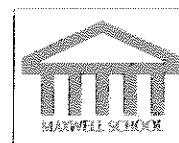




Metropolitan Studies Program
The Maxwell School
Syracuse University
Syracuse, New York 13244-1090
(315) 423-3114



1987

Vol. 3 No. 2

In This Issue

The focus in this issue of *Revenews* is the Ecuador Fiscal Administration Studies carried out under the auspices of the Metropolitan Studies Program's Local Revenue Administration Project during 1985 and 1986. Financed by USAID-Ecuador and under the direction of David Greytak, professor of economics and current director of the Metropolitan Studies Program, the project was a three-pronged study of the Ecuador system of individual income tax, the national revenue sharing and customs administration.

In addition to Greytak, the project staff included research associate Hernando Garzon and data analyst Bruce Riddle both of the Metropolitan Studies Program, Jorge Martinez

of Georgia State University, and Caroline Fawcett, now at Johns Hopkins University; the customs work was led by British customs consultant Kenneth Stacey, with assistance from Oakley Austin and Francisco Gonzalez. Metro graduate students Victor Mendez, Miguel Osio and Raymond Sarthou provided research assistance.

The project resulted in five working papers, now available in both English and Spanish as part of the Metropolitan Studies Program Occasional Paper Series, Nos. 103 through 107. The papers are available from the Program's Publications Officer, individually for \$3.00, or as a set for \$12.00, surface mail postage included; air mail rates vary and are available upon request.

Ecuador Fiscal Administration Study

The rapidly rising price of petroleum during the 1970s is often blamed for exacerbating the economic problems of oil importing Third World countries. Conversely, certain petroleum exporting nations have been particularly hard hit by the subsequent softening of the world price of oil. Ecuador provides a good example of the latter. Oil was discovered in Ecuador in 1967 and by 1971 the country was a net petroleum exporter. The price increases experienced during the 1970s helped fuel a decade of rapid economic growth; the world recession and lower petroleum prices of the early 1980s brought this expansion to a halt.

As the economy expanded, the public sector in Ecuador increased its expenditures even more rapidly, using external debt to supplement the petroleum-induced increases in revenues. The world financial crisis of the early 1980s diminished the possibility of financing the deficit externally, so internal policies had to be pursued. While inflationary finance was used initially, it was also recognized that major changes in the structure of the economy and economic policies were necessary to overcome the financial difficulties.

In 1985 the Minister of Finance of the Government of Ecuador requested assistance from the U.S. Agency for International Development Mission to Ecuador (USAID) in conducting a series of studies in the area of fiscal administration. The USAID mission turned to the Local Revenue Administration Project to carry out this effort.

Three different topical areas were of interest to the Ministry of Finance (MOF). One was the personal income tax; a second was customs administration; the third focused on the principal method of transferring funds from the central government to local jurisdictions. The requested activities were carried out from August 1985 through September 1986 and were led by Professor David Greytak.

International Studies Staff

Directors

David Greytak,
Metropolitan Studies
Program
Roy Bahl, Jamaica Tax
Structure Examination
Project
Larry Schroeder, Local
Revenue
Administration Project

Senior Research Associates

Nancy Benjamin
(Economics)
Guthrie Birkhead (Dean;
Public Administration)
Steve Haggblade (Public
Administration)
Bernard Jump, Jr.
(Associate Dean;
Public Administration)
Kyung Kim (Economics)
Mary Lovely (Economics)
William Mangin
(Anthropology)
Jerry Miner (Economics)
Sung Il Nam
(Economics)
Bruce Riddle (Data
Analyst)
David Robinson
(Geography)
Michael Wasylenko
(Economics)

Research Associates and Assistants

Douglas Amissah (Public
Administration)
Carol Swan Babcock
(Public
Administration)
Elizabeth Dalton (Public
Administration)
William Duncombe
(Public Administration)
Hernando Garzon (Social
Science)
Robert Guell
(Economics)
Lauria Grant
(Economics)
Nigel Grant
(Economics)
Rita Hilton (Public
Administration)
Nandinee Kutty
(Economics)
Jing Li (Economics)
Jin Gyu Oh (Economics)
Vijay Rao (Public
Administration)
Christopher Schwabe
(Economics)

Income Taxes

Two aspects of the income tax were of particular interest to the Ecuador MOF: first, an indication regarding how the rates and structure of the Ecuadorian personal income compared with income taxes in other Caribbean, Central and South American countries; and second, what the tax revenue, equity and compliance implications would be if alternative income tax structures were imposed in Ecuador. Results from the analysis of these two questions were presented in two staff papers.

Hernando Garzon, Research Associate in the Metropolitan Studies Program, compared Ecuador's tax structure with its Latin American and Caribbean neighbors—Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Guatemala, Honduras, Jamaica, Mexico, Paraguay, Peru, Trinidad and Tobago, and Venezuela. The results show that Ecuador differs from the norm in several ways. Public finance literature has shown that there is generally a direct relationship between tax as a percent of GNP and per capita income. This pattern also holds in the countries included in the analysis. Ecuador, with a tax/GNP ratio of 12.4 percent, was below the 15-country median of 17.2 percent. Similarly, the ratio of personal income taxes to GNP in Ecuador of 5.6 percent was less than the regional median of 8.4 percent. At least compared to the other countries in the study, tax burdens in Ecuador are not particularly heavy.

Other elements of the Ecuadorian tax system set it apart from that in other countries. Though most business expenses are not deductible, investment income in a few government-approved industries is. The personal income tax marginal rates vary from 8 to 40 percent with dependent deductions contingent upon spousal income. Because this contingent deduction is formulated as a constant multiple of the minimum wage, Ecuadorians are protected from inflation via indexing because the minimum wage is generally increased with inflation. These unique features of the tax are complicated by the fact that surcharges exist in certain regions for public universities, public transit and rehabilitation centers. Though being different is not necessarily wrong, many of these aspects of the Ecuadorian tax system exist as a result of purely political reasons which have nothing to do with good economic policy.

Professor Jorge Martinez of Georgia State University carried out the task of analyzing the implications of altering the current personal income tax structure. The existing tax was characterized as having high and steeply progressive marginal rates but, as mentioned above, produced tax yields that were somewhat less than the average in the region. Martinez noted that the tax rates may have discouraged work effort and risk taking and, when linked to a cumbersome tax combined with weak enforcement, high levels of tax evasion resulted. Evasion is quite easy because the likelihood of being caught by the underfunded, poorly trained auditing staff is quite low. Ecuadorians have used every evasion tactic known. They file multiple tax returns in order to avoid high marginal rates or to obtain multiple refunds. "Addition errors" are common and most often result in significantly lower taxes. Others simply do not file or do not declare cash transactions or other income that can be easily hidden.

Since the Government of Ecuador was interested in reforming the structure of the income tax, one objective of the research performed here was to study the likely revenue and distributional effects of alternative rate structures so that the Government could use the information in determining the most appropriate rate structure. Since it is anticipated that tax rate changes would result in changes in tax com-

pliance, Martinez also studied four different types of tax evasion: income underreporting, multiple filing, intentional errors in the computation of the tax and nonfiling by professionals.

The results were drawn from a series of complex simulations made from four 1983 taxpayer data files containing taxpayer information for over 67,000 Ecuadorian taxpayers including those who had no tax liability, those who were self-employed and taxpayers receiving business or capital income. In addition, data from a sample of 2,000 professionals as well as data from the National Audit Program were used to analyze the tax evasion issues. All these computerized data were analyzed in Syracuse under the direction of Senior Research Associate and Data Analyst Bruce Riddle.

Martinez found that, while the personal income tax in Ecuador was overall highly progressive, there was pronounced regressivity in the lowest income classes due to the failure of low-income taxpayers to claim all exemptions and to the erroneous withholding statements filed by employers. Three different alternative tax rate schedules under consideration by the Ministry were used in the policy simulations. Each had slightly different total revenue and revenue growth effects and income distributional consequences.

The analysis of tax evasion indicated that taxpayer errors, multiple filing, nonfiling by professionals and income underreporting represented a combined revenue loss of more than 54 percent of 1983 income tax revenues. Furthermore, the level of tax evasion was found to increase with taxpayer income thereby reducing the vertical fairness of the tax.

Martinez found room for further simplification of the income tax as well as potential for broadening the tax base so as to allow for a significant reduction in marginal rates on a revenue-neutral basis. He also presented several recommendations concerning tax administration that could improve the fairness of the income levy and help replace revenue losses that would accompany general decreases in that tax rate structure.

Customs Administration

Kenneth Stacey led the study of the customs collection system. This portion of the project included a review of the laws, regulations and policies effecting customs operation and an assessment of the existing customs organization with the goal of identifying deficiencies in internal controls and documentation flow which permit evasion of duty. Based on these assessments, recommendations were made concerning changes in the underlying organization, its staffing and operational procedures as well as recommendations for additional technical assistance to implement the new system. Stacey was assisted in these efforts by the two consultants, Oakley Austin and Francisco Gonzalez, each of whom spent several months in Ecuador.

A variety of recommendations were drawn from the analysis. First, the system should be reorganized to streamline the administrative processes and to demarcate more clearly the functions of customs and tariff policy and customs operation. It was also deemed desirable to establish an investigative branch of the customs service and to create an independent customs unit at the Guayaquil airport. In the area of customs operations Stacey recommended several new practices designed to improve the ability of customs inspectors to value goods and to ensure that imports subject to customs levies did not escape valuation. Finally, the project reviewed the Government's plan to computerize customs activities and recommended changes in the com-

puter system to allow valuation and entry checking to be implemented at an earlier date than originally envisioned.

Intergovernmental Grants

The final portion of the LRAP project in Ecuador concerned the system used by the central government to transfer funds to local governments. The centerpiece of this system is the Fondo Nacional de Participaciones (FONAPAR). Established in 1971, FONAPAR was to become the only rational and nonpolitical means of transferring national government funds to local governments in Ecuador. The grant pool is based primarily on fixed proportions of national government tax revenues. Allocations of the monies to local governments take two forms. One is an automatic transfer to all municipalities; the second, accounting for over two-thirds of total allocations, is intended to be used solely for capital investment purposes.

The Government of Ecuador was concerned about two different aspects of the FONAPAR program. One concern focused on the administration of the funds in the Ministry of Finance. Caroline Fawcett, currently at Johns Hopkins University, studied the internal operations of FONAPAR and described how it operates and interacts with a number of other Ecuadorian institutions including the Central Bank, Treasury, National Planning Board and several autonomous government agencies. She analyzed the complexity of these interrelations and identified a number of problems that result in an uncertain flow of monies to local governments. In addition she showed the complexity of the budgeting, reporting and approval process and recommended changes in internal procedures that could reduce the amount of red-tape and streamline the procedures.

The second area of concern regarding FONAPAR focused on the effects which the grant scheme has on local government behavior. During the past 15 years, local governments have become increasingly dependent upon these externally-generated funds. This increased reliance upon intergovernmental transfers was thought to be in part due to local governments substituting grant revenues for their own-source revenue mobilization efforts. David Greytak and Victor Mendez, an economics doctoral student in the Maxwell School, addressed this issue by estimating a complex econometric model of local government behavior. The model distinguishes between the effects of the automatic portion of grants which can be used for a wide variety of purposes and the discretionary investment grants that are limited to new capital projects.

The results suggest that in smaller municipalities the automatic allotments were used as a substitute for local revenue mobilization but that the investment transfers were found to stimulate total capital and current spending. An increase of one sucre in investment allotment was found to be associated with a 1.8 sucre increase in capital spending and a 0.8 sucre increase in current expenditures. In larger cities, both the automatic and investment transfers were found to increase both current and capital expenditures. Nevertheless, no evidence was found to suggest that the grants stimulated own-resource mobilization efforts. Greytak and Mendez suggested alternative grant allocation formulae and simulated the effects each would have on different localities. Of particular interest were alternatives that would provide local governments with additional incentives to mobilize resources on their own and to reduce their reliance on intergovernmental transfers.

In summary, the portions of the Local Revenue Administration Project on Fiscal Administration in Ecuador address-

ed three, somewhat related, issues of resource mobilization—alternatives to the current income tax structure, improved customs administration and improvements in the administration of the major intergovernmental grant program. Although oil revenues allowed the country to enjoy considerable prosperity during the 1970s, the country is recognizing that these benefits also created some problems that only rather major reforms in the structure and administration of other revenue instruments will be able to resolve.

In Nepal

Research Associate Jim Wozny spent five weeks in Nepal in May and June under the auspices of the Local Revenue Administration Project. He carried out for USAID-Kathmandu a short-term study of local government resource mobilization in Nepal; a major portion of his time was spent collecting data from several outlying districts and analyzing data already collected by a local counterpart firm. Upon his return, he and Larry Schroeder (who was in Nepal in January as part of the same effort) prepared a report on the work, which should provide the first information ever available on rural local governments which use voluntary contributions to carry out development projects at the village level.

In China

Roy Bahl made trips to China in June and September for The World Bank. One activity is a joint research project on the impacts of a land use tax in association with the Chinese Academy of Social Sciences. Bahl traveled to Beijing and Jinan in Shandong Province to continue gathering a large sample of enterprise financial and land use data. In addition, as part of the urban planning study he traveled to Changzhou in Jiangsu Province to survey municipal financing practices.

In Philippines

In April the National Tax Research Center of the Government of the Philippines presented Roy Bahl with the Pioneer Award as the highlight of the Center's 27th anniversary. The award is conferred only rarely and is to recognize individuals who have provided invaluable assistance in the institutionalization of tax research. Bahl carried out a major portion of his work in the Philippines under the Local Revenue Administration Project.

In Guatemala

Jorge Martinez, associate professor of economics at Georgia State University, spent two weeks in Guatemala in August as part of the Local Revenue Administration Project at the behest of USAID-Guatemala. Working with USAID and the Ministry of Finance, he examined the government's new tax bill, especially in the areas of internal revenue, property taxation, customs, and budget administration and from the point of view of both policy and administration.

In El Salvador

In May and June David Greytak traveled twice to El Salvador to assist an USAID-El Salvador team in design-

ing the structure and operational characteristics of a Municipal Assistance Program. The Program, which was slated to begin operations in early 1987 as part of a newly-instituted Municipal Assistance Institute, was to include both technical assistance and a grants program. The grants program, to be funded with 2 percent of the central government revenues, included grants distribution among municipalities based in part on tax effort.

In Ecuador

David Greytak, Jorge Martinez and Hernando Garzon spent three weeks in Ecuador in July, with Pat Morrison of Development Associates. Included in the work they were doing was a mid-term evaluation of a four-year USAID-Ecuador income tax audit and compliance project and a final evaluation of the USAID-sponsored innovative cooperative inter-institutional municipal technical assistance project.

In Jamaica

The Jamaica Tax Structure Examination Project work is drawing to a close and, as a result, Roy Bahl made trips to Kingston in June, August and October. In October, the Project and Bahl were honored at a luncheon hosted by Jamaica's Prime Minister Edward Seaga, who said that the project could be a model for other developing countries. Seaga also tied the improvement of Jamaica's economy, which is experiencing its highest level of growth since the early 1970s, in part to the successful implementation of the tax reform measures. Professor Daniel Holland of MIT joined Bahl and project resident advisors George Whitehouse and Mathias Bourgeois at the luncheon.

Three more JTSEP staff papers were issued. Staff Paper No. 34, "Real Property Tax Valuation in Jamaica: Recommendations for Change," by Charles Cook and Arlo Woolery, considers the possibility of implementing a computerized mass appraisal approach to property tax valuation in Jamaica. Staff Paper No. 35, "Payroll Tax Reform in Jamaica," by Michael Wasylenko and Bruce Riddle analyzes the payroll tax system in Jamaica and looks at the possibilities for lowering the payroll tax contribution rates in light of the expanded tax base which resulted from the 1986 reform. In Staff Paper No. 36, "Household Expendi-

ture Effects of the Jamaican Food Stamp Program," Barbara Miller and Carl Stone present their final report on the findings from the Low Income Household Expenditure Survey II, which gathered data in 1986 from a sample of 160 urban and rural low-income households.

Visitors To Metro

Two visitors from Egypt spent time at Metro recently. Mohammed El Nuby visited Metro in July and Iman El-Shayeb visited in September. Both were interested in the Program's efforts in central government tax projects. Ms. El-Shayeb is the Project Officer at USAID-Egypt responsible for their proposed tax reform initiative; Mr. El Nuby has recently joined AID from the Ministry of Finance. Paul O'Farrell, now chief mission economist at USAID-Egypt and graduate student alumnus of Metro, also visited Metro in August.

Kazuhiro Ueta, associate professor of economics from Kyoto University in Japan and graduate student Hiroki Yamada visited Metro in August to discuss urban public finance with Roy Bahl and John Yinger.

Staff Presentations

In May Larry Schroeder gave a presentation on forecasting to a group of developing country government officials attending a seminar sponsored by the International Law Institute in Washington.

On June 24th, Schroeder and Jerry Miner participated in the AID-Washington sponsored "Workshop on Sustainability of AID's Development Assistance Efforts." For the workshop, LRAP prepared a brief paper focused on the financial aspects of sustainability and how local resource mobilization might be used to address these problems.

Roy Bahl gave a presentation in September to a Lincoln Institute-USAID Seminar on Property Taxation in Developing Countries. A paper he co-authored with William Dillinger of The World Bank, "Urban Public Finance in LDCs," was delivered at a conference in Nagoya, Japan in July. In addition, Bahl made a presentation on "Public Finances in China," at the East West Center in Honolulu in late June.

Syracuse University

REVENUES

Metropolitan Studies Program

400 Maxwell Hall

Syracuse, New York 13244-1090, USA

NON-PROFIT ORG.
U.S. POSTAGE
PAID
SYRACUSE
UNIVERSITY
SYRACUSE, NEW YORK

Land and Liberty
5 East 44th Street
New York
NY
10017