



# Pension Reform and the Development of Pension Systems

An Evaluation of World Bank  
Assistance



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# Foreword

Formal pension systems are an important means of reducing poverty among the aged. In recent years, however, pension reform has become a pressing matter, as demographic aging, poor administration, early retirement, and unaffordable benefits have strained pension balances and overall public finances.

Pension systems have become a source of macro-economic instability, a constraint to economic growth, and an ineffective and/or inequitable provider of retirement income.

In the 1990s, the World Bank took a leading role in pension reform. The Bank's strategy for pension reform is formalized in *Social Protection Sector Strategy: From Safety Net to Springboard* (World Bank 2001), which sets forth a multi-pillar framework consisting of (1) a publicly managed, tax-financed pension system; (2) a privately managed, funded scheme; and (3) voluntary retirement savings. *Strategy* followed up on the World Bank's earlier policy research report, *Averting the Old Age Crisis* (1994), which offered a more detailed prescriptive exposition of a multi-pillar pension framework. This latter report gained prominence worldwide as favoring funded systems and as providing the underpinning for the Bank's activity during the period under review.

The Bank supported a wide variety of pension reforms through analytical and advisory services and lending operations. It has issued over 350 pa-

pers and publications on pension reform. The breadth of research on pensions is impressive and covers a broad range of topics. Fiscal and regulatory issues, in particular, have been the focus of substantial analysis. However, analyses of the living conditions of the aged have tended to be perfunctory, and few studies empirically investigated the limits of formal pension coverage or ways to increase it.

Bank operations helped countries build institutional capacity to strengthen the administration of tax-financed pension systems and the regulation of funded pensions, providing relatively more assistance to multi-pillar reformers.

Eighty-seven percent of all projects with a pension component and 75 percent of the pension components were satisfactory in their evaluation outcome. But Independent Evaluation Group (IEG) case studies analyzing the longer-term impact of the reforms found that outcomes varied widely across countries and depended on the depth of analyses, initial conditions, institutional capacity, and political commitment.

The Bank's strategy for a multi-pillar pension system relies on ensuring that sound macroeconomic policies and an adequate financial sector are in place. In countries where initial multi-pillar conditions were not in place, the Bank most often supported purely pay-as-you-go (PAYG) reforms that, in turn, contributed to fiscal objectives. Nonetheless, in a number of instances, the Bank supported multi-pillar reforms even though there were clear weaknesses in the country's underlying economic and financial structure. Moreover, the Bank did not always fully consider noncontributory options to expand the social safety net to those outside the formal system.

While the impact of pension reforms takes years to discern, IEG used indirect indicators to gauge the long-run effectiveness of the Bank's support. Bank-supported reforms have often contributed to fiscal sustainability. But, despite expectations, in many countries with multi-pillar systems, funded pensions remain poorly diversified and pension coverage has not increased. Also, the secondary objectives of funded pillars—to increase savings, develop capital markets, and improve labor flexibility—remain largely unrealized.

This evaluation presents several recommendations:

- First, to ensure well-tailored assistance to country conditions and consistent policy prescriptions, the Bank needs to implement guidelines for Bank staff for the development of pension operations, paying more attention to the minimum macroeconomic and financial sector preconditions necessary for a multi-pillar reform. It also needs to be careful not to oversell the benefits of the secondary objectives of pension reform in its dialogue with client countries.
- Second, the Bank needs to ensure that client capacity to implement pension reform is adequate, develop a checklist for capacity requirements and provide increased assistance for building capacity.
- Finally, the evaluation also recommends that the Bank conduct additional research on high-priority issues, such as income of the aged, the impact of corruption and governance on the feasibility of effective pension regulation, and ways in which to stimulate capital market development and competition. The Bank needs to improve internal and external coordination, including consensus-building among stakeholders.



*Vinod Thomas*

Director-General, Independent Evaluation Group



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# Preface

**T**his evaluation presents an independent assessment of the World Bank's support for pension reform activities focusing on the period from 1994 to 2004. This report is the first comprehensive Independent Evaluation Group (IEG)<sup>1</sup> evaluation of the Bank's involvement in pension reform, assessing the implementation of the Bank's strategy and the resulting development outcomes.

Since 1984 the Bank has assisted 68 countries with reform of their pension systems through more than 200 loans and credits. In addition, the Bank has issued over 350 papers and publications on pension reform.

This report analyzes the Bank's assistance to support pension reform to determine if the Bank's strategy was relevant and if it was followed. The evaluation assesses whether pension reform decisions reflected best practice guidelines at entry, and whether Bank-assisted reforms achieved their social, macroeconomic, and financial objectives. The report also evaluates the Bank's assistance in building institutional capacity, coordinating within the Bank, and cooperating with other international or-

ganizations. Finally, the evaluation summarizes these findings and presents specific recommendations for the future.

The evaluation is based on a compilation, developed by IEG, of all Bank lending and economic and sector work on pension reform, case studies for 16 countries, Financial Sector Advisory Program (FSAP) assessments, economic indicators, desk reviews, and interviews with Bank staff and external organizations.

The report was circulated to Bank management involved in pension reform, the Human Development Network, and the Operations Policy and Country Services Department. The country case studies were also distributed to the relevant Country Directors.

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1. On December 15, 2005, the Bank's Operation Evaluation Department was renamed the Independent Evaluation Group—World Bank.

### **Main Evaluation Messages**

- The Bank has largely supported a flexible, multi-pillar pension framework, consistent with Bank strategy. The majority of the ratings for the Bank's assistance in pension reform have been satisfactory.
- The Bank should pay greater attention to parametric reforms and to exploring options to expand the safety net for those not covered by the pension system.
- The Bank needs guidelines to ensure well-tailored assistance to country conditions and consistent policy prescriptions.
- The Bank needs to increase its assistance in building capacity to ensure sustainable reforms.



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# Executive Summary

Pension reform is a focus of World Bank activities because pensions are an important part of the social safety net for workers covered by the formal pension system in many client countries. Pensions are a mechanism to reduce the risks of old-age poverty and a means to smooth lifetime income to maintain living standards in retirement.

Pension systems must be fiscally and politically sustainable to achieve their income-support objective. Unsustainable pension systems can be an obstacle to fiscal stability, economic growth, and poverty reduction. Over the past two decades, the need for pension reform has become more pressing in client countries, because demographic aging and the mismanagement of pension systems have put a strain on government budgets, which threatens to undermine macroeconomic stability and retirement income security.

Countries with high coverage rates and increasingly high percentages of the population reaching retirement age are most likely to face severe future fiscal imbalances. Countries in the Bank's Europe and Central Asia Region are prime examples. Even countries with lower coverage and younger populations, including countries in the Latin America and Caribbean Region, face fiscal issues similar to those in countries with serious demographic problems, particularly when employment in the covered sector is declining relative to an increasing number of retirees. In

countries in other Regions, pension reform has been less of a priority.

This report is the first comprehensive, independent evaluation of the Bank's involvement in pension reform. It assesses the Bank's pension reform strategy and the resulting development outcomes for Bank assistance between 1984 and 2004. During this period, the Bank assisted 68 countries with reform of their pension systems with more than 200 loans and credits. In addition, the Bank issued more than 350 papers and publications on pension reform.

This report analyzes the Bank's assistance to determine whether the strategy was relevant and whether it was followed. More specifically, the evaluation assesses whether pension reform operations reflected best-practice guidelines at entry, and whether the reforms achieved their social, macroeconomic, and financial objectives. The report also evaluates the Bank's assistance in building institutional capacity, as well as ad-

*Demographic aging may lead to severe fiscal imbalances in the future.*

ditional factors that could affect reform outcomes. Finally, the evaluation summarizes these findings and presents specific recommendations for going forward.

### The Strategy for Pension Reform

The Bank's strategy for pension reform is presented in *Social Protection Sector Strategy: From Safety Net to Springboard* (2001) (hereafter, *Strategy*). Because this document is the only official Board-approved strategy for pension reform, it is the basis of the evaluation. Of course, many Bank publications have influenced the direction of Bank assistance, in particular, the Bank's earlier publication *Averting the Old Age Crisis* (1994) (hereafter, *Averting*). In effect, *Strategy* ratified many of the precepts established in *Averting*.

*Strategy* recommends the establishment of flexible multi-pillar pension systems, consisting of three pillars based on different forms of income support, as long as proper initial conditions prevail. The first pillar consists of a publicly managed, unfunded plan; the second pillar is a mandatory, privately funded plan; and the third pillar is a voluntary, privately funded plan. It also recommends complementary retirement income provisions for uncovered workers and the poor.

Based on the Bank's strategy, the Independent Evaluation Group (IEG) used the following criteria to judge the soundness of pension reforms: (1) impact on the income of the aged, (2) the nature of the fiscal policy and financial sector environment, (3) the capacity of the administrative structure to operate a multi-pillar system, and (4) the soundness of regulatory and supervisory arrangements. The report evaluates the extent to which these criteria have been met, based on statistical indicators, assessments from Implementation Completion Reports (ICRs) and Project Performance Assessment Reports (PPARs), assessments from the Financial Sector Advisory Program (FSAP), interviews with Bank staff and external stakeholders, and 16 IEG case studies.

### The Bank's Support for Pension Reform

The World Bank supported a variety of pension systems, both unfunded and funded, through

lending operations and analytical and advisory activities, including economic and sector work, policy dialogue, training, and dissemination. The Bank provided \$5.4 billion in pension-specific lending from 1984 to 2005, with more than half of this amount issued during the fiscal 1998–2001 period. Of the countries receiving Bank support for pension reform, The Europe and Central Asia and Latin America and Caribbean Regions dominated, with a combined total of 40 countries.

The Bank's papers and publications on pensions provide a substantial foundation for the Bank's operations, policy dialogue and overall approach on pensions. The breadth of analytical work is considerable, with a preponderance of studies on countries in the Europe and Central Asia Region, followed by those in Latin America and the Caribbean, paralleling the pattern of lending. Fiscal and regulatory issues have been the focus of substantial analysis because fiscal imbalance has been the leading reason for countries to undertake pension reform and seek the Bank's assistance. The Bank has undertaken numerous studies on complicated technical issues such as the regulation of funded pensions and the administrative costs of the funded pillars. Bank thinking on pensions has evolved over time, reflecting broader discussion and accumulated country experience.

While the Bank's analytical contributions represent a critical expansion of knowledge on pension reform, economic and sector work often failed to provide country-specific guidance to assist in project development. For example, while the Bank has conducted poverty assessments in many countries, all too few offer a detailed profile of the living conditions of the aged. Similarly, while low pension coverage is frequently mentioned as a problem, little empirical research has been conducted to identify policies that encourage its growth. In addition, studies to improve public pension administration have been underrepresented in Bank work, despite the importance of program implementation for PAYG and mandatory, funded pensions alike. Economic and sector work has been limited in a number of other areas, as well, including disability and

survivor's pensions and the political economy aspects of reform.

While the Bank's lending operations have helped reform many publicly managed, unfunded plans, the Bank has provided greater resources to countries developing multi-pillar systems. In Latin America and the Caribbean, the Bank provided lending support for mandatory, privately funded pillars, which, in one form or another, were implemented in most countries where the Bank engaged in dialogue. In Europe and Central Asia, the Bank also undertook operations to assist the development of mandatory, privately funded pillars. In a number of these countries, however, reforms were slow in coming or were never implemented. With the exception of a limited number of countries that offered social pensions, particularly in Europe and Central Asia, the Bank provided little support to develop social assistance for the aged poor, even though this was a stated element of the Bank's strategy on pension reform.

In its financial support of multi-pillar systems, the Bank has not taken a one-size-fits-all approach. Systems supported by Bank lending varied in size and design. However, it is difficult to document whether this variation was the result of the Bank's taking into account specific country conditions, the task team's preference for a particular structure, or the country's preference for a particular reform.

Over three-quarters of the Bank's ratings for pension components, and projects that included pension components, had satisfactory outcomes. Based on project ratings, the Bank appears to have been more successful in its pension reform activities in Latin America and the Caribbean than in Europe and Central Asia.

While satisfactory ratings for individual loan activities are important, the success or failure of an operation may not correspond to the success or failure of a Bank pension program overall. IEG case studies of particular countries, which analyze the Bank's assistance to pension reform comprehensively over time, indicate that development outcomes depend on multiple factors. In particular, successful outcomes depend on at-

tention to initial conditions, effective institutional capacity, and political commitment to the reform.

### Was Bank Support Consistent with Initial Conditions?

While the primary objectives of pension reform are to reduce old-age poverty and smooth lifetime consumption, *Strategy* indicates that additional objectives of multi-pillar reforms may also be achieved, including greater worker participation in the pension system and higher economic growth through increased savings and the promotion of capital market development.

The Bank's strategy to implement multi-pillar pension reforms was intended to apply to countries that satisfied certain preconditions, including (1) sustainable macroeconomic policies, (2) a sound financial sector, and (3) sufficient implementation capacity. This evaluation uses a set of indicators to assess whether the necessary conditions were in place before Bank support of multi-pillar pension reform. IEG case studies were more likely to rate the Bank's performance satisfactory in IEG multi-pillar reform countries when these preconditions were met.

The Bank only supported PAYG improvements in some countries that did not meet these preconditions, rather than advancing multi-pillar reforms. In some cases, however, the Bank supported multi-pillar systems in countries with high fiscal deficits, weak financial systems, and ineffective implementation capacity.

Although pension shortfalls undermine fiscal stability, the transition costs of immediately switching from a PAYG system to a funded system will temporarily increase the fiscal deficit further, because the government must continue to pay pension benefits while some contributions are diverted into private funds. Thus, countries should first be advised to achieve fiscal sustainability through expenditure rationalization and revenue reform, including parametric reforms to their pension systems, before embarking on a multi-pillar reform.

Despite *Strategy's* recommendation, the Bank's pension reform agenda in client countries

often did not include policies to protect the vulnerable elderly who are ineligible for public pensions. From a poverty reduction standpoint, countries with low pension coverage rates need to explore options to expand participation in the formal system and/or provide complementary social safety nets to improve the welfare of the aged. For example, in Latin America and the Caribbean, where coverage is low, pension reform will assist far fewer future retirees than in Europe and Central Asia, where a high proportion of workers are covered by formal plans.

### What Has Been the Impact of Reforms?

Pension reform requires many years of implementation before its impact can be fully evaluated. Most reforms are too recent for a longer-term assessment. Consequently, it is necessary to use indirect indicators to gain insight into the progress toward achieving the Bank's objectives for pension reform.

Large fiscal deficits, stemming in part from imbalances in pension revenues and expenditures, motivated many countries to seek Bank assistance in reforming their pension systems. While the Bank's reforms improved the financial balance of many PAYG systems, additional reforms often were needed, but not enacted, to ensure full fiscal sustainability.

One advantage of a multi-pillar system is to reduce financial risk to future pensioners through portfolio diversification, including the existence of public and private components. In many countries with multi-pillar systems, however, investments in privately funded pillars are not well diversified, although rates of return are high as a result of investments in government bonds. While these bonds offer high returns, they often just compensate for macroeconomic and investment risk. In addition, privately funded systems remained open to political influence, just like PAYG plans, particularly in times of economic crisis.

Empirical evidence suggests that the secondary objectives of privately funded pension plans to increase savings, develop capital markets, and increase worker participation in the pension

system have remained largely unmet. There is little evidence that privately funded pillars have succeeded in increasing national savings or in developing capital markets. Furthermore, multi-pillar reforms have not increased pension coverage in most reforming countries.

### Has Adequate Attention Been Given to Institutional Capacity?

World Bank operations have supported countries in building institutional capacity throughout the pension reform process. Out of more than 200 loans and credits, 129 have supported institutional capacity, including improving the administration of unfunded systems, actuarial forecasting, and regulation of privately funded plans.

The need to develop effective pension administration, however, has been greater than the assistance provided. The Bank underestimated institutional weaknesses because of incomplete needs assessments, reluctance on the part of some agencies to open a dialogue with the Bank, and insufficient Bank expertise on the administration of publicly managed, unfunded plans. In addition, administrative projects that were undertaken would have benefited from better Bank and client supervision, particularly in countries with capacity constraints.

Bank loans to establish regulatory systems for privately funded pensions have been limited in number and scope. In particular, in Latin America and the Caribbean, investment restrictions may have created an additional investment risk for future retirees. But in some cases successful administrative and regulatory reforms were supported by policy dialogue rather than investment projects or technical assistance. This was true in some Europe and Central Asia and Latin America and the Caribbean countries.

The Bank developed a long-term forecasting model for pensions, the Pension Reform Options Simulation Toolkit (PROST), as an in-house tool for policy analysis to help client countries develop financially sustainable pension systems. However, the Bank's technical assistance did not develop sufficient local expertise to assess the fiscal balance of pension programs on an ongoing



basis or to update policy reforms. Some countries could not implement PROST because of too few trained professionals. Others found PROST data requirements prescriptive or too inflexible to use for country-specific applications.

### Has Support Been Well Coordinated?

The World Bank's internal and external relationships have affected the outcomes of Bank activities and the success of the reforms, through (1) coordination among Bank units and teams, (2) coordination with other donors and international organizations, and (3) relationships with clients. The Bank has yet to develop a decision-making process that is well-coordinated across the three primary networks involved in pension reform (Human Development, Poverty Reduction and Economic Management, and Finance). Without consistent guidelines and benchmarks for pension activities, staff changes within the Bank and in client countries led to inconsistent advice and support over time. Furthermore, the Bank has not always been steadfast or efficient in its provision of funding, resulting in over-funding or under-funding of particular pension reforms.

Improved cooperation with international agencies and bilateral donors over the years has resulted in stronger pension reforms. But the Bank could still benefit from finding further common ground with its international partners, despite differences in perspective. The Bank's own stop-and-go tactics—that is, lack of sustained within-country attention over several CASS—tended to reinforce discontinuities in the progress of reform. While the Bank worked successfully with many governments, it needs to ensure that it involves all relevant ministries and stakeholders.

### Summary and Conclusions

The Bank's multi-pillar strategy is well documented with a strong legacy of operational work, economic and sector work, training, and seminars. Reforms have differed regionally and by country, as a result of client concerns and Bank experience. Nonetheless, the Bank's advice has not always been effective. While formal pension systems in many countries contributed to bal-

looning budget deficits, the Bank's preoccupation with fiscal sustainability tended to obscure the broader goal of pension policy, that is, to reduce poverty and improve retirement income adequacy *within a fiscal constraint*.

To improve this process, IEG recommends that the Bank:

#### *Develop Guidelines to Design Pension Reforms and Pay Greater Attention to Parametric Reforms*

- a. *Pay greater attention to parametric reforms* to ensure fiscal sustainability and to the macro-economic, financial, and institutional sector *preconditions necessary for a multi-pillar reform*. This would involve preparing and implementing *guidelines* to ensure well-tailored assistance to country conditions and consistent policy prescriptions including statistical indicators and in-depth assessments.
- b. *Be more realistic in presenting the benefits of the secondary objectives of pension reform* in dialogue with client countries, as there is insufficient empirical evidence to support the claims that funded systems have, or can, improve savings and capital market development.

#### *Build Client Capacity*

- c. *Develop a checklist for client capacity requirements* (including contribution collection, contributor database development, actuarial and policy analysis, and regulation of multi-pillar operations) to assess client requirements and determine how best they can be met. *This would involve ensuring that a plan for technical assistance is put in place for reform initiatives so that client capacity is developed.*

#### *Conduct Research on Outstanding Issues*

- d. *Ensure that adequate analysis is conducted on key issues* such as income of the aged, the impact of corruption and governance on the feasibility of effective pension regulation, methods to foster competition among pension funds, guidelines for investment alloca-

tion, the design of noncontributory systems, and ways in which capital markets develop, as well as research offering cross-country evidence on these topics.

***Improve Internal and External Coordination***

e. *Develop a process to ensure that cross-sector issues are considered, including financial is-*

sues identified by the FSAP, and maintain closer coordination between the Development Economics Vice Presidency, the networks, sector units, and country units.

f. *Develop a strategy to play a greater role in consensus building among stakeholders, in particular, other international organizations and client agencies.*

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## ACRONYMS AND ABBREVIATIONS

AAA	Analytical and advisory activities
ADB	Asian Development Bank
AFR	Africa Region
CAS	Country Assistance Strategy
CPI	Consumer price index
DAC	Development Assistance Committee
DB	Defined benefit
DC	Defined contribution
EAP	East Asia and Pacific Region
ECA	Europe and Central Asia Region
EBRD	European Bank for Reconstruction and Development
ESW	Economic and sector work
EU	European Union
FSAP	Financial Sector Advisory Program
GDP	Gross domestic product
GNI	Gross national income
HIPC	Heavily Indebted Poor Countries
ICR	Implementation Completion Report
IDB	Inter-American Development Bank
IEG	Independent Evaluation Group
IMF	International Monetary Fund
LAC	Latin America and the Caribbean Region
MNA	Middle East and North Africa Region
NDC	Notional defined contribution
OECD	Organization for Economic Cooperation and Development
PAYG	Pay-as-you-go
PHARE	Pologne, Hongrie Assistance à la Reconstruction Economique
PHRD	Policy and Human Resources Development Fund
PPAR	Project Performance Assessment Report
PPP	Purchasing power parity
PROST	Pension Reform Options Simulation Toolkit
SAR	South Asia Region
TACIS	Technical Assistance to the Commonwealth of Independent States
USAID	U.S. Agency for International Development
WBI	World Bank Institute



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## GLOSSARY

*Actuarial forecasts:* Forecasts used to project the long-run income and expenditure streams for pay-as-you-go (PAYG) pensions. Actuarial models can also be developed to project income and expenditures for a variety of policy alternatives and switching patterns, including the value of the transition deficit under alternative scenarios.

*Annuity:* A stream of payments at a specified rate, which may have some provision for inflation-proofing, payable until some contingency occurs, usually the death of the beneficiary or a surviving dependent.

*Bonosol:* A pension paid once per year by the Bolivian government, previously called “Bolívida.” It is the first universal flat old-age pension in the world that is not financed on a pay-as-you-go basis, but rather is fully funded from a non-contributory pension fund that is invested in noncontrolling equity in 10 formerly state-controlled, capitalized, and privatized firms, and financed with dividend income and asset sales.

*Chilean pension reform:* In 1981, the government gradually replaced the traditional collective PAYG system, which was managed by the state and which had defined but uncertain benefits, with a fully funded system managed by the private sector that has defined contributions but uncertain returns. Many countries have since implemented different versions of this reform.

*Contributions:* Payments made by employers and/or employees to a pension system, frequently through payroll deductions; also known as a payroll tax.

*Coverage ratio:* The number of workers actively contributing to a publicly mandated contributory

or retirement scheme, divided by the estimated labor force.

*Covered workers:* Workers that are included in a formal pension plan (see also *Coverage ratio*).

*Defined benefit (DB):* A guarantee by the pension agency or government that a pension will be paid based on a prescribed formula, in which contributions may not be tied actuarially to benefits.

*Defined contribution (DC):* A pension plan in which the periodic contribution is prescribed and the benefit depends on the contribution plus the investment return.

*Dependency ratio:* The ratio of persons receiving pensions from a certain pension scheme divided by the number of workers contributing to the same scheme in the same period.

*Development outcome rating:* The extent to which the project’s major relevant objectives were achieved, or are expected to be achieved, efficiently. The development outcome of the pension component was identified by the Independent Evaluation Group (IEG). The development outcome for the project overall was taken from Implementation Completion Reports (self-evaluations by Bank teams), and IEG reviews of Implementation Completion Reports (ICRs) and Project Performance Assessment Reports (PPARs). IEG evaluations are independent reviews conducted by IEG staff, frequently with the assistance of external consultants. ICR reviews are desk reviews, while PPARs are more extensive and include input from client governments.

*Earnings ceiling:* A maximum amount of earnings above which contributions to a public pension system (or multi-pillar system) are not required.

*Earnings-related (or contribution-related) pensions:* Pensions from PAYG systems that are derived using a formula related to past earnings or contributions to the system.

*Financial Sector Advisory Program (FSAP):* A program of joint assessments by the World Bank and the International Monetary Fund (IMF) of the financial conditions of client countries.

*First pillar:* A publicly managed, unfunded, defined benefit pillar; the PAYG system (see also *Multi-pillar reforms*).

*Flat benefits:* A dollar amount of pension to be credited for each year of service or a uniform payment to all entitled pensioners.

*Formal sector (economy):* Those enterprises that fully comply with government requirements for taxation, contributions to social insurance, and other legal requirements for business (see also *Informal sector*).

*Full funding:* The accumulation of pension reserves that total 100 percent of the present value of all pension liabilities owed to current members.

*Funded pillars (systems):* Systems that are invested in assets, in contrast to ones that are paid for by taxes, either through general revenues or on a contributory basis (see also *Full funding*).

*Gross national income (GNI):* Formerly GNP (gross national product), the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.

*Heavily Indebted Poor Countries (HIPC):* Established in 1996 as a joint collaboration between the World Bank and the IMF, this initiative's aim is to reduce the excessive debt burdens of the world's poorest nations. In 1999, the initiative allowed more countries to qualify for HIPC assistance, strengthening the link between debt relief and poverty reduction.

*Implicit public pension debt (net):* the value of outstanding pension claims on the public sector minus accumulated pension reserves.

*Index of control of corruption:* The World Bank developed a comprehensive set of governance indicators for the anti-corruption project, *Governance Matters* (see Kaufman, Kraay, Mastruzzi 2004). This category measures perceptions of corruption, conventionally defined as the exercise of public power for private gain. The particular aspect of corruption measured ranges from the frequency of "additional payments to get things done," to the effects of corruption on the business environment, to measuring "grand corruption" in the political arena or in the tendency of elite forms to engage in "state capture."

*Informal sector (economy):* Enterprises that do not fully comply with government requirements for taxation, contributions to social insurances, and other legal requirements for businesses, or firms and workers that are not included in such requirements (see also *Formal sector*).

*Legal retirement age:* The normal retirement age written into pension statutes.

*Mandatory pension system:* A pension system for which contributions are required for all workers in a country or for workers in particular covered sectors of the economy.

*Market capitalization:* The share price times the number of shares outstanding. Listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year.

*Means-tested benefits:* Benefits that are targeted to the poor based on income and assets.

*Minimum contributory period:* The minimum length of time that contributions must be made to a public pension system to receive a pension at retirement.

*Minimum pension guarantee:* A guarantee provided by the government to bring pensions to some minimum level.

*Multi-pillar reform (system):* Pension reform (system) with a first pillar that is public (generally PAYG); a second pillar that is mandatory and funded; and a third pillar that is voluntary and funded (see also *Funded pillars*). In this report, multi-pillar reform is used to describe any reform that involves or assists in implementing a mandatory, funded pillar.

*Normal retirement age:* The usual age at which employees become eligible for occupational pension benefits, excluding early retirement provisions.

*Net official aid:* Aid flows (net of repayments) from official donors to countries and territories in Part II of the Development Assistance Committee (DAC) list of recipients: more advanced Central and Eastern European countries, the countries of the former Soviet Union, and certain advanced developing countries and territories. Official aid is provided under terms and conditions similar to those for other development assistance. Data are in current U.S. dollars.

*Net official development assistance:* Disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of DAC, by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in part I of the DAC list of recipients. It includes loans with a grant element of at least 25 percent (calculated at a discount rate of 10 percent).

*Notional defined contribution (NDC):* Resembles a defined contribution system in having individual accounts that “accumulate” all the contributions of a worker, and then converting that sum into an annuity at retirement, but in which the return to contributions is “notional”—that is, not based on marketable investments in physical or financial assets.

*Occupational pension scheme:* An arrangement by an employer to provide retirement benefits to employees.

*Parametric reform:* A type of pension reform that maintains the structure and administration of the system but changes key elements of the parameters, such as contribution rates, retirement ages, or average benefit levels.

*Pay-as-you-go (PAYG):* In its strictest sense, a method of financing whereby current outlays on pension benefits are paid out of current revenues, often funded from a payroll tax.

*Pension coverage (see Coverage ratio).*

*Pension system balance:* The difference between pension fund revenues and pension fund expenditures in a PAYG system.

*Pologne, Hongrie Assistance à la Reconstruction Economique (PHARE):* An instrument financed by the European Union (EU) to assist the applicant countries of Central and Eastern Europe in their preparations for joining the EU. Now 8 out of 10 Central and Eastern European countries, which previously were eligible for the PHARE program, are EU Member States. Since May 2004, the program has been substantially reduced, and currently only Romania and Bulgaria remain PHARE recipient countries.

*Point systems:* PAYG pension systems in which pensions are determined according to a “point” formula in which the individual’s earnings are compared to the average wage.

*Policy and Human Resources Development (PHRD) Fund:* A collaborative effort between the Japanese Government and the World Bank, and currently one of the Bank’s largest sources of grant funds available to developing countries. The Fund, established in 1990, and its predecessor, the Japan Grant Facility, established in 1987, have provided nearly 2,000 grants in support of technical assistance activities to more than 120 countries.

*Pre-funding:* The accumulation of contributions in a funded system.

*Privately managed:* Funded pensions invested in assets by private pension funds or private asset managers (not managed by the government).

*Provident fund:* A fully funded, defined contribution scheme in which funds are operated and generally managed by the public sector.

*Prudent investor rule:* The rule requires investors (1) to be prudent and act as other careful investment professionals would, (2) to diversify and thereby minimize risk, (3) to monitor their investments and make necessary changes, and (4) to be loyal and act solely in the best interests of their beneficiaries.

*Replacement rate:* The value of a pension as a proportion of a worker's wage during some base period, such as the last year or two before retirement or the entire lifetime average wage. It also denotes the average pension of a group of pensioners as a proportion of the average wage of the group.

*Second pillar:* A funded, defined contribution pillar with no redistribution. With more ambiguous systems (e.g., systems that are partially funded or are managed by a tripartite board), this report classifies a system as having a second pillar if the funds are separate from the budget and invested in assets (see also *Multi-pillar reforms*). Such systems generally rely on individual accounts.

*Social pensions:* Noncontributory pensions paid to those over a certain age who are not receiv-

ing contributory pensions or whose contributory pensions are less than the social pension.

*Systemic pension reform:* A type of pension reform that replaces the existing PAYG system with a multi-pillar or other type of pension system that diversifies the structure of benefits, administration, and funding of the pension system.

*Technical Assistance to the Commonwealth of Independent States (TACIS):* The main EU initiative to help the countries of the Former Soviet Union with the transition to a market economy. It supports democracy and the exchange of knowledge and expertise through partnerships, links, and networks at all levels of society and is based on close cooperation and exchange of experience between partners.

*Third pillar:* A voluntary, privately managed pension pillar (see also *Multi-pillar reforms*).

*Transition cost:* The cost to the government of transforming a PAYG system to a multi-pillar system, which involves making the implicit pension liability explicit.

*Transitional deficit:* The government deficit caused by the transition cost (see *Transition cost*).

*Uncovered workers:* Workers that are not included in a formal pension plan (see also *Covered workers*).





### **Chapter 1: Evaluation Highlights**

- The Bank has been a leader in pension system reform.
- The Bank strategy supports a flexible, multi-pillar framework, under the appropriate macroeconomic, social, and financial conditions.
- The multi-pillar framework consists of a public unfunded pillar, a private funded pillar, and a voluntary pillar.

# The Strategy for Pension Reform

Pension reform is a focus of World Bank activities because pensions are an important part of the social safety net for workers covered by the formal pension system in many client countries. Pensions provide a mechanism to reduce the risks of old-age poverty and a means to smooth lifetime income to maintain living standards in retirement.

Pensions are only one part of the safety net to protect the aged, which may include other public programs, such as targeted benefits for the aged poor or universal benefits for all the aged, and a host of informal arrangements, including direct family support. Pension systems must be fiscally and politically sustainable to achieve their income-support objective. Unsustainable pension systems can be an obstacle to fiscal stability, economic growth, and poverty reduction.

The need for pension reform has become pressing as demographic aging has strained pension systems around the world, leading to large expenditures, large deficits, and high contribution rates. Even countries with relatively young populations have experienced these problems because of high benefits and lax eligibility requirements. In addition, poor administrative capacity and practices have resulted in ineffective collection, entitlement, and benefit determination. In many cases the pension system has become a source of fiscal and macroeconomic instability, a constraint to economic growth, and an ineffective and/or inequitable source of re-

tirement income. Even civil service pensions in countries with no other pension system may become a fiscal drain on government resources.

The World Bank has been a leader in assisting countries in pension reform. Since 1984 the Bank has helped 68 countries reform their pension systems with more than 200 loans and credits. In addition, the Bank has issued over 350 papers and publications on pension reform. This report is the first comprehensive evaluation of the Bank's involvement, assessing the relevance of the Bank's strategy and the resulting development outcomes.

During the 1990s the Bank was criticized for following a dogmatic approach, providing little support for the improvement of public systems and aggressively promoting the privatization of social security, regardless of the country's characteristics and initial conditions. Critics claimed that the Bank oversold the benefits of multi-pillar systems, particularly the benefits of a new second pillar, while simultaneously underestimating the advantages of publicly managed programs. Supporters of the Bank's approach stress

**Box 1.1: Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth**

*Strategy* praised *Averting the Old Age Crisis* for being the first comprehensive diagnosis of pension programs and for recommending greater reliance on private-sector investment management to address the challenge of (1) demographic trends that undermine fiscal sustainability and (2) government policies that are subject to political pressure. *Averting* argued that the best way for most countries to meet the challenges of an aging world is through a multi-pillar system with:

- A mandatory tax-financed public program designed to alleviate poverty
- A mandatory funded, privately managed program (based on personal savings accounts or occupational plans) for savings
- A supplementary voluntary option (through personal saving or occupational plans) for people who want more protection.

*Averting* proposed four alternatives for the first two pillars:

- A mandatory personal saving plan with a flat benefit public scheme

- A mandatory personal saving plan with a minimum pension guarantee in the public scheme
- A mandatory occupational plan with a flat benefit public scheme
- A mandatory occupational plan with a means-tested public scheme.

*Averting* discourages the use of an earnings-related scheme for the public pillar, but if one is provided, “*the wage replacement rate should be based on lifetime earnings...* [italics in original].” *Averting* notes that the “right mix” of pillars is not the same at all times and places, but depends on a country’s objectives, history, and current circumstances.

*Averting* suggests adopting a slow reform process for formal systems in low-income countries, and that public programs in the rural areas of poor countries “should concentrate on social assistance for the neediest of all ages, while every effort is made to develop the capacities that will enable more complex formal systems to work well. Mandatory contribution programs should be introduced first in the formal labor markets of urban areas, where the informal system is most likely to have broken down.”

*The Bank has been criticized for aggressively promoting the privatization of social security.*

the balance of assistance which covered both single- and multi-pillar reforms and suggest that pension reform failures have been primarily the result of inadequate government policy.

The 2001 publication *Social Protection Sector Strategy: From Safety Net to Springboard* (hereafter *Strategy*) details the Bank’s official strategy on pension reform, supporting a multi-pillar framework as best practice if proper initial conditions are in place. *Strategy* followed the Bank’s 1994 policy research report *Averting the Old Age Crisis* (hereafter *Averting*), which set an agenda for pension reform and provided the intellectual underpinnings to much of the Bank’s activities in the 1990s. *Averting* proposed a similar, but more detailed strategy; it has been influential worldwide as a blueprint for pension reform and is widely perceived as representing the Bank’s thinking, especially throughout the

1990s. Nevertheless, *Averting* was never presented or agreed upon as a sector strategy with the Bank’s Board<sup>1</sup> (see box 1.1).

### The Social Protection Sector Strategy

*Strategy* outlines a social risk management framework spelling out how public safety net programs can cope with, mitigate, or prevent the risks that increase a population’s vulnerability to poverty.<sup>2</sup> This document is the basis for the Independent Evaluation Group (IEG) pension evaluation, as it provides the official strategy for Bank operations. It supports flexible multi-pillar pension reform while ensuring adequate retirement income for informal sector workers and the lifetime poor.

*Strategy* offers a clear description of the purpose and function of pension systems, indicating that the improvement of old-age income security in the formal sector begins with “a flexible approach . . . focusing on a ‘multi-pillar’ system that many countries throughout the world are

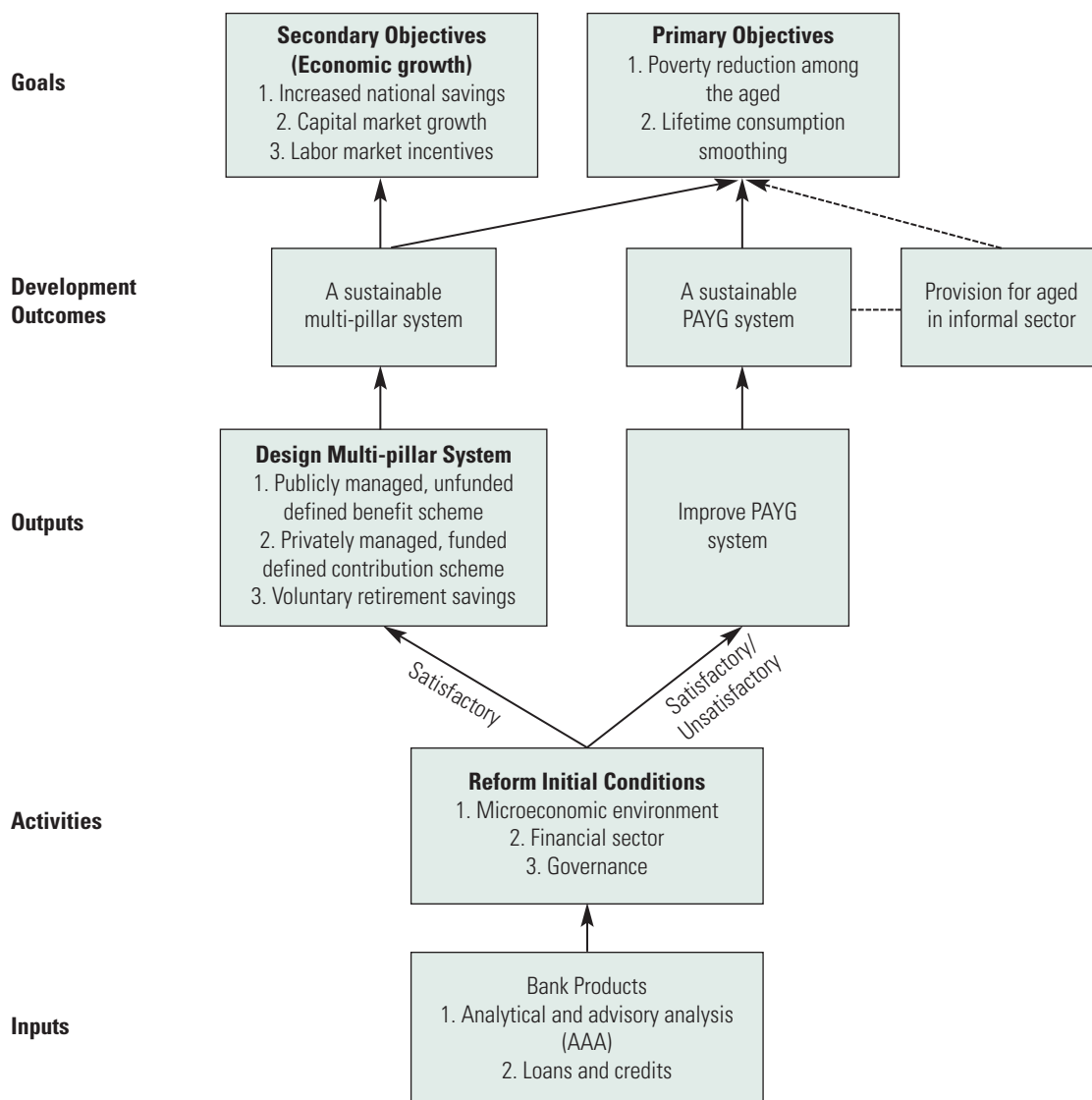
successfully implementing.” Further, while “maintaining this approach, the main challenges are to ensure adequate retirement income for informal sector workers and lifetime poor people, as well as for particularly vulnerable groups such as widows, by strengthening their access to earnings, savings, and other assets.” This is outlined more succinctly in figure 1.1, which is the framework used for this evaluation.

As explained in *Strategy*, a multi-pillar system consists of three types of income support: (1) a

publicly managed, unfunded, defined benefit (DB) program; (2) a privately managed, fully funded, defined contribution (DC) plan; and (3) voluntary retirement savings in the form of housing, insurance, or other assets. The first pillar addresses poverty alleviation and the second provides consumption smoothing. In contrast to a single public program, two pillars are expected to safeguard against the costs of an aging pop-

*Bank strategy supports a flexible, multi-pillar framework.*

**Figure 1.1: What Is the World Bank’s Pension Strategy?**



ulation, protect the system from political risk, and facilitate individual decision making in the process. In addition, multi-pillar systems are expected to contribute to national savings and financial-market development.

*Bank strategy suggests using the multi-pillar approach as a benchmark, not a blueprint.*

*Strategy* indicates that while the proposed multi-pillar approach to pensions “continues to be a useful benchmark, *it is not a blueprint* [italics added], and any reform has to take account of a country’s starting conditions and preferences.” *Strategy* promises that the “World Bank’s future work on pension reform will focus more on the provision of retirement benefits for people in the informal sector and on old-age income support for the life-time poor through public non-contributory schemes and community support.”

*Strategy* specifies that certain conditions must be fulfilled for the Bank to support a multi-pillar reform, including objectives for income redistribution, macroeconomic feasibility, financial sector readiness, a sound regulatory and supervisory framework, and sufficient administrative capacity. Criteria to judge the soundness of a pension reform include (1) distributive effects on the income of the aged, (2) the macro and fiscal policy environment, (3) the capacity of the administrative structure to operate a multi-pillar system, and (4) the soundness of regulatory and supervisory arrangements.

Because *Averting* was not a formal Bank strategy, Bank staff had considerable leeway throughout the 1990s in developing country-based solutions. While *Strategy* does not indicate which

*Specific social, macroeconomic, and financial conditions must be met before implementing multi-pillar reform.*

financial sector preconditions are required for a successful multi-pillar reform, related World Bank analysis (Vittas 1998) is more specific.<sup>3</sup> *Strategy* also does not provide the criteria against which to evaluate multi-pillar reform success, including improvements in retirement income security, gains in fiscal stability, and increases in savings and capital market development.

### *The relevance of the Bank’s strategy*

The Bank’s strategy for pension reform is highly relevant, as formal pension systems are an important means to reduce poverty among the aged and ensure lifetime consumption smoothing in many World Bank client countries. When pension expenditures exceed revenues, the difference will increase the consolidated government deficit, all else remaining unchanged, threatening macroeconomic stability and undermining retirement income security.<sup>4</sup> For those outside the formal pension system, the Bank’s strategy recommends designing policy to either increase coverage or to offer noncontributory schemes to allow better risk management for uncovered workers.

Formal public pension programs are more important in some Regions than in others. For this reason, the recognition of the need to reduce poverty among the nonpensioned aged is an important component of the Bank’s strategy. For example, pension coverage is greatest in the Europe and Central Asia Region, at an estimated 60 percent of the working-age population, compared with Latin America and the Caribbean and the Middle East and North Africa, where it is closer to 30 percent; East Asia and the Pacific, where it is a little over 15 percent; and Sub-Saharan Africa and South Asia, where it is less than 10 percent.<sup>5</sup>

Countries that have an increasingly high percentage of their populations reaching retirement age may face severe future fiscal imbalances. These countries are also more likely to have high pension coverage rates, and as a result, the Bank’s strategy on pension reform will likely affect a large portion of the population. Countries in Europe and Central Asia are a prime example. Even countries with lower coverage and younger populations, including countries in Latin America and the Caribbean and other Regions, face fiscal issues similar to countries with serious demographic aging problems, particularly when employment in the covered sector is declining relative to an increasing number of retirees. In those countries, the relevance of the Bank’s strategy is also evident. In Regions such as Africa, pension reform has been less of a Bank priority.

Pension reform continues to be a topic of some contention among researchers both inside and out-

side the Bank from a theoretical and practical perspective (see Appendix A). Since 1994, World Bank thinking on pensions has continued to evolve as pension issues are debated, and experience on the topic has become more expansive. This is evidenced in the edited volume *New Ideas about Old Age Security* (World Bank 2001b), which contains an evaluation highly critical of *Averting*, and the 2005 report *Keeping the Promise of Old Age Security in Latin America* (hereafter *Promise*), an assessment of pension reform in Latin America and the Caribbean with recommendations for a Regional strategy. Pension policy also received attention in the 2004 report *Economic Growth in the 1990s: Learning from a Decade of Reform* (hereafter *Learning*). Most recently, in 2005 the Bank released a major research report devoted to pensions, *Old Age Income Support in the 21st Century: The World Bank's Perspective on Pension Systems and Reform* (hereafter *Perspective*).<sup>6</sup> The topics, emphasis, and findings of these reports differ, indicating the nature of the debate within the Bank and reflecting a diversity of conclusions about the outcome of Bank-supported pension-reform activities over time.

### The Structure of the Report

Subsequent chapters use statistical indicators, assessments from IEG reviews of Implementation Completion Reports (ICRs) and Project Performance Assessment Reports (PPARs), assessments from the Financial Sector Advisory Program (FSAP), interviews with Bank staff and external stake-

holders, desk reviews, and 16 case studies to evaluate the quality at entry and development outcome of the World Bank's pension strategy.<sup>7</sup>

Chapter 2 assesses whether the Bank followed its strategy by reviewing its lending operations and non-lending activities, including economic and sector work (ESW), policy dialogue, and training and dissemination. The chapter also examines the outcome ratings for projects with pension components. Chapter 3 assesses whether Bank lending decisions were based on best practice guidelines. Chapter 4 analyzes whether Bank-assisted reforms have achieved their primary objective of providing a fiscally sustainable pension system and their secondary objectives of increasing savings and developing capital markets. Chapter 5 examines the Bank's assistance in building capacity for administration, regulation, supervision, and actuarial analyses. Chapter 6 evaluates the Bank's internal and external coordination, as well as the influence of exogenous factors on project outcomes. Chapter 7 summarizes the findings and presents specific recommendations for the future, including the establishment of formal guidelines to create an objective and coordinated method to evaluate Bank strategies for pension reform.

*Bank strategy on pension reform is relevant to poverty reduction among the aged.*

*The report evaluates Bank strategy, whether it was followed, and how well Bank operations were implemented.*

## **Chapter 2: Evaluation Highlights**

- Bank economic and sector work provides an extensive technical background on pension policy.
- Analysis of fiscal issues and private pension regulation has been thorough, but inadequate attention has been paid to income of the aged and ways to expand coverage.
- Both pay-as-you-go and multi-pillar pension systems supported by the Bank varied widely.
- Bank lending operations and nonlending work focused mainly on countries that implemented multi-pillar reforms.
- The majority of ratings for pension components and the projects overall were satisfactory.



# 2

## The Bank's Support for Pension Reform

**T**he World Bank supported pension reforms in 68 countries through lending and analytical and advisory activities (AAA)—including economic and sector work (ESW) (see box 2.1), policy dialogue, seminars, and training. This chapter first reviews the Bank's AAA to assess its thoroughness in elaborating the Bank's pension strategy.

It describes reforms the Bank supported or advocated to determine whether the Bank followed its own flexible multi-pillar model. Finally, the chapter reviews Bank-supported projects to determine whether they had satisfactory development outcomes.

The Bank's extensive ESW addressed a broad range of pension issues. Analysis in several areas, however, especially income of the aged and financial sector development, lacked sufficient depth to assist in project preparation. Conferences and seminars, which initially promoted *Averting*, broadened in content to include a fuller range of pension topics, congruent with changes in ESW. Staff interviews suggest that the impact of the Bank's informal policy dialogue on pension reform also has been influential.

Backed by a compendium of ESW and training, Bank loans and credits have supported multi-pillar reforms in Europe and Central Asia and Latin America and the Caribbean, which, consistent with *Strategy*, differed considerably by country. The reason for the variation, however, could be specific country preferences, specific

country conditions, or exogenous factors. While the majority of the development outcome ratings for the pension components of Bank loans are satisfactory, satisfactory outcomes for individual projects do not necessarily result in satisfactory development outcomes for the Bank's pension reform work overall.

### Analytical and Advisory Activities

The Bank's AAA includes published economic and sector work, informal and formal policy dialogue, and World Bank training and seminars.<sup>1</sup> All three forms of AAA influence the direction of Bank operations by providing information on pension reform issues to Bank staff, Bank client countries, and the wider public, including other stakeholders and donors.

### Economic and sector work<sup>2</sup>

The World Bank's papers and publications on pensions constitute an extensive technical foundation adding to and deepening the understanding of pension reform in more than 66 countries. Over 200 Bank country studies com-

**Box 2.1: Identifying Pension-Related Economic and Sector Work**

In addition to World Bank lending projects, the IEG pension database contains 355 ESW studies with substantial analyses on pensions and the income of the aged. ESW was selected based on the relevance and depth of analyses on pensions from nearly 1,000 documents in the ImageBank (the Bank's electronic document repository) containing the key words "pension," "social security," "contractual saving," and "provident funds" as of July 2004. Although this literature spans fiscal 1962 to fiscal 2004, this report focuses primarily on reports after fiscal 1990.

The pension database also identifies whether each ESW study addresses the commonly mentioned pension-related topics. The topics are: (a) poverty, (b) gender impact, (c) income of the aged, (d) targeting/coverage/eligibility, (e) fiscal sustainability, (f) capital market development, (g) contractual savings, (h) fund management/investment, (i) annuities/insurance, (j) pension system description, (k) pension reform design, (l) public information/political support, (m) private fund, (n) public administration/costs, and (o) transition costs.

*Bank analytical and advisory services have helped determine the direction of assistance.*

prise a comprehensive analytic base to examine the goals, preconditions, and underlying principles of the Bank's evolving pension strategy reform.<sup>3</sup> Pension studies have taken a variety of forms, including papers from many of the World Bank sector units, most prominently the Pension Primer Series produced by the Social Protection Network.

On a Regional basis, the preponderance of studies focus on Europe and Central Asia, followed by Latin America and the Caribbean, the only two Regions that have undertaken multi-pillar pension reforms. Over 40 percent of the studies address pension issues in countries that adopted multi-pillar reforms, and a dozen countries account for over four-fifths of the studies. More than 10 studies each have been issued for Argentina, Brazil, Poland, and Russia. Countries with funded pillars average over four studies apiece, and countries without funded pillars average just over two studies each. Brazil, which has not implemented a funded pillar, is an exception, with 16 studies.

World Bank ESW includes analysis of specific pension topics, descriptions of pension systems in developed economies, cross-regional analysis, and country assessments.

*Analyses have focused on fiscal issues, because fiscal imbalance often triggers pension reform.*

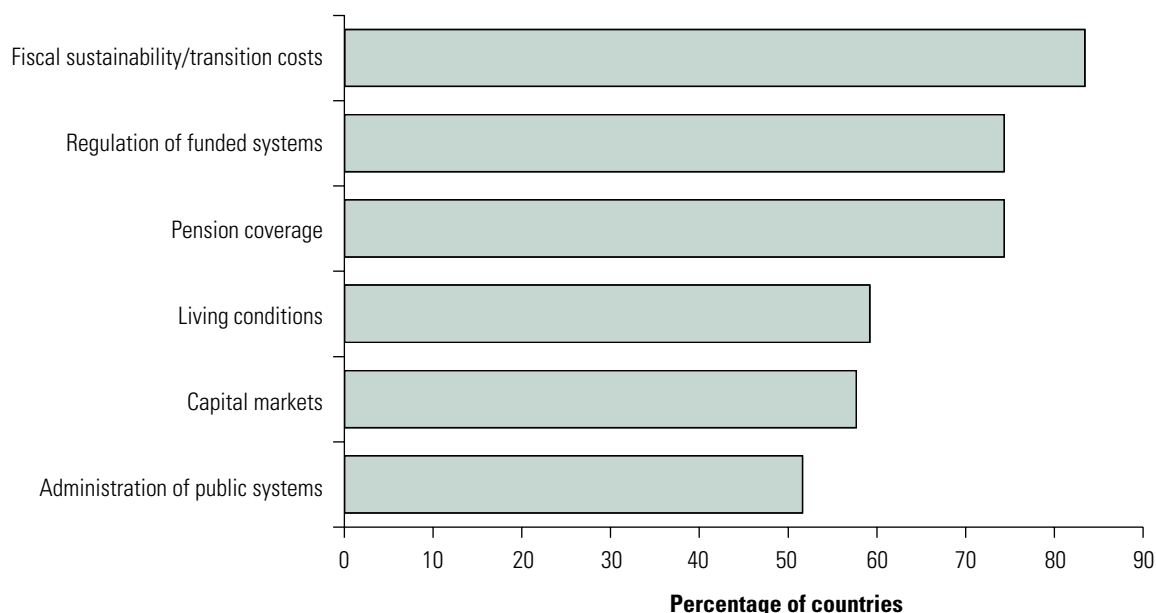
Six topics are the most prevalent: (1) fiscal sustainability and transition costs, (2) regulation of funded systems, (3) pension coverage,

(4) living conditions of the aged, (5) capital markets, and (6) the administration of public systems (figure 2.1).<sup>4</sup> Fiscal issues are the focus of substantial analysis because fiscal imbalances are a primary reason for the Bank to assist in pension reform. In many instances, this has been the chief reason to shift to a multi-pillar system. Bank ESW has also been considerable in assessing the regulation of private pensions, including asset allocation, contribution collection, and governance.

Although the Bank's pension library is substantial, ESW often lacks the detailed analysis needed to assist in project implementation. For example, although many countries have had poverty assessments, the analysis of the income of the aged is limited.<sup>5</sup> Poverty assessments do not relate the risk of poverty among the elderly to age, family structure, gender, or location—all necessary to understand the role pensions may play in establishing a safety net.<sup>6</sup> Pockets of poverty or sources of income are not considered; distributional data are not provided. The impact of gender on the welfare of the elderly is assessed in only 11 percent of countries with pension ESW.

Similarly, although pension coverage is an important topic, little empirical research has been conducted on the limits of formal pension coverage or ways to increase it, despite interest expressed in *Strategy* to expand on this topic.<sup>7</sup> Furthermore, ESW has been limited on topics closely related to old age pension reform, including disability and survivor's pensions, public information, and the political process. In

**Figure 2.1: More Sector Work Addressed Fiscal Issues and Transition Costs, and Fewer Reports Discussed Public Administration**



Source: IEG analysis of World Bank data.

addition, there is a need for more research on pay-as-you-go (PAYG) administration, including collection and payment strategies, in view of its importance to both PAYG systems and multi-pillar reforms.<sup>8</sup>

Country financial market conditions, a key determinant of readiness for multi-pillar reform, have received little attention in country reports, although the Bank has published seminal findings on the issue. The majority of country-specific investment-related ESW encourages the use of pension funds to improve capital markets and/or suggests that contractual savings mechanisms should be developed, without assessing financial-market stability.<sup>9</sup> Thus the Bank's ESW implicitly assumes that capital market development will follow pension reform; that is, the supply of funds will create its own demand. Less attention has been focused on financial and capital market development in Europe and Central Asia than elsewhere, including the Middle East and North Africa and Latin America and the Caribbean.

### *Training and dissemination*

The influence of seminars and workshops, particularly those conducted on a worldwide or Regional basis, has had a substantial impact on policy makers, although this impact is difficult to document. The dissemination of Bank research in the early years focused on *Averting*. Between 1994 and 1999, the Bank sponsored a series of promotional tours including more than 100 seminars and presentations on *Averting* and related research. It is thus no surprise that most of the world considers *Averting* to be the Bank's pension model. Subsequently, the agenda of seminars and workshops broadened, with the number of course offerings expanding from one in 1996 to 13 in 2003, reflecting the diversity of reforms taking place in Europe and Central Asia and Latin America and the Caribbean. World Bank Institute (WBI) seminars and workshops include basic education on multi-pillar reforms, train-

*Dissemination of Bank ESW initially focused entirely on Averting the Old Age Crisis, but was later extended.*

ing on the Bank's pension simulation model (PROST), and training on special pension reform topics such as administration and regulation. Recently, the WBI has shifted from global programs toward more country-focused training on Regional problems.

### *Policy dialogue*

#### *Policy dialogue generally supported multi-pillar reforms.*

Policy dialogue has been particularly important for the Bank's work on pension reform, but written documentation is limited, since in a number of instances the dialogue was informal or did not result in loans or credits. Nonetheless, its influence should not be underestimated. While Bank-client dialogue generally supported the multi-pillar strategy, it has not been consistent across countries or within countries over time in its consideration of the preconditions for multi-pillar reform, especially in Europe and Central Asia.<sup>10</sup> Although the Bank strongly supported multi-pillar reform in Latin America and the Caribbean, it has had a stop-and-go dialogue in a number of countries, when economic circumstances were essentially unchanged.<sup>11</sup> In Africa, Bank discussions with clients on the appropriateness of multi-pillar systems have been inconsistent across countries with similar macroeconomic, social, and financial conditions.<sup>12</sup>

### **Lending Operations in Support of Pension Reform**

While the Bank has not used a one-size-fits-all approach to pension reform, it has concentrated on multi-pillar systems rather than PAYG alternatives or noncontributory schemes.<sup>13, 14</sup> Little support was provided to expanding old-age benefits to workers in the informal economy. *Strategy* emphasized the importance of this type of intervention. In Europe and Central Asia, where countries were more likely to already have had old-age social assistance, reforms were more likely to be holistic—that is, to include a full assessment of other social protection programs such as social assistance for the aged. In Africa, the Bank provided small loans to a number of countries. Except for two large loans to Korea, Regions other than Europe and Central Asia and Latin America and the Caribbean received only a few small loans for pension reform.

Over the past two decades, the World Bank provided over 200 loans and credits with components supporting pension reform to 68 countries.<sup>15</sup> Total lending amounted to \$34 billion. Europe and Central Asia and Latin America and the Caribbean dominated, with 40 countries in these two Regions receiving roughly \$11 billion each. Bank funding was most active during fiscal 1998–2001, when operations with pension

**Table 2.1: Europe and Central Asia and Latin America and the Caribbean Received More Support for Pension Reform Than Other Regions from Fiscal 1984 to 2005**

Region	Countries (number)	Projects (number)	Commitments (\$ bn)	Size of pension component (\$ bn)
Africa	14	26	1.5	0.1
East Asia and Pacific	4	7	7.4	0.5
Europe and Central Asia	25	93	10.8	1.5
Latin America and Caribbean	15	57	10.7	3.1
Middle East and North Africa	6	9	1.1	0.1
South Asia	4	12	2.7	0.1
Total	68	204	34.2	5.4

Source: IEG analysis of World Bank data.

**Box 2.2: How IEG Identified Pension Projects**

IEG screened project documents for 400 loans and credits and identified more than 200 projects containing a pension component for fiscal years 1984 to 2005, developing a reliable and comprehensive database of World Bank pension projects. For adjustment projects, the pension component is identified as the relevant condition in the policy matrix; for investment loans (including technical assistance), the component described in the detailed project description. IEG also compared its database with existing Regional pension databases to ensure completeness. The classification of projects was not always straightforward.

The pension component consists of general analytic support, actual reform measures, and institutional capacity building. IEG took

a more comprehensive approach including Bank projects that specified a clear intent to reform a country's pensions through exploratory measures or research (classified as general analytic support).

Most of this report focuses on projects containing specific measures to reform legislation (actual reform measures), however, and specific types of technical assistance (institutional capacity building). In most cases, the loans and credits were used to reform pension design, although the database also includes loans to pay off pension arrears in certain parastatal enterprises (such as, coal, railroads, and the like).

components totaled \$19 billion, or 56 percent of all operational pension spending (table 2.1).

Because support for pension reform generally constituted only a portion of each loan or credit operation, IEG calculated the pension-specific component for each project (box 2.2).<sup>16</sup> Pension-specific lending undertaken by the World Bank totaled \$5.4 billion. Europe and Central Asia and Latin America and the Caribbean dominated commitments for pension reform, but the latter Region accounted for a higher pension-component share, at about 40 percent of the total loan or credit.

World Bank pension projects include specific policy reforms for both PAYG and multi-pillar systems. Although more than four-fifths of all Bank loans supported PAYG reforms, nearly one-third of these also supported funded second pillars as part of a multi-pillar reform, and nearly one-third supported voluntary pensions. Overall, more than three-quarters of all projects related to multi-pillar pension reform also included a PAYG component. Bank lending for second pillar reforms was provided without support for first-pillar assistance in only three countries; none of these satisfied the precondition for multi-pillar reform.<sup>17</sup> Countries implementing multi-pillar systems received half again as many loans for PAYG reforms as countries sticking

with their PAYG systems, and over twice as many resources for the PAYG pension component.

Countries legislating and implementing multi-pillar systems also received more loans per country than others (table 2.2). Nearly three-quarters of pension loans went to countries in Europe and Central Asia and Latin America and the Caribbean, the only Regions enacting multi-pillar reforms. Further, of the 23 countries receiving 4 or more pension loans, 13 enacted second pillars. Only one country—Georgia—that was receiving World Bank assistance for second-pillar reform failed to pass the necessary legislation to implement the pillar.

Second-pillar assistance was concentrated and substantial. Of 11 countries receiving funding of more than \$100 million apiece,<sup>18</sup> 8 enacted mandatory funded pension laws.<sup>19</sup> Overall, countries with second-pillar legislation accounted for over half of the \$5.5 billion funding for pension projects. Median World Bank lending per country implementing second-pillar reforms was \$50 million, compared with \$7 million for those not implementing second pillars.<sup>20</sup>

*The Bank has helped 68 countries through more than 200 loans and credits.*

*More than four-fifths of all Bank loans supported pay-as-you-go reforms.*

**Table 2.2: Countries with Multi-Pillar Systems Received More Assistance**

Loan pillar type	Pension system type in recipient country	Countries (number)	Projects (number)	Total commitments (\$ bn)	Total size of pension component (\$ bn)	Average no. of projects per country	Average size of pension component per country (\$ mm)
Pillar 1	PAYG system	45	100	13.5	2.4	2.2	53.7
	Multi-pillar system	21	70	13.5	2.7	3.3	126.4
Pillar 2	Multi-pillar system	20	43	5.2	1.7	2.2	84.4

*Note:* Most projects support more than one pillar, so the figures do not add up to 100 percent. The first pillar is defined as a publicly managed, unfunded, defined benefit pillar. The second pillar is defined as a privately managed, funded, defined contribution pillar (with no redistribution). The third pillar is defined as a voluntary, privately managed pillar. The delineation among many systems is actually less clear (for example, systems that are partially funded or are managed by a tripartite board). In general, this report classifies this category of more ambiguous systems as second pillar if the funds are invested in individual accounts.

### *Countries with multi-pillar systems received more loans than others.*

In Latin America and the Caribbean, the Bank supported multi-pillar reforms, which, in one form or another, were implemented in most countries in which the Bank had a dialogue.<sup>21</sup> Among countries in the Region with multi-pillar systems, lending was concentrated in six countries: Argentina, Bolivia, Colombia, Mexico, Peru, and Uruguay.<sup>22</sup> Eleven countries in Europe and Central Asia implemented multi-pillar reforms with Bank support. In other Regions, including Africa and East Asia and the Pacific, the World Bank provided small amounts of technical assistance for multi-pillar reforms that have not yet been implemented.

#### **PAYG reforms**

While *Strategy* recommends the implementation of multi-pillar systems, it supports parametric reforms when initial macroeconomic and financial sector conditions are not in place. The role of World Bank assistance for PAYG reforms has been to achieve fiscal sustainability by raising retirement ages, lengthening minimum contributory periods, restricting pension eligibility and early retirement options, and occasionally increasing contribution rates and/or earnings ceil-

ings. In Latin America and the Caribbean, although the World Bank supported a combination of PAYG and multi-pillar reforms, it also supported PAYG reforms in four countries providing participants a choice between a reformed PAYG system and multi-pillar option. In Europe and Central Asia, the Bank supported a large number of small loans for parametric reforms when multi-pillar systems were not an option.

#### **Types of multi-pillar reforms**

Multi-pillar pension reforms supported by the World Bank varied considerably, partly because of country preference and the kind of pension or social assistance system previously in place.<sup>23</sup> In Latin America and the Caribbean, although the Chilean example had a substantial influence, many reforms did not strictly follow its example. In Europe and Central Asia, where the Bank also supported multi-pillar systems, innovative designs with larger PAYG pillars and notional defined contribution (NDC) formulas were frequently implemented. Other reforms developed quite slowly, and some were never implemented.

The rationale for adopting mandatory funded pensions differed in Latin America and the Caribbean and in Europe and Central Asia. In the former Region, the primary objective of World Bank support was to improve financing and reduce the political influence on pension plan op-

*If macro-economic and financial conditions have not been met, Bank strategy recommends PAYG reforms.*



**Table 2.3: Most Development Outcomes for Pension Components Were Satisfactory**

Rating	Pension component rating		Overall project rating	
	Number	Percentage of category	Number	Percentage of category
Satisfactory	101	75	122	87
Unsatisfactory	33	25	18	13
Total	134	100	140	100

Note: Excludes six projects rated "non-evaluable" in the pension component for lack of information.

erations by replacing PAYG plans with funded systems. In Europe and Central Asia, the key concerns were fiscal stability and demographic pressures, which were to be relieved by reducing the size of PAYG components in the future and strengthening the relationship between contributions and benefits to encourage participation and equity.

The main difference between the actual reforms and the Bank's strategy is that most Europe and Central Asia countries maintained a relatively substantial PAYG pillar in the reformed system, where pensions were also related to contributions, a design not explicitly considered in *Strategy*. Pension reforms in the Region were likely to be phased in by age cohort and only made mandatory for younger workers.<sup>24</sup> By contrast, while reforms in Latin America and the Caribbean were more likely to be Chilean in style, many reformers in the Region also continued to support single-pillar PAYG systems for substantial portions of their populations.

In a multi-donor environment, it is difficult to determine whether the reform design was the result of the Bank taking into account the country's specific considerations, the task manager's preferences, or the country's desire for a specific reform. In terms of non-Bank influences, NDC reforms in Sweden and Italy became the model for a number of countries in Europe and Central Asia, and the Chilean reform influenced policy makers in both that Region and in Latin America and the Caribbean. In addition, other donors also influenced pension policy design. In Latin America and the Caribbean, the Inter-American Develop-

ment Bank, Chilean consultants, and the U.S. Agency for International Development (USAID) were particularly important; in Europe and Central Asia, the European Union and a host of bilateral donors, including Sweden, the Netherlands, and Denmark, provided support and advice.<sup>25</sup>

### Reviewing the Development Outcome of Pension Components

Of the 200-plus loans and credits for pension reform, the performance outcome of 139 projects was rated for the pension component and the project overall.<sup>26, 27</sup> Three-quarters of pension-component ratings are satisfactory (table 2.3). However, the ratings for the entire project tend to be more favorable, with only 13 percent of the projects rated unsatisfactory. While the ratings in 77 percent of the loans were consistent between the pension component and project overall, the pension component was lower in 18 percent of the loans. Thus, not every project IEG rated satisfactory overall has a satisfactory pension component.

The success or failure of any individual loan does not predict the outcome of the full Bank program of activities supporting pension reforms.<sup>28</sup> Loans led by the social protection and financial sectors were more likely to have satisfactory development outcome ratings for the pension component than those led by the eco-

*The rationale for adopting mandatory funded pensions differed by Region.*

*About three-quarters of the pension components, as well as the projects of which they were a part, were rated satisfactory on outcome.*

*Social protection and finance rated best among the sectors, and Latin America and the Caribbean rated better than Europe and Central Asia.*

economic policy sector.<sup>29</sup> This is true for both multi-pillar and PAYG systems. By Region, a higher proportion of loans made in Latin America and the Caribbean were rated satisfactory than those in Europe and Central Asia.<sup>30</sup> While ratings for projects in countries with PAYG are similar in both Regions, ratings in Latin America and the Caribbean are much higher than those in Europe and Central Asia for projects in countries with multi-pillar systems.

### Summary and Conclusions

The Bank has influenced pension reforms around the world through loans and credits and AAA. While ESW on pensions has covered a broad range of topics, it lacked the depth of analysis

needed to assist with retirement income policy and financial sector development during implementation. Country-specific ESW was likely to be strong in fiscal analysis and funded-pillar regulation, reflecting the multi-pillar focus of the Bank's pension reform strategy, but it did not cover all of the necessary topics.

The strengths and weaknesses of Bank lending parallel the strengths and weaknesses of Bank AAA. While satisfactory ratings for most individual loans are encouraging, one-fourth of pension component outcomes were unsatisfactory. Multi-pillar pension reforms supported by World Bank lending varied by country, but this may reflect individual country conditions or the influence of exogenous factors. Overall, the Bank offered greater resources to countries developing multi-pillar systems and less assistance in assessing or developing old age programs for uncovered workers.





### **Chapter 3: Evaluation Highlights**

- The Bank supported PAYG reforms in many countries where initial conditions were inappropriate for multi-pillar reform.
- The Bank also supported multi-pillar reforms in a number of countries lacking macroeconomic stability, banking sector readiness, moderate indebtedness, and a low risk for corruption, which are necessary for a successful multi-pillar pension system.
- In some countries, the Bank did not fully consider all non-contributory options to expand the safety net to those outside the formal pension system.

## Quality at Entry for Pension Reforms

The Bank's strategy for pension reform is to support a multi-pillar framework as best practice if proper initial conditions are in place. These include (1) sound macroeconomic policies, (2) an adequate financial sector, and (3) implementation capacity. If these conditions are not met, the Bank's strategy is to improve the system through other means to create fiscal stability and protection of the aged.

Parametric reforms are recommended to complement multi-pillar reforms to improve the existing system or to precede the implementation of a multi-pillar system by helping to create the proper conditions. At the time of project design, the need for pension reform must be balanced against and/or coordinated with related social policies to protect uncovered workers from poverty in old age, as part of the Bank's overall objective to reduce poverty among the aged.

Chapter 3 uses a set of indicators to assess whether the Bank exercised due diligence in ensuring that necessary conditions were met before supporting multi-pillar reforms and whether first-pillar assistance was considered when countries did not implement multi-pillar systems. Whenever possible, these indicators are compared with the performance outcome evaluations of the Bank's assistance from the IEG case studies. The chapter also assesses whether the Bank's objective of improving the welfare of the aged was addressed

sufficiently and whether evidence substantiates the hypothesis that multi-pillar reform will increase the savings rate and enhance economic growth.<sup>1</sup>

While the Bank did not advise the provision of funded pensions in many countries with unsuitable initial conditions, the Bank acted too quickly to support multi-pillar reforms in other countries without examining options for complementary safety-net programs to protect informal sector workers from poverty in old age. The Bank also supported some reforms in which macroeconomic, financial sector, and institutional preconditions were not met. This put the reforms at risk from the start. While many, but not all, countries in Europe and Central Asia showed a readiness for reform, those in Latin America and the Caribbean were less likely to be appropriate candidates. The development outcome ratings of the Bank's activities in IEG case study countries in which preconditions were not met were often rated unsatisfactory.

### When Were Only Single Pillars Considered?

Very few countries in which the Bank supported stand-alone, single-pillar pension reform could have developed multi-pillar systems. In virtually all cases, these countries did not have satisfactory

*In nearly all countries in which the Bank supported stand-alone, single-pillar reform, the countries did not have satisfactory preconditions for multi-pillar reform.*

preconditions.<sup>2</sup> Such single-pillar support was appropriate and in concert with the Bank's strategy. While multi-pillar reforms were discussed in a number of these countries, including China, India, Korea, and Turkey, the Bank did not insist that these reforms be im-

plemented before the economic prerequisites were in place and the political will to take such a step was firm.

Brazil was by far the largest recipient of Bank assistance for first-pillar reform in Latin America, at a time when its budget deficit was high and the inflation rate excessive. The Bank also provided first-pillar assistance to Panama, a country with a stable macroeconomic environment and a strong financial sector, but one in which pension coverage was low and the development of a multi-pillar pension system was not considered a priority.

The Bank also was cautious in its activities in many poorer and less-stable transition regimes, including most of Central Asia and the Caucasus. Both Turkmenistan and Uzbekistan had extremely weak banking systems, and Tajikistan had the

*The Bank did not always prioritize the need to expand safety nets to those outside the formal system nor fully analyze non-contributory options.*

lowest regional gross domestic product (GDP) per capita in terms of purchasing power parity. The financial sector in Belarus was also underdeveloped, and those in the Caucasus have been borderline, although regional improvements have

been taking place rather quickly over the past couple of years. While conditions in Slovenia were appropriate for a multi-pillar reform, in the end, the authorities were not interested in pursuing this policy. This was also true of the Czech Republic, one of the more successful transition countries,

but one that had not sought much Bank assistance overall.

Fourteen African countries received at least small amounts of Bank assistance for first-pillar reform to restructure civil service pensions and provident funds. The largest was Zambia, followed by Senegal. These countries are characterized by high poverty rates, poor financial sectors, a high proportion of foreign aid, and, in some cases, considerable government debt and inflation. None would have been good candidates for multi-pillar reform, although the Bank discussed the option of multi-pillar reform with Cameroon, Cape Verde, Mauritius, Senegal, and Zambia.

### Were Complementary Safety Nets Considered?

While the Bank refrained from pursuing multi-pillar systems in many countries with inadequate preconditions, it also often failed to prioritize the need for developing options for old-age safety nets outside the formal pension system in low-income and low-coverage countries. Out of eight low-coverage Latin American countries<sup>3</sup> that enacted multi-pillar systems with World Bank support, only Bolivia created a comprehensive safety net, the Bonosol,<sup>4</sup> in conjunction with its multi-pillar reform. Both Argentina<sup>5</sup> and Brazil<sup>6</sup> had rural programs that provided pensions to the aged, but both had substantial weaknesses that the Bank failed to address in its operations.

Many reformers in Central and Eastern Europe, such as Latvia, have targeted safety nets for uncovered workers, and the Bank provided assistance in a number of cases. But the Bank did not analyze the effectiveness of noncontributory options in countries such as Albania, Bosnia and Herzegovina, and the Kyrgyz Republic, where coverage is low or declining. In Asia, Korea added a noncontributory emergency pension with World Bank support in the context of parametric reforms, but China has not addressed the issue of old-age rural poverty, even though the formal system covers only about 20 percent of the population. With the exception of Mauritius, coverage rates in African countries where the Bank has held discussions are less than 15 percent. In Zambia, which received significant World Bank fund-

ing to redesign its PAYG system, neither the Bank nor the country undertook an analysis to identify needs and options, as feasible, for reducing poverty among the current and future uncovered elderly, an exercise that should have been conducted simultaneously with Bank funding for PAYG redesign.

### Is the Economy Stable?

Large fiscal deficits, stemming in part from imbalances in pension revenues and expenditures, are often a motivation for countries to seek assistance from the World Bank in reforming their pension systems. However, switching from a PAYG system to a funded system may not be the best course for countries with fiscal imbalances that are driven by factors other than pension deficits. The transition costs of switching from a PAYG system to a funded system will temporarily increase the fiscal deficit because the government must continue to pay pension benefits while some contributions are diverted into private funds. Countries should be advised first to achieve fiscal sustainability through expenditure rationalization and revenue reform, including parametric reforms to their pension systems, before embarking on a multi-pillar reform. Countries with high levels of public debt may not be able to take on the additional debt derived from the start of funded systems. Countries whose budgets are heavily dependent on external aid also may not have sufficiently stable revenue bases to support a multi-pillar system.

Stable monetary and fiscal policies are needed if multi-pillar systems are to achieve long-run retirement-income objectives, because large macroeconomic imbalances, high inflation, and excessive debt burdens create uncertainty and destabilize financial markets. Further, high levels of government debt are likely to constrain the development of capital markets. Four indicators are used to evaluate macroeconomic readiness for multi-pillar reform: the inflation rate, the central government budget balance, public debt, and the share of development assistance in total national income.

### Inflation

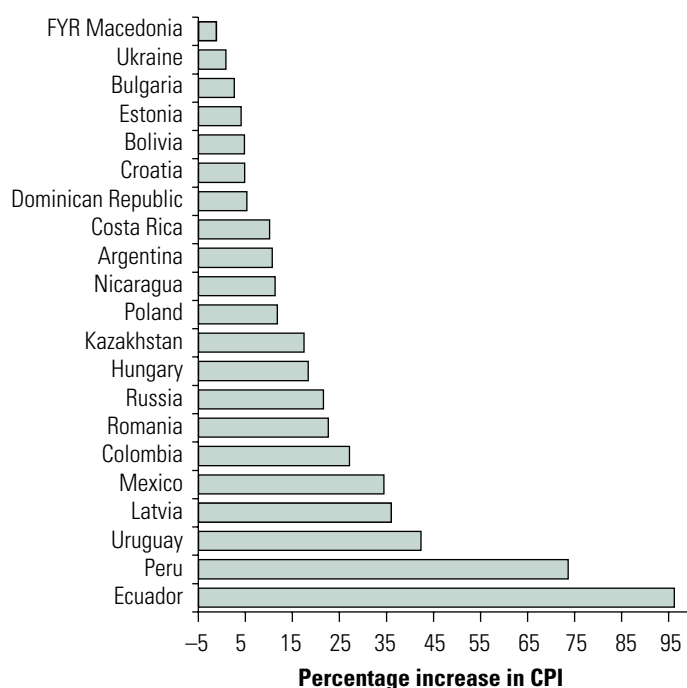
The Bank supported multi-pillar reforms in a number of countries with high inflation. High inflation

was a problem in Latin America in the early 1990s during the first round of multi-pillar reforms (figure 3.1). Ecuador, Peru, and Uruguay faced inflation rates of over 35 percent at the start of their pension reform.<sup>7</sup> Even after hyperinflation subsided in Europe and Central Asia, price increases exceeded 15 percent in several countries instituting funded pillars. Fortunately, inflation declined thereafter, so that price increases were below yields on government bonds. Seven countries with high inflation at the time of reform were included in the IEG case studies.<sup>8</sup> Of those, the development outcome of the Bank's assistance to Peru, Russia, and Uruguay was moderately unsatisfactory. While a number of countries may have postponed their reforms, the enactment of legislation was not predicted on post-enactment decisions to delay.

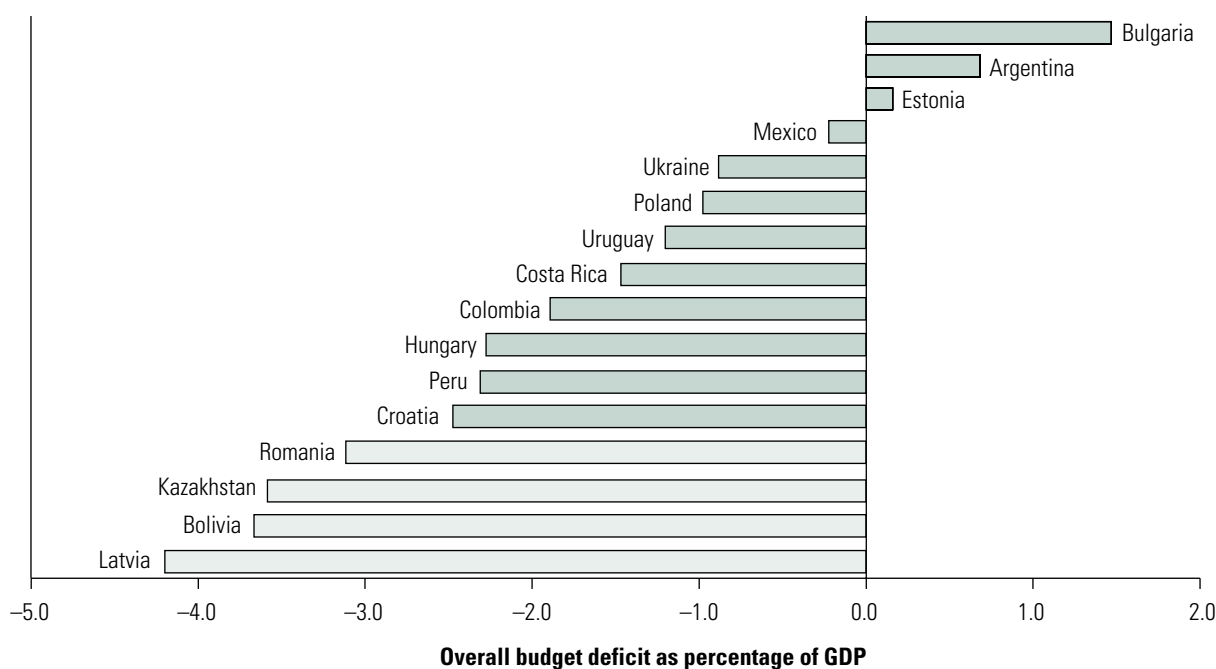
*Multi-pillar systems require a strong macroeconomic environment.*

*Most countries starting systemic reforms did not have large budget deficits.*

**Figure 3.1: Many Countries Had High Inflation at Reform**



Source: World Development Indicators (World Bank 2005).

**Figure 3.2: Several Countries Had High Budget Deficits at the Time of Their Pension Reform**

Source: World Development Indicators (World Bank 2005).

### **Fiscal balance**

Most countries initiating multi-pillar pension reforms had “moderate” fiscal deficits. Bolivia, Kazakhstan, Latvia, and Romania had budget deficits over 3 percent of GDP, an indicator that fiscal conditions for implementation of a funded system were not ideal (figure 3.2). Although Latvia’s deficit was initially high when the funded tier was implemented in 2001, the deficit had fallen to 1.4 percent of GDP. As for Kazakhstan, a favorable

*Governments need to finance the transitional debt resulting from multi-pillar reform.*

prognosis for the energy sector was realized, which provided economic stability and increased government revenues. Bolivia, Latvia, and Kazakhstan were included

in the IEG case studies. Of those, the development outcome of the pension reform activities in Bolivia was rated moderately unsatisfactory.<sup>9</sup>

### **Government debt**

Under stable economic policies, governments may restructure expenditures, raise taxes, or use government debt to finance the transitional deficit from multi-pillar pension reform.<sup>10</sup> Countries in

Latin America with lower coverage, other things being equal, face less transitional debt than countries in Europe and Central Asia, since past pension promises are smaller. Because the size of the funded pillar is related to the size of the transition deficit and its method of funding, the Bank was prudent in supporting larger PAYG pillars in Central and Eastern European countries, and even pillars that were related to earnings and contributions. This support was consistent with the flexibility of pension design proposed in *Strategy*.

Nonetheless, countries with low pension coverage can also have problems implementing funded systems if they have a limited tax base and high levels of government debt. As a benchmark, public debt of over 60 percent of GDP is generally regarded as extremely high. Nicaragua and Bolivia both enacted Chilean-style reforms and received support from the Bank. Both are highly indebted poor countries (HIPCs), and their indebtedness will remain a problem for a multi-pillar pension reform even if some obligations are forgiven. Bolivia, an IEG case study country, was rated moderately unsatisfactory on overall development outcome. Senegal and Uganda have

recently been studying multi-pillar reforms, but they are also HIPC countries. So far, the Bank has not been sufficiently proactive in trying to defer multi-pillar reforms in highly indebted countries.

### *Development assistance*

Countries receiving a high proportion of development assistance relative to gross national income (GNI) are unable to function independently without donor resources and are not fiscally independent. Further, if substantial development assistance is needed, poverty is likely to be high, and a poor population does not have sufficient income for discretionary saving through a pension system. In the Europe and Central Asia Region, although Georgia received substantial development assistance relative to GNI, the Bank still promoted a multi-pillar reform. Bank support to FYR Macedonia was conditioned on the implementation of a multi-pillar reform, even though it was heavily dependent on donor assistance at 7.4 percent of GNI, but the Bank eventually supported the suspension of the reform.<sup>11</sup>

Two countries in the Latin America and Caribbean Region that enacted multi-pillar reforms, Bolivia and Nicaragua, are heavily dependent upon donor assistance—at 9.0 and 13.6 percent of GNI, respectively.<sup>12</sup> The Bank's activities for the Bolivian re-form were rated moderately unsatisfactory in the IEG case study. Eventually the Bank helped place the Nicaraguan multi-pillar reform on hold, but only after initially encouraging the reform. More recently, the Bank has supported Senegal, which has been considering multi-pillar reform, despite having 9.3 percent of its GNI in development assistance funds.

### *Is the Financial Sector Sound?*

According to Vittas (1998), countries starting a funded system need “at least a small number of sound and well-functioning banks and insurance companies coupled with a willingness to implement capital market reforms and openness to foreign expertise.” Impavido, Musalem, and Vittas (2001) also warn that systemic multi-pillar pension reform is unlikely to succeed in countries in which the dominant banks are state-owned, financially insolvent, and operationally inept.

### *Banking systems in Europe and Central Asia<sup>13</sup>*

A number of Europe and Central Asia countries assisted by the World Bank in multi-pillar reforms had financial sectors that did not have sound financial systems. At the time their pension reforms were enacted, four countries—Kazakhstan, Romania, Russia, and Ukraine—had financial sectors that, as evidenced by the European Bank for Reconstruction and Development (EBRD) financial system rating (figure 3.3), did not exhibit: (1) substantial progress in bank solvency, (2) a framework of prudential regulation and supervision, (3) full interest rate liberalization with little preferential access to cheap refinancing, (4) significant lending to private enterprises, and (5) a significant presence of private banks.<sup>14</sup> Three other countries—Bulgaria, Latvia, and FYR Macedonia—met these criteria but did not have: (1) significant movement in banking laws to meet Bank for International Settlement standards, (2) well-functioning banking regulation and effective prudential supervision, (3) significant term lending to private enterprises, and (4) substantial financial deepening. The banking systems of Croatia, Estonia, Hungary, Poland, and the Slovak Republic were effective, according to the EBRD standards.

Countries that have not implemented multi-pillar pension systems in Europe and Central Asia are more likely to have weak financial sectors (figure 3.4). The Bank encouraged a multi-sector reform in Georgia in 1996 and 1998 through adjustment loans, despite a weak financial sector.<sup>15</sup> By contrast, the Bank has been trying to discourage the Kyrgyz Republic from inaugurating a multi-pillar system.

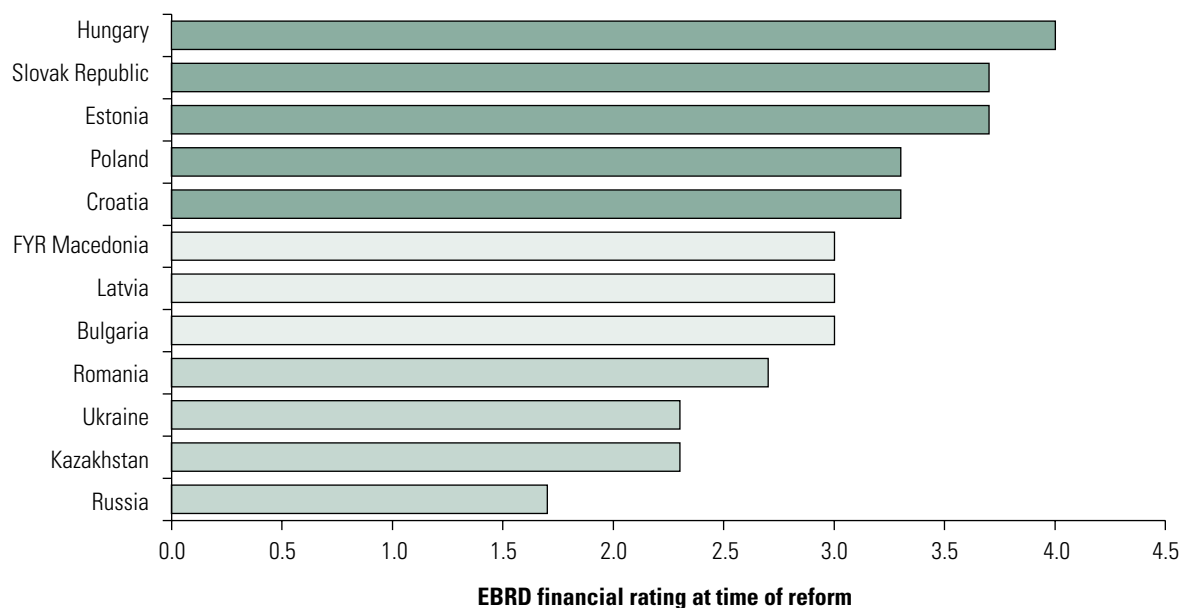
The Czech Republic and Slovenia, which have strong financial sectors, have exhibited little interest in multi-pillar reform.

Among multi-pillar reformers in Latin America and the Caribbean, Argentina, Colombia, and Peru had financial sectors that met the minimum conditions for a multi-pillar reform. Their systems were characterized by declining margins, increasing levels of intermediation, and an increasing range of financial products and services. However, these

*Countries dependent on development assistance are not good candidates for multi-pillar reform.*

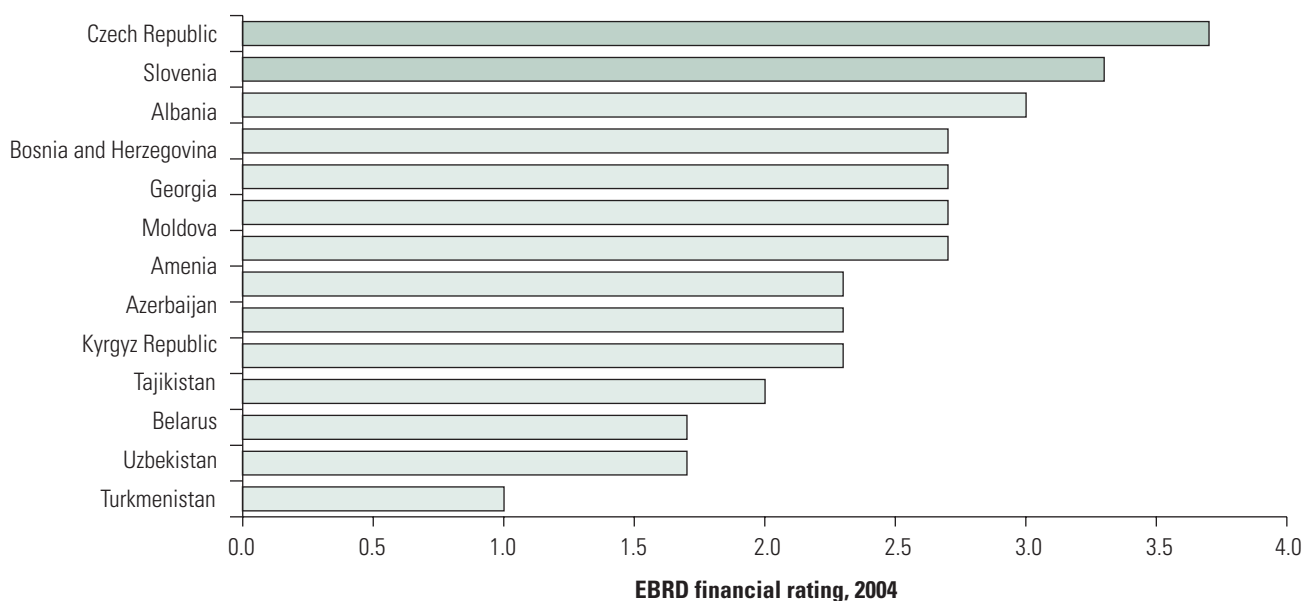
*Countries starting funded systems should have a well-functioning financial sector.*

**Figure 3.3: Poor Financial Sectors Characterize Some Europe and Central Asia Multi-Pillar Reformers**



Source: European Bank for Reconstruction and Development (EBRD).

**Figure 3.4: Europe and Central Asia Countries without Multi-Pillar Reform Are More Likely to Have Weak Financial Sectors**



Source: EBRD.



countries also had a relatively high proportion of state ownership in the banking sector at the time of their reforms.

Among the reformers in Latin America and the Caribbean enacting multi-pillar legislation after 2000—Costa Rica, the Dominican Republic, Ecuador, and Nicaragua—only Costa Rica had a well-developed financial sector at the time of reform.<sup>16</sup> While Bank support through policy dialogue, credits, or loans in these countries was considerably less than that provided to earlier reformers such as Peru and Argentina, the Bank did not discourage the latter set of reforms because of unsatisfactory financial sector performance. The reform in Nicaragua was eventually put on hold, in line with Bank guidance, as subsequent analysis found the country unprepared for such an ambitious undertaking.

In Latin America and the Caribbean, the Bank is currently working with Brazilian officials to help the federal and state governments introduce a new and complementary defined contribution pension fund for new civil servants, providing a complementary funded benefit on top of the PAYG benefit. The Brazilian financial market is satisfactory, and the equity market, with significant occupational funds, is better developed than in many countries with mandatory funded pillars.

### ***Banking systems in other Regions***

Except for Mauritius, no African country considering multi-pillar reform has a strong enough financial sector to support a multi-pillar reform.<sup>17</sup> This is consistent with the World Economic Forum's (2000) ratings of confidence in financial services in southern Africa, in which only Botswana and South Africa had higher ratings than Mauritius. Based on best practice, the Bank appropriately advised against a proposal for a multi-pillar reform in Nigeria, where the financial sector is characterized by high margins, low levels of intermediation, and few financial products or services. Despite the government's inclination to adopt multi-pillar reform, the Bank considered supporting the Nigerian pension system in a way that did not include multi-pillar reform.

In East Asia, Korea's financial markets are sufficiently developed to support a multi-pillar reform.<sup>18</sup> In contrast, the Chinese financial sector

remains weak. Four state banks account for about two-thirds of all deposits, and lend primarily to state-owned enterprises and not to the booming private sector.<sup>19</sup> While the Chinese have not yet started a multi-pillar system, China's gradual approach to all reform appears to have been instrumental in moving slowly, because the Bank's advice did not adequately stress financial market readiness, but focused instead on actuarial projections and general information on reform.

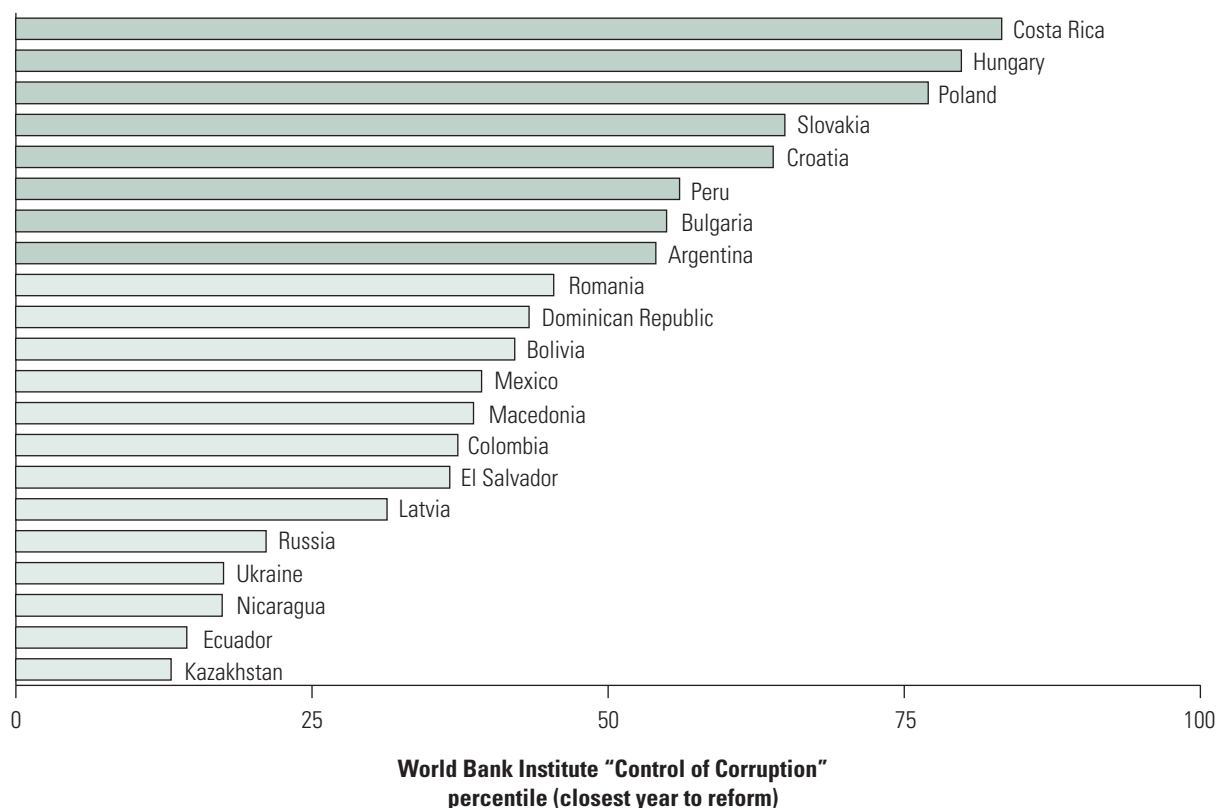
### ***Can Implementation Be Effective?***

One reason to shift to a privately funded pension system is to eliminate the potential for government interference. While funded pillars can provide autonomy from government, they are vulnerable to corruption and weak governance within the private sector. As a result, strong regulation and supervision of the pension funds, asset managers, and other financial intermediaries is essential if multi-pillar systems are to operate prudently and effectively. Although the presence of a private system can provide some balance against public power, a weak regulatory system may yield insufficient protection for pensioners in some countries, especially in funded systems where participants bear the risk of financial failure.<sup>20</sup> In Africa, Asia, and the Middle East and North Africa, provident funds and/or partially funded PAYG pension plans have received below-market rates of return because of high commissions, dubious investments, and outright theft, depending on the circumstances. So far, there has not been documentation of any instances of fraud and abuse in multi-pillar systems the Bank has supported.<sup>21</sup>

One signal of government commitment to regulatory reform is the World Bank's index of control of corruption, which can be used to assess the *potential* for regulatory effectiveness. Even if regulators are honest, they will be hard-pressed to regulate financial assets in a country in which business dealings are highly corrupt.

*A number of Europe and Central Asia countries undergoing Bank-assisted multi-pillar reform had weak financial sectors.*

*Countries shifting to private pension funds need to ensure they have strong regulatory systems.*

**Figure 3.5: Many Reformers Had Poor Corruption Indexes at the Time of Reform**

Source: Kaufmann, Kraay, and Mastruzzi 2005.

*A number of Bank-assisted multi-pillar reformers had a high risk of corruption.*

The Bank supported the enactment of legislation for funded pillars in 13 countries that had corruption ratings below the second quartile (50th percentile); five countries were in the lowest quartile (25th) during the year of their reform (figure 3.5).<sup>22</sup>

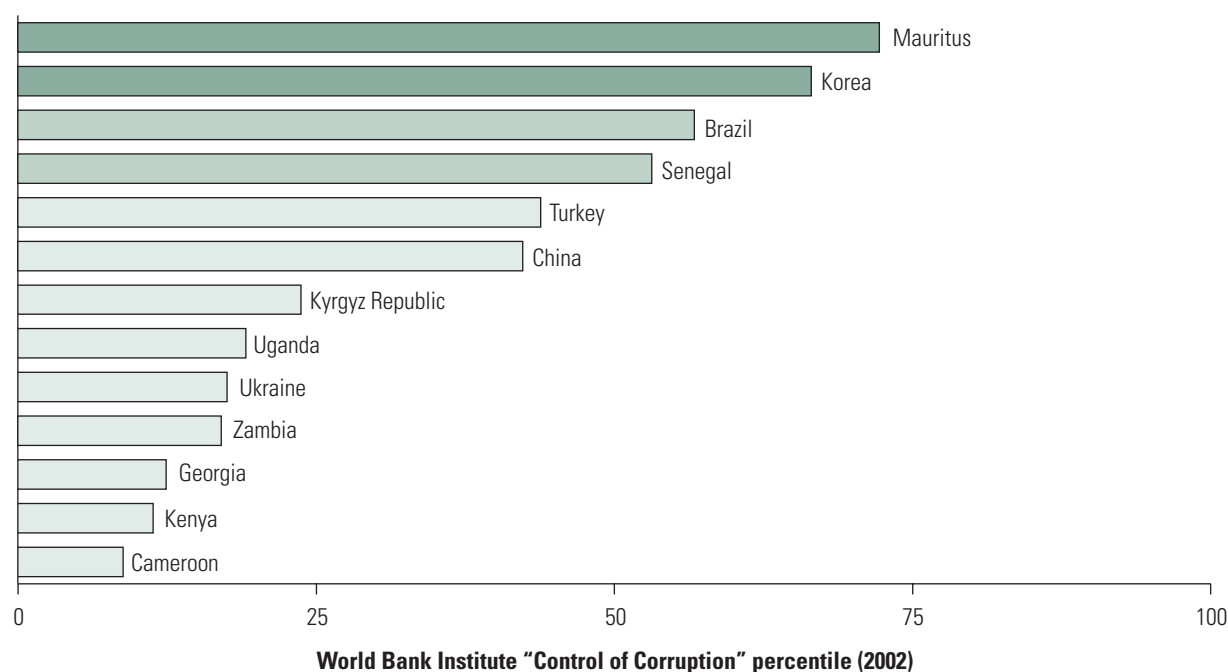
The sustainability ratings of IEG case studies were associated with corruption index ratings. In Latvia, where implementation was delayed, the corruption index moved into the positive range by the time the funded pillar started. The multi-pillar systems in Romania, Russia, and Ukraine are not yet fully in place, although the Bank has supported systemic pension reform vigorously in all three countries for many years. These countries all have negative corruption indices. While the Bank has had a lesser role in the Dominican Republic and Ecuador, where reforms

were adopted in 2003 and 2001, respectively, immediate steps are needed to determine whether effective regulation is possible.

Regulatory problems are likely to arise among future reformers as well (figure 3.6). Georgia, the Kyrgyz Republic, and Turkey all have ratings of corruption below the second quartile. The Bank has assisted Turkey and Georgia in taking preliminary steps toward implementing a multi-pillar reform, but not the Kyrgyz Republic. Among the potential African reformers, only Mauritius has a corruption rating above the 50th percentile.

**Are Higher Saving Rates Needed to Encourage Growth?**

*Strategy* argues that the adoption of a multi-pillar system can increase national savings, and increased savings may improve economic growth.<sup>23</sup> In developing a pension strategy, policy makers

**Figure 3.6: Corruption Ratings Are Poor among Some Potential Reformers**

Source: Kaufmann, Kraay, and Mastruzzi 2005.

need to assess the need for improved savings. In low-savings countries, this argument can be compelling, but not so in high-savings countries. East Asian countries with high savings rates include China, Malaysia, Thailand, and Vietnam. If high savings rates are combined with low returns to assets, PAYG pensions can provide better rates of return than funded plans.<sup>24</sup> Eight countries enacting funded reforms had savings rates in excess of 20 percent of GDP at the time of their reform (figure 3.7). China, Korea, Mauritius, and Turkey, all potential reformers, have savings rates of over 20 percent (figure 3.8).

Low-income countries with negative savings rates also may prefer a PAYG pension system. Nicaragua and Cape Verde face negative savings rates, with external transfers supplementing domestic consumption. This may be the situation in Senegal and Uganda as well; coverage is low and saving is negligible. The reasons for negative saving should be fully understood before deciding on a multi-pillar reform, because forced savings for covered workers may be inappropriate.

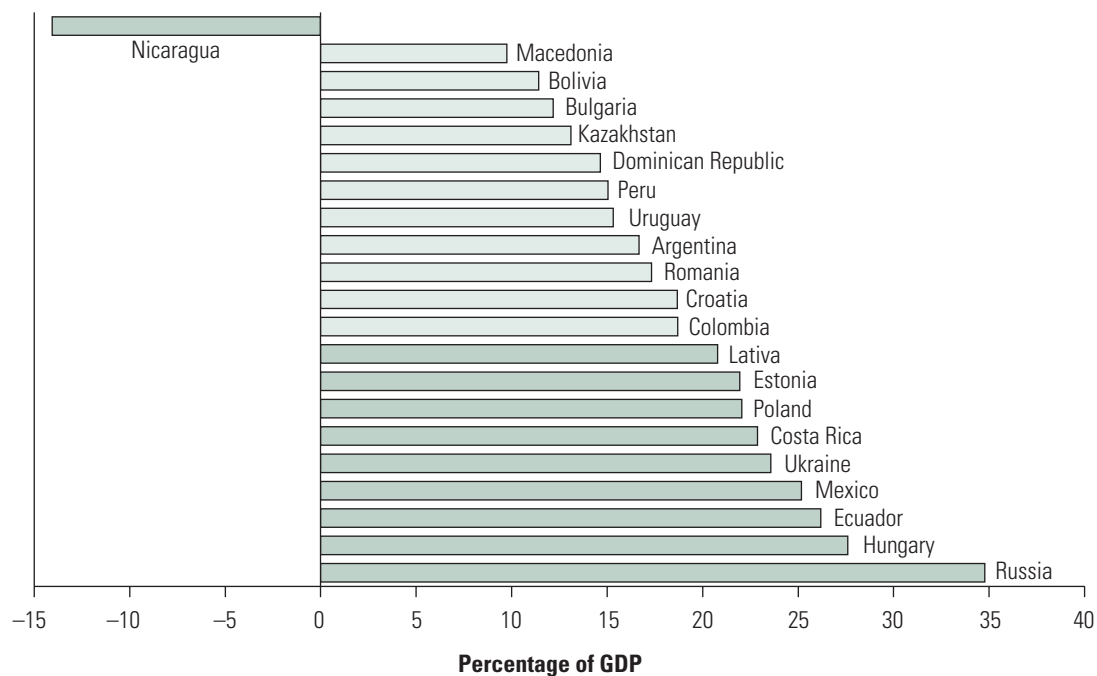
## Summary and Conclusions

In a number of countries, such as Peru and Nicaragua, the Bank did not assess the needs of the elderly before providing support for proposed multi-pillar reforms. In contrast, in other countries, such as Bolivia and Latvia, considerable attention was paid to old-age protection for those outside the formal system. In some instances, multi-pillar reforms were supported in countries that did not need higher savings to stimulate development. These included Ecuador and Russia, countries that also did not meet the Bank's standards for successful multi-pillar implementation based on macroeconomic and/or financial sector readiness.

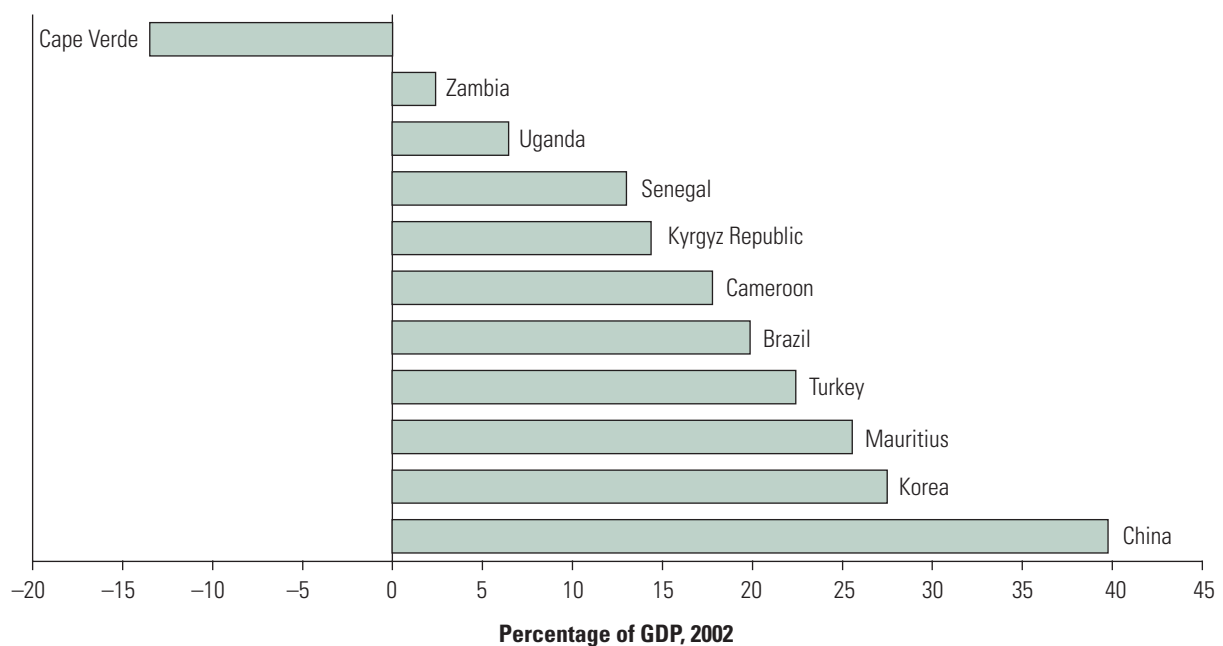
The Bank supported multi-pillar reforms in quite a few countries that met its fiscal and financial sector standards, including Croatia, Hungary, Latvia, and Poland, which had favorable

*The Bank should first assess whether a country has a need for increased savings.*

*Countries with low savings may opt for a PAYG system.*

**Figure 3.7: Some Multi-Pillar Countries Already Had High Savings Rates**

Source: World Development Indicators (World Bank 2005).

**Figure 3.8: Saving Rates Require Review before Deciding on Multi-Pillar Reform**

Source: World Development Indicators (World Bank 2005).

macroeconomic and financial market preconditions at the start. Their multi-pillar systems are more likely to be successful than others. The pace of reform in Latvia was particularly prudent, as the funded pillar was postponed until all the economic and financial preconditions were in place.

Nonetheless, quite a few countries started reforms without macroeconomic stability, banking sector readiness, moderate indebtedness, and low-to-moderate levels of corruption. Russia and

Ukraine still have weak financial sectors and ratings, below the 50th percentile for control of corruption. FYR Macedonia receives a high proportion of development aid. In Latin America, multi-pillar reforms were enacted in a number of countries with weak financial sectors, including Bolivia and Mexico, and four later reformers—Costa Rica, the Dominican Republic, Ecuador, and Nicaragua. Most of these countries are characterized by poor ratings of corruption control, below the second quartile.

#### **Chapter 4: Evaluation Highlights**

- In many countries with multi-pillar systems, funded pillars were not well-diversified and remained open to political influence, contrary to theoretical precepts for a good multi-pillar system.
- Both multi-pillar and parametric reforms have helped improve fiscal sustainability, but the improvements are not sufficient for the long term.
- The secondary objectives of funded plans—to increase savings, develop capital markets, and improve labor market flexibility—have remained largely unrealized.

# 4

## The Impact of Pension Reforms

Pension reforms require decades of implementation before a complete evaluation is possible. For most reforming countries, too little time has elapsed to evaluate the outcomes of Bank-supported reforms, but indirect indicators can be used to gain insight into the development outcomes.

The first section of this chapter uses such indicators to evaluate whether old-age income security has been achieved. While only implicit in *Strategy*, *Averting* and *Perspective* indicate that, when appropriately implemented, multi-pillar systems ought to offer greater retirement income security than PAYG systems by: (1) earning higher rates of return from diversified investments and (2) spreading political and systemic risk between the public and private sectors. In order for the pension system to provide retirement income security, the system also has to be fiscally sustainable. The second section reviews improvements in the financial balance of PAYG systems and the transitional deficit resulting from multi-pillar reforms.

The third section reviews whether secondary objectives from multi-pillar reforms were achieved, including increased national savings, capital market development, and labor market flexibility.<sup>1</sup> Finally, the last section of this chapter reviews the Bank's activities from the in-depth IEG case studies to provide a full assessment of the development outcomes within countries, taking the entire reform process into account, rather than each indicator individually.

Based on existing evidence, multi-pillar reforms in many countries, as implemented, have not improved old-age income security. In many cases, investments in the mandatory funded pillar are not well diversified, and instead are concentrated in government bonds. While in many cases the government bonds offer high rates of return, the high returns often reflect high levels of macroeconomic and investment risk.

Evidence on savings and capital market formation is also mixed. But this could be, in part, a result of poor fiscal policy undermining the potential for better outcomes. Finally, linkages between contributions and benefits do not appear to have improved the efficiency or formalization of labor markets, because coverage has remained stagnant in many countries.

### Income Security Outcomes

#### *Has risk been diversified?*

Multi-pillar pension plans are expected to hold a variety of securities, including higher-yielding equities and lower-risk international assets,<sup>2</sup> but many pension portfolios are primarily invested

**Table 4.1: In Latin America and the Caribbean, Only Some Funded Pension Portfolios Are Well-Diversified (percentage of holdings as of December 2002)**

	Government securities	Financial institutions	Corporate bonds	Equities	Investment funds	Foreign securities	Other
Argentina	76.7	2.6	1.1	6.5	1.8	8.9	2.4
Bolivia	69.1	14.7	13.4	0.0	0.0	1.3	1.5
Chile	30.0	34.2	7.2	9.9	2.5	16.2	0.1
Colombia	49.4	26.6	16.6	2.9	0.0	4.5	0.0
Mexico	83.1	2.1	14.8	0.0	0.0	0.0	0.0
Peru	13.0	33.2	13.1	31.2	0.8	7.2	1.5
Uruguay	55.5	39.6	4.3	0.0	0.0	0.0	0.5

Source: Gill, Packard, and Yermo (2005), based on data from AIOS, FIAP (data for Colombia).

Note: Information for Colombia refers only to the mandatory pension fund system.

*Private pension funds need to diversify risk through varied investments.*

in government debt.<sup>3</sup> Undiversified portfolios are a result of government-imposed investment guidelines, a lack of domestic investment opportunities, and/or economic crisis.<sup>4</sup> While the expansion of the demand for government debt can improve market efficiency and lead to the development of longer-duration instruments, a strategy of concentrated investment in government debt fails to yield the benefits provided by diversification.<sup>5</sup> From the point of view of macroeconomic policy, pensions invested primarily in government bonds are little different from PAYG systems.<sup>6</sup>

In Latin America and the Caribbean, except for Chile and Peru, pension portfolios for reforms supported by the Bank are heavily concentrated in government securities (table 4.1).<sup>7</sup> Colombia and Uruguay have more diversified portfolios than other countries in the Region, but still maintain a majority share in government securities. In some countries, the domestic bond market was

*Many private funds in Latin America and the Caribbean are concentrated in government bonds.*

not developed at the time of multi-pillar reform. Ironically, the diversification of Peru's portfolio partly results from poor debt management. During the early 1990s, there was no domestic bond market in Peru, and the government had to borrow entirely offshore and use ad hoc financing measures for its spending.<sup>8</sup> The combination of tight investment guidelines

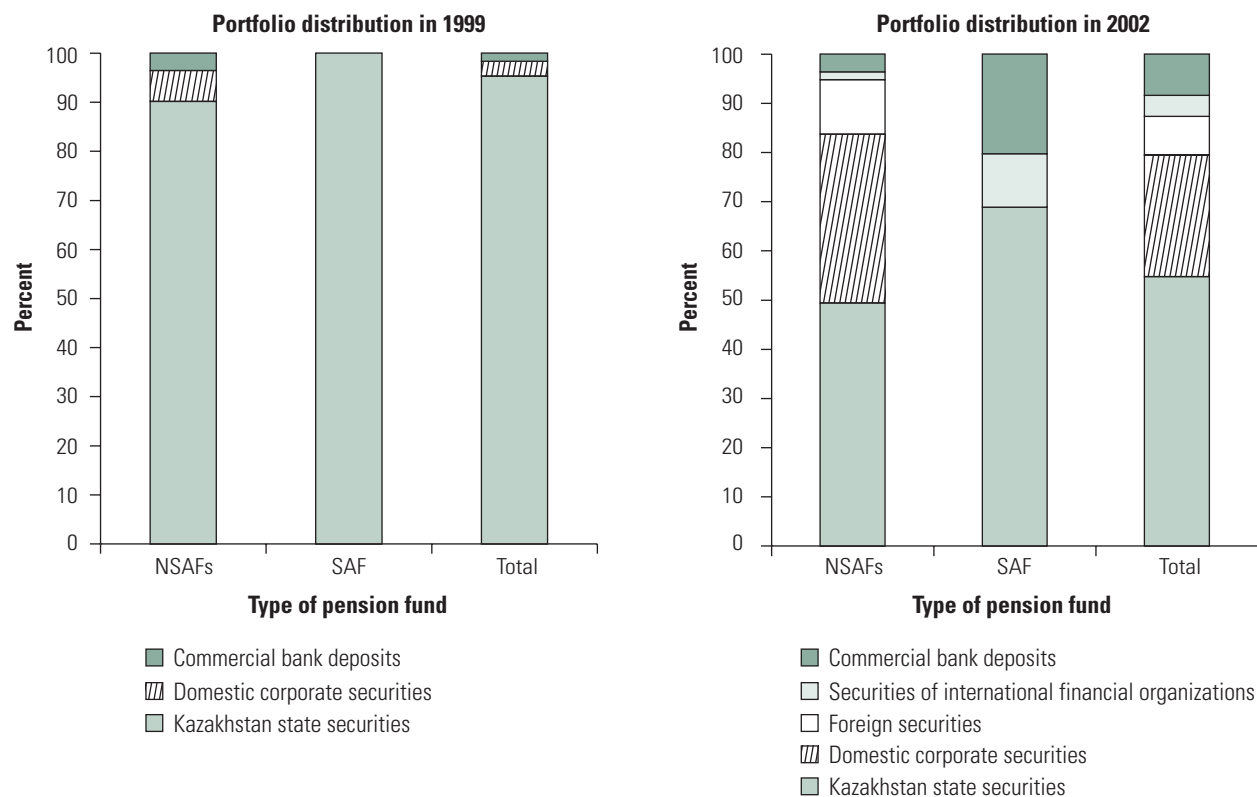
and the still illiquid market for government debt has led to greater portfolio diversification into capital markets.

Diversification in Europe and Central Asia is also limited. Hungarian pension funds invested roughly 70 percent of their assets in government bonds in mid-2003, only somewhat lower than the 80 percent share at inception. While slightly more diversified, Polish and Croatian funds were still invested at roughly 60 percent in government bonds in 2002.<sup>9</sup> Kazakhstan pension funds have diversified considerably since 1998, when the reform began (figure 4.1). This diversification has been, in part, a result of a donor-assisted drive to develop new financial sector instruments.

*Are rates of return higher?*

The long-term stability of the returns to funded pillars is difficult to evaluate because of sovereign credit risk, capital market volatility, and management costs. Gross rates of return for the funded pillars of many multi-pillar systems, however, have been favorable compared to wage growth—a proxy for the implicit rate of return to the PAYG system (table 4.2).<sup>10</sup> In all countries except Kazakhstan, wage growth since the start of the multi-pillar system has been less than the rate of return on assets. But gross rates of return do not account for the administrative costs of managing the funds. If a reduction of 1.5 percent is assumed for managing the funds (a fee structure found in some countries), then the positive wage–interest rate



**Figure 4.1: Pension Funds Have Become More Diversified in Kazakhstan****Table 4.2: Real Returns Have Outpaced Wage Growth for Funded Pensions in Most Countries**

Country	Real rate of return (since reform)	Real wage growth (since reform)	Different between rate of return and wage growth	S&P Sovereign Debt Rating (1999)
Argentina	11.7	-0.8	12.5	BB
Bolivia	16.2	8.8	7.4	BB-
Chile	10.5	1.8	8.7	A-
Colombia	11.8	1.4	10.4	BB
El Salvador	11.3	-0.2	11.5	BB+
México	10.6	0	10.6	BB
Peru	5.7	1.8	3.9	BB
Uruguay	9.5	3.6	5.9	BBB-
Poland	7.5	3.5	4.1	BBB
Kazakhstan	5.8	8.4	-2.6	B+

Source: International Federation of Pension Fund Administrators (2003) and Hammer, Kogan, and LeJeune (2004).

Note: Based on a subset of countries with available data. The S&P debt ratings ranged from AAA for many OECD countries to CC for Pakistan on a scale of 18 ratings.

*It is difficult to determine whether private funds will enjoy high rates of return in the long run.*

differential is reduced to around 2.5 percentage points for Peru and Poland.<sup>11</sup>

In many countries, high returns are a result of high interest on government

bonds and, as such, are related to the risk profile of the country's sovereign debt. Among the countries listed in table 4.2, the 1999 Standard & Poor's Sovereign Debt Rating for Chile was the highest, at A–, the sixth-highest category of 18 alphabetical ratings.<sup>12</sup> Poland had the

next highest rating, at BBB, the eighth of 18, and Kazakhstan was ranked the lowest, at BB, the thirteenth.

Sixty-nine countries were included in the ratings. Only 5 countries were rated lower than Kazakhstan; 26 were rated higher than Chile.

*High returns in private funds are sometimes the result of investing in high-risk government debt.*

included in the ratings. Only 5 countries were rated lower than Kazakhstan; 26 were rated higher than Chile.

Funded pensions are proposed to reduce the demographic and political risks of PAYG systems. But pensions from funded pillars, even in countries with mature, well-regulated, and highly efficient capital markets, are subject to other risks, such as capital market volatility. This can lead to fluctuations in replacement rates across cohorts, depending on the conditions of the market at the time of labor-force entry until retirement. For example, with equity investments, pensions will be quite sensitive to the exact year of retirement.<sup>13</sup> Even with investments in government bonds, replacement rates can vary considerably if the authorities do not predict long-term trends in returns accurately when they set contribution rates for the funded part of the pension system.<sup>14</sup>

### **Government interference**

One underlying motivation for a multi-pillar system is to limit government interference in retirement-

income security. But Bank-supported pension reforms have not always been effective in controlling government interference, especially

during economic crises. For instance, during the Argentinean crisis, the government forced pension funds to take up government debt.<sup>15</sup> Similarly,

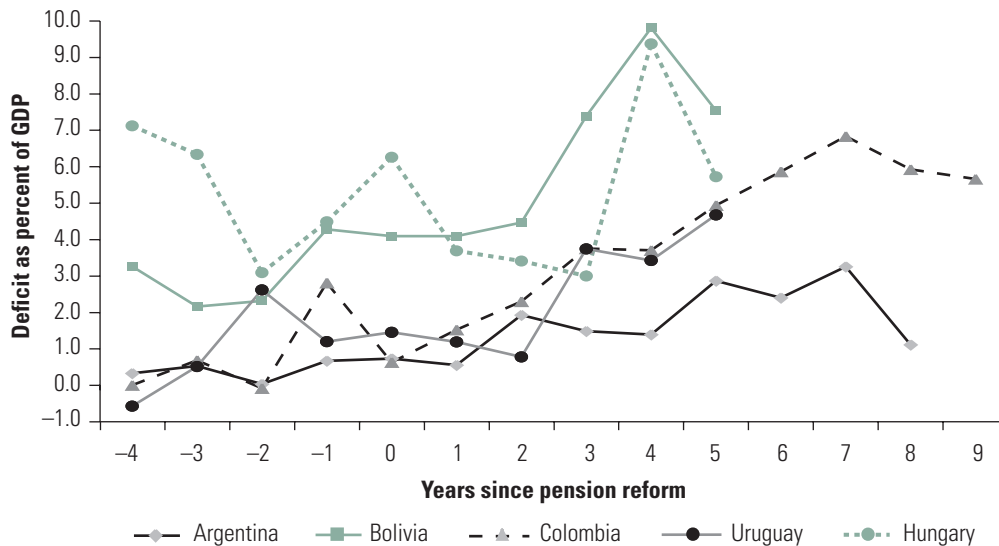
following the Russian crisis, the Kazakhstan government “encouraged” pension funds to exchange government bonds held before the currency devaluation for new issues, effectively reducing the rate of return. Government interference took place in Bolivia by forcing pension plans to accept Bonosol bonds.<sup>16</sup>

### **Fiscal Sustainability**

Fiscal sustainability is a long-term target related to the extent to which parametric reforms have reduced unfunded pension liabilities and the degree to which the funding of the transition costs of multi-pillar reforms has been fiscally responsible.<sup>17</sup> A thorough analysis of the financial sustainability of pension reform requires an evaluation of the actuarial projections of the PAYG system made before and after the reforms. Equally important to fiscal sustainability is the fiscal stance, independent of the pension system and associated transition cost (figure 4.2).

The World Bank assisted many countries in implementing parametric PAYG reforms to strengthen their system's fiscal balance. With Bank support, Brazil improved its fiscal position significantly over 1998–2003, which allowed it to survive two serious lapses in investor confidence. The cuts in pension expenditure achieved in the reform, while temporary, were a positive step toward more permanent stability. The Bank's assistance to the Kyrgyz Republic reduced pension costs by one-half as a percentage of GDP by 2002, compared with 1995. The reform helped balance the budget by 2003. In Kazakhstan, the fiscal deficit declined as a percentage of GDP, but was bolstered by the receipt of significant oil revenues, an event exogenous to pension policy.

In a number of Latin American countries, including Argentina, Bolivia, Mexico, Peru, and Uruguay, insufficient parametric reforms in civil service pensions and other PAYG plans created unsustainable pension deficits.<sup>18</sup> In Argentina and Bolivia, payouts increased more than expected because of fraudulent claims and a lax interpretation of rules (Ramachandran and Kissedes 2005). In Europe and Central Asia, the private sector evaded both first- and second-pillar contributions when tax rates were high. In these countries, the Bank focused more on developing multi-pillar sys-

**Figure 4.2: Fiscal Deficits Have Grown in Many Countries with Second Pillars**

Source: World Development Indicators (World Bank 2005).

tems than on implementing the complementary parametric reforms.

The World Bank did not make actuarial projections of the fiscal expenditures required to meet minimum guarantees provided by some multi-pillar systems for pensioners whose calculated pensions, based on their accumulated assets, would be lower than legislated minimums. This is an issue in a number of countries in Europe and Central Asia and Latin America and the Caribbean. Minimum guarantees and intermittent coverage will lead to higher general revenue expenditures whenever workers fail to accumulate sufficient resources in their individual accounts beyond the minimum pension. Projections are needed to assess whether this problem is imminent, especially in Chile and Kazakhstan. In addition, pensions in multi-pillar systems can gradually fall below the minimum if the guarantee is indexed and the full pension is not, which may pose a problem for Poland.

## Savings and Capital Market Development

### Have savings rates increased?

The impact of multi-pillar reform on savings is inconclusive (figure 4.3). Savings rates in Kazakhstan, Latvia, and Peru increased after multi-pillar

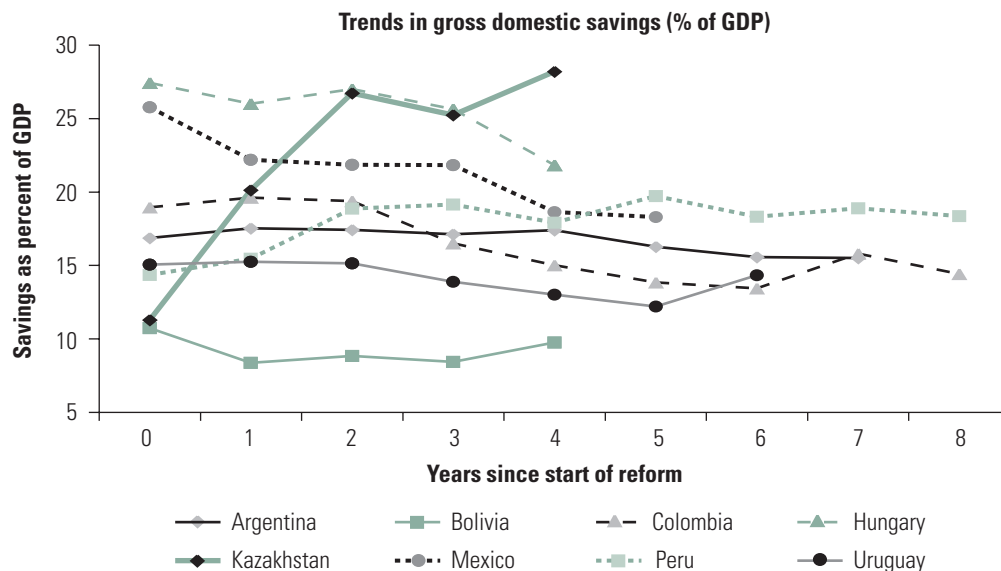
reforms, but in Kazakhstan, growth in oil revenue is more likely than pension reform to have improved gross domestic savings. By contrast, savings rates in Bolivia and Uruguay remained virtually unchanged, while rates in Colombia, Hungary, and Mexico declined. Argentina, Colombia, and Peru still have savings rates of less than 20 percent of GDP, and Bolivia and Uruguay have savings rates under 15 percent.<sup>19</sup>

The relationship between pension reform and savings is complex. It depends on the way in which the fiscal deficit has been financed, the reaction of financial markets, and the reactions of workers.<sup>20</sup> In Kazakhstan, the fiscal deficit declined as a percentage of GDP, and the savings rate increased. In Colombia, Hungary, and Uruguay, savings rates are highly correlated with fiscal deficits, suggesting that poor fiscal policies could reduce possible positive gains to savings from multi-pillar reforms. Savings and the fiscal deficit have been uncorrelated in Peru, however,

*In some countries in Latin America and the Caribbean, insufficient parametric reform has led to unsustainable pension deficits.*

*The effect of multi-pillar reforms on savings is unclear.*

*Pension reform and savings are not always correlated . . .*

**Figure 4.3: Savings Rates Increased Only in Kazakhstan**

Source: World Development Indicators (World Bank 2005).

Note: The most recent data for Argentina was omitted, because it likely resulted from a reduction in GDP rather than an increase in saving.

where savings increased. In Mexico, both the savings rate and the deficit declined.

#### *Have capital markets developed?*

So far, most capital markets have not developed significantly as a result of multi-pillar pension reform, even when financial sector and capital market regulation has improved. While

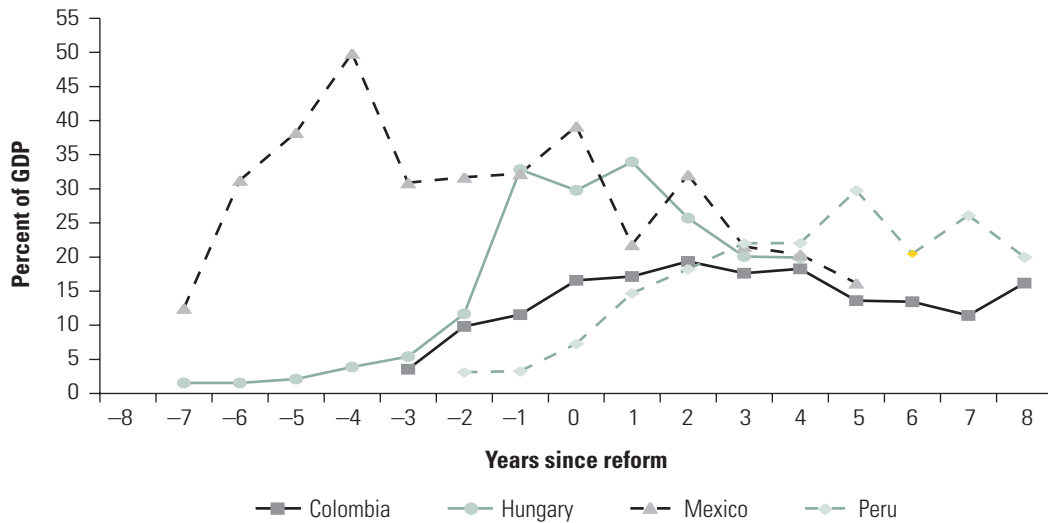
*... This may be attributed to the predominance of government bonds in pension portfolios.*

government bonds lengthened their maturities in some countries in concert with the needs of pensioners and pension plans, this has been an inadequate substitute for diversification, particularly in countries viewed as poor sovereign credit risks. Nor did pension plans diversify toward corporate securities or bank deposits, both capital market alternatives with which to finance business expansion and development.

Initially, hopes for pension-stimulated capital market development relied on equity-market development, although this emphasis has shifted in recent years. The equity market impact of multi-pillar reform has not been strong (figure

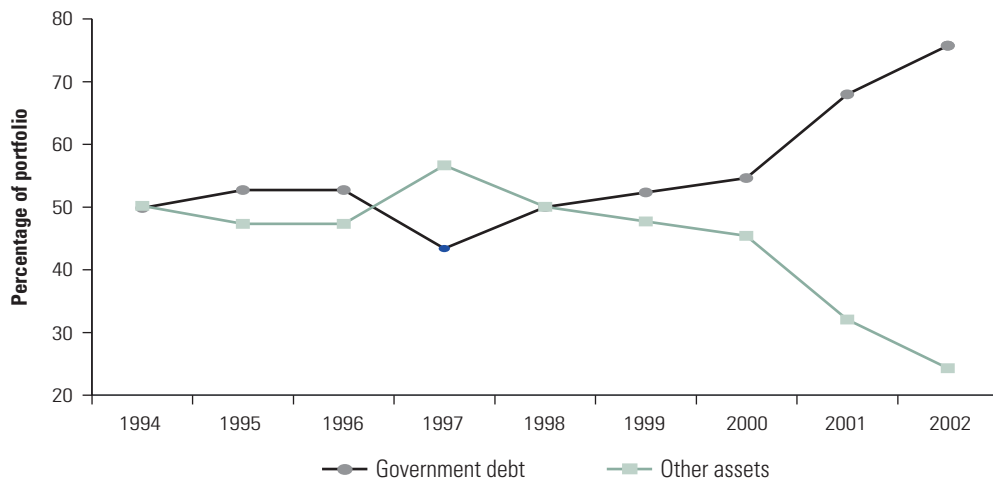
4.4).<sup>21</sup> But like savings, equity markets are influenced by myriad unrelated factors. Still, equity market development has not proceeded in Colombia or Hungary, although there has been growth in Peru. Colombia has had a limited and fragmented equity market for years, with trading concentrated in 10 stocks and no new issues. The Mexican equity market declined in the post-reform period from being one of the strongest in Latin America. While equity markets expanded in Peru, they accounted for only 25 percent of GDP after nearly a decade of reform.<sup>22</sup>

Of course, with significant shares of pension portfolios in government bonds, equity markets are unlikely to grow as a result of pension reform. An important question is whether the lack of equity market development is a cause or a result of the concentration of investments in government bonds. The development of equity markets may require more than a potential pool of funds, if companies are not ready to capitalize by issuing shares on the open market. For example, as the banking system became stronger in Hungary, Banks began to provide capital for expanding

**Figure 4.4: Market Capitalization Remains Quite Low**

Source: World Bank data.

Note: Kazakhstan is not included because market data were extremely unstable, no doubt reflecting a very small market and, possibly, changes in oil stock listings.

**Figure 4.5: Post-Crisis Pension Portfolios in Argentina Fled to Government Bonds**

Source: IEG Argentina Case Study.

businesses through loans, which reduced the need for companies to go to the equity market.

Economic conditions play a role in asset allocation as well. Countries that had high fiscal deficits, such as Colombia and Hungary, are unlikely to

experience capital market expansion. Trends in asset allocation in Argentina illustrate how financial crises can affect multi-pillar pension systems. Argentina's pension funds had been moving toward greater diversification until 1998, when the econ-

omy entered a depression that eventually led to a crisis in 2001 (figure 4.5). After that, government bonds took up the lion's share of investments—in part, because of government pressure.

Countries running a current account surplus could have diversified by investment in foreign markets, but most developing countries run current account deficits (Ramachandran and Kissedes 2005). In addition, in small capital markets, such as that of Peru, pension funds would affect the prices of assets, and may have to invest heavily in bank debt instead (Hanson and Ramachandran 2005).

### The Formalization of Labor Markets

*Strategy* argues that a multi-pillar system should “interfere less in individual labor supply and saving decisions.” One measure of a more efficient

labor market would be the degree of formalization, as reflected in the pension coverage rate, since pension coverage is only important in the formal economy. Multi-pillar pension reforms supported by the World Bank,

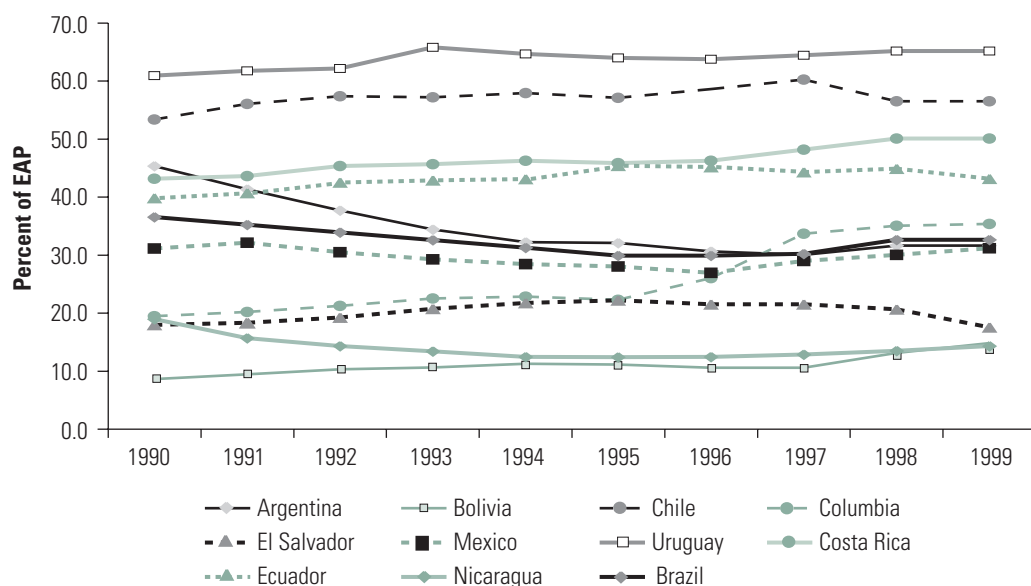
however, have not achieved higher participation (figure 4.6).<sup>23</sup>

Post-pension reform participation increased somewhat in Chile and Colombia, but plummeted in Argentina. Small gains in Bolivia are associated with the pension reform. One explanation for the stagnation of coverage rates could be the presence of minimum guarantees, which may encourage low-income workers to limit their years of contributions in the formal system. Others are high contribution rates and lack of economic growth. Whether this is because workers mistrust social security or simply evade the payroll tax is unclear.<sup>24</sup>

The impact of the Bank's support of multi-pillar schemes on labor market efficiency in Europe and Central Asia is still unclear. As a result of the socialist legacy of virtually full formal-sector employment, the Region's pension coverage rates are considerably higher than those of countries at similar levels of per capita income (adjusted for purchasing power parity). Latvia has witnessed greater labor market formalization, however, with pension coverage increasing by about 3 percent between 1995 and 1999—after the pension reform became effective, but before the funded

*The impact of multi-pillar reforms on labor market efficiency in Europe and Central Asia is inconclusive.*

**Figure 4.6: Pension Participation Rates Have Not Changed in Latin America and the Caribbean**



Source: Gill, Packard, and Yermo 2005, p. 100, figure 5.4.

Note: EAP = Economically active population.

**Table 4.3: Outcome Ratings Varied Considerably, as Did the Reason for the Ratings**

Country	Type of reform	Outcome	Sustainability	Pension component (\$ mm)	Reason for outcome rating
Bulgaria	Multi-pillar	Highly satisfactory	Highly likely	56	The Bank assessed the impact of adequacy and financial stability. The reform was highly successful in institution building.
Latvia	Multi-pillar	Satisfactory	Likely	38	Bank assistance focused on restructuring an outmoded pension system and on payment of social assistance. Actuarial modeling capacity is in place. Implementation was generally on schedule.
Kyrgyz Republic	PAYG	Satisfactory	Highly likely	34	The problems were diagnosed well, but technical support was too short in duration to affect capacity. However, the pension reform was a major achievement and is financially sustainable.
Kazakhstan	Multi-pillar	Satisfactory	Highly likely	324	The Bank's assistance was timely and relevant, but the long-term objective of providing adequate benefits needs to be revisited. The accomplishments of introducing a totally new system are substantial.
Hungary	Multi-pillar	Satisfactory	Highly likely	212	The policies and measures to implement the new pension system and create an institutional structure were timely and relevant. But the plan to develop a database that would provide an efficient record system for the first and second pillars was scrapped.
Korea	PAYG	Satisfactory	Highly likely	502	The objectives were consistent with needs and development priorities and sequenced to facilitate Korean proposals for reform. But reforms fell short of Bank recommendations for a multi-pillar system.
China	PAYG	Satisfactory	Likely	20	The Bank's assistance was consistent with initial conditions and development priorities. Performance in relation to the Bank budget was outstanding. Compared to smaller nations, progress has been slow.
Argentina	Multi-pillar	Moderately satisfactory	Likely	801	The Bank's assistance identified the main obstacles for the development of the pension system, and the PAYG pillar was unified. However, fiscal problems continued to plague the system.
Brazil	PAYG	Moderately satisfactory	Likely	1,326	The Bank's assistance supported many diverse objectives, but did not reduce inequality, reform rural pensions, or reform government compensation. Fiscal savings were less than anticipated.
Mexico	Multi-pillar	Moderately satisfactory	Likely	605	The Bank did not assess the effect of the reform on the poor or on coverage. The reform was not extended to the civil service or parastatals, where the implicit pension debt is high.

*(Continues on the following page.)*

**Table 4.3: Outcome Ratings Varied Considerably, as Did the Reason for the Ratings (continued)**

Country	Type of reform	Outcome	Sustainability	Pension component (\$ mm)	Reason for outcome rating
FYR Macedonia	Multi-pillar	Moderately satisfactory	Unlikely	26	The Bank provided a comprehensive approach including pension and social assistance reform. But a more tailored approach would have been advisable. The initial schedule for the second pillar was too fast, however. Minimum conditions were not in place; these are being improved.
Albania	PAYG	Moderately satisfactory	Unlikely	8	The Bank attributed the right priority to the pension reform in recognizing the deficiencies of the first “emergency approach.” The question is whether the system can deliver adequate pension benefits.
Peru	Multi-pillar	Moderately unsatisfactory	Unlikely	364	Developing a fiscally sustainable pension system is a valid objective, but since it only covers 10 percent of the population, the relevance of the overall strategy is questionable.
Uruguay	Multi-pillar	Moderately unsatisfactory	Unlikely	150	The Bank’s approach was ad hoc, reacting to events rather than having a clear-cut strategy, but the objective of financial stability was relevant. The Bank stuck to an ideological approach initially, which was not consistent with country conditions.
Bolivia	Multi-pillar	Moderately unsatisfactory	Unlikely	17	The Bank’s assistance on the Bonosol failed to devote resources to implementation. The Bank did not clarify the fiscal impact of the pension reform. Assistance for supervision of the old system was ineffective.
Russia	Multi-pillar	Moderately unsatisfactory	Unlikely	300	The Bank failed to convince policymakers that a good social security and social assistance system was essential. Pension reform proceeded along a very discontinuous path as Bank advice was inconsistent over time.

system was introduced in 2001. In Kazakhstan, despite a relatively large informal sector, the number of covered workers has increased since 1998, but this is likely to be related to renewed wage gains and growth stimulated by oil revenues. In contrast, the number of contributors to the Hungarian pension system remained virtually constant.

### Development Outcomes of World Bank Assistance

IEG commissioned independent consultants to conduct case studies that would provide a more comprehensive look at the Bank’s involvement in complete pension program activities over time

(see table 4.3). The ratings indicate a range of success regarding the influence of the Bank’s activities on development outcomes, and expectations that these reforms will be sustainable in the future. In Argentina and Uruguay, the Bank was perceived as pushing reforms that were not adapted to country conditions. In Argentina, Bolivia, Brazil, and Mexico, insufficient assistance or attention was given to long-run projections. The highly satisfactory rating for Bulgaria reflects the Bank’s concern for all the factors involved in a reform, including financial sector readiness, political will, and institutional readiness. The common themes in the satisfactory ratings for the Bank’s activities for Eu-



rope and Central Asia and East Asian countries are a focused reform agenda (albeit with some failures in implementation in Latvia and Hungary) and good operational advice (although with little input into policy in Kazakhstan). The use of experts exposed Korea to international best practice, and the effectiveness of policy advice in China contributed to the success of its reforms. The Bank gave sound advice in the Kyrgyz Republic by advising against the institution of a multi-pillar system in the absence of appropriate fiscal and financial sector preconditions.

No easy formula explains why the impact of the Bank's activities on development outcomes in some case study countries is better than in others. World Bank support has varied by loan amounts, investment-adjustment mix, and funding for project preparation. Bulgaria had relatively few formal ESW studies, but the Bank's contribution to development outcome was highly satisfactory. Russia had a dozen ESW studies, and the Bank's contribution to development outcome was rated moderately unsatisfactory. With only two loans and credits, the Bank's assistance to China's development outcome was satisfactory, as was Brazil's, with nine loans and credits. Latvia received only \$26 million in loans, and the Bank's assistance to development outcome was satisfactory, compared with Peru, which received \$364 million and had a development outcome of moderately unsatisfactory.

### Summary and Conclusions

A positive impact of the Bank's activities on development outcomes for multi-pillar pension re-

forms requires that a combination of measures work together, including effective fiscal policy, cost-reducing parametric reforms, and encouragement of capital markets.<sup>25</sup> The full effect of the Bank's activities in pension reform on development outcomes can only be evaluated if the program is assessed in its entirety, in combination with a set of indicators, rather than by the performance of the pension components of individual loans, or even groups of loans.

The outcome of the Bank assistance to multi-pillar reform falls short of achieving the objectives identified in *Strategy*. To some extent, this reflects the short time since the inception of reform. But pension portfolios in many countries are concentrated in government securities. Only the Chilean, Colombian, and Peruvian pension portfolios are relatively well diversified. While parametric and multi-pillar pension reforms have improved the financial balance of PAYG systems, additional reforms are often needed. Multi-pillar systems remain open to political influence, especially in times of economic crisis. Multi-pillar pension reforms have not yet increased savings or substantially developed capital markets. High rates of interest on government bonds and regulatory limits on domestic equity investments may have stifled capital market expansion. By contrast, countries with low coverage need to expand their safety nets to improve the welfare of the elderly by other means, such as noncontributory options.

*Development outcomes for case study countries do not show a clear trend.*

### **Chapter 5: Evaluation Highlights**

- The problems in Bank assistance in supporting pay-as-you-go administration appear to be related to inadequate Bank and client supervision.
- Despite the success of the Bank's pension simulation model (PROST), technical assistance has not been sufficient in developing local expertise.
- The Bank has made few loans to strengthen the regulatory environment.

# 5

## Building Institutional Capacity

One of the primary objectives of the Bank's pension strategy is the sound implementation of policy reforms. In line with this objective, World Bank operations have supported institutional capacity building. This chapter addresses the Bank's activities for (1) the administration of PAYG systems, (2) the development of actuarial capacity, and (3) the regulation and supervision of funded plans.<sup>1</sup>

Of the 68 countries that have received loans or credits for pension reform activities, including general analytic support and actual reform measures, 52 received loans or credits specifically for institutional strengthening to improve the operation and regulation of their pension systems. One hundred and twenty-nine loans or credits supported institutional capacity building; 48 percent of those operations were adjustment loans or credits, and 52 percent were investment or technical assistant loans or credits (table 5.1).<sup>2</sup>

The institutional development impact of the Bank's assistance to improve the actual operation of public pension systems has not been sufficient, and its success has been mixed. Implementation of actuarial capacity has been inadequate, with some exceptions, and countries have been unable to track fund balances, which has created the potential for serious macroeconomic distortions. Regulatory technical assistance for funded pillars should be stronger, particularly in view of continuing concerns about the appropriateness of in-

vestment guidelines, the lack of competition among pension providers, and high management fees and administrative costs.

### Improving the Administration of PAYG Pension Systems

Support for PAYG administration has ranged from financial audits to the complete overhaul of contribution collection, pension payment systems, and client services. Europe and Central Asia needed substantial operational changes at the outset of the transition; few computers were available, and employers kept workers' records without a central client database. Countries in Latin America and the Caribbean also had problems with their PAYG administration. They faced misreporting of entitlements and "ghost" pensioners on the books. Twenty countries received assistance for PAYG systems; a number of them received multiple loans.

*A wide range—but small amount—of investment loans were done for PAYG administration.*

**Table 5.1: Latin America and the Caribbean Heads the Regions in Credits and Loans Supporting Institutional Capacity Building per Capita**

Region	Total			Investment and technical assistance			Adjustment		
	Number of loans	Amount (\$ mm)	Amount per capita (\$)	Number of loans	Amount (\$ mm)	Amount per capita (\$)	Number of loans	Amount (\$ mm)	Amount per capita (\$)
Africa	14	103.2	1.35	9	13.4	0.76	5	89.9	2.42
East Asia & Pacific	5	440.7	1.99	2	10.0	0.01	3	430.7	3.32
Europe & Central Asia	59	1,260.4	1.81	30	204.4	2.06	29	1,056.0	1.55
Latin America & Caribbean	40	1,469.7	2.14	22	74.6	0.26	18	1,395.1	4.44
Middle East & N. Africa	5	45.3	1.22	1	9.4	0.32	4	35.8	1.45
South Asia	6	22.9	0.08	3	4.8	0.01	3	18.2	0.16
Total	129	3,342.3	1.77	67	316.6	1.11	62	3,025.7	2.49

Source: IEG analysis of World Bank data.

Countries in Europe and Central Asia were the most frequent borrowers, receiving more than half of all loans to improve PAYG administration. In general, loans to support pension fund administration were relatively small.

### *PAYG administration in Europe and Central Asia*

The Bank's success with the coordination and implementation of information technology has been mixed. The institutional development impact of the Bank's assistance in Bulgaria was highly satisfactory—the social security organization increased revenue collection and improved client service. A 1993 investment loan also improved the management of the Russian pension system through computerization and organizational improvements.

By contrast, poor implementation of a Hungarian project adversely affected the operation of its pension reform. Information technology implementation in Latvia was inefficient and delayed,

*Investment loans in the Region's PAYG systems have generally been ineffective.*

although the Bank's other activities improved policy planning and evaluation capacity. The Moldova project for PAYG reform experienced significant problems coordinating the implementation of information technology and the redesign of business practices. An ongoing investment project in Romania has had im-

plementation difficulties according to supervision reports. A smaller project for the Kyrgyz Republic had only a modest impact on institutional development, in part because the information technology system was poorly implemented.

### *PAYG administration in Latin America*

With the exception of a loan to Argentina, institutional support for PAYG administration in Latin America and the Caribbean was not effective. The Argentinean project was successful in achieving fiscal savings by re-registering pensioners and removing from the rolls deceased beneficiaries and children over the age of eligibility for survivors' benefits.

By contrast, the Bank missed opportunities for improvements in other countries. For example, Bolivia needed comprehensive assistance to improve its poorly managed state, military, police, and judicial pension systems, but this was not provided. The Bank also failed to encourage the Bolivian government to develop ties with the complementary occupational pension system to stop fraudulent pension payments and to reduce a backlog of tens of thousands of unprocessed claims. In Peru, the Bank did not address problems in the social security agency, which lacked the capacity to administer the system or manage its reserves. In Uruguay, the Bank ignored needed development of local offices, in part because it

did not have contact with officials in the Ministry of Labor and Social Security.

### *PAYG administration in other countries*

Africa received more support for PAYG administration than the Middle East and North Africa, East Asia and the Pacific, or South Asia. Credits in Africa were provided to nine countries, where the Bank funded small pension subcomponents within much larger loans.<sup>3</sup> Cape Verde received the majority of funding with \$5.9 million in three projects. The Bank also supported Pakistan and India with PAYG implementation through small pension components in larger projects. China is the only East Asian country to receive Bank assistance for PAYG administration. The loan, amounting to an estimated \$20 million, was critical in launching information technology improvements in the pension system, although direct support for administrative reform was modest.

### *Actuarial Forecasting*

While *Strategy* does not provide detailed instructions on the evaluative and analytical needs of governments any more than it stipulates financial sector preconditions, actuarial analysis is a mainspring of any government's ability to manage a pension system. *Perspective* reflects that concern by indicating that financial, accounting, actuarial, and governance audits are essential to pension programs to increase transparency, and therefore accountability. Institutionalizing actuarial capacity requires the establishment of a government actuarial office as a permanent part of pension administration. Actuarial projections are generally made on a scheduled basis in developed market economies under a set of demographic and economic assumptions, and findings are publicly available.

To this end, the World Bank has provided worldwide actuarial training using its long-term forecasting model, PROST (see box 5.1). The Bank has been instrumental in educating pension experts and policy makers on the underlying determinants of pension systems, including the impact of demographics and economic conditions. The Bank has been less successful in helping countries establish their own actuarial offices, and PROST has not been easily adapted to fit

#### **Box 5.1: Pension Reform Options Simulation Toolkit (PROST)**

The World Bank's PROST is a flexible, computer-based toolkit that advises researchers and policy makers on different options for pension reform. The model is intended to be easily adaptable to a wide range of country circumstances.

PROST assesses the fiscal sustainability of different pension schemes by taking into account pension contributions, entitlements, system revenues, and system expenditures over an extended period. PROST has been used in more than 80 countries, and as of December 2002, 364 people had taken a one-week training program for PROST.

country circumstances.<sup>4</sup> In addition, the Financial Sector has recently started working with the Fund for the Promotion of Scientific and Technical Research (FIRST) and USAID to develop an international program on building actuarial capacity.

### *Forecasting in Europe and Central Asia*

Bulgaria, FYR Macedonia, Latvia, Kazakhstan, and Moldova have received Bank assistance in developing policy offices and actuarial units. The Bulgarian and FYR Macedonian actuarial units both participated in the design of their multi-pillar reforms. The Latvian Ministry of Welfare uses a macro-simulation model developed with the assistance of the Bank to forecast the financial balance of the system. In Hungary, the Ministry of Finance uses PROST to monitor the financial course of the pension reform, but the projections are not published and outside access to the information is limited. Other Central and Eastern European countries, including Croatia and Romania, do not have actuarial offices.

Actuarial modeling has been stronger in Central and Eastern European countries than in the Commonwealth of Independent States. In Kazakhstan, the analysis group in the Ministry of Labor and Social Protection uses PROST for demographic projections, but not for long-run financial analysis. PROST is also used in Moldova, but an actuarial office has yet to be established, and World Bank staff members assist

*Actuarial analysis is essential for a government to manage its pension system.*

*The Bank has promoted actuarial training worldwide through PROST.*

government experts whenever policy simulations are needed. In the Kyrgyz Republic, in-house capacity to perform long-term analysis gradually fell by the wayside. Actuarial projections are not conducted, and there was little ownership of PROST. Both Russia and Ukraine developed actuarial models on their own because they found that PROST did not suit their circumstances.

### *Forecasting in Latin America*

Countries in Latin America and the Caribbean have less in-house actuarial capacity than those in Europe and Central Asia. Bolivia, the only country with functional in-house capacity, made serious mistakes in calculating

*Actuarial capacity is weaker in Latin America and the Caribbean than in Europe and Central Asia.*

the fiscal deficit resulting from the systemic pension reform, which the Bank did not catch or correct. In Mexico, the government found PROST unable to model its lifetime switching option and, as a result, the Mexican government is unable to

use PROST to forecast cash flows accurately.<sup>5</sup> Neither Argentina nor Uruguay has the capacity to make the systematic actuarial evaluations needed to develop options to regain fiscal sustainability.

### *Forecasting in other countries*

The Bank has had somewhat greater success in attempts to institutionalize actuarial modeling in China and Korea. Based on Bank recommendations, Korea conducts regular actuarial reviews of

*The Bank has been more successful in actuarial assistance in East Asia and the Pacific.*

all public pension schemes every five years to provide a basis for determining subsequent parametric changes. In China, one of the key aspects of World Bank assistance has been PROST training for national and

regional experts; the transfer of knowledge and experience was substantial. Yet data problems and the fragmentation of the pension system make it difficult to institute a national office.

The Bank has provided limited assistance for policy evaluation in some countries in Africa through small investment loans, but this has not led to the creation of actuarial offices. While pension audits and actuarial assessments should con-

stitute the first steps in designing pension reforms, this did not occur before Cape Verde<sup>6</sup> and Senegal both took actions to design a proposed multi-pillar system.

## **Improving the Regulation of Funded Pension Systems**

Funded systems have been criticized for high administrative and marketing costs, lack of competition among pension providers, and restrictive investment guidelines. Although costly marketing was recognized as a deficiency of the Chilean reform relatively early on, no Bank investment loans or credits have specifically focused on developing options to reduce costs. Nine loans in Latin America and the Caribbean and eight in Europe and Central Asia supported capacity enhancement for the implementation of funded pillars. Senegal and Cape Verde also borrowed to build capacity for funded pillar implementation. In addition, the Bank is working with the Organization for Economic Cooperation and Development (OECD) to set up regulatory templates, as well as an international coordinating body for pension regulators and supervisors.

### *Regulation in Europe and Central Asia*

The success of Bank assistance in strengthening second-pillar regulation varied considerably. The governments of Kazakhstan and Russia have not always been convinced of the need for international technical assistance and have either preferred to rely on their internal expertise or on national consultants. In Kazakhstan, technical assistance was provided through a reallocation of funds from an earlier investment loan to support the pension reform, but only a small proportion of the reallocated funds were spent. Because of the limited disbursement, the direct objectives of the loan were unmet.<sup>7</sup> The project completion report, however, notes that if success is measured by improvements in pension regulation and administration directly attributable to Bank project supervision, the nondisbursing loan actually achieved many of its development objectives. Later evaluations of Russian technical assistance for multi-pillar regulation were unfavorable, because the 1998 financial crisis delayed the adoption of a proposed pension law, and



eventually the Bank halted the reform because it was not well prepared.<sup>8</sup>

In Croatia and FYR Macedonia, regulatory assistance was neither efficient nor timely. The initial intent of the Croatia loan was to help establish the supervisory system for the mandatory funded pillar, but Croatia moved ahead with its pension reform before the Bank could finish project preparation. As a result, the regulatory structure is more costly than it would have been with stronger Bank support. Two small FYR Macedonian projects included subcomponents to establish the regulatory structure of the funded system. The second-pillar operational environment is more complex and expensive than necessary. Furthermore, the incomplete organization of the regulatory agency was one of the factors that delayed the start of the funded pillar.<sup>9</sup>

### *Regulation in Latin America*

Bank loans for second-pillar regulation have been quite small, although support to Latin America and the Caribbean through adjustment loans has been substantial. Loans for the supervision and regulation of funded pensions often were guided by narrow terms of reference related to specific government requests. In Argentina, substantial improvements were made in accountability and the legal/regulatory system. In Mexico, the government still needs to liberalize pension fund investment regulations and institute proper regulation of voluntary occupational pensions. (But with Mexico's considerable in-country expertise, regulatory shortcomings are not a result of inadequate technical assistance.) Bolivia and Chile also received Bank support for the regulation of funded pensions. The largest loan for second-pillar regulation was to Nicaragua, although the multi-pillar reform is now on hold.

Serious problems are found in the regulatory structures of three other countries in the Region—Colombia, Costa Rica, and the Dominican Republic. While Costa Rica and the Dominican Republic have active loans, they do not address funded pillar regulatory issues. Although Colombian regulatory officials are aware of industry problems, new investment guidelines are needed to permit greater flexibility in asset allocation. In Costa Rica, steps should be taken to reduce the dominant market share of public commercial

banks, and bank-related pension funds should not be automatically assigned to undecided workers.

*Bank efforts have yet to address the high costs of funded systems.*

### **Summary and Conclusions**

The Bank has yet to provide sufficient assistance in building institutional capacity in pension administration and actuarial evaluation. In addition, continuing assistance is needed to improve second-pillar regulation. These shortcomings are, in part, a result of incomplete needs assessments. The failure of administrative projects appears to be related to inadequate World Bank and client supervision, particularly in countries in which capacity is the weakest.

PROST is an invaluable tool for World Bank analysis of pension system design, for teaching and training client countries about factors that affect pension system balance, and for simulating a variety of reforms to ensure a financially sustainable system. However, better directed technical assistance is required to ensure that clients develop local expertise to create and maintain their own models, assess the fiscal balance of ongoing pension programs, and use actuarial modeling to design policy reforms. Many countries trying to implement PROST have been unsuccessful because of a lack of training. (Also, training requirements to create in-house actuarial expertise vary substantially by country.) Some clients found PROST data requirements too intensive, or needed greater flexibility to create country-specific applications.<sup>10</sup>

*More needs to be done in the Region to liberalize investment regulations.*

Bank loans to establish regulatory systems for funded pensions have been limited in number and scope. More successful regulatory and supervisory structures in Hungary and Poland were supported by policy dialogue than by investment projects or technical assistance. This may also have been the case in Latin America and the Caribbean. In that Region, investment limitations and unregulated voluntary pensions create a substantial future risk for participants. Future assistance in implementation will be needed in Regions where Bank activities have been limited, including Africa, the Middle East, and Asia, providing an opportunity for the Bank to be more proactive.

## **Chapter 6: Evaluation Highlights**

- The Bank's internal and external collaboration with other international agencies and with its client countries has affected the success of Bank-assisted reforms.
- Inconsistency in Bank policy often results from a lack of coordination among Bank sectors involved in pension reform.
- Relations with other donors have also weakened some outcomes.
- In its country relations, the Bank has not always effectively incorporated the concerns of all stakeholders involved in the process.





# World Bank Coordination

**T**he Bank's internal and external relationships affect the outcomes of Bank activities and the success of reforms. This chapter investigates the Bank's coordination of pension reform activities, specifically with (1) Bank units and teams, (2) other donors and international organizations, and (3) client countries.

The Bank continues to struggle to establish an informed decision-making process, partly because of a lack of internal Bank coordination. Because pension reform encompasses a number of disciplines, the current sector-based resource allocation does not facilitate funding for potential pension projects. Thus, the Bank has not always allocated its resources consistently and efficiently in accordance with the need for, and client interest in, reform. In addition, the Bank lacks detailed guidelines for the design of country-specific pension strategies.

Cooperation with other international agencies and bilateral donors is also a factor in establishing stronger pension reforms. Coordination with other international organizations is impeded by differences in perspective on pension reform and implementation. In addition, while the Bank has worked successfully with many governments, it needs to work harder to gain the support of all the ministries and stakeholders involved in pension reform.

## Coordination among World Bank Groups

Internal Bank coordination is important, given the multi-sector nature of pension reform, which affects fiscal policy, the financial sector, and social protection of the population. The Bank's matrix management requires carefully planned coordination. Unfortunately, a lack of internal cooperation sometimes slows Bank assistance. In addition, pension reform is an ongoing process that needs constant monitoring. In some situations, Bank assistance lacked such necessary continuity on a Regional and/or country-specific basis.<sup>1</sup>

A large number of sector boards have prepared and supervised loans and credits that included pension reform components (table 6.1). On the one hand, social protection has taken the lead by inaugurating the Pension Primer series (a compendium of Bank-commissioned papers on pension reform issues), developing the

*A lack of coordination among Bank sectors has led to inconsistent country policy.*

**Table 6.1: Economic Policy and Social Protection Sectors Had a Greater Role in Pension Reform Activities Than Did Other Sectors**

Sector	Africa	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East & N. Africa	South Asia	Total
Number of projects							
Economic policy	5	1	34	10	4	4	58
Financial	10	3	6	14	1	0	34
Public sector governance	2	0	14	13	2	5	36
Social protection <sup>a</sup>	0	1	30	9	1	1	42
Other	9	2	9	11	1	2	34
Total	26	7	93	57	9	12	204
Amount allocated to the pension component (US\$ millions)							
Economic policy	78.4	200.00	477.1	278.10	32.2	22.4	1,088.2
Financial	10.6	302.72	32.6	433.8	4.9	0.0	784.6
Public sector governance	5.9	0.0	168.2	409.3	4.5	19.6	607.6
Social protection	0.0	5.0	808.5	1,913.0	25.0	9.4	2,760.9
Other	27.3	10.7	51.7	33.2	9.4	7.5	139.9
Total	122.2	518.4	1,538.1	3,067.5	76.0	59.0	5,381.2

Source: IEG Pension Database.

a. The share of pension projects managed by Social Protection increased after the Bank's 1997 reorganization.

*The Bank also lacks consistent guidelines on how and when to support pension reform.*

PROST model, and providing pension experts to work on operations in many Regions where sector expertise was not available. On the other hand, other sectors also have strong interests in pension reform, particularly in macroeconomic and financial sector issues.<sup>2</sup> Differences in perspective across units have led to inconsistent strategies in the preparation and supervision of a number of country operations.<sup>3</sup> However, no sector has had a monopoly on operational effectiveness, because sector management and country outcomes are statistically uncorrelated.<sup>4</sup>

Inconsistency in the Bank's pension assistance can also be attributed to the lack of specific guidelines on how and when to support pension reform. As a result, Bank country assistance afforded too little support to some countries, and too much to others.<sup>5</sup> In addition, turnover in Regional Bank leadership can exacerbate inconsistency and lack of continuity, especially as Country Assistance

Strategy priorities change. Further, when conflicts arise between the sector and country units, there is no agreed-upon method of resolution.<sup>6</sup>

Even when Regional sector units have been interested in coordinating pension activities, funding has not always been forthcoming. For example, in Africa, implementation of a Regional pension reform program has been difficult to achieve. Moreover, when Bank clients ask for assistance, funding is not always available. For instance, Because of the high cost of the World Bank's major conferences, those who are able to attend do not necessarily have the greatest interest or need to learn about pension reform. The Bank has been addressing this issue, however, through the greater use of distance learning.

Another disconnect in Bank coordination has been between assessments conducted by the Financial Sector Advisory Program (FSAP) and pension reform projects. In FYR Macedonia, although the Financial System Stability Assessment (FSSA) indicated that the preconditions for reform were not in place, the Bank was already assisting FYR

Macedonia in pension reform. In many countries, access to FSAP documents has been limited because of confidentiality requirements. While country-team access to FSAP findings has improved, this has been achieved primarily through individual agreements rather than a formal, collaborative Bank policy.<sup>7</sup>

### Cooperation with Other Donors and International Organizations

The World Bank regularly collaborates with multilateral institutions and bilateral donors on pension reform regionally and worldwide (table 6.2). Effective cooperation with other international agencies and bilateral donors has resulted in stronger pension reforms, particularly by extending grant funding to countries that were unwilling to use World Bank funding for technical assistance.

Unfortunately, it is not always easy to ensure coordination, as many donors have predetermined work programs.<sup>8</sup> Few discussions have taken place in the field with the European Commission on pension reform, despite the accession of eight Central and Eastern European countries and basic agreement with the Bank on the direction of reform. Similarly, relations with the Organization for Economic Cooperation and Development (OECD) have been limited to formal meetings.<sup>9</sup> Cooperation is also hindered by differences in perspective on pension reform and implementation.

The Bank and the IMF have had extensive, ongoing discussions on pension issues, particularly concentrating on the fiscal framework. And there has been successful collaboration on assessments by the FSAP. The Bank and the IMF have failed to reach consensus on revenue collection issues in Europe and Central Asia, however, where the Bank's inability to fund a collaborative study has been an obstacle to better coordination. On the whole, however, the Bank-Fund relationship is satisfactory.

The Bank's relationships with the Inter-American Development Bank (IDB) and Asian Development Bank (ADB) have a history of independent activity intermingled with collaboration. The IDB and ADB have been as likely to work separately as together on the same countries. At the start of the 1990s, the IDB deferred to the Bank, which had a comparative technical advantage on pension reform issues. Since then, the IDB has developed greater financial expertise and has become more independent. Until recently, the ADB approached pension reform primarily from a financial perspective, but a more recent ADB report from its independent evaluation department suggests that the ADB is revisiting its underlying assumptions for social policy.<sup>10</sup>

*Restricted access to FSAPs is an additional obstacle to good policy formulation.*

*Effective cooperation with outside donors has resulted in stronger pension reform.*

**Table 6.2: Many Organizations Work with the World Bank on Pension Reform**

Category	Organization/donor
Key bilateral partners	U.S. Agency for International Development (USAID), U.K. Department for International Development (DFID), <sup>a</sup> Japanese Trust Fund, <sup>b</sup> Swedish International Development Agency (SIDA), Asian Development Bank (ADB), Inter-American Development Bank (IDB), German, Dutch, Danish, and Japanese governments
Key multilateral partners	International Monetary Fund (IMF), International Labor Organization (ILO), International Social Security Association (ISSA), United Nations Development Program (UNDP), European Union (EU)

*Note:* EU assistance has also been through PHARE and TACIS programs.

a. Formerly the KnowHow Fund.

b. Through the PHRD grant.

*Bank relations with other donors have been complex, with some clear successes, and limited coordination in other instances.*

The Bank has had successful and unsuccessful experiences working with USAID, ranging from disagreements about basic strategies to well-coordinated collaboration. Differences in strategy were evident in Montenegro and Ukraine at specific times. Yet in Bulgaria and Kazakhstan, USAID collaboration was instrumental in ensuring that reforms were effective. The most successful Bank-USAID collaboration has been for reforms supported by adjustment lending on the part of the World Bank and implemented by USAID consultants.

### Relationships with Clients

The Bank's relationships with clients have varied across projects and countries. In some cases,

*The Bank needs to be more receptive to signals given by governments.*

such as FYR Macedonia, Kazakhstan, Mexico, and Peru,<sup>11</sup> the Bank supported government policies without addressing their deficiencies sufficiently when these policies deviated from best practice. As a result, this acquiescence may have compromised the long-term goals of pension policy in these countries.

In other situations, the Bank either did not communicate well with its clients or failed to gain the support of all of the government. For example, in Uruguay and Hungary, the Bank had a good relationship with the Ministry of Economy/Budget and Planning Office and Ministry of Finance, respectively, but was unable to influence the country's social security agency.<sup>12</sup> In Thailand, Bank communication with both government and other donors<sup>13</sup> was unsuccessful, and a PAYG reform was instituted despite the Bank's objections.

Although it may be advantageous for the Bank to maintain a dialogue with client countries in the absence of a Bank loan or credit, the Bank also

*The Bank needs to balance the concerns of all stakeholders involved in pension reform.*

needs to respond appropriately to signals given by the governments. In the Philippines, the Bank should have lowered the intensity of the dialogue due to government

disinterest in effectively pursuing pension issues. Instead, the Bank tried to prepare a loan for ten years without success. Similarly, loan preparation activities lasted seven years in Slovakia before a technical assistance and capacity building loan was signed with the Ministry of Labor, but only after the Ministry of Finance finally committed itself to borrowing from the Bank. In these cases, the Bank lacked flexibility and spent considerable time unsuccessfully trying to negotiate with a reluctant client.

Aside from the government, other institutions may also influence pension policy. The Bank needs to address the concerns of all stakeholders as well as the interests of the government to formulate effective policy and assess the level of support for its policies, which can be difficult to gauge, especially in a democracy. For example, in some countries, such as Hungary and Poland, independent social security institutions had little desire to implement funded systems, while in other countries in Europe and Central Asia and Latin America and the Caribbean, private financial institutions, including asset managers and insurance companies, have had a vested interest in promoting funded pensions. Some of these institutions have the power to influence political decisions, and the Bank needs to better manage such diverse interests and take them into account more effectively when allocating resources.

Finally, exogenous economic and demographic factors affect the outcome of a country's pension reform. Some of these have led to the expansion of Bank assistance. For instance, the Asian crisis prompted Korea to request Bank assistance, which helped strengthen the pension system. By contrast, other factors have reversed progress on pension reform. For example, economic crises, as in Russia and Argentina, have slowed systemic reform, weakened financial markets, and left private pension portfolios less diversified because of a higher concentration in government debt. Conversely, the oil boom in Kazakhstan eased the fiscal position, allowing the government to end prematurely discussions on outstanding pension issues.<sup>14</sup> In Sub-Saharan Africa, the HIV epidemic altered the demographic structure, creating pressure on the elderly to care for an ever-expanding number of orphaned grandchild-

**Table 6.3: What Do IEG Case Studies Show about World Bank Performance?**

Country	Quality at entry	Supervision	Summary of performance
China	Satisfactory	Highly satisfactory	Highly satisfactory
Bulgaria	Highly satisfactory	Highly satisfactory	Highly satisfactory
Korea	Satisfactory	Highly satisfactory	Satisfactory
Latvia	Highly satisfactory	Satisfactory	Satisfactory
FYR Macedonia	Satisfactory	Satisfactory	Satisfactory
Kazakhstan	Satisfactory	Satisfactory	Satisfactory
Hungary	Satisfactory	Satisfactory	Satisfactory
Albania	Satisfactory	Satisfactory	Satisfactory
Brazil	Satisfactory	Highly satisfactory	Satisfactory
Mexico	Satisfactory	Satisfactory	Satisfactory
Argentina	Unsatisfactory	Satisfactory	Satisfactory
Russia	Unsatisfactory	Unsatisfactory	Unsatisfactory
Peru	Unsatisfactory	Satisfactory	Unsatisfactory
Uruguay	Unsatisfactory	Satisfactory	Unsatisfactory
Bolivia	Unsatisfactory	Unsatisfactory	Unsatisfactory
Kyrgyz Republic	Unsatisfactory	Unsatisfactory	Unsatisfactory

Source: IEG Case Study Reports.

Note: The indicators cited in this table were specified in the terms of reference for the consultants conducting the case studies (Appendix A in the approach paper, OED 2004b).

dren, with important ramifications for poverty among the aged (Kakwani and Subbarao 2004).

### Case Study Evaluation of World Bank Performance

Because pension reform is an ongoing process with long-term benefits, the effectiveness of the Bank's performance—as opposed to development outcome—needs to be considered over time. The IEG case studies evaluated the full portfolio of bank efforts, from AAA to loans and credits, and found that Bank performance varied widely across countries (table 6.3). Three factors made the most important contributions to an unsatisfactory rating of Bank performance: (1) inconsistency in the Bank's approach, (2) lack of attention to a particular issue, such as coverage, and (3) insufficient analysis. In contrast, IEG case studies in which the Bank's performance was rated highly satisfactory stressed (1) good sequencing of assistance, (2) consistency with the country's conditions, and (3) good analysis.

### Summary and Conclusions

The World Bank's pension reform activities have lacked consistency for several reasons:

- First, the Bank has not provided detailed guidelines to assess the priority of and need for multi-pillar pension reform.
- Second, the Bank could take greater care in allocating resources according to client interest in pension reform.
- Third, the sector-based resource allocation for Bank activities has led to cross-sector rivalries to secure access to budgetary resources for the development of pension projects that may have resulted in a lack of balance in how the Bank's assistance is structured.

These problems are exacerbated by staff turnover, inconsistencies across Bank networks, and shifting government priorities. In sum, the

*Bank performance is related to the consistency of its approach and the depth of its analysis.*

lack of coordination within the Bank has prevented it from establishing a transparent decision-making process.

The Bank can strengthen its pension reform activities by more frequent and substantial coordination with other international agencies and bilateral donors. Despite improvements in co-

operation, there are still a number of unresolved issues on pension reform. The Bank would also find it easier to engage countries to implement pension reforms by working with a broader group of ministries and considering the positions of all stakeholders involved in the country's reform process.

# Findings and Recommendations

The Bank's strategy for implementing multi-pillar pension reforms is evidenced by a legacy of operational work, ESW, training, and seminars. Reforms have differed Regionally and by country as a result of client concerns and Bank experience. In other words, the Bank has followed an approach that has differed according to country conditions and has not implemented a "one-size-fits-all" strategy as some critics have maintained.

Nonetheless, the Bank's advice has not always been effective or consistent. This final chapter reviews the findings of the IEG evaluation and provides recommendations for management to improve Bank effectiveness. IEG recommendations include: (1) additional research on outstanding issues, (2) enhanced development of client capacity, (3) a more structured approach to policy design; and (4) improved internal and external coordination. This strategy also requires a cost-effective way to identify key concerns to reap the rewards of greater effectiveness.

## Findings

The Bank's focus on pension reform most often has been sparked by concerns about fiscal sustainability, particularly when mismanaged systems have created demands on the government's budget that have crowded out other expenditures and/or led to fiscal deficits and subsequent macroeconomic instability. The focus of client country interest in pension reform often has also been on fiscal constraints. And these concerns are

extremely important, because a pension system that is fiscally unsustainable will hinder growth and fail to meet its commitment to the aged. Nonetheless, while addressing funding gaps, too often the Bank has not addressed sufficiently the primary goal of a pension system to reduce poverty and provide adequate retirement income *within a fiscal constraint*. It has also focused insufficient attention on the income of the aged.

Despite this shortcoming, pension reform activities in many Central and Eastern European countries have improved the potential for long-term fiscal sustainability overall, while providing adequate retirement income. Many reforms in Latin America and the Caribbean have also improved fiscal sustainability. The Bank's activities have encouraged private pension plans to develop participant choice between funded and PAYG systems, participant choice among pension funds, and coherent regulatory structures to prevent fraud and abuse. ESW has covered a wide range of topics, with particular success in the area of fiscal analysis, actuarial modeling,



and regulatory structures. Quite a few countries have had improved PAYG administration, including the implementation of actuarial offices.

The Bank has also emphasized the pro-growth aspects of multi-pillar reform—that is, increased savings and capital market development. But the IEG evaluation found few countries in which these promised outcomes have been achieved. Currently, there is insufficient analysis to determine the extent to which this lack of progress is related to counterproductive fiscal policy or to ambiguous expected outcomes.<sup>1</sup>

Finally, over the years the focus of the Bank's concerns about pension reform has evolved, from supporting Chilean-type systems in Latin America to new PAYG models such as NDCs. More recent ESW in Africa, for example, has investigated the situation of the aged within the context of poverty overall. The Bank has taken strides in outreach to facilitate cooperation with other international organizations, although opportunities for a greater consultative process remain.

### *Gaps in pension reforms*

Based on the IEG case studies, some of the multi-pillar reforms supported by the Bank can be seen to have shortcomings, indicating the need for continued follow-up to the initial reform (table 7.1). For example, as a consequence of incomplete analysis, the Bank's activities in Latin America and the Caribbean tended to be limited to funded reforms, even when pensions covered a small percentage of the population. As a result, the income

of the aged was inadequately addressed. While Bank assistance was instrumental in instituting parametric PAYG reforms, the Bank did not press for additional first-pillar reforms required by many countries in the Region, such as those stemming from fragmented pension systems in Mexico and Peru.

The Bank persistently encouraged countries such as Ukraine and Russia to institute multi-pillar reforms even when financial sector conditions were weak. And the Bank failed to try to dissuade countries with little control of corruption—including Nicaragua, Russia, and Ukraine—from actively developing multi-pillar reforms. In general, the Bank did not persuade multi-pillar reformers to develop diversified pension portfolios or support countries building the capacity to monitor the fiscal stability of their reforms. And finally, the Bank's performance in improving contribution collection in countries such as Hungary and Latvia was ineffective.

### *The relationship between ESW and operations*

While it is unclear how prior ESW has led to adequate policies, the general focus of Bank ESW has influenced the issues considered in Bank operations. The prominence of Bank support for multi-pillar systems is the most striking example of how the Bank's strategy led to the preparation of pension projects.

While the overall approach to support multi-pillar reform has been clear, ESW is lacking on some specific issues and research and policy analy-

**Table 7.1: Even the Best Reforms Have Continuing Challenges**

Post-reform issue	Countries
Low coverage	Argentina (declining), Kazakhstan, Kyrgyz Republic, Peru, Russia (declining)
Lack of poverty alleviation	Bulgaria (women), China, Mexico, Russia, Uruguay
Continuing fiscal deficits	Argentina, Bolivia, Brazil, Korea (long term), Uruguay
Limited actuarial capacity	Kyrgyz Republic, Mexico (better modeling needed), Uruguay
Underdeveloped financial sector	Bulgaria, China, FYR Macedonia, Russia, Uruguay
High commissions	Hungary, Peru
Additional pension systems	Mexico, Peru
High benefits	Brazil, Peru
Administrative capacity assistance untimely and ineffective	Hungary, Latvia

Source: IEG Case Studies.



sis have been incomplete or sporadic. For example, income of the aged has not been a priority research area or a priority for pension reform. Similarly, greater analysis is needed on a number of financial and regulatory issues, including basic research on how to improve capital markets in countries with multi-pillar systems and the extent to which societal corruption hinders regulation.

### Implementing client capacity

In many instances the Bank has not included sufficient capacity building in its initial agenda or in later follow-up activities on pension reform. In some cases, technical assistance has been successfully tied to an adjustment operation—but not always. Given client reluctance to borrow for technical assistance, new initiatives are needed, including effective donor coordination. Within the Bank, the World Bank Treasury Department’s Pension Asset Advisory Service is a promising initiative.<sup>2</sup> Another innovation is the collaboration of the WBI with selected client countries, particularly if the clients are well chosen and the lessons can be expanded to assist others.

### Internal and external cooperation

Internal coordination has not been consistent or sufficient in many areas, including advice on the income of the aged and financial sector assessment (FSAP included). Externally, the World Bank has limited its dialogue to clients or government departments that shared the Bank’s views on pension reform. Coordination with other donors and agencies has not always been smooth.

## Recommendations

Based on these findings, this evaluation has the following recommendations:

### DEVELOP GUIDELINES TO DESIGN PENSION REFORMS AND PAY GREATER ATTENTION TO PARAMETRIC REFORMS

- a. ***Pay greater attention to parametric reforms*** to ensure fiscal sustainability, and to the macroeconomic, financial, and institutional sector ***preconditions necessary for a multi-pillar reform***. This would involve preparing and implementing ***guidelines*** to ensure assistance that is well-tailored to coun-

try conditions and consistent policy prescriptions, including statistical indicators and in-depth assessments.

- b. ***Be more realistic in presenting the benefits of the secondary objectives of pension reform*** in dialogue with client countries, as there is insufficient empirical evidence to support the claims that funded systems have or can improve savings and capital market development.

### BUILD CLIENT CAPACITY

- c. ***Develop a checklist for client capacity requirements*** (including contribution collection, contributor database development, actuarial and policy analysis, and regulation of multi-pillar operations) to assess client requirements and determine how best they can be met. ***This would involve ensuring that a plan for technical assistance is put in place for reform initiatives so that client capacity is developed.***

### CONDUCT RESEARCH ON OUTSTANDING ISSUES

- d. ***Ensure that adequate analysis is conducted on key issues*** such as income of the aged, the impact of corruption and governance on the feasibility of effective pension regulation, methods to foster competition among pension funds, guidelines for investment allocation, the design of noncontributory systems, and ways in which capital markets develop, as well as research offering cross-country evidence on these topics.

### IMPROVE INTERNAL AND EXTERNAL COORDINATION

- e. ***Develop a process to ensure that cross-sector issues***, including integrating financial issues identified by the FSAP, and maintain closer coordination among the Development Economics Vice Presidency, the Networks, sector units, and country units.
- f. ***Develop a strategy to play a greater role in consensus building among stakeholders***, particularly international organizations and client agencies.



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## APPENDIXES



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## APPENDIX A: VIEWS ON PENSION REFORM—A BRIEF LITERATURE SURVEY

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Over the years, a substantial body of literature on pension policy and pension reform has been developed, focusing on two fundamental issues: (1) the appropriate mix of earnings-related pensions and poverty-reduction benefits (the Bismark/Beveridge controversy, see box A.1), and (2) the role of funding. The concept of funding is quite old and has been applied historically in many different ways in various countries.

Most work on social security has been on the earnings-related portion of the old-age provision. The first economic theory of social security probably can be traced back to Samuelson's (1958) article, which states that the equilibrium rate of return to PAYG pension plans equals the rate of population growth, under constant real wages. Aaron (1966) completed this insight by showing that in a mature PAYG plan, the real return equals population growth plus the rate of growth of productivity (real wages). Buchanan (1968), Friedman (1972), and Browning (1973) advocated switching to a funded system (even before the Chilean reform) and maintaining social security commitments by issuing government bonds. Later, Ferrara (1982) and Weaver (1981) advocated a gradual phase-out of the PAYG system in the United States. Other economists—including Pechman, Aaron, and Tausig (1968), and Diamond (1977)—have continued to find sufficient justification for traditional social security old-age benefits.

This debate intensified with the “money’s worth” controversy, with Feldstein’s (1974) empirical finding that the U.S. Social Security system had a negative impact on saving. Leimer and Lesnoy (1982) contested this conclusion, showing that a programming error influenced Feldstein’s outcome. Barro (1974) argued against Feldstein’s hypothesis on theoretical grounds, suggesting that savings were not reduced but

were shifted to bequests. Feldstein continued to support his research in numerous other papers.

Empirical evidence on the savings controversy has been inconclusive at best, although it has resulted in an intense dialogue about the impact of substituting funded systems for PAYG plans, relying on the positive effect of such a substitution on economic growth. Other economists have had a narrower focus, estimating the impact of different pension provisions on labor supply and the capital market, including the impact of parametric changes in the retirement age and the tax rate. Studies of the impact of voluntary employer-sponsored pensions on wage/pension tradeoffs and labor force participation were also pursued, although the empirical findings were ambiguous (Fields and Mitchell 1984; Gustman and Steimeier 1986). Kotlikoff’s (1988) work on intergenerational equity also influenced the debate about the proper structure of a pension system. With the implementation of the Chilean funded reform, U.S., European, and Latin American economists began to assess its success, and, later, that of other Latin American reforms (Bosworth, Dornbusch, and Laban 1994).

*Averting* provided an international perspective to this body of research with its conclusion that under the right conditions, a three-pillar system was optimal. Upon publication of *Averting*, reviews in economics journals commented on the volume. Turner (1995) said, “Of the many recommendations in the book, the two most controversial are its advocacy of a mandatory Chilean-style funded individual account system (the proposed second pillar) and its rejection of the traditional PAYG defined benefit social security system that has been the bulwark of retirement income systems in most OECD countries.” Disney (1995) indicated that *Averting* “never clearly states why high savings rates are

**Box A.1: A Four-Country Briefing on Developments Influencing Pension Policy Worldwide**

Modern pension policy began with the plan instituted by the government of German Chancellor Otto von Bismarck to help workers and forestall the program of the socialist movement. The 1889 law established a pension for all workers in trade, industry, and agriculture from the age of 70 years. In 1913 the pension age was reduced to 65 years.

The Bismarckian scheme was based on employer and employee contributions as well as on capitalization. A state subsidy was added to provide low-paid employees a higher pension than their contributions warranted.

After World War II, PAYG financing replaced the German-style capitalization in many social security schemes. Some modern derivations of the German programs include occupational funds supported through book reserves on employer balance sheets, rather than being directly invested in financial assets.

In the United States, the Social Security program enacted in 1935 is earnings-related, in the Bismarckian tradition. Originally, the scheme was to be based on capitalization. However, amendments in 1939 added a number of benefits and changed the scheme to a PAYG system with only a minimum reserve. Insurance company executives had expressed concern that the accumulation of a large reserve could adversely affect the capital market, encourage demands for increased benefits, and necessitate the reduction of other federal taxes.

After World War II, voluntary employer-sponsored plans flourished, eventually supplemented by individual retirement savings options. In 1981, the President's Commission on Pension Policy recommended a 3 percent contribution to mandatory universal pension accounts based on financial assets invested in individual accounts. The 2001 Commission to Strengthen Social Security

also supported a number of options, including mandatory individual retirement accounts.

In Great Britain, Sir William Henry Beveridge produced a report in 1942 proposing a program for social insurance that would provide universal pensions based on flat contributions and provide flat benefits as a minimum standard of living, replacing the former means-tested system for the elderly age 70 and over. The pension system was made part of the National Insurance Scheme in 1948, with a non-means-tested, basic state pension paid out of current revenues.

Subsequently, national earnings-related programs were implemented for higher-wage workers, because the flat rate pension was regarded as too low a percentage of earnings. From this, Great Britain instituted an earnings-related contributory State Earnings Related Pension Scheme (SERPS) in 1970, from which employers could contract out if they had a plan providing minimum benefits. Finally, reforms in 1986 allowed individuals to contract out from SERPS and establish individual accounts (personal pensions). Initially a 2 percent government match was used to encourage participation in the new system. In addition, there is a highly developed system of occupational funds.

In 1924, Chile became the first Latin American country to adopt a social security program. By the time of the Pinochet government, the PAYG system was in shambles. The 1980 reform, known as the AFP System, was one of the many changes in Chile, in a process initiated in the mid 1970s. Chile's pension reform completely replaced the social security system with personal pension accounts that require pre-funded, mandatory contributions and private fund management. The new pension system gave covered workers the right to choose between different pension providers and between different forms of payout after their retirement.

important" and suggests a reduction in capital stock may be called for in aging populations. Nonetheless, he accepts the broad thrust of the Bank's policy agenda. Beattie and McGillivray (1995) took issue with the report's assertion that public pension systems failed socially and economically, identifying shortcomings that can apply to both public and privatized systems.

Between 1994 and 2001, a wealth of articles appeared on all aspects of pension reform. Implicit and explicit criticisms of the World Bank approaches have come from researchers such as Bosworth and Burtless (1998) and Arnold, Graetz,

and Munnell (1998). Feldstein's (1998) edited volume on privatization was generally supportive, while Bodie, Mitchell, and Turner (1995) present a cross-section of views. Gillion, Turner, Bailey, and Latulippe (2000) cover many of the topics included in *Averting* for the International Labor Organization, but suggest that more options for reform are available than the ones included in *Averting*.

Through numerous articles and books, many experts have entered into the pension debate, both influencing the Bank's work and being influenced by it. Most observers agree that multi-

pillar reforms are appropriate in some instances, but quite a few disagree with the Bank's prescription in specific situations at particular times. Critics of the Bank's approach, which regards multi-pillar systems as best practice, include Diamond and Orszag (2002) and Barr (2000). By contrast, Feldstein (1998) and Schieber and Shoven (1999) tend to support the Bank's strategy. Kotli-

koff (1994) believes that pension plans should invest in a fully diversified international portfolio, and for that reason is critical of the Bank. In sum, there is no unanimity on when multi-pillar systems should be implemented, what multi-pillar systems should look like, or when parametric reforms are sufficient to maintain a sustainable pension system.





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## APPENDIX B: PENSION SYSTEMS IN WORLD BANK–ASSISTED COUNTRIES

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This appendix reviews the diverse kinds of pension reforms that the World Bank has supported. It provides information on the amount of Bank lending provided to countries by Region and type of reform, including multi-pillar and PAYG. Nearly three-quarters of the loans were issued to Europe and Central Asia (ECA) and Latin America and the Caribbean (LAC), the only Regions to have enacted multi-pillar systems. Most ECA countries maintained a relatively substantial PAYG pillar, with pensions related to contributions, while LAC countries did not. Overall, Bank assistance for PAYG reforms was aimed at achieving fiscal sustainability. Reforms in ECA were more likely than those in LAC to include PAYG and funded-pillar assistance, as well as support to improve social assistance.

### Countries with Multi-pillar Systems

#### *Latin America and the Caribbean*

The Bank issued loans and credits to 15 countries in Latin America and supported second-pillar reforms in 11, including Chile (table B.1).<sup>1</sup> Most of the Bank's funds were lent to six countries: Argentina, Bolivia, Colombia, Mexico, Peru, and Uruguay.<sup>2</sup> The Bank also provided technical assistance to multi-pillar reforms in Costa Rica, the Dominican Republic, and Nicaragua, but funding for these countries was relatively small.

LAC pension reforms vary considerably, although the Chilean example had a substantial influence. Chilean consultants often provided advice and counsel, but differences from the Chilean reform abounded. Some countries included a first pillar, others allowed for choice between a PAYG system and a funded second pillar. Some permitted participants to switch between the two. Like the Chilean system, Peru's pension system

lacks a PAYG pillar. Peru also retains a separate civil service pension system. Uruguay's new system consists of a PAYG pillar, based on notional accounts similar to a notional defined contribution (NDC) scheme. The funded pillar operates simultaneously with the PAYG system and is compulsory for contributors under age 40 whose incomes exceed a minimum. The add-on concept, in which the funded pillar is mandatory only for higher earners and voluntary for lower earners,<sup>3</sup> is unique to Uruguay.

Bolivia's pension system has a flat universal benefit and a funded second pillar. However, the universal pension, the Bonosol, is *not* tax-financed; rather, it is *funded* using the government's shares in 10 privatized enterprises, an innovation unique to Bolivia. The pension funds for the fully funded second pillar also manage the Bonosol assets.

Argentina, Colombia, and Mexico instituted pension systems that give participants the choice of a PAYG system or a funded pillar. Argentina's system includes a flat benefit, as well as supplemental PAYG and funded tiers. Nearly half of the provinces maintain their own pension plans. Workers can make a one-time switch from the PAYG to the funded tiers at any time. Mexico's reformed system is a fully funded plan, with a minimum guarantee and subsidies for low-income participants. Mid-career workers can choose between the old and new systems,<sup>4</sup> and have a lifetime switch option at the time of retirement. In Colombia, a mixed system provides a choice between a defined benefit (DB), partially funded PAYG scheme and a privately managed, funded plan. Low-income contributors are subsidized and a minimum-pension guarantee is provided for participants with at least 10 years of contributions if their accounts provide a pension that is lower than the guarantee.

**Table B.1: Mexico, Argentina, and Peru Received the Most Assistance among LAC Countries Implementing a Mandatory Funded Pillar**

Country	Year of reform	Amount of loans (\$ mm)	Number of loans
Mexico	1995/1996	604.3	4
Argentina	1993/1994	481.1	8
Peru	1992	363.6	6
Uruguay	1996	149.3	5
Colombia	1995	63.7	3
Bolivia	1993–2000	13.6	6
Ecuador	2001	10.0	1
Nicaragua	2004	8.3	3
Costa Rica	2000	6.7	3
Dominican Republic	2001	1.5	1
Chile	1980/1981	1.4	1
Total		1,703.6	41

Source: IEG Pension Database.

### Europe and Central Asia

Eleven of 24 Bank-supported ECA countries implemented multi-pillar reforms, including Bulgaria, Hungary, Kazakhstan, and Latvia (table B.2). The Bank assisted ECA countries in improving fis-

cal stability and reducing demographic pressures by strengthening the relationship between contributions and benefits, most often through funding. Relative to LAC, reforms were more likely to be phased in by age cohort and are only mandatory for younger workers. Older participants choose between the existing or old PAYG system and the funded tier, but their resulting placement in the funded tier is usually binding.

Multi-pillar systems implemented in Bulgaria, Croatia, Hungary, and Latvia include a fairly substantial contribution-based PAYG pillar. Hungary's funded pillar is mandatory for new entrants and voluntary for those already covered by the PAYG plan. Latvia has an NDC PAYG pillar with a guaranteed minimum pension, as well as a funded tier. Participants aged 50 and older remained in the old system, workers under age 30 had to join the funded system, and those between 30 and 49 years could choose between the two. Similarly, Croatia's system retained participants over age 50 in the PAYG system, placed those under age 40 in the new funded scheme, and gave those in between the option to choose their system. Bulgaria's second pillar was mandatory for those younger than age 40.

Kazakhstan is the only ECA country that implemented a Chilean-style reform, which trans-

**Table B.2: Kazakhstan, Russia, Ukraine, and Hungary Received the Greatest Amount of Assistance among ECA Countries with Mandatory Funded Pillars**

Country	Year of reform	Amount of loans (\$ mm)	Number of loans
Kazakhstan	1998	323.8	4
Russia	2002	287.8	6
Ukraine	2004	147.0	5
Hungary	1998	124.1	4
Romania	2004	58.7	6
Croatia	1998/2002	52.1	3
Bulgaria	2000	47.3	4
Lithuania	2002/2004	26.5	2
FYR Macedonia	2000/2002	26.2	8
Slovak Republic	2004	25.4	2
Latvia	1995 plus	20.9	4
Poland	1998	2.6	2
Total		1,115.8	48

Source: IEG Pension Database.

ferred all participants to a fully funded plan with a minimum-pension guarantee for those meeting contribution requirements. However, unlike Chile, past obligations are financed on a current basis rather than through recognition bonds. In addition, contributors are given a choice between a private and a state-run plan managed by asset managers chosen by the government.

## Countries with PAYG Systems

### Latin America and the Caribbean

Although the majority of Bank loans in LAC supported a combination of first and second pillar reforms, the Bank also supported pure PAYG reforms in four countries (table B.3). First pillars supported by Bank operations ranged from pure PAYG system to partially funded systems, or systems with notional accounts.

Among the pure PAYG reformers, Brazil, the largest recipient of Bank assistance in LAC, instituted a plan resembling an NDC plan. Bank assistance was focused on reducing inequities between public and private sector workers, upgrading municipal management, strengthening regulatory regimes for private sector workers, reducing pension pressures on the fiscal deficit, and increasing pension benefits for rural and disabled workers. Jamaica's reform included grants to the elderly.

Many parametric reforms among LAC countries with multi-pillar systems focused on strengthening the safety net by centralizing disparate pension regimes and raising contributions, as in Colombia, and improving collections and administration, as in Argentina and Colombia. Argentina targeted noncontributory pensions to the poor and to eliminating arrears. The Bank's projects supported the reduction of contribution rates in Argentina, Mexico, and Peru.

### Europe and Central Asia

The Bank supported a large number of small loans for parametric reforms in ECA (table B.4). The majority of Bank assistance for the first pillar was intended to improve fiscal sustainability by lowering the dependency ratio, ensuring the timely payment of pensions, and paying off arrears. A number of systems also eliminated privileged pensions to civil servants.<sup>5</sup>

**Table B.3: Brazil Received the Majority of Bank Assistance for PAYG Reforms in LAC**

Country	Amount of loans (\$ mm)	Number of loans
Brazil	1,326.3	9
Panama	24.5	3
Jamaica	8.9	2
Honduras	4.2	2
Total	1,363.9	17

Source: IEG Pension Database.

**Table B.4: Turkey Received the Largest Loan among ECA Countries without a Mandatory Funded Pillar**

Country	Amount of loans (\$ mm)	Number of loans
Turkey	197.7	3
Bosnia & Herzegovina	43.5	6
Moldova	37.8	4
Kyrgyz Republic	33.9	4
Serbia	25.2	5
Georgia	14.7	6
Uzbekistan	10.0	1
Armenia	8.9	5
Slovenia	7.7	1
Albania	7.1	5
Azerbaijan	5.9	1
Tajikistan	2.9	1
Turkmenistan	0.6	1
Total	422.3	45

Source: IEG Pension Database.

The Bank increasingly supported the development of NDC plans in its pension reform lending in ECA, in conjunction with other reform options, including DB formula and point systems. Kyrgyz Republic, Latvia, and Poland adopted NDC systems, while FYR Macedonia, Hungary, and Moldova maintained DB formulas. Credits in Bosnia-Herzegovina supported DB PAYG systems. Bulgaria, Croatia, Serbia, and the Slovak Republic all adopted systems that transformed the pension formula from one that was adjusted on an *ad hoc* basis to a point system, similar to the formula

**Table B.5: Zambia Received the Greatest Amount of Funding in Africa for Pension Reform**

Country	Amount of loans (\$ mm)	Number of loans
Zambia	68.8	4
Senegal	19.4	2
Madagascar	5.4	1
Guinea-Bissau	5.0	1
Mauritius	4.9	2
Cape Verde	4.0	3
Cameroon	4.0	2
Ghana	3.9	3
Mali	1.7	1
Mozambique	1.5	1
Sierra Leone	1.2	1
Niger	0.9	1
Tanzania	0.8	2
Uganda	0.8	2
Total	122.2	26

Source: IEG Pension Database.

used in Germany. Turkey's PAYG reforms were instituted to stem operating losses, strengthen the system's organizational structure, and increase pensions. Legislation to implement administrative reforms is awaiting passage.

Reforms in ECA were more likely to include noncontributory assistance for the aged than those in LAC. For example, in Latvia and FYR Macedonia, the Bank assessed the full social pro-

tection system rather than just the employment-based pensions. Poverty benefits for the elderly are generally a residual part of a larger social benefits system in many transition economies. The difference is that these programs had improved design and administration.

### Africa

The Bank provided small loans to a number of African countries to help stabilize and restructure civil service pensions and provident funds (table B.5). The goal was to reduce the pension liability to the overall budget by strengthening the link between contributions and benefits and by reviewing investment policies to improve returns. The Bank also supported expanding coverage in Cape Verde and paying off arrears in Guinea-Bissau and Sierra Leone.

### Other Regions

Except for two large loans to Korea, East Asia and the Pacific, the Middle East and North Africa, and South Asia received only a few small World Bank loans for pension reform (table B.6). In South Asia, credits to India were provided to improve actuarial forecasting and reduce liabilities in the pension fund.<sup>6</sup> In the Middle East and North Africa, the Bank has promoted contractual savings through the establishment of voluntary funded systems. Fragmented pension systems were integrated in Morocco, and the introduction of DC plans in Jordan was explored.

**Table B.6: Support to Korea for Pension Reform Far Exceeded That for Other Countries in Asia or the Middle East and North Africa**

East Asia and Pacific			South Asia			Middle East and North Africa		
Country	Amount of loans (\$ mm)	Number of loans	Country	Amount of loans (\$ mm)	Number of loans	Country	Amount of loans (\$ mm)	Number of loans
Korea	501.9	3	India	32.5	6	Morocco	34.4	2
China	10.0	2	Pakistan	17.5	3	Tunisia	29.9	2
Laos	5.7	1	Sri Lanka	9.0	2	Jordan	7.7	2
Mongolia	0.8	1	Afghanistan	0.1	1	Djibouti	2.5	1
						Algeria	1.2	1
						Yemen	0.3	1
Total	518.4	7	Total	59.0	12	Total	76.0	9

Source: IEG Pension Database.

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## APPENDIX C: PERFORMANCE RATINGS FOR PENSION PROJECTS

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This appendix reviews the development outcome ratings of completed pension reform projects, compares them to other Bank projects, and describes the rationale for the ratings. The loans and credits have been divided into three groups: (1) those that are 80 to 100 percent devoted to pension reform, (2) those that are between 30 and 80 percent devoted to pension reform, and (3) those in which pension issues account for less than 30 percent of the loan.<sup>1</sup> The rationale for the division is to investigate whether loans that primarily focused on pension reform performed better than those in which pension reform was only a small component of the loan.

The development outcome of the pension component was scored by IEG using a two-part rating system (satisfactory or unsatisfactory) based on a review of Implementation Completion Reports (ICRs),<sup>2</sup> IEG ICR reviews and Project Performance Assessment Reports (PPARs).<sup>3</sup> The development outcome for the overall project is from the ICR reviews and the PPARs. The ratings for the overall project are based on the IEG six-part rating scheme, which was condensed to a two-part system, equivalent to that used in the pension component analysis.<sup>4</sup>

On average, overall ratings for projects including a pension component were higher than all Bank projects for outcome, sustainability, and institutional development (table C.1). On a disaggregated basis, this finding was true for projects entirely devoted to pensions and for those with a small (30 percent or less) pension component. The ratings for the middle group were largely influenced by a large loan to Russia that was rated moderately unsatisfactory.<sup>5</sup> Among all pension projects, the group of pension projects with pension reform comprising 80 to 100 percent of the loan's objectives was rated the highest in development outcome (see also table C.2).<sup>6</sup>

### Analysis of Pension Performance Rating

#### *Loans made primarily for pension reform*

Pensions accounted for over 80 percent of the loan in 7 percent of the loans evaluated. By Region, they accounted for 24 percent of pension lending in Europe and Central Asia and 11 percent in Latin America and the Caribbean. The loans included seven adjustment loans, two investment loans, and one technical assistance project. These 10 projects all had very high development outcome ratings (table C.3).<sup>7</sup>

Loans issued to Argentina, FYR Macedonia, and Uruguay were all rated highly satisfactory. The large adjustment loan made to Argentina helped consolidate Argentina's pension systems and quickly led to significant savings. A 1998 Uruguay loan improved the regulation and operations of the funded system's pension plans, in particular through the diversification of assets.<sup>8</sup> Another highly satisfactory pension loan was the small technical assistance loan to FYR Macedonia, which successfully assisted the legal reform for the PAYG system and a framework law for a multi-pillar system.<sup>9</sup>

The other loans were rated satisfactory because some aspects of loan performance could have been improved. The reform of the social security system in Brazil was advanced but not completed in the 1999 loan; the conditions of the 2000 loan were fully complied with, but did not reduce special privileges. The Kazakhstan reform was successful in improving contributions, although the third loan tranche was not completed. The Latvian loan was exemplary in achieving a full reform of the pension system, but the information technology component was unsatisfactory. The Mexican project implemented a new private pension system, but the complementary reforms for the housing fund proved dif-

**Table C.1: Performance Ratings for the Project Overall**

Project	Total evaluated projects		Outcome satisfactory		Sustainability likely		Institutional development impact substantial	
	No. of projects	Commitments (\$mm)	No. of projects (%)	Commitments (%)	No. of projects (%)	Commitments (%)	No. of projects (%)	Commitments (%)
All pension projects	140	29,697	87	82	77	75	57	43
Pension component >80%	10	2,506	100	100	70	68	80	54
Pension component 30%–80%	10	1,859	70	49	80	78	50	11
Pension component <30%	120	25,332	88	83	78	76	55	44
Total World Bank projects	3,391	259,968	70	76	56	66	38	43

*Note:* Two pension projects were not rated for institutional development impact and were excluded from the calculations. Outcome satisfactory = highly satisfactory, satisfactory, moderately satisfactory. Sustainability likely = highly likely, likely. Institutional development impact substantial = high, substantial. Pension projects from approval fiscal year 1984 to 2005. World Bank projects from approval fiscal year 1984 to 2003.

**Table C.2: Performance Ratings for the Pension Component**

Project	Total evaluated projects			Outcome satisfactory		
	Number of projects	Commitments (mm)	Pension component (mm)	Number of projects (%)	Commitments (%)	Pension component (%)
All pension projects	134	28,262	4,784	75	77	89
Pension component >80%	10	2,506	2,503	100	100	100
Pension component 30%–80%	10	1,859	736	80	50	64
Pension component <30%	114	23,898	1,544	73	77	82

*Note:* Six projects were rated “non-evaluable” and excluded from calculations. Outcome satisfactory = highly satisfactory, satisfactory, moderately satisfactory. Pension projects from approval fiscal year 1984 to 2005.

difficult to achieve because of political constraints. In Peru, a pension reform was instituted, but the public systems continue to lack adequate records or controls.

#### **Loans made largely for pension reform**

Seven percent of all completed loans and credits had pension components that made up 30 to 80 percent of the loan. This includes 12 adjustment loans and 7 investment loans, with development outcomes for the project overall ranging from highly satisfactory to unsatisfactory (table C.4). These ratings generally correlated with the rating of the pension component.

The pension component of the Peruvian Financial Sector Adjustment Loan was rated satisfactory, as the social security reforms were expected to improve the longer-term resiliency of the system. The pension component of the Mexican Contractual Savings Development Program was also rated satisfactory, although the ICR indicated that no progress had been made in the reform of pension assets invested in (subsidized) housing loans or for the reform of the public pension system.

By contrast, the pension component in the Russian Social Protection Adjustment Loan was rated unsatisfactory because the financial crisis

**Table C.3: Performance Ratings: Loans 80–100 Percent Devoted to Pension Reform Activities**

Country	Loan	Year	Loan outcome	Sustainability	Pension component (\$mm)
Argentina	Provincial Pension Reform Adjustment Project	1997	Highly satisfactory	Likely	620
Brazil	Social Security Special Sector Adjustment Loan	1999	Satisfactory	Likely	758
Brazil	Second Social Security Special Sector Adjustment Loan	2000	Satisfactory	Likely	505
Bulgaria	Social Insurance Administration Project	1997	Satisfactory	Highly likely	24
Kazakhstan	Pension Reform Structural Adjustment Loan Project	1998	Satisfactory	Not rated	300
Latvia	Welfare Reform Project	1997	Satisfactory	Likely	15
FYR Macedonia	Pension Reform Technical Assistance Project	1999	Highly satisfactory	Likely	1
Mexico	Second Contractual Savings Development Project	1998	Moderately satisfactory	Uncertain	400
Peru	Pension Reform Adjustment Loan	1997	Satisfactory	Likely	100
Uruguay	Contractual Savings Structural Adjustment Loan	1998	Highly satisfactory	Uncertain	100

**Table C.4: Performance Ratings: Loans 30%–80% Devoted to Pension Reform Activities**

Country	Loan	Year	Loan outcome	Pension component outcome	Pension component (\$mm)
Albania	Technical Assistance for Social Safety Net Project	1994	Satisfactory	Satisfactory	3
Argentina	Capital Market Development Technical Assistance Project	1994	Satisfactory	Satisfactory	3
Bolivia	Financial Markets & Pension Reform Technical Assistance Project	1996	Satisfactory	Satisfactory	3
Hungary	Public Sector Adjustment Loan	1998	Satisfactory	Satisfactory	93
Hungary	Pension Administration & Health Insurance Project	1993	Unsatisfactory	Unsatisfactory	15
Kyrgyz Republic	Social Sector Adjustment Credit	1999	Satisfactory	Satisfactory	26
Kyrgyz Republic	Social Safety Net Project	1995	Moderately unsatisfactory	Satisfactory	7
Mexico	Contractual Savings Development Program	1997	Highly satisfactory	Satisfactory	200
Peru	Second Financial Sector Adjustment Loan	1999	Moderately satisfactory	Satisfactory	136
Russia	Social Protection Adjustment Loan	1997	Moderately unsatisfactory	Unsatisfactory	249



had significant negative effects on the prospects for adopting and implementing pension reform. Similarly, the 1993 Hungarian investment loan did not help support pension reform or implementation well even though the reform was successful overall.

***Large pension component expenditures, small pension component shares***

Of the 114 evaluated loans, 37 of the loans and credits contained a pension component amounting to \$10 million or more, although the median pension component share was less than 10 percent of the full loan (table C.5). The development outcome rating for the project overall often did not correlate with the rating for the pension component.

The Argentinean Special Structural Adjustment Loan was rated unsatisfactory but the pension component was satisfactory because new pension eligibility criteria were instituted the legislative and executive branches to improve the program's efficiency and curb abuses. Similarly, while the PPAR rated the 1996 Zambian loan

moderately unsatisfactory, the pension component was satisfactory because pension reforms were eventually implemented, even though they were delayed.<sup>10</sup>

By contrast, the pension components for Hungary, Kazakhstan, and Uruguay were deemed unsatisfactory even though the overall loans were satisfactory. According to the PPAR for the 1987 Uruguay loan, the Bank and government did not work well together. In Kazakhstan, pension arrears were not cleared—a key condition the loan. Similarly, in Hungary the financial stability in the pension system was increased, also a key objective of the loan. In addition, the reform of the social safety net was brought to a standstill and implementation was postponed indefinitely.

The pension components of loans to Bosnia-Herzegovina, Romania, Tunisia, and Ukraine also were unsatisfactory, although the overall loan was satisfactory. In Tunisia, the preparation of the social security reform was delayed because studies took longer than anticipated at the time the second tranche was released. Similarly, the pension component of the Romanian loan was

**Table C.5: Performance Ratings: Loans Less Than 30 Percent Devoted to Pension Activities with a Pension Component of at Least \$10 million**

Region/country	Loan	Year	Loan outcome	Pension component outcome	Pension component (\$mm) Africa
<b>Africa</b>					
Zambia	Fiscal Sustainability Credit	2000	Moderately satisfactory	Satisfactory	44
Zambia	Economic Recovery & Investment Credit	1996	Moderately unsatisfactory	Satisfactory	22
<b>East Asia and the Pacific</b>					
Korea, Republic	Structural Adjustment Loan Project	1998	Satisfactory	Satisfactory	225
Korea, Republic	Second Structural Adjustment Loan	1999	Satisfactory	Satisfactory	200
Korea, Republic	Economic Reconstruction Loan	1998	Satisfactory	Satisfactory	77
<b>Europe and Central Asia</b>					
Bosnia-Herzegovina	Public Finance Structural Adjustment Credit	1998	Satisfactory	Satisfactory	11
Bosnia-Herzegovina	Second Public Finance Structural Adjustment Credit	1999	Satisfactory	Satisfactory	11
Bosnia-Herzegovina	Transition Assistance Project	1997	Satisfactory	Unsatisfactory	10
Bulgaria	Social Protection Adjustment Loan	1999	Satisfactory	Satisfactory	16



**Table C.5: Performance Ratings: Loans Less Than 30 Percent Devoted to Pension Activities with a Pension Component of at Least \$10 million**

Country	Loan	Year	Loan outcome	Pension component outcome	Pension component (\$mm)
Croatia	Structural Adjustment Loan	2002	Satisfactory	Unsatisfactory	24
Hungary	Second Structural Adjustment Loan	1991	Moderately satisfactory	Unsatisfactory	10
Kazakhstan	Finance & Enterprise Development Project	1995	Satisfactory	Unsatisfactory	13
Lithuania	Structural Adjustment Project	1997	Satisfactory	Satisfactory	13
Lithuania	Second Structural Adjustment Loan	2001	Satisfactory	Satisfactory	13
Moldova	Second Structural Adjustment Loan	1998	Moderately satisfactory	Satisfactory	20
Romania	Structural Adjustment Loan	1992	Satisfactory	Unsatisfactory	17
Russia	First Rehabilitation Loan	1995	Moderately satisfactory	Satisfactory	20
Russia	Employment Services & Social Protection Project	1993	Moderately satisfactory	Satisfactory	12
Ukraine	Rehabilitation Loan	1995	Moderately satisfactory	Unsatisfactory	83
Ukraine	Coal Sector Adjustment Loan	1997	Satisfactory	Satisfactory	20
Ukraine	Programmatic Adjustment Loan	2002	Satisfactory	Non-evaluable	20
Uzbekistan	Rehabilitation Loan	1995	Unsatisfactory	Satisfactory	10
<b>Latin America &amp; Caribbean</b>					
Argentina	Special Structural Adjustment Loan	1999	Unsatisfactory	Satisfactory	101
Argentina	Special Repurchase Facility Support Loan	1999	Highly unsatisfactory	Unsatisfactory	19
Brazil	Rio de Janeiro State Reform-Privatization Project	1998	Satisfactory	Satisfactory	21
Brazil	Social Protection Special Sector Adjustment Loan	2000	Highly satisfactory	Satisfactory	16
Brazil	Programmatic Financial Sector Adjustment Loan	2001	Satisfactory	Satisfactory	12
Colombia	Structural Fiscal Adjustment Loan	2002	Moderately satisfactory	Satisfactory	50
Colombia	CO Programmatic FSAL I	2003	Satisfactory	Satisfactory	10
Ecuador	Programmatic Human Development Reform Loan	2003	Moderately satisfactory	Unsatisfactory	10
Panama	Economic Recovery Loan	1992	Highly satisfactory	Satisfactory	18
Peru	Structural Adjustment Loan	1992	Highly satisfactory	Satisfactory	56
Peru	Financial Sector Adjustment Loan	1992	Highly satisfactory	Satisfactory	42
Uruguay	Second Structural Adjustment Loan	1989	Satisfactory	Satisfactory	12
Uruguay	First Structural Adjustment Loan	1987	Satisfactory	Unsatisfactory	11
<b>Middle East and North Africa</b>					
Morocco	Contractual Savings Development Loan	1998	Moderately satisfactory	Satisfactory	25
Tunisia	Economic & Financial Reforms Support Loan	1992	Satisfactory	Unsatisfactory	25

unsatisfactory because studies addressing the long-term issue of financial viability of the PAYG schemes were not carried out.

In Bosnia, the earliest loan, the 1997 Transition Assistance Project, was satisfactory, but the pension component was unsatisfactory because the Bank remained unconvinced that programs proposed would be either fiscally sustainable or provide improved targeting. By contrast, two subsequent 1998 and 1999 loans had satisfactory pension components and were satisfactory overall. Ukraine's 1995 loan was moderately satisfactory, while the pension component was unsatisfactory because measures had not been introduced to strengthen the social safety net, in contrast to the loan objectives. While the Bank

and the government agreed on the principals of the reform by third tranche release, implementation was delayed.

In Korea, three very large pension components of loans undertaken in 1998 and 1999 were rated satisfactory. These loans started a national pension scheme that was to pay out full pensions starting in 1998. In addition, a "Compensation Fund" was started to finance an immediate means-tested, noncontributory social pension for the elderly. Measures were instituted to pave the way for opening up pension fund investments in securities other than government bonds or directed investments. The second structural adjustment loan laid groundwork for additional reforms of the pension system.

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## APPENDIX D: MULTI-PILLAR PENSION SYSTEMS, TRANSITION COSTS, AND SAVINGS

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Multi-pillar pension systems create a government revenue shortfall if they divert contributions used to pay current pensions from the PAYG system to the funded pillar. This transition debt may be debt-financed or tax-financed. Often, a combination of the two is used, with parametric PAYG reforms reducing budgetary expenditures so that the transition cost is less.

Countries can also fund the transition costs of multi-pillar pension reforms by issuing recognition bonds and/or new government securities, which may be purchased by the pension funds. Countries in Europe and Central Asia tended to have high pension liabilities before the transition, so that a Chilean-style reform would have created an extremely high transition deficit requiring significant reductions in expenditures or significant increases in government debt with resulting high fiscal deficits. For that reason, the choice of a more substantial PAYG pillar was wise. By contrast, pension systems in Latin America and the Caribbean were much smaller because of restricted coverage. Chilean-style systems were more feasible, as the transitional debt was considerably lower.

### *Debt-financed transition*

If the reform is a partial privatization of the pension system without reductions in other expenditures, it will be entirely debt-financed. In that case, the impact on national savings should be roughly neutral because the revenue losses will be fully offset by the increase in private savings (the flows to the mandatory second pillar accounts). In other words, the increase in explicit public debt is offset by the decrease in implicit debt—that is, the obligations to future pensioners from the old PAYG system.

However, a debt-financed transition also could have a net negative impact on saving if the interest

rate on explicit debt is higher than the implicit interest rate on the former implicit debt (the rate of return to the PAYG system). In that case, the explicit debt may increase more than the implicit debt declines. A second way in which a debt-financed transition could have a negative impact on savings is if financial markets reacted adversely to the growth of the explicit debt, even with a decrease in implicit debt. As a result, the interest rate on the explicit debt could increase because of a perception of higher risk. A completely debt-financed transition will not have any capital market effect, and pension funds will primarily hold government bonds.

### *Tax-financed transition*

*Tax-financed transition* is the term used to describe a fiscal adjustment that offsets revenue losses from the diversion of contributions to accounts that are either partly or fully funded. Such deficit reductions can come from: (1) tax increases, (2) reductions in other expenditures, (3) a parametric PAYG reform that creates a surplus offsetting the revenue losses from the transition to funding. In each case, the reduction in public savings would be smaller than the increase in private savings, leading to an increase in national savings, similar to that created by other types of fiscal adjustments.

### *Changes in personal saving*

Personal savings may react to the reform itself, but these changes are empirical and uncertain. Changes in personal savings brought about by pension reform are determined in large part by the importance of borrowing constraints that exist in most countries.

Most reforms include an increase in the retirement age. According to the overlapping-generations model, an increase in the retirement

age should lead to a decline in private savings, because when employees work for a longer period, they do not need to save as much to achieve their optimal retirement income goals and reach the savings level that would smooth their consumption levels over their retirement. Therefore, private savings should decline.

However, most reforms also include reductions in benefits through changes in indexation (from wages to prices) or direct changes in the benefit formula. According to the same overlapping-generations model, this should lead to an increase in private savings, for analogous reasons—the

changes reduce retirement income and disturb optimal savings plans to smooth consumption over the life cycle. Therefore, workers need to save more to restore optimal consumption smoothing. But consider a worker who is partly contributing to a second pillar in which the expected returns are higher than those of the PAYG system. This may reduce voluntary savings through the income effect, or increase them through a substitution effect. Most economists conclude that the income effect would dominate, but the net impact is likely to be very small.

APPENDIX E: INDICATOR TABLES

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Table E.1: Selected Indicators of All World Bank Client Countries: Europe and Central Asia

Country	Social indicators					Macroeconomic indicators								Financial indicators			
	2003 GDP PPP per capita (1995 intl \$)	2001 poverty rates (<\$1 day)	2001 GINI coefficient	2003 total population all ages	Percent population >65		Projected coverage rates <sup>a</sup>	Illiteracy rate (% popu- lation age >15) <sup>b</sup>	CPI inflation rate (%) <sup>c</sup>	Overall budget balance (% GDP) <sup>d</sup>	Gross domestic savings (% GDP) <sup>e</sup>	Tax revenue (% GDP) <sup>f</sup>	Central debt (% GDP) <sup>g</sup>	2002 aid (% GNI)	2002 governance rating	Market cap (% GDP) <sup>h</sup>	
					2003	2025											
Albania	3,975	0.23	28.14	3.2	7.26	10.4	16.6	39	1.29	0.48	-11.6	-1.41	16.55	51.86	6.39	-0.5	
Armenia	3,137	12.83	37.92	3.1	10.18	13.7	20.1	46.4	0.6	4.76		4.42		11.95	-0.4	1.35	
Azerbaijan	3,136	3.67	36.5	8.2	7.46	10.4	17.8	37.2		2.81	-2.9	29.38	16.62		5.97	-1	0.09
Belarus	5,228	0.08	30.35	9.9	14.01	18	23.9	58.9	0.32	28.4	-1.4	19.03	26.61	11.44	0.28	-1	
Bosnia & Herzegovina	5,243			4.1	10.68	18.6	25.4	46.9	5.4		-12.49				10.05	-0.9	
Bulgaria	6,789	4.73	31.91	7.8	16.72	19.4	25	69.9	1.44	2.16	1.9	13.36	25.23		2.49	-0.1	8.84
Croatia	9,687	0.08	31.1	4.5	15.62	19.5	22.5	67.6	1.85	0.12	-2.4	17.95	37.59		0.75	0.2	21.63
Czech Republic	14,304	0.12	25.82	10.2	13.91	18.6	25.3	64.9		0.1	-1.9	25.83	32.08	16.74	0.6	0.7	20.67
Estonia	11,608	0.05	37.64	1.4	15.19	19.3	26	69.4	0.2	1.3	2.5	20.11	27.17	2.65	1.12	0.8	45.21
Georgia	2,234	2.71	36.9	5.1	14.2	15.7	19.8	53.2		5.56	0.1	9.44	10.36	56.74	9.36	-0.8	
Hungary	12,673	0.34	24.44	10.1	14.63	18.9	24.1	75.3	0.64	4.64	-3.9	22.14	33.55	53.06	0.77	0.8	20.2
Kazakhstan	5,701	0.11	31.3	14.9	8.11	11.5	16.9	43.4	0.56	6.44	-0.4	27.97	9.64	17.66	0.8	-0.8	5.42
Kyrgyz Republic	1,491	0.86	29.03	5.1	6.14	8	14.2	36.2		3.5	0.4	13.22	12.44	99.33	12.05	-0.8	0.27
Latvia	8,680	1.25	33.62	2.3	15.51	18.2	22.8	65.9	0.25	2.87	-1.7	20.68	24.03	14.81	1.03	0.7	11.8
Lithuania	9,784	0.47	31.85	3.5	14.19	17.6	22.6	64.6	0.35	-1.67	-0.4	15.48	22.11	22.77	1.06	0.6	19.27
Macedonia, FYR	5,881	0.83	28.21	2	10.64	15.6	20.5	53.1		0.08		3.44			7.36	-0.4	1.34
Moldova	1,308	21.78	36.18	4.2	11.04	13.8	18	46.1	0.95	11.75	-6.4	-12.26	19.99	54.92	7.82	-0.6	23.66
Poland	10,108	0.39	31.6	38.2	12.59	17.2	21.2	63.7		0.72	-4.2	13.51	25.86	38.33	0.61	0.6	17.73
Romania	6,280	1.5	30.25	22.2	13.86	17.5	25.5	63.2	2.7	15.27	-3.1	15.31	22.8	0.44	1.55	-0.3	9.25
Russian Federation	7,997	4.79	45.62	143.4	13.21	18	23.3	62.5	0.41	13.67	3.5	31.22	22.71	49.35	0.38	-0.4	53.24
Serbia & Montenegro				8.1	18.42	17	19.7					-5.2			12.4		0.06
Slovak Republic	11,713	0.21	25.81	5.4	11.45	16.5	23.3	66.1	0.32	8.55	-3.2	23.76	28.96	41.34	0.8	0.4	8.72
Slovenia	16,784	0.02	28.41	2	14.82	21	29.3	77.5	0.35	5.6	-1.1	25.21	35.01	26.41	0.78	0.8	19.82
Tajikistan	973	8.02	31.52	6.3	4.63	6.1	12.8	30.9	0.51		0.1	-0.27	10.49	81.45	14.82	-1.2	
Turkey	5,869	1.22	40.03	70.7	5.9	9.9	18.6	21.9	13.5	25.3	-19.6	19.68	24.17	99.88	0.35	-0.2	28.73
Turkmenistan	5,117	9.85	40.77	4.9	4.46	6.6	13.1	34.8	1.22			32.09			0.89	-1.5	
Ukraine	4,759	1.53	28.96	48.4	15.13	18.6	24.4	62.4	0.36	5.21	-0.9	23.99	21.68	36.55	1.16	-0.7	8.69

Table E.2: Selected Indicators of All World Bank Client Countries: Latin America and the Caribbean

Country	Social indicators				Macroeconomic indicators							Financial indicators				
	2003 GDP PPP per capita (1995 int'l \$)	2001 poverty rates (<\$1 day)	2001 GINI coefficient	2003 total population all ages	Percent population >65		Projected coverage rates <sup>a</sup>	Illiteracy rate (% popu- lation age >15) <sup>b</sup>	CPI inflation rate (%) <sup>c</sup>	Overall budget balance (% GDP) <sup>d</sup>	Gross domestic savings (% GDP) <sup>e</sup>	Tax revenue (% GDP) <sup>f</sup>	Central debt (% GDP) <sup>g</sup>	2002 aid (% GNI)	2002 governance rating	Market cap (% GDP) <sup>h</sup>
					2003	2050										
Antigua and Barbuda	8,818			0.1	7.64						21.79			2.03	0.6	
Argentina	10,075	3.33	52.24	38.4	9.79	12.3	17.8	3.01	13.44	-3.3	25.89	12.47		0	-0.5	30.01
Belize	5,791			0.3	4.63	5.8	15.1	23.09	2.58		9.94			2.68	-0.1	
Bolivia	2,215	14.52	44.68	9	4.33	6.1	11.6	13.28	3.34	-7.9	8.03	13.78	69.35	8.96	-0.5	19.44
Brazil	6,755	8.17	59.25	176.6	5.37	10.3	17.9	13.63	14.72	-7.8	22.03	20.63		0.08	-0.2	47.64
Chile	8,875	0.89	57.61	15.8	7.4	12.7	17.9	37.5	2.81	-0.3	25.34	18.71	15.62	-0.03	1.2	119.16
Colombia	5,899	8.06	57.92	44.4	4.77	9.7	16.4	27.8	7.13	-7	14.38	10.6	29.3	0.57	-0.4	18.38
Costa Rica	8,252	2.02	46.6	4	5.77	9.7	15.6	29.9	9.45	-1.2	16.18	20.05	38.36	0.03	0.4	14.56
Dominica	4,740			0.1	8.44				1.55		2.83			12.91	0.3	
Dominican Republic	5,829	0	47.44	8.7	4.53	9.4	17.1	23	15.63	1	12.76	15.57	20.71	0.78	-0.4	0.81
Ecuador	3,203	17.15	53.39	13	4.84	8.6	16.3	9.02	7.93	0	17.91	12.4		0.95	-1	8
El Salvador	4,343	31.66	53.27	6.5	4.99	7	15.9	24.3	2.12	-0.3	0.78	1.63	3.6	1.67	-0.5	11.01
Grenada	6,381			0.1	7.65				1.07	2.2	22.2	23.08		2.52	0.4	
Guatemala	3,584	15.97	59.87	12.3	3.45	4.9	9.5	19.8	30.14		5.13			1.08	-0.6	
Guyana	3,647	0.42	44.58	0.8	4.81	8.9	16.9	24.1	5.34		7.09			9.68	-0.3	
Haiti	1,422			8.4	3.46	4.1	7	16.8	39.28		-3.13			4.72	-1.6	
Honduras	2,312	19.93	56.24	7	3.33	5.7	12.4	16.9	7.67		11.91			6.78	-0.7	8.7
Jamaica	3,639	0.35	38.82	2.6	6.93	9.4	18.7	30.4	10.32	-3.2	8.28	26.08	142.48	0.33	-0.1	108.74
Mexico	7,945	9.85	54.93	102.3	5.15	9.3	17.8	29.9	4.55	-1.3	18.16	13.2	23.22	0.02	0.2	19.57
Nicaragua	2,194	50.48	55.13	5.5	3.05	5.6	12.7	16	23.32	-4.4	5.96	16.49		13.58	-0.9	
Panama	5,631	8.01	56.56	3	5.8	10.5	17.9	28	7.68	0.1	23.04	14.1		0.29	-0.1	21.56
Paraguay	4,108	13.9	56.85	5.6	3.56	6.2	11.3	22.5	14.17	-0.8	10.59	10.14	12.76	1.01	-1.3	5.46
Peru	4,580	18.12	49.82	27.1	4.97	8.6	16.6	24.2	2.26	-1.9	17.84	13.64	44.29	0.89	-0.5	26.31
St. Kitts and Nevis	11,097			0	10.7				3.91	0.9	22.3	23.55		9.28	-0.1	
St. Lucia	4,887	23.23	42.58	0.2	5.6		30.2		0.94	1.7	12.76	23.62		5.3	-0.1	
St. Vincent and the Grenadines	5,971			0.1	8.24				0.26	-6.3	18.74	27.57	62.56	1.38	-0.1	
Trinidad and Tobago	8,675	1.73	40.27	1.3	6.4	11.8	19.8	34.8	3.74	0	27.9	23.27	51.51	-0.08	0.5	103.96
Uruguay	7,201	0.23	44.56	3.4	12.63	13.4	17.9	53.3	19.38	-4.7	14.9	23.39	24.53	0.11	0.5	0.82
Venezuela, RB	4,269	15.37	49.53	25.5	4.57	9	15.7	25.9	31.09	-4.3	23.85	12.23		0.06	-1.1	4.51

Table E.3: Selected Indicators of All World Bank Client Countries: Africa

Country	Social indicators					Macroeconomic indicators							Financial indicators		
	2003 GDP PPP per capita (1995 int'l \$) <sup>a</sup>	2001 poverty rates (<\$1 day)	2001 GINI coeffi- cient	2003 total population		Illiteracy rate (% popu- lation age >15) <sup>c</sup>	Projected coverage rates <sup>b</sup>	CPI inflation rate (%) <sup>d</sup>	Overall budget balance (% GDP) <sup>e</sup>	Gross domestic savings (% GDP) <sup>f</sup>	Tax revenue (% GDP) <sup>g</sup>	Central debt (% GDP) <sup>h</sup>	2002 aid (% GNI)	2002 gover- nance rating	Market cap (% GDP) <sup>h</sup>
				2003	2050										
Angola	2,017			13.5	2.95	3	5.5	8.4	98.23		36.71		4.53	-1.2	
Benin	978			6.7	2.65	3.5	6.8	60.24	1.49		7.19		8.25	-0.6	
Botswana	7,269	22.04	66.7	1.7	2.32	3.9	9.9	15.4	9.19	8.1	39.44	15.07	11.26	0.9	28.84
Burkina Faso	1,023	48.7	46.85	12.1	2.71	2.5	5.3	7.6	2.03		3.89	7.25	70.41	-0.7	
Burundi	545	56.97	42.39	7.2	2.54	3.6	7	6.3	15.96	-4.9	-0.16	16.71	183.92	-1.5	
Cameroon	1,799	17.1	44.55	16.1	3.69	4	7.6	9.9	2.8	0.1	16.49	12.78	104.63	-0.6	
Cape Verde	4,826			0.5	3.83	4.2	13	16.6	1.88		-15.4		14.59	-0.2	
Central African Republic	943	64.41	61.33	3.9	3.53	4.3	7.7	9.8	3.39		11.93		5.75	-1.4	
Chad	1,049			8.6	2.8	3.9	6.7	7.6	-1.88	-12.5	12.17	4.76	33.41	-0.8	
Comoros	1,529			0.6	2.67	3.3	7.4	7.4	43.78		0.65		13.11	-0.8	
Congo, Dem. Republic	586			53.2	2.56	3.1	5.6	6.5	31.52	0	4.11	0.04	152.19	-1.6	
Congo, Rep.	824			3.8	3.03	3.2	6.1	8.5	-0.85	5.8	47.14	10.54	160.59	-1.3	
Cote d'Ivoire	1,277	16.75	43.75	16.8	2.58	4	9	7.7	3.35	0.4	25.68	16.35	102.57	-0.9	12.02
Equatorial Guinea				0.5	3.85	4.1	6.7	12.4			19.86		2.76	-1.4	
Eritrea	831			4.4	2.64	4.1	7.8	6.5			-37.92		30.82	-0.4	
Ethiopia	622	22.98	30.01	68.6	2.81	3.2	5.4	6.2	17.78	-5	1.78	12.9	101.4	-0.9	
Gabon	5,335			1.3	5.58	5.5	7.6	25.7	0.5	-1.7	54.48	20.46	1.73	-0.5	
Gambia	1,491	21.97	50.23	1.4	3.17	4.8	7.5	8.2	4.94	-2.8	2.29	18.2		-0.8	
Ghana	1,943	47.46	40.71	20.4	4.48	4.3	8.2	9.6	26.67		5.64	13.15	5.42	0	18.61
Guinea	1,858			7.9	2.54	3	5.4	8.1		-7.1	10.77	11.2	7.91	-0.8	
Guinea-Bissau	592			1.5	3.43	4.1	6.5	9.2	-1.62		-21.97		30.49	-1.4	
Kenya	900	29.82	44.93	31.9	2.66	3.9	10.6	6.5	9.82	-1.8	11.07	21.11	68.8	-0.9	30.19
Lesotho	2,301	39.05	63.16	1.8	5.19	4.8	8.7	11.6	6.67	-6.1	-17.99	34.41	67.77	-0.3	
Liberia				3.4	2.79	4.1	7.2	44.12					11	-1.5	
Madagascar	703	61.03	47.45	16.9	3.02	3.3	7.5	7	-1.22	-5.3	8.1	11.33	119.81	-0.4	
Malawi	538	49.73	50.31	11	3.36	2.8	6	6.4	9.57	-5.6	-5.07	17.23	62.74	-0.7	9.24
Mali	864	64.25	50.5	11.7	2.76	3	5.6	8.5	-1.35	-7.0	20.0	14.1	88.6	-0.8	
Mauritania	1,649	21.37	39.03	2.7	3.3	4.4	8.5	8.9	5.15		0.06		31.53	-0.2	111
Mauritius	9,790			1.2	6.37	11.7	17.5	28.7	4.23	0.8	25.18	17.33	32.5	0.5	37.42
Mozambique	985	33.71	39.61	18.8	3.61	3.4	6.2	53.51	13.37		29.97		60.37	-0.4	



Namibia	5,544	32.83	74.33	2	3.77	4.5	8.3	18.2	16.69	7.19	-5.4	13.76	29.65	4.48	0.2	5.89
Niger	719	64.71	50.61	11.8	2.29	2.8	5.1	4.5	82.94	-1.61		6.26		13.84	-0.8	
Nigeria	891	69.91	50.56	135.6	2.66	3.8	6.9	6.7	33.2	14.02		17.18		0.85	-1.1	18.91
Rwanda	1,103	38.45	28.9	8.3	2.96	2.9	7.6	7.5	30.76	6.94	-9.3	1.1	9.3	48.43	-0.8	
São Tomé and Príncipe	376			0.2	6.37					10.2	-19.6	-16.2	18.3	35.5	-0.6	
Senegal	1,463	15.12	41.28	10	2.68	3.9	7.4	6.9	60.75	-0.03		10.67	17.05	56.01	-0.2	
Seychelles	14,735			0.1	7.17				8.14	3.3	-14.1	19.38	31.44	9.25	0	
Sierra Leone	483			5.3	2.6	3.3	5.8	6.3		7.6	-6.9	-12.33	6.82	1.25	-1.5	
Somalia				9.6	2.4	2.9	5.3					-12.45		47	-2	
South Africa	9,124	10.71	57.77	45.3	4.33	6.7	11.7	24.1	14.02	5.98	-1	18.85	26.29	46.8	0.5	167.46
Sudan	1,779			33.5	3.58	5	10.3	8.9	40.08	5.85	-0.9	24.66	6.35	8.61	-1.1	
Swaziland	4,104	8.46	60.65	1.1	2.8	4.5	10.3	13.4	19.07	7.29	-1.9	9.2	26.71	28.74	-0.4	9.96
Tanzania	531			35.9	2.42	3.3	7.2	4.6	22.93	4.43		8		13.22	-0.5	4.26
Togo	1,328			4.9	3.17	3.3	6.5	8.6	40.36	-0.96		7.98		3.77	-1.2	
Uganda	1,279	84.31	43.11	25.3	1.87	5.8	12	5.9	31.11	7.83	-6.2	8.3	10.79	39.62	-0.4	0.64
Zambia	768	63.32	52.6	10.4	2.29	2.3	7.1	6.1	20.13	22.23		4.9		11.22	-0.9	5.97
Zimbabwe	2,124	58.26	50.12	13.1	3.07	3.7	9.2	10.9	10	140.08		10.58	26.37	58.1	-0.8	187.85

Table E.4: Selected Indicators of All World Bank Client Countries: Middle East and North Africa

Country	2003 GDP PPP per capita (1995 int'l \$)	Social indicators					Macroeconomic indicators							Financial indicators			
		2001 poverty rates (<\$1 day)	2001 GINI coefficient	Percent population >65		Projected coverage rates <sup>a</sup>	Illiteracy rate (% popu- lation age >15) <sup>b</sup>	CPI inflation rate (%) <sup>c</sup>	Overall budget balance (% GDP) <sup>d</sup>	Gross domestic savings (% GDP) <sup>e</sup>	Tax revenue (% GDP) <sup>f</sup>	Central debt (% GDP) <sup>g</sup>	2002 aid (% GNI)	2002 governance rating	Market cap (% GDP) <sup>h</sup>		
				2003	2025												
Lending countries																	
Algeria	5,433	1.37	35.33	31.8	4.05	6.4	14	17.2	31.14	2.58	4	46.45	31.98	50.42	0.67	-0.6	
Brunei				0.4	2.81	12.1	17.4	38.1								1	
Djibouti	1,864			0.7	3.12	4.5	8.4	8.7				-5.35			12.91	-0.9	
Egypt	3,435	3.08	34.41	67.6	4.3	8	14.2	13.9	44.41	4.25	-2.2	15.23	16.5		1.43	-0.3	32.84
Iran	6,214	0.16	44.1	66.4	4.69	5.4	11.2	16.5	22.93	16.47	-0.6	26.58	8.47		0.1	-0.5	8.29
Iraq				24.7	3.06	4.9	10.1									-1.6	
Jordan	3,756	0.29	36.42	5.3	3.17	3.9	9.2	11.8	9.1	2.34	-2.6	-2.81	18.99	91.88	5.74	0.4	111.19
Lebanon	4,412			4.5	5.87	7.7	15.5	20.5			-20.6	-8.98	14.06	135.23	2.53	-0.4	7.88
Morocco	3,489	0.53	39.46	30.1	4.36	7.7	15.7	14.8	49.27	1.17	-2.5	16.68	25.01	72.78	1.8	0.1	29.56
Syria	3,109			17.4	3.15	4.6	12.2	11.4	17.11	0.97	0.7	23.75	17.43		0.42	-0.6	
Tunisia	6,160	0.27	40.81	9.9	6.07	8.2	16.3	22.3	26.83	2.72	-2.6	20.8	26.03	62.56	2.37	0.7	10.15
Yemen, Rep.	773	13.95	33.44	19.2	2.61	2.4	5.7	5.5	51.02	10.83	-2.3	12.44	9.42		6.33	-0.9	
West Bank and Gaza				3.4	3.06	2.5	4.5					-36.52			42.9	-1	17.92
Nonlending countries																	
Bahrain	15,196			0.7	2.67	12.8	17.8	30.8	11.5	1.22	-6.9	33.6	7.21	30.66	0.97	0.8	89.16
Israel	17,300			6.7	9.61	13.4	18.8	58.8	4.69	-0.6	-3.6	9.32	36.18	99.06	0.75	1	43.78
Kuwait	14,455			2.4	1.81	10.3	17.7	34.9	17.06	1.19	-9.7	17.82	3.43		0.01	0.2	56.1
Libya				5.6	3.69	4.1	7.6		18.34			25.52				-0.9	
Malta	15,771			0.4	12.53			55.8	7.38	0.54	-6.3	15.18	27.71	55.88	0.29	1.2	37.18
Oman	11,813			2.6	2.77	3.8	5.5	26	25.59	-0.42	-4.3	34.13	7.39	19.87	0.21	0.7	19.7
Qatar				0.6	3.04	17.9	14			2.27		31.96			0.01		29.01
Saudi Arabia	11,377			22.5	2.88	6.1	9.2	26.5	22.12	0.6		37.33			0.01	-0.1	39.74
United Arab Emirates	18,461			4	2.3	17.2	16.9		22.74			30.11	1.77		0.01	0.8	11.39

Table E.5: Selected Indicators of All World Bank Client Countries: East Asia and the Pacific

Country	Social indicators					Macroeconomic indicators								Financial indicators	
	2003 GDP PPP per capita (1995 int'l \$)	2001 poverty rates (<\$1 day) <sup>a</sup>	2001 GINI coeffi- cient <sup>b</sup>	Percent population >65		Projected coverage rates <sup>c</sup>	Illiteracy rate (% popu- lation age >15) <sup>d</sup>	CPI inflation rate (%) <sup>e</sup>	Overall budget balance (% GDP) <sup>f</sup>	Gross domestic savings (% GDP) <sup>g</sup>	Tax revenue (% GDP) <sup>h</sup>	Central debt (% GDP) <sup>i</sup>	2002 aid (% GNI)	2002 gover- nance rating	Market cap (% GDP) <sup>j</sup>
				2003	2025										
Cambodia	1,904	38.1	40.39	13.4	2.65	5.4	9.3	30.58	1.22	14.03			12.69	-0.6	
China	4,344	0.33	33.32	1288.4	7.3	12.2	19.2	9.08	1.16	43.17	6.76	12.69	0.12	0.2	48.32
Fiji	4,798			0.8	3.83	9.3	16.7	7.06	4.17	20.31	21.29	36.64	1.92	0.1	5.81
Indonesia	2,926	7.51	34.3	214.5	4.88	8.3	15.8	12.13	5.83	21.5	13.57	45.21	0.79	-0.6	26.24
Kiribati				0.1	3.13					-45.12			22.86	0.1	
Korea, Dem. Rep.				22.6	6.62	11.4	18.8							0.8	
Korea, Rep.	15,574			47.9	7.51	14.7	23.1		3.55	31.91	15.97	9.58	-0.01	-1.8	54.45
Lao	1,649	32.6	37	5.7	3.5	3.8	7	33.56	15.49	13.11			16.22	-0.8	
Malaysia	8,432	0.5	49.15	24.8	4.38	8.3	15	23.2	1.06	39.9	18.93		0.1	0.9	163.22
Marshall Islands				0.1									48.43	-0.4	
Micronesia, Fed. Sts.				0.1	4								45.58	-0.3	
Mongolia	1,567	20.18	30.27	2.5	4.11	5.9	14	10.3	2.2	8	18.11	23.05	83.52	-0.2	3.53
Myanmar				49.4	4.5	6.8	13.2	14.72	57.07	12.35	2.97			-1.3	
Palau				0									21.16		
Papua New Guinea	2,179			5.5	2.49	4.5	9.7	9	14.71	21.62	21.91	63.88	7.64	-0.8	
Philippines	3,758	15.04	46.09	81.5	3.94	7.2	13.2	13.5	7.4	3.06	16.25	64.92	0.67	-0.1	29.25
Samoa	4,993			0.2	5.06	6.5	15.5	17.9	1.32	0.15			14.52	0.2	
Solomon Islands	1,426			0.5	2.63	4.5	9.5	9	10.01	3.01	18.95		10.91	-1.3	
Thailand	6,592	4.5	43.15	62	6.58	12.1	21.7	22.8	7.35	1.82	29.44	14.41	29.77	0.3	84.44
Timor-Leste				0.8	2.84	5.4	10			-47			58.29	-0.8	
Tonga	6,066			0.1	8.82			1.2	11.62	-24.95	19.67		16.44	-0.6	
Vanuatu	2,543			0.2	3.33	5.2	9.7	12.5	1.99	7.63	19.61	31.26	11.89	-0.6	
Vietnam	2,165	2.56	35.52	81.3	5.25	7.5	16.1	14.2	9.72	28.08	16.36		3.64	-0.3	

Table E.6: Selected Indicators of All World Bank Client Countries: South Asia Region

Country	Social indicators					Macroeconomic indicators							Financial indicators		
	2003 GDP PPP per capita (1995 intl \$)	2001 poverty rates (<\$1 day) <sup>a</sup>	2001 GINI coeffi- cient <sup>b</sup>	Percent population >65		Projected coverage rates <sup>c</sup>	Illiteracy rate (% popu- lation age >15) <sup>d</sup>	CPI inflation rate (%) <sup>e</sup>	Overall budget balance (% GDP) <sup>f</sup>	Gross domestic savings (% GDP) <sup>g</sup>	Tax revenue (% GDP) <sup>h</sup>	Central debt (% GDP) <sup>i</sup>	2002 aid (% GNI)	2002 gover- nance rating	Market cap (% GDP) <sup>j</sup>
				2003	2025										
Afghanistan				28.8	2.82	3.6	6.9			-16.33				-1.4	
Bangladesh	1,553	36.0	31.8	138.1	3.35	5.8	13.4	4.57	-3.1	17.63	6.97	40.1	1.83	-0.5	3.12
Bhutan				0.9	4	4	6.9	2.48	-14.5	27.86	7.71	63.16	13.72	0.9	8.54
India	2,530	34.7	32.5	1064.4	5.06	8.4	15.2	38.7	-4.8	21.84	9.93	57.66	0.29	-0.1	46.6
Maldives				0.3	4.1	3.8	7.9	2.79	-6.7	46.12	13.42	47.84	4.55	0.8	
Nepal	1,233	37.7	36.7	24.7	3.81	10.8	17.5	55.99	-6.1	11.15	9.57	66.47	6.66	-0.5	14.57
Pakistan	1,714	13.4	33.0	148.4	3.35	5.3	10.3	58.55	-4.7	15.56	12.9	90	3.59	-0.5	24.09
Sri Lanka	3,284	6.6	34.4	19.2	6.65	11.9	19.4	7.92	-10.2	15.6	14.55	103.07	2.11	0	14.64

**Notes to tables E.1-6**

Data from SIMA, except 2002 governance ratings, poverty rates, gini coefficient and where noted. 2002 Governance ratings from [http://info.worldbank.org/governance/kkz2002/year\\_report.asp?yearid=1](http://info.worldbank.org/governance/kkz2002/year_report.asp?yearid=1) (see "Governance Matters III: Governance Indicators for 1996-2002" (World Bank Policy Research Working Paper 3106). Poverty Rates and Gini Coefficient from PovCalNet.

**Table E.1: ECA**

a. São Tomé and Príncipe data provided by management.

b. IEG estimates.

c. 2002 data except 2001 for Albania, Armenia, Croatia, Lithuania, Slovak Republic; 2000 for Bosnia & Herzegovina, Estonia, Latvia, Tajikistan, Turkey; 1995 for Turkmenistan.

d. 2003 data except 2002 for Azerbaijan and Georgia. Estonia data from <http://www.stat.ee/123387>. Sao Tome and Principe data provided by management.

e. 2001 data except 1999 for Azerbaijan; 1998 for Albania; 1995 for Moldova. Sao Tome and Principe data provided by management.

f. 2003 data except 2002 for Albania, Croatia, Georgia, Hungary; 2001 for Turkmenistan. São Tomé and Príncipe data provided by management.

g. 2001 data except 2002 for Georgia, Moldova; 1999 for Azerbaijan; 1998 for Albania. São Tomé and Príncipe data provided by management.

h. 2001 data except 2002 for Georgia, Moldova; 2000 for Romania; 1998 for Albania. São Tomé and Príncipe data provided by management.

i. 2003 data except 2001 for Kazakhstan, FYR Macedonia, Moldova; 2000 for Serbia & Montenegro. São Tomé and Príncipe data provided by management.

j. Uzbekistan; 1999 for Armenia, Azerbaijan; 1996 for Kyrgyz Republic.

**Table E.2: LAC**

a. 2003 data except 2002 for Belize.

b. Urban data only for Uruguay.

c. Urban data only for Argentina and Uruguay.

d. IEG estimates.

e. 2002 data except 2001 for Bolivia, Ecuador, Honduras, Nicaragua, Paraguay, 2000 for Belize, Mexico.

f. 2003 data except 2002 for El Salvador, Guyana; 1999 for St. Kitts & Nevis.

g. 2003 data except 2002 for Antigua & Barbuda, Belize, Brazil, Dominica, Grenada, Guyana, Haiti, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines.

- h. 2001 data except 2000 for Mexico; 1999 for Colombia, Dominican Republic; 1995 for Trinidad & Tobago; 1994 for Uruguay; 1993 for Paraguay.  
i. 2003 data except 2001 for Bolivia, El Salvador, Uruguay; 1998 for Honduras.

**Table E.3: AFR**

- a. 2003 data except 2001 for Zimbabwe.  
b. IEG estimates.  
c. 2002 data except 2001 for Cameroon, Lesotho; 2000 for Central African Republic, Mali, Mauritius.  
d. 2003 data except 2002 for Cameroon, Cape Verde, Central African Republic, Democratic Republic of Congo, Gambia, Zambia, Zimbabwe; 2001 for Sudan; 2000 for Gabon. Mali data provided by management.  
e. 2001 data except 2000 for Madagascar, Malawi, Seychelles; 1999 for Burundi, Cameroon, Ethiopia, Sudan; 1998 for Lesotho; 1997 for Sierra Leone; 1996 for Botswana, Kenya; 1993 for Rwanda; 1991 for Chad, Gabon, Guinea, Swaziland; 1990 for Gambia. Mali data provided by management.  
f. 2003 data except 2002 for Democratic Republic of Congo, Mozambique, Zimbabwe; 2000 for Somalia; 1998 for Equatorial Guinea. Mali data provided by management.  
g. 2001 data except 2000 for Madagascar, Namibia, Seychelles, Swaziland; 1999 for Burundi, Cameroon, Ethiopia, Guinea, Sierra Leone, Sudan; 1998 for Kenya, Lesotho; 1997 for Zimbabwe; 1996 for Botswana; 1993 for Burkina Faso, Ghana; 1992 for Rwanda; 1991 for Chad, Gabon; 1990 for Gambia, Malawi. Mali data provided by management.  
h. 2001 data except 2000 for Republic of Congo, Swaziland; 1999 for Burundi, Cameroon, Ethiopia, Sierra Leone, Sudan; 1998 for Kenya, Lesotho; 1997 for Democratic Republic of Congo, Zimbabwe; 1996 for Botswana; 1995 for Madagascar; 1994 for Burkina Faso; 1993 for Ghana; 1992 for Rwanda; 1991 for Chad; 1990 for Malawi.  
i. 2002 data except 2001 for Equatorial Guinea, Zimbabwe.  
j. 2003 data except 2002 for Namibia, Zimbabwe; 2001 for Malawi, Mauritania, Swaziland, Tanzania, Uganda, Zambia.

**Table E.4: MNA**

- a. 2003 data except 2002 for Bahrain, Israel, Kuwait, Malta; 1998 for United Arab Emirates.  
b. IEG estimates.  
c. 2002 data except 2001 for Iran; 1996 for Egypt.  
d. 2003 data except 2002 for Bahrain and Syria.  
e. 2001 data except 2000 for Iran, Tunisia; 1999 for Bahrain, Kuwait, Syria; 1998 for Malta; 1997 for Egypt; 1996 for Lebanon, Yemen.  
f. 2003 data except 2002 for Bahrain, Kuwait, Libya, Oman, Saudi Arabia; 2000 for Djibouti; 1998 for United Arab Emirates; 1997 for Qatar.  
g. 2001 data except 2000 for Iran, Tunisia; 1999 for Kuwait, Lebanon, Morocco, Syria, United Arab Emirates, Yemen; 1998 for Malta; 1997 for Egypt.  
h. 2001 data except 2000 for Tunisia; 1999 for Lebanon, Morocco; 1998 for Malta.  
i. 2002 data except 1998 for United Arab Emirates; 1997 for Qatar.  
j. 2003 data except 2002 for Bahrain, Israel, Oman, Saudi Arabia; 2001 for Iran, Malta, United Arab Emirates, West Bank & Gaza; 2000 for Kuwait, Qatar.

**Table E.5-6: EAP and SAR**

- a. Urban data only for China and India. Cambodia, Lao, Malaysia, Thailand data from East Asia Regional Update on "Reducing Rural Poverty" (November 2002). Bangladesh, India, Nepal, Pakistan, Sri Lanka data from World Development Indicators.  
b. Urban data only for China and India.  
c. IEG estimates.  
d. 2002 data except 2001 for India; 2000 for China, Malaysia, Mongolia, Philippines, Thailand; 1999 for Vietnam; 1998 for Pakistan; 1996 for Fiji, Tonga.  
e. 2003 data except 2002 for Myanmar, Vanuatu, Bhutan; 2001 for Mongolia.  
f. 2001 data except 2000 for Myanmar; 1999 for Bangladesh, Indonesia, Papua New Guinea; 1997 for Republic of Korea, Malaysia; 1996 for Fiji; 1991 for Tonga; 1990 for Vanuatu.  
g. 2003 data except 2002 for Afghanistan, Cambodia, Maldives, Vietnam; 2001 for Bhutan, Fiji, Timor-Leste, Tonga; 2000 for Papua New Guinea, Vanuatu; 1999 for Myanmar; 1998 for Lao; 1990 for Solomon Islands.  
h. 2002 data except 2001 for India, Indonesia, Mongolia, Philippines, Sri Lanka, Thailand; 2000 for Myanmar; 1999 for Bangladesh, China, Papua New Guinea, Vanuatu; 1997 for Republic of Korea, Malaysia; 1996 for Fiji; 1991 for Solomon Islands, Tonga.  
i. 2001 data except 2002 for Maldives, Nepal; 2000 for Pakistan; 1999 for China, Indonesia, Papua New Guinea, Vanuatu, Bangladesh; 1997 for Republic of Korea; 1994 for Fiji.  
j. 2003 data except 2000 for Nepal; 1999 for Fiji, Mongolia, Bhutan.



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APPENDIX F: REFERENCE TABLES

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Table F.1: Overall World Bank Performance Ratings for Completed Pension Projects Relative to Projects in Other Sectors

Project	Evaluated projects		Outcome satisfactory		Sustainability likely		Institutional development impact substantial		Bank performance satisfactory		Borrower performance satisfactory	
	Number of projects	Commitments (\$mm)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)
Pension component <30%	120	25,332	88	83	78	76	55	44	87	86	80	75
Pension component 30–80%	10	1,859	70	49	80	78	50	11	60	33	80	50
Pension component >80%	10	2,506	100	100	70	68	80	54	100	100	100	100
All pension projects	140	29,697	87	82	77	75	57	43	86	84	81	75
<b>World Bank</b>	<b>3,391</b>	<b>259,968</b>	<b>70</b>	<b>76</b>	<b>56</b>	<b>66</b>	<b>38</b>	<b>43</b>	<b>75</b>	<b>80</b>	<b>70</b>	<b>74</b>

*Note:* Two pension projects were not rated for institutional development impact and were excluded from the institutional development calculations. Outcome satisfactory (highly satisfactory, satisfactory, moderately satisfactory). Sustainability likely (highly likely, likely). Institutional development impact substantial (high, substantial). Bank performance satisfactory (highly satisfactory, satisfactory). Borrower performance satisfactory (highly satisfactory, satisfactory). World Bank projects from approval fiscal years 1984 to 2003.



Table F.2: Overall Performance Ratings for Completed Projects with Pension Component (x&lt;30%), by Region

Region	Evaluated projects		Outcome satisfactory		Sustainability likely		Institutional development impact substantial		Bank performance satisfactory		Borrower performance satisfactory	
	Number of projects	Commitments (\$mm)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)
Africa	11	914	73	72	55	55	55	47	82	81	73	72
East Asia and Pacific	4	7,040	75	99	100	100	33	50	75	99	100	100
Europe and Central Asia	61	7,517	89	93	80	83	56	53	92	88	80	77
Latin America and Caribbean	30	6,762	87	48	77	41	69	38	83	78	77	40
Middle East and North Africa	7	1,003	100	100	86	85	29	37	86	75	86	75
South Asia	7	2,096	100	100	71	84	29	19	71	72	86	95
<b>All Regions</b>	120	25,332	88	83	78	76	55	44	87	86	80	75

Note: Two pension projects were not rated for institutional development impact and were excluded from the institutional development calculations. Outcome satisfactory (highly satisfactory, satisfactory, moderately satisfactory). Sustainability likely (highly likely, likely). Institutional development impact substantial (high, substantial). Bank performance satisfactory (highly satisfactory, satisfactory). Borrower performance satisfactory (highly satisfactory, satisfactory).

Table F.3: Overall Performance Ratings for Completed Projects with Pension Component (30%&lt;x&lt;80%), by Region

Region	Evaluated projects		Outcome satisfactory		Sustainability likely		Institutional development impact substantial		Bank performance satisfactory		Borrower performance satisfactory	
	Number of projects	Commitments (\$mm)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)
Africa	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
East Asia and Pacific	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Europe and Central Asia	6	1,141	50	17	83	99	50	17	50	17	67	18
Latin America and Caribbean	4	718	100	100	75	44	50	2	75	58	100	100
Middle East and North Africa	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
South Asia	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>All Regions</b>	10	1,859	70	49	80	78	50	11	60	33	80	50
Europe and Central Asia excluding Russia SPAL	5	341	60	56	80	95	60	56	60	56	80	61

Note: Outcome satisfactory (highly satisfactory, satisfactory, moderately satisfactory). Sustainability likely (highly likely, likely). Institutional development impact substantial (high, substantial). Bank performance satisfactory (highly satisfactory, satisfactory). Borrower performance satisfactory (highly satisfactory, satisfactory).

Table F.4: Overall Performance Ratings for Completed Projects with Pension Component (x&gt;80%), by Region

Region	Evaluated projects			Outcome satisfactory		Sustainability likely		Institutional development impact substantial		Bank performance satisfactory		Borrower performance satisfactory	
	Number of projects	Commitments (\$mm)	Number of projects	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)
Africa	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
East Asia and Pacific	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Europe and Central Asia	4	343	100	100	100	75	13	100	100	100	100	100	100
Latin America and Caribbean	6	2,163	100	100	100	67	77	67	46	100	100	100	100
Middle East and North Africa	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
South Asia	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>All Regions</b>	10	2,506	100	100	100	70	68	80	54	100	100	100	100

Table F.5: Overall Performance Ratings for All Completed Pension Projects, by Region

Table F.5: Overall Performance Ratings for All Completed Pension Projects, by Region												
Region	Evaluated projects		Outcome satisfactory		Sustainability likely		Institutional development impact substantial		Bank performance satisfactory		Borrower performance satisfactory	
	Number of projects	Commitments (\$mm)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)
Africa	11	914	73	72	55	55	55	47	82	81	73	72
East Asia and Pacific	4	7,040	75	99	100	100	33	50	75	99	100	100
Europe and Central Asia	71	9,001	86	83	80	82	58	51	89	79	80	70
Latin America and Caribbean	40	9,643	90	63	75	50	67	37	85	81	83	58
Middle East and North Africa	7	1,003	100	100	86	85	29	37	86	75	86	75
South Asia	7	2,096	100	100	71	84	86	19	71	72	86	95
All Regions	140	29,697	87	82	77	75	57	43	86	84	81	75

Note: Two pension projects were not rated for institutional development impact and were excluded from the institutional development calculations. Outcome satisfactory (highly satisfactory, satisfactory, moderately satisfactory). Sustainability likely (highly likely, likely). Institutional development impact substantial (high, substantial). Bank performance satisfactory (highly satisfactory, satisfactory). Borrower performance satisfactory (highly satisfactory, satisfactory).

Table F.6: Overall Performance Ratings, Completed World Bank Projects, by Region

Region	Evaluated projects		Outcome satisfactory		Sustainability likely		Institutional development impact substantial		Bank performance satisfactory		Borrower performance satisfactory	
	Number of projects	Commitments (\$mm)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)
Africa	1,029	37,471	58	62	38	39	28	28	65	71	58	63
East Asia and Pacific	547	60,252	81	86	69	80	45	52	81	87	79	83
Europe and Central Asia	477	37,538	79	74	73	75	50	48	85	79	79	70
Latin America and Caribbean	664	70,145	76	77	63	69	45	47	80	85	74	77
Middle East and North Africa	287	15,948	69	72	55	51	35	38	74	72	70	73
South Asia	387	38,614	70	73	54	62	34	34	69	68	65	68
<b>All Regions</b>	<b>3,391</b>	<b>259,968</b>	<b>70</b>	<b>76</b>	<b>56</b>	<b>66</b>	<b>38</b>	<b>43</b>	<b>75</b>	<b>80</b>	<b>70</b>	<b>74</b>

*None.* Outcome satisfactory (highly satisfactory, satisfactory). Sustainability likely (highly likely, likely). Institutional development impact substantial (high, substantial). Bank performance satisfactory (highly satisfactory, satisfactory). Borrower performance satisfactory (highly satisfactory, satisfactory). World Bank projects from approval fiscal years 1984 to 2003.

**Table F.7: Overall Performance Ratings for Pension Projects by Sector Board**

Sector Board	Evaluated projects		Outcome satisfactory		Sustainability likely		Institutional development impact substantial	
	Number of projects	Commitments (\$mm)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Commitments (%)
Economic Policy	51	12,225	84	71	73	59	43	35
Social Protection	29	4,659	90	80	86	82	66	37
Financial Sector	22	8,297	91	94	73	87	62	36
Public Sector Governance	22	2,289	95	99	77	86	67	77
Other Sector Boards	16	2,227	75	90	81	91	63	73
Total	140	29,697	87	82	77	75	57	43

Note: Two pension projects were not rated for institutional development impact and were excluded from the institutional development calculations.

**Table F.8: Pension Component Performance Ratings by Sector Board**

Sector Board	Evaluated projects		Outcome satisfactory	
	Number of projects	Commitments (\$mm)	Number of projects (%)	Commitments (%)
Economic Policy	50	12,148	68	75
Social Protection	29	4,659	90	69
Financial Sector	19	7,245	84	98
Public Sector Governance	21	2,284	76	87
Other Sector Boards	15	1,927	60	16
Total	134	28,262	75	77

**Table F.9: Pension Component Performance Ratings by Lending Instrument Type**

Lending instrument type	Evaluated projects		Outcome satisfactory	
	Number of projects	Commitments (\$mm)	Number of projects (%)	Commitments (%)
Adjustment	101	27,117	75	77
Investment	18	847	83	76
Technical assistance	15	298	67	48
Total	134	28,262	75	77

Note: Excludes six projects for which the pension component is rated "non-evaluable."

Table F.10: Distribution of All Pension Projects, By Region

Region	Before 1994				1994–97				1998–2001				2002–05			
	Countries (number)	Projects (number)	Commitments (\$mm)	Size of pension component (\$mm)	Countries (number)	Projects (number)	Commitments (\$mm)	Size of pension component (\$mm)	Countries (number)	Projects (number)	Commitments (\$mm)	Size of pension component (\$mm)	Countries (number)	Projects (number)	Commitments (\$mm)	Size of pension component (\$mm)
Africa	4	5	384	6	3	3	187	24	9	11	724	63	4	7	179	29
East Asia and Pacific	0	0	0	0	2	2	390	11	3	5	7,037	508	0	0	0	0
Europe and Central Asia	5	7	1,369	61	20	34	4,254	531	17	29	3,563	747	14	23	1,596	199
Latin America and Caribbean	7	12	1,398	150	8	13	1,489	650	9	18	6,238	2,097	11	14	1,526	170
Middle East and North Africa	1	1	250	25	3	3	355	14	2	2	130	25	3	3	383	12
South Asia	2	2	595	18	1	1	29	4	2	5	1,349	22	4	4	775	15
<b>All Regions</b>	19	27	3,996	260	37	56	6,705	1,234	42	70	19,041	3,463	36	51	4,458	424

Region	Before 1994			
	Countries (number)	Projects (number)	Commitments (\$mm)	Size of pension component (\$mm)
Africa	14	26	1,474	122
East Asia and Pacific	4	7	7,427	518
Europe and Central Asia	25	93	10,782	1,538
Latin America and Caribbean	15	57	10,651	3,067
Middle East and North Africa	6	9	1,118	76
South Asia	4	12	2,748	59
<b>All Regions</b>	68	204	34,200	5,381

Table F.11: All Pension Projects as Percentage of All World Bank Projects

Region	All years			Before 1994			1994-97			1998-2001			2002-05		
	Number of projects	Commitments (\$mm)		Number of projects	Commitments (%)		Number of projects	Commitments (%)		Number of projects	Commitments (%)		Number of projects	Commitments (%)	
Africa	1	2		1	1		1	2		2	7		1	1	
East Asia and Pacific	0	7		0	0		1	2		1	28		0	0	
Europe and Central Asia	5	15		4	6		14	24		5	21		3	9	
Latin America and Caribbean	3	9		3	3		5	7		4	26		2	6	
Middle East and North Africa	1	4		0	2		3	7		1	3		1	8	
South Asia	1	4		1	2		1	0		2	11		1	4	
<b>All Regions</b>	<b>2</b>	<b>7</b>		<b>1</b>	<b>2</b>		<b>5</b>	<b>8</b>		<b>3</b>	<b>21</b>		<b>1</b>	<b>5</b>	

Table F.12: All Pension Projects According to Pillar by Region

Region	Total pension projects			Pillar 1			Pillar 2			Pillar 3		
	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)
Africa	26	1,474	122	22	1,219	117	6	183	30	12	667	76
East Asia and Pacific	7	7,427	518	5	4,395	441	2	2,032	226	3	5,040	308
Europe and Central Asia	93	10,782	1,538	82	8,546	1,497	33	2,178	660	37	3,535	701
Latin America and Caribbean	57	10,651	3,067	44	9,480	2,902	25	3,775	1,132	15	4,705	691
Middle East and North Africa	9	1,118	76	6	660	57	1	100	25	5	678	47
South Asia	12	2,748	59	11	2,733	59	1	251	6	2	110	9
<b>All Regions</b>	<b>204</b>	<b>34,200</b>	<b>5,381</b>	<b>170</b>	<b>27,034</b>	<b>5,073</b>	<b>68</b>	<b>8,520</b>	<b>2,078</b>	<b>74</b>	<b>14,735</b>	<b>1,832</b>



Table F.13: All Pension Projects According to Lending Instrument Type by Region

Region	Total pension projects			Adjustment loan			Investment loan			Technical assistance		
	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)
Africa	26	1,474	122	13	1,079	107	9	322	10	4	73	5
East Asia and Pacific	7	7,427	518	5	7,072	508	1	350	5	1	5	5
Europe and Central Asia	93	10,782	1,538	62	9,900	1,331	23	694	185	8	188	21
Latin America and Caribbean	57	10,651	3,067	30	9,523	2,957	10	921	44	17	207	67
Middle East and North Africa	9	1,118	76	7	1,003	66	2	115	10	0	0	0
South Asia	12	2,748	59	7	2,096	47	4	637	12	1	15	0
<b>All Regions</b>	204	34,200	5,381	124	30,674	5,017	49	3,039	266	31	488	98

Table F.14: World Bank Lending Operations by Region

Region	All years			Before 1994			1994-97			1998-2001			2002-05		
	Number of projects	Commitments (\$mm)	Number of projects (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Number of projects (%)	Commitments (%)	Number of projects (%)	Number of projects (%)	Commitments (%)	Number of projects (%)
Africa	2,875	68,994	851	29,058	324	9,814	533	10,789	1,167	19,333					
East Asia and Pacific	1,613	99,982	406	41,092	189	22,415	441	24,868	577	11,607					
Europe and Central Asia	1,912	72,795	178	21,077	251	17,780	609	16,612	874	17,326					
Latin America and Caribbean	1,899	120,066	466	50,832	252	19,971	443	23,983	738	25,280					
Middle East and North Africa	904	28,616	214	14,532	113	4,970	195	4,433	382	4,682					
South Asia	1,152	76,707	321	36,880	87	10,472	290	11,871	454	17,484					
<b>All Regions</b>	10,600	467,198	2,437	193,471	1,216	85,423	2,519	92,580	4,428	95,725					

Note: World Bank projects from approval fiscal years 1984 to 2005.

Table F.15: World Bank Adjustment Lending Operations by Region

Region	All years			Before 1994			1994-97			1998-2001			2002-05		
	Number of projects	Commitments (\$mm)		Number of projects	Commitments (%)		Number of projects	Commitments (%)		Number of projects	Commitments (%)		Number of projects	Commitments (%)	
Africa	383	21,671		164	9,869		83	3,734		64	3,215		72	4,853	
East Asia and Pacific	53	16,800		17	3,726		7	373		19	12,199		10	502	
Europe and Central Asia	165	30,201		29	6,419		43	7,409		46	8,227		47	8,146	
Latin America and Caribbean	224	46,481		86	17,112		34	4,546		37	11,680		67	13,143	
Middle East and North Africa	47	6,977		19	3,789		9	1,215		10	1,145		9	828	
South Asia	65	9,489		31	3,843		6	510		5	1,351		23	3,785	
<b>All Regions</b>	<b>937</b>	<b>131,618</b>		<b>346</b>	<b>44,758</b>		<b>182</b>	<b>17,787</b>		<b>181</b>	<b>37,817</b>		<b>228</b>	<b>31,257</b>	

Note: Total does not add up because total includes non-country projects that are not categorized into Region.

Table F.16: Preparation and Supervision Cost of All Pension Projects According to Lending Type, by Region

Region	Total pension projects					Adjustment loan					Investment loan					Technical assistance				
	No. of closed projects	Commitment/ project (\$mm)	Cost/ project (\$000)	Project cost as % of commitment		No. of closed projects	Commitment/ project (\$mm)	Cost/ project (\$000)	Project cost as % of commitment		No. of closed projects	Commitment/ project (\$mm)	Cost/ project (\$000)	Project cost as % of commitment		No. of closed projects	Commitment/ project (\$mm)	Cost/ project (\$000)	Project cost as % of commitment	
Africa	14	81	411	0.51		10	101	415	0.41		2	44	460	1.05		2	346	7	0.00	
East Asia and Pacific	5	1,414	429	0.03		5	1,414	429	0.03		0	NA	NA	NA		0	NA	NA	NA	
Europe and Central Asia	77	129	383	0.30		57	163	409	0.25		13	36	354	0.97		7	224	11	0.00	
Latin America and Caribbean	43	239	305	0.13		29	323	290	0.09		5	160	607	0.38		9	185	5	0.00	
Middle East and North Africa	7	143	462	0.32		7	143	462	0.32		0	NA	NA	NA		0	NA	NA	NA	
South Asia	7	299	469	0.16		7	299	469	0.16		0	NA	NA	NA		0	NA	NA	NA	
<b>All Regions</b>	<b>153</b>	<b>206</b>	<b>373</b>	<b>0.18</b>		<b>115</b>	<b>259</b>	<b>387</b>	<b>0.15</b>		<b>20</b>	<b>68</b>	<b>428</b>	<b>0.63</b>		<b>18</b>	<b>218</b>	<b>9</b>	<b>0.00</b>	

Table F.17. Preparation and Supervision Cost of All Pension Projects According to Year, by Region

Region	Before 1994				1994–97				1998–2001				2002–05			
	No. of closed projects	Commitment/ project (\$mm)	Cost/ project (\$'000)	Project cost as % of commitment	No. of closed projects	Commitment/ project (\$mm)	Cost/ project (\$'000)	Project cost as % of commitment	No. of closed projects	Commitment/ project (\$mm)	Cost/ project (\$'000)	Project cost as % of commitment	No. of closed projects	Commitment/ project (\$mm)	Cost/ project (\$'000)	Project cost as % of commitment
Africa	4	94	403	0.43	3	62	505	0.81	6	88	358	0.41	1	40	485	1.21
East Asia and Pacific	0	NA	NA	NA	1	40	380	0.95	4	1,758	442	0.03	0	NA	NA	NA
Europe and Central Asia	7	196	386	0.20	34	125	384	0.31	25	139	364	0.26	11	76	420	0.55
Latin America and Caribbean	12	117	286	0.25	12	122	409	0.33	13	475	230	0.05	6	208	294	0.14
Middle East and North Africa	1	250	488	0.20	2	135	448	0.33	1	100	275	0.28	3	128	524	0.41
South Asia	2	298	410	0.14	0	NA	NA	NA	3	250	470	0.19	2	375	526	0.14
<b>All Regions</b>	<b>26</b>	<b>153</b>	<b>349</b>	<b>0.23</b>	<b>52</b>	<b>120</b>	<b>399</b>	<b>0.33</b>	<b>52</b>	<b>347</b>	<b>340</b>	<b>0.10</b>	<b>23</b>	<b>142</b>	<b>413</b>	<b>0.29</b>

Region	Total pension projects			
	Number of closed projects	Commitment/ project (\$mm)	Cost/project (\$'000)	Project cost as % of commitment
Africa	14	81	411	0.51
East Asia and Pacific	5	1,414	429	0.03
Europe and Central Asia	77	129	383	0.30
Latin America and Caribbean	43	239	305	0.13
Middle East and North Africa	7	143	462	0.32
South Asia	7	299	469	0.16
<b>All Regions</b>	<b>153</b>	<b>206</b>	<b>373</b>	<b>0.18</b>

Table F.18: Pension Projects with Highest Preparation and Supervision Cost Relative to Size of Commitment

Region	Country	Project name	Lending instrument type	Approval fiscal year	Commitment (\$mm)	Project cost (\$000)	Project cost as % of commitment
Europe and Central Asia	Kyrgyz Republic	Payments and Banking System Modernization Project	Investment	2004	9	774.2	8.60
Middle East and North Africa	Djibouti	Fiscal Consolidation Credit Project	Adjustment	2002	10	586	5.86
Europe and Central Asia	Bosnia-Herzegovina	Social Insurance Technical Asst Credit Project	Technical assistance	2003	7	322.7	4.61
Europe and Central Asia	Albania	Technical Asst for Social Safety Net Project	Investment	1994	5.5	245.8	4.47
Africa	Cape Verde	Capacity Building Project for Private Sector Promotion Project	Investment	1996	11.4	474.6	4.16
Europe and Central Asia	FYR Macedonia	Social Protection Project	Investment	2004	9.7	386.2	3.98
Europe and Central Asia	Albania	Social Service Delivery Project	Adjustment	2001	10	382.5	3.82
Africa	Mauritius	Financial Sector Supervisory Authority Project	Technical assistance	2002	1.8	69.2	3.82
East Asia and Pacific	China	Pension Reform Project	Investment	1999	5	174	3.48
Europe and Central Asia	Moldova	Social Protection Management Project	Investment	1999	11.1	368.7	3.32
Europe and Central Asia	Kyrgyz Republic	Social Safety Net Project	Investment	1995	17	552.4	3.25
Latin America and Caribbean	Nicaragua	Health Sector Reform Project	Investment	1994	15	484.8	3.23
Africa	Mali	Financial Sector Development Project	Investment	2000	21	673	3.20
Europe and Central Asia	FYR Macedonia	Public Sector Management Adjustment Credit Project	Adjustment	2002	15	464.6	3.10
Europe and Central Asia	Albania	Second Poverty Reduction Support Credit Project	Adjustment	2004	18	523.1	2.91

Table F.19: Pension Projects with Highest Absolute Preparation and Supervision Cost

Region	Country	Project name	Lending instrument type	Approval fiscal year	Commitment (\$mm)	Project cost (\$000)	Project cost as % of commitment
Europe and Central Asia	Hungary	Public Sector Adjustment Loan Project	Adjustment	1998	150	1,837.1	1.22
East Asia and Pacific	China	Enterprise Housing and Social Security Reform Project	Investment	1995	350	1,247.3	0.36
Latin America and Caribbean	Brazil	Rio de Janeiro State Reform-Privatization Project	Investment	1998	250	1,189.9	0.48
South Asia	India	Andhra Pradesh Economic Restructuring Project	Investment	1998	543.2	1,092.7	0.20
Europe and Central Asia	FYR Macedonia	Financial and Enterprise Sector Adjustment Credit Project	Adjustment	1995	85	986.8	1.16
East Asia and Pacific	Korea, Republic of	Second Structural Adjustment Loan Project	Adjustment	1999	2,000	980	0.05
Latin America and Caribbean	Bolivia	Capitalization Program Adjustment Credit Project	Adjustment	1996	66.3	950.9	1.43
Europe and Central Asia	Romania	Second Private Sector Adjustment Loan Project	Adjustment	2003	300	944	0.31
Europe and Central Asia	Russian Federation	Social Protection Adjustment Loan Project	Adjustment	1997	800	907.9	0.11
Europe and Central Asia	Ukraine	Second Programmatic Adjustment Loan Project	Adjustment	2004	250	892.6	0.36
South Asia	India	Andhra Pradesh Economic Reform Program Project	Adjustment	2002	250	794.5	0.32
Europe and Central Asia	Kyrgyz Republic	Payments and Banking System Modernization Project	Investment	2004	9	774.2	8.60
Europe and Central Asia	Turkey	Privatization Implementation Assistance and Social Safety Net Project	Technical assistance	1994	100	740.9	0.74
Latin America and Caribbean	Argentina	Capital Market Development Project	Investment	1994	500	731.7	0.15
Africa	Senegal	Private Investment Promotion Project	Investment	2003	46	729.4	1.59
South Asia	India	Karnataka Economic Restructuring Loan/Credit Project	Adjustment	2001	150	707.4	0.47
Europe and Central Asia	Romania	Structural Adjustment Loan Project	Adjustment	1992	400	705.5	0.18
Middle East and North Africa	Tunisia	Third Economic Competitiveness Adjustment Loan Project	Adjustment	2002	252.5	674.9	0.27
Africa	Mali	Fin Sector Development Project	Investment	2000	21	673	3.20
Latin America and Caribbean	Costa Rica	Third Structural Adjustment Loan Project	Adjustment	1993	100	667.8	0.67

Table F.20: Distribution of All Pension Projects, By Sector

Sector	Before 1994			1994-97			1998-2001			2002-05		
	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)
Economic Policy	13	2,442	169	19	2,550	202	21	7,257	630	5	1,127	87
Social Protection	3	702	37	9	1,084	407	18	2,758	2,198	12	553	120
Financial Sector	5	708	48	10	1,115	230	11	6,181	465	8	755	42
Public Sector Governance	4	40	3	6	388	326	12	1,270	157	14	1,616	122
Private Sector Development	0	0	0	5	303	28	3	81	4	4	118	22
Health, Nutrition & Population	0	0	0	2	37	2	2	567	7	6	170	28
Other	2	104	4	5	1,228	40	3	927	1	2	120	4
<b>All Sectors</b>	<b>27</b>	<b>3,996</b>	<b>260</b>	<b>56</b>	<b>6,705</b>	<b>1,234</b>	<b>70</b>	<b>19,041</b>	<b>3,463</b>	<b>51</b>	<b>4,458</b>	<b>424</b>

Sector	All years		
	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)
Economic Policy	58	13,376	1,088
Social Protection	42	5,097	2,761
Financial Sector	34	8,758	785
Public Sector Governance	36	3,314	608
Private Sector Development	12	501	54
Health, Nutrition & Population	10	775	37
Other	12	2,379	49
<b>All Sectors</b>	<b>204</b>	<b>34,200</b>	<b>5,381</b>

Table F.21: All Pension Projects According to Pillar by Sector

Sector	Total pension projects			Pillar 1			Pillar 2			Pillar 3		
	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)
Economic Policy	58	13,376	1,088	55	13,217	1,080	12	1,435	115	24	5,160	458
Social Protection	42	5,097	2,761	41	4,997	2,661	17	1,526	1,085	14	1,838	904
Financial Sector	34	8,758	785	20	4,318	664	17	1,526	1,085	13	6,098	340
Public Sector Governance	36	3,314	608	33	2,929	582	10	912	143	7	710	54
Private Sector Development	12	501	54	8	341	42	7	250	33	6	243	37
Health, Nutrition & Population	22	3,153	86	13	1,232	45	5	2,871	(383)	10	686	8
Other	204	34,200	5,381	170	27,034	5,073	68	8,520	2,078	74	14,735	30
<b>All Sectors</b>	<b>58</b>	<b>13,376</b>	<b>1,088</b>	<b>55</b>	<b>13,217</b>	<b>1,080</b>	<b>12</b>	<b>1,435</b>	<b>115</b>	<b>24</b>	<b>5,160</b>	<b>1,832</b>

Table F.22: All Pension Projects According to Pillar by Year

Approval fiscal year	Total pension projects				Pillar 1			Pillar 2			Pillar 3		
	Number of projects	Commit- ments (\$mm)	Size of pension component (\$mm)		Number of projects	Commit- ments (\$mm)	Size of pension component (\$mm)	Number of projects	Commit- ments (\$mm)	Size of pension component (\$mm)	Number of projects	Commit- ments (\$mm)	Size of pension component (\$mm)
2005	1	20	1		1	20	1	1	20	1	3	313	39
2004	10	604	76		9	591	75	5	467	68	9	477	68
2003	17	1,147	149		14	862	134	8	642	88	7	436	17
2002	23	2,688	197		19	2,303	187	5	106	33	5	655	39
2001	9	1,185	50		6	679	35	2	149	24	5	1,571	740
2000	17	2,342	789		14	2,183	786	5	353	19	9	3,311	177
1999	21	7,013	1,309		18	6,612	1,302	10	1,118	209	10	5,609	382
1998	23	8,501	1,315		18	4,331	1,116	12	3,232	1,168	10	1,608	332
1997	18	2,591	986		15	2,146	956	5	665	316	5	166	12
1996	13	947	47		9	378	41	4	145	13	2	80	3
1995	15	2,237	162		13	2,151	148	2	86	14	2	53	3
1994	10	929	40		8	883	34	4	604	20	2	200	6
1993	6	1,003	43		5	903	40	0	0	0	0	0	0
1992	8	1,777	163		8	1,777	163	4	907	101	1	40	1
1991	5	654	12		5	654	12	0	0	0	2	93	2
1990	2	295	14		2	295	14	0	0	0	1	95	9
1989	4	181	16		4	181	16	1	28	4	1	28	4
1987	1	80	11		1	80	11	0	0	0	0	0	0
1984	1	5	0		1	5	0	0	0	0	0	0	0
<b>Total</b>	<b>204</b>	<b>34,200</b>	<b>5,381</b>		<b>170</b>	<b>27,034</b>	<b>5,073</b>	<b>68</b>	<b>8,520</b>	<b>2,078</b>	<b>74</b>	<b>14,735</b>	<b>1,832</b>



Table F.23: All Pension Projects According to Lending Instrument by Year

Approval fiscal year	Total pension projects			Adjustment loans			Investment loans			Technical assistance		
	Number of projects	Commit- ments (\$mm)	Size of pension component (\$mm)	Number of projects	Commit- ments (\$mm)	Size of pension component (\$mm)	Number of projects	Commit- ments (\$mm)	Size of pension component (\$mm)	Number of projects	Commit- ments (\$mm)	Size of pension component (\$mm)
2005	1	20	1	1	20	1	0	0	0	0	0	0
2004	10	604	76	5	497	62	3	79	12	2	27	2
2003	17	1,147	149	10	1,027	102	3	85	33	4	36	14
2002	23	2,688	197	14	2,540	160	9	148	37	0	0	0
2001	9	1,185	50	6	1,098	39	3	87	11	0	0	0
2000	17	2,342	789	9	2,075	769	5	234	4	3	34	15
1999	21	7,013	1,309	16	6,966	1,290	2	28	12	3	19	7
1998	23	8,501	1,315	16	7,625	1,274	3	817	28	4	59	13
1997	18	2,591	986	12	2,400	909	4	156	53	2	35	24
1996	13	947	47	6	863	39	3	37	3	4	47	5
1995	15	2,237	162	8	1,690	132	5	498	28	2	49	2
1994	10	929	40	3	240	15	5	581	17	2	109	8
1993	6	1,003	43	4	801	15	2	202	27	0	0	0
1992	8	1,777	163	7	1,760	162	0	0	0	1	17	1
1991	5	654	12	2	550	10	2	87	1	1	17	1
1990	2	295	14	2	295	14	0	0	0	0	0	0
1989	4	181	16	2	147	12	0	0	0	2	35	4
1987	1	80	11	1	80	11	0	0	0	0	0	0
1984	1	5	0	0	0	0	0	0	0	1	5	0
<b>Total</b>	<b>204</b>	<b>34,200</b>	<b>5,381</b>	<b>124</b>	<b>30,674</b>	<b>5,017</b>	<b>49</b>	<b>3,039</b>	<b>266</b>	<b>31</b>	<b>488</b>	<b>98</b>

**Table F.24: Ratio to Total of All Pension Projects According to Lending Instrument by Year**

Approval fiscal year	Adjustment loans			Investment loans			Technical assistance		
	Number of projects (%)	Commit- ments (%)	Size of pension component (%)	Number of projects (%)	Commit- ments (%)	Size of pension component (%)	Number of projects (%)	Commit- ments) (%)	Size of pension component (%)
2005	100	100	100	0	0	0	0	0	0
2004	50	82	81	30	13	15	20	5	3
2003	59	90	68	18	7	22	24	3	10
2002	61	94	81	39	6	19	0	0	0
2001	67	93	78	33	7	22	0	0	0
2000	53	89	98	29	10	1	18	1	2
1999	76	99	99	10	0	1	14	0	1
1998	70	90	97	13	10	2	17	1	1
1997	67	93	92	22	6	5	11	1	2
1996	46	91	83	23	4	6	31	5	11
1995	53	76	82	33	22	17	13	2	1
1993	67	80	36	33	20	64	0	0	0
1992	88	99	99	0	0	0	13	1	1
1991	40	84	84	40	13	6	20	3	11
1990	100	100	100	0	0	0	0	0	0
1989	50	81	72	0	0	0	50	19	28
1987	100	100	100	0	0	0	0	0	0
1984	0	0	0	0	0	0	100	100	100
<b>Total</b>	61	90	93	24	9	5	15	1	2

Table F.25: All Pension Projects According to Pillar by Type of Reform Assistance

Type of reform assistance	Total pension projects			Pillar 1			Pillar 2			Pillar 3		
	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)
General analytic support	106	17,375	2,297	88	10,958	1,725	41	5,521	1,123	35	5,232	407
Actual reform measures	129	24,974	4,854	114	23,073	4,635	24	3,871	1,431	30	6,979	1,241
Institutional capacity building	129	15,810	3,342	95	11,634	2,738	35	3,780	1,461	40	6,581	958
<b>Total projects</b>	<b>204</b>	<b>34,200</b>	<b>5,381</b>	<b>170</b>	<b>27,034</b>	<b>5,073</b>	<b>68</b>	<b>8,520</b>	<b>2,078</b>	<b>74</b>	<b>14,735</b>	<b>1,832</b>

Table F.26: Primary Program Objectives of World Bank Lending Operations Projects, By Sector

Sector	All years			Before 1994			1994-97			1998-2001			2002-05		
	Number of projects	Commitments (\$mm)		Number of projects	Commitments (\$mm)		Number of projects	Commitments (\$mm)		Number of projects	Commitments (\$mm)		Number of projects	Commitments (\$mm)	
Economic Policy	1,166	52,740		202	22,811		102	7,698		336	14,506		526	7,726	
Social Protection	470	17,337		39	1,504		64	3,576		150	6,596		217	5,661	
Financial Sector	712	40,343		131	12,739		66	7,179		150	12,621		365	7,804	
Public Sector Governance	760	23,150		121	4,268		76	2,431		205	7,807		358	8,643	
Private Sector Development	604	14,097		53	3,767		86	3,806		144	2,885		321	3,640	
Health, Nutrition & Population	622	23,790		121	6,214		83	5,282		150	5,729		268	6,565	
Other	6,266	295,741		1,770	142,167		739	55,451		1,384	42,436		2,373	55,686	
<b>All Sectors</b>	<b>10,600</b>	<b>467,198</b>		<b>2,437</b>	<b>193,471</b>		<b>1,216</b>	<b>85,423</b>		<b>2,519</b>	<b>92,580</b>		<b>4,428</b>	<b>95,725</b>	

Table F.27: All Pension Projects as Percentage of All World Bank Projects

Sectors	All years			Before 1994			1994-97			1998-2001			2002-05		
	Number of projects (%)	Commitments (%)		Number of projects (%)	Commitments (%)		Number of projects (%)	Commitments (%)		Number of projects (%)	Commitments (%)		Number of projects (%)	Commitments (%)	
Economic Policy	5	25		6	11		19	33		5	19		1	15	
Social Protection	9	29		8	47		14	30		7	94		6	10	
Financial Sector	5	22		4	6		15	16		8	10		2	10	
Public Sector Governance	5	14		3	1		8	16		1	1		4	19	
Private Sector Development	2	4		0	0		6	8		2	32		1	3	
Health, Nutrition & Population	2	3		0	0		2	1		47	332		2	3	
Other	0	1		0	0		1	2		5	45		0	0	
<b>All Sectors</b>	<b>2</b>	<b>7</b>		<b>1</b>	<b>2</b>		<b>5</b>	<b>8</b>		<b>0</b>	<b>0</b>		<b>1</b>	<b>5</b>	

Note: World Bank projects from approval fiscal years 1984 to 2005.

Table F.28: All Pension Projects in the Case Study Countries, All Years

Country/category	Projects with pension components						Total pension projects as % of total World Bank lending					
	x<30%			30%<x<80%					x>80%			
	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Size of pension component (\$mm)	Number of projects	Commitments (\$mm)	Pension component as % of commitment
Europe and Central Asia (ECA)												
Albania	1	6	3	4	93	4	5	99	7	5	12	1
Bulgaria	1	24	24	3	137	23	4	161	47	5	7	2
Croatia	1	27	27	2	212	25	3	239	52	5	16	3
Hungary	2	282	196	2	450	16	4	732	212	5	18	5
Kazakhstan	1	300	300	3	330	24	4	630	324	6	31	16
Kyrgyz Republic	2	54	33	2	54	1	4	108	34	5	15	5
Latvia	1	18	15	3	121	6	4	139	21	7	30	5
FYR Macedonia	2	11	10	6	283	17	8	294	26	14	40	4
Russia	1	800	249	5	1,999	39	6	2,799	288	3	20	2
ECA subtotal	12	1,521	858	30	3,678	153	42	5,199	1,011	5	19	4
Total ECA projects	15	1,563	899	78	9,219	727	93	10,782	1,626	5	15	2
Percentage of total	80	97	95	38	40	21	45	48	62			
Latin America and Caribbean (LAC)												
Argentina	3	329	323	5	3,958	158	8	4,287	481	5	20	2
Bolivia	1	9	3	5	178	11	6	187	14	6	10	1
Brazil	5	1,278	1,278	4	921	49	9	2,199	1,326	2	7	4
Mexico	3	809	603	1	24	1	4	832	604	2	3	2
Peru	2	400	236	4	1,100	127	6	1,500	364	5	29	7
Uruguay	1	100	100	4	378	49	5	478	149	9	24	7
LAC subtotal	15	2,924	2,543	23	6,559	395	38	9,482	2,938	4	10	3
Total LAC projects	16	2,932	2,551	41	7,719	516	57	10,651	3,067	3	9	3
Percentage of total	94	100	100	56	85	77	67	89	96			
East Asia and Pacific (EAP)												
China	1	5	5	1	350	5	2	355	10	0	1	0
South Korea	0	0	0	3	7,000	502	3	7,000	502	3	63	4
EAP subtotal	1	5	5	4	7,350	507	5	7,355	512	1	14	1
Total EAP projects	1	5	5	6	7,422	513	7	7,427	518	0	7	1
Percentage of total	100	100	100	67	99	99	71	99	99			



APPENDIX G: SELECTED WORLD BANK ECONOMIC AND SECTOR WORK,  
BY REGION (COUNTRY-SPECIFIC)

(Excludes FSAP assessments)

	Report title	Report type	Date	Number
<b>Africa</b>				
1	Malawi: Public expenditures—issues and options Vol. 1	Economic Report	09/30/2001	22440
2	Mauritius: Country economic memorandum: sharpening the competitive edge Vol. 1	Economic Report	04/12/1995	13215
3	The role of occupational pension funds in Mauritius Vol. 1	Policy Research Working Paper	04/30/2003	WPS3033
4	The insurance industry in Mauritius Vol. 1	Policy Research Working Paper	04/30/2003	WPS3034
5	Namibia's social safety net: issues and options for reform Vol. 1	Policy Research Working Paper	10/31/1998	WPS1996
6	Senegal: Policies and strategies for accelerated growth and poverty reduction—a Country Economic Memorandum Vol. 1 of 1	Economic Report	04/03/2004	28143
7	Safety nets and income transfers in South Africa Vol. 1	Departmental Working Paper	02/28/1999	19335
8	The use of "asset swaps" by institutional investors in South Africa Vol. 1 of 1	Policy Research Working Paper	12/01/2003	WPS3175
9	A social protection strategy for Togo Vol. 1	Working Paper (Num. Series)	07/31/1999	20534
10	Reforming pensions in Zambia: an analysis of existing schemes and options for reform Vol. 1	Policy Research Working Paper	01/31/1997	WPS1716
<b>East Asia and Pacific</b>				
1	China: The emerging capital market Vol. 1	Sector Report	11/03/1995	14501
2	China: The emerging capital market Vol. 2	Sector Report	11/03/1995	14501
3	Population aging and pension systems: reform options for China Vol. 1	Policy Research Working Paper	05/31/1996	WPS1607
4	China: Reform of state-owned enterprises Vol. 1	Sector Report	06/21/1996	14924
5	China: Pension system reform Vol. 1	Sector Report	08/22/1996	15121
6	How can China provide income security for its rapidly aging population? Vol. 1	Policy Research Working Paper	10/31/1996	WPS1674
7	Old age security: pension reform in China Vol. 1	Publication	09/30/1997	17090
8	Implicit pension debt, transition cost, options, and impact of China's pension reform: a computable general equilibrium analysis Vol. 1	Policy Research Working Paper	02/28/2001	WPS2555
9	Reforming Indonesia's pension system Vol. 1	Policy Research Working Paper	10/31/1996	WPS1677
10	Indonesia development policy report: beyond macroeconomic stability Vol. 1 of 1	Sector Report	12/04/2003	27374
11	The Korean pension system at a crossroads Vol. 1	Sector Report	05/10/2000	20404
12	The national pension scheme of the Republic of Korea Vol. 1	WBI Working Paper	01/31/2001	22712
13	Public expenditure in Malaysia: who benefits and why Vol. 1	Publication	01/31/1979	10113
14	Mongolia: Poverty assessment in a transition economy Vol. 1	Sector Report	06/27/1996	15723

(Continues on the following page.)

	Report title	Report type	Date	Number
15	Financial sector reforms in Mongolia Vol. 1	WBI Working Paper	01/01/1998	18873
16	Mongolia: Poverty Reduction Strategy Paper and Joint Staff Assessment Vol. 1 of 1	Poverty Reduction Strategy Paper	08/18/2003	26563
17	Philippines: An agenda for the reform of the social security institutions Vol. 1	Sector Report	09/29/1995	13400
18	Philippines: Improving government performance: discipline, efficiency and equity in managing public resources (a public expenditure, procurement and financial management review) Vol. 1	Sector Report	04/30/2003	24256
19	Thailand: Increasing private sector participation and improving efficiency in state enterprises Vol. 3	Sector Report	10/11/1994	13132
<b>Eastern and Central Europe</b>				
1	Albania: Beyond the crisis—a strategy for recovery and growth Vol. 1	Economic Report	12/07/1998	18658
2	Household welfare, the labor market, and social programs in Albania Vol. 1	Publication	05/31/2001	WTP503
3	Albania: Poverty assessment Vol. 1 of 1	Economic Report	11/05/2003	26213
4	Armenia: Interim Poverty Reduction Strategy Paper and joint assessment Vol. 1	Poverty Reduction Strategy Paper	04/27/2001	22131
5	Azerbaijan: Poverty assessment Vol. 1	Economic Report	02/24/1997	15601
6	Azerbaijan: Poverty assessment Vol. 2	Economic Report	02/24/1997	15601
7	Bosnia & Herzegovina: From recovery to sustainable growth Vol. 1	Publication	05/31/1997	16711
8	Bosnia & Herzegovina: Public expenditure review Vol. 1	Economic Report	11/26/1997	17161
9	Bosnia & Herzegovina: Public expenditure review Vol. 2	Economic Report	11/26/1997	17161
10	Bosnia & Herzegovina: From aid dependency to fiscal self-reliance: a public expenditure and institutional review Vol. 1	Economic Report	10/31/2002	24297
11	Social safety net and the poor during the transition: the case of Bulgaria Vol. 1	Policy Research Working Paper	05/31/1995	WPS1450
12	Managing fiscal risk in Bulgaria Vol. 1	Policy Research Working Paper	01/31/2000	WPS2282
13	Croatia: Beyond stabilization Vol. 1	Economic Report	12/19/1997	17261
14	Pension reform in Croatia Vol. 1	Working Paper (Num. Series)	02/28/2003	25983
15	Czech Rep: Capital market review Vol. 1	Publication	05/31/1999	19306
16	Czech Rep: Enhancing the prospects for growth with fiscal stability Vol. 1	Publication	09/30/2001	22888
17	Czech pension system: challenges and reform options Vol. 1	Working Paper (Num. Series)	06/30/2002	24675
18	Estonia: Public expenditure review update Vol. 1	Economic Report	07/03/1997	16420
19	Estonia: Country economic memorandum: implementing the EU accession agenda Vol. 1	Publication	06/30/1999	19404
20	Georgia: Interim poverty reduction strategy paper and joint assessment Vol. 1	Poverty Reduction Strategy Paper	12/04/2000	21448
21	Georgia: Poverty update Vol. 1	Economic Report	01/10/2002	22350
22	Georgia: Public expenditure review Vol. 1	Economic Report	11/25/2002	22913
23	Hungary: Reform of social policy and expenditures Vol. 1	Publication	04/30/1992	10647
24	Private pension funds in Hungary: early performance and regulatory issues Vol. 1	Policy Research Working Paper	08/31/1996	WPS1638
25	Poverty and social transfers in Hungary Vol. 1	Policy Research Working Paper	05/31/1997	WPS1770



	Report title	Report type	Date	Number
26	The Hungarian pension system in transition Vol. 1	Working Paper (Num. Series)	04/30/1998	20048
27	Fiscal risks and the quality of fiscal adjustment in Hungary Vol. 1	Policy Research Working Paper	09/30/1999	WPS2176
28	Hungary: On the road to the European Union Vol. 1	Publication	11/30/1999	19923
29	Pension reform in Hungary: a preliminary assessment Vol. 1	Policy Research Working Paper	07/31/2001	WPS2631
30	Generational Accounting and Hungarian Pension Reform	Social Protection Discussion Paper	12/12/2001	SPD0127
31	Kazakhstan: Living standards during the transition Vol. 1	Sector Report	03/22/1998	17520
32	Kazakhstan: Joint private sector assessment Vol. 1	Sector Report	09/30/1998	18467
33	Kazakhstan: An ambitious pension reform Vol. 1	Working Paper (Num. Series)	01/31/2001	23156
34	Latvian pension reform Vol. 1	Working Paper (Num. Series)	08/31/1999	20850
35	Social transfers and social assistance—an empirical analysis using Latvian household survey data Vol. 1	Policy Research Working Paper	04/30/2000	WPS2328
36	Lithuania: An opportunity for economic success Vol. 1	Publication	08/31/1998	18383
37	Lithuania: An opportunity for economic success Vol. 2	Publication	08/31/1998	18383
38	Macedonia: Focusing on the poor Vol. 1	Sector Report	06/11/1999	19411
39	Macedonia: Focusing on the poor Vol. 2	Sector Report	06/11/1999	19411
40	Social insurance in the transition to a market economy: theoretical issues with application to Moldova Vol. 1	Policy Research Working Paper	04/30/1996	WPS1588
41	Moldova: Public expenditure review Vol. 1	Sector Report	10/09/1996	15532
42	Poland: Income support and the social safety net during the transition Vol. 1	Publication	01/31/1993	11592
43	Poverty in Poland Vol. 1	Sector Report	09/14/1994	13051
44	Poverty in Poland Vol. 2	Sector Report	09/14/1994	13051
45	Poland: Growth with equity policies for the 1990s Vol. 1	Economic Report	09/28/1994	13039
46	Poverty and social transfers in Poland Vol. 1	Policy Research Working Paper	03/31/1995	WPS1440
47	Understanding poverty in Poland Vol. 1	Publication	07/31/1995	14876
48	Wage and pension pressure on the Polish budget Vol. 1	Policy Research Working Paper	06/30/1997	WPS1793
49	Poland: Country economic memorandum: reform and growth on the road to the EU Vol. 1	Economic Report	07/15/1997	16858
50	Welfare and the labor market in Poland: social policy during economic transition Vol. 1	Publication	09/30/1998	WTP417
51	The quest for pension reform: Poland's security through diversity Vol. 1	Working Paper (Num. Series)	10/31/1998	20111
52	Shaping pension reform in Poland: security through diversity Vol. 1	Working Paper (Num. Series)	08/31/1999	20852
53	Pension reform and public information in Poland Vol. 1	Working Paper (Num. Series)	08/31/2000	23142
54	Disability and work in Poland Vol. 1	Working Paper (Num. Series)	01/31/2001	23145
55	Poland: The functioning of the labor, land and financial markets: opportunities and constraints for farming sector restructuring Vol. 1	Sector Report	12/31/2001	22598
56	Romania: Poverty and social policy Vol. 1	Sector Report	04/30/1997	16462
57	Romania: Poverty and social policy Vol. 2	Sector Report	04/30/1997	16462
58	Romania: Public expenditure review Vol. 2	Economic Report	06/26/1998	17743
59	Romania: Building institutions for public expenditure management: reforms, efficiency and equity—a Public Expenditure and Institutions Review Vol. 1	Economic Report	08/31/2002	24756

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60	Romania: Poverty assessment Vol. 1 of 2	Sector Report	09/30/2003	26169
61	Romania: Poverty assessment Vol. 2 of 2	Sector Report	09/30/2003	26169
62	"Poverty in Russia" in Service provision for the poor: Public and private sector cooperation Vol. 1 of 1	Publication	01/01/2004	28403
63	Income transfers and social safety net in Russia Vol. 1	Publication	09/30/1992	11168
64	The role of women in rebuilding the Russian economy Vol. 1	Publication	09/30/1993	12305
65	Russian Fed: Social protection during transition and beyond Vol. 1	Sector Report	02/02/1994	11748
66	Russian Fed: Social protection during transition and beyond Vol. 2	Sector Report	02/02/1994	11748
67	Pension funds in Central Europe and Russia: their prospects and potential role in corporate governance Vol. 1	Policy Research Working Paper	05/31/1995	WPS1459
68	Russian Fed: Toward medium-term viability Vol. 1	Publication	04/30/1996	15559
69	"Gender Aspects of Pension Reform in Russia" in Making the transition work for women in Europe and Central Asia Vol. 1	Publication	12/31/1999	WDP411
70	Dividing the spoils—pensions, privatization, and reform in Russia's transition Vol. 1	Policy Research Working Paper	03/31/2000	WPS2292
71	Assisting Russia's transition—an unprecedented challenge Vol. 1	Publication	01/01/2002	25397
72	Russian Fed: Bank assistance for social protection Vol. 1 of 1	Working Paper	01/01/2002	27970
73	Integrating housing wealth into the social safety net: the elderly in Moscow Vol. 1	Policy Research Working Paper	08/31/2003	WPS3115
74	Serbia & Montenegro: Medium-term public expenditure priorities Vol. 1	Economic Report	10/16/2002	24880
75	Slovakia: Restructuring for recovery Vol. 1	Publication	09/30/1994	13528
76	Slovakia: Development policy review Vol. 1	Sector Report	11/30/2002	25211
77	Slovakia: Development policy review Vol. 2	Sector Report	11/30/2002	25211
78	Slovakia: Joining the EU: a development policy review Vol. 1 of 1	Publication	06/01/2003	26607
79	Winners and losers in transition: returns to education, experience, and gender in Slovenia Vol. 1	Policy Research Working Paper	08/31/1994	WPS1342
80	Slovenia: Labor market issues Vol. 1	Sector Report	03/30/1998	17741
81	Slovenia: Economic transformation and EU accession Vol. 2	Publication	03/31/1999	19020
82	Turkey: Challenges for adjustment Vol. 1	Economic Report	04/01/1996	15076
83	Non-bank financial institutions and capital markets in Turkey Vol. 1	Publication	04/30/2003	25954
84	Turkey: Country economic memorandum: towards macroeconomic stability and sustained growth Vol. 1 of 3	Economic Report	07/28/2003	26301
85	Ukraine: Reforming the pension system Vol. 1	Working Paper (Num. Series)	01/31/1996	17365
86	Pension reform, growth, and the labor market in Ukraine Vol. 1	Policy Research Working Paper	02/28/1997	WPS1731
87	Ukraine: Public expenditure review: restructuring government expenditures Vol. 1	Sector Report	06/25/1997	16112
88	Economic growth with equity: Ukrainian perspectives Vol. 1	Publication	10/31/1999	WDP407
89	Uzbekistan: Social and structural policy review Vol. 1	Sector Report	08/25/1999	19626

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<b>Latin America and the Caribbean</b>				
1	Argentina: Capital market study Vol. 1	Sector Report	12/21/1994	12963
2	Effects of social security on lifetime income distribution in Argentina Vol. 1	Poverty & Social Policy Working Paper	08/31/1995	17364
3	Cordoba: public sector assessment: proposals for reform Vol. 1	Sector Report	05/15/1996	15132
4	Cordoba: public sector assessment: proposals for reform Vol. 2	Sector Report	05/15/1996	15132
5	The Argentine pension reform and its relevance for Eastern Europe Vol. 1	Policy Research Working Paper	08/31/1997	WPS1819
6	Private pension funds in Argentina's new integrated pension system Vol. 1	Policy Research Working Paper	08/31/1997	WPS1820
7	Argentina: The fiscal dimension of the convertibility plan: a background report Vol. 1	Economic Report	01/22/1998	16996
8	Argentina: Financial sector review Vol. 1	Sector Report	09/28/1998	17864
9	The pension system in Argentina—six years after the reform Vol. 1	Working Paper (Num. Series)	06/30/2000	23089
10	El sistema previsional y la crisis de la Argentina ) Vol. 1 of 1 (Spanish	Working Paper (Num. Series)	07/30/2003	26825
11	Pension reform in Bolivia: innovative solutions to common problems Vol. 1	Policy Research Working Paper	09/01/1997	WPS1832
12	Bolivia: Public Expenditure Review Vol. 1	Economic Report	06/14/1999	19232
13	Private sector and social services in Brazil: who delivers, who pays, who regulates Vol. 1	Sector Report	06/30/1994	13205
14	Brazil: Social insurance and private pensions Vol. 1	Sector Report	01/25/1995	12336
15	Effects of social security on lifetime income distribution in Brazil Vol. 1	Poverty & Social Policy Working Paper	08/31/1995	17362
16	Reforming social security: lessons from international experience and priorities for Brazil Vol. 1	Departmental Working Paper	05/31/1997	17120
17	Labor market prospects of public employees in Brazil: an empirical evaluation Vol. 1	Departmental Working Paper	06/17/1997	17069
18	Brazil: From stability to growth through public employment reform Vol. 1	Sector Report	02/17/1998	16793
19	Brazil: From stability to growth through public employment reform Vol. 2	Sector Report	02/17/1998	16793
20	Brazil: Critical issues in social security Vol. 1	Publication	05/31/2001	22513
21	Broadening the base for growth: a report on the state of Bahia Vol. 1	Economic Report	10/26/2001	21377
22	Rural poverty alleviation in Brazil: towards an integrated strategy Vol. 1	Economic Report	12/27/2001	21790
23	Rural poverty alleviation in Brazil: towards an integrated strategy Vol. 2	Economic Report	12/27/2001	21790
24	Brazil: Issues in fiscal federalism Vol. 1	Economic Report	06/04/2002	22523
25	Brazil: Inequality and economic development Vol. 1 of 2 / Policy report	Sector Report	10/01/2003	24487
26	Brazil: Inequality and economic development Vol. 2 of 2 / Background papers	Sector Report	10/01/2003	24487
27	The rationale and performance of personal pension plans in Chile Vol. 1	Policy Research Working Paper	02/29/1992	WPS867

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28	Chile: Pension reform and growth Vol. 1	Policy Research Working Paper	06/30/1995	WPS1471
29	Chile: Social security reform and women's pensions Vol. 1	Working Paper (Num. Series)	02/28/2001	22565
30	Chile's pension reform after twenty years Vol. 1	Working Paper (Num. Series)	12/31/2001	24079
31	Gender Effects of Social Security Reform in Chile in The World Bank economic review 16 (3) Vol. 1	Publication	01/01/2002	25579
32	Revealed preference and self-insurance—can we learn from the self-employed in Chile? Vol. 1	Policy Research Working Paper	01/31/2002	WPS2754
33	Pooling, savings, and prevention—mitigating the risk of old age poverty in Chile Vol. 1	Policy Research Working Paper	05/31/2002	WPS2849
34	Colombia's pension reform: fiscal and macroeconomic effects Vol. 1	Publication	11/30/1995	WDP314
35	Colombia: Social Safety net assessment Vol. 1	Sector Report	08/30/2002	22255
36	Colombia: The economic foundation of peace Vol. 1	Publication	12/31/2002	25426
37	Costa Rican pension system: options for reform Vol. 1	Policy Research Working Paper	06/30/1995	WPS1483
38	Costa Rica: A pension reform strategy Vol. 1	Publication	01/31/2000	20100
39	Dominican Rep: Poverty assessment: poverty in a high-growth economy 1986–2000 Vol. 1	Sector Report	12/17/2001	21306
40	Dominican Rep: Poverty assessment: poverty in a high-growth economy 1986–2000 Vol. 2	Sector Report	12/17/2001	21306
41	Mexico: Social security reform: the capital accumulation and intergenerational distribution effect Vol. 1	Policy Research Working Paper	10/31/1990	WPS512
42	Mexico: Mobilizing savings for growth Vol. 1	Sector Report	12/23/1997	16373
43	Mexico: Mobilizing savings for growth Vol. 2	Sector Report	12/23/1997	16373
44	The 1997 pension reform in Mexico Vol. 1	Policy Research Working Paper	06/30/1998	WPS1933
45	The economics of gender in Mexico: work, family, state, and market Vol. 1	Publication	04/30/2001	22242
46	Mexico: Fiscal sustainability Vol. 2	Sector Report	06/13/2001	20236
47	Paraguay: Country economic memorandum: macroeconomic policies to reactivate growth Vol. 1	Economic Report	03/05/1999	18392
48	Paraguay: Financial sector review Vol. 1	Economic Report	11/15/2002	24249
49	Peru: Public expenditure review Vol. 1	Economic Report	10/31/1994	13190
50	Peru: Reforming the pension system Vol. 1	Working Paper (Num. Series)	06/30/1995	17361
51	Pension reform and private pension funds in Peru and Colombia Vol. 1	Policy Research Working Paper	11/30/1997	WPS1853
52	Trinidad & Tobago: Macroeconomic assessment and review of public sector reform and expenditures: the changing role of the state Vol. 1	Economic Report	06/28/1996	15187
53	Uruguay: Options for pension reform Vol. 1	Working Paper (Num. Series)	06/30/1995	17363
54	Uruguay: Country economic memorandum Vol. 1	Economic Report	01/22/1996	14263
55	Fiscal impact of switching from a pay as you go to a capitalization system: the case of Uruguay's largest pension system, BPS Vol. 1	Departmental Working Paper	07/31/1996	17412
56	Uruguay: Financial sector review Vol. 1	Sector Report	11/15/2000	20199
57	Uruguay: Maintaining social equity in a changing economy Vol. 1	Economic Report	07/17/2001	21262
<b>Middle East and North Africa</b>				
1	Djibouti: Pension system reform: strategic note Vol. 1	Sector Report	12/31/2001	22087
2	Egypt: Country economic memorandum: issues in sustaining economic growth Vol. 1	Economic Report	03/15/1997	16207

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3	Egypt: Country economic memorandum: issues in sustaining economic growth Vol. 2	Economic Report	03/15/1997	16207
4	Egypt: Country economic memorandum: issues in sustaining economic growth Vol. 3	Economic Report	03/15/1997	16207
5	The role of non-bank financial intermediaries (with particular reference to Egypt) Vol. 1	Policy Research Working Paper	03/31/1998	WPS1892
6	The pension system in Iran: challenges and opportunities Vol. 1 of 2	Sector Report	09/01/2003	25174
7	The pension system in Iran: challenges and opportunities Vol. 2 of 2	Sector Report	09/01/2003	25174
8	Morocco: Financial sector strategy note Vol. 1	Sector Report	09/26/2000	20885
9	Morocco: Poverty update Vol. 1	Sector Report	03/30/2001	21506
10	Morocco: Poverty update Vol. 2	Sector Report	03/30/2001	21506
11	Options for pension reform in Tunisia Vol. 1	Policy Research Working Paper	07/31/1993	WPS1154
12	Tunisia's insurance sector Vol. 1	Policy Research Working Paper	05/31/1995	WPS1451
<b>South Asia</b>				
1	Subnational Administration in Afghanistan Vol. 1 of 2 / Assessment and recommendations for action	Sector Report	04/01/2004	28435
2	Afghanistan—Subnational Administration in Afghanistan Vol. 2 of 2 / A guide to Government in Afghanistan	Sector Report	04/01/2004	28435
3	How well do India's social service programs serve the poor? Vol. 1	Policy Research Working Paper	08/31/1990	WPS491
4	India: Reducing poverty, accelerating development Vol. 1	Publication	01/01/2000	20749
5	Maharashtra: reorienting government to facilitate growth and reduce poverty Vol. 1	Sector Report	10/31/2002	25053
6	Nepal: Financial sector study Vol. 1	Sector Report	10/16/2002	24959
7	Pakistan: Economic update: adjustment and reforms for a better future Vol. 1	Working Paper	04/22/1998	19015
8	Pakistan: Public expenditure review: reform issues and options Vol. 1	Economic Report	10/07/1998	18432
9	A framework for civil service reform in Pakistan Vol. 1	Sector Report	12/15/1998	18386
10	Pakistan: Reforming provincial finances in the context of devolution—an eight point agenda Vol. 1	Economic Report	11/10/2000	21362
11	Reforming Punjab's public finances and institutions Vol. 1	Sector Report	08/21/2001	20981
12	Pakistan: Development policy review—a new dawn? Vol. 1	Sector Report	04/03/2002	23916
13	Household savings: an estimation for Sri Lanka Vol. 1	Working Paper (Num. Series)	10/31/1976	SDF27
14	Promoting growth in Sri Lanka: lessons from East Asia Vol. 1	Policy Research Working Paper	06/30/1995	WPS1478
15	Review of superannuation benefit programs in Sri Lanka Vol. 1	Sector Report	05/19/2000	20468



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## APPENDIX H: MANAGEMENT RESPONSE

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Public and private pension systems are an essential mechanism in client countries for reducing the risks of old-age poverty and smoothing lifetime income so the aged can maintain living standards. Pension systems vary substantially in being sufficiently *adequate* to cover the risks of old-age poverty for most of its population, sufficiently *affordable* so as not to overburden current workers, employers and governments; *sustainable* to be able to provide promised benefits consistent with contribution levels over multiple generations and sufficiently *robust* to withstand the effect of economic, political and demographic shocks. Many are inadequate both in terms of the level of poverty risk reduction provided relative to cost and the level of coverage; many create a substantial financial burden on employers, employees and governments in order to pay for benefits beyond the affordability of the current society; many have had severe problems of financial sustainability creating an obstacle to fiscal stability, economic growth and poverty reduction; and many have proven highly vulnerable to variance in economic and political conditions.

### Bank Support

The World Bank is an acknowledged leader in assisting countries to ensure that their pension systems are adequate, affordable, sustainable and robust. Since 1984, the Bank has helped 68 countries reform their pension systems with support from more than 200 loans and credits. Moreover, the Bank has served as a central source of new thinking on pension reform, having issued over 350 papers and publications, including books such as *Averting the Old Age Crisis* (World Bank 1994) and *Old Age Income Support in the 21st Century* (World Bank 2005), which have proven catalytic in shaping the conceptualization

of pension reform options and strategies. Finally, the Bank has been a leader in setting the stage for debate and for knowledge gathering and management in its organization of international, national, and regional conferences and seminars on pension reform issues; multiple formal and informal training programs for policy makers and practitioners; creation and dissemination of a common computer model for systematically projecting and evaluating pension reform options; and by creating communication linkages through its Web site, international, and regional networks.

### The OED Review

Management welcomes this timely and comprehensive review of Bank assistance to pension reform and the development of pension systems. This Management Response discusses the OED report's main findings and presents views on key issues that are fundamental to the success of the Bank's work in this important area. It is important to keep in mind that most structural reforms undertaken in Bank client countries occurred in the late 1990s, while judgments over outcomes, sustainability, adequacy, affordability, and robustness can only be made after a period of 10 or more years. Conclusions regarding the Bank's assistance should therefore be viewed as tentative.

### Main OED Findings and Recommendations

#### OED Findings

The OED reports principal findings are:

- *Focus on fiscal sustainability.* The Bank's focus on pension reform has often been sparked by concerns about fiscal sustainabil-



ity. While addressing funding gaps, too often the Bank has not sufficiently addressed the primary goal of a pension system to reduce poverty and provide adequate retirement income *within a fiscal constraint*. Moreover, it has also focused insufficient attention on the income of the aged.

- *Emphasis on increasing savings and capital markets development.* The Bank has emphasized the pro-growth aspects of multi-pillar reform—increased savings and capital market development but the OED evaluation found few countries in which these promised outcomes have been achieved.
- *Gaps in support to reform programs.* Some of the multi-pillar reforms supported by the Bank have shortcomings indicating the need for continued follow-up to the initial reform. For example, the Bank's activities in Latin America and the Caribbean tended to be limited to funded reforms, even when pensions covered a small percentage of the population. While Bank assistance was instrumental in instituting parametric pay as you go reforms, the Bank did not press for additional first-pillar reforms required by many Latin America and Caribbean countries.
- *Support for multi-pillar reforms where inadequate preconditions existed.* The Bank persistently encouraged some countries to institute multi-pillar reforms even when financial-sector conditions were weak. Furthermore the Bank failed to try to dissuade countries with little control of corruption from actively developing multi-pillar reforms. The Bank did not persuade multi-pillar reformers to develop diversified pension portfolios or support countries building the capacity to monitor the fiscal stability of their reforms. Last but not least, the Bank's performance in improving contribution collection in some countries was ineffective.
- *Economic and sector work.* While it is unclear how prior economic and sector work led to adequate policies, the general focus of Bank ESW has influenced the issues considered in Bank operations. While the overall approach to support multi-pillar reform has been clear, ESW has been lacking on some specific

issues. Research and policy analysis often has been incomplete, spotty, and sporadic.

- *Capacity building.* In many instances the Bank did not include sufficient capacity building in its initial agenda or in later follow-up activities on pension reform. In some cases, technical assistance has been successfully tied to adjustment operations—but not always.
- *Internal and external cooperation.* Internal coordination has not been consistent or sufficient in many areas, including advice on the income of the aged and financial sector assessment (FSAP included). Externally, the World Bank has limited its dialogue to clients or government departments that shared the Bank's views on pension reform. Coordination with other donors and agencies has not always been smooth.

## OED Recommendations

The OED Review's recommendations are discussed below, along with management comments.

## MANAGEMENT COMMENTS

### *On the Analysis and Conclusions*

Management finds the study comprehensive in analyzing support for pension reforms and agrees with the general thrust of most of the recommendations. In particular, management agrees with the recommendations to strengthen internal coordination and the diagnostic framework for determining country readiness for privately-managed second pillar reforms.

***A Dynamic Learning Framework.*** In management's view, the report could do more to portray the dynamic character of the learning process which has characterized the Bank's framework for pension reforms over the 20 years covered. Working at a country level and internationally, the Bank has contributed to knowledge products and, in the process, learned and reevaluated its position and formal and informal guidance to staff. This dynamic character has influenced the development of research programs for the areas where key uncertainties exist at a conceptual, empirical and implementation level. The report acknowledges the Bank's knowledge products as a foundation for policy dialogue but does not evaluate knowledge



products as an essential element of the country dialogue. These include central policy-focused analytical products (such as the pension primer series), capacity building efforts (including global pension core courses, regional training programs, Bank-sponsored conferences and seminars), and policy research programs (such as on annuities, coverage and old-age poverty). This learning process has led to revisions of the Bank's perspective on pension reform over time, including a much firmer view on objectives of pension systems and reforms, and the substance and process criteria the Bank applies for supporting country pension reform proposals. A more systematic review of the Bank's knowledge products would have provided a richer view of the whole range of instruments used in helping countries reach their desired development objectives.

**Benchmark Criteria Applied.** Management would have preferred that the review apply what it views as benchmark evaluation criteria appropriate to specific time periods of Bank interventions. The report applies the 2001 document *Social Protection Sector Strategy: From Safety Net to Springboard* ("Strategy") (World Bank 2001a) as a benchmark against which the Bank's activities from 1984 to 2004 are assessed. However, much of the Bank's support for pension reform measures predates this document. Moreover, there was a substantial growth of learning in the Bank and in the international community as to good practice approaches. Indeed, the report acknowledges that the "most intense" period of Bank activity was from 1998 to 2001, before "Strategy" was published. Much of the Bank's work during that period was influenced by the findings of *Averting the Old Age Crisis* (World Bank 1994), which, although not a formal strategy document, serves as a stronger benchmark to measure the Bank's activities in the 1990s, prior to the publication of "Strategy." There are significant points of difference between "Averting" and "Strategy" largely arising from the experience the Bank gained through its involvement with countries that underwent parametric and structural reforms. Management believes that using "Strategy" as the benchmark to assess activities that were guided by "Averting" leads the OED Report to a

more critical set of findings and conclusions than would have been the case if more time-appropriate benchmarks were used. Finally, the report acknowledges the Bank guidance document *Old Age Income Support in the 21st Century: An International Perspective on Pension Systems and Reform* (World Bank 2005) but does not link recent interventions to the new approaches suggested in this document reflecting four years additional experience, consultation, research and reflection.

**The Impact of the Bank.** In management's view, the report appears to overstate the role and potential impact of Bank support, relative to the influence of country reform agendas and the agenda of other development partners. Much of Bank lending took place after reforms were legislated and where countries required fiscal assistance. In Latin America for example, of the 12 countries that undertook structural reforms, the Bank was active in only seven. Of these, the Bank provided support against the backdrop of country initiatives often heavily influenced by the Chilean experience, with the Bank becoming involved only once the broad reform model had been decided.

**Fiscal Necessity for Pension Reform for Growth and Poverty Alleviation.** Management puts a greater weight than the review on the importance of fiscal crises and the priority this demanded as part of a poverty-alleviation and growth strategy. The threat to economic stability and growth posed by pension systems in Latin America in the 1990s arose from design characteristics and mismanagement that posed unsustainable fiscal and economic burdens and which often benefited middle and upper income groups at the expense of the poor. Poorer households in Latin America often bore the brunt of these circumstances in inflation taxes or forgone economic growth or fiscal resources for more properly targeted poverty alleviation support. In Europe and Central Asia, many of the existing pension entitlements could not be sustained in an environment of substantial economic retrenchment. Many of the aged poor in Europe and Central Asia suffered from effective benefit reductions. Gov-

ernment requests for Bank assistance in reforming pension systems and the form this assistance took emanated from such circumstances. In most cases, the Bank was approached by clients faced with crisis situations, and staff reacted with assistance often focused on stopping fiscal hemorrhaging of earnings-related public pension systems. Only once hard-won economic stability was achieved by the late 1990s could a more sober dialogue be established about fiscally-sustainable ways of addressing more broadly the risks to income in old age (including coverage), particularly the risk of poverty. In management's view, these changing client needs and Bank responses could have come out more clearly in the OED review.

**Minimum Coverage, Benefits and Poverty Alleviation.** In management's view, the review should have taken a broader view of the links between pension reform and poverty reduction. The review for the most part focuses narrowly on the links between pension reform and the elderly poor. There are other essential dimensions of the role of pension reform in alleviating poverty. The report questions whether the Bank's assistance in pension reform focused sufficiently on supporting the elderly poor, including extending coverage and ensuring minimum benefit entitlements. Two essential concepts are not discussed. It is because relatively high income earners often have had substantial claims on GDP via their acquired pension rights that pension reform is and was urgently needed. Expenditures of such large sums of resources on relatively few individuals compared to total population raises questions of resource allocation, equity, fairness and growth. Reducing the fiscal burden required for existing and future pension entitlements attributed to only a portion of workers and retirees is an essential means of freeing up precious fiscal resources for old-age poverty alleviation. Although pension reform may initially only affect a few people, it can have strong and relevant ripple effects throughout the economy. This was part of the rationale for intervention in the pensions sector in the late 1990s, and management would have liked a larger discussion of this rationale in the review.

### **Strategy Evolution and Differentiation since 2001.**

The Bank has differentiated its strategy according to country characteristics, based on assessments of prospective vulnerability of the elderly population in relation to other vulnerable groups as reflected in the 2001 Strategy. Moreover, it has weighed the fiscal resources and institutional capacity necessary to provide additional support for vulnerable populations. Attention to coverage has increased substantially in Latin America and the Caribbean, where there is a potential to reduce vulnerability of the aged while managing fiscal costs. In Europe and Central Asia, where coverage has been higher than in other regions, increasing attention is being paid to coverage in the face of weaknesses in some countries in benefit provision; and in South Asia and Africa, expansion of coverage is being considered against the pressing needs of all vulnerable groups as well as fiscal and institutional resource constraints. The focus on vulnerability is an essential metric of the 2001 Strategy that does not come out in the OED review.

**Country Cases.** In some cases, application of narrow technical criteria leads to differences between OED and management on interpretations of results.<sup>1</sup>

### **On the Recommendations**

**Recommendation 1.** Develop Guidelines to Design Pension Reforms and Pay Greater Attention to Parametric Reforms: (a) Pay greater attention to parametric reforms to ensure fiscal sustainability and to the macro-economic, financial, and institutional sector preconditions necessary for a multi-pillar reform. This would involve preparing and implementing guidelines to ensure well-tailored assistance to country conditions and consistent policy prescriptions including statistical indicators and in-depth assessments; and (b) Be more realistic in presenting the benefits of the secondary objectives of pension reform in dialogue with client countries, as there is insufficient empirical evidence to support the claims that funded systems have or can improve savings and capital market development.

**Parametric Reforms.** Management will continue to focus attention on reform options to ensure the affordability and adequacy of benefits, as well as system and fiscal sustainability and robustness in the face of shocks. The Bank's will continue to evaluate pension systems against country objectives and then to recommend reforms measures (including parametric and/or structural reforms) appropriate to country conditions. Management notes that the current framework used for evaluating pension reform options already evaluates both parametric and structural reforms. Recently, the Bank co-sponsored with the Swedish social security administration a key review of a promising unfunded pension reform option—Non-financial or Notional Defined Contribution (NDC) plans (World Bank forthcoming).

**A Diagnostic Framework for Second Pillar Reforms.** Management fully agrees with the importance of guiding criteria for establishing privately-managed second pillar reforms and will establish a working group represented by HDN, FSE and PREM to develop a diagnostic framework. The recently initiated series of FSAP Updates and demand-driven ESW are enabling the Bank to identify the actions needed to improve the performance of young second pillars, as well as the actions that new reformers need to consider before establishing second pillars. The results of this work will be supplemented by the development of relevant indicators for a larger number of reforming countries in order to produce a meaningful set of guidelines. Attempting to standardize such criteria in checklists would likely restrict the ability of staff to tailor advice on reforms to the wide variation of country conditions.

**Impact on Savings and Capital Markets.** Although the empirical evidence linking pension policies and economic growth are widely debated, strong theoretical arguments and a growing body of empirical evidence point to a link between pension reforms and strengthening the efficiency and transparency of the financial sector. There are also well documented strong empirical links between financial sector development and eco-

nomic growth. To the degree that pension policy reform has a medium-term impact on growth, whether through structural reforms or parametric reforms to existing systems, such growth will be the strongest and most efficient measure to reduce poverty, including poverty of the aged. Management agrees with the importance of realistically presenting the benefits of the secondary objectives of savings growth and capital market development. Measures to support these objectives must be fully consistent with a hierarchy of measures supporting a strategy towards poverty alleviation.

**Recommendation 2.** Build Client Capacity: Develop a checklist for client capacity requirements (including contribution collection, contributor database development, actuarial and policy analysis, regulation of multi-pillar operations) to assess client requirements and determine how best they can be met. This would involve ensuring that a plan for technical assistance is put in place for reform initiatives so that client capacity is developed.

Development of institutions is an essential part of most pension reforms and assessing capacity-building requirements are key to the development of a successful reform. Management now addresses overall issues of capacity building in the context of results-based CASs, according to the priorities set out in country-owned plans such as PRSs. Capacity, along with governance and country results frameworks, are standard subjects covered during management review of draft CASs. Capacity-building plans are prepared by clients with support from the Bank and other development partners. To the extent that the Bank is financing technical assistance for such capacity building, management will continue to require that plans are put in place consistent with project implementation needs. Management would not see a checklist as necessarily effective, given the need to adapt Bank support to country conditions. Moreover, the Bank can only review capacity-building technical assistance programs to the degree that it is requested to do so by country authorities.

**Recommendation 3.** Conduct Research on Outstanding Issues: Ensure that adequate analysis is conducted on key issues such as income of the aged, the impact of corruption and governance on the feasibility of effective pension regulation, methods to foster competition among pension funds, guidelines for investment allocation, the design of non-contributory systems, and ways in which capital markets develop, as well as supportive research that can provide cross-country evidence on these topics.

Management agrees that adequate analytical work is essential to its work supporting the strengthening and reform of pension systems. However, there are many other competing priorities for country analytic work. If CASs identify pension reform as a central element of the Bank's support efforts, management will ask CAS teams to review the knowledge base, including analytic work done by the client country and other development partners, and to address the issue of covering identified gaps. Management considers this the now-current practice and therefore plans no further action on this recommendation. With regard to cross-country analytic and research topics, a task force representing HDN, FSE, PREM, and DEC network and Regional staff will review needs and set priorities for consideration in the work program process of the relevant units. Key issues such as development of improved pension regulation and oversight appropriate to country conditions; alternative design options for unfunded contributory pension schemes; policy options to ensure minimum income support and poverty risk reduction for the elderly including non-contributory schemes; and 2nd pillar fund performance and indicators will be priorities for consideration for further research.

**Recommendation 4.** Improve Internal and External Coordination: (a) Develop a

process to ensure that cross-sector issues are considered including financial issues identified by the FSAP and maintain closer coordination between the Development Economics vice presidency, the Networks, sector units, and country units; and (b) Develop a strategy to play a greater role in consensus building among stakeholders, in particular, international organizations and client agencies.

**Internal Coordination.** Management agrees with the importance of internal and external coordination. In an effort at strengthening internal coordination, the task force outlined above representing HDN, FSE, PREM and DEC network and Regional staff will meet periodically to review inter-sectoral collaboration in the development of central and country-level outputs and strategies and in the context of the analytical and research priorities noted above. The recently initiated FSAP Updates and ESW focused on pensions, insurance and capital markets will play a critical role in this process.

**External Engagements.** The Bank anchors its Country Assistance Strategies in a country's own vision for its development as defined in a Poverty Reduction Strategy or other country-owned process. With this as the framework for country level engagements, staff will continue to actively work with country authorities and coordinate with other development partners. The Bank will stay engaged with other international organizations and bilateral donors and creditors in discussing alternative approaches to pension reform. Management fully agrees to measures to improve coordination and to address differences and commonalities in reform proposals.

**Attachment.** Attached to this Management Response is a table containing detailed responses in the Management Action Record matrix

## Management Action Record

Major monitorable IEG recommendations requiring a response	Management response
<p><b><i>Develop Guidelines to Design Pension Reforms and Pay Greater Attention to Parametric Reforms</i></b></p> <p><i>a. Pay greater attention to parametric reforms to ensure fiscal sustainability and to the macroeconomic, financial, and institutional sector preconditions necessary for a multi-pillar reform. This would involve preparing and implementing guidelines to ensure well-tailored assistance to country conditions and consistent policy prescriptions including statistical indicators and in-depth assessments.</i></p> <p><i>b. Be more realistic in presenting the benefits of the secondary objectives of pension reform in dialogue with client countries, as there is insufficient empirical evidence to support the claims that funded systems have or can improve savings and capital market development.</i></p>	<p>The Bank will continue to evaluate pension systems against country objectives and recommend reforms (including parametric and/or structural reforms) appropriate to country conditions. Management fully agrees with the importance of guiding criteria for establishing privately-managed second pillar reforms and will establish a working group represented by HDN, FSE, PREM and DEC to develop a diagnostic framework. Draft guidelines will be produced within one year, completing Management's commitment with regard to this recommendation.</p> <p>Management agrees with the importance of realistically presenting the benefits of the secondary objectives of savings growth and capital market development. Measures to support these objectives must be fully consistent with a hierarchy of measures supporting a strategy towards poverty alleviation. This issue will be covered under the above guidelines.</p>
<p><b><i>Build Client Capacity</i></b></p> <p><i>c. Develop a checklist for client capacity requirements (including contribution collection, contributor database development, actuarial and policy analysis, regulation of multi-pillar operations) to assess client requirements and determine how best they can be met. This would involve ensuring that a plan for technical assistance is put in place for reform initiatives so that client capacity is developed.</i></p>	<p>Management now addresses overall issues of capacity building in the context of results-based CASs, according to the priorities set out in country-owned plans such as PRSs. Capacity, along with governance and country results frameworks, are standard subjects covered during Management review of draft CASs. Capacity-building plans are prepared by clients with support from the Bank and other development partners. To the extent that the Bank is financing technical assistance for such capacity building, Management will continue to require that plans are put in place consistent with project implementation needs. Management would not see a checklist as necessarily effective, given the need to adapt Bank support to country conditions.</p>
<p><b><i>Conduct Research on Outstanding Issues</i></b></p> <p><i>d. Ensure that adequate analysis is conducted on key issues such as income of the aged, the impact of corruption and governance on the feasibility of effective pension regulation, methods to foster competition among pension funds, guidelines for investment allocation, the design of non-contributory systems, and ways in which capital markets develop, as well as research offering cross-country evidence on these topics.</i></p>	<p>Management agrees that good analytic work is important in supporting the strengthening and reform of pension systems. However, there are many competing demands for limited resources for country analytic work. If CASs identify pension reform as a central element of the Bank's support efforts, Management will ask CAS teams to review the knowledge base, including analytic work done by the client country and other development partners, and to address the issue of covering identified gaps. Management considers this the now-current practice and plans no further action on this recommendation. With regard to cross-country analytic and research topics, the same task force established to strengthen coordination will review needs and</p>

*(Continues on the following page.)*

Management Action Record (*continued*)

Major monitorable IEG recommendations requiring a response	Management response
	set priorities for consideration in the work program process of the relevant units. With that discussion, Management will consider this action complete.
<p><b><i>Improve Internal and External Coordination</i></b></p> <p><i>e. Develop a process to ensure that cross-sector issues are considered including financial issues identified by the FSAP and maintain closer coordination between the Development Economics vice presidency, the Networks, sector units, and country units.</i></p> <p><i>f. Develop a strategy to play a greater role in consensus building among stakeholder, in particular, other international organizations and client agencies.</i></p>	<p>As noted above, in an effort at strengthening internal coordination, a task force representing HDN, FSE, PREM, and DEC network and regional staff will meet periodically to review inter-sectoral collaboration, notably in the context of the analytical and research priorities noted above.</p> <p>Staff will continue to actively work with country authorities and coordinate with other development partners in the context of a country's own vision for its development as defined in a PRS or other country-owned process. The Bank will stay engaged with other international organizations in discussing alternative approaches to pension reform and to address differences and commonalities in reform proposals.</p>



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## APPENDIX I: CHAIRMAN'S SUMMARY: COMMITTEE ON DEVELOPMENT EFFECTIVENESS (CODE)

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On October 12, 2005 the Committee on Development Effectiveness (CODE) considered the IEG report *Bank Assistance to Pension Reform and the Development of Pension Systems* together with the Draft Management Response.

### Background

The World Bank early policy research report *Averting the Old Age Crisis* (1994) offered a detailed prescriptive exposition of a multi-pillar pension framework. The Bank's strategy for pension reform formalized in *Social Protection Sector Strategy: From Safety Net to Springboard* (2001—"Strategy") builds on the three pillar approach proposed in the 1994 report built on: (1) a publicly managed, tax-financed pension scheme; (2) a privately managed, funded scheme; and (3) voluntary retirement savings. *Strategy* moves the multi-pillar proposal beyond structural prescription. The Bank took a leading role beginning in the 1990s supporting a wide variety of reforms through analytical and advisory services and lending operations. During this period, the Bank assisted 68 countries with reforms of their pension systems with more than 200 loans and credits. In addition, the Bank issued more than 350 papers and publications on pension reform and has been a leader in setting the stage for debate and knowledge gathering in its organization of conferences and seminars, training programs, and the development and dissemination of a computer model for projecting pension reform options

### IEG Findings and Recommendations

This IEG report assesses the Bank's pension reform strategy and the resulting development outcomes for Bank assistance between 1985 and 2004, focusing on work inaugurated in the 1990s. The Bank's multi-pillar strategy to support pen-

sion reforms differed Regionally and by country, as a result of client concerns and Bank experience. IEG finds that the Bank's advice has not always been effective. While formal pension systems in many countries contributed to ballooning budget deficits, the Bank's preoccupation with fiscal sustainability tended to obscure the broader goal of pension policy—to reduce poverty and improve retirement income adequacy *within a fiscal constraint*. To improve this process, IEG recommends that the Bank: (1) develop guidelines to design pension reforms, pay greater attention to parametric reforms and de-emphasize secondary objectives of pension reform to support savings growth and capital markets development; (2) build client capacity; (3) conduct research on outstanding issues; and (4) improve internal and external coordination.

### Management Response

Management found the study comprehensive in analyzing support for pension reforms although it felt that the Bank's activities during 1985–2004 were increasingly less influenced by the ideas of the 1994 report. The evolution of Bank thinking and operations is documented in the 2001 "Strategy" and the 2005 policy position paper "*Old-Age Income Support in the 21st Century*." Management agreed with the general thrust of the recommendations, in particular with those to strengthen internal coordination and the diagnostic framework for determining country readiness for privately-managed second pillar reforms. In management's view, the report appears to overstate the role and potential impact of Bank support; and could have taken a broader view of the links between pension reform and poverty reduction. Management put a greater weight than the review on the importance

of fiscal crises. Management stated that it is important to keep in mind that most structural reforms undertaken in Bank client countries occurred in the late 1990s while judgment over their results can only be made after a period of 10 or more years.

### Overall Conclusions

The Committee welcomed IEG's evaluation of Bank activities in pension reform which is critical for many clients, and usually complex and politically sensitive. Speakers generally welcomed the content and quality of the report. They found the findings relevant and pertinent to the Bank's work going forward, though some speakers noted that more time was required to fully observe the outcomes of the reforms. The draft Management Response (MR) was also seen as thoughtful though several speakers would have preferred greater elaboration on a number of key aspects including the uneven distribution of Bank assistance and concentration in two Regions (Europe and Central Asia and Latin America and the Caribbean). The discussion focused mainly on areas where differences between IEG and management were most apparent, namely: (1) preconditions for supporting multi-pillar reform, especially macroeconomic stability and fiscal sustainability; (2) relative emphasis on the so-called secondary objectives (e.g. savings mobilization or financial market development); and (3) the Bank's vision on pension within the wider issue of social protection for the population at large, including workers in the informal sector.

### Next Steps

The draft Management Response will be revised taking into account the comments and concerns raised at the meeting, including requests for more details and precision in the responses. There was broad support for a wider Board discussion on strategy.

The following issues were raised during the meeting:

**Preconditions for Multi-Pillar Reform.** Many speakers stated that the Bank should not exclude countries, particularly low-income ones that do not meet the preconditions for a multi-pillar re-

form (macroeconomic stability and fiscal sustainability) from the scope of its assistance for much-needed reform programs. Members were in favor of the Bank engaging in a wide range of countries, including low-income and fragile economies and felt macroeconomic issues could be addressed in parallel. Management concurred with the importance of a wider engagement with low-income economies and pointed out that the majority of Bank support has been towards first-pillar reforms and in a number of cases has discouraged movements towards second-pillar reforms where conditions were not appropriate. Many members welcomed management's intention to set up a working group to develop a diagnostic framework for the second pillar. A few members suggested the guidelines should reflect country priorities including appropriate measures when preconditions necessary for a multi-pillar reform are not met.

**Deemphasizing the Secondary Objectives of Pension Reform.** The general sentiment was not in favor of deemphasizing the secondary objectives (promoting savings growth and building financial systems and capital markets) as suggested by IEG. IEG clarified its view that these secondary objectives were indeed important but they should not be overemphasized as they might have been in the past.

**Focus of World Bank Activities.** There was broad recognition of the complexity of pension reforms and their impact on macroeconomic and fiscal stability as well as long-term sustainable economic growth. Some members noted that the Bank played a valuable role in pension reforms while others felt that technical assistance has been insufficient and discontinuous. Members generally agreed with management that the Bank's involvement in pension reforms was triggered by serious fiscal crises which unsustainable pension schemes contributed to in many countries. Some speakers indicated that the Bank should remain engaged in this area because many developing countries were undertaking pension reforms and faced the challenge of making the systems financially sustainable. The need for improved internal and external coordination,



communication strategies, and monitoring and evaluation of reform progress was also noted. Speakers emphasized that political economy including governance issues should be given due attention. Members were disappointed that Bank assistance to reforms did not necessarily lead to expanded pension coverage for the working population; some Members encouraged the Bank to be more proactive in ensuring the provision of safety nets for people in the informal sector. *IEG noted two ways in which public pension programs can provide safety nets for old-age income security for the informal sector through: (1) a tax-financed, non-contributory pension; and (2) a means-tested pension for the aged and the disabled.*

**Capacity Building and Research.** Some members noted that assistance to countries should be tailored to their needs, particularly capacity building, and encouraged the Bank to evaluate potential simplification measures for users of its pension reform options simulation model. The Bank's analytical work should cover fiscal sustainability, alternatives to reform pay-as-you-go (PAYG) systems, and the informal sector, among other relevant issues. *Management pointed out the tradeoffs in research within its budget envelope.* While noting that the majority of projected outcome ratings have been satisfactory, members observed that research occasionally had been incomplete, and had not always translated into effective operations. Many speakers proposed more research to review the impact of HIV/AIDS on pension systems, as well as impact that pension reform had had on elderly population groups.

**Country and Regional Perspective.** While noting the uneven distribution of Bank assistance—mainly concentrated in Europe and Central Asia and Latin America and the Caribbean, a few

members noted that the Bank should address the needs of many countries in underserved regions. A question was raised on how to expand the safety net for a large section of the population which does not have any pension benefit, in particular in low-income African countries with high levels of poverty. A few members suggested that addressing pension reforms in CASs will assure systematic Bank support, including adequate analytical and advisory activities (AAA). Management suggested the importance of comparing the relative vulnerability and social risk management options afforded to different groups in order to determine whether scarce resources should support the elderly poor or perhaps be better allocated to other more vulnerable populations (such as children and disabled).

**Other Suggestions.** Some members felt that IEG review could have covered: (1) a broader view of the links between pension reform and poverty reduction rather than looking only at the coverage and level of pensions paid to elderly; (2) differences between IMF and World Bank in their views on income and social security revenue collection; and (3) labor market issues. Regarding the revision of Management Response some members suggested the following changes: (1) more clarity, especially in areas where there is disagreement with IEG findings and recommendations; (2) more detailed analysis of IEG recommendations on building client capacity and conducting research on outstanding issues; and (3) more information on how lessons of experience have led to changes in the Bank's approach thereby leading to changes in Bank lending operations. A question was also raised about any IEG or management analysis of the supply side of the sector.

Chander Mohan Vasudev, Chairman



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## ENDNOTES

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### Chapter 1

1. Some of the differences between *Strategy* and *Averting* arose as a result of the experiences the Bank gained through its involvement with countries that underwent multi-pillar and parametric reforms.

2. *Strategy* provides a considerable discussion of the types of risks and risk management. Pensions are risk-coping (poverty alleviation) and risk-mitigation (a drop in income after retirement) mechanisms (World Bank 2001a).

3. This work was cited in *Perspective* (World Bank 2005). For additional discussion, see Chapter 3.

4. The sustainability of a pension system is at risk when the proportion of active workers to retirees is low, particularly in PAYG contribution-based systems. This is easy to demonstrate based on a simple formula, as the revenues from contributions must equal the wage bill times the contribution rate, while pension expenditures equal the number of pensioners times the average pension. When pensions are high relative to wages, the contribution rate will need to be higher. When there are fewer workers for each retiree, the contribution rate will also need to be higher. While countries may also have accumulated additional assets to cushion the shortfall, if demographic factors are important, this is only a temporary solution to fiscal insolvency. If there is a limit on affordable contribution rates, benefits will have to be reduced.

5. See Appendix E for projected coverage rates for a set of World Bank client countries. The projections are based on an equation regressing actual coverage rates (Palacios and Pallares-Mirrales 2000) on GDP per capita in terms of purchasing power parity, the percentage of the population over age 65, and Regional dummies. The adjusted R-squared statistic was 0.90, indicating a statistically close fit.

6. This volume explains the Bank's perspective on pension reforms but, as also noted in the Preface, it has

not undergone the review accorded to official World Bank publications.

7. The IEG case studies include six countries in the Latin America and Caribbean (LAC) Region, eight countries in Europe and Central Asia (ECA), and two countries in East Asia and the Pacific. The selection of countries was determined by the Bank's involvement in pension reform in each country, the Regional implementation of multi-pillar systems, exclusively in ECA and LAC, and the fact that most pension activities have taken place in ECA and LAC. Specific countries selected for in-depth appraisals of the Bank's assistance to pension reform comprised a substantial share of the value of the pension portfolio in each region (more than 75 percent of the value of the pension component) and constituted a representative sample (the selection criteria included the subregion, size of the population, level of per capita income, level of financial sector development, and other factors). Activities in other Regions are assessed through desk reviews and interviews with Bank staff.

### Chapter 2

1. See Appendix G for a listing of publicly available World Bank pension ESW.

2. Written AAA includes core ESW, LAC Regional studies, and FSAP reports done in conjunction with the IMF. This evaluation does not focus on the FSAP reports, which are the topic of another IEG study. However, evidence from those reports is used to support indicator analysis in Chapters 3 and 4.

3. Over 350 publications have addressed some aspect of pension reform. One hundred and thirty-one ESW studies have a Regional or issue-specific focus; a number are discussed in Chapter 1 because they provide an extension of the outline described in *Strategy*. Some studies were conducted as part of a country assistance strategy, while others were undertaken as research funded outside the operational process.

4. The categories were selected based on prior knowledge of important pension issues and post-review categories that were found to be important.

5. The most ambitious study of income of the elderly is by Edward Whitehouse (2002) who uses 11 international studies to assess poverty among the aged. He notes the importance of this type of analysis by stating that “looking at pension replacement rates alone ignores other resources on which the elderly can draw.” Whitehouse confirms IEG conclusions about the lack of studies assessing the income of the aged by indicating “We have also examined the World Bank’s poverty assessments. Few, however, provide empirical evidence on the economic status of the elderly.” This paper is the first in a series on poverty and income distribution issues in the design of old-age pension systems, but the series has not been completed. While the study covers 44 countries, the bulk of the analysis is for the OECD. Data for ECA are from Grootaert and Braithwaite (1998) and from the Luxemburg Income Survey. Data for LAC are from the IDB.

6. The ECSSD Working Paper No. 12, “Older People in Transition Economies: An Overview of their Plight in the ECA Region” (1999), is the perhaps most thematically comprehensive study of living conditions. Yet, even this report does not provide satisfactory data on poverty and near poverty, or an assessment of sources of income. These shortcomings reflect those of the poverty assessments that are the statistical basis of the inquiry. The Bank is addressing this deficiency in Latin America and the Caribbean in a recent draft (see Bourguignon and others 2005) and in Africa (see Kakwani and Subbarao 2005).

7. Theoretical arguments have been made that coverage will increase if contributions are tied more closely to benefits, but empirical follow-up has not evolved.

8. See Chapter 6 for a discussion of a lost opportunity to conduct ESW on this issue. The Pension Primer series (a compendium of Bank-commissioned papers on pension reform issues) does contain some research on these topics.

9. See Chapter 3 for details.

10. In Azerbaijan, the Kyrgyz Republic, and Moldova, the thrust of Bank dialogue has been to discourage multi-pillar reforms in view of economic and financial market constraints. Similarly, informal discussions between the Bank and the Russian authorities helped halt a premature multi-pillar reform, even though the Bank had provided considerable funding to encourage

the development of the reform. In contrast, the Bank was enthusiastic about multi-pillar reforms in Armenia, Georgia, and Ukraine, and recommended them before economic and financial sector preconditions were in place. The Bank carried on an extensive policy dialogue with Poland and the Slovak Republic and both enacted multi-pillar reforms. However, discussions in the Czech Republic and Slovenia did not lead to any lending activity, and did not alter the path of locally developed pension programs.

11. In Uruguay, the Bank advised against the country’s own pension reform in favor of one more in keeping with *Averting*; as a result, the government turned to the Inter-American Development Bank (IDB) for assistance. The Bank supported the reform only after it was enacted. El Salvador and Ecuador eventually used other advisors as well.

12. Despite a successful policy dialogue and initial Bank support, Mauritius has not implemented a multi-pillar system. In contrast, the Bank was unsuccessful in discouraging a multi-pillar system in Nigeria, where conditions are not favorable. However, the Bank made premature efforts to move Zambia toward a multi-pillar reform despite its unfavorable conditions.

13. See Appendix B for a more detailed discussion of specific country reforms.

14. There were some obvious exceptions, such as Brazil and Korea.

15. Over 70 percent of the Bank’s pension lending was approved before the 2001 publication of the Bank’s official strategy on pensions.

16. IEG identified only 18 operations that were 100 percent devoted to pension reform. These projects spanned all types of lending operations and were in East Asia and the Pacific (China), Europe and Central Asia, and Latin America and the Caribbean.

17. See Chapter 4 for analysis on the initial quality of Bank projects.

18. These are Argentina, Hungary, Kazakhstan, Korea, Mexico, Peru, Russia, Turkey, Ukraine, and Uruguay.

19. Brazil, Korea, and Turkey did not. In fact, Brazil received the greatest total amount of pension support with Bank funding totaling \$1.3 billion.

20. These figures excluded two outliers, Brazil and Korea. They included amounts spent on both pillars.

21. The studies upon which this review is based are IEG Latin America and the Caribbean case studies by Rofman, San Martino, and Valdes-Prieto (forthcoming).

22. The World Bank also provided technical assistance to multi-pillar reforms in a number of other countries, including Costa Rica, the Dominican Republic, and Nicaragua, but funding was relatively minor.

23. See Appendix B for greater detail on reforms in specific countries.

24. Older participants can choose between the existing or old PAYG system and the funded tier, but their resulting placement in the funded tier is binding.

25. Pension reforms in IEG case study countries generally also had the participation of other international actors. Performance outcomes for this sample of countries were not related to the number or type of international actors involved.

26. See Appendix F for IEG ratings of pension loans overall and for IEG case study countries.

27. The development outcome of the pension component was identified by IEG using a two-part rating of satisfactory or unsatisfactory. The development outcome for the project overall was taken from ICRs (self-evaluations by Bank teams) IEG ICR reviews, and PPARs. The rating for the project overall is based on a six-part rating scheme, which was condensed to the two-part equivalent used in the pension component analysis. (The six-part project-rating scheme is: highly satisfactory, satisfactory, moderately satisfactory, moderately unsatisfactory, unsatisfactory, and highly unsatisfactory. The two-part equivalent scheme categorizes highly satisfactory, satisfactory and moderately satisfactory ratings as satisfactory; and moderately unsatisfactory, unsatisfactory, highly unsatisfactory ratings as unsatisfactory.)

28. Overall performance outcome is the subject of Chapter 4.

29. The management of projects containing pension components was spread across sector networks and boards, most frequently: Poverty Reduction and Economic Management (Economic Policy and Public Sector); Human Development Network (Social Protection); and Financial Sector. Five other sectors account for the remaining projects: Human Development (Education and Health, Nutrition and Population); Transportation; Urban Development; Transport; and Energy and Mining. The latter two were more likely to be focused on pensions in the context of creating retirement packages in downsized industries. Pension components were included in three types of operations: adjustment lending, investment projects, and technical assistance.

30. Africa, East Asia and the Pacific, the Middle East and North Africa, and South Asia were not included in the comparison because of small sample size.

## Chapter 3

1. Implementation readiness is addressed further in Chapter 5. The sample of countries included in this chapter's evaluation includes all countries that have undertaken systemic reforms or are prospective reformers, and that have sufficient documentation for analysis. For instance, some countries, such as India, with which the Bank has had a substantial policy dialogue, are not included, because no formal project has gone to Board. Other countries, identified in IEG interviews, are not included due because there is a lack of documentation. As noted in Chapter 2, it is difficult to assess the impact of the Bank's policy dialogue in these circumstances.

2. See Appendix B for a summary of Bank operations and Appendix E for indicators of economic and financial sector conditions.

3. Low coverage is defined as coverage of less than 30 percent of the working population.

4. The Bonosol provides a benefit for all those who were 21 years old as of 1995, so it is comprehensive for all elderly over the age of 65 until 2039.

5. In Argentina, the case study notes that the decrease in coverage had been visible for several years, but the Bank only recently started to consider it, and Bank documents have not yet recommended relevant policy. The national noncontributory scheme was relatively ineffective in reducing poverty among the aged, and the schemes developed by provinces also had a limited scope, since they were arbitrarily assigned, given budgetary restrictions, and candidates accumulated on long waiting lists. Bank assistance helped reduce some laxity and heterogeneity between provincial schemes, but it did not help reduce inequities in the system.

6. In Brazil, the case study finds that the proportion of the rural old with no income from work or pensions is lower than both the urban old and rural young in 1998. ESW in 1995 found that the level of the rural pension was above the poverty line, and it proposed that the rural pension be scaled back, but this recommendation was not adopted. ESW also proposed some modest targeting in the rural sector, but the objectives relating to the old poor were excluded from the five proposed priority goals in the Structural Adjustment Loans even though they would have greatly increased the

fiscal efficiency of the program. The exclusion of improvements to the rural poor was a reflection of the mentality that bringing up fiscal issues would lead to a cut in benefits for the old poor.

7. In the medium term, post-reform, Argentina and Uruguay suffered economic crises.

8. These were Hungary, Kazakhstan, Latvia, Mexico, Peru, Russia, and Uruguay.

9. The development outcomes according to the IEG case studies were satisfactory for both Latvia and Kazakhstan.

10. See Appendix D for a discussion of the fiscal and debt implications of funded pension reform.

11. The IEG case study rating of FYR Macedonia is based on the decision to place the multi-pillar reform on hold; it is critical of the initial attempt to implement the reform.

12. While Nicaragua's reform was put on hold, the decision to proceed in the first place was not well advised given its significant reliance on donor assistance.

13. The framework for measuring financial sector quality is based on EBRD ratings, Bank assessments, and a more comprehensive analysis of the financial conditions of each country from the FSAP assessments. The latter two are confidential; as a result, only the EBRD ratings are discussed in this section.

14. These EBRD measures of financial sector strength roughly parallel the Bank's own measures of the financial sector with the exception of Kazakhstan, in which the Bank assessed the country's banking system more favorably than the EBRD.

15. This is confirmed by the Bank's analysis.

16. In Costa Rica, while the banking system continues to be dominated by public banks and a Bank assessment of the financial sector was less than satisfactory, the FSAP analysis of the financial sector indicates that it is reasonably well-developed. In the Dominican Republic, a Bank-Fund assessment pointed to significant issues surrounding the soundness of the financial system.

17. In Cameroon, banks remain vulnerable to fundamental liquidity risk and credit risk as a result of large movements in the trade balance. While the banking system in Senegal is generally well regulated, it is still vulnerable to government pricing policies, although the government is no longer managing the day-to-day affairs of banks in which it holds a stake. The banking sector in Uganda has improved, but on-site examinations continue to identify significant under-provisioning, and indicate that capital is understated.

18. However, Korea already has a high level of national savings, which may deter the government from adopting a multi-pillar system.

19. Poorly defined property rights and reports of corruption and misappropriation suggest that the central government may find it difficult to distinguish between what it owns and what is owed to it. If so, the banks' nonperforming loans could jeopardize central government finances (China Country Assistance Evaluation, OED [IEG] 2005).

20. *Strategy* did not investigate the relationship between a culture of corruption and effective regulation of the private sector in its discussion of political risk and power.

21. However, this could simply be due to a lack of documentation, as countries with low incidences of corruption have well-documented instances of fraud and abuse.

22. Since the World Bank's governance database provides information for 1996, 1998, 2000, 2002, and 2004, the data used are for the year closest to the reform. For earlier reformers, 1996 is used and for later reformers, 2002 is used.

23. *Strategy* states "funded systems hold some advantages over traditional systems. The second pillar would be able to provide better income replacement for a given contribution rate . . . enhance national savings, promote capital market development, and reduce labor market distortions by linking contributions to benefits." *Perspective* states, under a multi-pillar system, "The *saving rate* and consequently the level of capital accumulated and output produced may be higher . . . Higher savings rates are associated with technological changes of the capital dependent type leading also to a higher growth path." In addition, *Perspective* cites Feldstein (1996) in arguing that consequently "the marginal product of capital exceeds the market rate of interest—as capital markets are never fully integrated—creating another gain for the national economy from a funded scheme."

24. The rate of return in a PAYG system is equal to the rate of growth of covered average wages plus the rate of growth of the labor force.

## Chapter 4

1. Very little research has been conducted on the direct impact of pensions on economic growth. One recent study (Davis and Hu 2004) found a positive relationship between pension assets, growth, and capital



for emerging market economies. However, the countries with the highest pension assets as a proportion of GDP were Malaysia, Fiji and Chile, two of which do not have a multi-pillar system and the last, Chile, exhibits more satisfactory performance in many areas compared to other multi-pillar countries in Latin America. These issues will need to be addressed further in the future as multi-pillar reforms continue to grow and asset holdings expand.

2. While investing abroad will help diversify the portfolio and decrease investment risk, especially when the domestic capital market is undeveloped, it exposes the portfolio to exchange rate volatility and currency risk.

3. Some countries, such as Estonia, have invested in government bonds of different countries. The risk profile of such an investment strategy would be quite different from undiversified investments in a country's own sovereign debt.

4. During times of economic crisis, pension fund portfolios may naturally shift toward government debt when other assets lose value or become more risky.

5. Nonetheless, diversification to highly risky private equity or debt instruments would not improve the risk profile of participants. Investment in assets below investment grade should be precluded by effective regulatory controls.

6. A number of proponents of funding, however, would say that participants may receive a stronger guarantee if their pensions are funded through bonds than if they are funded on a PAYG basis.

7. In most countries with funded pension systems, portfolio ceilings are set by regulation rather than applying the prudent investor rule. Peru is the only country in which government securities can be a maximum of 30 percent of a pension fund's portfolio. In other countries, funds can invest from 50 percent to 100 percent of their assets in government issues. In most countries, there are very low limits on the percentage of assets that can be invested in foreign securities. Only Bolivia permits up to 50 percent of assets abroad.

8. The absence of a well-developed domestic market for government debt also weakened bank risk management.

9. The share of government bonds in Estonia was quite low at 34 percent of the portfolio, but Estonia's reform was not among those supported by the Bank through loans or credits.

10. The International Labor Organization estimates that the rate of return in Poland was less than inflation from December 1999 to 2004 and that the situation is similar in Hungary.

11. This difference could decline over time if economies of scale in pension management are achieved and regulatory agencies are effective in reducing costs of management and marketing. See Dobronogov and Murthi 2005.

12. The year 1999 is an intermediate marker for the progress of the various pension reforms.

13. There are many other ways to reduce investment risk, including the use of relatively sophisticated approaches such as hedge funds.

14. See Thompson (1998) for simulation analysis.

15. According to Ramachandran and Kessides (2005), Argentina's government default on its bonds essentially destroyed the second pillar.

16. *Promise* (2005).

17. See Appendix D for additional detail on this topic.

18. In Peru, the pension costs for civil service retirees remain high. In Argentina, the PAYG system includes a multiplicity of plans with high replacement rates and low retirement ages. Uruguay's PAYG system faces fiscal problems, and actuarial modeling is not being used to inform policymakers. In Bolivia, the Bank overlooked critical reforms in the old system while the multi-pillar system was being established. Argentina and Uruguay also suffered significant financial crises in the late 1990s, which caused their economies to contract, despite their strong fiscal profile.

19. Econometric studies continue to be inconclusive about the impact of pension reform on saving. For example, Walker and Lefort (2002) report that a number of studies have found the direct impact of pension reform on savings to be ambiguous. Samwick (1999) using data for a panel of countries found that only Chile experienced an increase in gross national savings rates after pension reform. While Riesen and Bailliu (1997) found that the impact of pension reform on personal saving was eight times greater for emerging market economies than for advanced economies based on data for 11 countries from 1982–93, aside from Chile, the report did not include any countries assisted by the World Bank. Davis (2005) concludes that a rise in saving is not a guaranteed outcome of a pension reform.

20. See Appendix D for an explanation of the interaction between funded pensions, savings, and fiscal policy.

21. Econometric studies have also tried to assess these impacts. For example, Catalan and others (2000) used econometric analysis to look at the impact of contractual savings instruments on capital market development, but their study also included countries with provident funds or voluntary pension systems and not countries in which the World Bank supported the development of multi-pillar systems. Other researchers have assessed a more complicated set of indicators to determine the impact of pension reform on capital markets. Walker and Lefort (2002) found that transaction costs decreased in Chile as a side effect of pension reform, but not necessarily in Peru and Argentina, possibly due to the short duration of the time series data. When they looked at seven Latin American countries, they found no significant effects of pension funds on dividend yields, although they did increase price to bond ratios. They also did not find any significant effect of pension fund reforms on stock market volatility.

22. By way of comparison, this is below the 85 percent share of equities relative to GDP in Chile, or even the 35 percent share in Brazil, where funded pensions are voluntary (based on data for 2000).

23. The term “participation” as used in this instance represents current contributors, as opposed to all workers who have ever contributed.

24. This is also noted by Ramachandran and Kessides (2005).

25. The case study evaluations do not assess the development outcome of the reform but, rather, the Bank’s assistance in promoting a satisfactory development outcome. Thus, the case studies take into consideration the multitude of uncontrolled factors that may affect the reform during the reform process. The assessment of the impact of World Bank assistance followed IEG methodology for project evaluation. It judged the outcomes, institutional development impact, and the sustainability of the results of the assistance. The outcome rating was derived as a result of three sub-criteria: relevance, efficacy, and efficiency.

## Chapter 5

1. The chapter’s findings on institutional development impact are based on IEG case studies, ICR Reviews, and interviews with Bank staff.

2. Of those, 19 borrowed only for investments or technical assistance, while another 6 borrowed only for adjustment support.

3. The countries are Cameroon, Cape Verde, Ghana, Mali, Mauritius, Mozambique, Niger, Senegal, and Tanzania.

4. Even fewer countries have received formal support from the Bank to institute offices for strategic planning, operational planning, policy development, program monitoring, and policy evaluation.

5. The Mexican government requires annual actuarial reviews of all its pension systems, which are carried out by Mexican actuarial firms that use internationally accredited actuaries. But without in-house actuarial capacity, the independence and accuracy of these calculations can be politically compromised.

6. There is one licensed actuary in Cape Verde who received PROST training and is fully involved in the reform work.

7. The limited disbursement was due in large part to the government’s subsequent decision not to borrow for technical assistance.

8. The IEG Russia case study also raised substantive issues about the Russian government’s current reform, which was developed without Bank assistance.

9. Also see Chapter 3.

10. In addition, clients need another budgeting tool other than PROST to develop short-term budget estimates and minor benefit adjustments.

## Chapter 6

1. This has posed a problem in Africa and the Middle East, and also in Bolivia, Korea, the Kyrgyz Republic, and Uruguay. For Korea, its earlier graduation from the IBRD was a proximate cause of the lack of continuity in the Bank’s dialogue.

2. After the 1997 Bank reorganization, organizational units involved in pension reform issues included the Development Economics vice presidency, country units, sector units, and networks. Similar structural units took part in a dynamic pension dialogue before the reorganization.

3. For example, intersector disagreements have been of concern in pension operations in Bosnia & Herzegovina, Georgia, India, and Ukraine. In Ukraine, it was a lengthy process before the World Bank could come to any agreement on the direction of reform, and even now, the current reform may be too early.

4. The analysis was based on the number of operations or the total amount of loan funds under management.

5. For instance, Mauritius, which had met the pre-conditions for a multi-pillar pension reform, received



too little funding and Zambia, where performance was poor, received a significant amount for pension reform.

6. A problem that affected FYR Macedonia, Nicaragua, and Nigeria

7. Issues related to FSAP assessments will be examined in IEG's forthcoming FSAP evaluation.

8. These include TACIS, UNDP, and USAID.

9. However, the OECD has had a number of staffing overlaps with the Bank, resulting in an informal transfer of knowledge.

10. See Asian Development Bank 2003.

11. However, Kazakhstan cancelled the last tranche of a pension adjustment loan because there was little government ownership of the later conditions, and Kazakhstan no longer needed adjustment lending.

12. Other international organizations, particularly labor ministries and social security administrations, occasionally provide different interpretations than the Bank on Bank interactions with the government.

13. These include ADB, IMF, and USAID.

14. This includes coverage, annuity provision, and women's pensions.

## Chapter 7

1. In addition, there remains considerable controversy among economists about the impact of pensions on saving and the impact of saving on growth.

2. The initiative would share expertise with pension funds through seminars and technical assistance in conjunction with portfolio management. The Treasury already provides this type of assistance to central banks.

## Appendix B

1. This review is based on the Latin America and the Caribbean Region country case studies by Rofman, San Martino, and Valdes-Prieto.

2. All except Colombia are represented in the IEG case studies.

3. The government also provides a subsidy for lower-earners in the first pillar if they join the funded system.

4. The pre-reform PAYG system has been dismantled, but workers that choose the old system's benefit package will have their entire accumulation paid in a lump sum to Treasury, which issues an annuity through the new system. The government then assumes partial investment risk for the individual account.

5. Management notes that there are no longer any separate schemes for civil servants in Europe and Central Asia, except in Turkey. However, according to the

U.S. Social Security Administration's website on the pension systems of other countries, Albania and Russia still have special schemes for civil servants and Azerbaijan has special schemes for certain categories of civil servants.

6. A recent reform of the state civil service plan in India creates a funded pillar, which the government hopes to augment with reformed provincial plans and contributions from the self-employed.

## Appendix C

1. These divisions were made based on the likelihood that the strength of supervision would depend on the level of Bank resources, that is, thorough pension supervision would be more likely when the proportion of the loan devoted to pensions was higher.

2. These are self-evaluations by Bank teams.

3. A simple satisfactory/unsatisfactory scale was used because in many ICRs where the pension component was not prominent, a more detailed verbal evaluation of the pension component was not available to make a nuanced judgment. In addition, six projects were deemed "non-evaluable."

4. The six-part project-rating scheme is: highly satisfactory, satisfactory, moderately satisfactory, moderately unsatisfactory, unsatisfactory, highly unsatisfactory. The two-part equivalent scheme categorizes highly satisfactory, satisfactory and moderately satisfactory ratings as satisfactory; and moderately unsatisfactory, unsatisfactory, highly unsatisfactory ratings as unsatisfactory.

5. In particular, the outcome rating and institutional development ratings weighted by commitments are particularly low. The low ratings in outcome and institutional development are the result of the \$800 million Russian Social Protection Adjustment Loan, which received respective ratings of moderately unsatisfactory, and modest. This project makes up 46 percent of total commitments for the 9 pension projects in this category. The rating for institutional development impact was also influenced by a modest rating for a 1997 Mexican adjustment loan.

6. Only two projects, for Latvia and FYR Macedonia, were less than 100 percent devoted to pension reform. The other components in these projects were related to social assistance.

7. The development outcome for the pension component was satisfactory for all 10 projects. Because the rating for the project overall shows more delineation among ratings, only those ratings are shown. The de-

velopment outcome ratings are uncorrelated with sustainability or size of the pension component.

8. However, development outcome of these two pension reforms as they stand today were adversely affected by the collapse of the Argentinean and Uruguayan economies.

9. The loan was evaluated on its performance in supporting an associated adjustment loan rather than for the success of the pension reform. A further assessment by FSAP indicated that FYR Macdonia's financial sector and the regulatory structure were not ready for the pension reform, and progress on the reform had to be slowed down.

10. However, the Bank's 1997 ESW study indicated that the pension system remained deficient in design, financing, and administration.

## Appendix H

1. For example, the report in some cases uses the drafting of legislation as an indication that a country has undertaken a reform program. Nicaragua, for example, is cited as having undertaken a reform even though the reform was put on hold, as indicated in Chapter 3 of the report.

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