan, 2004).

<u>Reform Options</u>

An underlying problem is that there is need for NWFP to rethink the rate and base structure of its property tax. The tax liability per area unit of a property is all that is reported in the valuation table. As noted above, however this coefficient is (implicitly) the product of a nominal tax rate and a valuation.[55] A first necessary reform is to make explicit the separation between tax rate and tax base. This separation needs to be made explicit for several reasons:

- Responsibility for rate setting could be assumed by city district government and TMAs before valuation responsibilities are handed over. This could not be done under the present regime.

[55] Presumably, the implicit value is based on market rental value.

- Good property tax practice requires a separation between valuation (a technical matter) and rate setting (a political matter).
- Monitoring of the accuracy and fairness of property tax assessment practices requires regular sales-assessment ratio studies. These would require separate data on property values per area unit.

We might use the same procedure as in the Punjab case to define a target for property tax revenue enhancement in NWFP. If we use the international average for less developed countries of 0.5 percent of GDP, the target for 2006 would have been Rs 3.6 billion, or an implied increase of about 10 times the present level. This target amount is shown in row (1) of Table 19. The reform question becomes whether there are options available to upgrade the property tax to this extent.

Revaluation. The first problem to be addressed is to build into the system a method to capture property value increases (vs. increases in area). This should be followed by a general revaluation, or in the NWFP case, a revision of the valuation table. At present, the NWFP government has no plans to construct a new table.

There is no solid empirical basis for estimating the revenue increase that would follow a revaluation, e.g., data that show increments in market value over the past decade. We can offer only a hypothetical example of how revaluation might affect the property tax base. We do this by noting that the increase in assessed value in Punjab was estimated to be by a factor of 1.8, suggesting an 80 percent increase in property values between 2002 and 2007. To illustrate the potential effects of revaluation in NWFP, we have used a factor of 1.5 --- the lower factor to suggest the lower level of income in NWFP. Such upgrading of the valuation table (by 50 percent) would lead to a revenue increase of Rs 150 million, or as shown in row (4) of Table 19, an amount equivalent to only 4.5 percent of the targeted revenue increase

Base Broadening. A second set of reforms would focus on base broadening. We estimate the revenue gain from the following changes in the present exemption package, using exactly the same methodology that was followed in the case of Punjab.

- Eliminate the 5 marla exemption.
- Eliminate the tax preference for owner occupiers.
- Tax vacant properties.
- Tax industrial properties at commercial rates.
- Payment in lieu of tax introduced for provincial government properties.

As we show in Appendix C, and in Tables 18 and 19, these changes would yield an increase of Rs 1,541 million at new valuation levels. This is more than three times the level of current collections. Base broadening in NWFP would cover about one-third of the gap between the present level of property taxes and the target level.

Indexation. To address the problem of building some natural growth into the property tax base, we evaluate two reform options and report the results in Table 20. First, we have indexed the tax rate by the (one-year lagged) general rate of inflation. The resulting indexed collections are shown in column 3 of Table 20. Over the 2002-2003 to 2005-2006 period, the province would receive a total of Rs 127 (3 year total) million in additional revenues (83 percent of the 2002-2003 total). We can also note that in the event of a general revaluation in 2006-07 without indexing, the tax shock would have been 98 percent of 2002-2003 levels, but under indexing, the shock would be reduced to 47 percent.

The second possibility for growth enhancement is the introduction of a three year valuation cycle. Using historical data and assuming general revaluations in 2002-2003 and 2005-2006, we show that between general revaluations the government would have gained Rs 60 million in additional revenues (39 percent of 2002-2003 levels) and faced a tax shock of 41 percent in 2005-2006 revaluation year.

Rate Adjustments. The estimated effect of these changes in property tax structure is to cover about Rs 2 billion of the estimated revenue gap of about 3 billion (row 8 in Table 19). How could the remainder be made up? In the NWFP system, this might be done by further increasing the location values (above the 150 percent built in to the revaluation shown in row 4 of Table 19). Assuming a 75 percent collection ratio, we estimate that the 'location factors' will need to be increased by 2 times to bridge the revenue gap.)[56] This is reported in row 9 of Table 19.

Administration. Even with a more rational structure of UIPT, revenue enhancement will be held back because of the presently poor state of property tax administration. A major need is to upgrade the skills and size of the staff that assess and collect UIPT. Khan (2004), after study of the UIPT administration in NWFP, makes the point that Peshawar has over 115,000 property units and that these cannot be managed by the present ETD staff. Arguably the greatest needs are to invest in surveys that will allow records of the various tax bases to be updated, and to begin moving recordkeeping away from the present manual system toward an automated system. This is discussed in more detail in Khan (2004).

[56] The calculation is based on the assumption that residential and commercial properties fall in the four location classes according to these percentages: A=0.5, B=0.25, C=0.50 and D=0.20. To take into account the effects of base broadening we add the number of 5 marla units to the D category of residential, industrial property units to the B category of commercial, and vacant lots to C category of residential.

Comprehensive Structural Reform: UIPT

The UIPT is not yielding very much revenue, and it is failing in its non-fiscal objectives. This suggests that it could be a good time for both provinces to overhaul the entire structure of the tax. Structural reform will be more difficult at a later time when the level of the tax is higher. In the analysis above, a revenue "target" for the property tax in Punjab is set at Rs 25 billion at 2006/2007 levels of the tax. The target for NWFP is set at Rs 3.6 billion. This would bring both provinces to the international average, but it also would imply a dramatic increase in property tax revenues. We would propose that this increase be obtained from four measures, as summarized in Tables 15 and 19. The following actions might be taken.

First, bring in the new valuation roll in Punjab, which assesses market rental value and puts the correct relative values on properties. In NWFP, put in place a formal structure that calls for periodic revaluation and begin construction of a new valuation roll.

The second step is to broaden the base of the property tax in both provinces. The numerous preferential treatments in the present system should be eliminated or rolled back and preferences should be limited to low valued properties. This would include eliminating the 5 marla exemption and the preferential treatment of owner occupiers. It also would require that provincial government properties make a payment in lieu of property tax for services received. Vacant properties would be taxed, and industrial properties would be moved to the commercial valuation table. If these base broadening measures were all introduced at once, on the new valuation base, they would bring in Rs 7.5 billion in Punjab (row 4 of Table 15), and Rs 1 billion in NWFP. Even without the introduction of a new valuation roll, this is equivalent to 125 percent of current collection in Punjab and 50 percent in NWFP.

Indexation would bring in another Rs 827 million in Punjab and Rs 78 million in NWFP, leaving gaps of Rs 11.2 billion and Rs 2.1 billion, respectively. These gaps might be filled by increasing the nominal tax rate. We also propose that a single tax rate be adopted in Punjab. There is no justification for an additional higher rate, because superior amenities, etc. have already been accounted for in the valuation of the property.

In addition, the taxation of land and improvements should be brought to the same basis, i.e., the tax base should be the number of square feet of covered area plus the number of square feet of land area. Since this involves increasing the tax on land relative to that on buildings, it will lead to an additional revenue increase. Data are not available to estimate the magnitude of the revenue increase.

Intergovernmental Reform. The provincial government in Punjab has adopted a medium term framework (Government of Punjab, 2007a) that will move it toward the assignment of property tax policy and administration to local governments. In the interim it should implement the legal tax sharing arrangement with local governments. There are strong arguments to make the property tax a local government revenue source, with the TMAs having rate setting powers and some degree of administrative control, as announced in the policy framework. While this is the present legal arrangement for the property tax, de facto it is not yet the practice in either province. It would be useful to revisit the benefits of the legal arrangements laid down in the 2001 local government ordinance, and to begin implementation, for the following reasons:

- This will permit a stronger link between property taxes paid and local public services received.
- Taxing powers will make elected local officials more accountable to the voters for the quality of local public services delivered.
- Local officials have greater familiarity with the local economy hence a comparative advantage in some areas of tax administration, e.g., identification of properties for the tax roll.

There are also disadvantages to adopting this intergovernmental approach, and concerns that might be raised about the potential success of the medium term framework. First, local governments already have the authority to set the tax rate and to administer the tax, and they have chosen to do neither. Why will things be any different under Punjab's medium term framework, and why might things change in NWFP? Second, some local governments may not be technically up to the job of property tax administration. This could result in a long transition period. The first challenge in structuring the reform program and implementing it would be to get around these disadvantages.

As a first step, the provincial governments could move toward a redefinition of certain of their intergovernmental practices.

- So long as the provincial government remains involved in collections, it should notify each local government of its revenue entitlement (the amounts collected in its area). This should be done on a timely basis so as to assist local government cash flow planning during the fiscal year.
- No intercept from property taxes should be allowed for utility payments. If there are to be intercepts, they should come from the general grant to local governments. To intercept from property taxes weakens the perception of the linkage between property taxes paid and local public services received. In fact, the practice of intercepts for utility payments has recently been discontinued.

Because of the deficiency in local public services, a reasonable goal of government might be to increase the effective rate of property taxation. But local governments have not been willing to use the rate setting powers that they now have. The alternative, transfers from the province, are "easier" money in that they have little political cost to local politicians. This is the mindset that must be broken if decentralization is to succeed. One way to do this is to provide a significant incentive for local governments to increase the level of property taxation. The province might attach a tax effort feature to its grant program to try and coax this increased property tax effort out of the local governments.

There is also the issue of who should administer the property tax. There is a strong a proiri case for local administration and there is a legal basis for this. This is the long term plan under the new framework in Punjab and presumably it is the plan in NWFP. However, there is a question of administrative capacity at the district and TMA levels. This leaves three options:

- Divide responsibilities along functional lines, for example, leave preparation of the valuation table and recordkeeping with the province, but let the local government be responsible for collections and for identification of new properties to be added to the tax rolls.

- Let the local governments assume further administrative responsibility when they demonstrate readiness, as measured by some objective benchmarks.

- Let the tax administration be led by the province, but allow the local governments to set the tax rates (perhaps above some minimum).

All of these reform options would increase the revenue importance of the UIPT.

Motor Vehicle Taxes

Motor vehicle taxes give provincial governments a potentially strong source of revenue. Depending on how the tax is structured, the result can be an income elastic base, a progressive distribution of burdens, and a relatively easy administration. As we show below, much more revenue could be captured if the structure of the taxation of motor vehicles were rationalized, and if the rate were increased. This result would hold in both provinces because the underlying problems and issues are much the same.

Revenue Performance

There are two motor vehicle taxes in the present system: a onetime registration charge and an annual tax (the "token tax"). In both NWFP and Punjab, about two-thirds of motor vehicle revenues are collected from the token tax.[57] In per capita terms, these motor vehicle taxes are equal to only about Rs 32 in NWFP and Rs 46 in Punjab in 2005-2006 (Table 21). They account for about 14 percent of own source revenues in both provinces (well more than the property tax) but are equivalent to less than one percent of GDP with the effective rate being about the same in both provinces. ETD officials estimate a compliance rate of about 80 percent for motor vehicle taxes in Punjab and 70 percent in NWFP.

One might expect natural revenue growth from motor vehicle taxes. In fact, motor vehicle ownership in Pakistan has been growing faster than the international average for developing nations (see Box 5). The base of both forms of motor vehicle tax used in these provinces is some combination of the number of motor vehicles, their value, and

---

[57] The Punjab estimate is calculated from Government of Punjab, 2007b, p. 38. The NWFP estimate is based on ETD assessment.

their engine capacity. Different rates are applied to different types of vehicles. Growth in the number of vehicles and increases in the value of vehicles form the *base effect* on the revenue – income elasticity. As may be seen in Table 22, the growth in the number of motor vehicles has far outstripped the growth in population in Punjab. In fact, the growth in vehicles in Punjab is more than five times that in population. So, there is reason to expect some buoyancy in motor vehicle tax revenues. There is also a *rate effect*. The ad valorem rate of the tax on registration of motor vehicles would be conducive to stimulating revenue growth as the value of vehicles increased, as would the shift in consumption toward vehicles with a larger engine capacity.

The actual revenue growth is shown in Table 21. Both real per capita revenues and revenues as a percent of GDP increased in Punjab between 2000 and 2007. The increase in real collections is most pronounced for the most recent three years shown. The revenue buoyancy was 1.40, possibly suggesting that the base effect (growth in numbers of vehicles) dominated the rate effect but also reflecting a rate increase in 2003-2004. NWFP is a different story. Over this same period, neither real per capita revenues nor revenues as a percent of GDP increased and the income elasticity was only 0.67. The reasons for this difference in revenue performance lie partly in underlying economic differences. GDP grew at about the same rate in both provinces, but the roadway network in Punjab is much larger, and Punjab is both more developed and more urbanized. The reason also lies in the difficulties of NWFP in collecting full liability for motor vehicle taxes. This is due partly to non registration of vehicles in the PATA areas, partly to a leakage of registrations to Balochistan, and partly to widespread exemptions. Some observers have argued that there are other contributing factors: (a) the sale of vehicles on power of attorney and their non-registration, and (b) a high incidence of corruption amongst tax collectors.

Box 5. Growth of Motor Vehicle ownership in Pakistan

Between 1960 and 2002, motor vehicle ownership in Pakistan grew from 1.7 per 1,000 population to 12, an annual growth rate of 4.7 percent. This compares to a worldwide average (of sampled countries) of 2.8 percent. For comparison purposes, India's annual growth rate was 6.8 percent and China's 9.8 percent. Relative to personal income, the vehicle ownership rate in Pakistan grew by 2.57 percent over the period, while India's grew by 2.92 percent and China's by 1.51 percent. Dargy, et.al (2007) estimate that between 2002 and 2030, Pakistan's ownership rate will grow from 12 per 1,000 to 29 per 1,000 population--a 3.2 percent growth rate in ownership. They also estimate that the ownership rate relative to personal income growth will reach 1.48 percent. For India and China these rates are 1.98 and 2.2 respectively. Source Dargy, Gately and Sommer (2007).

The Registration Tax

The registration tax is a relatively simple levy in that it is collected only once, at the time of initial purchase. There are no exemptions, not even for government vehicles. However, Malik (2004, p31) reports exemptions for ambulances and school buses in NWFP, and also that a number of government vehicles do not pay taxes "because of owning department's influence".

Even if the vehicle is sold, or if its user moves to another province, there is no additional registration tax levied. First-time purchasers are free to pay the registration charge in any province they choose. Once a vehicle is registered, the owner receives a license plate and a registration book that includes space for stamps. If the vehicle is sold, a transfer tax is paid but there is no additional registration fee. The registration book is transferred with sale. It is required that the owner identification page be replaced through the motor vehicle registration office.

The registration tax rate varies by type and age of vehicle. It is an ad valorem sales tax that is assessed according to the value of the motor vehicle and its engine capacity. The rate structure in Punjab is:

Engine Capacity	**Tax Rate**
Up to 1000 cc	1 percent of sales value
1000-2000	2 percent of sales value
Over 2000	4 percent of sales value
Commercial	1 percent of sales value

The following rates apply for registration in NWFP:

Category of vehicle	**Tax Rate**
Motor cycle/scooter	1 percent of sales value
Motor car, jeep up to 1300 cc engine power	1 percent of sales value
Motor car, jeep from 1300 to 2500 cc	2 percent of sales value
Motor car, jeep above 2500 cc	4 percent of sales value
Trucks, buses, pick ups	1 percent of sales value
Tractors	Rs.1000

Tax rates have not been changed in 4 years in Punjab and 8 years in NWFP. The tax can be paid in installments, with a 10 percent discount for full payment at time of registration.

Assessment and collection are relatively straightforward. The registration fee is collected at the time of purchase of a new motor vehicle. Without payment, there can be no ownership papers. A project is underway in NWFP to expand the computerized data base on motor vehicle registrations. To date however, there are no tax data included in this file. Moreover, the numbering of each record is such that there is no possibility for linking this file to other tax information.

Annual (Token) Tax

The annual tax (the token tax) on automobiles is a fixed rupee amount, depending on the engine capacity. The average car (1000-5000 cc) pays a flat amount of Rs 1500 per year. Trucks pay according to axle weight, and buses according to seating capacity.

The token tax rate has not been changed since 2000. Vehicles older than 10 years receive a 20 percent discount. Vehicles used for agricultural purposes are exempt.

The token tax for motor cars can be paid where the vehicle was originally registered or can be paid in another district if the owner applies for a change of residence. For "tied" vehicles, which include commercial vehicles, buses and trucks, the tax can only be paid in the office that maintains the registration record. Otherwise, taxes are paid either at the post office or at ETD offices.

Police squads are the major form of enforcement, using random road stops. Enforcement is by a registration card carried in the car. Neither number plates nor windscreen stickers are used in enforcement.

Problems and Issues

The major policy issue to be raised about motor vehicle taxation is whether the structure of the tax matches the government's goals for it. Provincial governments might have multiple goals for the tax on motor vehicles. The most obvious is to raise some target amount of revenue for financing public services. However, there are other goals that the government might have for motor vehicle taxes. It might want to charge road users for the upkeep of the road system, or it may want to impose an extra tax on those who generate congestion and pollution. It may even want to discourage the use of roadways to reduce congestion. All of this needs to be considered in light of the demand for motor vehicle transport, and in light of the economic and political sensitivity of taxes on this sector of the economy.

The present level of tax burden is very low. In 2006, the per capita amount of tax on motor vehicles was only Rs 32 in NWFP and Rs 46 in Punjab, well less than one percent of GDP in both provinces (Table 21). At a time when the provinces face a shortfall in the quality of public services provided, there would seem to be a premium on revenue mobilization, and motor vehicle taxation would appear to offer some fiscal space. One question to be answered is "how much revenue should be raised from these taxes"?

The revenue targeting issue might be approached by viewing motor vehicle taxes as a kind of benefit charge for using roadways. In 2006, taxes on motor vehicles were equivalent to only about 65 percent of provincial government expenditures on road maintenance and construction in Punjab, and 53 percent in NWFP.[58] Note that these percentages relate to actual roadway expenditures, which are below desired (standard) levels and have been for many years. The sector is said to have been squeezed to yield funds for new infrastructure.

In NWFP, the allocation for district level road maintenance declined even further in 2003-04. A significant proportion of the road network is in poor condition primarily due to shortage of maintenance funds. A backlog of Rs.2.5 billion for maintenance needs was estimated in 2004 (ADB, 2004a). Punjab road expenditures are in a similar state. From 1990 to 2000, for instance, the road network grew from 26,100 km to 41,000 km but at the beginning of the current decade the road condition was categorized as fair to

---

[58] We define road expenditures as sum of

a. Provincial road sector current expenditure
b. Provincial current capital expenditure on roads
c. Districts road sector expenditure is calculated using an approximate ratio of 7 percent of the total grant to the district government as road sector expenditure at the local level. The percentage was obtained from the revised estimates of City District Government Faisalabad 2005-2006, using road sector expenditure to total budget ratio. It does not include estimates of road expenditures by TMAs, because the consolidated TMA accounts are not available.

poor and deteriorating rapidly owing to insufficient maintenance and high volumes of traffic. ADB estimates in 2002 were that given the expansion in the network, Rs.8 billion would be needed annually to maintain the roads in their existing condition (ADB, 2004b). This is almost double the actual 2005-2006 level. Given that the ratio of road fatalities to vehicles is 10 times higher in Pakistan compared with other developed countries (ADB, 2004a), the required expenditure to maintain them at an improved level will require road sector expenditures to increase much more. When viewed as a benefit charge, there would seem to be a reasonable argument for a significant increase in the effective rate of tax on motor vehicles. However, the present token and registration taxes do not allocate burdens according to the amount of road *use*, which makes them an imperfect benefit levy.

Would an increase in motor vehicle taxes above present levels impose an inordinately heavy burden on tax payers? Some statistics based on the present rate and base structure, and an illustration, might give an idea of effective rates. (See Table 23 for NWFP and Table 24 for Punjab). Suppose an automobile costs Rs 1.2 million. The annual (token) tax would be Rs 2000. The one time registration fee would be 2 percent of the value of the vehicle (Rs. 24,000). If this registration fee is capitalized over a 10 year life of the car, a combined annual tax of Rs 4,400 is implied for a new car (rows 1-3). This amount would be equivalent to 9 percent of average per capita income in Punjab and 13 percent in NWFP for this type of vehicle.

While this comparison to average income would indicate a very high tax burden, it should be noted that motor vehicle ownership is concentrated in higher income brackets, hence the effective tax rates on owners will be much lower. (Also the effective tax rate for smaller and less expensive vehicles would be lower). From The Pakistan Household Income and Expenditure Survey, we can note that the average level of income in the top two deciles is 135 percent above the provincial average in Punjab and 134 percent in NWFP. Further evidence of this concentration of ownership might be drawn from the Pakistan Household Income and Expenditure Survey. The richest ten percent of households in Punjab earn 31 percent of all income in the province and account for 68 percent of expenditures on motor fuels. The proportions in NWFP are 21 percent and 75 percent, respectively. Given the overall low level of taxation at the provincial and central government level in Pakistan, one might argue that this level of taxation does not impose a heavy marginal burden on higher income families. There would appear to be room for an increase.[59]

A second problem is that there are reported (by government officials in both province) to be significant leakages from the tax base. With respect to the registration charge, some owners just do not pay the tax. Some register in other provinces (which is allowed under this tax).[60] Some use fake documents to underdeclare taxable value. In addition, significant exemptions are a problem for NWFP. A 2004 study (Malik, 2004), sponsored by NWFP, estimated that less than 50 percent of the vehicle traffic in NWFP was registered in the province. Independent estimates reported in this same study are that motor vehicle tax collections are equal to only about 50 percent of tax potential. Khan (2004) also notes the problem associated with a large number of vehicles brought into the

[59] We have also calculated the tax burden for the purchase of a used vehicle (shown in Tables 23 and 24), using the same method. The results under the present tax regime show the tax burden to be Rs 3000 vs. Rs 4400 owing to the lower registration tax.

[60] It is reported that many commercial vehicles are registered in Balochistan where the tax rate is lower, but operate primarily in NWFP.

country without payment of custom duty. He estimates about 20,000 such vehicles in FATA/PATA areas in NWFP, of which less than half are registered.

There are other administration problems. The annual (token) tax for private cars is paid at the post office. Because there is not good coordination between the post office and the excise tax department, record keeping on compliance with motor vehicle taxes is not very good. Commercial vehicles pay at the district ETD offices, where recordkeeping is thought to be better. The MV tax payment records are not computerized. All of this suggests some unfairness in the levy of motor vehicle taxes. Some pay it fully, while some are outside the tax net. This differential taxation erodes taxpayer confidence and further stiffens resistance to tax increases. It also implies a loss of revenues, but there are no good data available to make a reliable estimate.

Reform Options

In considering reform options, the first order of business is for the provinces to think through their rationale for the taxation of motor vehicles. What goals should be accomplished with the motor vehicle tax regime, e.g., should it be a tax levied according to ability to pay (automobile ownership), a tax to cover the cost of roadway use, or a tax to reimburse the general population for the congestion and pollution generated by motor vehicles? Then the constraints must be determined. Will reform be limited to a restructuring of the registration and token taxes, or might a tax on motor fuels be considered? Once these basic questions are answered, both the restructuring and the revenue yield issues can be addressed.

Increased emphasis on the taxation of motor vehicles would seem a good reform option for Punjab and NWFP. The base, the number and value of motor vehicles, is growing. A properly structured tax regime for motor vehicles could provide a needed boost to the revenue elasticity of the tax system. Heavier taxes on motor vehicle use can (potentially) address two other needs: (a) to act as a benefit charge on road users that can partially cover the cost of road construction and maintenance, and (b) to compensate society for the external costs of motor vehicle use (i.e., pollution and congestion). The present system does not appear to match up well with any of these goals.

The most difficult question is how to change the revenue structure so as to hit the collection target and achieve the other goals discussed above. One approach is to leave the basic structure in tact but to iron out some of the problems with the component registration and token taxes. The alternative, a *comprehensive* reform, would change the basic structure of motor vehicle taxes, perhaps including or adding a tax on motor fuels. The view here is that the provincial governments would be best served by moving toward a comprehensive reform of the taxation of motor vehicles. Note, however, that comprehensive reforms always involve more risk. We also present the components of a piecemeal reform

Piecemeal Reforms. A first reform target under a piecemeal correction would be the registration tax. In effect, the registration charge is an ad valorem sales tax on purchases of new or imported motor vehicles. It also might be thought of as an entry tax, i.e., as a kind of onetime payment for the privilege of using provincial roads. Certainly it fails this test of a privilege tax because vehicle owners may choose any province as the place of registration irrespective of how much they use the road network in each province. In fact, if the registration tax were to be thought of as a privilege tax for the use of provincial roads, it would be more appropriate as a federal government tax. Therefore, one reform option would be to transfer the registration tax to the central government, and then return collections to the provinces on a formula basis (perhaps according to provincial road mileage). But in its present form, the registration charge is an important provincial tax, and surely it would not be given up quietly. In many countries, such a proposal also would cause a concern that the revenue sharing would not make its way back to the subnational governments. There may be better alternatives.

If the registration tax is to be retained by provinces, an alternate proposal for reform might be considered:

- A residence requirement should be imposed, with enforcement by provincial number plates and windscreen stickers. If the registration charge is a price for the use of provincial roads, why not require registration in the province of residence? There are problems with this option. It will be administratively difficult, as compliance with the residence requirement will need to be enforced. There also is the special problem of imposing a residence requirement on commercial vehicles that operate across province boundaries. Finally, the federal government may have a concern about elimination of the registration tax because of the presumptive levy that is piggybacked on to this collection. These are difficult, but manageable problems.[61]

- The registration tax rate could be doubled for each class of motor vehicle, and an increase in revenue yield of about Rs 1782 million might be expected (38 percent over the 2006-2007 revised estimates).[62] The effective rate on a "normal" automobile would rise from 1 or 2 percent of value to 2 or 4 percent. While this does not seem an inordinately large increase, at least for more expensive vehicles, it comes on top of a number of other taxes on new car purchases. These include collection of a presumptive income tax for the federal government. There may be stiff

[61] The kind of administrative changes needed to implement a registration requirement are outlined In Government of Punjab (2007c). These proposals have been drawn up by the ADB-financed Punjab Public Resource Management Program.

[62] This estimate is made as follows. We double the revenue from the registration fee and add it to the token tax collection. The new yield would be Rs 6,446 million, assuming there is no change in the token tax or in the rate of compliance.

political resistance to increases in the registration tax.

The second reform target under a piecemeal program is the token tax. The goal of the annual (token) tax is to charge for the use of roadways in the province. It is collected annually from all registered vehicles, and it might be thought of as a user charge. The token tax fails the test of a good user charge because the amount of the tax does not vary with motor vehicle use. Because it is a flat charge per type of vehicle, it does not discriminate according to miles driven (though it does levy a higher tax on heavier vehicles). Some have speculated about the possibility of simply increasing the tax rate on the present levy. Others have proposed that it be converted to a one-time entry fee, much like the present registration charge (Government of Punjab, 2007c). We can find no detailed analysis of either option, but note that neither proposal would link tax burdens to road use.

A piecemeal reform of the token tax could involve a rate increase, simply as a revenue measure. One approach would be to hold the specific rate constant in real terms by adjusting it for the rate of inflation since 2003. If this were done, the estimated increase in revenue yield would be Rs 3.9 billion in Punjab and Rs 1 billion in NWFP. The increase for the entire period would be 94 and 149 percent respectively. The tax on motor vehicles as a share of GDP would rise from 0.094 percent to 0.15 percent in Punjab, and from 0.093 percent to 0.19 percent in NWFP.

A supporting administrative reform (for both the token tax and the registration charge) is to computerize the records to allow easier tracking of registrations and comparisons with other information. There is much to recommend automation, e.g., those with tax liability can be tracked and enforcement can become more efficient, a reliable defaulter list can be generated, the work of the "spot check" squads can become more efficient, the impact of tax policy changes can be better estimated, and revenue projections for budget purposes can become more accurate. In fact, such an automated system is now being developed in Punjab, but is still in the pilot stage.[63] A related improvement has to do with human resources. The collection rate could be strengthened if more manpower were available to enforce the taxes (Khan, 2004).. This could be assisted by windscreen or number plate certificates that would enable easier detection of nonpayment. Still, these administrative improvements will fall well short of objectives if there is no residence requirement for registration, because leakages from the taxed base will continue.

Comprehensive Reform of the Existing Structure. A comprehensive reform of the present registration and token tax could call for adoption of a unified tax on motor vehicles, levied as an annual fee based on vehicle type (a rough proxy for engine capacity). This new, unified tax would replace the present token tax and registration fee. All motor vehicles could be grouped into three classes, and each would be subjected to a specific rate, as shown in Tables 25 and 26. The specific rates were chosen to hit a revenue target equal to the amount required to match the present level of provincial roadway expenditures.[64] This reform proposal is mindful of the objectives of making the system as simple as possible in order to ease the administrative burdens of assessment and collection.[65]

[63] For a more detailed discussion, see Government of Punjab (2007e).

[64] Many other rate structures would satisfy this objective.

[65] The coverage of each rate class will be determined by each province, and probably will be based mostly on distributional considerations. The rate classes likely will differ from province to province. Our proposed rate structure, shown in Tables 25 and 26, is meant only to be illustrative.

The proposal made here holds to a specific rate structure (vs. ad valorem) in order to protect the tax administration from complications associated with valuation. One problem with this approach is that it provides no built-in revenue growth. To address this problem, we propose consideration of an indexing of the specific rates to the general rate of inflation.[66]

The proposed revenue target in Punjab would be Rs 6.3 billion, which is equivalent to roadway expenditure in fiscal year ending June 2006. This would be an increase of about 50 percent over the present level of motor vehicle taxes collected. This target could be reached with the rate structure described in Table 25.

The proposed rate structure presented in Tables 25 and 26 also shows the results, by vehicle type, of indexing the tax rate by 7 percent. In the year 1999-2000, a seven percent indexing would have led to a revenue-income elasticity of 1.86 in Punjab. This compares with an actual elasticity of 1.18. With indexation alone there is a revenue gain of Rs 4.3 billion (28 percent) over six years in Punjab (Table 25).

We have analyzed the same reform package for NWFP (Table 26). The revenue target in NWFP is Rs 1.284 billion, similarly based on roadway expenditures. This would be a 90 percent increase over the 2006 motor vehicle tax collection level of Rs 677 million. The three rate classes and revenue estimates are shown in Table 26. The inflation indexing is similarly shown in Table 27. For NWFP, the gain from indexing is Rs 517 million (17 percent). In NWFP the elasticity with and without indexation is 0.53 because the increase in registered vehicles is small.

---

66 An alternative index would be the percent increase in provincial government roadway expenditures, with a one year lag.

From a revenue perspective, the results are impressive. In the initial year of the reform, motor vehicle revenues would increase by about 50 percent in Punjab and 90 percent in NWFP. Would this lead to an inordinately heavy increase in tax burden? Certainly there would be a noticeable increase. The tax on motor vehicles as a share of GDP would increase from 0.09 percent to 0.15 percent in Punjab, and from 0.09 percent to 0.19 percent in NWFP, respectively. Over 60 percent of the burden however, would fall on higher income vehicles owners.

This increase in tax burden also can be explored with the simple numerical example reported in Tables 23 and 24. Again let us take the case of a new sedan that might sell for about Rs 1.2 million. For the existing tax regime, let us assume that the one-time registration tax is fully borne by the consumer over a ten year life of the vehicle. The burden would be Rs 2,400 per year. After accounting for the token tax of Rs 2000, the total annual tax equivalent is Rs 4,400. As a percent of the "annual consumption" of the car[67], the combined annual the tax rate would be the equivalent of 3.7 percent (see Table 23 and 24). If we retain the registration tax and levy the proposed Rs 5000 annual road use charge, the tax burden would increase by Rs 3000 per year in both provinces (rows 4 and 5 of Tables 23, 24). If we abolish the registration tax but increase the annual tax to Rs 5000, the tax burden increases by Rs 600 or 0.5 percent of the "annual consumption" of the automobile. For a new car, the tax burden increases from 3.7 percent of "annual consumption" to 4.2 percent. In case of a used car the tax burden increases from 2.2 percent of the "annual consumption" of the car to 5.0 percent. In neither case does the tax burden seem unmanageable given the higher income level of most owners of

[67] We depreciate the car on a straight line basis, assuming a 10 year life. The annual "consumption" of car is calculated by dividing the total price by 10.

motor vehicles.[68] This situation as regards the tax burden on smaller cars and vehicles used in public transport requires separate and more detailed study.

Provincial officials point out that it is politically difficult to raise taxes on motor vehicles, and that there would be strong taxpayer resistance to doing this. In fact, provincial officials in both provinces make the same arguments about any tax increases, and have shied away from own source revenue enhancements for several years. It should be noted that one feature of motor vehicle taxation in Pakistan makes rate increases especially difficult – the federal government's use of motor vehicle registration as an event where a presumptive income tax on individuals is imposed. This is viewed by the province as limiting its fiscal space in that it stiffens taxpayer resistance to any proposed increases in provincial motor vehicle taxes and fees.[69]

Motor fuel tax. A more far-reaching comprehensive reform would be the adoption of a provincial motor fuel tax. While the token tax is meant to be a user charge for road use, it does not reflect the amount of road use. A tax on motor fuels would better serve this objective and would mobilize significant revenues. Motor Fuels are taxed at the central government level in virtually all countries. In the United States, the state governments have autonomy in setting the rate of tax on gasoline. The levy of motor fuel taxes by subnational governments in developing economies is not universally practiced, but is certainly not unknown. See Box 6 for a note on the cases of Brazil, India and Indonesia.

---

[68] The Gini Coefficient was 0.4129 for Pakistan in 2001-2002 and the share of the poorest 20 percent of the population was 6.66 percent compared with 48.08 percent for the richest 20 percent (Kemal, A.R. 2006, Tables 1 and 2).

[69] Some have also cited toll plaza charges as an encroachment under the notion that highway tolls are a user charge similar to the motor vehicles tax (user charge for roads). However, the federal tolls are levied only on federal highways, hence there would seem to be no issue of encrochment.

In fact, a motor fuels levy has been proposed and evaluated as a revenue source for provincial governments in Pakistan. One fiscal analysis of Punjab Province recommended the adoption of a tax on motor fuels, on grounds of revenue productivity, ease of collection and the benefit charge aspect (Government of Punjab, 2007c). The report cautioned, however, that the tax should be phased in rather than implemented fully in one year, and that it should be proposed as a user charge to protect its legal status.

Though there is much detail to be worked out, a provincial tax on motor fuels would seem to be a workable proposition. The following is a general outline of a proposal for a provincial motor fuels tax (motor fuels charge).

1. The tax would be levied on an ad valorem basis with the rate set at the discretion of the province. This means that fuel prices would vary from province to province.

2. The tax rate also could vary by type of fuel, at the discretion of the provincial government.

3. The tax would be collected by the oil marketing companies based on fuel sold in the province. The federal government would then transfer the revenues to the provincial treasury.

The revenue yield from the tax would depend on the target that the provincial government was trying to hit, and subsequently on the rate that it chose. As may be seen from the calculations presented in Table 28, revenues actually raised from motor vehicle taxes in 2005-2006 could be covered by a specific tax rate of Rs 0.52 per litre of diesel and Rs 1.00 per litre of motor fuel in Punjab, and a tax rate of Rs 0.33 per litre of diesel and Rs 0.75 per litre of motor fuel in NWFP. The necessary ad valorem rates would have been 1.47 percent in Punjab and 0.93 percent in NWFP. The method used to make these estimates is described in Appendix D.

Box 6. Subnational Government Taxation of Motor Fuels in Brazil, India, and Indonesia

Three examples of motor fuel taxation in developing countries, which might be instructive for Pakistan, are the cases of Brazil, India and Indonesia.

In Brazil, intrastate sales of fuel are taxed under the state government value added tax. The tax is levied on a destination basis and the revenues are retained by the collecting state. The tax rate is set by each state and may vary significantly. “For gasoline, the average national burden is 46.9 percent, with variations as low as 41.1 percent in the state of Mato Grosso and as high as 50.8 percent in the state of Rio de Janeiro” (Soares de Silva, 2006, p293).

Gasoline taxes are not in the State government VAT in India, but states can tax gasoline under a separate sales tax. State governments are free to set the rate above a centrally prescribed minimum of 20 percent, with the result that the rate varies between 20 and 28 percent. The tax is collected directly from the gasoline distribution company. In most Indian states the gasoline tax is a major revenue source, sometimes accounting for more than one-half of total revenues.

In Indonesia, the motor fuel tax is administered and collected by the province. The tax rate is set by the central government and therefore is uniform across the country. The provincial government is required to allocate 70 percent of the revenue collections to the districts (local governments) on an equalizing basis.

There would be numerous impediments to the adoption of a provincial motor fuel tax. The following are notable questions and some possible responses.

- *The federal government is committed to a uniform national price for motor fuels. This proposal would lead to a variable price if provinces chose different tax rates.* In actuality the proposed fuel tax is a user charge for provincial services. Since the cost and quality of provincial road services varies across provinces, differences in the fuel tax rate are justified. Such variations exist in both India and Brazil

- *Some provinces might intentionally set their fuel tax rate low to attract consumers.* This is possible, but these provinces would lose revenue if they chose a lower rate. The federal government might provide an incentive for levying this charge at higher rates by reducing the NFC award by the estimated amount of fuel tax that could have been raised at “normal” rates, or by mandating a minimum tax rate as is done in India.

- *Would certain uses of petroleum be exempt from the tax, and would certain uses be taxed at a different rate than others?* In principle, exemptions and preferential rates might be justified based on use by low income households. Most often mentioned in this regard are home heating and cooking, public transport and agriculture.[70] In practice, such preferential treatment is not feasible on administrative grounds, and would open the door to abuse (as has happened in the case of other provincial level taxes). The best route is to have no preferential treatments, with the possible exception of kerosene for domestic use. Utility production and pricing decisions should be taken in recognition of the market price of petroleum (including taxes) as should public transport and agricultural use. If it is desired to lower the tax burden on low income households, there are better ways to do this than with price reductions for petroleum products. While this principle seems an appropriate basis for structuring a tax on petroleum products, the present analysis is focused only on motor fuels.

- <u>Commercial vehicles (e.g., trucks) may buy gas in one province but use the roadways in another, thereby compromising the benefit justification of a provincial motor fuel tax.</u> To some extent this will happen. The use of an apportionment formula, as is done in the US (McLure, et. al. 2007), is not administratively feasible in Pakistan. To some extent the effect of this leakage will be to narrow the inter-provincial differences in motor fuel tax differentials.

- <u>*How to prevent tax base erosion due to smuggling? There is a particular concern from Balochistan that they will lose revenue from reduced motor vehicle fees and not recapture this revenue from motor fuel taxes because of smuggled petroleum from Iran.*</u> The proposed size of the provincial fuel charge might not be great enough to significantly increase smuggling. In any case, the first line of defense against fuel smuggling should be provincial and federal controls.

Clearly there would be some political opposition to a motor fuels tax from provincial governments, and from the federal government. Some elected officials would be concerned about the political fallout. The impact on gasoline and diesel prices at the pump, and possibly on the price of power, would be unpopular with voters. Some federal government officials might see a provincial motor fuels tax as an encroachment on the federal tax base, and a bothersome influence to be reckoned with in controlling national

[70] In 2006-2007, the percent distribution of consumption was as follows: motor fuel (6.8), Kerosene (0.01), JP-1 (0.03), Diesel (43.0), LDO (0.01), Fuel Oil (43.9) and other (0.01).

fuel prices.

Some provincial government officers might worry about how their province would fare in the swap from the present system of registration tax – token tax to a motor fuels tax. With respect to the latter, NWFP officials do not see this swap as being to their advantage because the road network in the Province is small. In fact, the revenue swap issue need not be a concern. Given the low level of roadway expenditures and the size of the general revenue gap, provinces might be allowed to adopt the user charge based on motor fuels and retain the unified annual tax as outlined above. The former would be a charge for road use, while the latter would be a privilege tax (license) for operating a motor vehicle in the province.

There is another version of the motor fuel tax proposal that gets around some of the problematic issues. It could be assessed as a federal tax with the revenues distributed among provinces on an origin basis, such as is done in Indonesia. This gets around the problem of non-uniform fuel prices and (arguably) the challenges to the legality of this charge. However, it does so at a serious cost in that this becomes an intergovernmental transfer instead of a local levy. As such, the reform would not be in step with the goals of fiscal decentralization.

Finally, there is the question of the equity of a user charge on motor fuels. Suppose the goal is to distribute the burden of this tax on motor vehicle use according to the benefits received. One might say that these benefits are proportional to the amount spent on motor fuel consumption, or alternatively, the benefits could be seen as proportional to the consumption of all transport services. If we use motor fuel consumption as an indicator of benefits-received, we can see that the distribution of fuel tax payments is skewed heavily to the higher income brackets. For example in NWFP, the top 20 percent of households earn 44 percent of income and account for 87 percent of expenditures on motor fuels. (See Table 29). Roughly the same pattern holds in the case of Punjab. (See Table 30). The implication of this pattern is that a motor fuel benefit charge would fall most heavily on higher income households.

The benefits received from roadway expenditures might be seen as accruing to all consumers. In this case, the same progressive distribution of burdens might result. (Tables 29 and 30). However, the pattern of burdens in this case is less heavily skewed to the higher income families.

Tax on Professions, Trades, and Callings (“Profession Tax”)

The revenue performance of the professions tax is described in Table 31. In NWFP, the professions tax raised Rs 49 million in 2004-05 and is estimated to raise Rs 70 million in 2005-06. Due to a rate increase, there has been an uptick in revenues since 2004. In both provinces, the tax accounts for only a minimal share of the budget: 1.6 percent of own source revenues in NWFP and 0.80 percent in Punjab. Real per capita collections have risen slightly in NWFP over this study period, but collections in Punjab have stagnated. The tax raised Rs 97 million in Punjab in 2004-2005 and a revenue target for 2005-06 was set at Rs 225.

Professions Tax Overview

The professions tax has its roots in a central government levy on “every person engaged in import and export trade and who held a license” (Malik, 2004, p. 37). At that time, the tax was levied on the *value* of goods imported or exported. In both provinces, the current version of the professions tax is a flat charge (specific tax) for designated "professions." In 1973, the tax was assigned to the provincial governments.

The tax is levied as a flat amount but this "rate" varies by type of profession. There is a rather loose definition of the term "profession" and each province has the authority to develop their own detailed list of professions. However, the list of professions is very similar between NWFP and Punjab. As noted below, there is little correspondence between the flat tax amount that is applied and the potential income received by various professionals, i.e., higher paid professions are not systematically taxed at higher effective tax rates, although there are differences in statutory rates.

The professions tax has more the feel of a user charge on businesses (corporate and unincorporated) than an income tax. The Punjab Resource Management Program report (Government of Punjab, 2007c) views the professions tax as a user fee, but Malik (2004) analyzes it as an income tax in NWFP. Both studies report dismally low levels of collection and compliance. There are reports that the local governments insist on collecting the tax, increasing confusion about the collection procedure (World Bank, 2005a). A large proportion of the tax is paid by salaried government workers.[71] Many observers see administrative difficulties that may be impossible to overcome in the short or medium term unless the structure of the tax is changed.

Indian states have similar experiences with the professions tax. Orissa State imposes a tax on professions, trades and callings that is effectively levied as a payroll tax on wage earners, and is withheld by employers (Orissa State Government, of 2000). In

[71] Provincial officials report that 80 percent or more of the tax is paid by government employees. We do not have data to verify this claim.

the state of West Bengal, the tax is also levied via employers as a withheld tax or directly on the self-employed (State of West Bengal, 2008). Employers obtain a 'Certificate of Registration' and self-employed obtain a "Certificate of Enrollment" as a condition of compliance with the tax. In Maharastra State, low levels of compliance led to a tax amnesty in 2007. In most examples we could identify in India, the level of revenue collection is small. For example, in West Bengal, the tax on professions, trades and callings generates approximately 1.5 percent of the total tax revenue for the state (30 rupees per capita in 2004-05). The city of Dhaka also levies a professions tax, with similar results.

Tax Structure

In Punjab, there are six general categories of "profession", with a fixed amount of tax assessed to each category. Each category has multiple subcategories so that in total, 47 "professions" are taxed. NWFP lists 11 main categories. As seen in Table 32, the specific rates range from Rs 200 to Rs 100,000 in Punjab and from Rs 100 to Rs 50,000 in NWFP. The tax rates were last changed in 2002-03 in both provinces. Most taxpayers who are subject to the professions tax are also subject to the federal income tax.

The tax is structured so that it may fall on the corporate entity ("companies registered"), on self-employed professionals (doctors, lawyers, marriage hall entrepreneurs, etc.), and on employees (presumably in the formal sector). The latter category is taxed at a very low rate. This definition of the base gives the professions tax some characteristics of a business license fee for companies and self-employed, and an additional wage tax for individuals employed in these sectors (categories 7 and 9 in Table

32). If one accepts that the tax is a fee levied on business for services provided by the provincial government, it is not at all obvious that there should be an additional fee levied on individuals employed in these businesses. Instead of having an additional category of taxpayers and an additional tax administration, it might be preferable to roll the tax on workers in the formal sector into the amount that is levied directly on the business.

It is no easy task to determine the revenue potential of the professions tax in either province. To do this, one would have to know the number employed in each taxed category. The Pakistan Labor Force Survey (Federal Bureau of Statistics, 2005b and 2006b) offers some detail on the level of employment by occupation, but it is difficult from that survey to determine who is self-employed versus who is employed by a company, and it is difficult to determine the level of sales/exports for the companies and self-employed businesses, etc. We make an estimate of the revenue potential for the following occupational categories: Professionals, Technicians and Associate Professionals, and Legislators, Senior Officials and Managers. For the tax rate, we use a very rough (and conservative) average of Rs 500 per employed person. Excluding any tax on companies, this analysis demonstrates the revenue potential of the tax—Rs 1.3 billion in NWFP and Rs 6.3 billion in Punjab (Table 33). In both cases, the analysis suggests that current collections are less than 4 percent of revenue potential.[72]

An analysis of Lahore data can give some indication of the relative importance of the different categories of profession in current revenue collection. Based on data from the Punjab Excise and Taxation Department for Lahore District, 2006-07, most of the revenue from the tax (49.2 percent) comes from category 5 in Table 32 (persons engaged

[72] Malik (2004) finds similar results.

in a profession, trade, calling or other employment, who are subject to the income tax). The next largest revenue producers for Lahore are: companies with paid up capital exceeding Rs 200 million (10.9 percent), real estate agents within metro and municipal limits (7.3 percent), companies with paid up capital exceeding Rs 50 million (6.9 percent), and companies with paid up capital exceeding Rs 5 million (4.1 percent). This analysis demonstrates that nearly 80 percent of the revenue take is from employed individuals (some of whom are employed by "paying" companies) and directly from companies.

Administration

Administration of the tax is very weak in both provinces. Provincial officials confirm our belief that there is much higher revenue potential than is currently exploited. The excise tax departments in both provinces build their tax rolls by using income tax statistics, limited company directories, professional association lists, etc. In Punjab, officials attempt to obtain information to identify professionals from the chamber of commerce and from professional associations. In Punjab, about 35 lower level officers are working on assessment and collection of this tax (but they also work on other taxes). In Lahore district alone, there are over 250,000 taxpayers on the tax rolls. However there are no designated "professions tax" officers. Assessments and demand notices are carried out by the excise tax department. The process is very labor intensive. This imbalance between officers and clients suggests the root of the administrative problem and exacerbates the compliance problem.

In NWFP, an initial demand notice ("notification bill") is sent to individuals and it contains their professions tax liability. According to officials in NWFP, if the notice is ignored, the penalty is a doubling of the tax. Still, the reported collection rate is very low. It is estimated by officials to be on the order of 30 to 40 percent. There is little manpower designated for administering the tax in NWFP. For example, in Peshawar district there are only 7 inspectors assigned to cover the tax on professions. Khan (2004) notes that Peshawar's population is about 1.5 million, and that there are over 50,000 shops and 3000 doctors. But he reports that the relevant records on professions tax shows that only a fraction of these "potentials" are in the base. His calculation is that each inspector has the impossible task of supervising about 10,000 tax units.

In some cases payment of the tax may be made by a principal on behalf of a group of taxpayers, e.g., unions on behalf of particular groups of traders, or employers on behalf of employees. Malik (2004) reports that confusion between the provincial government and local governments regarding collection authority may decrease compliance. According to Malik (2004, p38), local governments "insist on collecting this tax" even though it is not a local government tax.

Problems and Issues

The professions tax is an attempt to reach a part of the personal income base in the province. However, the tax is levied at such low rates that it would likely fail on the revenue raising objective, even if administration were efficient. To give an idea of how low effective tax rates can be, it was noted (by ETD officials) that a physician can make Rs 20,000 per day, but pay only Rs 1,000 per year in professions tax. In such a case, the tax is little more than a nuisance.

Another problem is the uncertain justification for levying this tax. The professions tax might be justified on the basis of benefits received from provincial government services, i.e., it is a tax paid by a business, employee or self-employed person for the privilege of doing business in the province. Or, it might be an attempt to tax higher paid professions at higher rates. However, the variable rate of tax across professions suggests neither a benefits rationale or an ability to pay element. A benefits tax approach would suggest transforming the professions tax into a business levy, or a piggyback on the federal corporate income tax. As a general income tax, the professions tax might be replaced by a more transparent income tax.

Other features of the tax structure are just unclear. For example, some professionals are taxed twice—once through an official employer and then again as a professional employee. This practice is suggestive of a general benefits tax such as an income tax. In short, it is not easy to infer the objectives of the tax from its structure.

As a stand-alone tax, the professions tax would be hard to collect in the best of circumstances. Professionals not tied to an incorporated business are notoriously difficult to find for purposes of tax administration. The sheer number of professionals (2.7 million in NWFP and 12.5 million in Punjab) would make efficient administration of the tax a very costly proposition. Many states in India require a registration process for the tax on professions. This process may be effective if the registration is required for other important business transactions or tax payments. These might include contracting with the federal government, customs procedures, workers welfare and workers profit participation funds (these would be applicable to companies only), motor vehicle registration, etc. The crux of the problem is the identification of eligible taxpayers, and it is no easy task to identify all potential taxpayers. Khan (2004), in his analysis of tax administration in NWFP calls for a detailed survey to identify businesses and individuals liable for the tax on professions. An integrated data base that captures professional registration, motor vehicle registration, government contracting, and other activities would go a long way toward resolving the administration problems of the professions tax.

Most would point to weak revenue performance as the major failure of this tax. As was discussed above, collections under the current system are estimated at less than 10 percent of what they would be if the collection rate was 100 percent.

Reform Options

ETD officers in Punjab believe that the tax, even as currently structured, could raise up to 3 times more in revenue if there was more focus on its collection. This seems a feasible if not conservative target. Khan (2004) has the same view for NWFP, and argues that the tax could be significantly more productive.

There are several ways to improve the practice of taxing professionals at the Provincial level. We would suggest five reform options. One is to take the view that the professions tax is more a nuisance than a productive levy, so it should be abolished as a provincial tax. It would be better to invest the administrative resources used in potentially more productive areas of revenue mobilization. Under this scenario, the professions tax might be turned over to the TMAs or union councils and perhaps be treated as a kind of general charge for the privilege of doing business in the local area. However, this transfers the difficulties in collection to a lower level of government if the data base and administrative capacity for collection are not enhanced.

The second route is to take the view that there is need for a more broad-based provincial tax to reach the growing fiscal capacity, particularly in urban areas. The professions tax could be converted into a piggyback levy on the federal income tax, (on individuals and/or corporations) with collection by the federal government. Provincial governments could choose a piggyback rate within a prescribed range and the federal government could collect the income tax as it does now[73]. For example, a three percent piggyback on collections for individuals and self employed in Punjab could yield Rs 487 million per year and Rs 83 million in NWFP—both substantially more than current collections.[74]

Objections to this option are that it could be struck down as a "double tax" particularly on workers in complaint enterprises, and unconstitutional. Also, increasing the overall income tax rate, even by this small amount, might reduce compliance. Another objection would be that under this scheme the self-employed would escape the local tax net altogether since they often evade the federal income tax. This is a valid objection because the self-employed are notoriously hard to tax. To deal with this, the piggyback income tax might be supplemented by a presumptive income tax administered by the province. Even if the presumptive tax on the self-employed was not effective, it would be no worse than the present professions tax administration where 80 percent of collections come from those already in the income tax base. This option is included in the

---

[73] For purposes of illustration, this piggback is for individuals and self-employed only. A similar change could be done for companies.

[74] We used data on federal income tax collections to develop this estimate. We have company income tax collections by province but we do not have individual salaried or non-salaried collections by province. We calculated the share of company receipts to total receipts by province, and assumed that the same share would hold for salaried and non-salaried individual collections. For NWFP this share is 3.7 percent and in Punjab it is 21.5 percent.

policy matrix and it is the opinion of the authors that this option has the most potential given the current state of administrative resources.

Alternatively, the tax could be piggybacked on the gross receipts of companies and self-employed. A gross receipts tax (or gross turnover) would be more simple. Gross-receipts taxes, however, can be very distorting in nature and could increase the tax burden of compliant start-up businesses by a substantial amount and possibly lead to cascading in output prices. A number of transition countries have chosen this route with limited success. Examples are Albania, Azerbaijan, Kazakhstan, Kyrgyzstan, Ukraine, and Serbia (Engelschalk, 2004).

A third reform route would convert the current professions tax into a sales tax on services. Many professionals provide some type of service although not all are covered under the current tax on services. If option 2 (piggyback on the income tax) is not a viable option, replacing the professional tax with an expanded provincial sales tax on selected services is an alternative. A drawback with this option is that services delivered by a firm or an individual whose headquarters office was in a different province than the where the service was delivered would raise some controversy about where the tax should be credited. Unfortunately, we cannot make a revenue estimate for this option with data that are currently available. Services are difficult to tax, but because of the existing federal sales tax infrastructure, the collection rate of a sales tax on services probably would be higher than that for the current professions tax.

A fourth option would retain the tax, but adjust the specific rates to be higher and more in line with expected levels of income for the various professionals, and to eliminate the tax on salaried individuals who are employed in companies. A matrix of illustrative rates is included in Appendix F, as suggested by Ahmad Khan in a review of the professions tax. However, without a significant improvement in administration, such reform options are unlikely to yield much in additional revenues. The necessary first step here is a survey to enumerate all of those professions liable for the tax, and an automation of this data base. Because such a data base does not presently exist, we cannot make an estimate of the revenue impacts of increasing the nominal rates. While this option has its merits—it is an income-based tax that has its roots in the current professions tax -- the provincial authorities would have to commit increased resources to administer the tax. Changes would need to encompass training, performance evaluation, and data base development in addition to other considerations.

A fifth option would be to restructure the tax as a benefits charge for services provided by the provincial government (e.g., road infrastructure, certain utilities). In this case, the tax might be levied on businesses and not necessarily on employees of taxpaying entities (although there may be a similar benefits argument for individuals). A provincial level business registration fee (flat fee or progressive fee based on type or size of business) could be assessed annually as a presumptive tax. Here again there are difficulties of compliance, record keeping and administration that may dampen revenue significantly.

Land Revenues: Land and Property Transfer Taxes

The Board of Revenue (BOR) is responsible for assessing and collecting rural land taxes and charges, the agricultural income tax, and all property transfer taxes. The tax administration set up is the same in both NWFP and Punjab. Most revenues collected by the BOR come from taxes on property transfers in urban and rural areas. There are also a number of fees/charges that add up to a significant amount of revenue. There is no annual tax on land that is collected by the Board of Revenue in Punjab.[75] There is however, an annual tax on agricultural land in NWFP. In both provinces, there is an additional tax on property transfers that is collected by the local government (and is not covered in this report). The following table shows the tax rates for the four different taxes levied on a property transfer:

(Rates as percent of value)

Tax	NWFP	Punjab
Stamp Duty (Province)	3	2
Registration or Mutation Fee (Province)	2	1
Capital Value Tax (Federal)	2	2
Tax on Transfer (Local)	0.5	1
Total	**7.5**	**6**

Revenue Performance

Board of Revenue collections of land revenues in Punjab and NWFP (shown in Tables 34-36) account for less than one percent of GDP in both provinces, and are much lower in NWFP than in Punjab. In light of the fact that agriculture accounts for about 27 percent of provincial GDP in Punjab and 30 percent in NWFP, this is a surprisingly low revenue share. Even when account is taken of the share of subsistence farming, the revenue contribution seems low.[76] Neither has the revenue trend been impressive (Table 35).

[75] The UIPT is collected by the Excise Tax Department.

[76] Another way to look at the revenue burden from land taxes is in terms of the tax per hectare of cultivated land. In the table below we show that Punjab taxes a hectare of cultivated land 2.6 times more heavily than does NWFP.

The level of collections of land revenues are shown by major type for Punjab in Table 36. The results of this disaggregation reveal that stamp duties, mostly collected from property transfers, are the major revenue component of taxes collected by the BOR. Taxes on property transfers also include a mutation fee or a registration fee. Liability for each of these taxes depends on the type of property being transferred, and to some extent on the choice made by the taxpayer.[77]

The total amount of revenue collected from each form of property transfer tax is reported in Table 37.[78] The stamp duty on property transfers yielded about Rs 7.8 billion in Punjab, i.e., about 20 percent of own source revenues in 2006-07. In recent years, the nominal tax rate has been lowered in an effort to increase compliance. (None of these tables reports collections of transfer tax by local governments, or the federal government capital value tax on property transfers.[79] Only provincial government revenues are shown in Tables 36 and 37).

Land taxes per hectare of cultivated land (2005-2006) (In rupees)

Taxes	Punjab	NWFP
Agriculture income tax	25.83	17.09
Registration fee	82.90	10.25
Land revenue	133.09	80.57
Stamp duty	229.90	73.24
Total	471.73	181.15

[77] For agricultural land, a person can choose to have the transaction recorded as a "mutation only" or a "registration" followed by a "mutation."

[78] The data reported in Tables 34-36 differ from that reported in Table 37. This is because the data sources differ and because of classification differences.

[79] Aggregate data on local government finances are not available for either province.

Mutations and Registrations

There are two forms of property transfer: "mutation" and registration (Box 7). A mutation involves a transfer of property when there is a record of ownership but not necessarily a deed. This is the form of transfer used in rural areas where much of the land has been inherited. Registration is used mostly in urban areas where in general there are no comprehensive records of ownership. Regular or organized land records do not exist in most urban areas. There are no patwaris for the urban areas and a mutation register is not maintained. Registration transfer is the only option for most urban purchasers. In other cases, where land records exist (e.g., rural land and in one part of Peshawar old city) registration is preferred because it gives a stronger title (since a registered deed has a presumption of truth attached to it under the evidence laws). Legally, the same presumption is attached to mutations, but due to deterioration of land records, the courts may call for additional evidence and do not always accept a certified mutation as a sufficient basis for establishing ownership.

Box 7. Mutations and Registrations

Mutation is applicable primarily to the transfer of agriculture land. For a mutation, the transfer is reported to the patwari who enters it in the mutations register where he notes the reference in the record-of-rights and the number of the parcel. The mutation is then certified in a public gathering by the Tehsildar when he visits the patwar circle. In general this happens once a month. Upon certification by the Tehsildar in the mutation register, the transfer becomes final. The patwari then makes a red ink entry in the records-of-rights register. This entry forms the basis of changes in the ownership column of this parcel of land when the next edition of the record-of-rights is prepared. The editions are prepared every four years. Mutations are carried out for all forms of transfer, including inheritance, sale or in compliance with a civil court decree. The tax treatment varies by type of transfer.

Registration, applies mostly to urban property, for which the records-of-rights do not exist. For registration, the transfer deed is prepared on a stamped paper and attested to by the registrar of properties. The registrar maintains a record of the deeds but there is no comprehensive record of properties in most urban areas. If a person wishes to carry out registration for agricultural land, he is allowed to do so as an additional step after the mutation.

Tax Base: Rural Properties. Technically, the base of the property transfer tax is the market value of the property transfer. In practice, it is not completely clear how the transfer is valued for purposes of tax. The process in rural areas in Punjab is described to be as follows: The buyer and seller make a declaration of the value. The Patwari (Box 8) is consulted about the "reasonableness" of this declaration. The law provides for a right of preemption, i.e., neighbors may buy the land for a price higher than the stated declaration. These checks, in theory, will lead to a proper self-declaration of land value. However, experience tells us that it cannot be assumed that preemption is costless, or that there will not be collusion among neighbors, therefore preemption may not be invoked in many cases.

Resort to the Patwari to check on the reasonableness of declared value is not likely to be effective for a number of reasons. One of these reasons is that the claims on the Patwari's time (e.g. court appearances) may preclude the possibility of his doing the necessary research. The result is that undervaluation is thought to be very common because the declared selling price is usually accepted as the base of taxation (Government of Punjab, 2007f).

The method used is somewhat different in NWFP. The base for the tax is not declared value but a notional value that is drawn from a table of estimated market values for lands in different locations. This table is certified by a committee. The committee is chaired by the collector and its membership includes the executive district officer of finance and the district officer of Works and Services. The latter will provide inputs on value-enhancing developments in different zones. In fact, the valuation table is an average of the declared values in the past year, for each type of land. A similar table is prepared in urban and rural districts. There is an ample number of transfers to calculate an average value. In Punjab the collector formulates a valuation table for urban areas only.

In neither province is there a sales ratio study to enable an estimate of undervaluation. Such studies usually require independent appraisals of market value. The only supporting evidence prepared for rural areas in Punjab (and for urban and rural areas in NWFP) is the *ausat yaksala* which is an average sales value for different types of land in a recent period. In both provinces, this document is prepared by the patwari. It is not thought to give a reliable estimate of full market value.

Tax Base: Urban Properties. A valuation table is used for land in urban areas in both provinces. The valuation tables are prepared by the district collector, who is head of the land revenue department. He is empowered by law to carry out any survey or adopt any means necessary to do the valuation.

In theory, these values are based on a combination of subjective, expert judgment and objective price information. They are updated regularly. In practice, the approach may be more ad hoc. In Punjab, the land values in the table are reported to be the same as those laid down in the (repealed) Wealth Tax Act of 1963. (Government of Punjab, 2007f). This suggests little by way of a regular updating. Moreover, the table does not include the value of structures.

Available evidence suggests that properties are undervalued, but there is no good evidence of the extent of this undervaluation. One (non-scientific) survey of 11 selected areas in Lahore district came to the conclusion that the assessment ratio against market value varied from 55 percent to 79 percent (Government of Punjab, 2007f). We can find no such evidence in rural areas. In neither province is there any coordination between the Board of Revenue in its land valuation process, and the ETD in its urban property tax valuation process. This would seem to be a missed opportunity.

Tax Rates. Property transfers are subject to an array of tax rates and special fees. A Rs 200 fee is applied to any mutation. Transfers by inheritance and those transferred under court decree pay only this amount. Otherwise, mutation transfers and registration transfers are subject to a 1 percent registration tax in Punjab and 2 percent in NWFP, and a 2 percent stamp duty on the value of the transfer in Punjab and 3 percent in NWFP.
A local transfer tax of one percent is collected separately by the TMA in Punjab. In NWFP the local transfer tax rate is 0.5 percent.[80] In addition, there is a 2 percent capital value tax levied by the central government.

Land Records. There are detailed records of land ownership, land characteristics and land use in the rural areas. They are maintained by the patwari. All districts in Punjab and most areas in NWFP have these records. Areas which have these records are called "settled".

[80] The local tax on transfer of property is collected by the TMA through private contractors. The TMAs award annual contracts based on a competitive bidding process. The reservation price that the TMA announces is generally a notional incremental increase in the previous year's price. They do not conduct valuation surveys or market research to compute a more realistic reservation price. The in-house expertise of TMAs is weak. They do not have staff expertise in property markets. The contractors assign their collection personnel to sit at the registrar's office. The registrar, following government instructions, will insist on seeing a receipt for payment of property transfer tax before he attests the registration deeds. The valuation of the property is however carried out by the registrar. He does this by reviewing the reported value of transaction. The contractor's representative at the point of collection does not have clear incentives to collect the full amount of revenue due to the municipality. If the parties offer to settle for a sufficiently low valuation resulting in a lower liability, they can still save money after paying the contractor. The contractor's representative collects the revenues and deposits the amount according to the payment schedule, not necessarily according to the payment received. The contract calls for a lump sum amount payable to the TMA.

Box 8. The Patwari

He is the junior most official of the BOR tax collection administration. He is underpaid, does not have any staff or transport and in many cases does not have a government-provided office. The bundle of registers he is required to maintain mostly is wrapped in the cadastral map or *latha*, when he needs to carry it around. In this sense he has a mobile office.

A patwari's importance belies his junior standing. He has numerous important duties. (1) He is the custodian of land records. In rural lands, and some urban areas, a presumption of truth is attached to the records of rights in the courts. Invoking these records, titles are determined. (2) The record-of-rights is updated every four years under the law. The patwari writes the record with his pen, specifying the titles, occupancy and other rights in land. The four yearly editions are maintained by him. (3) He keeps a 'Mutations Register', which is linked with the four yearly record-of-rights register. The process of mutation is initiated and completed with the patwari. He enters the details of property, records the transaction and upon attestation by a Revenue Officer, makes a cross entry in the record-of-rights register. (4) He assigns a value to the property when recording the transaction and determines the liability for taxes on property transfers. (5) The patwari maintains a Crop Register or *Khasra Girdawari*. In this register he records the results of his six monthly crop inspections for each parcel of land, also recording the ownership and occupancy. (6) For Valuation Tables prepared for any land-related taxes he provides the estimates—the *ausat yaksala*. (7) Estimates of crop yields, *jhar padawar*, are prepared with inputs from patwari. (8) He issues the ownership certificate, *fard malkiyat*, required for many basic citizenship documents and mortgage and banking requirements. (9) He certifies ownership for agriculture loans. (9) In many cases he issues a "no-dues certificate". (10) With the assistance of the village *lambardar,* he collects land related dues. (11) In cases of natural disaster, he is dispatched as the vanguard of assistance to assess damages and thereby recommend compensation. (12) A patwari prepares records and notifications for acquisition of land for government or large private projects, determines titles, prepares valuation estimates and certifies payment to owners. (13) Informally, the local officials count on him for miscellaneous functions including public meetings, arrangements of some official functions and data gathering. (14) Due to his role in land administration, the patwari is sought after by local elite and he in turn can count on their support. His accountability to the department leadership is limited. (15) He maintains land records in Urdu which are based on antiquated survey techniques. A patwari will determine the boundaries of a certain property if there is a dispute. (16) He is called to attend courts and render evidence in cases disputed title, possession, partition and compensation. As the number of land-related litigation cases has multiplied, increasing amounts of his time is spent in court. This has the result of his spending less and less time on maintaining records and carrying out field inspections, setting up a vicious circle.

By contrast, records are not very good on the physical characteristics of properties in urban areas because these properties have never been surveyed. The degree to which this is a problem varies by type of urban area. Urban areas are of various kinds: (i) those which are old urban settlements, (ii) those where urban growth has sprawled into rural areas, (iii) urban localities developed by development authorities, or (iv) urban areas developed by private developers. The state of property records differs among these property types. For (i), in some cases, old records are available. However, in cases where these are available they are not up to date and often have only a historical value. In the case of (ii) the patwari records are available and may or may not give good evidence of the current status of the property. Development authority properties (iii), have reasonably complete records which were prepared at the time of their development. All parcels of land are numbered and the original allottees or buyers are recorded. However, development authorities do not update the records after the first transfer of ownership to the buyers. For (iv) records are not fully developed and are not up to date. All four categories of land may exist in notified urban areas.

In the absence of any formal property records, the PT-1 register of the excise tax department is the only record of these properties that might give evidence of ownership. However this fiscal register does not give any *proof* of ownership. At best it provides corroborative evidence. Preparation of comprehensive land records for the urban areas is an important task that remains to be completed.

Stamp Duty

The base for stamp duty includes virtually all kinds of transfers and legal documents. For example, more than 120 items are subject to stamp in NWFP. The stamp duty rates vary by type of document, but most revenue is collected from stamps on property transfers. The Province has proposed a new schedule of stamp duty rates, but it is not clear that this revision will be accepted. Stamp duty reform has also been under discussion in Punjab. The proposed reform includes a reduction in the tax rate on property transfers, per an ADB recommendation (Government of Punjab, 2007f). In Punjab the stamp duty rate is 2 percent on the value of property transfers. This is in addition to the 1 percent registration fee, 2 percent CVT and 1 percent local rate. Hence the total rate paid on a property transfer is 6 percent (7.5 percent in NWFP). Approximately 75-80 percent of stamp duty revenue is from property transfers in Punjab.

Other Land Taxes in NWFP

While the system of mutation, registration, and stamp duty is much the same in the two provinces, there are some differences in terms of additional taxation of land imposed in NWFP. *Ushr* is essentially a contribution collected by the BOR. The funds are turned over to the district Zakat account, which is managed by a committee appointed from within the district. The committee allocates the money among welfare projects and assistance to the needy. The *ushr* revenue is not included in the Provincial Government budget.

The base of the tax is the volume of the produce of a farm. The assessment may be made at the farm gate. The tax rate is 10 percent for unirrigated or barani (rain irrigated) land, and 5 percent in the case of irrigated land. Irrigation can be by tubewell, canal or any other means (the lower rate of tax is meant to reflect the cost of irrigation). Exemptions from the tax are for land that is not cultivated, and for farms producing less than 1000 kilos of wheat. The exemption does not apply to cash crops. Those following *Fiqh Jafaria* are given an exemption from paying *ushr*. Revenue collections are reportedly weak by comparison with revenue potential. Some observers take the view that major administrative improvements and monitoring are required.

Payment may be in-kind. The government agent may collect the payment, for example of wheat, at the time of threshing. The Government then sells the produce and passes the money to the Zakat Department. In practice most of the collection is in cash. There may be a compliance problem. It was noted by provincial officials that collection was difficult other than for grain products. The difficulties in collection are compounded by the high rate of tax which contributes to lowering voluntary compliance. Revenue from *Ushr* in 2002/03 was Rs 1.7 million.

NWFP also imposes a *land tax* which is a general revenue in the provincial government budget, but is a minor revenue source. The base of the tax is the area of land owned. The tax rate is Rs 50 per acre for irrigated land and Rs 25 for unirrigated land up to 12.5 acres. Irrigated farms of 12.5 to 25 acres in size are taxed at a rate of Rs 72 per acre. The rate is 100 rupees per acre for farms larger than 25 acres. The rates for unirrigated land are one-half of the rate for irrigated farms. Orchards are taxed at Rs 300 per acre. Land tax is levied on cultivated land only. Uncultivated land is exempt.

Only farmers with ownership of less than 5 acres in a revenue estate are exempt. The tax liability is worked out on the basis of a person's ownership in one revenue estate. Ownership of land in another jurisdiction will not cause a land owner to be bumped to a higher tax bracket. This provision is by default, because the land records are not interlinked. Until they are, there is no way to fully capture the tax base.

<u>Water Rates</u>

These revenues are transferred by the province to the districts on a derivation basis. Water rates are assessed by the provincial irrigation department, but are collected by the village headman on behalf of the BOR. The village headman is supported by the patwari. Presently, the Board of Revenue in Punjab has assigned patwaris to work directly under the irrigation department to solve the inter-departmental coordination issues. Estimated revenue collections are about Rs 5 billion, even though collection rates are only about 60-65 percent of amounts due. The department also collects a local rate which is Rs 2 per acre on all types of agricultural land.

Determination of the use of water is linked to crop types, which in turn is deduced from the patwari's crop inspections. Better quality inspections can help determine the usage more accurately. The rate structure should also be reviewed with an eye toward increasing revenue from this source.

Problems and Issues

About 27 percent of province-wide GDP is generated in the agricultural sector in Punjab and 30 percent in NWFP. Anecdotal evidence in Punjab suggests that both urban and rural property values have increased considerably in recent years. However, revenues from the various land taxes are not keeping pace with either inflation or GDP (Table 35).[81]

The problem is that property transfers are not being taxed at their market values, as is called for in the law. The only objective evidence used in the valuation process would appear to be the averages computed by the Patwari for rural areas. But since this is an average of stated or declared values, it is almost certainly much below the true market value. In compulsory land acquisition cases, the courts have routinely refused to accept the annual average value worked out from patwari records and have awarded higher compensation to land owners. A Supreme Court judgment in the 1990s ordered

[81] Land revenue (largely mutation fee), registration fee and stamp duty have declined as a percentage of GDP in both Punjab and NWFP from 2004-2005 to 2005-2006.

that government should pay on the basis of market values instead of on the patwari's *ausat yaksala*.

Neither is there confidence that the urban area valuation tables recognize full market value. These tables are prepared by the collectors but apparently are based on no more accurate a data base. The opinion of those government officials interviewed is that the valuation tables represent only a fraction of market value and are not based on an adequate survey. Officials from the provinces speculate that taxed values are probably in the range of 25 – 50 percent of true values, and much less in the case of new development areas. The property values assessed on the basis of the valuation table in Lahore were estimated to range from 55 percent to 79 percent of the corresponding market values.[82]

The upshot of this situation is that the transfer taxes are yielding only a fraction of their revenue potential at current rates. Since sales ratio studies are not carried out, the true coverage of the tax base is unknown.

A second problem is that the tax base has been narrowed by exemptions --- sometimes given for political reasons and sometimes given for reasons of administration. Officials in NWFP offered the following list of issues, but much of this would be applicable to Punjab as well.

1. Large tracts of land in some districts have not been 'settled', which means that detailed records for them have not been prepared. They remain outside the tax base.

2. PATA districts in NWFP are largely outside the land tax base because of their legal status. The tax laws have not yet been extended to cover them.

3. Small farms are exempt. Due to subdivision of land, through inheritance, the base is shrinking.

[82] Government of Punjab 2007c, p.89

The tax base is narrowed for administrative reasons as well. In rural areas, the Patwari's office is overburdened with duties which do not relate to tax collection. He does not have staff, office or mobility. He is dependent on local support for performance of his official duties. (See Box 8). The result is significant delay in recording property transfers and collecting taxes due.

Third, there is a significant problem with record keeping. An updating of the "record of rights" is required every fourth year. But in many instances the records are not updated on time. The Government of Punjab (2007f) reports the records in Lahore to be 20 years out of date. Organized records for land in urban areas do not exist. The quality of records also leaves much to be desired. Reportedly, errors in records have contributed significantly to civil litigation.

Are the Basic Tax Instruments Adequate?[83]

Before considering a specific reform package for the present system of stamp duties and other property transfer taxes, it would be useful to question the purpose of these taxes. Underneath this questioning is the concern about whether the present regime is the most suitable for Pakistan. In raising this question, we might look to the international practice.

Stamp duties are a part of the tax system in most countries, but they are widely criticized. The fundamental question to be addressed in Pakistan (and elsewhere) is "why have a stamp duty?" Clearly there is need to legalize documents and assure that they are properly filed, and a government stamp is one way to do this. To levy a service charge

[83] This section draws heavily and directly from Bahl (2004).

that would cover the stamping and verification cost would seem a reasonable justification. There might be some justification for differentiating the rate of charge by type of document, given the different degree of examination required for various types of documents. The problems arise with respect to property transfers --- such as the regime that includes stamp duty, mutation fee and registration fee in Pakistan.

There are a number of reasons why real estate transfers have found their way into tax systems in many developing countries, including Pakistan. First, it is an easy tax handle in that most buyers/sellers desire to legally record the transfer and therefore will voluntarily comply. Second is the revenue motivation and what might appear to be a very low cost of collection. When property values escalate, as happens periodically in most countries, the revenue take can be quite significant. Third, if property ownership is concentrated in the higher income classes, the distribution of tax burdens may be progressive. Fourth, the number of people in the taxpaying population in any given year is much smaller than in the case of more general taxes, hence the opposition to the tax may not be as great as would be the case if, say, an increase in the value added tax were proposed. Finally, a property transfer tax might reach that part of the population that ordinarily avoids payment of most income tax and value added taxes.

There are major disadvantages to the property transfer tax. First, it raises the cost of property transactions thereby reducing the volume of transactions, hence slowing the development of the real estate market. Second, if the tax is properly assessed, administrative costs could be high, at least because of the need to check the self-reported property values and revalue when necessary. Third, a property transfer tax gives property owners an incentive to understate taxable value, hence weakening the database that is called on for assessment of the urban property tax.

A moment's reflection will lead to the conclusion that the problems with the property transfer tax are dependent on the level of the nominal tax rate chosen. At very low rates, these problems may be of less consequence. But when the tax rate is high, the implications of these problems are magnified.

In fact, countries choose very different rates of taxation on the value of property transfers. An illustrative list of rates for various countries is shown in Table 38. These data suggest a great deal of variation in the practice. South Africa, for example, taxes property transfers and also subjects these sales to a 14 percent VAT. But in many countries, the rates are below those levied in Pakistan. The reform options most often seen for property transfer taxes in recent years are reductions in the rate to mitigate the problems described above. Examples include Czech Republic in 2003, Portugal in 2003, Slovakia in 2002, Taiwan in 2003, and Dominican Republic in 2003.

Reform Options

The primary, short run reform goal of provincial tax reform is to increase revenues to finance services. This should be done by rationalizing the system of taxation so that the revenue flow is adequate to meet the revenue target, the tax burdens are fairly spread between urban and rural residents, and undesirable behavioral effects are avoided. Simplification in the tax structure should be sought, especially given the limited administrative capacity of the provincial government. This is the context in which we consider reform of the present system of land taxes.

An obvious change is to collapse the three different provincial property transfer taxes into one levy. This would simplify the tax regime and make it more transparent and manageable. Initially the tax rate could be set at the present (aggregate) level.

In the short run, some will argue for an increase in property transfer tax rates as a revenue enhancement measure. This might be done by simply raising the rate, or by indexing the existing rates to some indicator of average property value growth.[84] This is not a good solution to the revenue problem, and it is not good tax policy, because it ignores the underlying valuation problem and might even exacerbate it. Higher rates would provide even more incentive for underdeclaration of values. The alternative route, indexing, would penalize properties that experienced slower growth in favor of those experiencing faster growth. The goal of developing the real estate market would also be thwarted.

Others will argue to lower the tax rate so as to encourage compliance. It would be reasonable to conclude that lower rates would improve compliance, but we have no hard evidence on the extent of the response. Reportedly, some local governments in Punjab realized an increase in compliance after lowering the tax rate. However, only anecdotal evidence on this experience is available.

An essential element to any sustainable reform is to improve the method of valuing property transactions so as to better approximate true market value. There are a number of necessary actions that must be taken to eliminate or at least reduce the gap between assessed and market value. In fact, several of these proposals are presently under consideration.

---

[84] Among the possibilities for an index are the rate of growth in agricultural sector GDP.

- Carry out a survey of all properties so that a full cadastre is available for compiling the tax roll.

- Subject all declared transfer values to independent valuations carried out by the BOR.

- Increase the staff of qualified valuers used in updating the tax roll and in making the assessments. If the goal is to subject all property transfers, or even all suspect declarations, to desk and possibly field verification, a significant (and costly) increase in staff will be called for.

- Settle on a method of valuation and develop the appropriate procedural manual. Given the present state of valuation in the two provinces, this method will likely involve making use of a combination of expert judgment and objective information (e.g., realtor opinions and the valuation data established in urban areas for UIPT).

- Carry out regular sales-assessment ratio studies to monitor valuations and to update the valuation tables in both urban and rural areas. This could be done by the increased staff, and with the use of expert opinions.[85]

- Enact a substantial surcharge on tax due in the case of declarations that are found to be well below market levels based on independent valuation.

- A potential check on valuation might be made by coordination with the valuations placed on urban properties by the excise tax department for purposes of UIPT. At present, there is no such coordination.

We cannot estimate the amount of additional revenue that might be expected from such enhancements to the valuation process. There are no reliable sales-ratio studies available, but anecdotal evidence suggests that a 50 percent undervaluation of transferred property might be a reasonable estimate.[86] In this case, a 15 percent increase in taxable

[85] For a good discussion of assessment quality in the context of an emerging economy, see Bell and Bowman (2002)

[86] In 2005-2006, revenue collections in Punjab were Rs 11.4 billion and the property transfer rate was 20 percent, implying a total value of exchanged property of Rs 378.786 billion. If property exchanges hands on average, every fifth year, the implied total value of land is Rs 1,893.933 billion. If the assessment ratio were 50 percent, the estimated total land value would be Rs 3,787.865 billion, which is 86 percent of regional GDP.

values, and tax collections, would be well within the reach of provincial governments if they chose to make the necessary administrative improvements. This would yield an additional Rs 1.7 billion in collections in Punjab. In NWFP it will yield an additional Rs 100 million. Some observers would place the degree of underassessment at a greater level, perhaps 70 percent. In this case, our proposed 15 percent increase in values underestimates the revenue potential from revaluation, even taking into account the political considerations that would dictate "going slow".

What might be the timetable for such a reform program? Preparing the cadastre, developing the valuation mythology and hiring and training of the additional staff could take two years. Therefore, it could be three years before significant revenue enhancement would appear.

A more comprehensive reform of the taxation of the rural sector might pull back from taxing property transfers altogether. The rationale for this proposition is straight forward. Provincial taxes might be seen as a payment for public services received. It seems more reasonable to extract this payment yearly rather than at the time of a transfer. Moreover, there might be some administrative economies since UIPT and the agricultural income tax are annual taxes, and since a cadastral survey is required in any case.

The present regime of taxing only transfers could be replaced with an annual tax on land in rural areas, perhaps imposed as a presumptive income tax on rural land. The umbrella for this new tax would be the agricultural income tax in the case of lands used for agricultural purposes (see the proposal below). For rural lands not used in farming, it would be a tax on annual rental value at highest use. Valuation would be carried out following the steps noted above. Urban land would continue to be taxed under the UIPT. No property would be assessed both a rural and an urban property tax.

How would this restructuring be done? First, the mutation fee, registration fee and stamp duty on property transfers would be combined into a single land tax, levied on the basis of the market value of land. The rate would be set according to revenue considerations. Second, and in order to move to a unified annual tax, it will be necessary to prepare a cadastre showing the ownership and physical characteristics of every parcel. After this, a valuation table would be prepared for the province, and updated on a periodic basis. These comprehensive administrative improvements are within the reach of the provincial government. Necessarily, they would precede the structural reform.

The revenue yield from a unified annual tax on urban and rural property will depend on the nominal tax rate that is chosen. The elasticity will depend on the accuracy and timelines of revaluation and on whether there is indexation of property values. A unified, annual land tax with "reasonable" rates and proper valuation could easily result in well more than a doubling of rural land tax revenues.

Not all would agree with eliminating the tax on property transfers. One reason is that a property transfer is an event that is easily identified by the taxman. Undervaluation may be common, but completely escaping the tax probably is not. There also are important transition issues. This structural reform would bring a major shift from the present tax regime, so a great many details would need to be worked out. Moreover, a political consensus would have to be reached among the many stakeholders before any legal drafting could go forward. However, the administrative reforms that would support this restructuring could be implemented in any case, since they also are necessary for improving the present regime.

Another reason why some would argue that the present regime cannot be abandoned is that property transfer taxes are a proxy for capital gains taxes on property investments. This is not a good justification for the present regime because the sales price of a property probably bears little relationship to the size of a capital gain. The capital gain depends on the real appreciation in value since purchase, whereas the property transfer tax depends solely on the gross selling price irrespective of any other factors including whether or not any gain had been made. (See Box 9).

A capital gains tax on land could be introduced in addition to the annual land tax proposed above. In theory, the concept of a capital gains tax on land is straightforward. The tax liability would be taken on the difference between the buying and selling price of the property, indexed for inflation. The buying price (base) would be set according to historical records of purchase price. Owners could petition to have this base increased. The selling price would be verified by the valuation staff in the capital gains tax office. Note, however, that there would be a self-enforcing feature.[87] The nominal gain would be adjusted for inflation and for the cost of allowable improvements to the property (e.g., irrigation).

[87] Buyers would have a disincentive to underdeclare the purchase price because their basis for a future tax on capital gains would be too low.

Box 9. A Capital Gains Tax or a VAT on Property Transfers?

One idea with some currency is to introduce a capital gains tax on property (real estate). This would serve the purposes of generating revenues and closing off an avenue of avoidance of income taxes.

There are two ways that this might be done. One is to institute a separate capital gains tax on real property in place of the current transaction taxes on real estate sales. Capital gains taxes on property are not unknown in developing economies. They are levied, for example, in Columbia, Korea, Zimbabwe and Taiwan. However, the implementation of a capital gains tax on real property raises some serious administrative issues.

As the international practice shows, there are a number of important issues:

- How would records of the original selling price be documented and verified?
- How would records of the increase in basis be kept and verified? For example, records would be required to show the cost of improving properties to enhance the selling price.
- Would there be an inflation adjustment?
- How would inter-family transactions be handled?

One might conclude that the tax administration in Pakistan is not yet ready to support an effective capital gains tax on real property.

Another choice is to eliminate the stamp duty and property transfer tax on property sales, and bring residential real estate transfers under the value added tax. Buyers and sellers would have an incentive to report correctly, and a more accurate flow of information about land values would result. The tax would be levied at 15 percent on the selling price of land, less the (real or notional) tax paid on the purchase price. For some sales, the tax burden would be well below that of the current rate on total transaction value.

This would violate the notion of a VAT as a consumption tax since housing is consumed over many years. The practice varies widely among the industrialized countries. Some cover certain types of property sales under the VAT (e.g., new vs. used buildings as in Germany and Belgium), some use a transfer tax much as Pakistan does and zero rate new buildings (UK), and there are numerous types of special treatments and exemptions. A good discussion of the treatment of real property under the VAT is in Bird and Gendron (2007, p81-86).

One disadvantage to this approach is that capital gains on real property would be taxed in a different way from capital gains in other sectors of the economy (Thirsk, forthcoming). A major drawback is administration, especially establishing the basis for a capital gains tax, and developing a method for indexing for inflationary increases and adjusting for qualified investments in real property. As complicated as these administrative requirements seem, they are not any more daunting than the present requirement of establishing a true market values for every real estate transaction.

Such a tax system would have appeal. Revenues would not ebb and flow with land market activity, and the number of different taxes levied on rural land would be reduced. Once a capital gains tax became established, the unified administration would be more efficient at collecting revenues than is the case under the present regime. The incentives for underdeclaration of property prices at the time of sale would be lessened. The result might be a better flow of information about land prices, which is necessary to develop a property market.

Agricultural Income Tax (AIT)

The Agricultural Income Tax is collected by the Board of Revenue in both NWFP and Punjab. Agricultural income is exempt from federal income tax (Federal Income Tax Ordinance 2001) and this has caused some controversy regarding both the ownership and the legality of the AIT. Malik (2004) claims that one of the main reasons for the controversy is that the tax is not specifically called out in the Constitution. Both provinces, however, do impose the tax, although as a presumptive tax, and not directly as a tax on agricultural income. NWFP started levying a land tax and agriculture income tax in July 2001, and is credited with some of the early policy development of the tax.

The Punjab Provincial Agricultural Income Tax Act of 1997 defines the base, rate and collection of the tax. In theory, the base is income derived from agricultural land. In the 1997 Act, agricultural income is defined as rents received from property used for agricultural purposes, income derived from cultivation, or income derived from owner-occupied buildings on the property (including small businesses such as dairies). The Punjab Act provides for two alternative calculations of the tax. The first is based on land area and the second is based on agricultural income. Officials in both provinces note that the land area method is the one actually used and the income base is not used to apply the actual tax. In this regard, the agricultural income tax may be thought of as a presumptive income tax.

Revenue Performance.

The AIT raises a relatively small amount of money for the government of Punjab (see Tables 34-36). Estimated collections in Punjab are Rs 658 million in 2006 or 2.06 percent of total own source revenue. This represents an average of Rs 170.3 per farm, or an average of Rs 1,669 per farm greater than 12.5 acres in size, based on data from the 2000 Census of Agriculture. Real per capita collections have fallen dramatically since 1999-2000, and by 2005-06, represented only 32 percent of 1999-2000 collections.

The level of tax collections in NWFP also is quite small—70 million rupees in 2005-06. This amounts to 1.53 percent of total own source revenue. In NWFP, AIT collections are about on par with the level of collections from the professions tax. Based on data from the 2000 Agricultural Census, the average burden of the tax in NWFP is 51.6 rupees per farm, or 241 rupees per farm greater than 5 acres. Real per capita collections remained approximately constant in NWFP between 1999 and 2006.

Valuation and Tax Base.

In theory, all agricultural land is taxable under the agricultural income tax in both provinces. According to the law, the agriculture income tax can be assessed in two ways: one based on the value of crop output and the other a presumptive tax with flat rupee rates by farm size.

The tax laws provide detailed schedules for unirrigated land and irrigated land. In Punjab, irrigated land of less than 12.5 acres is exempt, and non-irrigated land with less than 25 acres is exempt.[88] In NWFP, there is no exemption level if the tax is calculated based on land area. However, in NWFP, the income-based schedule does include an exemption of Rs 80,000 of agricultural income. The theory of the income-based exemption is that it provides for a minimum level of income from which families can take care of their basic needs. This Rs 80,000 exemption is somewhat low by the current standard for the federal income tax—which is now Rs 150,000 The same justification may be offered for the 12.5 acre exemption in Punjab, though some officials argue that 12.5 acres is too generous and represents more than a subsistence farm. However, using data from the Census of Agriculture on crop yield, the income earned from a 12.5 acre farm that specializes in growing wheat would be substantially less than Rs 80,000 (depending on the treatment of rent and other inputs). In the case of most other crops reported by the Census, a 10 acre farm would generate income of Rs 80,000 or more. Past efforts to reduce the minimum taxable farm size below 12.5 acres have failed in Punjab.

For the income method, the technical description of the valuation process is as follows. Theoretically, the land revenue staff establishes an average yield per acre for all

[88] In all cases, the land area is sown land area.

crops cultivated in the district. (The document is called *Jhar Paidawar*.) Upon certification by the district collector this becomes the operative formula for calculation of the tax base.[89] Similar estimates are prepared for each revenue estate (revenue estates are units within districts). In some cases, depending upon soil types and local factors, the revenue estate estimate may differ from the district estimates. In such cases the revenue estate formula is applicable for calculation of the tax base. Input prices and market prices for crops are based on surveys and analysis conducted as part of the Census of Agriculture. Many of the prices are fixed by government.

The focus of the tax is sown land area, but the valuation process is much less focused on crop inspections than on land tenure. In practice, the patwari performs a crop inspection every 6 months (called a *girdawari*) and uses these data to update the special register *khasra girdawari*. Owners and tenants have an interest in having their status reflected accurately, but in some cases, negotiation between the land owner and patwari can be substituted for the inspection. Land tenure, therefore, appears to be the central concern of the patwari's work, and the crop valuation is relegated to a secondary concern. The lack of accurate, timely, and detailed data on ownership of land, crop yield, and input prices leads to a situation where there is little basis to establish the AIT liability based on income. That may be a principle reason that, according to our interviews, both NWFP and Punjab use the farm area imputation to calculate AIT liability.

[89] There are typically two growing seasons and if a farmer grows in one season but not in another, he is supposed to be taxed as having grown all year according to the explanation given by the Board of Revenue). Based on the description of the valuation method, it is not at all clear that this provision can be enforced.

Tax Rates

In Punjab, the tax rate schedule for irrigated land (under the acreage tax base) is:

i.	Less than 12.5 acres	exempt
ii.	12.5 to 25 acres	Rs 150 per acre
iii.	Over 25 acres	Rs 250 per acre
iv.	Orchards	Rs 300 per acre
v.	Non irrigated	one half the above
vi.	Idle land	no tax

These tax rates have been constant since 1996 but the exemption level has changed over time. Prior to 1997, the tax was under the Land Revenue Act and the exemption was for 2.5 acres. When the Agricultural Income Tax was imposed in 1997, the exemption was set at 5 acres for a short time, before increasing to 12.5 acres. At some point after 2001, the BOR attempted to reduce the exemption back to 5 acres, but that proposal was met with significant political opposition.

The per acre tax rate structure is not a graduated marginal rate structure. Instead, all acreage of farm land in a rate class is taxed based on the same slab rate. For example, for a parcel of 50 irrigated acres, the tax rate is 250 rupees on all 50 acres. Once the exemption threshold is reached, all land is taxable. This leads to large changes in the tax rate at each size boundary and may in fact encourage individuals to claim that they own smaller properties. Since the valuation system is not transparent, there may be a high probability of under reporting and not being detected.

In contrast, the income-based rate structure in Punjab, as shown below, is a progressive marginal rate structure.

Income bracket	**Rate**
Agricultural income is less than Rs.80,000	Exempt
Agricultural income is less than Rs.100,000	5%
Agricultural income is between Rs.100,000 and 200,000	Rs.5000 plus 7.5% of the amount exceeding Rs.100,000
Agricultural income is between Rs.200,000 and 300,000	Rs.12500 plus 10% of the amount exceeding Rs.200,000
Agricultural income is greater than Rs.300,000	Rs.22,500 plus 15% of the amount exceeding Rs.300,000

In NWFP, the acreage-based structure does not allow for any exemption level, as seen in the schedule below:

Slab of land (1 irrigated acre = 2 unirrigated acres, excluding orchards)	**Rate per acre**
Less than 5 acres	Rs.50
5 to 12.5 acres	Rs.72
Greater than 12.5 acres	Rs.100
Orchards (any acreage)	Rs.300

Under the income valuation method, each owner of land is obliged to file a tax return, and is subject to the rates shown below. Theoretically, if the assessed tax under this method is less than that calculated by the acreage schedule, then the liability is to be determined by the second method (see schedule below). The BOR view (based on interviews in June 2007) in NWFP is that the patwaris and their supervising Tehsildars do not have the capacity to assess AIT using the income method. Moreover, the land owners do not typically file an income tax return which reduces the ability to track tax liability.

Income bracket	**Rate**
Agricultural income is less than Rs.80,000	Exempt
Agricultural income is less than Rs.100,000	5%
Agricultural income is between Rs.100,000 and 200,000	Rs.5000 plus 7.5% of the amount exceeding Rs.100,000
Agricultural income is between Rs.200,000 and 300,000	Rs.12500 plus 10% of the amount exceeding Rs.200,000
Agricultural income is greater than Rs.300,000	Rs.22,500 plus 15% of the amount exceeding Rs.300,000

In practice, the acreage method is used in both provinces.

General Administration

To the extent they exist, records on land holding and crops are maintained in duplicate; one copy is with the patwari and the second is kept at the district office. The patwari is in charge of all of the land records at the local level. The district collector is a registrar for the district as well as a tax collector, but in effect most of the record keeping functions are carried out by the patwari. The hierarchy of Kanungo, Tehsildar and District Collector perform supervisory roles.

Records. The AIT piggybacks off of the land transfer taxes in the sense that the information recorded for each parcel is used for both taxes. The information includes the total land area, owner, tenant if any, type of land, and any encumbrances. Lands are inspected every six months and the status of occupancy and crops is updated (although the rigor of the crop inspection is suspect, as noted above) and by Khan (2004). There is discussion of computerizing this information in both provinces.

Titling. The system is 400 years old. The Patwari maintains records on title and ownership. Bank loans require copies of the records, and any mortgage is reflected in the records. The registers are often hand-carried by the Patwari (tied in cloth) for field visits, following an age old tradition. The titling and tenure records are very important to the AIT, whether a land-based or income-based tax is levied, since that information is needed to identify the taxpayer. Clearly there is need to modernize the mode of record keeping.

Collection. The patwari has responsibility for collections. He prepares the demand notice on the basis of his records and bi-annual crop inspections. A demand note is presented to the taxpayer by the patwari. Collection is in cash and deposits are made into the government account. The patwari receives no incentives for higher levels of collections.

Penalties. In all cases, there are penalties for nonpayment, including seizure of land. The enforcement mechanism provided in the *Land Revenue Act 1967* is the basic legal mechanism which is invoked for collection of nearly all taxes and government dues in arrears. It is formally referred to as 'arrears of land revenue'. Once there is a declaration of the amount as 'arrears of land revenue' the provisions of sections 80 to 89 of the act follow eight stages for collection including:

a. Notice

b. Attachment of personal property

c. Detention of the defaulter, which may continue till the time payment in full or in part has been received

d. Attachment of real property and appointment of a receiver. The receiver then collects the arrears and deposits them with the government

e. Attachment of real property

f. Seizure of property and sale for recovery of the arrears

In Punjab, the penalty for non-payment of tax is assessed at a rate of 5 percent per year of the unpaid amount (not to exceed 50 percent of the total unpaid amount). There is little evidence that land seizures or other of the penalties for non-compliance are carried out in either province.

Issues and Problems

The effective rate of agricultural income taxation is very low. The AIT provides very little support to the provincial budgets despite the fact that agriculture is one of the largest sectors in the provincial economy.

The revenue potential of the agricultural income tax is much greater than its current yield. We have made estimates of this revenue gap using census data. The underlying data used in this analysis (baseline data of the area cultivated, by farm size) are presented in Table 39. An estimate of the potential AIT revenue, under the current land based tax structures for NWFP and Punjab, is presented in Table 40. In Punjab, we estimate the potential revenue under current law to be Rs 2.9 billion or more than 4 times the actual collections in 2000. For NWFP, we estimate potential collections under current law of Rs 249 million, or 10 times the current level of collections. Malik (2004) got much the same result for NWFP in an earlier study. While these estimates are rough, they do suggest that the orders of magnitude of evasion, compliance, and administrative problems are very large.

The major reasons for these revenue shortfalls are because the tax base has been significantly eroded by exemptions in the case of Punjab and because the tax is not well administered in either province. The level of exemption in Punjab (12.5 acres) significantly narrows the tax base. Based on data from the Agriculture Census 2000 (ACO, 2000), approximately 85 percent of all properties are outside the tax base. While some provincial level officials in Punjab took the position that 12.5 acres of irrigated land was well above subsistence and there was room for taxation, others said this was not the case. They also pointed out the political difficulties inherent with increasing this tax.

We simulate the potential revenue associated with reducing the exemption in Punjab from 12.5 acres to 5 acres. This would yield potential AIT revenue of Rs 4 billion (See Table 41) but would tax some farmers with incomes less than Rs 80,000.[90] If the relative compliance rate and administration costs were similar for large and small farms before and after this change, this would increase actual AIT revenue in 2005-06 from an estimated Rs 658 million to nearly Rs 910 million in Punjab.

Another problem with the present structure is that it makes no allowance for the fact that some crops are more lucrative than others. For example, sugar cane yields 15,000 net rupees per acre, while many other crops net 8,000-9,000 rupees per acre (Agricultural Policy Institute, 2004).[91] This results in an unfairness in the tax system.

The system of administration, while well documented in law, is not enforced. Observers point out that neither the revenue officials nor the taxpayers are adequately familiar with the legal requirements and details. The required information and records are not maintained so that holdings and crop values are not updated. While there is information available to estimate crop value, gross income is typically determined on an ad hoc basis.

Is the Agricultural Sector Undertaxed?

Some would argue that there is a broader question of whether the agricultural sector is "undertaxed" in Pakistan. This concern might be put forward in its most simple form: while agriculture's share of national income is 23 percent (20.6 in 2006-07), the

[90] Including those farmers growing low yield crops such as wheat.

[91] It is our understanding that the sugarcane crop yields cover one year while the other crop yields cover less than a full year.

sector "pays" a very small percentage of tax revenue. There has been a debate about whether these statistics are suggestive of an "undertaxation". Chaudhry (1999) refutes the underpayment argument and points out that there are implicit taxes on agriculture such as those associated with price controls for many farm products. These controls keep agricultural prices (and revenues) artificially low relative to the world price. Khan (1999) points out, correctly, that the incidence of all taxes—implicit or explicit—is on individuals and the focus should be the incidence of the tax on consumers, labor, or capital and not on sectors. By this argument, the concept of the "tax burden of the agricultural sector" does not have a great deal of meaning.

Clearly, there is merit to the argument that implicit taxes have resulted in higher effective tax rates on agriculture relative to statutory rates, and relative to effective tax rates on some other sectors in the developing world. These "taxes" come via macroeconomic policies as well as explicit taxes on the agricultural sector. Many countries protect their industrial sector—artificially raising prices of certain agricultural inputs, while controlling output prices for the agricultural sector (often below world market prices). In addition, in many countries, protectionism has led to increases in the exchange rate which in turn reduced the competitiveness (and net returns) from agricultural exports. Chaudhry and Kayani (1991) calculated the implicit taxes on agriculture in Pakistan between 1970 and 1990 and found effective rates as high as 75 percent, with wide variation among crops and years. Rajaraman (2000) discusses the impact of the same set of macroeconomic factors and taxes on the agricultural sector in India.

The World Bank (2007) argues that the net taxation of agriculture has fallen dramatically in most countries during the last twenty years. The estimates take account of both implicit and explicit taxes. Can we assume that Pakistan has followed this same pattern? We have not analyzed all of the explicit and implicit taxes on agriculture in Pakistan. However, the absence of export taxes and declining customs duties suggest that the effective tax rate on agriculture in Pakistan has followed the worldwide trend of decline. A full analysis of macroeconomic policies and federal and local tax policies toward agriculture would be needed to make a good estimate of the total tax burden on agriculture. Anderson (forthcoming, reported in World Bank 2007) finds that in Pakistan, the effective level of taxation of agriculture declined from approximately 18 percent to less than 5 percent (see Box 10). Implicit taxes on agriculture still exist in Pakistan, but there is evidence that they are much smaller now than in previous years.

We might shift the question from whether we have the "right" level of burden on the agricultural sector, to whether there is a case for increasing the level of taxes raised from agricultural income. From a horizontal equity perspective, there seems to be some justification for a higher level of agricultural income tax. Agricultural income is exempt from income tax, so non-farming households at any given income level face a higher tax burden on their labor income than do agricultural households. While there are certainly inequities in other parts of the tax system, this one can be particularly egregious because the federal income tax generates a substantial portion of revenue for the central government and because there are large numbers of individuals employed in the agricultural sector. In 2005-06, 44.4 percent of employed people in Punjab were engaged in "agriculture, forestry, hunting, and fishing" and 44.3 percent in NWFP were in this sector (Pakistan Statistical Yearbook, 2007). While these figures include those in forestry, hunting and fishing, these are upper-bound estimates of the relative size of the agriculture labor force. Additionally, these figures do not account for the level of relative productivity among the sectors.

Box 10. Changes in Protection and Taxation of Agriculture Sector 1980-84 to 2000-24

Anderson (forthcoming, reported in World Bank 2007) reports that in three groupings of countries (agriculture-based, transforming, and urbanized) macro and public finance policies reduced the effective rate of taxation on agriculture in 24 out of 28 countries. In his analysis, higher explicit and implicit taxes yield a negative "nominal rate of assistance", where subsidies or protection of the sector yields a positive nominal rate of assistance. Most urbanized countries now provide a positive rate of assistance while the rate of assistance in most transforming countries is negative:

Transforming Country	Estimate of nominal rate of assistance 1980-84	Estimate of nominal rate of assistance 2000-04
Indonesia	+10 to 15	+35
India	+0 to 5	+15
Thailand	- 5 to - 1	+5 to + 10
Malaysia	-10 to -5	+3 to +5
China	-50	+1
Pakistan	-18 to -15	-5 to -2
Sri Lanka	-10 to -8	-7 to -3
Egypt	-20 to -15	-15 to -10
Senegal	-30	-18 to -15
Zimbabwe	-45	-70 or less

Source: Estimates based on information presented in World Bank, 2007 and Anderson (forthcoming as reported in World Bank, 2007)

Secondly, because agriculture is such a large part of Pakistan's economy, not taxing agricultural income means that effective tax rates on other sectors of the economy must be higher (or public service levels must be lower). This is bound to decrease the economic efficiency of the tax system as taxpayers in these other sectors seek ways to avoid or evade those taxes. Third, the agriculture income tax may be justified, at least partially, on the principle that government infrastructure provides benefits to the agricultural sector. The agricultural sector also benefits from low interest loans and public expenditures on research and development. Though we have not done a cost-benefit analysis, it might be argued that this flow of benefits constitutes a justification for increasing the agricultural income tax.

All of this said, there is still the question of price controls (both for inputs as well as final outputs of the agricultural sector). This complicates the discussion of raising the revenue take from the agricultural income tax. Raising taxes without releasing these price controls could effectively reduce the level of taxpayer profits. There would be no possibility to shift the tax increase to consumers, as there might be if demand for the output was relatively inelastic. Farmers could reduce output (or quality) as a result of the tax increase. Federal government reactions to a provincial tax increase (eliminating output price controls or increasing subsidies for inputs) are impossible to forecast. In the short-run, it is very possible that the incidence of any tax increase on the agricultural sector would fall on the farmers and on farm owners.

Reform Options[92]

In both provinces, the BOR officials discussed the need for the agricultural income tax to become a larger contributor to the budget. Officials also discussed the need (theoretically at least) for the tax to become an income-based levy. These reform ideas are not new, and they are controversial. A number of previous studies have analyzed the agricultural income tax in Pakistan. Chaudhry (1999) notes that between 1959 and 1993, nine commissions were formed to study the AIT and only two recommended an income based agricultural tax. Khan (1999) notes that the studies of the

[92] Ahmed and Stern (1991) also discuss whether agriculture *should* be taxed differentially relative to other sectors of the economy.

1960s and 1970s recommended against an AIT because of other implicit and explicit taxes that existed during that time. Other studies have pointed out that although the majority of farmers are subsistence farmers, some make large incomes (Coopers and Lybrand, 1989, NTRC, 1986).[93] Malik (2004) concludes his study of NWFP with the view that there is substantially greater revenue potential in the tax.

Structural and Administrative Changes. There are a number of options for reforming the agricultural income tax. Administrative reforms should come first. The major reform risk is that no option will yield substantial increases in revenue if the administration of the system is not enhanced. The Punjab Resource Management Program (Government of Punjab, 2007f) outlines changes in administration that might increase compliance with whatever AIT system is considered. Some of these changes are quite dramatic relative to the current practice and include additional checks and balances in the system. The Punjab Report discusses pros and cons of these alternatives. In addition, the report presents a major restructuring of the BOR and Excise Tax Departments under one Provincial Revenue Authority. These administration reform options include the following:

- Creating a withholding system for the AIT, where tax is withheld on the purchase of agricultural inputs, with an exemption limit for small farmers,[94]
- Creating a withholding system on the sale of cash crop outputs,

[93] The agricultural income tax in India is also a state levy, but it is used in only six states (Rajaraman, 2000). Sundharam and Andley (2003) discuss the need for an agricultural income tax levied on presumptive income in India. The Indian Taxation Inquiry Commission recommended an income-based agricultural tax that would eventually be merged into the general income tax system. These recommendations have not been accepted in India (Sundharam and Andley, 2003).

[94] An observer points out that this may be most useful in the case of government procurements and that universal application could lead to additional leakages in the system.

- Expansion of the self assessment scheme,
- Expand the information kept in the base records (*Khasra Girdawari*) to include the Produce Index Unit System (estimates of costs of inputs and gross receipts by crops) into the records.

If these types of administrative reforms are brought on line, some structural changes could go forward. One major change is that the provinces could retain the basic approach of taxing the farm size, but this could be augmented with a presumptive assessment based on crop type and expected net income. Eventually, self-assessment must be considered as part of this process. But, until the administration is upgraded, we do not think that self assessment would reduce the inequities in the system or increase tax revenues.

A reform program for the agricultural income tax might begin by considering two types of options --- land-based presumptive options or income based presumptive options.[95]

Land-based Presumptive Reforms:

- Reduce the exemption level in Punjab. The exemption of 85 percent of all land would seem an unreasonable level. An alternative would be to have no exemption and to charge a nominal (flat) amount for small farms. This would raise administrative and compliance costs but would expand the tax base to cover the entire sector. As shown above, this would increase revenue in Punjab by 38 percent.

[95] Another alternative is to tax rental income. It has been reported in various interviews that many of the farms are actually worked by sharecroppers—individuals and families who rent the land. Rental values should reflect the potential value of agricultural output of the land, so taxing rents would be similar to a presumptive income tax. Non-rented plots could be taxed presumptively by using established rental values. However, there is little evidence that information on rental values and tenants is readily available. Since there is a mechanism to measure crop output and values (as flawed as it might be), it may be administratively easier to estimate potential value of output. Also, the tax might be integrated with the general income tax. However, given the constitutional issue related to the taxation of agricultural income, it might be difficult to treat agricultural income like other forms of income for tax purposes.

- Second, the tax rates could be increased. The new rates could be set according to revenue targets, or to redress sectoral imbalances, or to gain parity with taxpayers in other sectors of the provincial economy or among those with similar levels of income.

- Third, a more progressive rate schedule could be developed.

These options have some advantage over the income-based option because of their simplicity. However, they may perpetuate a presumptive system and prevent the AIT from growing into a "true" income-based tax in the long-run.

Income-based Presumptive Reforms:

- Define a presumptive net income amount by farm, based on farm size and crop type. The rates could be flat or variable. A subsistence level of income could be exempt from tax, similar to the personal income tax exemption of 100,000 rupees.[96] This option has the benefit of keeping the AIT a direct tax on income.

We estimate the impact of such reform options on total revenue, assuming that full collection takes place. In other words, these should be considered potential revenues from these reform alternatives. In most cases, our base data are from the 2000 Agricultural Census, Pakistan. We do not attempt to update the size distribution of farms from the 2000 Census.

We simulate a variety of land-based rate structures. Different crops yield very different levels of net income for farmers. So, it might be considered more equitable to impose the land-based taxes at a differential rate based on crop. The overall progressivity of the tax could also be enhanced by adjusting the slab rates—by crop and acreage or simply by acreage.

---

[96] The actual level of income tax exemption is currently Rs 150,000 as of 2007. This represents a steep increase in the threshold which may not be sustainable. For purposes of the reform options analyzed here, we use the previous income tax threshold of Rs 100,000 as a benchmark, Thrisk (forthcoming).

The Agriculture and Policy Institute Center (2004, 2007)[97] estimate the profit/loss per acre for major crops in Pakistan. Based on their data for Punjab for 2002-03, sugarcane is the most lucrative crop (yielding 7,503 rupees per acre including cost of land rent), while wheat profitability is actually negative (542 per acre) if land rent is included. The estimates for Sindh are larger, and Malik (2004) uses the values from Sindh as proxies for NWFP in estimating potential income from agriculture. After sugarcane, rice and cotton are the most lucrative crops. More scenarios could be considered (for example, a progressive rate structure depending on crop type or more distinction among crops[98]), but adding too much complication to the system could result in a further deterioration of tax compliance. We consider three specific reform programs.

Two land-based reform scenarios that might be considered are as follows:

Option a. *Progressive rate structure* (*independent of crop*): 7.5 acre exemption for irrigated or unirrigated land; 7.5 to 25 acres taxed at 100 rupee per acre, 25 to 50 acres at 150 rupees per acre, 50 to 150 acres at 200 rupees per acre, and Rs 300 per acre for farms greater than 150 acres.[99] Unirrigated land would be taxed at half the rate of irrigated land and orchards would be taxed at 300 rupees per acre. Our simulations by farm size give a result of an 11 percent revenue increase in NWFP and a 21 percent increase in Punjab.

Option b. *Flat rate structure by crop type*: 7.5 acre exemption for all farms (except orchards); wheat taxed at 100 rupees per acre, cotton taxed at 200 rupees per acre, rice taxed at 300 rupees per acre, and sugarcane taxed at 350 rupees per acre. These amounts were chosen based on the relative level of profitability of these crops. Unirrigated land taxed at 150 rupees per acre regardless of the

[97] Formerly the Agriculture Price Commission.

[98] Gurmani et al (2006) document differences in profitability among grains, for example.

[99] While the exemption level chosen is largely illustrative, it corresponds to an income exemption of Rs 80,000 for crops yielding Rs 10,000 rupees or more per acre. This would be on the high end of productivity for typical crops according to the Agriculture and Policy Institute. The 7.5 acre cut off is used since it corresponds to readily available data on crop size that is produced by the Census of Agriculture.

crop.[100] Orchards would be taxed at 300 per acre. Our simulations show that revenues would increase by 27 percent in NWFP and 37 percent in Punjab.

An income-based reform scenario might be considered:

Option c. *Tax presumptive net income based on crop yield and profitability, with exemption of 100,000 rupees and progressive rates from 5 to 15 percent*. Our simulations show that revenues would increase by 20 percent in NWFP and 10 percent in Punjab.

Using data from the Agricultural Census, Board of Revenue, and Agriculture and Crop Reporting Center, we can estimate the revenue impact of these proposals. Relative to current law, Option a) increases revenue by 11 percent in NWFP and by 21 percent in Punjab. The resulting distribution of tax burden is more progressive than the present system under this reform scenario. Option b imposes a tax structure based on farm size, but adjusted for crop type. Adjusting the land-based rates by type of crop is admittedly a more complicated way to go. However, this type of reform brings the AIT closer to a tax on potential income than the tax structures based on land alone. We estimate this approach considering four crop types: wheat, cotton, rice, and sugarcane. For these purposes, we collapse other grains and fruits and vegetables into the wheat category. These categories can easily be changed. The revenue impact for NWFP is an increase in AIT of 27 percent and the increase in Punjab is 37 percent under this structure.

Finally, we estimate the revenue potential of a tax based on potential income (Option c), where income is estimated based on the average profit/loss including land rent per crop, per acre. To simplify the analysis (similar to that done by Malik, 2004), we estimate the potential revenue assuming an average net profit per acre of Rs 4,000 (lower

[100] We do not have detail on the profitability of farms by crop type for unirrigated plots so those estimates are not included in this analysis.

bound of all crops) and Rs 8,000 per acre (an upper bound estimate of the average crop yield). With a threshold of 100,000 rupees for tax purposes, on average, only farms of 25 acres or more would be taxable. The revenue analysis suggests that this structure could yield 280 million rupees in NWFP (a 20 percent increase) and approximately 2.9 billion in Punjab (a 10 percent increase), assuming that such a tax could be administered. The smaller increase in Punjab is due to the relatively large number of farmers that would be exempted due to the Rs 100,000 threshold.

Sales Tax on Services

The Constitution of Pakistan reserves certain tax bases for the federal government. All other (residual) tax bases can be claimed by provincial governments. The Constitution provides for federal taxation in the case of "taxes on the sales and purchases of goods imported, exported, produced, manufactured or consumed". This leaves open the possibility for provincial governments to levy a sales tax on services. All four provincial governments tax some services.

Tax Base and Rate

In theory, the constitution is permissive in allowing each province to define its own sales tax base i.e., to determine which services it will tax. In practice, the laws for each province were written by the federal government and were adopted (as ordinances) by the four provinces. These ordinances include a more or less uniform list of services to be taxed. The base is the gross amount of sales, and the tax rate is set by the federal government at the national rate of 15 percent. Service providers are entitled to claim input tax credit for the tax paid on taxable purchases, inputs and utilities.

Tax Administration

Tax assessment and collection is the responsibility of the sales tax collectorate of the federal government. A collection fee of 2 percent is retained.

Revenue Performance

The revenue performance is described in Table 42. The sales tax on services yields 9.15 percent of own revenues in NWFP and 7.52 percent in Punjab, which makes it a considerably more important revenue source than the property tax, but a considerably less important source than either taxes on property transfers or motor vehicle taxes. Still, revenues amount to only about 0.05 percent of GDP.

The composition of sales tax revenues is described in Table 43. The pattern shown is one where 98 percent of total national collections is made in Punjab and Sindh. Note that revenue collections are concentrated on four services: hotels and restaurants, travel and shipping agents, advertisements and courier services.

Problems and Issues

There are four issues to be addressed in evaluating the sales tax on services as a provincial government revenue source: (a) whether it has a significant revenue potential for provinces, (b) administrative concerns, (c) the matter of encroachment on this tax base by the federal government, and (d) economic disincentives.

Revenue Potential. In theory, the sales tax on services could be a lucrative revenue source for provincial governments. The base of the tax is potentially large. We can note from the national accounts in Punjab that 10 percent of provincial GDP is classified as "other services". This sector is defined in the provincial accounts to exclude transport, storage and communications. If this rough estimate of the broad version of the base for the sales tax on services is indicative, we can say that the effective tax rate at present is well less than one percent.

However, there are some significant challenges in taxing this base and ratcheting up revenues. First, the provincial government would need to be willing to expand its presently taxed base to include additional services. As noted above for other provincial taxes, a combination of the growing NFC awards and political opposition to provincial tax increases lead to a situation where there is little incentive for the political leadership to increase tax effort. Second, the service sector is notoriously hard to tax because it is composed of many small firms that are difficult to identify and their recordkeeping often is problematic. Third, there is a "headquarters" problem, i.e., the tax may be paid at the headquarter location rather than at the point of consumption. Note, for example, that Punjab accounts for 57.2 percent of Pakistan's GDP but only 40 percent of total provincial sales tax collections on services. Sindh, where many headquarters are located, accounts for 29.8 percent of national GDP but 58 percent of provincial collections of the sales tax on services.[101]

Tax Administration. Administration may pose a constraint to a more revenue productive sales tax. On the one hand, the federal sales tax administration may be neutral

[101] Sindh GDP is estimated based on Provincial Finance Department statistics.

in its collection of the provincial tax on services vs. collection of a national sales tax. On the other, why should the central government aggressively pursue collections against a broader services base, when 98 percent of the revenues accrue to the provincial governments? The deeper the province decides to go into the services base, the harder to assess will be the base, and the more costly to the central government will be the administrative effort required. In, fact, the government of Punjab proposed an expansion of the tax base to include marriage halls and beauty parlors, but according to provincial officials, the central government sales tax administration department was unwilling to collect from these sectors. Administrative complication was cited as the reason. Punjab province also has proposed an expansion of the base to 44 additional categories of service but no action has yet been taken.

This highlights a significant problem. The split between administrative responsibility and rate/base determination is not likely to work effectively unless there is significant revenue sharing. The levying government (province) will accept the political risk only if the revenue rewards are great enough, and the collecting government (federal) will not allocate the resources necessary to administer the tax properly if the revenue benefits do not justify taking on the additional costs. While the correct split of revenues to accomplish the goal of "adequate" revenues for the province and the federal governments has not been worked out, it seems clear that the present 98 percent/2 percent division is not the answer.

There is another dimension to the administration problem. The provinces complain, rightly, that they do not receive regular reports from the federal sales tax administration department concerning the details of collections. If the provincial governments are to be expected to move forward with base expansion, and to use their comparative advantage of "familiarity" to identify new firms for inclusion in the net, there must be full sharing of information about tax assessment and collection. However, it is not clear whether the underlying problem is that the central government is unwilling to supply this information, or whether their statistical data base is so weak that the data are not available.

Encroachment. Third, there is the issue of "encroachment". The Constitution does not reserve the right to tax services for the federal government. Presumably this leaves the provinces free to levy a sales tax on services. In fact, however, the federal government also levies a sales tax on services, in the form of excise taxes. While the federal government sees this as a matter of national interest, the provincial governments see it as encroachment. The ten services now taxed by the federal government as excises are listed in Table 44. The total yield on these is Rs 28.2 billion vs. Rs 4.2 billion in collections under the provincial ordinances.[102] Most of the federal revenue (95 percent) is collected from telecommunications services. Paradoxically, the provinces would be better off in revenue terms if the sales tax on services was a federal tax with revenues included in the NFC sharing pool.

Economic Incentives. Finally, there is a question about whether a 15 percent tax on services would damage the economy and perhaps force some firms out of the market. For example, some hotels and places of entertainment might see the tax as significantly cutting into their profit margin. Another outcome is that consumers might find their consumption of services more expensive, to the extent the tax can be shifted to them.

[102] The Rs 28.2 billion refers only to collections made in "the VAT mode", i.e., under the value added tax administration.

These are possible, even probable outcomes according to some observers. Should this cause a rethinking of the proposals to extend the sales tax on services?

The answer here is that it should not. Services should be taxed, just as other consumption is taxed. Why should the sales tax treat the purchase of clothing or an appliance any differently than an expenditure on a restaurant meal or a visit to a beauty parlor? Services have enjoyed a preferential tax treatment in Pakistan for many years, and the proposal here is to remove that preference. While some service sector activities will be negatively impacted, and there might be an employment effect, the more level playing field would allow producers of goods to expand their output as consumer choices shift.

Reform Options

The most obvious reform option is for the provincial government to selectively expand its base by bringing more services into tax. This expansion should begin by including those services that could most easily be reached under current administrative practice.[103] This proposal would need to be accompanied by an incentive package that would stimulate an increase in revenue effort on the part of the provinces i.e., to reward provincial governments for taking this politically unpopular step. (We further discuss the incentive issue below). It is likely that if the incentive strategy was successful, this option would lead to disproportionately heavy revenue collection in Punjab and Sindh where the service sector is more developed.

[103] Malik (2004, p46) carried out such an analysis for NWFP and identified 25 services for inclusion in the sales tax base. Pasha (1995), in an earlier study, carried out a similar exercise for all provinces.

There is no easy way to identify the “best” candidates for inclusion in the tax base for the sales tax on services. One might imagine the following steps.

1. Charge the federal government with the responsibility for compiling a comprehensive list of services, perhaps by reference to the categories listed in the standard industrial classification.

2. Charge the provinces with responsibility for identifying those services to be brought into tax and assisting the federal sales tax department in building the tax roll. Provinces might start this process by determining whether a useful establishment survey exists or could be carried out. Other files that can be useful in identifying firms for inclusion in the sales tax are UIPT records, electricity duty payments, and professional registries. An issue to be resolved is whether all provinces would need to tax the same set of services. Under a provincial administration, each province would be able to choose its own base from among the list of eligible services. Under a federal administration, there might be more pressure for uniformity.

3. Each province should work with the federal sales tax administration to identify a size threshold for inclusion in the services tax net, and then estimate revenue yield.

4. The federal sales tax department in each province should develop comprehensive reports on assessment and collection detail, and delinquency lists. These reports should be shared with the provincial governments.

5. It is likely that new provincial ordinances will be required.

An important consideration that underlies all of the reform options proposed here is that the tax base will become more complicated as additional services are added. As noted above, there is question about the willingness of the central government to expand its administrative efforts so as to reach those smaller firms and self-employed individuals who provide services. This problem might be erased in either of two ways. The first is to transfer administrative responsibility for the services tax to the provincial government. If this were done, the provinces would need to gain expertise in sales tax administration, a comparative advantage which the central government now has. In the long run, provincial administration of provincial taxes could be the right direction for reform in a federal country such as Pakistan. (See Box 11). It would however, be difficult to protect revenues during what might be a long transition period. If provincial governments were not up to the task of efficiently collecting the tax on (services and many analysts share this concern), the reform would bring little revenue gain. Moreover, it should be considered that a federal sales tax administration avoids duplication of efforts between the two levels of government, and likely is a lower cost administrative option.

The other solution is to hold to the federal administration but to give a collection incentive to the federal government by converting the sales tax on services to some form of shared tax. (An example of how this might be done is discussed below). If federal revenue retention from collections was high enough, a more aggressive administrative effort might be drawn out. It is doubtful that a 2 percent collection fee is the answer.

The issue of federal encroachment on the provincial sales tax base is also difficult. In fact, "encroachment" is a pejorative that may not properly describe the issue. The two levels of government are in competition for the same revenue base. The provincial level feels that it has a constitutional right to the tax base, and would like to have the federal government give it an exclusive on taxing services. The federal government sees its right to tax services when in the national interest, and when the headquarters problem makes provincial taxation infeasible. The middle ground is a shared tax, where each side has a claim on this tax base.

Box 11. Who should Administer the Sales Tax on Services?

Provincial governments have some comparative advantage in administering the sales tax on services. The identification of liable tax payers, and the maintenance of the tax roll are comparative advantages of the province because of its greater familiarity with the local economy. Since the sales tax on services is a provincial revenue source, there should be more incentive to assess and collect the tax than is the case under the present centrally administered system. Finally, there might be some significant advantage to a coordinated collection of the sales tax on services, the professions tax and the urban property tax.

A centrally administered system also has some advantages. Staff is familiar with sales tax assessment, and with audit. Collection also may be a comparative advantage of the central government because the provincial government would find it difficult to enforce the tax where powerful local interests are involved.

In the long run, given the objectives of a fiscal federalism, the best options are either (a) to move the administration of provincial taxes to the provincial government, on a "readiness" basis, or (b) to have provincial rate setting under a shared sales tax on services.

Revenue sharing does not resolve the interprovincial competition issue that surrounds the headquarters problem. There is no one best resolution to the headquarters problem. Countries have tried various approaches. One step that might be taken is to allocate all final sales for a company across provinces. If this can be done, the proration can be used to deal with the headquarters problem. However, this is administratively difficult, involves a good deal of subjectivity in establishing an allocation formula, and increases the compliance costs on companies. This approach is used, for example, in the allocation of the state government corporate income tax base across states in the US. Second, each company could be asked to report its taxable sales by province, but this could significantly increase compliance costs and administrative costs. Third, those components of the service tax base where the headquarters problem is particularly serious, could be assigned to the federal tax base, and a revenue sharing scheme could be worked out. A fourth approach is to introduce a tax effort component into the NFC award, but to eliminate "headquarters taxes" from the tax effort computation. In this case, the federal government would be responsible for identifying "headquarters taxes", i.e., provincial taxes whose burdens are largely exported. None of these proposals could be implemented without a great deal of arbitrariness.

Depending on the goals that the federal and provincial governments have set for the sales tax on services, consideration might be given to three reform options.

Option 1: One course of action is to fold the sales tax on services into the federal value added tax (i.e., eliminate the excise tax approach). Since federal collections on goods are part of the NFC revenue sharing pool, then over 40 percent of sales tax collections on services would accrue to the provinces.[104] By comparison with the present system, the province would do better in terms of revenues. Why not leave it at that? There are several reasons. One is that the service sector may remain untaxed while goods are taxed at 15 percent under the VAT. This would continue the unwanted distortion in the national sales tax system.[105]

A second drawback with this option is that continuing with the present system does not address the disconnect between who administers the tax and who gets the revenue, hence the absence of an incentive for aggressive administration will remain in place. A more focused collection effort, as a provincial sales tax on services might give, could lead to an increased revenue take on the service sector. Finally, this system does not allow a province to easily ratchet up collections if it should choose to do so. Revenue growth will likely be modest under this option.

---

[104] The GST on goods is collected by the federal government. After deducting a collection fee (5 percent), one-sixth of the revenues from the pool for the pass-through grant to local governments. The inter-provincial distribution of this pool is on the basis of octroi collections in 1998-1999. The remaining five-sixths of the revenue becomes part of the general divisible pool and is distributed between the federal government and the provinces (vertical sharing) and among the provinces horizontally according to the NFC formula.

[105] VAT administrations in most low income countries concentrate efforts on the import and manufacturing stages, and are less successful in taxing services.

Option 2: The ten services that are presently taxed by the federal government could be transferred to the provinces. This would increase provincial revenues from the service tax by a factor of more than seven.[106] (Another version of this option would be to limit the transfer to those services that are not collected in the VAT mode, (but the revenue take would be small in that case). This transfer of base could establish the sales tax on services as a provincial tax. Sales tax administration would also be transferred to the provinces, The next step would be for the provinces to begin expanding their tax base selectively by bringing the easier to reach services into tax.

The disadvantage to this approach is that the "easier to tax" services with a broad base are likely to come away with a much heavier tax burden than other services. This would continue a pattern of taxing those sectors where administration is manageable, while allowing the tax burden on the hard-to-tax services to remain low. There is also the problem of the difficulty that provinces would have in administering this tax. The proper accounting for cross-province sales of inputs would be particularly difficult for the province tax authorities given their limited experience with the sales tax. Finally, there is the shortcoming that the federal government would almost certainly resist surrendering this taxing power.

The revenue yield from this option depends not only on how quickly the provinces learn sales tax administration, but on which services are brought into the tax net. This involves a detailed analysis, service by service, of the potential taxable base. Short this preparatory work, we can only suggest revenue targets that might be feasible. But even these kinds of calculations are convincing of the very significant revenue

[106] We do not have data to break out the division of this revenue by province, but estimate that the variations are quite wide.

potential. For example, at present, the GST on services in Punjab is equivalent to about 0.05 percent of GDP originating in the "other services" sector. If the goal is to double this effective rate (to only 0.1 percent of provincial GDP in this sector), the increase in revenue would be Rs 2.2 billion in Punjab. If we assume that the GDP share of "other services" is the same in NWFP as in Punjab, doubling of the present tax effort on services would yield an additional Rs 420 million in revenue. This kind of revenue potential would seem high enough that each province would want to undertake an effort to identify those services that could be brought into the base. Reformers would do well to remember, however, that gaining access to the service tax base is only part of the challenge. The provincial governments would then have to develop the wherewithal to assess and collect the sales tax on services.

Option 3: A third reform option is to convert the sales tax on services to a shared tax with the federal level. The federal and provincial governments would tax the same services, with assessment and collection carried out by the federal government. There would be a separate federal and provincial government tax rate (not to exceed 15 percent). The services to be taxed would have to be the same under such a regime, and the federal rate would be the same in all provinces. The provincial tax rate could vary according to the decision of the provincial government. This autonomy in provincial rate setting would preserve an important fiscal decentralization feature, even though it could introduce some administrative complication. There might be restrictions here, e.g., the federal rate might be set at 7.5 percent and the provincial rate would be limited to 7.5 percent.

Because revenues would be shared between the two levels of government, there would be more incentive for aggressive tax administration by the federal government. The revenue increase under the shared tax could be (potentially) quite significant. This approach combines the rate setting discretion of provincial governments with the superior administration capacity of the federal government.

One disadvantage of this approach (from the point of view of provinces) is a giving up of the formal (exclusive) claim on this base by provinces. Another disadvantage is that the headquarters problem would remain. Particularly Sindh could follow a strategy of taxing services heavily and exporting its tax burden to other provinces.

Tax Burdens. Would revenue increases from the sales tax on services be feasible in terms of the burden it would impose on taxpayers in the provinces? To try and answer this question, we estimate of the distribution of the burden of the sales tax on services using HIES data on the consumption of personal and professional services by households at various income levels.[107] In Tables 29 and 30 we compare the distribution of income across population deciles with the distribution of consumption of personal services. For example, the top 10 percent of the households in NWFP account for about 44 percent of all household income, but only about 36 percent of consumption of personal services. The distribution presented in this table shows that the lower income groups allocate a greater share of their budgets to services. This suggests that the GST on services is a mildly regressive tax. A repeat of this analysis for Punjab gives almost exactly the same result (See Table 30).

[107] We assume full forward shifting of the tax to consumers. For a full discussion of the method used, see Wallace (forthcoming).

Other Taxes

The revenue performance of all other taxes in the province are reported in Table 45. Both provinces levy more or less the same set of "smaller" taxes. In a few cases, the tax base calls for some differentiation, e.g., tobacco in NWFP and cotton in Punjab. In total these smaller taxes add to administrative costs and do not generate significant revenue. Notwithstanding that these are minor levies, their potential is not being fully exploited. Even the present narrow revenue bases are only partially captured because of weak administrative efforts.

Entertainment Tax

The Entertainment tax (duty) is a minor levy on various types of entertainment events (cinemas, circuses, stage plays, casual entertainment). The tax rates have been lowered in recent years. Administration is by inspectors, and the management of an event is responsible for collections. In both provinces, there is a notional determination of the tax liability. It is set at a fixed percent of the announced admission price, but with an assumption that only 20 percent of the seating capacity of the theatre will be occupied. Entertainment duty accounts for less than 0.1 percent of provincial government revenues in both Punjab and NWFP.

The entertainment duty is beset by a number of problems. The base has been narrowed by exemptions, so that some entertainment events are not taxable.[108] This imposes a revenue cost and it introduces some unfairness. Exemptions may be given by local government officials and so the coverage of the tax may vary greatly from district to

[108] Cinemas in cantonment areas are exempt.

district. Another problem is that the tax rate (65 percent) is high enough to encourage evasion. This is an especially important problem because of the difficulty of collecting the tax under present administration arrangements. Collection rates are unknown. Finally, because cinemas have been closing, this tax is losing its revenue raising capacity. Many in the ET department in Punjab think it should be eliminated.

Excise Duty

Excise tax revenue is collected mostly from the sale of licenses to produce alcohol products used for industrial purposes, e.g., denatured alcohol. There also is a duty levied at a specific rate on the production of all spirits. In total these duties account for a very small amount of revenue (Table 45).

Cotton and Tobacco levies

There is a levy of 8 paisa per kg on the receipt of cotton at the mill. The tax is collected directly from the ginning factories in Punjab province. The revenue yield is very small.

The tobacco development cess is levied as a specific tax on the amount of tobacco production in NWFP. The tax rate is 2 rupees per kilogram of tobacco. Assessment and collection are relatively straightforward. The Pakistan Tobacco Board sets an annual target of production based on their information about the demand for tobacco by the two major cigarette manufacturing companies. The tax is levied on the target and is easily administered. Most of the tobacco grown in the Province is purchased by two companies which simplifies collections.

The main tobacco manufacturing plants are in Karachi. Tobacco sales have expanded beyond these two companies, so the department now uses (since 2004) a private contractor to collect the tax on open market transactions. This has resulted in an increase in collections. Still, revenue collections are very low.

Hotel Tax

The hotel tax is levied at an ad valorem rate on room rentals. In Punjab, the rate is 8 percent (except in hill stations, where the rate is 4 percent). In NWFP, the rate is 5 percent. There is provision for self assessment, but in practice the tax liability is assessed by ETD in both provinces. The assessment formula used is the same. Gross receipts are estimated as the product of the rate per bed and the number of beds. The tax rate of 5 percent is applied to the estimated revenue base that assumes a 50 percent occupancy. This notional determination of tax liability frees the ETD from having to monitor the self-assessed base and keep track of actual occupancy rates.

There are a number of problems with the hotel tax. Some hotels object to the use of a notional 50 percent occupancy rate for beds versus an actual occupancy calculation. A case is pending in the court. In NWFP, the hotel tax is not levied in the PATA districts. Many resorts that operate in these districts, with a large number of beds, are outside the tax net. Another problem is overlap with the general sales tax on services, whose revenues also accrue to the provinces. Services provided by hotels are already listed as a possible base for the sales tax on services.

Electricity Duty

In 1964 Punjab levied an electricity duty through its Finance Act.[109] The duty is levied on consumption of electricity. The consumers under various categories are liable for its payment. All federal, provincial and local government official facilities are exempt. In addition, places of worship and street lights are exempt. The duty is collected by the licensee (mostly WAPDA) on behalf of the provincial government when selling electricity to consumers. The rates vary across classes of consumers. The rates were revised in June 2007,[110] replacing the rates that had applied since 1980. Under the Finance Act 2007, the following rates apply:

A	In case of energy supplied by a licensee to consumers of any of the following categories:	Electricity Duty on the amount of the variable charges or the supply charges worked out according to electricity tariff (percent)
1	Domestic;	1.5
2	Commercial;	1.5
3	Industrial undertakings	1
4	Tube wells for irrigation and agricultural machinery	1
5	Premises where the supply of energy by a licensee is un-metered	1.5

B	In case of energy not supplied by a licensee to consumers of any of the following categories	Electricity duty per unit
1	Domestic	5.5 paisa
2	Industrial undertakings	1.5 paisa

WAPDA collects the tax as part of the electricity bills and pays it to the provincial government. The provinces have harmonized rates and laws, through consultations in IPCC. The duty is therefore structured similarly in NWFP and Punjab. Collections from

109 Government of Punjab 1964, Section 13 and Fifth and Sixth Schedules
110 Government of Punjab 2007h`, Section 3

this duty are a small amount of provincial revenue. In Punjab it was 0.74 percent of total revenues in 2005-2006. In NWFP electricity duty revenues were 0.68 percent of total provincial revenues in the same year.

Problems and Reform Options

The "other taxes" levied by the provinces do not generate much revenue. The sum of hotel tax, entertainment tax, excises, and tobacco and cotton levies and other agricultural cesses, yielded an amount equivalent to only 1 percent of total revenues in Punjab and about 1.5 percent in NWFP. The administrative costs of efficiently collecting these taxes would be high. In the case of entertainment tax and hotel tax, the assessment is notional and exemptions have compromised fairness.

One reform route is to abolish the hotel tax in favor of including it in the sales tax on services. This could lead to a revenue gain, even if the smaller hotels are subjected only to a flat charge. The electricity duty might also be moved to the sales tax on services. The entertainment tax could be passed down to the local governments, since they are in a better position to administer the tax efficiently. Khan's (2004) conclusion about the entertainment tax in NWFP is that "There is not much potential in this tax, hence no reason to continue with it". The excise duties also might be abolished, on grounds that revenue yield does not justify the administrative effort.

The agricultural cesses and excises should be folded into the agricultural income tax. This could increase fairness and revenue flow, if the agricultural income tax is reformed in terms of its assessment. In the case of tobacco in NWFP, another option might be considered. The tobacco cess could abolished in favor of a surcharge on the federal excise duty on tobacco products. The additional revenue could be returned to the province. This approach could eliminate unnecessary administrative expenditure on collections of provincial cess.

This reform package would free up administrative resources at the province level, to be devoted to taxes where the yield potential is greater. The net revenue losses would be small.

Hydel Profits: NWFP

According to a constitutional provision (article 162 (2)), the provinces are entitled to the net profits from the generation and sale of electricity at power stations located in their area, when these stations are owned and operated by federally owned utilities. The biggest power station in NWFP is located at Tarbela. The dam and its power house were commissioned in 1974. The construction was financed by the federal government. Despite the constitutional provision, NWFP did not get the net profits for many years after the Tarbela facilities went into operation. The matter has been challenged by the province on a continual basis and remains unresolved even today.

Currently, the province receives a partial payment of its claims against revenues from electricity sales. Even at this level, the net profits from hydroelectric sales in 2007-2008 are seven percent of total provincial current revenues and 96 percent of provincial own source revenue.

In 1991 an initial agreement was reached when the Council of Common Interests (CCI), a constitutional body for resolution of intergovernmental disputes, ruled that net profits along with arrears should be paid by WAPDA to NWFP on an annual basis. At this stage the CCI also laid out a methodology for calculation of net profits. For the year 1991-1992, the net profits were calculated to be Rs 6 billion Government of NWFP, 2007a). NWFP has been paid an annual amount of Rs 6 billion ever since. This implies an erosion in real value by more than 60 percent between 1992 and 2005 (World Bank, 2005a). The province disputes this payment as being too low, and in addition it asks for payment of Rs 596 billion in arrears. According to the Government of NWFP, the electricity tariff has been increasing ever since this 1991 calculation, but the determination of profits has been kept constant.

NWFP raised this issue during the 6th NFC discussions. As a result it was decided between the federal government, the controlling authority of WAPDA, and NWFP that the matter will be referred to an independent arbitration tribunal. Following this decision, WAPDA and NWFP presented their claims and supporting arguments to the arbitration tribunal in 2005. WAPDA, contesting the NWFP claim of unpaid arrears, presented a counter claim that an overpayment of Rs 11 billion had been made to the province between 1991 and 2005 and that this should be adjusted against the future payments. WAPDA's claim is based on the argument that some of the surcharges do not form part of the revenue entitlement of the province.

In October 2006, the tribunal decided in favor of the NWFP claim and concluded that an amount of Rs 110 billion was payable to the province, and that this amount should be paid in five installments. After the tribunal's decision, NWFP requested payment from WAPDA and its guarantor, the federal government. WAPDA in turn has filed a civil suit challenging the tribunal's decision. The Government of NWFP has approached the Supreme Court to get the tribunal's decision implemented. The payment of profits in the meanwhile remains constant at Rs 6 billion per year.

Conclusions and Implementation

There are good opportunities for reforming the system of provincial level taxation and fiscal decentralization in Pakistan, but the job will not be an easy one. A comprehensive reform will require both federal and provincial government involvement. The leadership in program design for this activity might come from FBR, but any reform of the intergovernmental system must leave significant room for provincial level discretion.

A properly designed reform must at once allow the federal government to satisfy its objective of increasing provincial level taxes in a framework of good tax policy, and the provincial government to satisfy its objective of enhancing both public service levels and fiscal autonomy. In keeping with the spirit of fiscal decentralization one would not expect all provinces to choose exactly the same reform program. It is imperative, then, that the federal government be clear on what is inside and what is outside the legal boundaries for provincial revenue mobilization.

The design of the tax reform might center on four elements. The first is to determine appropriate targets for provincial tax revenues, i.e., by how much should revenues be increased? The second is to identify structural reforms that would make the provincial tax system operate in a more efficient way, would hit these revenue targets, and would further the decentralization goals that the government has adopted. The third is to put appropriate incentives in place to encourage provinces to implement tax reforms that will generate increased revenues. The fourth is to lay out the elements of a feasible implementation program for these structural reforms. We cover all four of these elements in the discussion below, and in a final note we add a discussion of actions that the federal and provincial governments might take to begin moving toward implementation.

Perhaps most important of all considerations about the proper reform package is its political acceptability. The reform program laid out above is more fair than the present system in that it moves toward treating all taxpayers in the same way by removing tax preferences from many households and businesses. Special treatments are rarely given up without a fight, however, and the more influential are those who have enjoyed the preference, the tougher will be the fight. In addition, the reform package includes a net revenue increase of significant amount. Taxpayers usually are resistant to tax increases, even when account is taken of the possible improvement in public services. Tax reform coupled with tax increase will require a strong political will on the part of the leadership in both provinces.

Revenue Targets

How much tax revenue should be raised by provincial governments? The most conservative of politicians will favor low risk options, usually a tinkering with the present system. But tinkering will not raise much money. We see the basic goal of this reform to be a significant increase in revenue mobilization by provincial governments. This calls for a more far-reaching set of reforms, and much higher revenue targets. This is perhaps the first matter for policy makers to sort out.

Estimating a tax revenue target for Pakistan's provinces is at best a subjective exercise. For example, the federal government has called for an increase in provincial taxes to reach a level equivalent to one percent of GDP.[111] Achieving this target would require a doubling of the present level of revenues in both provinces. There is no documentation available on how this central government target was determined, nor are there proposals for how it might be reached.

There are systematic approaches to fixing on provincial revenue targets, and arguably this is where the formation of an intergovernmental fiscal reform program should begin. Probably the best approach is to start with expenditure targets that reflect minimum acceptable service levels (ME). From the identity

ME – Tr = OSR

where Tr = transfers

OSR = own source revenues,

we can develop a revenue target for provincial governments. After accounting for financing from intergovernmental transfers, the remainder of the cost of providing minimum service levels would be covered by own source revenues. This normative service level approach to determining the minimum needed level of tax effort is what each provincial government should do, i.e., revenue needs should be based on an expenditure plan.[112] However, the major difficulty with this approach is that "minimum service level" is itself a subjective concept. Determining minimum service levels, and costing them out, becomes a balancing act between affordability and what a province considers to be its most pressing needs for upgrading services.[113]

---

[111] This target was presented in the *Economic Survey* (Government of Pakistan, 2007, p.65).

[112] The revenue target for motor vehicle taxes, discussed above, was set in reference to roadway expenditures. This is an example of expenditure needs driving a revenue target.

[113] South Africa uses such an approach by allocating a portion of its "equitable shares" grant to local

Sometimes the balancing act is driven more by affordability (and political) considerations than by service upgrading. This would seem to be the case in Pakistan. Politics often has driven higher investments in the expansion of service delivery networks. In the 1990s, costly CDLs were used to carry on infrastructure development programs despite revenue shortfalls. The provinces recognize that the services they provide are greatly inadequate, but they have not been willing to increase taxes to cover this gap. In fact, it is more likely that expenditure levels are driven primarily by the amount of transfers (and loans) received from the center.[114] The solutions to this problem are either (a) to leave it to local voters to push elected officials for increases in service levels that would lead to tax increases, or (b) to put in place a system of incentives/penalties for higher/lower rates of provincial revenue mobilization. Either of these solutions is consistent with the fiscal decentralization approach to governance. However, it does not appear that any of Pakistan's provinces have established minimum spending or service levels. Under the ADB's Punjab Devolved Social Services Program, minimum service delivery standards have been developed but they have not been adopted (ADB, 2007). Nor does the federal government target for provincial taxes appear to be driven by this concept. Expenditure benchmarks were established in the Poverty Reduction Strategy Paper in 2004 (Government of Pakistan 2004, Table 71, page 110).

A second approach is to set the provincial revenue target as the amount necessary to eliminate the structural budget deficit for each province. Based on the analysis

---

governments on a basis of expenditure needs. The approach is to provide each local government with a block grant that is equal to the estimated cost of providing 'basic services' to poor households (Reschovsky, 2003).

[114] This too is subject to a hard budget constraint and therefore implies a role for the NFC in Provincial finance reform.

presented above and summarized in Table 3, we can argue that the shortfall in Punjab is equivalent to 137 percent of total provincial taxes in 2006-2007. The analogous number for NWFP is about 300 percent of total provincial taxes (Table 5). This calculation suggests quite large target increase in provincial taxes for both provinces. Note however that this “fiscal discipline” approach to setting budget targets is driven more by goals of budget balance than by public service needs. While it is a good thing that provincial governments are financially solvent, the reasons for this solvency can be as much due to low spending and low taxes as to fiscal prudence. A companion reform to upgrade provincial services would call for an even higher tax target.

The revenue target might also be set by using international comparisons. The average level of subnational government taxes in developing countries is equivalent to about 10 percent of total taxes raised by central and subnational governments (Bahl and Wallace, 2005). Thus each province might take the target of raising its ratio of taxes to GDP to a level that is equivalent to 10 percent of the central government’s tax to GDP ratio. Using this approach, we can estimate that Punjab’s target would require an increase of 111 percent in taxes and NWFP’s would require a 179 percent increase in taxes. The fault with the international standards target is that it is calculated without reference to expenditure needs or to expenditure responsibilities assigned to the provincial and local governments, it is based on uncertain (IMF) data, and it is arbitrary. The illustrative targets for property taxation, discussed above, were set in this manner.

In developing the revenue profile for a comprehensive reform program, we will work with two targets: Scenario “A” is based on eliminating the structural deficit of the provinces, and scenario “B” is based on an international norm approach. These targets can give a first approximation of the amount of revenue to be raised with tax structure revisions. This is summarized in rows 1 and 2 of Table 46 and 47 for Punjab and NWFP, respectively. For example, Punjab's tax targets are Rs 65.3 billion (A) and Rs 46.7 billion (B) while actual collections are Rs 22.1 billion. NWFP's targets are Rs 12 billion (A) and Rs 7.7 billion (B) while actual collections are about Rs 2.8 billion. We base the analysis on 2005-2006 fiscal year data so as to take advantage of reported actual amounts.

Note that these targets call for provincial taxes to rise to between 1.06 and 1.66 percent of GDP, hence they also meet the goals laid out by the federal government. On the other hand, these two revenue targets call for some provincial taxes to increase several fold over their present levels. As is discussed in the analysis above, there are restructuring options for provincial taxes that could lead to such increases. However, these options suggest the need for a considerable upgrading of the administrative capabilities of the provincial governments, as well as a difficult political sell.

<u>Structural Reforms</u>

Some will argue that these targets are too ambitious. On the other hand, these targets may be viewed in the context of the very low current level of taxation, the many preferential treatments that have been given, and lax administration. The whole idea of this reform option is to significantly increase the participation of provincial governments in revenue mobilization, so it follows that the targets should be high. If the provincial political leadership feels uneasy with the target levels of revenue mobilization, it is probably a sign that the reform program suggested has met its objectives. Also, there is the question of the timing required to reach these targets, i.e., a one year tripling of a tax might be politically infeasible, but a four year time horizon might make the same reform palatable.

As demonstrated in some detail above, this range of revenue targets can be reached with what many would see as "reasonable" structural reforms. Moreover, the reforms outlined here have other beneficial properties in terms of improving the equity of the system, reducing the administrative cost, and rationalizing the choice of tax instruments. It should be said early (and often) that these policy changes and revenue enhancements cannot be realized without a significant upgrading of the tax assessment and collection efforts of the provincial governments.

The structural reform opportunities that can be pursued under a comprehensive reform are outlined in Table 48, with estimates of the revenue potential for each reform shown in Tables 46 and 47.[115] For example, in the case of the reform of the property tax (UIPT) for Punjab, the specific package of reforms is outlined in Table 48. In row (4) of Table 46, we show that these UIPT reforms would generate revenues of Rs 14.2 billion at 2005-2006 levels. This would account for about 22 percent of the structural deficit target (Rs 65.3 billion, and about 30 percent of the international average target (Rs 46.7 billion).[116] However, such an increase in property tax revenues would bring a major tax shock. Note that it would require more than a tenfold increase in property taxes, and would bring the UIPT to a level of 0.3 percent of GDP. An increase of this magnitude is

[115] Only the comprehensive reform package is outlined in Tables 46-48. Several other options have been presented in the analysis above, and are summarized in the policy matrices shown in Appendix E.

[116] This increase in revenues is less than the amounts shown in the property tax analysis above, because there is no provision here for an increase in the nominal tax rate, and because the analysis here is for 2005-2006.

rarely observed, which might lead some to conclude that it is impossible. Another way to look at it is that the present levels of property tax in Punjab and NWFP are so low that this reform is tantamount to introducing a new tax. Moreover the recent decision to assign the tax to local government is an opportunity to completely overall the urban property tax. Even so, the full "reform" would need to be phased in, perhaps over a period of three years. Roughly the same scenario for UIPT is shown for NWFP in Table 47. It would be incorrect, in our view, to assume that an increase of this magnitude is not possible. And, we note that even with this increase, property tax revenues in both provinces would be lower than the international average for developing countries.

We offer a full package of comprehensive reforms (Table 48) for the other provincial taxes, with revenue estimates shown in Table 46 for Punjab and in Table 47 for NWFP. The revenue estimates, are drawn from the individual analyses presented above, and are further summarized in Appendix E. As shown in Table 46 (bottom row) this package of reforms can cover about 73 percent of the structural deficit in Punjab, and raise the level of provincial taxes to approximately the 1 percent federal government target. In the case of NWFP (Table 47), these same structural reforms fall short of the structural deficit target by about 44 percent. This result is not unexpected. NWFP is a poorer province, and even with the same tax effort it cannot cover desired expenditures. With respect to Target B, this package of reforms enables Punjab to raise taxes to the international average, but in case of NWFP it falls short of the target by about 12 percent.

What to make of these results? First, even this ambitious program does not allow Punjab to cover its structural deficit. However, the administrative reforms that accompany this set of rate and base changes may cover the remaining gap – equivalent to about 25 percent of the present level of taxes. If not, a further increase in the effective tax rates proposed here will be necessary. In the case of NWFP, we might make the same observation, but note that even with administrative improvements, a significant gap will remain. Part of the solution here will include increased equalization transfers.

Incentives

Provincial governments must be willing to enact and implement these reform measures if revenue gains are to be realized. As discussed above, there has not been much interest in revenue mobilization on the part of the provincial governments in the past. There are three ways in which this reluctance might be overcome enough to reform the tax system. The first is to convince taxpayers that a result of the reform will be improved public services. The second is to convince taxpayers that a comprehensive reform will bring about a more fair tax system, in that similarly situated households and businesses will be treated the same. It also can be argued that such a tax system will be friendly to economic development because of its fairness and because the higher rate of revenue mobilization could lead to infrastructure improvements. The third is to offer an incentive that is lucrative enough to help provincial governments overcome their reluctance to increase taxes. The discussion below focuses on the incentive route.

Punjab finances only 9 percent of its expenditures from its own taxes, and NWFP finances only 3 percent. The remainder of revenues come from intergovernmental transfers and from loans. This state of affairs raises two problems. First, it weakens the link between the expenditure benefits enjoyed by local residents and the burden associated with paying for those expenditures. The result is a weak accountability of provincial/local officials to their voting constituency. Second, provincial and local governments have a comparative advantage in raising certain types of revenue. Their failure to aggressively collect these revenues imposes a "cost" in terms of an overall lower level of revenue mobilization in the country. The consequence is a lower level of public services than otherwise would be the case.

The question arises as to why provincial government taxes are not higher. In Punjab and NWFP the standard answers to this question are weak taxable capacity, inadequate tax sources, deficient tax administration, and voter resistance. All of these arguments are open to some debate, but as we have shown above, the provincial tax share of GDP has remained low during this decade.

A possible explanation of the failure of provincial governments to mobilize more revenue is that they have too little incentive to do so. The central government provides significant and growing revenue through transfers and loan funds, so why incur the wrath of voters and take on the local elite by raising taxes? Arguably, political leaders in provincial governments would rather be accountable for the present levels of public services than spend their political capital. A related issue is that provincial governments are not very good at spending for public services. In fact, provincial spending patterns are characterized by unfilled positions and delays in capital project disbursements. If provinces cannot spend what they have available now, why raise more in taxes? This is yet another dimension to the provincial tax effort issue.

An Incentive Model. To address the problem of incentives for increasing taxes, the federal government may want to reconsider the structure of transfers by including a reward for increased revenue mobilization in the distribution formula.

At present, the distribution of the NFC award among the four provinces is done according to population size. The awards in 2005-2006 are shown in columns 1 and 2 of Table 49. Note that the awards are structured so as to be invariant with respect to tax effort. This means that if a province had a higher rate of revenue mobilization than shown in column 3, it would receive neither more nor less in NFC award. The goal of an incentive program is to change this state of affairs.

We propose that the NFC award be divided into two components: an NFC incentive award (NFCIA) and an NFC normal award (NFCN). NFCN would continue to be distributed according to population shares (or according to other criteria that a future Finance Commission would choose). The Finance Commission would decide on the relative sizes of the incentive pool and the normal pool. For example, they might decide to distribute 10 percent through the incentive pool and 90 percent through the normal pool. The more weight placed on the goal of increased tax effort, the greater will be the share of the incentive pool.

The other dimension of the NFC award, the distribution of the incentive pool among provinces, raises more difficult questions. There are many ways to structure an incentive grant, and this will require a study and careful empirical analysis. Such a study would include all four provinces, and involve simulation of the possible impacts of various formulae. Because only two provinces are included in this study, we can offer no more than a hypothetical example, based on assumed numbers for Sindh and Balochistan.

To illustrate, one possible formula would be the following:

$$NFCIA_i = \frac{TE_i}{\Sigma\, TE_i}\,(W_t.\ NFCIA) + \frac{TG_i}{\Sigma\, TG_i}\,(W_g.\ NCFIA)$$

Where

$NFCIA_i$ = incentive award given to the i^{th} province

NFCIA = total size of the incentive fund

Wt = weight given to the tax effort component

TE_i= tax effort index in the i^{th} province

W_g = weight given to tax effort index improvement

TG_i = growth in tax effort in the i^{th} province

Such a formula would reward both higher levels of tax and the growth in taxes. But this formula is only illustrative and there is much work to do in designing this kind of grant program. Four conceptual decisions must be made. These decisions suggest how difficult it might be to make the choices necessary to design and implement the formula.

The first difficult choice is the size of the incentive fund vs. the normal fund. The bigger is the incentive fund, the greater the potential to compromise equalization (if higher income provinces exert a greater tax effort). That is, if Punjab and Sindh made the highest tax effort, this formula would result in shifting resources toward Punjab and Sindh and away from NWFP and Balochistan. The larger the size of the incentive fund, the greater the shift. This raises the difficult issue of what would happen to the losing provinces under such a regime. The failure of a province to raise taxes could lead to compromises in service levels in that province. The federal government would have to decide if it is ready to face the fallout from such a shift in resources in order to encourage more resource mobilization at the provincial level. Alternatively, it could consider establishing a separate equalization component in its NFC award.

The other side of the issue is that the incentive reward must be large enough to draw a tax effort response from the provincial government. The province will want an answer to the question, "how much in additional transfer do I get if I raise Rs 1 million in additional taxes"? The larger the potential reward, the more willing might the province be to implement revenue enhancement measures.

A second difficult problem is defining the measure of tax effort. Ideally one would measure the level of taxes collected as a percent of the capacity to raise taxes. Tax collections as a percent of provincial GDP is the most obvious candidate. But, there are three flaws in using such an indicator: (a) the measurement of provincial GDP in Pakistan is not well developed, (b) the *composition* of GDP may matter greatly in determining taxable capacity, and (c), a province may be able to export the burden of taxes (e.g., the headquarters issue in Sindh) and still have the collections count toward its higher tax effort.

The third difficult choice is whether and by how much to reward the *level* of tax effort vs. the *increase* in tax effort. There are arguments for and against both indicators. If only the level of tax effort is rewarded, high taxing provinces might not have adequate incentive to "do better". If only the increase in tax effort is rewarded, historically lower taxing provinces might be favored over historically higher taxing provinces.

Finally, there are difficult legal and political hurdles to overcome in building an incentive component into the NFC awards. On the legal side, is there a way to circumvent the requirement that all provinces must agree to the formula structure of the

NFC award? Can this formula adjustment be done by federal government mandate? So long as consensus is a binding constraint on the NFC distribution formula, it seems unlikely that an incentive plan will be acceptable. The possible opening is that the incentive grant might be structured out of the federal share and under clause (b) of article 160 or sub-article (7) of article 160 of the constitution. On the political side, provinces have already shown themselves to be unwilling to increase taxes, even in the face of poor public service levels. This does not bode well for the prospects of provinces accepting a reward/penalty program based on their tax effort choices.

Empirical Test: An Illustration. For purposes of illustration of how such a scheme might work, we propose a model with the following features:

- 75 percent of the NFC award is allocated to the normal pool and is distributed by population.
- 25 percent of the NFC award is allocated to an incentive pool.
- The incentive pool is allocated across provinces 50 percent according to the level of tax effort and 50 percent according to the increase in tax effort.
- Tax effort is measured as the ratio of provincial taxes to GDP and the change in tax effort is the change in the ratio of taxes to GDP. Negative changes in tax effort earn a zero allocation.

The results of our illustrative simulation are shown in Table 49. In columns 1 and 2, we report the distribution of the NFC award under the present system. For example, NWFP receives 12.86 percent of the total NFC award. In columns 3, 4 and 5, we show the measures of tax effort and changes in tax effort. (Note that the values for Sindh and Balochistan are assumed, hypothetical amounts). The results of this simulation are shown in columns 6 and 7. The following are worth remark.

- Sindh exerts the highest tax effort in this illustrative model, and the result is a shift in the NFC award toward Sindh. NWFP also has a high tax effort and also gains an increased share. The Sindh share of total NFC revenues increases from 28 to 37.3 percent, while that for NWFP rises from 12.9 to 13.2 percent.

- Punjab has a lower tax effort, and its share of the NFC award declines. In this illustration the decline is from 52 to 42 percent of the total award.

- Balochistan makes the lowest tax effort, but still gains an increased share of the NFC award. This is because even with a low level of tax effort, it has a stronger position than in the population sharing pool.

Implementation and Institutional change

If there is a clear message in this analysis of provincial taxes, it is that reform must be comprehensive, i.e., it must address policy design, incentives to increase the rate of revenue mobilization, and tax administration. The focus of this analysis is tax policy but the success of a structural reform will depend on whether an improved tax administration can be achieved. Without significant improvements in tax administration, especially updated surveys of taxable subjects, more accurate valuation, and the automation of recordkeeping, better tax structures will come to naught. An important first step toward improving the system of tax administration is to reconsider the fragmented responsibility for tax assessment and collections. With a unified tax administration in place, it will be easier to measure and assess tax bases.

In Punjab and NWFP, the principal tax collecting agencies are the Board of Revenue (BOR) and the Excise and Taxation Department. The BOR is mainly concerned with taxes on rural lands. Specifically, it assesses and collects stamp duty, mutation fee, registration fee, land revenue and agriculture income tax. In the case of stamp duty and registration fee, BOR is also responsible for collections in urban areas. The ETD collects UIPT, motor vehicle taxes, professions tax, provincial excise duty and some smaller provincial taxes. In the case of the sales tax on services and electricity duty, the finance departments of the federal and provincial governments, respectively, play a primary role. In all of this work, there appears to be little collaboration between ETD and BOR, or between the federal and provincial government.

This state of affairs is counterproductive to effective policy and collection. The kind of problems that arise might be illustrated with three examples. First, the valuation tables for the property transfer taxes and the UIPT are separately done, even though both taxes rely on much the same information to establish a base of taxation. Increasingly, the two agencies are said to be coordinating at the field level to ensure reliability of information, but still their records are not aligned with each other. Second, the record keeping function can fall between the two agencies. In areas which are newly urbanized, the patwari does not update his record to reflect the development of housing units on erstwhile agriculture land. If the area is not notified as urban, the ETD does not cover it in their surveys nor do they pick it up on their valuation registers. The fact that BOR is primarily concerned with rural lands means that its record keeping does not extend into urban areas. Nearly all urban areas lack a systematic record of property titles. The systems and expertise of the BOR is not used for urban areas. The result is that nearly all urban areas lack a systematic record of property titles. Third, there is no way to cross check for compliance problems, either within or between agencies. For example, motor vehicle registrations cannot be cross checked against land ownerships records (which could aid compliance and would be a desirable feature of a motor vehicle registration system that had a residence requirement).

The present organizational structure is recognized by many observers as sub-optimal. The Government of Punjab has discussed creating a unified tax authority. A Provincial Board of Revenue might be set up with all provincial tax assessment and collection functions assigned to it. (Property titling may or may not be included in its functions). A joint BOR, organized according to tax functions would give the provinces a better functional capacity to raise the revenues assigned to them. It should be equipped with computerized systems of tax base documentation, qualified tax administrators and adequate resources to manage collection. There are numerous advantages to be had from a unified tax administration at the provincial level.

- All tax bases and tax payment histories could be cross–referenced. For example, payment of motor vehicle annual tax, UIPT and professional tax could be linked by a unique taxpayer number.
- There could be a complete enumeration of all land (rural and urban) in the province, and this enumeration could include physical dimensions, value information, use, ownership and tax payment history.
- A unified tax administration would allow the government to capture economies of scale in both training and EDP.

It is well beyond the scope of this study to evaluate this proposal in detail, but the possible gains from a unified authority are great enough to merit a serious review, despite the history of objections to this proposal.

Implementation: Timetable

Another dimension of implementation is a timetable for reform. Some of the reforms suggested in this review can be adopted quickly, if government chooses to do so, while others would require more time to prepare for implementation. The following schedule is one set of suggestions about the time required to put these reforms in place, if Government chose to do so.

<u>Reforms that could be introduced quickly (within one year)</u>

- Prepare a new valuation table in Punjab
- Eliminate preferential treatments under UIPT
- Adopt a new property tax base in NWFP
- Unify motor vehicle taxes into an annual tax
- Introduce a motor fuel tax
- Convert the sales tax on services to a shared federal-provincial tax
- Bring the hotel tax and the electricity duty into the sales tax on services
- Allocate the entertainment tax to local governments

<u>Reforms that would require 1-3 years to Introduce</u>

- Unify land taxes as an annual tax on land value, based on a new survey of all properties in the province; eliminate the property transfer tax
- Introduce a new valuation roll in NWFP
- Expand the base of the Professions Tax
- Convert the agricultural income tax to a presumptive tax on income based on land area and crop type. Bring all agricultural cesses into this tax base.
- Expand the base of the sales tax on services
- Introduce an incentive element into the NFC formula

<u>Longer term reforms</u>

- Adopt a capital gains tax on land
- Convert the professions tax to an income tax surcharge

What to do Next?

The federal and provincial governments might use this report as an input in beginning to think about long run tax reform for the provincial governments. The first task to be undertaken is to develop analyses similar to this for Sindh and Balochistan, so that a complete picture of the current situation is gained. It would be inappropriate to begin developing national policy without a better understanding of the relevant differences in these two provinces vs NWFP and Punjab. Following this, two blue ribbon committees should begin working: one at the federal government level and one at the provincial government level.

Federal Blue Ribbon Commission on Fiscal Federalism. The Federal Commission would take on two major tasks. The first would be to address the problems with tax assignment, and the second would be to revisit the NFC award formula.

(i) Tax assignment. Some of Pakistan's fiscal problems have their origins in a deep-seated philosophy about taxation and revenue sharing. The constitution and its interpretation call for a revenue assignment model where certain tax instruments are renewed for each level of government (either directly or by exclusion). This raises two problems of fiscal balance that contribute significantly to the fiscal problems of the provincial governments.

The first is the vertical imbalance between the significant expenditure role that provinces have been asked to play, and the less productive revenue sources that have been assigned to them. The agricultural sector, the consumption of services, and real estate are all notoriously hard to tax. The result is that most of the provincial budget is financed with revenue sharing from central government taxes. Direct revenue mobilization by provincial governments is much less important. One of the main advantages of a decentralized fiscal system --- the ability of elected subnational governments to choose a level of taxes that matches their preference for public expenditures --- is not captured.

The second imbalance is in the area of tax administration. The federal government's ability to assess and collect income and consumption – based taxes is much superior to that of sub-national governments. Even if the power to access a broad-based tax were given to provincial governments, the administrative ability to do so would not be in place.

The resolution to this problem is to move toward a tax base sharing model where the federal government defines the tax base, sets a federal tax rate and administers the tax. Each provincial government would choose its own tax rate, probably within some limits. This tax base sharing approach could be applied to the sales tax on services and to a piggyback on the individual income tax to replace the professions tax.

(ii) Intergovernmental Transfers. The Commission might take this occasion to review the present system of intergovernmental transfers. In some ways the system is working well. It is transparent, and full entitlements are distributed. The vertical share is growing, and the importance of NFC transfers in provincial government finance is increasing. If there are issues surrounding the NFC awards, they have to do with the failure to agree on a formula in a timely manner and with some dissatisfaction with the formula finally arrived at.[117]

The problem that is more central to this analysis is that provincial government

---

[117] The discussion in the press around the time of and award suggests disagreement on the population – based formula.

revenue mobilization is not increasing, arguably because the NFC award is carrying so much of the revenue load. In theory, the federal government could address this issue by building a greater equalization component into the formula thereby reducing the assignment of NFC awards to the provinces where revenue mobilization potential is greatest. This would force the higher income provincial governments (Punjab and Sindh) to either increase taxes or cut services. A second alternative is to build an incentive for increased tax effort directly into the allocation formula, similar to that outlined above.

Neither of these options are easily structured, and they represent very difficult choices. The federal government might undertake a thorough modeling exercise to try and estimate the impacts of various restructurings on provincial finances.

Provincial Blue Ribbon Commissions on Taxation. Each province might appoint a blue ribbon commission to begin working on this issue. The goal would be to develop a comprehensive reform program, based on best practice and on the objectives that the province set for itself. A further goal would be to find the right fit for provincial taxes in the national scheme. The FBR would join these commissions in an advisory capacity. It is important that the TOR for the commissions include all of the relevant pieces. As this report makes clear, the issues of tax policy, tax administration and intergovernmental transfers cannot be separated if a viable reform is to be designed and implemented. All should be part of the TOR for the commissions. The term of reference should call for study and recommendations in three areas, as discussed below.

First, the structure of taxation should be simplified, perhaps even further than suggested above. Possibly building on the analysis in this paper, the Commission could recommend improvements in the tax structure as well as increases in the level of taxes that would be consistent with provincial revenue targets. Much of the work of the Commission would involve debating the merits of alternative tax packages.

The view in this study is that in the long run, the provincial tax structure might include only the following:

- An urban property tax and an annual tax on agricultural and other rural land. The former would be devolved to local governments.
- A capital gains tax on land.
- A Federally administered surcharge on the individual income tax and a federally administered and expanded sales tax on services. Both could feature provincial level rate setting. The provincial share of revenues would flow directly to the provincial governments.
- An annual tax on motor vehicle use, and a tax on motor fuels.
- All other taxes in the system would be abolished or folded in to those above.

The second part of the work would be to identify the kind of tax administration that is desired. In the long run, a unified (or coordinated) provincial tax administration, and shared federal and provincial tax administration responsibilities should be in the mix. A stronger, automated recordkeeping system for taxation is essential. Training of tax officials is a high priority, to establish state of the art methods of assessment and collection.

The third component of the Commission study would be intergovernmental fiscal relations within the province. This would involve a reassessment of the relationship between the province and its junior bodies, i.e., districts, TMAs and union councils. The three questions to be addressed in this analysis are expenditure assignment, revenue assignment and the system of intergovernmental transfers. Questions of the goals for revenue mobilization by local governments, and equalization, will be central to this work.

The results of the Provincial Commission work in each province should be brought together in a consensus report, a White paper on Provincial government Finance, which could serve as a blueprint for provincial fiscal policy in the next decade.

References

ACO (2000). Agriculture Census 2000, Agriculture Census Organization, Statistics Division, Government of Pakistan.

Asian Development Bank, Department for International Development United Kingdom and World Bank (2004), *Devolution in Pakistan,* Asian Development Bank, Manila, Philippines.

ADB (2004a). NWFP Road Sector Development and Sub-regional Connectivity Project, Report and Recommendations of the President, 2004 (PAK 36052), Asian Development Bank, Manila, Philippines.

ADB (2004b). Punjab Road Sector Development Project, Report and Recommendations of the President, 2004 (PAK 32058), Asian Development Bank, Manila, Philippines.

ADB (2007). Pakistan: Punjab Devolved Social Services Program-Release of the Second Tranche, Program Number: 32264, Loan Number: 2144/2145, Tranche Release Report, October 2007, Asian Development Bank, Manila, Philippines.

Ahmed, Ehtisham and Nicholas Stern (1991) *The Theory and Practice of Tax Reform in Developing Countries*, (New York: Cambridge University Press).

Ahmad, Iftikhar, Usman Mustafa and Mahmood Khalid 2007; National Finance Commission Awards in Pakistan: A Historical Perspective, PIDE Working Papers 2007:33, Pakistan Institute of Development Economics

Agricultural Policy Center, Ministry of Food, Agriculture, and Livestock (2007) "Cost of Production," available on website:

Agricultural Price Commission, Ministry of Food, Agriculture, and Livestock, (2004). "Cost of Production," Islamabad.

Bahl, Roy (2004). "Property Transfer Tax and Stamp Duty" Jamaica Comprehensive Tax Study, Paper Number Two (Atlanta: Andrew Young School of Policy Studies, Georgia State University).

Bahl, Roy, Eunice Heredia-Ortiz, Jorge Martinez-Vazquez and Mark Rider (2005). "India: Fiscal Condition of the States, International Experience, and Options For Reform" International studies Program working Paper 05-14, Andrew Young School of Policy Studies, Georgia State University.

Bahl, Roy, and Jorge Martinez-Vazquez (forthcoming). "The Propoerty Tax in Developing Countries: Current Practice and Prospects" in *Making the Property Tax Work: Experiences in Developing and Transitional Countries, ed. By Roy* Bahl, Jorge Martinez-Vazquez and Joan Youngman. (Cambridge: Lincoln Institute of Land Policy).

Bahl, Roy, Jorge Martinez-Vazquez and Joan Youngman, editors (forthcoming). *Making the Property Tax Work: Experiences in Developing and Transitional Countries* (Cambridge: Lincoln Institute of Land Policy).

Bahl, Roy and Sally Wallace (2003). "Fiscal Decentralization: The Provincial-Local Dimension" in *Public Finance in Developing and Transitional Countries*, ed. by Jorge Martinez-Vazquez and James Alm (Cheltenham, UK: Edward Elgar), pp 5-34.

Bahl, Roy and Sally Wallace (2005). "Public Financing in Developing and Transition Countries" *Public Budgeting and Finance*, Silver Anniversary Issue, Pages 83-98.

Bell, Michael and John Bowman (2002). "Local Property Taxation: Uniformity and Other Issues" in *Property Taxes in South Africa: Challenges in the Post-Apartheid Era* edited by Michael Bell and John Bowman (Cambridge, Mass: Lincoln Institute of Land Policy).

Bird, Richard and Enid Slack, editors (2004) *International Handbook of Land and Property Taxation* (Cheltenham, UK: Edward Elgar).

Bird, Richard and Pierre-Pascal Gendron (2007). *The VAT in Developing and Transition Countries* (Cambridge: Cambridge University Press).

Bird, Richard and Olga Lucia Acosta (2005). "The Dilemma of Decentralization in Colombia" in *Fiscal Reform in Colombia: Problems and Prospects* ed. By Richard Bird, James Poterba and Joel Slemrod (Cambridge, Mass.: The MIT Press).

Bird, Richard and Sally Wallace (2004). "Is it Really so Hard to Tax the Hard-To-Tax?" in *Taxing the Hard to Tax: Lessons From Theory and Practice*, edited by James Alm, Jorge Martinez-Vazquez and Sally Wallace, (Amsterdam: Elsevier) Pages 121-158.

Chaudhry, M. G. and N. N. Kayani (1991). "Implicit taxation of Pakistan's agriculture: an analysis of the commodity and input prices", *Pakistan Development Review*, 30(3): 225-242.

Chaudhry, Ghaffar M. (1999) "The Theory and Practice of Agricultural Income Tax in Pakistan and a Viable Solution," *Pakistan Development Review* 38(4): 757-768.

Coopers and Lybrand (1989). Study of Direct Taxation: Final Report to the Government of Pakistan, Coopers and Lybrand, London

Cyan, Musharraf (2007), "Fiscal Architecture—A Fetter on the New Local Governments", *International Journal of Public Administratin,* Volume 30, Issue 12 - 14 , pages 1459 – 1483.

Dargy, John, Dermot Gately, and Martin Sommer. 2007. "Vehicle Ownership and Income Growth, Worldwide 1960-2030". Working paper, New York University Department of Economics:

Eckert, Joseph (forthcoming). "Computer-Assisted Mass Appraisal Options for Transition and Developing Countries" in *Making the Property Tax Work: Experiences in Developing and Transitional Countries, ed.* By Roy Bahl, Jorge Martinez-Vazquez and Joan Youngman. (Cambridge: Lincoln Institute of Land Policy).

Engelschalk, Michael. 2004. "Creating a favorable tax environment for small business," in James Alm, Jorge Martinez-Vazquez, and Sally Wallace, ed. *Taxing the Hard-to-Tax*, (Amsterdam: Elsevier).

Faisalabad (2007). Annual Budget 2007-2008 for City District Government Faisalabad, City District Government Faisalabad.

Federal Bureau of Statistics (2005 and 2006). *Pakistan Statistical Yearbook* (Islambad, Pakistan). micro data files and documentation. Files received via the FBR.

Federal Bureau of Statistics (2005a and 2006a). *Labour Force Survey*, Government of Pakistan.

Federal Bureau of Statistics (2007). *Pakistan Statistical Yearbook*, Government of Pakistan.

FIAS (2007). Pakistan: Review of Administrative Barriers (Washington DC: The World Bank).

Ghaus, Ayesha (1996); National Finance Commission: Intergovernmental Sharing in Pakistan, (Karachi: Social Policy and Development Center)

Ghaus-Pasha, Aisha, Abdul Rauf Khan and Rafia Ghaus (1998); Provincial Resource Mobilisation, A Paper Prepared for the Commission on Tax Reforms, Government of Pakistan, Social Policy and Development Center, Karachi

Government of NWFP (2007a). *White Paper, 2007-2008*, 16 June 2007, Finance Department, Government of NWFP

Government of NWFP (2007b). *Annual Budget Statement 2007-2008*, Finance Department, Government of NWFP

Government of NWFP (2007c). *Estimates of Receipts for 2007-2008,* Finance Department, Government of NWFP.

Government of Pakistan (2004a), Agricultural Policy Commission, Ministry of Food, Agriculture and Livestock, Government of Pakistan.

Government of Pakistan (2004b). *Porverty Reduction Strategy Paper*, Ministery of Finance, Government of Pakistan.

Government of Pakistan (2007). *Economic Survey: 2006-2007,* Ministery of Finance, Government of Pakistan.

Government of Punjab (1964). *Finance Act 1964*, Finance Department, Government of Punjab.

Government of Punjab (2005). *Pakistan: Punjab Economic Report*, Report no. 29373-PAK, March 31.

Government of Punjab (2007a). *Notification number SOTAX (LG) 2-22/2007*, dated December 17, 2007

Government of Punjab (2007b). *Estimates of Receipts for 2007-2008*, Finance Department, Government of Punjab

Government of Punjab (2007c). *Public Financial Management Reports: Taxes Collected by Excise & Taxation Department* (Punjab Resources Management Program, Planning & Development Department).

Government of Punjab (2007d). *Finance Act 2007*, Finance Department, Government of Punjab.

Government of Punjab (2007e). *Pre-budget Policy Address of Ch. Pervaiz Elahi*, June 13, Government of Punjab

Government of Punjab (2007f). *Public Financial Management Reports: Tax Administration Reforms and Taxes Collected by Board of Revenue* (Punjab Resources Management Program, Planning & Development Department).

Government of Punjab (2007g). *White Paper 2007-2008*, Finance Department, Government of Punjab.

Government of Punjab (2007h). *Finance Act 2007*, Finance Department, Government of Punjab.

Government of Punjab (2007i). Annual Budget Statement 2007-2008, Finance Department, Government of Punjab.

Gurmani, Zulfiqar Ali, Muhammad Zia-ul-Hassan, M. Imran, Ali Raza Jamali, and Muhammad Bashir (2006), "Cost Benefit Analysis of Wheat Barley and Oat Crops for Grain Production," *Journal of Agricultural Research* 44(4): 335-341.

IMF (2006). Government Finance Statistics 2006, International Monetary Fund, Washington DC

IMF (2007). Government Finance Statistics 2007, International Monetary Fund, Washington DC

Kemal, A. R. (2006). Income Inequalities in Pakistan and a Strategy to Reduce Income Inequalities, PRSP Secretariat, Ministry of Finance, Government of Pakistan

Khan, Ahmad (2004). "Reform of Tax Administration in NWFP", Report of the Study Sponsored by DFID, Mimeograph.

Khan, Muhammad Aslam (1999),"Comments on The Theory and Practice of Agricultural Income Tax in Pakistan and a VIable Solution," *The Pakistan Development Review* 30(4): pp. 766-768

Malik, Sohail J. (2004). "Study on Tax Potential in NWFP" (Innovative Development Strategies, Ltd., Mimeographed)

McLure, Charles E., Robert Pitcher, and Lonette Turner (2007). "Taxation of Commercial Motor Fuel in the United States and Canada: The International Fuel Tax Agreement" *Bulletin for International Taxation*, volume 61, no.12, December, pp 541-548.

NTRC (1986), *National Tax Reform Commission Report*. Ministry of Finance, Government of Pakistan, Islambad

Orissa State Government. 2000 Finance Department Notification on Orissa Act 7, Tax on Professions, Trade, Callings, and Employment, accessed on January 1, 2008 http://ws.ori.nic.in/salestax/PT/ptaxrule.htm.

Pasha, Hafiz (1995). "Sales Taxation of Services By Provincial Governments" Conference on Resource Mobilization and Expenditure Planning, Lahore, March 11-13.

Pasha, Hafiz, Aisha Ghaus, Rafia Ghaus and Rizwanullah Khan (1992). Fiscal Policy in Pakistan, Social Policy and Development Center, Karachi

Rajaraman, Indira (2000). Fiscal Features of Rural Local Government in India, in *Governance, Decentralization, and Reform in China, India, and Russia*, Jean-Jacques Dethier, ed. (Bonn, Kluwer Academic Press).

Reschovsky, Andrew (2003). "Intergovernmental Transfers: The Equitable Share" in Restructuring Local Government Finance in Developing countries: Lessons from South Africa, edited by Roy Bahl and Paul Smoke (Cheltenham, UK: Edward Elgar Publishing), pages 173-236.

Soares de Silva, David Roberto R. (2006). "Fuel and Energy Taxation in Brazil is a Work in Progress" *Tax Notes International*, (October 23).

State Bank of Pakistan (2007a). Annual Report, 2006-2007, State Bank of Pakistan, Karachi

State Bank of Pakistan (2007b). Statistical Bulletin, November 2007, State Bank of Pakistan, Karachi

State of West Bengal. 2008. Professions Tax in West Bengal, accessed on January 1, 2008 http://wbcomtax.nic.in/ptax.htm

Sundharam, K.P.M and K. K. Andley. 2003. *Public Finance Theory and Practice*. (New Delhi: S. Chand and Company).

The Urban Unit (2006). "Property Taxes in The Punjab, Pakistan" World Bank Infrastructure and Energy Department, South Asia Region and Planning and Development Department, Government of Punjab.

The Urban Unit (2007). "Property Tax System in The Punjab: Post-Devolution Scenario – A case for Reforms" Planning and Development Department, Government of the Punjab.

Thirsk, Wayne (forthcoming). "Tax Policy in Pakistan: An Assessment of Major Taxes and Options for Reform" Working Paper, International Studies Program, Andrew Young School, Georgia State University.

Wallace, Sally (forthcoming). "The Incidence of Taxation in Pakistan: A Primer and Tax Burden Estimates" Working Paper, International Studies Program, Andrew Young School, Georgia State University.

World Bank (2000). *Pakistan: Reforming Provincial Finance in the Context of Devolution*, Poverty Reduction and Economic management Unit, South Asia Region, World Bank, Washington DC.

World Bank (2001). *Pakistan: Reforming Punjab's Public Finances and Institutions,* Poverty Reduction and Economic management Unit, South Asia Region, World Bank,Washington DC.

World Bank (2004). *Pakistan: Public Expenditure Management, Strategic Issues and Reform Agenda (Vol I),* Poverty Reduction and Economic management Unit, South Asia Region, World Bank, Washington DC.

World Bank (2005a). *Pakistan: NWFP Economic Report*, Poverty Reduction and Economic Management Sector Group, South Asia Region, World Bank, Washington DC.

World Bank (2005b). *State Fiscal Reforms in India: Progress & Prospect,* Delhi, McMillan India.

World Bank (2007). *World Development Report*, World Bank, Washington DC

APPENDIX A

Legal roots of Revenue Assignment in Pakistan

Revenue assignment in Pakistan is derived from the constitution and certain statutes. At the first level, revenues are assigned between the federal government and the provinces by specific constitutional provisions. Local governments are a creation of the provinces. So the provinces assign some of their revenue sources to local governments. This second level of assignment is through statutes like the Local Government Ordinances 2001.

The federal-provincial assignment is either through express constitutional provisions or through the federal and concurrent lists[118]. The principle here is that a revenue source can be assigned to the federation or a province by an express provision in an article of the constitution or through classification in the federal or the concurrent lists of subjects. In the latter case if the revenue source is mentioned in the Federal List it belongs to the federation only, but if it is in the Concurrent List it is a shared base and both the federation and the provinces can develop legal instruments to tax the base. If a revenue source is neither mentioned in the Federal List nor it appears in the Concurrent List, it belongs to the province only.

The revenue assignment between the federal and provincial governments, according to the constitutional scheme, is shown in the following table:

Table A.1. Federal Revenues

	Revenue Assignment/Tax	Legal provision
1.	Personal income tax (except agri income)	Federal List (subject 47)
2.	Corporate income tax	Federal List (subject 48)
3.	Customs	Federal List (subject 43)
4.	Sales tax on goods	Federal List (subject 48)
5.	Excise duty (except on alcohol, narcotics)	Federal List (subject 44)
6.	Capital value tax	Federal List (subject 50)
7.	Estate duty	Federal List (subject 45, 46)
8.	Mineral oil, minerals, natural gas	Federal List (subject 51)
9.	Tax on production capacity	Federal List (subject 52)
10.	Terminal taxes on goods transport and passengers	Federal List (subject 53)
11.	User charges on federal subjects	Federal List (subject 54)

[118] The lists are appended to the constitution and lay down the distribution of subjects between the federal and provincial governments.

Table A.2. Provincial revenues

1.	Excise duty on alcohol, liquor, narcotics	Assigned to province by bar on the federation in the Federal List (subject 44)
2.	Sales tax on services	Residuary assignment
3.	Tax on professions	Article 163 of the constitution
4.	Motor vehicle tax	Residuary assignment
5.	Property tax	Residuary but there is bar in the Federal List (subject 51)
6.	Capital gains	Assigned through bar on the federation in the Federal List (subject 50)
7.	Agriculture income tax	Through bar on the federation in the Federal List (subject 47)
8.	Stamp duty	Residuary assignment
9.	Registration fee	Residuary assignment
10.	Mutation fee	Residuary assignment
11.	Natural gas excise duty	Article 161 of the constitution
12.	Net hydro profits	Article 161 of the constitution
13.	Electricity duty	Article 157(2) (b)of the constitution
14.	User charges	Residuary assignment

Taxes at number 1 to 6 in the table above are shared revenues under the NFC clauses of the constitution. The base and rate are set by the federation.

The following table summarizes the revenues assigned to local government by the provinces under the Local Government Ordinances 2001:

Table A.3. Local Revenues[119]

District Councils	Tehsil and Town Councils	Union administrations
• Education tax. • Health tax. • Tax on vehicles other than motor vehicles. • Local rate on lands assessable to land revenue. • Fees in respect of schools, colleges, and health facilities established or maintained by the district government. • Fees for licenses granted by the district government. • Fees for specific services rendered by a district government. • Collection charges for recovery of tax on behalf of the government as prescribed. • Toll on new roads, bridges, within the limits of a district, other than national and provincial highways and roads.	• Local tax on services. • Tax on the transfer of immovable property. • Property tax on annual rental value of buildings and lands. • Fee on advertisement, other than on radio and television, and billboards. • Fee for fairs, agricultural shows, cattle fairs, industrial exhibitions, tournaments and other public events. • Fee for approval of building plans and erection and re-erection of buildings. • Fee for licenses or permits and penalties or fines for violation of the licensing rules. • Charges for execution and maintenance of works of public utility like lighting of public places, drainage, conservancy, and water supply. • Fee on cinemas, theatrical shows and tickets thereof, and other entertainment. • Collection charges for recovery of any tax on behalf of the Government, District Government, Union Administration or any statutory authority as prescribed.	• Fees for licensing of professions and vocations. • Fee on sale of animals in cattle markets. • Market fees. • Fees for certification of births, marriages and deaths. • Charges for specific services rendered by the union council. • Rate for the remuneration of village and neighborhood guards. • Rate for the execution or maintenance of any work of public utility like lighting of public places, drainage, conservancy and water supply.

[119] *Devolution in Pakistan*, ADB/DfID/WB 2004

APPENDIX B

Methodology Used in Estimating the Revenue Cost of Tax Preferences in Punjab

Estimation of the revenue cost of property tax preference builds on actual data from Punjab ETD. However, some necessary data are not available and we make some assumptions. Different assumptions of course will yield different results, but the estimates give a better way to study the revenue cost of tax preferences then does pure guesswork.

The data in the top panel of columns (1) and (2) in the Appendix Table Exemptions were provided by ETD. The assumptions are shown in the bottom panel of the table. The data in column (3) to (5) are the estimates.

Owner Occupied Residential Units. The property tax demand for rented, residential units is Rs.3718 per unit. We apply this average tax rate to 95% of the 383,021 owner occupied residential units to estimate a "true demand" of Rs.1.4 billion (column 3). The remaining five percent of the owner occupied units are assumed to be industrial units. The difference between this amount and the Rs.451 million demanded in 2006-07 (column 2) is the tax preference (Rs. 901 million).

Owner Occupied Commercial Units. The average tax demand on a rented commercial unit is Rs.4440. We apply this average tax rate to 234,986 owner occupied commercial units and estimate a demand of Rs.1.04 billion (column 3). The tax preference in this case is Rs.463 million.

Industrial Units. We assume the number of industrial units to be equal to 5% of residential properties, which comes to 28,486. Then we apply the average tax of rented commercial units to this number and estimate the demand for industrial units as Rs.127 million. We calculate the current demand from industrial units to be Rs.57 million by applying the average owner occupied residential rate to the number of units. The tax preference is therefore estimated to be Rs.69 million.

Vacant lots. Assuming that vacant lots are equal to 5% of the residential property units, we calculate a property tax demand from vacant lots applying a rate 1.5 times the average tax on rented residential units. It comes to Rs.159 million. Vacant lots are not taxed at all, therefore the size of tax preference in this case is Rs.159 million.

5-marla units. Using ETD estimates, we calculate the number of 5 marla units to be 1,139,436, (twice the number of residential properties on the tax roll). Then we apply a rate equal to half of the average tax on rented residential units to calculate a demand of Rs.2 billion for this category.

The results of this exercise show that the elimination of these preferential treatments would increase property tax revenue by Rs.3.7 billion. The estimates are made based on the current tax roll.

The ETD's estimated demand with introduction of the new roll is Rs.5.2 billion. The actual demand for 2006-07 was Rs. 2.9 billion. From this we derive a factor of 1.8. We apply this factor to project the demand from all the categories of property under the broader base. The results reported in column 5 are total projected demands and the additional revenue in column 6 is net of the baseline demand in each category. If the new valuation roll were in place, we could estimate the revenue cost of exemptions and preferential rate treatments as Rs. 7.5 billion.

APPENDIX C

Methodology Used in Estimating the Revenue Cost of Tax Preferences in NWFP

For NWFP we did not have the estimated number of properties under each tax category. But we had the numbers for Peshawar zone only. We calculated the impact of the reforms for Peshawar Zone (rows 1 to 10). The ETD reported that nearly 75% of collection comes from Peshawar Zone. Using this fact, we project the total revenue from the reforms for the province in the last row.

Owner Occupied Residential Units. The property tax demand for rented, residential units is Rs.1096 per unit. We apply this average tax rate to 95% of the 50518 owner occupied residential units to estimate true demand of Rs.53 million (column 3). The five percent of the owner occupied units are assumed to be industrial units. The difference between this amount and the Rs.18 million demanded in 2006-07 (column 2) is the tax preference (Rs. 35 million).

Owner Occupied Commercial Units. The average tax demand on a rented commercial unit is Rs.5488. We apply this rate to 59,400,000 owner occupied commercial units and estimate a demand of Rs.247 million (column 3). The tax preference in this case is Rs.188 million.

Industrial Units. We assume the number of industrial units to be equal to 5% of residential properties, which comes to 3757. Then we apply the average tax of rented commercial units to this number and estimate the demand for industrial units as Rs.21 million. We calculate the current demand from industrial units by applying the average owner occupied residential rate to the number of units as Rs.2 million. The tax preference is Rs.18 million.

Vacant lots. Assuming that vacant lots are equal to 5% of the residential property units, we calculate a demand from vacant lots applying a rate 1.5 times the average tax on rented residential units. It comes to Rs.6 million. Vacant lots are not taxed at all, therefore the size of tax preference in this case is Rs.6 million.

5-marla units. Using ETD estimates, we calculate the number of 5 marla units to be 150,284 (twice the number of residential properties on the tax roll). Then we apply a rate equal to half of the average tax on rented residential units to calculate a demand of Rs.82 million for this category.

The ETD has not developed a new roll. Assuming the property revaluation will increase the current values by at least 1.5 times, we simulate for introduction of a new roll and applying the factor of 1.5, project the demand from all the categories of property (column 4). The demand in column 4 is net of the baseline demand in each category.

APPENDIX D

Method Used to Estimate Revenues from a Motor Fuel Tax in Punjab and NWFP

Punjab

The goal in this calculation is to estimate the tax rate for motor fuels in Punjab that will lead to revenues of Rs 6,333 million, which is the amount necessary to cover roadway expenditures. We calculated the tax rates going through the following steps:

1. In Punjab, according to the Ministry of Petroleum and Natural Resources, Government of Pakistan data[120], the consumption of diesel in 2006-07 was 3.982 million metric tons. For motor fuel, it was 0.714 million metric tons. This gives a total of 4.696 million metric tons.

2. Using a weight-volume conversion used by the oil industry[121], this can be converted to 6,049 million liters of diesel and 1,013 million liters of motor fuel.

3. From the oil company advisory website,[122] we can find that the price of motor fuel is Rs 53.7 for motor fuel and Rs 37.7 for HSD (diesel), an average for the year.

4. The ad valorem base is the product of the consumption of gas (1,013 m litres) and the price per litre (Rs 53.7), or Rs 54,369 million. For diesel it is (6,049 m litres) * (Rs 37.7) = Rs 228,034 million. The total base for 2006-2007, then, is Rs 282,403 million.

5. We assume we want an ad valorem rate, in order to maintain an elasticity. We further assume we want the same ad valorem rate for motor fuel (MS) and Diesel (HSD).

6. The rate is calculated as the quotient of the revenue target (Rs 6,333 million) and the base (Rs 282,403), and is equal to about 2.24 percent. It would be equivalent to Rs.0.9 per liter (if we have the same rate for gasoline and diesel).

[120] http://www.ocac.org.pk/province.asp

[121] 1 metric ton of diesel equals 1519 liters and 1 metric ton of regular motor fuel is 1418 liters at 86°F (30°C); http://www.eppo.go.th/ref/UNIT-OIL.html

[122] http://www.ocac.org.pk/province.asp.

NWFP

The goal is again to estimate the tax rate for motor fuels in NWFP that will lead to revenues of Rs 1,284 million, which is the amount necessary to cover roadway expenditures.

1. In NWFP, the consumption of Diesel in 2006-07 was 1.221 million metric tons, according to the Ministry of Petroleum, Government of Pakistan data[123]. For motor fuel, it was 0.063 million metric tons. This gives a total of 1.284 million metric tons.

2. Using a weight-volume conversion, this can be converted to 1,840 million liters of diesel and 89 million liters of gasoline. Again we use the oil industry weight volume conversions.

3. From the Oil company advisory website[124] , we can find that the price of motor fuel is Rs 53.7 for motor fuel and Rs 37.7 for HSD (diesel).

4. The ad valorem base is the product of the consumption of gas (89 m litres) and the price per litre (Rs 53.7) or Rs 4,797 million. For diesel it is (1840 m litres) * (Rs 37.7) = Rs 69,350 million. The total base for 2006-2007, then, is Rs 74,147 million.

5. We want an ad valorem rate, in order to maintain an elasticity. We further assume we want the same ad valorem rate for motor fuel (MS) and Diesel (HSD).

6. The rate is calculated as the quotient of the revenue target (Rs 1284 million) and the base (Rs 66995), and is equal to about 1.73 percent. This will be equivalent to Rs.0.67 per liter if we used the same rate for diesel and gasoline.

123 http://www.ocac.org.pk/province.asp
124 http://www.ocac.org.pk/province.asp

The calculations are given in the following table:

Table D.1. Conversion and Rate Calculation

Revenue Target (Punjab)   Rs 4,154 million

	Punjab					
	Mil Mt Tons[a]	**Conversion Factor[b]**	**Million Liters**	**Price/ Liter**	**Ad valorem base (Rs.)**	**Rate[c]**
Diesel	3.982	1519	6,048.66	37.7	228,034.41	
Motor fuel	0.714	1418	1,012.45	53.7	54,368.67	
Total	4.696		7,061.11		282,403.08	
					Ad valorem rate	1.47
					Specific rate	
					Diesel	0.52
					Motor Fuel	1.00

Rev target (NWFP) Rs 677 million

	NWFP					
	Mil Mt Tons[a]	**Conversion Factor[b]**	**Million Liters**	**Price/ Liter**	**Ad valorem base (Rs.)**	**Rate[c]**
Diesel	1.211	1519	1,839.51	37.7	69,349.49	
Motor fuel	0.063	1418	89.33	53.7	4,797.24	
Total	1.274		1,928.84		74,146.73	
					Ad valorem rate	0.91
					Specific rate	
					Diesel	0.33
					Motor Fuel	0.75

Notes:

[a] The quantities of petroleum products are from http://www.ocac.org.pk/province.asp

[b] Conversion factor used by oil industry, valid at 86 Fahrenheit or 30 Centigrade. [1] 1 metric ton of diesel equals 1519 liters and 1 metric ton of regular motor fuel is 1418 liters at 86°F (30°C); from http://www.eppo.go.th/ref/UNIT-OIL.html

[c] Rates have been arbitrarily chosen to achieve the revenue target.

APPENDIX E

Table E.1. Policy Matrix UIPT Reforms

Structural and Administrative Measures	Revenue impact (in percent increase)[1]	Comments
Punjab should bring in its new valuation roll, and settle on the definition of its tax base.	Punjab (13 percent)	NWFP needs to acknowledge a value based system and revise its value coefficients; This reform could be implemented in two years.
Eliminate 5 marla ,vacant land, and government property exemptions	Punjab (17 percent) NWFP (7 percent)	Introduce an exemption for low value properties
Remove preferential treatment of owner occupied property, industrial property, and governmental property.	Punjab (20 percent) NWFP (49 percent)	Introduce an exemption for low value properties
Index the Property Tax Base	Punjab (4 percent) NWFP (3 percent)	The alternative is a three year valuation cycle, or both measures could be adopted
Punjab should adopt a single nominal rate	Depends on the rate adopted	
The area-unit tax base should be changed to square feet of land and square feet of covered space.	n.a., but the result would be a revenue increase, depending on the rate adopted.	Would encourage a more efficient use of land.
Carry out a survey of all properties	This is necessary to complete a proper valuation roll in both province. Identification of new properties would have a positive revenue effect.	This will require additional staff and training, and possibly an expenditure for contractor.
Prepare a new valuation roll for introduction after the survey is completed.	If full market value is assessed, the property tax base might double in value.	This will require additional staff and training
Value all properties, and separate the valuation function from the rate setting and exemption function	Nil	Allows the technical valuation function to operate independently from the political rate setting and exemption decisions
Do an annual sales ratio study	The revenue impacts are indirect. The sales-ratio study identifies uniformity in assessment and can be used to improve the valuation process.	This will require additional staff and training

APPENDIX E

Table E.1. Policy Matrix UIPT Reforms (continued)

Structural and Administrative Measures	**Revenue impact (in percent increase)[1]**	**Comments**
Devolve rate setting powers to city district governments and TMAs	Revenue impacts will depend on the efficiency with which the local governments administer the property tax, and on their willingness to impose higher effective rates.	This will require additional staff and training

Note:
1. As a percent of total tax revenue in the province in 2005-2006.

APPENDIX E

Table E.2. Policy Matrix Motor Vehicle Tax Reforms

	Structural and Administrative Measures (Comprehensive Reform)	Revenue impact (in percent increase)[1]	Comments
1	Unify registration and token tax into an annual tax on motor vehicles, with a simplified rate structure. Index the rates.	18 percent in Punjab, and 36 percent in NWFP, based on three rates and a consumer price index.	Would cover the cost of roadway expenditures at present levels in both provinces.
2	Fuel levy at an ad valorem rate, with rates varying by province and by type of motor fuel VS diesel	The increase would be 19 percent of present motor vehicle tax revenues in Punjab and 24 percent in NWFP, based on an ad valorem rate of two percent.	Tax rates could be set at levels sufficient to raise the same amount of many as does the present motor vehicle tax regime.

	Structural and Administrative Measures (Piecemeal Reform)	Revenue impact (in percent increase)[1]	Comments
3	Registration Tax (a): adopt a residence requirement, or	n.a. Revenues would probably increase for both NWFP and Punjab.	Enforcement and policing would require new techniques, and the allocation of additional resources for administration.
4	Registration Tax (b): Double the nominal tax rate in each vehicle class and introduce a residence requirement, or	12 percent in Punjab and 16 percent in NWFP[2].	Leakage of registrations would probably be accelerated with the higher rate.
5	Registration Tax (c): transfer to the central government with agreement to share the revenues on a basis' of the size of the road network.	NWFP would lose revenues, but Punjab would probably gain.	Would convert a provincial tax to an intergovernmental transfer.
6	Annual (token) tax: increase and index the specific rates.	The impact of the rate increase depends on the rate chosen. The impact of indexing would be 5 percent in NWFP, and 8 percent in Punjab.	There could be a negative compliance effect.
7	Do a census and computerize registration records.	n.a., but the net impact would be a revenue enhancement.	Update and Computerize motor vehicle registration records; Require windscreen stickers or number plate stickers

APPENDIX E

Table E.2. Policy Matrix Motor Vehicle Tax Reforms (continued)

	Structural and Administrative Measures (Comprehensive Reform)	Revenue impact (in percent increase)[1]	Comments
8	Token tax Collections: Automate payment records to check compliance	n.a., but the net impact would be a revenue enhancement.	Increased fines and penalties would be a good supporting reform.
9	Token tax and registration tax: Adopt a unique tax identifier to enable a cross check with at least the property tax	n.a., but the net impact would be a revenue enhancement.	Would require additional resources.

Notes:
1. As a percent of total tax revenue in the province in 2005-2006.
2. We assume registration equals 1/3 of total collections reported under motor vehicle tax.

APPENDIX E

Table E.3. Policy Matrix Professions Tax

Structural and Administrative Measures	Revenue impact (in percent increase)[1]	Comments
(a) Abolish the tax	Revenue loss of 1.0 percent of total tax revenues in Punjab and 3 percent in NWFP	Delegate the tax to TMAs or Union councils
(b) Convert to a 3 percent levy on federal personal income tax liability	6 percent in Punjab and 8 percent in NWFP	Could be unconstitutional
(c) Merge with the sales tax on services	n.a.	Many professionals supply services, and in some cases, administration would be feasible.
(d) Retain the present structure but raise the rates.	n.a.	Need a comprehensive survey of professionals
(e) Convert to a business registration fee, levied on a presumptive basis	n.a.	Employees would not be taxed separately, but professionals would be taxed separately.
(f) Carry out a complete survey of tax base		This may be a duplication of the work of the income tax department though at present the database of the department is far from complete. There will be a gain in doing it in coordination with the IT department.

Note:
1. As a percent of total tax revenue in the province in 2005-2006.

APPENDIX E

Table E.4. Policy Matrix land Tax Property Transfer Taxes

Structural and Administrative Measures (Comprehensive Reform)	**Revenue impact (in percent increase)[1]**	**Comments**
Eliminate transfer taxes in favor of a unified annual tax on rural land.	Revenue impact would depend on the rate chosen, but with a new survey and valuation, a 15 percent increase in revenues from this source would seem feasible. The increase might be larger.	An annual tax would be levied for all rural lands under this new land tax. Lands used in farming would be subject to AIT. Urban lands would be subject to the UIPT. No property would be subject to more than one tax. Preparatory work could take three years.
Adopt a capital gains tax on real property transfers.	Cannot estimate from available data. Property transfers yielded Rs.11.4 billion in Punjab and Rs.0.7 billion in NWFP, so a capital gains tax could yield a higher amount.	This would be superior to the present system of taxing transfers as a surrogate for capital gains, but would be administratively difficult. Could take three years to design and introduce.
Structural and Administrative Measures (Piecemeal Reform)	**Revenue impact (in percent increase)**	**Comments**
Combine all property transfer taxes into a single levy	Nil under present rates, unless valuation is enhanced.	Aggregate rate will be held constant; improves transparency of the tax
Survey all properties and produce an updated valuation Table.	1.7 billion (8 percent of total tax revenue) increase in Punjab and Rs 101 million in NWFP (4 percent of total tax revenue), assuming a 15 percent increase in values.	This process could take 3 years, and would require staff upgrading.
Upgrade staff to verify all declared values.	Revenue increase would be significant, but there are no data on which to base on estimate.	Could be implemented in two years. Would involve significant administrative costs.

Note:
1. As a percent of total tax revenue in the province in 2005-2006.

APPENDIX E

Table E.5. Policy Matrix Sales Tax on Services

Structural and Administrative Measures	**Revenue impact (in percent increase)[1]**	**Comments**
Convert the sales tax on services into a shared tax with separate provincial and federal rate setting.	Even after a doubling of revenues at the province level, the sales tax on services would still account for less than one percent of GDP originating in the "other services sector. Revenue yield would be Rs 2.2 billion in Punjab (10 percent of total tax revenue) and Rs 420 million in NWFP (15 percent of total tax revenue).	Administration would be by the federal government as is done now.
Alternate Plan: Shift responsibility for taxing services fully to the provinces.	Nil in the short run.	Collections could fall until administrative skills were developed.
Alternate Plan: No change in structure.	Nil in the short run.	Federal administration has been unwilling to tax additional services.

Note:
1. As a percent of total tax revenue in the province in 2005-2006.

APPENDIX E

Table E.6. Policy Matrix Agricultural Income Taxes

Structural and Administrative Measures (Comprehensive Reform)	Revenue impact (in percent increase)[1]	Comments
Reduce the exemption level in Punjab to 5 acres	Increase AIT revenue in Punjab by 38 percent	This would increase the scope of the AIT in the Province and bring it into line with treatment in NWFP. A 5 acre exemption is less generous than the Rs 150,000 federal individual income tax threshold.
Increase the tax rates for a area-based AIT; 7.5 acre exemption; progressive rates	Increase AIT revenue by 11 percent in NWFP and by 21 percent in Punjab.	Increases the progressivity of the tax and may be viewed as more equitable; requires an updating of the Agricultural Census to keep track of farm size and landowner.
Increase tax rates for area based AIT; flat rate by crop type	Increase AIT revenue by 27 percent in NWFP and by 37 percent in Punjab.	Increases the equity of the tax but requires that the authorities keep current with crop type and profitability and landowner.
Increase tax rates for area based AIT; flat rate by crop type	Increase AIT revenue by 27 percent in NWFP and by 37 percent in Punjab.	Increases the equity of the tax but requires that the authorities keep current with crop type and profitability and landowner.
Structural and Administrative Measures (Administrative Reform)	**Revenue impact (in percent increase)**	**Comments**
Expansion of a withholding system on agricultural inputs	n.a.	This would increase the tax handle associated with the tax; however, it may not be effective for much local trading—is likely to be most effective for government transactions.
Create a withholding system for AIT based on the sale of cash crops	n.a.	This would increase the tax handles but would be most effective for larger farmers.

Note:
1. As a percent of total tax revenue in the province in 2005-2006.

APPENDIX E

Table E.6. Policy Matrix Agricultural Income Taxes (continued)

Structural and Administrative Measures (Administrative Reform)	**Revenue impact (in percent increase)[1]**	**Comments**
Introduce a self-assessment scheme	n.a.	This would move the AIT to a more "modern" income tax; however, it is unlikely to be effective without massive follow up by tax authorities and detailed record keeping on the part of the authorities for crop type, ownership, and profitability.
Expand the administrative data to include estimates of the cost of crops, prices of outputs	n.a.	These changes are necessary at the least in the case of a move toward more income-based measures. They require updating of the crop reporting and detailed maintenance of ownership records.

Note:

1. As a percent of total tax revenue in the province in 2005-2006.

APPENDIX E

Table E.7. Policy Matrix: Other Taxes

Structural and Administrative Measures (Administrative Reform)	Revenue impact (in percent increase)[1]	Comments
Shift entertainment Tax to local governments	Nil	Would free up provincial level tax administration resources
Shift Cotton and Tobacco Levies to the agricultural income tax	Nil	Would simplify the tax structure.
Shift hotel tax and electricity duty to the sales tax on services.	Nil	Appropriate to tax these as services. The effective tax rate, would be higher so there could be some revenue increase.

Note:
1. As a percent of total tax revenue in the province in 2005-2006.

APPENDIX F

Illustrative Rate Reform for the Professions Tax[1]

Existing Categories	Existing Rate	Proposed Categories	Proposed Rates
Persons engaged in any Profession, trade, calling either wholly or		All persons engaged in any Profession, trade, calling	
part time within the Province whose monthly income or earning		or employment, other than those mentioned	
i) When exceeds Rs 3000 but does not exceed Rs 5000	Rs 100	hereinafter, within the Province of NWFP, whether	
ii) when exceeds Rs 5000 but does not exceed Rs 10,000	Rs 150	Provincial or Federal employees	
iii) When exceeds Rs 10,000	Rs 200	i) When exceeds Rs 6000 but does not exceed Rs	
		10,000	
		ii) when exceeds Rs 10,000 but does not exceed Rs	Rs 100
		20,000	
		iii) When exceeds Rs20 ,000	Rs 150
			Rs 200
Companies registered under the Companies Ordinance 1984		All limited Companies, Modarbas, Mutual Funds,	
with paid up capital		and any other body corporate with paid capital or	
a. Exceeding Rs 0.2 million but not exceeding Rs 1.0 million	Rs 1000	paid up capital and reserves in the preceding year	
b. Exceeding Rs 1.0 million but not exceeding Rs 2.5 million	Rs 3000	which ever is more	
c. Exceeding Rs 2.5 million but not exceeding Rs 10 million	Rs 6000	a. not exceeding Rs 10 m	Rs 10,000
d. Exceeding Rs 10 million but not exceeding Rs 50 million	Rs 10,000	b. exceeding Rs 10 m but not exceeding Rs 25	
e. Exceeding Rs 50 million but not exceeding Rs 100 million	Rs 25,000	million	Rs 15,000
f. Exceeding RS 100 million	Rs 50,000	c. exceeding Rs 25 m but not exceeding Rs 50	
		million	Rs 20,000
		d. exceeding Rs 50 m but not exceeding Rs 100	
		million	Rs 50,000
		e. exceeding Rs 100 m but not exceeding Rs 200 m	Rs 75,000
		f. exceeding Rs 200 million	Rs 100,000
		EXPLANATION:	
		The paid capital in the case of foreign banks shall be the minimum paid up capital as determined by the State Bank of Pakistan	

APPENDIX F

Illustrative Rate Reform for the Professions Tax[1] (continued)

Existing Categories	Existing Rate	Proposed Categories	Proposed Rates
Persons other than Companies owning factories and commercial establishments with ten or more employees	Rs 750	Persons other than Companies owning factories, commercial establishments, ***Private Educational Institutions and Private Hospitals*** with ten or more employees	Rs 1500
Persons holding licenses under the Import and Export Control Act who during the preceding financial year have imported or exported goods of the value of		Holders of import or export license under the Import ar Export Act assessed to income tax in the preceding yea with annual turn over	
a. not exceeding Rs 50,000	Rs 1000	a. not exceeding Rs 500,000	Rs 1500
b. exceeding Rs 50,000	Rs 1500	b. exceeding Rs 0.5 million but not exceeding Rs 5 m	Rs 2500
		c. exceeding Rs 5 m but not exceeding Rs 25 m	Rs 5,000
		d. exceeding Rs 25 m but not exceeding Rs 100 m	Rs 7,500
		e. exceeding Rs 100 m but not exceeding Rs 500 m	Rs 10,000
		f. exceeding Rs 500 m but not exceeding Rs 1000 m	Rs 30,000
		g. exceeding Rs 1000m	Rs 75,000
Clearing Agents licensed or approved as Custom House Agents	Rs 1000	Same	Rs 1500
Travel Agents		Travel Agents	
a. IATA	Rs 5000	A .IATA	Rs 7500
b. Non-IATA	Rs 2000	b. Non-IATA	Rs 3000
Restaurants and Marriage Halls	Rs 5000	Restaurants	Rs 7500
Advertising Agencies	RS 1000	Advertising Agencies	Rs 5000
Doctors			
a. Specialists	RS 1000	Same	Rs 1500
b. Non Specialists including Medical Practitioners, Hakeems and Homeopaths	Rs 300		Rs 500

APPENDIX F

Illustrative Rate Reform for the Professions Tax[1] (continued)

Existing Categories	Existing Rate	Proposed Categories	Proposed Rates
Clinical Laboratories		Clinical Laboratories including pathological and chemical laboratories	
a. Located at Peshawar and Abbotabad	Rs 5000	a. Located at Peshawar and Abbotabad	Rs 7500
b. Located at other places	Rs 1000	b. Located at other places	Rs 1500
Contractors/Suppliers/Consultant who during the preceding financial year supplied to the federal or any provincial government or any local authority goods, commodities, or rendered service of the value		Contractors/Suppliers/Consultant who during the preceding financial year supplied to the federal or any provincial government or any local authority goods, commodities, or rendered service of the value	
a. exceeding Rs 10,000 but not exceeding Rs 1 million	Rs 1000	a. exceeding Rs 10,000 but not exceeding Rs 1 million	Rs 2000
b. Exceeding Rs 1 million but not exceeding Rs 2.5 million	Rs 1500	b. Exceeding Rs 1 million but not exceeding Rs 2.5 million	Rs 3000
c. Exceeding Rs 2.5 million	Rs 5000	c. Exceeding Rs 2.5 million	Rs 10000
		Petrol Pumps whose commission earned in the preceding year	
		a. does not exceed Rs 0.2 m	Rs 1500
		b. exceeding Rs 0.2 m but does not exceed Rs 0.4 m	Rs 2500
		c. exceeding Rs 0.4 m but does not exceed Rs 0.6 m	Rs 3500
		d. exceeding Rs 0.6 million	Rs 4000
		All establishments including video shops, real estate shops/agencies, car dealers not assessed to income tax in the preceding financial year	Rs 1000.

Note:

1. Based on correspondence with a reviewer.

Glossary of Terms

FATA: Federally Administered Tribal Areas; they are not part of NWFP but traditionally the Governor of NWFP exercises executive authority over them as an agent of the federal government and administers them through political agents. Provincial civil servants are seconded to work in the FATA.

1. Bajaur Agency
2. Mohmand Agency
3. Khyber Agency
4. Kurram Agency
5. Orakzai Agency
6. North Waziristan Agency
7. South Waziristan Agency

Frontier Regions In addition to the two categories above there are smaller tracts of land in some districts which are called FR Regions; they are part of the districts but are administered under the federal laws. Some are

Kala Dhaka (or Black Mountain) in Mansehra
Darra in Kohat
FR Bannu
FR Tank

Cantonment Urban areas administered by the army under a special law. They are mostly the best areas in most cities, sustained by subsidized development, low or no taxes. Most of the land is owned by army which is given out on long term lease.

Nazim Elected head of the local government; there are Zila, Tehsil and Union Nazims. Naib Nazim heads the council.

PATA Provincially Administered Tribal Area

1. District Kohistan
2. District Swat
3. District Shangla
4. District Buner
5. District Upper Dir
6. District Lower Dir
7. District Chitral
8. Malakand Agency

Patwari	The junior most field officer of the land revenue department. (See Box 8).
Tehsil	When used to describe a unit of area It is a conglomeration of revenue estates; When used to describe an administrative unit. It is a sub-district; a Tehsildar heads a tehsil and supervises the work of Kanungos and Patwaris working for him. When used in local government tehsil Municipal Administration is the second tier of local government in rural areas (in urban areas the second tier is called Town); it has an elected council and an indirectly elected Nazim; their mandate is to provide municipal services. Property tax (85 percent of the revenue) has been assigned to the TMA under the new law.
Tehsildar	In charge of the land revenue administration in a Tehsil
Ushr	A tax based on religious tradition; literally means one-tenth. It is levied on agricultural produce: 1/10 of the produce if the land is not irrigated; 1/20 if the land is irrigated
WAPDA	Water and Power Development Authority is a public sector monopoly with a mandate for power generation, transmission and distribution all over the country, except Karachi. It also manages water reservoirs, barrages and link canals, feeding provincial irrigation networks.
Zakat	A religious tax; the base is all kinds of wealth which has not been put to any use for a 12 month period. The state collects in from bank accounts. People pay it on their own and have a choice of giving it to the government or give it to private charities. Overwhelmingly the second option is taken.

Table 1. Disparities in Economic Condition

Variable	Pakistan	Punjab	NWFP
Population[a] (in millions)	161.7	91.2	21.2
(percent of Pakistan)	-	(56)	(13)
Per capita GDP (in rupees)[b]	49,200	48,362	34,307
(percent of Pakistan)	-	(98)	(69)
Percent of GDP[c]			
Agriculture	19.3	27.0	29.6
Manufacturing	17.3	16.1	16.1
Percent of population below poverty line[d]	34.5	45.8	44.6
Land area (sq kms)[e]	796	205	74
(percent of Pakistan)		(26)	(9)
Urban population (millions)	53.9	28.6	3.9
(percent in urban areas)[f]	(33)	(31)	(18)
Percent increase in real per capita GDP(1998-06)[g]	23.4	22.9	23.1

Notes:

[a] Provincial populations are based on the estimates for 2006 prepared by National Institute of Population Studies. National population for 2006 reported from Government of Pakistan (2007)

[b] Calculations for the national per capita GDP are based on data from Table 1.5 in Government of Pakistan (2007), for the Punjab estimate we have relied on Punjab Bureau of Statistics GDP tables and for the NWFP per capita GDP we have used data from NWFP Finance Department. Government of Punjab estimates GDP to have reached Rs.59,219 per capita in 2007, (reported in Government of Punjab 2007e, p.2)

[c] Table 1.5, Statistical Appendix, Government of Pakistan (2007) for the national percentages. The GDP percentages for NWFP are for the year 2002-03 from Government of NWFP (2005) and for Punjab the percentages are for the year 2002-03 from Table 1.5 in Government of Punjab (2005).

[d] The poverty data are for year 2002 from Sohail J. Malik (2004), p. 12-13, a background study carried out by PRSP Secretariat, Ministry of Finance; Government of Punjab estimates poverty in 2007 at 21 percent (reported in Government of Punjab, 2007e, p.8). The World Bank (2007) estimates that 35 percent of NWFP households lived below the poverty line in 2001-2002.

[e] Government of Pakistan 2007

[f] Planning Commission of Pakistan

[g] Calculated from Table 1.5, Statistical Appendix, Government of Pakistan (2007), Punjab Planning and Development Board GDP tables and NWFP Finance Department data.

Table 2. Budgetary Position Punjab 2006-07[a]

(Rupees in millions)

Budgetary Position		2006-07
1. General Revenue Receipts		**276,252**
1.1 Federal Transfers	191,264	
1.2 Provincial tax revenue	31,456	
1.3 Provincial non tax revenue	35,184	
1.4 Development /Non-development grants	18,348	
2. Current Revenue Expenditure		**201,081**
3. Surplus (1-2)		75,171
4. Current Capital expenditure		**87,681**
4.1 Account - I		
4.1.1 Foreign & Domestic Debt Management (Charged)-CDLs[b]	6,367	
4.1.2 Intergovernmental transfers	9,283	
4.1.3 State Trading (Medical Store Depot)	11	
Total Expenditure - I	**15,661**	
4.2 Account – II		
4.2.1 State Trading- Wheat a/c	39,289	
4.2.2 Domestic Debt (Charged)Cash credit from Commercial banks	32,732	
Total Expenditure - II	**72,020**	
5. Development Expenditure		**137,112**
5.1 **Development Revenue Expenditure-**General public service, safety affairs, economic affairs, health, local government, Agriculture etc	68,817	
5.2 **Development Capital Expenditure-** Irrigation, town development, roads, bridges, Government buildings, loans to municipalities etc	68,295	
6. Gross Deficit 3-4-5		-149,622
7. General Capital receipts- Account I		
7.1 Recoveries of loans from Local Governments, government servants, Non-Bank Financial Institutions	670	
7.2 Permanent foreign debt- PRMP, ESR, ASPL II, etc	24,880	
8. General Capital Receipts- Account II		
8.1 State trading schemes receipts	39,036	
8.2 Floating debt- Cash credit accommodation	32,984	
9. Development Capital Receipts-foreign debt from federal government	8,876	
10. Total Capital receipts (7+8+9)		**106,445**
11. Net deficit (6+10)		**-43,176**

Notes:

[a] Government of Punjab (2007i)

[b] Cash development loans (CDLs) are long term federal loans to provincial governments for capital development expenditures.

Table 3. Budgetary Position Punjab 2006-07[a]

(Rupees in millions)

Budgetary Position (Rupees in millions)	2006-07	
1. General Revenue Receipts		**276,252**
1.1 Federal Transfers	191,264	
1.2 Provincial tax revenue	31,456	
1.3 Provincial non tax revenue	35,184	
1.4 Development /Non-development grants	18,348	
2. Current Revenue Expenditure		**285,558**
2.1 General (Salaries, Operation & Management)	201,081	
2.2 Intergovernmental grants	9,283	
2.3 State trading (medical store)	11	
2.4 Development revenue expenditure	68,817	
2.4 Foreign and domestic debt	6,367	
3. Wheat trading operations		**0**
3.1 State trading (wheat account) receipts	39,036	
3.2 Floating debt-cash credit accommodation (short term loans)	32,984	
3.3 State trading (wheat account) purchase	39,289	
3.4 Domestic debt, commercial banks, (repayment of short term loans)	32,732	
A. Current Deficit (1-2+3)		-9,307
4. Capital expenditure		**68,295**
4.1 Development capital expenditure	68,295	
B. Overall Deficit (A+3)		-77,602
5. Financing		**34,425**
5.1 Recoveries of loans from LG, civil servants, NBFI	670	
5.2 Permanent foreign debt (PRMP, ESR, ASPL II etc)	24,880	
5.3 Development capital receipts-foreign debt	8,876	
C. Uncovered Deficit (4-B)		-43,176

Note:

[a] Government of Punjab (2007i)

Table 4. Budgetary Position NWFP 2006-07[a]

(Rupees in millions)

Budgetary Position (Rupees in millions)		2006-07
1. General Revenue Receipts		**66,142**
1.1 Federal Transfers	44,645	
1.2 Provincial tax revenue	3,050	
1.3 Provincial non tax revenue	18,448	
2. Current Revenue Expenditure		**55,174**
3. Surplus (1-2)		10,969
4. Current Capital expenditure		**14,869**
4.1 Account - I		
4.1.1 Foreign & Domestic Debt Management (Charged)-CDLs[b]	4,204	
4.1.2 Loans to government servants and Non financial institutions	24	
Total Expenditure - I	**4,228**	
4.2 Account - II		
4.2.1 State Trading- Wheat a/c	8,161	
4.2.2 Domestic Debt (Charged)Cash credit from Commercial banks	2,480	
Total Expenditure - II	**10,641**	
5. Development Expenditure		**29,501**
5.1 Development Revenue Expenditure-General public service, safety affairs, economic affairs, health, Local government, Agriculture etc	5,589	
5.2 Development Capital Expenditure- Irrigation, town development, roads, bridges, Government buildings, loans to municipalities etc	23,912	
6. Gross Deficit 3-4-5		-33,401
7. General Capital receipts- Account I		
7.1 Recoveries of loans from Local Governments, government servants, NBFIs	400	
7.2 Permanent foreign debt- Program loans etc	7,930	
8. General Capital Receipts- Account II		
8.1 State trading schemes receipts	4,409	
8.2 Floating debt- Cash credit accommodation	2,139	
9. Development Capital Receipts-foreign debt from federal government	9,212	
10. Total Capital receipts (7+8+9)		**24,090**
11. Net deficit (6+10)		**-9,310**

Notes:

[a] Government of NWFP (2007b).

[b] Cash development loans (CDLs) are long term federal loans to provincial governments for capital development expenditures.

Table 5. Budgetary Position NWFP 2006-07[a]

(Rupees in millions)

Budgetary Position (Rupees in millions)	2006-07	
1. General Revenue Receipts		**66,142**
1.1 Federal Transfers	44,645	
1.2 Provincial tax revenue	3,050	
1.3 Provincial non tax revenue	18,448	
1.4 Development /Non-development grants		
2. Current Revenue Expenditure		**64,990**
2.1 General (Salaries, O&M)	55,174	
2.2 Foreign and domestic debt	4,204	
2.3 Loans to civil servants & non-financial institutions	24	
2.4 Development revenue expenditure	5,589	
3. Wheat trading operations		**-4,093**
3.1 State trading (wheat account) receipts	4,409	
3.2 Floating debt- cash credit accommodation (short term loans)	2,139	
3.3 State trading (wheat account) purchase	8,161	
3.4 Domestic debt, commercial banks, (repayment of short term loans)	2,480	
A. Current Deficit (1-2+3)		-2,941
3. Capital expenditure		**23,912**
3.1 Development capital expenditure	23,912	
B. Overall Deficit (A+3)		-26,853
4. Financing		**17,542**
4.1 Recoveries of loans from LG, civil servants, NBFI	400	
4.2 Permanent foreign debt (Program loans, SACs)	7,930	
4.3 Development capital receipts-foreign debt	9,212	
C. Uncovered Deficit (4-B)		-9,310

Note:

[a] Government of NWFP (2007b).

Table 6. Intergovernmental Fiscal Profile of the Four Provinces

Year	Own Source Revenue as a Percent of GDP		Per Capita Expenditures		Intergovernmental Transfers[a] as a Percent of Total Revenues			
	NWFP	Punjab	NWFP	Punjab	Balochistan	NWFP	Punjab	Sindh
1999-2000	0.7	-	-	-	94	86	81	84
2000-01	0.7	-	-	-	94	88	82	82
2001-02	0.8	0.6	-	-	94	86	83	82
2002-03	0.7	0.7	-	1,645	94	88	83	82
2003-04	0.7	0.7	-	1,845	92	86	80	81
2004-05	0.7	0.8	2,575	2,877	92	88	81	81
2005-06	0.6	0.7	4,086	3,396	92	88	83	81
2006-07	-	-	4,485	4,604	-	-	-	-

Source: Calculated from data provided by the World Bank, Islamabad

Note:

[a] Includes only NFC transfers.

Table 7. Fiscal Comparisons: Provincial Level Governments

Country	Years	Percent of Total Government Expenditure by Provincial Governments	Intergovernmental Transfers as a Percent of Total Provincial Revenues
Pakistan[a]	2006-2007	35	83
India	2003	50	37
Russia[b]	-	47	75
Argentina[c]	2004	40	19
South Africa[c]	2005	45	96
Malaysia[c]	2003	8	35

Sources:

[a] Calculated from Table 4.2, Statistical Appendix, Government of Pakistan 2007. It reports revised estimates for the year.

[b] IMF (2007) and Martinez, Rider, and Wallace (forthcoming)

[c] IMF (2006)

Table 8. Revenue Structure of Provincial Governments in 2005-2006

	Punjab		NWFP	
	Rupees (in millions)	**Percent of own source revenues[a]**	**Rupees (in millions)**	**Percent of own source revenues[a]**
Direct Taxes:				
Urban Property Tax	674	2.28	300	6.70
Agriculture income tax	658	2.23	70	1.56
Registration fee (Transfer of Property)	2,113	7.15	42	0.94
Land revenue[b] (includes mutation fee	3,392	11.48	330	7.37
Taxes on professions, trades & callings	225	0.76	75	1.67
Indirect Taxes:				
Motor vehicle tax	4,154	14.06	677	15.11
GST on Services	2,224	7.53	420	9.37
Stamp duties	5,859	19.83	300	6.70
Entertainment tax	13	0.04	13	0.29
Electricity duties	1,270	4.30	270	6.03
Hotel tax	245	0.83	29	0.65
Provincial excises	846	2.86	30	0.67
Education cess	0	0.00	57	1.26
Cotton cess	443	1.50	-	0.00
Other[c]	31	0.11	43	0.96
Total[d]	22,180	74.97	2,762	59.27

Source: Calculations are based on provincial revenue time series data provided by the World Bank, Islamabad.

Notes:

[a] Own source revenue is a total of tax and non tax receipts.

[b] Includes transfers by mutation and miscellaneous land revenue.

[c] The "other" category is calculated as a residual and there are wide variations between years, indicating there may be changes in classification. The NWFP collection reported under "other" is Rs.150 for 2005-2006, while it was less than Rs.5 million in the three preceding years. We use the average amount of the four years for this table.

[d] The total does not add to 100 percent because non-tax receipts are not included. The total for NWFP is based on actual collections in 2005-2006 and does not use the calculation for others described in note ‘c’.

Table 9. Revenue Mobilization in Punjab and NWFP, 2002-2006

Revenue Source	**Punjab**		**NWFP**	
	Revenue as a percent of GDP		Revenue as percent of GDP	
	2001-2002	**2005-2006**	**2001-2002**	**2005-2006**
Urban Property Tax	0.001	0.026	0.039	0.041
Excise Duty	0.021	0.019	0.005	0.004
Land taxes	0.086	0.077	0.049	0.045
Motor Vehicle Taxes	0.064	0.094	0.110	0.093
Professions Tax	0.007	0.005	0.010	0.010
Other Taxes	0.000	0.001	0.014	0.005
Fees and Charges	0.196	0.135	0.255	0.209
Total	0.375	0.358	0.482	0.424

Source: Calculations based on provincial revenue time series data provided by the World Bank, Islamabad

Table 10. The Changing Reliance on Intergovernmental Transfers by Provincial Governments

Period	Per Capita Transfer Amount (nominal)[a,b] (in Rupees)		Per Capita Transfer Amount (in real terms)[c] (in Rupees)		Percent of Total Federal Transfers to four Provinces	
	Punjab	**NWFP**	**Punjab**	**NWFP**	**Punjab**	**NWFP**
1999-2000	889	889	889	889	51	12
2000-01	984	977	909	903	52	12
2001-02	990	974	894	880	51	12
2002-03	1,111	1,136	961	982	52	12
2003-04	1,076	1,172	864	941	51	13
2004-05	1,427	1,495	1070	1122	53	13
2005-06	1,562	1,653	1073	1135	52	13

Sources:
Calculations are based on:
[a] Provincial revenue time series data provided by the World Bank, Islamabad
[b] NIPS population data
[c] FBS GDP deflator

Note: Transfers reported here include only the NFC award.

Table 11. The Growth in Federal Transfers[a]

Years	Transfers received as percent of Provincial GDP		Transfers received as percent of Total Expenditure		Transfers received as percent of Total Federal transfers	
	Punjab	NWFP	Punjab	NWFP	Punjab	NWFP
2000-2001	3	5	-	-	52	12
2001-2002	3	5	-	-	51	12
2002-2003	3	5	68	-	52	12
2003-2004	3	5	58	-	51	13
2004-2005	3	5	50	58	53	13
2005-2006	3	5	46	40	52	13

Note:
[a] Transfers include only shared taxes.

Years	Total Federal Transfers as percent of GDP	Total Federal Expenditures as percent of GDP[a]	Federal Transfers as percent of Federal Expenditures[b]
2000-2001	3.64	-	-
2001-2002	3.60	-	-
2002-2003	3.74	-	-
2003-2004	3.28	10.33	31.77
2004-2005	3.62	10.46	34.63
2005-2006	3.53	10.26	34.38

Sources:
[a] Table 5.10, Government of Pakistan (2007)
[b] For federal expenditures we used Table 5.10, Government of Pakistan (2007) and for transfers we have relied on the provincial time series data provided by the World Bank, Islamabad.

Table 12. Revenue Performance of the Urban Immovable Property Tax

Years	Per capita Nominal Amount (Rupees)[a]		Per capita Real Amount (Rupees) [a,b,c]		Percent of Own source revenue [a]		Percent of GDP [d,e]	
	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab
1999-2000	3.63	2.39	3.628	2.39	2.55	1.14	0.019	0.009
2000-01	7.19	5.86	6.641	5.42	5.23	2.74	0.036	0.020
2001-02[f]	8.26	0.33	7.464	0.30	5.19	0.17	0.039	0.001
2002-03	7.72	11.67	6.677	10.10	4.96	5.22	0.034	0.036
2003-04	10.78	10.73	8.654	8.62	5.80	3.93	0.042	0.029
2004-05	10.20	18.44	7.651	13.83	5.09	5.70	0.034	0.044
2005-06	14.17	12.45	9.733	8.55	6.54	3.84	0.041	0.026

Sources:
Calculations are based on:
[a] Provincial revenue time series data provided by the World Bank, Islamabad
[b] NIPS population data
[c] FBS GDP deflator
[d] Punjab Bureau of Statistics, provincial GDP estimates
[e] NWFP GDP estimates from Government of NWFP (2005)
[f] In 2001-2002 the one year dip in collections in UIPT collection occurred due to the legal challenges to the new valuation roll.

Note: Base Year = 1999-2000

Table 13. International Comparison of Property Tax Revenues: Selected Countries

Country[a]	Percent of GDP
Pakistan[b]	
Punjab	0.026
NWFP	0.041
Chile	0.7
Ethiopia	0.5
Croatia	0.2
Indonesia	0.1
Slovak Republic	0.6
Sri Lanka	0.7
Thailand	0.3
Hungary	0.3
Poland	1.1
Argentina	0.9
Mexico	0.3
South Africa	0.7

Sources:

[a] Bahl and Martinez-Vazquez (forthcoming) and calculations from IMF (2005) for all the countries reported in the table except Pakistan

[b] The Pakistan provincial percentages are authors' calculations reported in Table 12.

Table 14. Revenue Impact of Removing Preferential Property Tax Treatment in Punjab

(Columns 2 to 6 are in rupees)

Property Class	(1) Number of Property units	(2) Property Tax Demand in 2007	(3) Demand including the taxation of exemptions[a]	(4) Additional Revenue (1)[g]	(5) Projected Demand with New Roll[h]	(6) Additional Revenue (2)[i]
A. Total residential units	569,718	1,146,134,484				
owner occupied (OO) units	383,021	451,923,976	1,353,011,408[b]	901,087,432	2,435,420,534	1,983,496,558
Rented units	186,697	694,210,508	694,210,508		1,249,578,914	555,368,406
B. Total Commercial units	496,826	1,742,684,401	-			
Commercial (OO)	234,986	580,013,405	1,043,428,837	463,415,432	1,878,171,907	1,298,158,502
Commercial (Rented)	261,840	1,162,670,996	1,162,670,996	-	2,092,807,793	930,136,797
C. Assumptions						
industrial units[c]	28,485.9	57,306,724	126,488,427[e]	69,181,703	227,679,169	170,372,444
vacant lots	28,485.9	0	158,882,478.2	158,882,478	285,988,461	285,988,461
5 marla units[d]	1,139,436	0	2,118,433,042[f]	2,118,433,042	3,813,179,476	3,813,179,476
Total		2,888,818,885	6,657,125,696	3,711,000,087	11,982,826,253	9,036,700,644

Notes:

[a] We have used demand/unit for projections, since ARV estimates are not available for each type of property unit

[b] For OO, owner occupied, (residential and commercial) units, we have used the demand/unit of rented units for projections

[c] Industrial units are assumed to be 5 percent of total residential units

[d] 5 marla units are assumed to be 2/3 of all units (200 percent of currently taxed residential units)

[e] For industrial units, we use 1.5 x demand/unit of rented commercial unit

[f] For 5 marla units, we use 1/2 the demand/unit of ordinary rented residential unit to cater to a lower than average value

[g] Additional Revenue (1) is the difference between column 3 and 2 (using zero demand for industrial units since it is counted already in the residential units for the base year).

[h] The actual demand for 2007-2008 when projected by a factor of 1.8 equals the projected demand with the new roll. We use this factor to project the demands in each category.

[i] Additional Revenue (2) is difference between columns 5 and 2

Table 15. Illustrative Property Tax Reform Program for Punjab

(Rupees in millions)

Revenue Impacts of Reform Package	Amount
1. Revenue Target 2006-07[a]	25,478
2. PT Collection 2006-2007	2,311
3. Gap	23,167
4. Revenue impact of introducing a new valuation roll on the existing tax base[b]	2,889
5. Revenue impact of base broadening measures after introduction of the new roll[c]	7,551
6. Indexation (Additional Revenue)[d]	827
7. Payment in lieu of tax	611
8. Revenue gap [3-(4+5+6+7)]	11,289
9. Property tax rate required to cover the gap[e]	0.40

Notes:

[a] Revenue target is 0.5% of Provincial GDP (we use GDP estimate for 2006-07 by Punjab Bureau of Statistics)

[b] Revenue impact is based on the assumption that a new roll is introduced for 2006-07. This is computed by subtracting the actual collection in 2005-06 from the new demand worked out by ETD after revaluation.

[c] Net impact of removal of exemption for 5 marla properties, vacant properties and provincial government properties, and removing preferential treatment for owner-occupied properties and industrial properties. For details see Appendix B.

[d] See column 4, Table 16.

[e] We use a rate of 22 percent (an average statutory tax rate, considering the nominal rates of 20% and 25 percent) to calculate ARV of the assessed property from the actual collection. Then we add the projected revenue from reform to the baseline collection and calculate the new ARV, using an effective tax rate of 22 percent. To conclude we use the calculated ARV and the total revenue target to calculate the effective tax rate required to bridge the gap.

Table 16. Simulation of the Effects on Indexing the Property Tax in Punjab

(in Rupees)

Year	(1) Index (t-1)	(2) Actual Collections	(3) Indexed Collections[a]	(4) Revenue increase[d]	(5) 3-year revaluation[e]
2001-2002	100	27,580	-	-	-
2002-2003	107.7329	994,000	994,000	-	994,000
2003-2004	115.30144	935,227	1,007,547	72,320	935,227
2004-2005	125.93201	1,643,776	1,895,297	251,521	1,643,776
2005-2006[b]	135.77545	1,135,444	1,429,887	294,443	2,958,797
2006-2007[c]	146.39	2,311,055	3,137,846	826,790	4,171,903
2007-2008	156.64	5,200,000	5,200,000	-	5,200,000
One-yr increase[f]	-	2,888,945	2,062,154	-	1,028,097

Notes:

[a] Base year for Column 3 is 2002-2003, the first year when the new roll prepared in 2001-2002 was implemented.

[b] The property tax collection for 2006-07 is the estimated collection from Government of Punjab (2007i).

[c] Rs.5.2 billion was the projected demand in 2006-2007 with the proposed introduction of the new roll. Since the new roll was not implemented in 2006-2007 and is expected to be enforced in 2007-2008, we have moved the 2006-07 target to 2007-2008.

[d] The annual increase with indexation.

[e] We apply a factor of 1.8 to the actual collection in 2004-2005 to project the demand for 2005-2006. Then for 2006-2007, we apply the average rate of increase in property tax collection from 2003-2004 to 2005-2006 to the calculated demand for 2005-2006. For 2007-2008, we assume that the demand will be the same as projected after introduction of the new roll.

[f] Calculated as the difference between projected collections in 2008 and 2007.

Table 17. The Tax Rate Structure in NWFP

(Rupees per area unit)

Location	Residential	Commercial
A	1.5	9
B	1.25	7
C	1.0	5
D	0.75	3

Source: Excise and Taxation Department, NWFP

Table 18. Revenue Impact of Removing Preferential Property Tax Treatment in NWFP

(Columns 2 to 6 in rupees)

Property Class	(1) Number of Property units	(2) Property Tax Demand in 2007[b]	(3) Demand including taxation of exemptions	(4) Additional Revenue (1)	(5) Projected Demand with New Roll[j]	(6) Additional Revenue (2)
A. Total residential units	100,742[a]	144,595,690				
owner occupied (OO) units	74,771	91,440,383	145,383,377	53,942,994	218,075,066	126,634,683
Rented units	25,971	53,155,307	53,155,307		79,732,961	26,577,654
B. Total Commercial units[c]	174,446	129,438,113				
Commercial (OO)	129,090	95,784,204	396,316,317[d]	300,532,113	594,474,475	498,690,271
Commercial (Rented)	45,356	33,653,909	139,246,273[d]	105,592,364	208,869,410	175,215,501
C. Assumptions						
industrial units	5,037[e]	7,229,785	15,464,283[h]	8,234,499	23,196,425	15,966,640
vacant lots	5,037[f]	0	15,464,283	15,464,283	23,196,425	23,196,425
5 marla units	124,207[g]	0	127,109,337[i]	127,108,337	190,662,505	190,662,505
Total		274,033,803		610,874,589	1,338,207,265	1,056,943,678

Notes:

[a] The number of residential units include properties above 5-marla only and is based on ETD, NWFP records

[b] We have used demand/unit for projections, since ARV estimates are not available for each type of property unit. For details see Appendix C.

[c] For the commercial properties, the break up for owner occupied and rented categories is not available; we have used the average tax for both categories

[d] We use 1.5 times the average tax rate of rented residential property to calculate demand for commercial property, assuming that it will be higher for the commercial category.

[e] Industrial units are assumed to be 5 percent of total residential units.

[f] Vacant lots are assumed to be 5 percent of the residential units.

[g] The number of 5 marla units is based on ETD, NWFP estimates

[h] To calculate the demand for industrial units, we use 1.5 times the average tax rate of a rented residential unit.

[i] To calculate the demand for 5 marla units, we use 1/2 the demand/unit of rented residential units.

[j] Projections with the introduction of a new roll assume an increase by a factor of 1.5 for each category.

Table 19. Illustrative Property Tax Reform Program for NWFP

(Rupees in millions)

Revenue Impacts of Reform Package (2005-2006 data)	Rupees in millions
1. Revenue Target 2005-2006[a]	3,631
2. PT Collection 2005-2006	300
3. Gap	3,331
4. Revenue impact of introducing a new valuation roll on the existing tax base[b]	150
5. Revenue impact of base broadening measures after introduction of the new roll[c]	1,030
6. Indexation (Additional Revenue)[d]	78
7. Payment in lieu of tax[e]	511
8. Revenue gap [3-(4+5+6+7)]	2,073
9. Percent increase in location coefficient required to cover the gap	200

Notes:

[a] Revenue target is 0.5 percent of the provincial GDP for 2005-2006 from Government of NWFP (2005).

[b] NWFP does not have a projected demand based on a new roll. We assume it will be 1.5 times the 2005-06 demand.

[c] Net impact of removal of exemptions for owner occupied units, higher rates for industrial property, taxation of vacant plots (from Table 18, adjusted for the additional revenue for rented residential units category).

[d] Using 2002-2003 as the base line year (see Table 20).

[e] Payment in lieu of taxes calculated as 12 percent of ARV (Government expenditure is 12 percent of GDP).

Table 20. Simulation of the Effects on Indexing the Property Tax in NWFP

(in Rupees)

Year	(1) Index (t-1)	(2) Actual Collections	(3) Indexed Collections[a]	(4) Revenue increase[b]	(5) 3-year revaluation[c]
2001-2002	100	159,556,748	-	-	-
2002-2003	107.73	152,536,587	152,536,587	-	152,536,587
2003-2004	115.30	218,000,000	234,857,711	16,857,711	218,000,000
2004-2005	125.93	211,000,000	243,286,048	32,286,048	211,000,000
2005-2006	135.77	300,000,000	377,796,038	77,796,038	360,000,000
2006-2007	146.39	-	-	-	-
2007-2008	156.64	-	-	-	-

Notes:

[a] Base year for Column 3 is 2002-2003.

[b] The revenue increase column gives the annual increase with indexation.

[c] We show the impact of a 3-year valuation by projecting a new demand for 2005-2006, assuming a 1.5 times increase on the revenue collected in 2004-2005.

Table 21. Revenue Performance of Motor Vehicle Tax

Years	Per capita Nominal Amount (Rupees) [a]		Per capita Real Amount (Rupees) [a,b,c]		Percent of Own source revenue [a]		Percent of GDP [d,e]	
	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab
1999-2000	22.65	20.18	22.65	20.18	15.93	9.65	0.12	0.07
2000-01	23.54	19.60	21.76	18.12	17.12	9.17	0.12	0.07
2001-02	23.22	19.35	20.98	17.48	14.59	9.85	0.11	0.06
2002-03	22.60	22.83	19.55	19.75	14.52	10.20	0.01	0.07
2003-04	24.03	29.93	19.29	24.03	12.93	10.96	0.09	0.08
2004-05	26.44	38.53	19.83	28.91	13.19	11.90	0.09	0.09
2005-06	31.98	45.55	21.97	31.29	14.76	14.05	0.09	0.09

Sources:
Calculations are based on:
[a] Provincial revenue time series data provided by the World Bank, Islamabad
[b] NIPS population data
[c] FBS GDP deflator
[d] Punjab Bureau of Statistics, provincial GDP estimates
[e] NWFP GDP estimates from Government of NWFP (2005)

Table 22. Growth in Motor Vehicles and Population in Punjab

Years	Number of Motor Vehicles[a]	Motor Vehicle Growth Rate	Population Growth Rate
2003	3,031,728	-	-
2004	3,322,974	0.10	0.02
2005	3,836,986	0.15	0.02
2006	4,325,776	0.13	0.02
2007	4,998,026	0.16	0.02

Source: Excise and Taxation Department, Punjab

Note:
[a] Column 1 shows the number of registered vehicles in the province.

Table 23. Implied Tax Burden on a Standard Motor Car in NWFP

(Rupees)

	New Purchase	Used Car[c]
Present situation		
Capitalized Registration fee[a]	2,400	200
Annual (Token) Tax	2000	2000
Combined Annual Tax	4,400	2,200
Reform		
Annual Token Tax	5000	5000
Combined Annual Tax	7,400	5200
Increase in tax liability		
If Registration Fee abolished (A)	600	2800
If Registration Fee retained (B)	3,000	3,000
Increase in tax liability as a percent of per capita GDP[b]		
If Registration Fee abolished (A)	2%	8%
If Registration Fee retained (B)	9%	9%
Annual car consumption (C)	120,000	100,000
Current Tax as percent of (C)	3.7	2.2
Tax after reform as percent of (C)	4.2	5.0

Notes:

[a] For a corolla 1300 cc priced at Rs.1200,000, we calculate the annual incidence of registration fee by dividing the registration fee in ten equal installments over the year life of the new car.

[b] The decrease, because of high registration fee rates, will be steeper for vehicles with a larger engine capacity.

[c] For a new car we calculate the consumption by dividing the value of car into hen equal parts (assuming that an equal amount is consumed each year). For a used car we assume the price to be Rs.500,000 and that the car has a remaining life of five years.

Table 24. Implied Tax Burden on a Standard Motor Car in Punjab

(Rupees)

	New Purchase	Used Car[c]
Present situation		
Capitalized Registration fee[a]	2,400	200
Annual (Token) Tax	2000	2000
Combined Annual Tax	4,400	2,200
Reform		
Annual Token Tax	5000	5000
Combined Annual Tax	7,400	5,200
Increase in tax liability		
If Registration Fee abolished (A)	600	2800
If Registration Fee retained (B)	3,000	3000
Increase in tax liability as a percent of per capita GDP[b]		
If Registration Fee abolished (A)	1%	6%
If Registration Fee retained (B)	6%	6%
Annual car consumption (C) [C]	120,000	100,000
Current Tax as percent of (C)	3.7	2.2
Tax after reform as percent of (C)	4.2	5.0

Notes:

[a] For a corolla 1300 cc priced at Rs.1200,000, we calculate the annual incidence of registration fee by dividing the registration fee in ten equal installments over the year life of the new car.

[b] The decrease, because of high registration fee rates, will be steeper for vehicles with a larger engine capacity.

[c] For a new car we calculate the consumption by dividing the value of car into hen equal parts (assuming that an equal amount is consumed each year). For a used car we assume the price to be Rs.500,000 and that the car has a remaining life of five years.

Table 25. Proposed Reform in Motor Vehicle Taxes: Punjab

(Rupees in millions)

MVT Collection 2005-06 = Rs 4,154.17 million[a]
Road sector expenditure = Rs 6,333.28 million (= Revenue Target)

Vehicles by category	Registered	Annual Liability with new rate[b]	Collection 2005-06 at specific rate	Collection 2006-07 with Indexation[c]
Motorcycles/scooters	3,169,095	200	634	766
Rickshaws	115,250	200	23	28
Tractors	572,519	200	115	138
Motor cars	799,173	5,000	3,996	4831
Jeeps	25,613	5,000	128	155
Station Wagons	27,761	5,000	139	168
Pickups	34,477	5,000	172	208
Station Wagons (city)	8,361	5,000	42	51
Station Wagons (Intercity)	20,862	5,000	104	126
Station van (loader)	35,815	5,000	179	217
Ambulance	2,196	5,000	11	13
Bowzer petrol	660	5,000	3	4
Bowzer	533	5,000	3	3
Taxies	17,677	5,000	88	107
Coaches	2,203	5,000	11	13
Station vans (stage carriage)	7,652	5,000	38	46
Delivery vans	50,294	5,000	251	304
Private carrier (trucks)	24,587	8,000	197	238
Luxury vehicle	267	8,000	2	3
Buses	37,613	8,000	301	364
Minibuses	11,411	8,000	91	110
Minibuses (intercity)	16,455	8,000	132	159
Other vehicles	1,357	5,000	7	8
Total	**4,981,831**		**6,667**	8,061

Notes:

[a] Revenue target = Provincial Roads O&M expenditures + Total Grants to District * (District O&M/District Grant) + Current Capital Expenditure on Roads. We use data on Faisalabad District O&M expenditure (Faisalabad , 2007) and grant from the province (Government of Punjab, 2007i) to calculate the fraction of PFC grant allocated to road O&M in the districts.

[b] In the three categories, personal liability/rates have been selected to arrive at the target revenue.

[c] Tax collection in 2007-08 with indexation, if projected inflation is 7.0 percent, and the annual increase in the number of vehicles is 13 percent. We make the second assumption because the annual increase in registered vehicles from 2002 to 2007in Punjab is around 13 percent.

Table 26. Proposed Reform in Motor Vehicle Taxes: NWFP

(Rupees in millions – except rates which are in rupees)

MVT Collection 2005-06 = Rs 677.00 million[a]
Road sector expenditure = Rs 1,284.61million

Vehicles by category	Registered	Annual Liability with new rate[b]	Collection 2005-06 at specific rate	Collection 2006-07 with Indexation[c]
Motorcycles/scooters	96,488	200	19	23
Rickshaws	20,606	200	4	5
Tractors	29,757	200	6	7
Motor cars/jeeps/ Station wagons	105,608	5,000	528	638
Delivery vans/pickups/ Station wagons	16,492	5,000	82	100
Taxies	18,431	5,000	92	111
Buses/minibuses	36,952	8,000	296	357
Public carrier (trucks)	28,971	8,000	232	280
Private carrier (trucks)	8,225	8,000	66	80
Other vehicles	13,484	5,000	67	82
Total	**375,014**		**1,393**	**1,684**

Notes:

[a] Revenue target = Expenditure on the road sector + 10% of district transfers.

[b] In the three categories, personal liability/rates have been selected to arrive at the target revenue.

[c] Tax collection in 2006-07 with indexation, if projected inflation is 7.0 percent.

Table 27. Indexation of the Token Tax

(Rupees in millions)

Year	Actual Collections		Indexed Collections		Revenue Gain	
	Punjab	NWFP	Punjab	NWFP	Punjab	NWFP
1999-2000	1,602	417	-	-	-	-
2000-01	1,593	444	1,695	504	102	60
2001-02	1,610	448	1,740	484	130	36
2002-03	1,944	447	2,484	476	540	29
2003-04	2,608	486	3,681	563	1,073	77
2004-05	3,435	547	4,764	654	1,329	107
2005-06	4,154	677	5,315	885	1,161	208
Total	16,946	3,467	19,680	3,566	4,335	517

Notes:

[a] Column 1 and 2 are actual collections from the provincial revenue time series provided by the World Bank, Islamabad.

[b] A 7 percent indexation has been applied from 1999-2000 onwards.

Table 28. Revenue Potential of a Motor Fuel Tax

	Punjab	NWFP
Motor Vehicle Revenues in 2005 -2006 (in Rs millions)	4,154	677
Consumption of Petroleum (Litres in millions)[a]		
Diesel	6,049	1,840
Motor Fuel	1,013	89
Necessary Tax Rate		
Specific Rate per litre (in Rs)		
Diesel	0.52	0.33
Motor Fuel	1.00	0.75
Ad valorem rate (percent)[b]	1.47	0.91

Notes:

[a] Base calculated by using conversion factors used by oil industry, valid at 86 Fahrenheit or 30 Centigrade. Detailed calculation given in Appendix D.

[b] We use the total rupee value of the consumed fuel as the base for this calculation. For details see Appendix D.

Table 29. Distribution of Consumer Expenditures for Selected Consumption Items: NWFP

Population Decile	Percent of Income	Percent of Expenditures for		
		Personal Services	Transport	Motor Fuel
1	2.9	4.0	3.0	0.2
2	3.7	5.3	3.7	0.2
3	5.5	6.3	5.3	0.4
4	6.9	8.9	6.8	0.3
5	7.1	7.9	7.2	2.0
6	9.0	10.4	7.8	1.5
7	10.7	11.1	10.0	3.6
8	10.3	10.0	10.0	5.2
9	14.8	14.8	13.9	11.9
10	29.1	21.4	32.4	74.7

Source: Authors' calculations from Pakistan Household Income and Expenditure Survey.

Table 30. Distribution of Consumer Expenditure for Selected Consumption Items: Punjab

Population Decile	Percent of Income	Percent of Expenditures for		
		Personal Services	Transport	Motor Fuel
1	3.4	5.1	3.0	0.3
2	5.1	6.4	4.4	0.6
3	5.3	6.3	4.8	0.7
4	6.2	7.1	4.9	0.9
5	6.8	7.0	5.7	1.4
6	7.5	8.9	6.5	2.6
7	8.5	8.7	6.7	3.6
8	10.9	10.4	10.7	8.4
9	14.8	13.3	14.5	13.4
10	31.5	26.9	39.0	68.1

Source: Authors' calculations from Pakistan Household Income and Expenditure Survey.

Table 31. Revenue Performance of the Professions, Trade and Callings Tax

Years	Per capita Nominal Amount (Rupees)[a]		Per capita Real Amount (Rupees)[a,b,c]		Percent of Own Source Revenue[a]		Percent of GDP[d,e]	
	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab
1999-2000	1.12	2.36	1.12	2.36	0.79	1.13	0.006	0.009
2000-01	1.33	2.27	1.23	2.10	0.97	1.06	0.007	0.008
2001-02	2.12	2.10	1.92	1.90	1.33	1.07	0.010	0.007
2002-03	2.26	2.02	1.96	1.75	1.45	0.90	0.010	0.006
2003-04	1.93	2.20	1.55	1.76	1.04	0.80	1.037	0.006
2004-05	2.37	2.21	1.78	1.66	1.18	0.68	1.182	0.005
2005-06	3.54	2.47	2.43	1.69	1.63	0.77	0.010	0.005

Sources:
Calculations are based on:
[a] Provincial revenue time series data, provided by the World Bank, Islamabad
[b] NIPS population data
[c] FBS GDP deflator
[d] Punjab Bureau of Statistics, provincial GDP estimates
[e] NWFP GDP estimates from Government of NWFP (2005)

Table 32. Taxes on Professions and Callings

Category	Rate NWFP	Rate Punjab
1. Companies registered under Companies Ordinance 1984	Rates range from Rs 1000 to Rs 50000 based on amount of paid up capital	Rates range from Rs 5000 to Rs 100,000 based on amount of paid up capital
2. Persons other than companies owning factories and commercial establishments	Rs 750 (companies with 10 or more employees)	Rs 1000 to Rs 5000 based on the number of employees
3. Persons other than companies owning commercial establishments having more than 10 employees		Rs 3000 within metro and municipal corporation limits Rs 2000 all others Rs 1000 all other commercial establishments other than wholesalers and retailers
4. Persons engaged in import or export	Rs 1000 to Rs 1500 based on value of imports or exports	Rs 2000 to Rs 5000 based on value of imports or exports
5. Persons engaged in profession, trade, calling or employment who were assessed to pay income tax		Rs 200
6. Contractors, builders, and property developers	Rs 1000 to Rs 5000 based on the amount of sales	Rs 500 to Rs 10000 based on the amount of sales
7. Persons engaged in other professions and callings	Rs 100 to Rs 200 based on monthly income	Rs 500 to Rs 10000 based on profession
8. Customs and clearing house agents	Rs 1000	
9. Travel Agents	Rs 2000 to Rs 5000	
10. Restaurants and Marriage Halls	Rs 5000	
11. Advertising agencies	Rs 1000	
12. Doctors and Labs	Rs 300 to Rs 5000 based on type of profession	

Table 33. Revenue Potential: Tax on Professions (2005)

(Rupees)

	Professionals	Technicians and Associate Professional	Legislators, senior officials, and managers	TOTAL
NWFP Rural	37,062,000	128,412,000	215,064,000	
NWFP Urban	108,054,000	289,188,000	552,276,000	
TOTAL	145,116,000	417,600,000	767,340,000	1,330,056,000
Punjab Rural	126,647,000	462,475,000	1,091,441,000	
Punjab Urban	434,015,000	1,159,745,000	2,988,300,000	
TOTAL	560,662,000	1,622,220,000	4,079,741,000	6,262,623,000

Table 34. Total Revenue Collections of Land Taxes: By Component

(Rupees in millions)

	NWFP				Punjab			
	AIT	Registration	Land Revenue[a]	Stamp Duty	AIT	Registration	Land Revenue[b]	Stamp Duty
1999/00	71	11	172	142	1,217	247	2596	4,416
2000/01	23	9	177	139	672	227	2714	3,218
2001/02	47	10	200	152	556	232	2430	3,458
2002/03	44	55	250	177	623	341	3645	4,281
2003/04	58	37	292	265	768	527	4484	6,536
2004/05	47	42	375	333	615	2,186	7311	6,324
2005/06	70	42	330	300	658	2,113	3392	5,859

Source: Provincial time series data provided by the World Bank, Islamabad.

Notes:

[a] Land Revenue in NWFP includes mutation fee and land tax.

[b] Land Revenue in case of Punjab includes mutation fee, some minor charges and rent from government lands.

Table 35. Revenue Performance of Land and Property Transfer Taxes

35.1 AIT

Years	Per capita Nominal Amount (Rupees)[a]		Per capita Real Amount (Rupees)[a,b,c]		Percent of Own Source Revenue[a]		Percent of GDP[d,e]	
	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab
1999-2000	3.85	15.33	3.85	15.33	2.71	7.33	0.020	0.057
2000-01	1.20	8.27	1.10	7.64	0.87	3.87	0.006	0.028
2001-02	2.46	6.68	2.22	6.03	1.54	3.40	0.012	0.022
2002-03	2.25	7.32	1.94	6.33	1.44	3.27	0.010	0.022
2003-04	2.87	8.82	2.30	7.08	1.54	3.23	0.011	0.024
2004-05	2.27	6.90	1.70	5.18	1.13	2.13	0.008	0.016
2005-06	3.31	7.22	2.27	4.96	1.53	2.23	0.010	0.015

35.2 Registration

Years	Per capita Nominal Amount (Rupees)[a]		Per capita Real Amount (Rupees)[a,b,c]		Percent of Own Source Revenue[a]		Percent of GDP[d,e]	
	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab
1999-2000	0.58	3.12	0.58	3.12	0.40	1.49	0.003	0.012
2000-01	0.47	2.80	0.43	2.59	0.34	1.31	0.002	0.010
2001-02	0.54	2.79	0.48	2.52	0.34	1.42	0.003	0.009
2002-03	2.81	4.01	2.43	3.47	1.80	1.79	0.012	0.012
2003-04	1.83	6.05	1.47	4.85	0.98	2.21	0.007	0.016
2004-05	2.03	24.52	1.52	18.40	1.01	7.57	0.007	0.058
2005-06	1.98	23.17	1.36	15.91	0.92	7.14	0.006	0.048

35.3 Land Revenue[f, g]

Years	Per capita Nominal Amount (Rupees)[a]		Per capita Real Amount (Rupees)[a,b,c]		Percent of Own Source Revenue[a]		Percent of GDP[d,e]	
	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab
1999-2000	9.35	32.71	9.35	32.71	6.58	15.63	0.049	0.121
2000-01	9.40	33.40	8.69	30.87	6.84	15.63	0.047	0.114
2001-02	10.36	29.21	9.35	26.38	6.51	14.86	0.049	0.096
2002-03	12.64	42.80	10.93	37.02	8.12	19.13	0.055	0.131
2003-04	14.44	51.47	11.59	41.32	7.77	18.84	0.056	0.138
2004-05	18.12	82.01	13.60	61.52	9.05	25.33	0.061	0.195
2005-06	15.59	37.19	10.71	25.54	7.19	11.47	0.045	0.077

35.4 Stamp Duty

Years	Per capita Nominal Amount (Rupees)[a]		Per capita Real Amount (Rupees) [a,b,c]		Percent of Own Source Revenue [a]		Percent of GDP [d,e]	
	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab	NWFP	Punjab
1999-2000	7.71	55.63	7.71	55.63	5.42	26.59	0.040	0.206
2000-01	7.38	39.60	6.83	36.59	5.37	18.53	0.037	0.135
2001-02	7.89	41.56	7.13	37.54	4.96	21.14	0.037	0.137
2002-03	8.96	50.28	7.75	43.49	5.76	22.47	0.039	0.154
2003-04	13.10	75.02	10.52	60.23	7.05	27.46	0.051	0.202
2004-05	16.09	70.94	12.07	53.22	8.03	21.91	0.054	0.169
2005-06	14.17	64.24	9.73	44.12	6.54	19.81	0.041	0.133

Sources:
Calculations are based on:
[a] Provincial revenue time series data provided by the World Bank, Islamabad
[b] NIPS population data
[c] FBS GDP deflator
[d] Punjab GDP estimates from Punjab Bureau of Statistics
[e] NWFP GDP estimate from Government of NWFP (2005)

Notes:
[f] Land Revenue in NWFP includes mutation fee and land tax.
[g] Land Revenue in case of Punjab includes mutation fee, some minor charges and rent from government lands.

Table 36. Disaggregation of Provincial Government Land Taxes by Component for Punjab (2005-06)[a]

Tax	Per capita collection (Rs.)	Percent of GDP	Percent of Land Taxes[b]
Stamp Duty	83.89	0.13	49.78
Mutation	41.5	0.08	24.64
Registration	24.4	0.05	14.47
Agriculture Income Tax	16.05	0.02	9.53

Source: Government of Punjab (2007i).

Note:
[a] Excludes federal capital value tax and local government tax on transfer of property.
[b] Land tax total includes stamp duty, mutation, registration and agriculture income tax.

Table 37. Collection by Type of Provincial Government Property Transfer Tax[a]

(Rupees in millions)

Land Taxes	Punjab[b]	NWFP[c]
Agriculture Income tax	1,493	70
Land Revenue	249	421[d]
Mutation fee	3,861	-
Registration fee	2,267	47
Stamp duty	7,802	285

Notes:

[a] Excludes federal capital value tax and local government tax on transfer of property.

[b] The Punjab collections are from Government of Punjab (2007b).

[c] The NWFP collections are from Government of NWFP (2007b).

[d] The classification in this case is not clear; it may include mutation fee.

Table 38. Property Transfer Taxes on Real Estate: Selected Countries

Country	Tax Rate
Pakistan	
Punjab	9 percent
NWFP	10.5 percent
Jamaica	13 percent
Portugal	Graduated rate ranging from 2 percent to 6.5 percent. Rate varies by value and land use.
Germany	3.5 percent
Slovakia	1 percent to 6 percent, depending on value
Czech Republic	3 percent
Netherlands	6 percent
Pakistan	5 percent
Bhutan	5 percent
Taiwan	7.5 percent
Mauritius	Between 5 percent and 10 percent
Swaziland	Between 3 percent and 4 percent, depending on value
Costa Rica	1.5 percent
El Salvador	Up to 3 percent depending on value
Kenya	4 percent

Sources:
Portugal, *Tax Notes International*, April 21, 2003, p. 227
Germany, *Tax Notes International*, January 14, 2002, p. 102.
Slovakia, *Tax Notes International*, March 8, 2004, p. 915.
Czech Republic, *Tax Notes International*, January 5, 2004, p. 26.
Netherlands, *Tax Notes International*, June 16, 2003, p. 1093.
Bhutan, *Taxes and Investment in Asia and the Pacific,* Supplement No. 104, 1993, International Bureau of Fiscal Documentation.
Taiwan, *Taxes and Investment in Asia and the Pacific,* Supplement No. 165, 1998, International Bureau of Fiscal Documentation.
Mauritius, *African Tax Systems,* Supplement No. 117, 2000, International Bureau of Fiscal Documentation.
Swaziland, *African Tax Systems,* Supplement No. 105, 1997, International Bureau of Fiscal Documentation.
Costa Rica, *Latin American Taxation Database*, Supplement No. 122, 2000, International Bureau of Fiscal Documentation.
El Salvador, *Latin American Taxation Database*, Supplement No. 113, 1998, International Bureau of Fiscal Documentation.
Kenya, *"Land Value Taxation: A Case Study Approach,"* McCluskey and Franzsen, 2001
Pakistan, data supplied by Provincial Government Officials. Rates are inclusive of the central government capital value tax and the local government tax.

Table 39. Distribution of Cultivated Area by Farm Size, 2000

	Cultivated area	Irrigated Area	Of which orchards	Unirrigated area
NWFP				
Farm Size (acres)				
All Farms	4,096,033	2256518	68202	1839515
Govt farms	2,414	2271	203	143
Private Farms	4093619	2254247	67999	1839372
under 1	139271	73320	8503	65951
1 to under 2.5	634503	308591	20080	325912
2.5 to under 5	741897	383937	9134	357960
5 to under 7.5	591398	316867	4731	274531
7.5 to under 12.5	643086	359488	6514	283598
12.5 to under 25	491899	258750	4432	233149
25 to under 50	391901	203571	6825	188330
50 to under 100	215082	152105	2637	62977
100 to under 150	95600	78118	2871	17482
150 and above	148980	119485	2273	29495

	Cultivated area	Irrigated Area	Of which orchards	Unirrigated area
Punjab				
Farm Size (acres)				
All Farms	25,485,032	21500989	427705	3984048
Govt farms	45,326	36674	1179	8653
Private Farms	25439706	21464315	426526	3975395
under 1	160592	117906	1434	42687
1 to under 2.5	1408581	1157827	13147	250757
2.5 to under 5	2778289	2390055	29913	388244
5 to under 7.5	3315357	2876676	42497	438682
7.5 to under 12.5	4836591	4214124	66261	622457
12.5 to under 25	5489884	4735774	94293	754118
25 to under 50	4062726	3275912	79248	786818
50 to under 100	1954161	3134852	52629	453268
100 to under 150	520610	421982	15124	98629
150 and above	912909	773174	31988	139737

Source: ACO (2000)

Table 40. Potential AIT, Current Lax

Current Law Potential NWFP				
Farm Size (acres)	Irrigated	Unirrigated	Orchards	Grand Total
under 1	3,240,850	1,648,775	2,550,900	7,440,525
1 to under 2.5	14,425,550	8,147,800	6,024,000	28,597,350
2.5 to under 5	18,740,150	8,949,000	2,740,200	30,429,350
5 to under 7.5	22,473,792	9,883,116	1,419,300	33,776,208
7.5 to under 12.5	25,414,128	10,209,528	1,954,200	37,577,856
12.5 to under 25	25,431,800	11,657,450	1,329,600	38,418,850
25 to under 50	19,674,600	9,416,500	2,047,500	31,138,600
50 to under 100	14,946,800	3,148,850	791,100	18,886,750
100 to under 150	7,524,700	874,100	861,300	9,260,100
150 and above	11,721,200	1,474,750	681,900	13,877,850
TOTAL	163,593,570	65,409,869	20,400,000	249,403,439

Current Law Potential Punjab				
Farm Size (acres)	Irrigated	Unirrigated	Orchards	Grand Total
under 1	0	0	430,200	430,200
1 to under 2.5	0	0	3,944,100	3,944,100
2.5 to under 5	0	0	8,973,900	8,973,900
5 to under 7.5	0	0	12,749,100	12,749,100
7.5 to under 12.5	0	0	19,878,300	19,878,300
12.5 to under 25	696,222,150	56,558,850	28,287,900	781,068,900
25 to under 50	799,166,000	98,352,250	23,774,400	921,292,650
50 to under 100	770,555,750	56,658,500	15,788,700	843,002,950
100 to under 150	101,714,500	12,328,625	4,537,200	118,580,325
150 and above	185,296,500	17,467,125	9,596,400	212,360,025
TOTAL	2,552,954,900	241,365,350	127,960,200	2,922,280,450

Source: ACO (2000)

Table 41. Revenue Impact of Reducing the Exemption to 5 acres in Punjab, 2000

	Proposal 1: reduce the exemption			
Farm Size (acres)	**Irrigated**	**Unirrigated**	**Orchards**	**Grand Total**
under 1	0	0	430,200	430,200
1 to under 2.5	0	0	3,944,100	3,944,100
2.5 to under 5	0	0	8,973,900	8,973,900
5 to under 7.5	425,126,850	32,901,150	12,749,100	470,777,100
7.5 to under 12.5	622,179,450	46,684,275	19,878,300	688,742,025
12.5 to under 25	696,222,150	56,558,850	28,287,900	781,068,900
25 to under 50	799,166,000	98,352,250	23,774,400	921,292,650
50 to under 100	770,555,750	56,658,500	15,788,700	843,002,950
100 to under 150	101,714,500	12,328,625	4,537,200	118,580,325
150 and above	185,296,500	17,467,125	9,596,400	212,360,025
TOTAL	3,600,261,200	320,950,775	127,960,200	4,049,172,175

Source: ACO (2000)

Table 42. Revenue Performance of the Sales Tax on Services 2005-2006

Province	Per capita Collection (Rupees)[a]	Percent of Own Source Revenue[b]	Percent of GDP
NWFP	19.83	9.15	0.06
Punjab	24.38	7.52	0.05

Sources:
Calculated from
[a] Provincial revenue time series data provided by the World Bank, Islamabad and the NIPS population estimates.
[b] Provincial revenue time series data provided by the World Bank, Islamabad.

Table 43. Sales Tax Collection from Services (Provincial)

(Rupees in millions)

Item Name	Punjab	Sindh	NWFP	Balochistan	Total
1. Hotels/Restaurants/Fast food/Catering (Services)	1343.25	514.13	54.60	17.27	1929.25
2. Services provided by Travel Agents/Stevedores/Shipping Agents/Ship Chandlers	240.51	648.20	4.44	2.45	895.59
3. Advertisements on T.V. / Radio	48.98	667.79	0.21	0.05	717.03
4. Courier Services	42.78	608.17	0.04	0.01	651.00
5. Caterers, Suppliers of Food/Drinks	2.57	18.37	0.00	0.00	20.94
6. Services provided for Inland Carriage of goods	10.22	0.00	0.00	0.00	10.22
7. Clubs (Services)	3.76	0.26	0.00	0.00	4.02
8. Marriage Halls and Lawns	1.91	0.00	0.00	0.29	2.20
9. Cable TV Operator and Others	0.19	0.00	0.30	0.00	0.49
10.Beauty Parlours/Clinics/Sliming Clinics	0.16	0.24	0.00	0.00	0.41
11.Service Rendered by Foreign Exchange	0.03	0.16	0.00	0.00	0.19
12.Services (Architects, Town Planners, Contr)	0.04	0.02	0.00	0.00	0.06
13.Laundries/ Dry Cleaners	0.05	0.00	0.00	0.00	0.05
Total	**1694.43**	**2457.34**	**59.59**	**20.08**	**4231.44**
Percentage Share	**40.04**	**58.07**	**1.41**	**0.47**	

Source: Federal Board of Revenue, Sales Tax Wing.

Table 44. Sales Tax/Excise Duty (in VAT mode) in Services in Pakistan

• In Pakistan, six services are chargeable to sales tax @ 15% through Provincial Sales Tax Ordinances promulgated in year 2000. These are: (i) Services provided by hotels, marriage halls, clubs and caterers (ii) Advertisements on TV and Radio (iii) Custom agents (iv) Ship chandlers (v) Stevedores (vi) Courier services * Services provided by beauty parlors and dry cleaners are exempted.
• Four services are chargeable to federal excise duty @ 15% (in VAT mode): (i) Telecommunication services (ii) Advertisements on CCTV/cable TV (iii) Inland carriage of goods by air (iv) Domestic air Travel
• Six services are chargeable to federal excise duty at specific rates: (i) International air travel (ii) Shipping agents (iii) Insurance except life insurance (iv) Non-fund services of banks (v) Franchise services

Source: Federal Board of Revenue, Sales Tax Wing.

Table 45. Revenue Performance of Taxes as Percent of Total Revenues[a]

45.1. Punjab

	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Urban Property Tax	0.22	0.49	0.03	0.87	0.80	1.05	0.66
Agriculture income tax	1.40	0.69	0.56	0.55	0.65	0.39	0.38
Registration fee	0.28	0.23	0.24	0.30	0.45	1.40	1.23
Land revenue (includes mutation fee)	2.69	2.56	2.23	2.91	3.37	3.29	1.97
Taxes on professions, trades & callings	0.21	0.19	0.18	0.15	0.16	0.13	0.13
Motor vehicle tax	1.84	1.64	1.63	1.71	2.22	2.20	2.41
GST on Services	0.00	0.96	1.11	1.09	1.20	1.03	1.29
Stamp duties	5.07	3.31	3.50	3.77	5.56	4.05	3.41
Entertainment tax	0.27	0.21	0.12	0.11	0.09	0.02	0.01
Electricity duties	0.09	1.59	0.16	0.15	0.17	0.42	0.74
Hotel tax	0.11	0.08	0.09	0.08	0.12	0.10	0.14
Provincial excises	0.54	0.50	0.53	0.49	0.62	0.49	0.49
Cotton cess	0.32	0.00	0.36	0.30	0.28	0.32	0.26
Other	0.84	2.50	0.93	0.01	0.01	-0.59	0.09
All taxes	13.88	14.95	11.67	12.48	15.69	14.33	13.21

Source: Calculations are based on provincial revenue time series data provided by the World Bank, Islamabad

Note:

[a] Total revenue includes all intergovernmental transfers.

45.2 NWFP

	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Urban Property Tax	0.35	0.64	0.73	0.60	0.79	0.60	0.76
Agriculture income tax	0.37	0.11	0.22	0.17	0.21	0.13	0.18
Registration fee	0.06	0.04	0.05	0.22	0.13	0.12	0.11
Land revenue (includes mutation fee)	0.91	0.84	0.91	0.98	1.06	1.07	0.83
Taxes on professions, trades and callings	0.11	0.12	0.19	0.18	0.14	0.14	0.19
Motor vehicle tax	2.20	2.11	2.05	1.75	1.77	1.56	1.71
GST on Services	0.00	1.04	1.17	1.16	1.24	1.11	1.06
Stamp duties	0.75	0.66	0.70	0.69	0.96	0.95	0.76
Entertainment tax	0.12	0.04	0.04	0.03	0.03	0.01	0.03
Electricity duties	1.39	1.04	2.02	1.27	0.50	0.52	0.68
Hotel tax	0.09	0.00	0.00	0.02	0.04	0.04	0.07
Provincial excises	0.08	0.07	0.10	0.09	0.08	0.06	0.08
Education cess	0.13	0.00	0.00	0.21	0.42	0.63	0.14
Other	0.21	0.25	0.26	0.01	0.00	0.01	0.38
All taxes	6.76	6.98	8.42	7.37	7.38	6.95	6.98

Source: Calculations are based on provincial revenue time series data provided by the World Bank, Islamabad

Note:
[b] Total revenue includes all intergovernmental transfers.

Table 46. Tax Revenue Targets and Reform Options Punjab[a]

(Columns 1 and 2 are rupees in millions)

	(1) Tax Revenues (2005-06)	Reform Program Options		
		(2) Amount (Post Reform)	(3) Percent Increase	(4) Percent of GDP
Target A[b]		65,356	195	1.48
Target B[c]		46,756	111	1.06
Total Taxes	22,180			0.50
Individual Taxes				
UIPT	1,135	14,189	1,150	0.32
MVT	4,154	8,061	94	0.18
Motor Fuel Tax[d]	…	4,156	100	0.09
Land Taxes[e]	11,364	13,068	15	0.30
Agriculture Income tax	658	796	21	0.02
Professions tax	225	487	116	0.01
Sales tax on services	2,224	4,448	100	0.10
Other taxes[f]	2,540	2,540	0.05	0.06
Total taxes with reform		47,745	115	1.08

Notes:

[a] Based on 2005-06 levels.

[b] Structural Deficit Approach: We assume the unfunded deficit of the province (see Table 3, Row C) in 2006-2007, also held in 2005-2006. To this amount, we add the tax collection in 2005-2006 to arrive at the revenue target.

[c] International Average Approach: The national tax effort is 10.6 percent of GDP (Table 1.5, Statistical Appendix, Government of Pakistan, 2007). We calculate the provincial target as 0.0106*Provincial GDP.

[d] This revenue target can be achieved using the rate structure used for illustration in Table 28.

[e] Land taxes include Mutation Fee, Registration Fee and Stamp Duty

[f] Other taxes include Entertainment Tax, Electricity Duty, Hotel Tax, Provincial Excise, Cotton Fee, and "Others" in the Provincial Tax Revenue classification in Government of Punjab (2007b).

Table 47. Tax Revenue Targets and Reform Options NWFP[a]

(Columns 1 and 2 are rupees in millions)

	(1) Tax Revenues (2005-06)	Reform Program Options		
		(2) Amount (Post Reform)	(3) Percent Increase	(4) Percent of GDP
Target A[b]		12,072	337	1.66
Target B[c]		7,699	179	1.06
Total Taxes	2,762			0.38
Individual Taxes				
UIPT	300	2,069	590	0.28
MVT	677	1,684	149	0.23
Motor Fuel Tax[d]	…	674	100	0.09
Land Taxes[e]	672	773	15	0.11
Agriculture Income tax	70	78	11	0.01
Professions tax	75	83	11	0.01
Sales tax on services	420	840	100	0.12
Other taxes[f]	549	576	0.05	0.08
Total taxes with reform		6,776	145	0.93

Notes:

[a] Based on 2005-2006 levels.

[b] Structural Deficit Approach: We assume that the unfunded deficit of the province (see Table 5, Row C) in 2006-2007 held in 2005-2006. To this amount, we add the collection in 2005-2006 to arrive at the revenue target.

[c] International Average Approach: The national tax effort is 10.6 percent of GDP (Table 1.5, Statistical Appendix, Government of Pakistan, 2007). We calculate the provincial target as 0.0106*Provincial GDP.

[d] This revenue target can be achieved using the rate structure used for illustration in Table 28.

[e] Land taxes include Mutation Fee, Registration Fee and Stamp Duty

[f] Other taxes include Entertainment Tax, Electricity Duty, Hotel Tax, Provincial Excise, Education Cess and "Others" in the Provincial Tax Revenue classification in Government of NWFP (2007c).

Table 48. Policy Reform Matrix

Tax	Comprehensive Reform Components
UIPT	• Eliminate 5 marla exemption • Eliminate preferential treatment of owner occupants • Bring in new valuation roll (Punjab) • Upgrade valuation table (NWFP) • Bring land and structures to same basis • Adopt a single rate (Punjab) • Tie TMA rate setting to provincial transfers
Motor Vehicle Taxes	• A unified annual (license) tax on motor vehicles • Adopt a motor fuels tax
Professions Tax	• A 3 percent piggyback on federal individual income taxes
Property Transfer Taxes	• A unified annual tax on rural land
Agricultural Income Tax	• Progressive rate structure by farm size • Reduce exemption from 12.5 to 7.5 acres (Punjab); increase exemption to 7.5 (NWFP)
Sales Tax on Services	• A shared federal-provincial tax with federal administration

Tax	Reform Components
UIPT	• Same as above
Motor Vehicle Taxes	• Abolish registration tax or shift to the federal level • Adopt a simplified token tax rate structure • Increase the token tax rate
Property Transfer Taxes	• Improve valuation methods • Update property records
Agriculture Income Tax	• Same as above
Professions Tax	• Same as above

Table 49. Distribution of NFC Transfers: Impact of an Incentive Scheme

Province	Distribution		(3) Taxes as percent of GDP[a]	(4) Provincial Tax Effort as fraction of total Tax Effort[b]	(5) Change in Tax Effort 2005 to 2006	Distribution Under an Incentive Scheme[c]	
	(1) Amount (Rupees in millions)	(2) Percent				(6) Amount (Rupees in millions)[d]	(7) Percent[e]
Punjab	142,498	52.36	0.36	0.24	-0.06	115,084	42.29
NWFP	34,990	12.86	0.42	0.29	-0.01	35,983	13.22
Balochistan	18,354	6.74	0.25	0.17	0.00	19,504	7.17
Sindh	76,306	28.04	0.45	0.30	0.02	101,577	37.32

Notes:

[a] For Balochistan and Sindh we are using hypothetical Tax/GDP ratios to demonstrate how the scheme works. For Punjab and NWFP the tax effort has been calculated for the year 2004-2005 from the provincial time series data provided by the World Bank Islamabad. We use the provincial GDP estimates of the Punjab Bureau of Statistics and Government of NWFP (2005).

[b] We calculate each row in this column as a fraction of the total tax effort of the provinces in 2005-2006; From 2004-2005 and 2005-2006, the tax effort decreased both in Punjab (from 0.41 to 0.36 percent) and in NWFP (from 0.43 to 0.42 percent of GDP). We assume, in order to demonstrate the effect of the incentive formula, that the tax effort remained constant at 0.25 percent in Balochistan and increased from 0.43 to 0.45 percent in Sindh, from 2004-2005 to 2005-2006.

[c] 75 percent of the grant is distributed on population basis and the remaining 25 percent on the basis of the incentive formula.

[d] This is the total grant a province will receive under the incentive formula), S_i which is calculated as:

$$S_i = \left[\left(\frac{TE_i}{\sum TE_i} + \frac{\Delta TE_i}{\sum TE_i}\right) \times 0.125\left(DivisiblePool_{2005-2006}\right)\right] + \left[\left(\frac{Pop_i}{\sum Pop_i}\right) \times 0.75\left(DivisiblePool_{2005-2006}\right)\right]$$

Where

$S_i =$ Share of a province

TE_i = Tax effort of a province in 2005-2006 and

$\sum TE_i$ = Sum of the individual tax efforts of the provinces in 2005-2006

ΔTE_i = Change in the tax effort of a province from 2004-2005 to 2005-2006 and

$\Delta TE_i = \Delta TE_i$ if ≥ 0

And $\Delta TE_i = 0$ if < 0

$\sum \Delta TE_i$ = Sum of the changes in the tax efforts of the provinces

$\left(DivisiblePool_{2005-2006}\right)$ = This equals the total of the NFC grants given to the provinces in 2005-2006

Pop_i = Population of a province in 2005-2006 according to NIPS estimates

$\sum Pop_i$ = Sum of the population of the four provinces

[e] The changes in shares between columns 1 and 2 (original shares) and columns 6 and 7 (shares after application of the incentive formula) are explained below:

1.

1) Punjab's share decreases significantly because the provincial tax effort has declined from 0.41 to 0.36 of GDP, which is a major decrease in the tax effort.

2) NWFP's share has increased even when its tax effort has declined from 0.43 to 0.42 percent of GDP, a smaller decrease compared with Punjab, because its tax effort at 0.42, is still higher than Punjab, at 0.36 of GDP. But the increase in the NWFP share would have been greater had the tax effort increased.
3) In case of Balochistan, the provincial share has increased slightly from 6.74 to 7.17 percent of the Divisible Pool, because Balochistan's tax effort has held constant when it has gone down in two out of four provinces.
4) Sindh has gained (from 28 to 37 percent of the total transfers) because of two reasons: (a) its tax effort is higher than other provinces; (b) its tax effort (by our assumption) has gone up from 0.43 to 0.45 percent of GDP
5) In general the changes show the effects of both the level of tax effort in a province compared with the other provinces as well as the change in the tax effort over the last one year.