Reference Number: SST: REG 2008-17
Special Evaluation Study
July 2008

Private Equity Fund Operations

Operations Evaluation Department

Asian Development Bank
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>AIG</td>
<td>American International Group</td>
</tr>
<tr>
<td>AISF</td>
<td>AIG Indian Sectoral Fund</td>
</tr>
<tr>
<td>APVL</td>
<td>Asia Pacific Ventures Limited</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>CAGR</td>
<td>compound annual growth rate</td>
</tr>
<tr>
<td>CalPERS</td>
<td>California Public Employees Retirement System</td>
</tr>
<tr>
<td>CAPE</td>
<td>country assistance program evaluation</td>
</tr>
<tr>
<td>CAPM</td>
<td>capital asset pricing model</td>
</tr>
<tr>
<td>CLASS</td>
<td>comprehensive loan administration and servicing system</td>
</tr>
<tr>
<td>CPS</td>
<td>country partnership strategy</td>
</tr>
<tr>
<td>CSP</td>
<td>country strategy and program</td>
</tr>
<tr>
<td>CTL</td>
<td>Controller’s Department</td>
</tr>
<tr>
<td>DMC</td>
<td>developing member country</td>
</tr>
<tr>
<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>EMPEA</td>
<td>Emerging Markets Private Equity Association</td>
</tr>
<tr>
<td>ESHS</td>
<td>environmental, social, health, and safety</td>
</tr>
<tr>
<td>FDI</td>
<td>foreign direct investment</td>
</tr>
<tr>
<td>FIRR</td>
<td>financial internal rate of return</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>HQPV</td>
<td>H&amp;Q Philippine Ventures Incorporated</td>
</tr>
<tr>
<td>ICICI</td>
<td>Industrial Credit and Investment Corporation of India</td>
</tr>
<tr>
<td>ICT</td>
<td>information and communication technology</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>IL&amp;FS</td>
<td>Infrastructure Leasing &amp; Financial Services Limited</td>
</tr>
<tr>
<td>IVCL</td>
<td>IL&amp;FS Venture Capital Limited</td>
</tr>
<tr>
<td>LAPIC</td>
<td>Lombard Asian Private Investment Company</td>
</tr>
<tr>
<td>LNWCEI</td>
<td>Liberty New World China Enterprises Investments</td>
</tr>
<tr>
<td>MDB</td>
<td>multilateral development bank</td>
</tr>
<tr>
<td>NPL</td>
<td>nonperforming loan</td>
</tr>
<tr>
<td>OED</td>
<td>Operations Evaluation Department</td>
</tr>
<tr>
<td>OGC</td>
<td>Office of the General Counsel</td>
</tr>
<tr>
<td>OIST</td>
<td>Office of Information Systems and Technology</td>
</tr>
<tr>
<td>PAU</td>
<td>Project Administration Unit</td>
</tr>
<tr>
<td>PCCR</td>
<td>project completion report</td>
</tr>
<tr>
<td>PEF</td>
<td>private equity fund</td>
</tr>
<tr>
<td>PPER</td>
<td>project performance evaluation report</td>
</tr>
<tr>
<td>PPP</td>
<td>public–private partnership</td>
</tr>
<tr>
<td>PRC</td>
<td>People’s Republic of China</td>
</tr>
<tr>
<td>PRISMS</td>
<td>private investment securities management system</td>
</tr>
<tr>
<td>PSCM</td>
<td>Capital Markets and Financial Sectors Division</td>
</tr>
<tr>
<td>PSDS</td>
<td>private sector development strategy</td>
</tr>
<tr>
<td>PSIM</td>
<td>private sector investment management</td>
</tr>
<tr>
<td>PSOD</td>
<td>Private Sector Operations Department</td>
</tr>
<tr>
<td>RMU</td>
<td>Risk Management Unit</td>
</tr>
<tr>
<td>RRP</td>
<td>report and recommendation of the President</td>
</tr>
<tr>
<td>RSDD</td>
<td>Regional and Sustainable Development Department</td>
</tr>
<tr>
<td>SMEs</td>
<td>small and medium-sized enterprises</td>
</tr>
<tr>
<td>SOE</td>
<td>state-owned enterprise</td>
</tr>
</tbody>
</table>
GLOSSARY

Additionality – This evaluation parameter consists of two components: (i) the extent to which ADB finance was a necessary condition for the timely realization of the project, directly through mobilization of funds and/or indirectly by providing comfort to other financiers; and (ii) ADB’s contribution to the design and functioning of the project to improve development impact.

Carried interest – A fund manager’s share (typically about 20%) of capital gains on investments returned to investors, net of the hurdle rate.

Fund – Entity in which investor’s funds are held

Hurdle rate – Preferred return on investment paid first to fund investors before calculation of the fund managers’ carried interest (typically about 8% per year)

Management fee – Annual fee for investment funds calculated on committed or invested capital (typically 2.0%–2.5% per year)

Frontier Countries – Developing Member Countries other than India and the People’s Republic of China

Fund manager – Entity that manages the fund

NOTES

(i) In this report, "$" refers to US dollars.

Key Words
additionality, asian development bank, business success, country strategy, development impact, financial sector, asia, pacific, investment fund, performance evaluation, private sector operations department, private equity, infrastructure, venture capital, small and medium-sized enterprises, pensions, capital markets, institutional investors, work quality

Director General
H. S. Rao, Operations Evaluation Department (OED)

Director
R. B. Adhikari, Operations Evaluation Division 2, OED

Team leader
B. A. Finlayson, Senior Evaluation Specialist,
Operations Evaluation Division 2, OED

Team members
J. Dimayuga, Evaluation Officer,
Operations Evaluation Division 2, OED
M. Tagud, Senior Evaluation Assistant,
Operations Evaluation Division 2, OED

Operations Evaluation Department, SS-91
The guidelines formally adopted by the Operations Evaluation Department (OED) on avoiding conflict of interest in its independent evaluations were observed in the preparation of this report. Joseph C.F. Lufkin was the consultant. To the knowledge of the management of OED, there were no conflicts of interest of the persons preparing, reviewing, or approving this report.
EXECUTIVE SUMMARY

A. Introduction and Background

Investments in private equity funds (PEFs) are a core activity for the Private Sector Operations Department (PSOD). The Asian Development Bank (ADB) made its first PEF equity investment in 1983. Between 1983 and 31 December 2007, investments in a total of 75 PEFs were approved with a combined value of $900 million. At 31 December 2007, PSOD had 40 active funds with a total approved value of $676.4 million.

The increase in the level of investment in PEFs within ADB’s operations since the last Operations Evaluation Department (OED) evaluation five years ago, the significant size of the PEF portfolio in relative terms compared to other peer development agencies, and a forecast increase in PEF approvals in 2008, indicate that it is an opportune time to independently reevaluate the PEF portfolio. The objective of this special evaluation study is to independently evaluate PEF operations, draw lessons, and identify ways in which its contribution to supporting private sector development through the use of PEF instruments can be enhanced. The special evaluation study follows OED’s Guidelines for Preparing Performance Evaluation Reports on Nonsovereign Operations.

Private equity in emerging economies has grown rapidly over the last five years into a multibillion dollar industry. Asia is the dominant destination for private equity among emerging economic regions, and annual fundraising has risen from $2.2 billion in 2003 to an estimated $23.1 billion in 2007. While these private capital flows are substantial and growing rapidly, allocation is quite narrow across countries and sectors. In Asia, investment is concentrated in India and the People’s Republic of China (PRC). The fostering of high-growth small and medium-sized enterprises (SMEs) and catalyzing productivity improvements in existing businesses are seen by governments and development agencies as important policy objectives in many developing member countries. Virtually all multilateral development banks and bilateral development finance institutions invest in PEFs as part of their efforts to promote SMEs. PEFs provide a means of improving SME access to technology and equity capital. By the mid-1990s, multilateral development banks such as ADB had become important participants in the PEF market in Asia, to help catalyze third-party private equity in the region. Despite the high level of sophistication of the financial structures used in the private equity industry, financial performance has been low and highly skewed. Unless investors in PEFs were with a top performing manager, evidence indicates that better returns would have been achieved investing in bonds.

PEFs have formed an important component of ADB's Private Sector Development Strategy approved in 2000. Within this framework, ADB’s public sector regional departments are responsible for developing the enabling environment, whereas PSOD takes the lead in directly catalyzing investment. A review of ADB’s country strategy and programs indicates regional departments have been most active supporting PEFs in the large, relatively advanced, rapidly transforming economies such as India and the PRC. Regional departments have been creating enabling conditions for SMEs (and indirectly PEFs) in these countries by pursuing reforms in areas such as strengthening local equity markets and helping remove investment restrictions on pension funds. Reforms of the enabling environment that is directly beneficial for private equity has been limited in countries such as Indonesia, Pakistan, the Philippines, and Thailand, where PSOD was active investing in PEFs in the past.
PSOD has targeted medium-sized funds in developing member countries, with a particular focus on SMEs in infrastructure sectors, and it has sought to demonstrate that acceptable returns can be achieved from these forms of investment. Most of these investments have occurred independent of regional department reform initiatives. It has been difficult to coordinate PSOD’s activities with regional departments as approximately 50% of its direct investments in PEFs up to the end of 2007 have been made in regional funds.

Growth in ADB’s PEF approvals has been erratic. Almost 50% of ADB’s currently outstanding capital commitments to PEFs have been approved since 2003. The portfolio is geographically concentrated, with only four countries accounting for 78% of investments, and two countries (India and the PRC) accounting for 51% of investment. Regional, non sector specific, SME funds are the dominant type of PEF, accounting for 47% of investments. Infrastructure in the telecommunications, transport, and utilities sectors, together account for 53% of investments in investee companies.

PSOD is responsible for PEF investments under its Capital Markets and Financial Sectors Division which was created in 2002. There are two full-time-equivalent professional staff and two administrative staff assigned to originate investments and manage the current portfolio of 40 PEFs, which appears substantially inadequate. While the management information system for PEFs has been upgraded, it is not fully utilized, processing procedures are labor intensive, and internal reporting within ADB as a whole is limited to the quarterly reports on private sector operations.

B. Key Evaluation Findings

The PEF investment portfolio is evaluated using four criteria: (i) development impacts and outcomes, (ii) ADB investment profitability, (iii) ADB work quality, and (iv) ADB additionality.

1. Development Impacts and Outcomes

Development impacts and outcomes are evaluated under the following subheadings: (i) private sector development; (ii) business success; and (iii) environment, social, health, and safety performance. Private sector development is appraised under two subheadings: (i) beyond company impacts, and (ii) direct company outcomes.

The main beyond company impacts have been the mobilizing of funds and demonstrating the feasibility of the concept of PEFs in Asia. A review of ADB’s active portfolio investments indicates that while the level of capital mobilized by PEFs has been highly variable, there has been an average ADB investment of $16.7 million per PEF with an average capitalization of $135.4 million, equating to $8.08 for every dollar invested by ADB. This leverage is further increased as PEFs then take minority investments in SMEs and help stimulate further private investment. This result indicates that private capital mobilization is an important feature of PEF investments, although rapidly increasing private equity flows in the Asian region indicate that constraints on accessing private equity from third parties are diminishing in markets such as India and the PRC. Evidence supports the findings of the literature review (Appendix 3) that PEFs have positive direct company outcomes in areas such as strengthening corporate governance, technology transfers, and employment generation. Taken together, the results indicate that ADB’s investments in PEFs have been beneficial in the past, although the impacts and outcomes from the strategy of targeting regional SME funds have been declining over time. On balance, a rating of "satisfactory" is assigned to the private sector development criterion.
The business success of the PEF investments is rated "partly satisfactory". Financial returns generated by the PEFs in which ADB has invested are significantly below comparators such as other peer funds. ADB's average annual nominal return (net of management fees) in PEFs for the period 1986–2005 was 6.9% compared to industry benchmark averages of 12.6% for Asia, 24.4% for Western Europe, and 20.4% globally (excluding the United States). The nominal financial rate of return (inclusive of management fees) from investee companies of 9.5% does not cover the market based required rate of return for equity investments. Standard PEF industry performance measures such as the capital asset pricing model derive an average hurdle rate over the last 24 years of 14.3%.

Environmental, social, health, and safety performance requirements were assigned a rating of "satisfactory". Provisions for fund managers to establish safeguard management systems have worked effectively, although provisions to monitor safeguards post approval should be strengthened.

On the basis of these findings, the overall rating for development impacts and outcomes was rated "satisfactory".

2. ADB Investment Profitability

ADB investment profitability has been improving in recent years, but overall performance has been poor. The nominal financial internal rate of return for the PEF portfolio was 7.5%, which is only slightly more than 50% of ADB’s average required rate of return of 14.3%. As a result, ADB investment profitability was rated "unsatisfactory".

3. ADB Work Quality

ADB work quality addresses (i) screening, appraisal, and structuring; (ii) monitoring and supervision; and (iii) role and contribution to the project.

The screening process has demonstrated a lack of strategic focus, and the identification of PEF investments has been primarily reactive in response to sponsors approaching ADB. The structuring and appraisal of PEF structures has been satisfactory, although subject to weaknesses. The due-diligence process is comprehensive by industry standards and it has been reasonably successful identifying relatively low-risk PEFs. Offsetting this result, development impacts are not clear, and financial performance has been poor. Post investment approval, funds have often departed significantly from approved investment concepts and there are few mechanisms available to PSOD to mitigate this risk. PSOD has an investment policy of limiting participation in PEF investment decisions to acting as a member of the advisory committee. ADB's limited role in fund decision-making is further restricted by its role as a minority shareholder, reducing its potential to influence management decisions once funding is committed. ADB has not made sufficient use of provisions in fund agreements such as a requirement for comprehensive business plans, opt-out clauses, and veto rights.

There are weaknesses in ADB’s monitoring arrangements for PEFs. Reports obtained from fund managers vary in quality and they are primarily paper based, which makes processing time-consuming and delays availability of data. Management information systems do not record data on performance indicators such as development impacts and PSOD does not report to ADB Management on actual relative to targeted development performance. Financial, environmental, and social safeguard risks are directly assessed by PSOD only following project approval, and they are not subject to independent review outside the department. Risk
Management Unit has access to financial reports but it does not independently rate projects post approval. There is very little monitoring of non-financial risks post investment approval. PSOD does not prepare an overview of the PEF portfolio, for Management review as it is subsumed in ADB's non-sovereign-guaranteed portfolio. PSOD prepares project completion reports, but this only occurs at a minimum of 7.5 years after the investment period for the fund commences, and they can only provide limited guidance on lessons learned and appropriate management responses to issues that arise.

The lack of data and management reports makes it difficult to assess ADB’s role and contribution to developing PEFs. Once funding is committed, PSOD is largely dependent upon fund managers to achieve positive development and financial results by relying upon a combination of commercial incentives and a set of high-level investment restrictions that have little relationship with development objectives. As a result, the overall rating for ADB’s work quality is “partly satisfactory”.

4. ADB Additionality

This criterion is based on whether (i) ADB finance was a necessary condition for the timely realization of PEF investments, and (ii) ADB’s contribution and function improved development impact. The review of the PEF portfolio indicates that in the past ADB’s participation in PEFs has provided additionality by catalyzing private investment in PEFs. However, this impact has been declining over time due to the continued focus on markets such as India and the PRC, where ADB’s demonstration and risk mitigation impacts for PEFs have been declining in recent years, as demonstrated by the rapid growth in private equity in these markets. Due to resource constraints, Capital Markets and Financial Sectors Division has had limited ability to directly add value to PEF operations and strengthen their development impacts. The rating for ADB additionality is "partly satisfactory".

5. Overall Assessment

The overall rating of the PEF operation, as justified by the underlying ratings of development impact, ADB investment profitability, ADB work quality, and ADB additionality, is "partly successful".

C. Issues, Lessons, and Recommendations

Issues about PEFs have been identified in the following areas: (i) whether they are developmental; (ii) the balance in ADB’s portfolio between PEFs and direct equity investments; (iii) the lack of strategic focus for PEFs; (iv) problems of style drift; (v) weaknesses in management reporting; (vi) the organization of PEFs; and (vii) the adequacy of resources for managing the PEF portfolio.

PEFs have a number of important development advantages. They provide a mechanism for attracting world-class fund managers to developing member countries to develop new companies and restructure existing companies. Through involvement of corporate investors, PEFs provide a means of transferring new technology from developed economies and accessing additional risk capital from foreign sources that would not otherwise be available. Fund managers can target large numbers of SMEs in developing member countries and recruit specialized staff locally to help manage investments. PEFs provide a means of attracting local sources of finance to high-potential SMEs, further leveraging funding impacts. PEFs have fund managers who have strong incentives to achieve tangible physical and financial results in a
short time, and in most cases have the necessary level of control to achieve these results. PEFs have the ability to support small investors and leverage large amounts of capital. The combination of these factors suggests that PEFs provide an important instrument for developing SME projects in the private sector from the bottom up.

Offsetting these factors, ADB’s involvement with the investee companies through PEFs is indirect through the management of the fund, and management fees are substantial. Congruence of development and financial incentives may not always be present. As a result, PEFs can be difficult to manage compared to direct equity investments, and it is more difficult to promulgate development outcomes at the investee company level. Direct equity investment has the advantage of higher degree of involvement in investee corporate governance through stronger decision rights that can be used to promote development objectives, and it not subject to the perverse incentives created by a finite life and imperfectly aligned management incentives. The main disadvantage of direct equity is that it involves more direct costs to manage these investments compared to PEFs. Hence, both direct equity and PEFs have their uses. As to the balance between these instruments, ADB’s prudential guidelines for equity investments indicate an equal balance between direct equity investments and PEFs in the limit. A comparison with other development agencies such as European Bank for Reconstruction and Development and the International Finance Corporation shows that they are making greater use of direct equity investments than PEFs. PEFs will tend to be more suitable for sectors such as SME start-ups where performance and management control of individual companies is not critical relative to the performance of the portfolio of investments. In comparison, direct equity will tend to be more important when individual company performance, such as large infrastructure projects, is key.

PSOD needs to make greater use of mechanisms such as ADB’s country partnership strategies to coordinate development strategies for SME financing using instruments such as PEFs relative to other development instruments such as debt. Country strategies need to reflect the specific development objectives that are being sought by ADB in a particular country, sector, and firm, relative to stage of development of the PEF industry, and ADB’s available resources and the financial risks that it is prepared to assume. From the perspective of ADB’s financial sustainability, it is preferable to place greater reliance on technical assistance and debt instruments in high-risk frontier countries such as Afghanistan, and make greater use of PEFs in emerging middle-tier countries such as the Philippines in under served sectors such as municipal infrastructure and technology intensive sectors such as clean energy that are not being targeted by the PEF sector. PSOD needs to develop a strategy for its PEF operations that is integrated with country partnership strategies, clearly identifies which sectors and stages of firm development it intends to target, and how they will support the development of the private sector.

Underpinning this strategy, there is a need for clear business plans and management reports on actual results relative to targets so PSOD can take a more proactive management role. To date, PSOD has managed to sidestep this problem by taking a “hands-off” approach to PEF management so there is limited input required by ADB Management. PSOD has relied upon the incentives inherent in fund structures to achieve a reasonable outcome. This approach has only been moderately successful, with problems of style drift, poor historical financial performance, and lack of availability within ADB of information on the performance of PEF investments and the PEF portfolio as a whole. The growth that will occur in ADB’s PEF portfolio over the next five years indicates this type of strategy will create risks if supporting institutional arrangements are not strengthened to upgrade its risk management and reporting systems. At present the PEF operation and its management functions are not adequately resourced to meet
this challenge. Evidence suggests that the number of professional staff should be doubled, with a commensurate increase in administrative staff, just to manage the existing portfolio. PSOD needs to reallocate staff from within the department, recruit additional staff, outsource some of its management functions, or downsize the PEF portfolio. Irrespective of which changes are made, PSOD needs to increase its exposure in the resident missions to support project origination and management functions.

There are a number of trade-offs that need to be considered by ADB Management in determining the most appropriate PEF operational strategy and organizational structure. The final arrangement will be driven to a significant extent by resource availability and risk-management considerations. Without increasing the level of staff sufficiently and strengthening reporting and risk-management systems through actions such as managing the PEFs as a stand-alone portfolio and putting in place management systems that facilitate independent review of risks, PSOD will be heavily constrained in the use of PEFs and the level of demonstration effects that it can achieve.

To help resolve these issues, the following options can be considered by ADB Management:

(i) Strengthening country programming arrangements so there is better coordination within ADB at the country and sector level when seeking to develop the nonbank financial sector for private sector development.
(ii) Preparing an operational strategy for PEFs, setting out principles for managing the overall portfolio, identifying targeted countries and subnational regions, sectors, stages of firm development, styles and sizes of funds, and desired development impacts that is circulated to all regional departments.
(iii) Upgrading PEF portfolio planning, management and reporting systems to facilitate management of PEFs as a stand-alone portfolio and facilitate development impact monitoring.
(iv) Strengthening the risk-management systems for PEFs by putting in place capacity to independently monitor projects post-approval from a financial, social, and environmental perspective.
(v) Clarifying organizational roles and responsibilities, with particular regard to making greater use of resident missions for PEF operations, and the need to complement regional department operations.
(vi) Allocating sufficient resources in the areas of budgeting and staff to efficiently and effectively manage PEF operations.

A broader menu of options to address these issues is presented under conclusions in Appendix 5. Given the wide scope and interconnected nature of these options, and their interrelationship with other PSOD and ADB operations, the adoption of an ADB wide collaborative approach to address these issues may be considered.

H. Satish Rao
Director General
Operations Evaluation Department
I. INTRODUCTION

A. Background

1. Investments in private equity funds (PEFs) are a core activity for the Private Sector Operations Department (PSOD). The Asian Development Bank (ADB) made its first PEF equity investment in 1983. Between 1983 and 31 December 2007, investments in a total of 75 PEFs were approved with a combined value of $900 million (Appendix 1). Within this total, 55 PEF investments were implemented with a total approved value of $744.2 million. On 31 December 2007, PSOD had 40 active funds with a total approved value of $676.4 million.\(^1\) Active PEF investments represented 8.9% of PSOD’s approved portfolio, and 47.6% of PSOD’s approved equity investments. Equity investments represented 18.6% of PSOD’s total approved portfolio.\(^2\)

2. In 2002, the Operations Evaluation Department (OED) conducted an impact evaluation study\(^3\) of ADB’s investment fund operations which concluded that PEFs had been successful in mobilizing resources, but financial performance had been poor due to the negative impact of the Asian financial crisis. During 2002–2006 there was strong growth in ADB’s PEF investment activities, with annual approval rates more than doubling and equity investments increasing at a commensurate rate. In 2007, PEF volumes fell sharply, with only one transaction of $20 million being approved. In 2008, a further four PEF investments are programmed with a total investment value of $165 million, of which $100 million was approved in April 2008. PEFs now form a significant proportion of the PSOD portfolio (8.9%), which is higher than the European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC), where this form of investment accounts for about 5% of their investment portfolios and equity accounts for about 20% of total business.\(^4\)

3. The substantial increase in the level of investment in PEFs within ADB’s operations since the last OED evaluation five years ago, the significant size of the PEF portfolio in relative terms compared to other peer development agencies, and the forecast increase in approvals in 2008, indicate that it is an opportune time to independently reevaluate the PEF portfolio.

B. Study Objectives, Methodology, Scope, and Sources of Data

1. Study Objectives

4. The objective of this special evaluation study is to evaluate ADB’s PEF operations and identify lessons to improve its effectiveness to support private sector development through the use of PEF instruments. In line with this objective, the special evaluation study seeks to answer the following questions:

   (i) What are the dominant trends in the PEF sector in developing member countries (DMCs)?

   (ii) What are the conceptual underpinnings for the use of PEF instruments?

   (iii) What are the necessary conditions for PEFs?

\(^1\) This data is sourced from Private Sector Investment Management notes.


\(^4\) EBRD. 2006. Annual Report. London. This report indicated that PEFs accounted for 5.7% of annual commitments and that equity in total accounted for about 20% of operations. IFC’s annual report for 2007 provides data which shows that PEF commitments as a percentage of total commitments in its investment portfolio was 5%, and that equity as a proportion of total commitments was 21%.
(iv) What has been ADB’s strategic approach to support PEFs?
(v) To what extent has ADB helped catalyze investment through the use of PEFs?
(vi) What are the key issues impacting on the quality of PSOD’s PEF operations?
(vii) What are the implications for ADB’s current and future PEF activities?

2. Methodology

5. The evaluation of ADB’s PEFs is based on the OED’s Guidelines for Preparing Performance Evaluation Reports on Nonsovereign Operations, which have been harmonized with standards used by other multilateral development banks. The guidelines are designed to answer three key questions in terms of whether ADB is

(i) doing the right things in enhancing the private sector enabling environment and pursuing direct investments through PEFs;
(ii) doing things right in terms of the organizational structure, scale of operations, resource mix, and adequacy of systems; and
(iii) adding value.

6. The conceptual framework underpinning this analysis is illustrated in Figure 1.

---

**Figure 1: Conceptual Framework for Evaluating Investments in Private Equity Funds**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB Strategic Direction for PSD</td>
<td>Implement Public Sector Loans/TA - Improve Enabling Environment</td>
<td>Policy and Institutional Reform</td>
<td>Lower transaction costs and risks</td>
</tr>
<tr>
<td>Prioritization and selection of PSD Projects</td>
<td>Implement Non Sovereign PSO - Direct Investment</td>
<td>Strengthen Firm Capacity</td>
<td>Better firm decisions</td>
</tr>
<tr>
<td>Marketing and project origination capacity, project administration systems, risk management and reporting arrangements, skills and number of staff etc.</td>
<td>Is ADB doing the right thing?</td>
<td>Is ADB doing things right?</td>
<td>Increased Competition and Private Investment</td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank; PSD = Private Sector Department; PSO = private sector operations; TA = technical assistance.
Source: Operations Evaluation Department.

---

7. The way the evaluation issues map onto the criteria and subcriteria defined in the guidelines is presented in Table 1.

Table 1: Evaluation Framework

<table>
<thead>
<tr>
<th>Key Questions of the Special Evaluation Study</th>
<th>Evaluation Criteria Based on the Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is ADB doing the right thing?</td>
<td>(i) Development Impacts and Outcomes:</td>
</tr>
<tr>
<td></td>
<td>(a) Contribution to the sustainable development of the private sector</td>
</tr>
<tr>
<td></td>
<td>(b) Business performance of PEFs</td>
</tr>
<tr>
<td></td>
<td>(c) Contribution to living standards and environmental sustainability</td>
</tr>
<tr>
<td>Is ADB doing things right?</td>
<td>(ii) ADB’s Investment Profitability:</td>
</tr>
<tr>
<td></td>
<td>(iii) ADB’s Operational Effectiveness:</td>
</tr>
<tr>
<td></td>
<td>(a) At entry screening, appraisal, and structuring work</td>
</tr>
<tr>
<td></td>
<td>(b) Monitoring and supervision quality</td>
</tr>
<tr>
<td></td>
<td>(c) Role and Contribution</td>
</tr>
<tr>
<td>Is ADB adding value?</td>
<td>(iv) ADB’s Additionality</td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank; PEF = private equity fund.
Source: Operations Evaluation Department.

8. The evaluation consists of establishing the context for the study by defining the rationale for ADB investing in PEFs, and reviewing the characteristics of ADB’s strategies and programs of assistance. An evaluation using data from a wide range of sources is then performed by applying the four criteria defined in Table 1 to the PEF portfolio, projects, and operations to determine the extent to which the PEF investments are achieving ADB’s objectives. The answers to these questions provide the basis for identifying critical issues, lessons, and recommendations on reforms that can be considered by ADB Management to improve the developmental and financial performance of ADB’s future PEF investments.

3. Scope and Sources of Data

9. The special evaluation study focuses on PEF investments administered by PSOD in ADB’s DMCs. The period of analysis covered by the evaluation is from the commencement of ADB’s PEF operations in 1983 up to 31 December 2007. The evaluation of PEFs is based on a review of trends in private equity (Appendix 2), a literature review (Appendix 3), country strategies and programs (CSPs) prepared by ADB’s regional departments, and studies prepared by OED and PSOD. OED has prepared nine country assistance program evaluations since 2000, although only a small number of these refer to PEFs. OED prepared an impact evaluation study on PEFs in 2002 (footnote 3) and three project performance evaluation reports (PPERs) in 2007. The PPERs encompass (i) a regional fund and funds investing in each of the two major Asian PEF destinations, India and the Peoples’ Republic of China (PRC); and (ii) the main types of PEFs in ADB’s portfolio, which target small and medium-sized enterprises (SMEs) and infrastructure (Appendix 4). PSOD’s reports and recommendations of the President (RRPs) contain data on the justification for investments in individual PEFs. In 1999, the Private Sector Group carried out a review of investments in PEFs. PSOD has prepared (on a self-assessment basis) project completion reports (PCRs) on 10 PEFs (Appendix 4) and in 2006 it conducted a

---

7 OED has not prepared PPERs in the past due to concerns about commercial sensitivity of information and the need for confidentiality.

review of development impacts for 67 investee companies in which ADB had invested via PEFs between the late 1990s and 2006. PSOD produced an internal strategy document for PEFs in 2003, and made various presentations to ADB’s Board of Directors. On a quarterly basis PSOD presents summarized details on fund performance that is based on data held in the private sector investment management (PSIM) notes system. PSOD’s fund management database and information system—the private investment securities management system (PRISMS)—is the main source of operational data on PEF investments.

C. Organization of the Report

10. The rest of the report is organized as follows. Section II provides the context for assessing ADB’s private sector development activities. Initially, an overview of trends in the PEF market is presented, followed by a summary of the findings of a broad-based exploratory literature review. These analyses identify critical issues impacting on PEF performance and highlight possible reforms to help resolve these issues and develop the private sector.

11. In section III, the objectives of ADB’s assistance program for PEFs are presented and the way in which they were incorporated into ADB’s country and corporate planning process are reviewed. ADB public sector interventions are considered to the extent they helped improve the legal and regulatory environment or strengthened capacity of DMC governments to implement PEF-related reforms. PSOD’s portfolio and operations are analyzed, reviewing the geographic and sector coverage of PEFs across DMCs and the various forms of PEFs that have been targeted. Operational factors, such as organizational positioning within ADB, the level of resources allocated to PEFs, and adequacy of management systems, are assessed.

12. In section IV, ADB’s PEF portfolio and operations are evaluated using the four private sector evaluation criteria presented in the OED guidelines and summarized in Table 1.

13. In section V, a summary is presented of the critical issues arising from the evaluation, and lessons are drawn for future PEF operations. Recommendations are presented identifying possible actions that can be considered by ADB Management to strengthen its PEF operations.

14. Data on ADB’s PEF portfolio, a PEF industry analysis, detailed findings of the literature review, details on PEF evaluations prepared by ADB, a review of ADB’s PEF operations, and details on calculating financial performance benchmarks for PEFs are attached as appendixes.

II. RATIONALE FOR PROMOTING PRIVATE EQUITY FUNDS

A. Overview of Market Trends

15. Private equity in emerging economies has grown rapidly over the last five years into a multibillion dollar industry (Appendix 2). The emerging economies PEF market is customarily divided into five regions: (i) Asia, (ii) Central and Eastern Europe and the Russian Federation, (iii) Latin America and the Caribbean, (iv) sub-Saharan Africa, and (v) the Middle East and North Africa. Asia has outranked every other emerging economy since 2002 in terms of fund raising. Of the $69 billion raised in the past four years, $40 billion (58%) has been allocated to Asia.

---

Table 2: Global Private Equity Fundraising in Emerging Economies 2003–2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Asia</th>
<th>CEE and Russian Federation</th>
<th>Latin America</th>
<th>Africa</th>
<th>MENA</th>
<th>Other Regions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>2,200</td>
<td>406</td>
<td>417</td>
<td>350</td>
<td>116</td>
<td></td>
<td>3,489</td>
</tr>
<tr>
<td>2004</td>
<td>2,800</td>
<td>1,777</td>
<td>714</td>
<td>545</td>
<td>618</td>
<td></td>
<td>6,454</td>
</tr>
<tr>
<td>2005</td>
<td>15,446</td>
<td>2,711</td>
<td>1,272</td>
<td>791</td>
<td>1,915</td>
<td></td>
<td>25,765</td>
</tr>
<tr>
<td>2006</td>
<td>19,386</td>
<td>3,272</td>
<td>2,656</td>
<td>2,353</td>
<td>2,946</td>
<td></td>
<td>33,193</td>
</tr>
<tr>
<td>2007 (est)</td>
<td>23,098</td>
<td>7,222</td>
<td>2,708</td>
<td>1,184</td>
<td>3,632</td>
<td></td>
<td>42,098</td>
</tr>
<tr>
<td>Total</td>
<td>62,930</td>
<td>15,388</td>
<td>7,767</td>
<td>13,716</td>
<td>11,148</td>
<td></td>
<td>110,999</td>
</tr>
</tbody>
</table>

CEE = Central and Eastern Europe, est = estimated, MENA = Middle East and North Africa.


b Sub-Saharan.

c New fundraising figures for Africa and Middle East-North Africa were reported in the aggregate for 2003 and 2004. Source: Emerging Markets Private Equity Association data; 2007 full-year figures are extrapolated by doubling June 2007 half-year figures.

16. As shown in Table 2, the private equity sector in emerging economies in 2003 totaled $3.5 billion. In 2004, that figure almost doubled to $6.5 billion and in 2005 there was a four-fold increase to $25.8 billion. In 2006, the growth rate tapered off slightly, with an increase of 30% to $33.2 billion, although the total increase was larger than the 2003 and 2004 totals combined. In 2007, rapid growth has continued, with forecast growth to $42.1 billion, an increase of 26%. Within this total, Asia\(^{11}\) is the dominant region among emerging economies, and annual fundraising has risen from $2.2 billion in 2003 to an estimated $23.1 billion in 2007.

17. Changes are occurring throughout the Asian private equity market at an increasingly rapid rate and market participants are becoming more sophisticated. Transactions are growing in size, and transaction types and strategies of market participants are becoming more complex. Private equity investments are starting to diversify across countries within Asia and they are funded from a wider range of sources than in the past. At present, attention and capital remains focused on India and the PRC, and funds are largely sourced from Europe and the US. Nevertheless, new funds are being formed to target investments in smaller regional markets and capital is increasingly coming from nontraditional sources such as domestic private equity institutions in India, the Middle East, and the PRC.

B. Good Practices

18. The fostering of high-growth SMEs and catalyzing productivity improvements in existing businesses are seen by governments and development agencies as important policy objectives in many DMCs (further details are provided in Appendix 3). Virtually all multilateral development banks (MDBs) and bilateral development finance institutions invest in PEFs as part of their

---

\(^{11}\) In this review, Asia includes all countries in the region with the exception of Australia, Japan, and New Zealand. Asia comprises all DMCs plus Brunei Darussalam; Hong Kong, China; the Republic of Korea, Singapore; and Taipei, China.
efforts to support sustainable development and strengthen SMEs. Equity is the dominant source of finance for SMEs in the early stages of development as they typically have negative cash flows and untried business models. Growing firms tend to complement equity with debt once cash flows become positive and collateral is available to support lenders, and it can be supported by intermediate forms of such as convertible debt instruments in the later stages of the company life cycle. Once a company reaches maturity, it is then capable of being listed on the stock exchange through an initial public offering\textsuperscript{12} and the shares can then be traded in the secondary market. This process is illustrated in Figure 2.

19. PEFs have emerged over the last decade as an increasingly important source of equity finance in emerging economies due to growth in developed-economy pension and insurance funds and their ongoing search for high returns. PEFs are an attractive business model as they allow SMEs to access equity finance and investors to diversify risk. PEFs provide a means of introducing into SMEs professional managers who have specific skills that can be used to transform family businesses into firms that can credibly access equity finance by listing on the share market. The characteristics of the private equity industry vary significantly across regions and sectors and it can be highly cyclical over time. Critical factors include economic conditions, quality of the legal and institutional environment, standards of corporate governance, access to institutional and foreign investors, and availability of exit mechanisms such as a liquid stock exchange. While the level of private equity investment has been rising rapidly in many DMCs, limited access to markets, a lack of management skills, and illiquid local capital markets, have prompted many PEFs to be associated with foreign firms.

20. ADB’s private equity investment activities began in the early 1980s. By the mid-1990s, MDBs such as ADB had become important participants in the PEF market in Asia, and they have played a key role in catalyzing third-party private equity. In almost all cases, the PEFs

\textsuperscript{12} An initial public offer occurs when a company issues shares to the public for the first time.
established in the 1990s in Asia were based on the United States (US) model in terms of strategy, structure, processing systems, and staffing arrangements. Most funds were denominated in US dollars, it was expected investments would be exited through an initial public offer, and staff were located in Europe or in the US and recruited from US investment banks. By the late 1990s it was apparent this model was not working particularly well at a time when Western markets were booming. By 2002, following the collapse of the dot-com bubble, fundraising levels in Asia had fallen to the same levels achieved in 1993. Despite the high level of sophistication of the financial structures used in the private equity industry, financial performance has been surprisingly low and highly skewed (Table 3). Over the period 1980–1995, only a small number of fund managers made high returns, with good managers tending to consistently outperform the market over time. If investors in PEFs were not with a top manager, evidence indicates that better returns would have been achieved by investing in bonds.

Table 3: Return Distribution by Asset Class: 1980–1995

<table>
<thead>
<tr>
<th>Item</th>
<th>Private Equity (%)</th>
<th>Listed Equity (%)</th>
<th>Fixed Income (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper 75%</td>
<td>21.9</td>
<td>17.0</td>
<td>12.6</td>
</tr>
<tr>
<td>Median</td>
<td>14.0</td>
<td>15.9</td>
<td>12.0</td>
</tr>
<tr>
<td>Lower 25%</td>
<td>6.9</td>
<td>14.8</td>
<td>11.5</td>
</tr>
<tr>
<td>Spread: 75%–25%</td>
<td>15.0</td>
<td>2.2</td>
<td>1.1</td>
</tr>
</tbody>
</table>

*Returns are defined in dollar terms.


21. In a review in 2002, three main factors were identified that were causing PEFs in emerging economies to underperform: (i) low standards of corporate governance, (ii) weaknesses in the legal system enforcing contracts and protecting all classes of investors (including minority investors), and (iii) lack of liquidity in the domestic equity markets that would allow an exit through an initial public offer. The accuracy and availability of operational and financial data was seriously deficient, especially for family-owned firms, making due diligence and monitoring of investments problematic, particularly when participating in a minority shareholder role. When disputes arose, the law courts often did not provide a reliable means of enforcing rights, forcing many fund managers to pursue majority ownership interests. In Western markets an initial public offer is the primary means of exit for PEFs, and alternatives such as management buyouts and sales to strategic shareholders are rarely used, as returns are typically much lower. In comparison, in emerging economies, most exits have occurred through sales to strategic investors.

22. These issues led to a shift in the typical PEF investment strategy in emerging economies after 2000. Staff were relocated from Western headquarters to the field or recruited locally to improve the quality of market information, conduct due diligence, and manage investments. There was a rebalancing of skills away from negotiating and deal-making towards managing companies and adding value through activities such as strengthening corporate governance and restructuring operations. There was a shift towards new economy firms that were not dominated by old established families or a state-ownership ethos, and funds became more proactive and discerning in deal selection. Exit strategies were defined prior to making the investment and helped guide operational reform programs. In many cases investments were financed using self-liquidating instruments such as mezzanine debt, or recapitalized so they could wait for a better time to exit.

23. Governments in Asia have become more attuned to the needs of investors. Critical areas of reform have included (i) providing better protection for minority shareholder rights, (ii) promoting sound corporate governance, (iii) liberalizing foreign investment restrictions, and (iv) improving access to equity capital markets. The clear definition of shareholder and creditor rights and a credible judiciary that can arbitrate disputes in a timely and cost-effective manner have been key areas of reform. Corporate governance standards include codes defining responsibilities of boards of directors, accounting and audit standards that reflect international norms, and rules on public disclosure of information and management accountability. In Asia, there is a surplus of capital in many countries due to high savings rates that make local insurance companies, pension funds, and mutual funds important potential sources of long-term funds. These sources of finance have often been subject to rules precluding investment in private equity funds, and in some cases governments have started to relax these restrictions. Regulations, rules, and systems underpinning the development of stock exchanges have been strengthened.

24. The continued growth in private equity in Asia has occurred despite a number of setbacks including the Asian financial crisis, the dot-com collapse, and reliance on a US model that has not been entirely appropriate for the Asian region. The private equity industry in Asia appears to be successfully confronting these challenges and, following a history of low financial returns, PEFs were achieving record levels of profitability in the period 2003 to 2007. However, SMEs in many DMCs continue to have limited access to equity capital, particularly from sources such as venture capital. When considering ways to resolve this issue, there will continue to be a trade-off for MDBs between development and financial impacts. By investing in expansion and refinancing late-stage SMEs in DMCs at advanced stages of reform using experienced fund managers, MDBs can invest in PEFs where there are limited development impacts but acceptable financial risks. Alternatively, MDBs can seek higher development impacts by investing in high-risk, early-stage SMEs in recently reformed economies using inexperienced fund managers. MDBs typically resolve these issues by pursuing a portfolio approach where they seek to balance development impacts against financial sustainability.

III. ADB’S STRATEGIES AND ASSISTANCE PROGRAMS

A. Strategic Objectives and Scope of Operations

25. ADB has been investing in PEFs since 1983. PEFs have formed an important component of ADB’s Private Sector Development Strategy14 (PSDS) approved in 2000. Under the PSDS, ADB’s public sector operations would increase their orientation towards private sector development, and private sector operations would focus more on development impact. The PSDS defined three strategic thrusts for ADB to help develop the private sector: (i) creating enabling conditions for the private sector and improving the investment climate, (ii) generating business by considering opportunities to facilitate third-party private sector participation in ADB projects (cofinancing), and (iii) catalyzing private investment through direct ADB financial participation. These objectives were subsequently incorporated into the Long-Term Strategic Framework approved in 200115 to provide the strategic framework for ADB for the period 2001–2015. A Medium-Term Strategy for 2001–200516 was prepared to implement the first phase of the long-term strategic framework. In accordance with the objectives of the medium-term strategy, there was a review of the strategic direction and operations of ADB’s direct private

investment activities in 2001. The review recommended the scope of private sector operations be broadened, the level of resources increased, and a department for private sector operations (i.e., PSOD) that met the needs of infrastructure and financial sectors, including PEFs, be established. The Medium-Term Strategy II for 2006–2008 endorsed these initiatives. In April 2008, the Board approved the long-term strategic framework 2008–2020 (Strategy 2020) which highlighted the importance of catalyzing private investment and strengthening the financial sector.

26. Within this framework, ADB’s public sector regional departments are responsible for developing the enabling environment through the use of technical assistance grants and sovereign-guaranteed loans. A review of ADB’s CSPs indicates regional departments have been most active supporting PEFs in the large, relatively advanced, rapidly transforming economies such as India and the PRC. PSOD took the lead in cofinancing and directly catalyzing investment through non-sovereign-guaranteed direct (equity and debt) and indirect (guarantees) financial participation in private sector projects. PSOD has targeted medium-sized funds in DMCs, with a particular focus on SMEs, and sought to demonstrate that acceptable returns can be achieved from these forms of investment. It has been difficult to coordinate PSOD’s activities with regional departments as approximately 50% of its direct investments in PEFs have been made in regional funds. Precise country allocations for regional funds are not defined in advance of investment approvals as fund managers make investment decisions largely independent of ADB in accordance with agreed investment guidelines.

27. The CSPs have acted as the primary mechanism for coordinating public and private sector operations within ADB. PSOD staff is nominally part of the country programming teams, but in most cases this does not appear to have extended beyond desk-based reviews of the CSPs. Commentary has typically been provided by PSOD from a departmental rather than a PEF perspective, with a focus on financial instruments rather than individual transactions. Where specific comments are provided on PEFs, they have tended to be designed to provide flexibility to pursue opportunities as they arise, rather than form part of the underlying country strategies being implemented by the regional departments. This approach has been driven by a number of factors, including (i) difficulties defining the specific needs of PEFs, (ii) problems forecasting the timing of transactions, (iii) commercial and competitive concerns about publicizing transactions, and (iv) the lack of resources within PSOD to support programming initiatives.

B. Public Sector Operations

28. Support for PEF investments has formed part of the broader programs of regional departments to improve SME access to finance. Regional departments have focused on initiatives to strengthen the enabling environment for SMEs, and reforms have varied across countries depending upon individual circumstances. These reforms have been very broad ranging in most cases and have not been targeted to specifically benefit PEFs. PEFs have only

---

19 In April 2008, the Board approved the Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank 2008–2020. The strategy was approved outside the period of analysis covered by this report, but it identifies the future direction of ADB. The new strategy highlights the need for ADB to pursue initiatives in areas such as inclusive growth, regional cooperation, and improving the environment and focus on sectors such as infrastructure, finance, and education. The new strategy indicates that private sector development and private sector operations will be scaled up in all operational areas, with a target of 50% of annual operations by 2020. There is an intention to scale up ADB operations at the regional and subregional level by at least 30% of total activities by 2020.
been a focus for regional departments in two countries where PSOD’s PEF operations have been particularly active—India and the PRC.

29. In the PRC, the country programs have continued over time to recognize PEFs as an important means of providing support to SMEs, although assistance has tended to be indirect, targeting issues such as SME access to credit and strengthening the share market, rather than being directly engaged in the PEF sector. Similarly, SME development continues to be a strategic objective for ADB’s public sector operations in India, and PEFs are recognized as an important mechanism for delivering support, although reforms were supportive rather than directly targeted at PEFs. In many respects, this result reflects the nature of PEFs where fund managers have a high degree of flexibility designing investment strategies that are not dependent upon the legal system to the same degree, or are subject to the same level of regulation, as other components of the financial system such as banks or pension funds. There have been substantial lags between providing technical assistance and seeing tangible results. In the PRC, the regional department noted in 1999 that it would provide technical assistance to pursue a comprehensive program of reforms to the private sector enabling environment in areas such as company, securities, and bankruptcy laws, but they did not come into effect until 2006 and 2007. In India, ADB has been active in the development of individual pension accounts that would create a pool of funds that could potentially be invested in PEFs, but implementation has been delayed by ideological concerns raised by the Parliament.

30. Offsetting this result, the regional departments have not played an active role in developing venture capital associations and interacting with these types of organizations to help facilitate reforms. There were no material programs in areas such as reforming inefficient tax structures for dividends and capital gains and removing unnecessary restrictions on cross-border flows of capital and foreign investment. Similarly, there were few initiatives to strengthen intellectual property or integrate PEFs with the education system and support regional SME-cluster development strategies.

C. Private Sector Operations

1. Strategy

31. The PSDS is a high-level document and it only provides general statements of principle rather than a clearly discernible investment strategy. PSOD has sought to remedy this issue by elaborating on the strategic role of PEFs in several documents. PEF investments have been a priority for PSOD as ADB can add value to co-investors through its ability to support both the public and private sectors. PSOD has noted that fund managers consider that ADB investment helps to mitigate risks related to the legal and regulatory environments of its DMCs. ADB adds value by selecting investment managers who create value for investee companies and can attract private capital. ADB can add value to PEFs through its attention to environmental and social safeguard protections, its role in creating environment management systems, and attention to corporate governance. ADB’s involvement in environmental, social, and governance issues reduces funds’ reputation risks and serves to improve the reputation of the asset class as a whole.

20 ADB. 1999. Technical Assistance to the People’s Republic of China for Development of Economic Laws. Manila (TA 3279-PRC, for $1,400,000, approved on 19 October).
21 An example is an internal memorandum from the PSOD director general to the ADB President entitled Development Impact of Private Equity Funds. November 2006.
32. In 2003, PSOD prepared an internal policy statement outlining an investment fund operations strategy (footnote 10). It was noted that PEFs would be selected on the basis they would provide additional benefits beyond financial rates of return, including improved infrastructure, good governance, and positive social and environmental impacts. As illustrated in Figure 3, the strategy distinguished between investing in PEFs that had (i) an economic focus in mature economies, providing capital in DMCs to demonstrate potential for fund returns, stimulate economic growth, and ensure continuity of capital flows; and (ii) a development focus in frontier economies, reducing risks of investing in DMCs by developing private equity markets.

<table>
<thead>
<tr>
<th>Country Development Level</th>
<th>Frontier Economies</th>
<th>Middle Tier Economies</th>
<th>Newly Industrialized Economies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>NA</td>
</tr>
<tr>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Substantial Experience</td>
</tr>
<tr>
<td>Sponsor</td>
<td>Sponsor</td>
<td>NA</td>
<td>Limited Experience</td>
</tr>
<tr>
<td>Active</td>
<td>Passive</td>
<td>Passive</td>
<td>Moderate Experience</td>
</tr>
<tr>
<td>Passive</td>
<td>Active</td>
<td>Passive</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3: Potential PSOD Roles in PEFs

NA = not applicable, PEF = private equity fund, PSOD = Private Sector Operations Department. Source: Private Sector Operations Department.

33. Within this framework ADB would invest in two categories of PEFs: (i) mature medium-sized funds managed by experienced fund managers typically raising their second or subsequent fund, and (ii) less mature SME funds with less-experienced fund managers investing in frontier countries that would be supported by a significant capacity-building component, and technical assistance grants. It was envisaged that over time PSOD would act like a "fund of funds" in the management of its portfolio and take an active role in the sponsorship and management of funds in more remote regions of mature economies and frontier economies. There might also be a shift towards investments in funds in more mature economies that would provide a regular return on investment rather than relying upon a single exit event. Frontier countries such as those in Central Asia might be targeted. There could also be a shift towards smaller funds in some instances to improve diversification and enhance targeting of SMEs. Investments would not have to be limited to SMEs, with well-structured mezzanine or restructuring funds being open to consideration. Funds could be regional or country specific, and target multiple or single industries.
34. The adoption of a portfolio approach to PEF management would help screen projects and determine the allocation of ADB’s capital across various categories of fund and the level of risk that it wished to assume, thereby balancing development impacts and financial sustainability. Investment guidelines would be designed to screen projects and set exposure limits based on country-level criteria such as minimum level per fund, amount invested per country, and desired development quadrant. All fund managers would be required to collect data using a standardized format on development outcomes, financial performance, and legal and regulatory barriers against which performance could be evaluated. Financial data would differentiate between returns on a gross basis and net of management fees. Data collection would reflect the requirements of OED’s evaluation guidelines and specifically identify how ADB’s funds added value relative to other PEFs in the region. ADB would develop standard terms and conditions for funds and put in place a nominee directors program.

35. The conceptual strategic framework for PEFs outlined in the PEF policy statement appears logical and reflects the inherent trade-off between development impacts and financial sustainability implicit in all of PSOD’s operations. The main weakness with the proposed approach is the potential for conflict of interest between strengthening PEFs institutional capacity and then holding them accountable for managing ADB’s investments. More importantly, there is a lack of detail on how the strategy would be implemented in operational, as opposed to conceptual, terms. There is no detail on the sectors or types of firms that would be targeted in different types of economies and the specific development impacts and outcomes that would be pursued. There is no linkage between local conditions, enabling environment requirements, and the type of PEFs that would be targeted. PSOD does not prepare its own business plans and the CSPs are the only documents that have provided some indication of how the PEF strategy will be implemented. CSPs are not useful from an operational perspective as they are too fragmented across countries and are prepared at irregular intervals. The level of detail on PEFs presented in the CSPs has been too superficial to provide a coherent view of what objectives the PEFs are actually seeking to achieve. This conclusion does not undermine the usefulness or necessity of CSPs, but it does highlight the need for a strategic document prepared from the perspective of rational integrated management of the PEFs as a structured portfolio rather than as a string of opportunistic investments.

36. A portfolio approach is essential for rational management of any group of investments, whether they be money-market instruments, real estate, bank loans, or PEF interests. Without recognition of the portfolio, there can be no appreciation or understanding, let alone quantification, of returns and net aggregate risk across the group of investments. Among MDBs, this approach has been likened to that employed by managers of funds of funds. Funds of funds are complex investment products for retail or institutional investors which consist of a portfolio of investments in different funds managed by other managers. This technique is used for a range of reasons, such as to access third-party management skills, systematically diversify risk across investment asset classes, and combine different and complementary management styles into a synthetic product. In practice, a true fund of funds is an investment product designed to be marketed to other investors who contribute capital to a commingled pool which is then invested in underlying funds. This concept is not entirely applicable to ADB as it has no customers who co-invest in a fund of funds. Nevertheless, rational management of ADB’s PEF portfolio should incorporate relevant aspects of fund of funds asset management techniques in areas such as selection of complementary funds and diversification of risks.
2. ADB's Private Equity Fund Portfolio

37. ADB's PEF investments follow industry practice and are typically structured as limited life companies or partnerships, where fund investors have limited liability and fund manager's have unlimited liability. The precise structural options are diverse and they are driven by factors such as the legal characteristics of the target countries and the needs of investors. PEFs usually have a life of 10 years, made up of a 5-year investment period and a 5-year divestment period. Annual fund management costs range between 2.0% and 2.5% of committed capital, plus a performance bonus of 20% of profits in excess of a minimum rate of return paid to investors that is normally in the order of 8%–9% of invested capital and it is referred to as "carried interest".  

38. As shown in Figure 4, growth in PEF approvals has been erratic. An early period of strong growth in approvals (1994–1996) was halted by the Asian financial crisis in 1997, after which there were almost no approvals for three years. When activity resumed in 2000, approval levels dropped year-on-year for four years. PEF investments then resumed the growth trend of the mid-1990s, rising to a record level in 2006 when capital commitments of almost $200 million were approved. In 2007, there was only one transaction approved for $20 million which had not been drawn down at 31 December 2007. Almost 50% of ADB's outstanding capital commitments to PEFs at 31 December 2007 had been approved by ADB since 2003.  

![Figure 4: ADB's Annual PEF Approvals](image)

ADB = Asian Development Bank; PEF= private equity funds.  
Source: Asian Development Bank records.

39. Between 1983 and 2007 ADB approved a total of 75 investments in PEF-related firms with a combined value of $900 million (Appendix 1). Within this total, seven investments (9%) were subsequently cancelled, 11 investments were in fund management companies, and the documentation for the single fund approved in 2007 has not yet been finalized. A total of 15

---

22 It should be noted that these funds are in their initial investment period, when investments are actively being made in investee businesses, and many of these investments will not begin to show returns until they have entered their divestment phases, when underlying investments are sold and the proceeds distributed to investors, including ADB.
funds have closed, one fund was merged into another fund, and the remaining 40 funds are still in operation. The portfolio of projects that proceeded had an approved value of $744.2 million, and it has fully divested from PEFs with a value of $67.8 million, deriving a current approved portfolio at 31 December 2007 of $676.4 million and an exposure (disbursements and undisbursed commitments) of $476.2 million.

40. Most PEFs represent direct minority equity investments (95%), although a small number of underwriting commitments (5%) were used to encourage investment by other investors. In one case a line of equity for $2 million was approved for a PEF in the Republic of Korea in 1987, but this modality did not prove to be successful and it was discontinued. PSOD has traditionally targeted medium-to-large PEFs, and the active portfolio has an average size of $135.9 million (Appendix 5).

41. Figure 5 shows that ADB’s PEFs in volume terms are concentrated in regional funds and two countries—India and the PRC. An analysis of investments made by regional funds indicates the financial benefits of these investments have been more evenly distributed across DMCs. A total of $2.7 billion has been invested by ADB’s investee funds to date, and within this figure the bulk of investment capital has gone to companies in 21 countries, almost all of which are DMCs. Nevertheless, at 31 December 2007 only four countries (India, the Philippines, the PRC, and Thailand) accounted for 78% of investments by volume, and two countries—India and the PRC—accounted for 51% of investment.

Figure 5: Geographic Distribution of PEF Approvals
(as of 31 December 2007)

Source: Asian Development Bank records.

---

23 With only two exceptions, PSOD does not take PEF shareholdings of greater than 25%, and the smallest current shareholding of PEF committed capital is 2.6%.

24 This figure represents the aggregate amount invested by all of the funds in which ADB has invested since 1984. This figure is larger than ADB’s own investments as it includes the capital contributed by all fund investors, not just ADB.
42. The PEFs fall into four broad categories based on purpose or style of investment. ADB has invested in nine portfolio funds that target liquid investments including two companies, as well as underwriting seven investments. ADB has invested in 12 special-purpose funds targeting capital markets, the environment, health, and nonperforming loans (NPLs), which together accounted for 24% of PEF approvals. In recent years special-purpose funds have become more prominent in PSOD’s portfolio. ADB has supported nine infrastructure funds to help relieve bottlenecks in DMCs in sectors such as telecommunications, power, and transport, and they represented 24% of PEF approvals. Regional non-sector-specific SME funds targeting medium-sized firms in the expansion phase have been the main area of activity, totaling 31 PEFs accounting for 47% of approvals. SME funds have provided a means of targeting and supporting entrepreneurs and technology developments by improving SME access to risk capital.

43. Figure 6 illustrates the sector distribution of the investments made by ADB investee funds at 30 June 2007 (the most recent data available at the time of evaluation). Many of the SME funds have supported infrastructure in sectors such as telecommunications, transport, and utilities, which account for 53% of investments by sector. It is difficult to determine the level of success of these investments at targeting development impacts as there is a lack of information in PRISMS, as presently configured, on investments by country, and sector, and no linkage to actual conditions within each country by sector. This information is important, as for example, it is questionable whether investments in the mobile telecom sector in India or the PRC have significant development impacts in the current environment, although they may have been material in the mid 1990s. It is also difficult to derive information on items such as investee firm stage of development in a particular country and sector. This information is relevant as start ups would have a greater likelihood of development impacts in manufacturing and services in frontier countries and high technology sectors such as energy efficiency in middle tier economies. Restructuring and expansion would be more important in sectors such as energy, roads, or water, in frontier and middle tier economies.

![Figure 6: Sector Distribution of Fund Investments, At Cost (as of 30 June 2007)](source: PRISMS database.)

---

25 ADB ceased underwriting funds following the Asian financial crisis.
44. Despite PSOD’s fund of funds concept, portfolio management based on risk and return considerations has not been an important feature of PEF operations; investment has been demand driven and opportunistic to a substantial extent. Risk was not transparently managed until the Risk Management Unit (RMU) was established in 2005 as an independent entity to PSOD. Despite the historical lack of an independent formal risk-management framework, the PEF portfolio is conservatively structured, with 80% of investments being in middle-tier countries with experienced or moderately experienced fund managers. In many respects this portfolio structure appears overly risk averse and there is potential for pursuing more risky projects that offer greater opportunities for demonstrating development impacts (Appendix 5).

45. In 2007, the Board approved revisions to ADB’s prudential exposure limits for nonsovereign operations. The revisions were made for exposures to single entities as well as company groups, industry sectors, and countries. The new exposure limits are designed to make efficient use of ADB’s economic capital, and diversify ADB’s overall portfolio, thereby curtailing maximum potential loss. The Board agreed to delegate its authority to Management to set a limit on equity investment in PEFs. Within this framework, PEFs are managed as part of a broader nonsovereign portfolio rather than as a stand-alone fund of funds. Recently, ADB’s capital available for PEFs has become increasingly limited. ADB’s maximum asset allocation to equity investments as a whole is defined in ADB’s charter as being 10% of the sum of unimpaired capital plus reserves plus surplus (ADB’s capital). PSOD divides this allocation equally between equity investments made directly to private firms and equity investments made indirectly through PEFs. 26 This figure is dynamic and changes over time. At 31 March 2008, ADB’s capital stood at approximately $15.2 billion and total committed (exposure plus undisbursed) equity was 7.06%, being split 3.57% to PEFs and 3.49% to direct equity.

46. Since that date, ADB has approved a further $100 million in PEFs. Assuming complete disbursement of all the outstanding approved equity investments, (and assuming no changes in all other figures), a notional “headroom” of $117.83 million is available for further approvals/investment in PEFs.27 This “headroom” for PEFs would increase with (i) an increase in ADB’s capital over time, and (ii) repayment of invested capital plus profits by existing PEFs. Conversely, the “headroom” would reduce with new PEF approvals such as the further $65 million proposed in 2008. Overall, it would appear that the available capacity for PEF investments is limited at the present time. There has been a debate recently within PSOD and elsewhere in ADB regarding the appropriateness of this 5% limit. Proposals have been made that ADB should restrict any further fund investments to a “recycling” of moneys received through distributions (returns of capital plus gains) from existing operational funds. Unlike all other operational departments, this arrangement would prevent PSOD from benefiting from future growth in ADB’s overall resources, restricting the size of the fund portfolio to organic growth.28

3. Management of Private Equity Funds

47. PSOD is responsible for PEF investments under its Capital Markets and Financial Sectors Division (PSCM) which was created in 2002. PEFs have been a small, although growing, part of PSCM’s operations, which encompass trade finance, SME partial credit

26 This is an operational guideline under ADB. 2007. Operations Manual. Section D13/BP: Investment Limitations in Nonsovereign Operations. Manila (September) to limit exposure in PEFs to 5% of ADB’s unimpaired capital plus reserves plus surplus, calculated at the time of investment.
27 These figures were provided to OED by PSOD.
28 This organic growth rate of the funds portfolio value may exceed or lag behind ADB’s overall growth rate, depending on aggregate performance of the funds.
guarantees, structured finance, and the support functions of PSCM portfolio management which reside in the Project Administration Unit (PAU). Within ADB’s overall organizational structure, the PEF operation relies upon the Office of the General Counsel (OGC) for legal advice, the RMU for independent financial assessments of investment proposals, the Regional and Sustainable Development Department (RSDD) for independent social and environmental safeguard assessments of proposals, the Treasury Department to manage fund drawdowns and repayments, and the Controller’s Department to approve and record transactions. There is limited interaction with regional departments, the Office of Cofinancing Operations, and the Central Operations Services Office on issues such as strategic priorities, cofinancing, and procurement issues. The Budget, Personnel and Management Systems Department administers budgeting and human resources. The Office of Information Systems and Technology (OIST) manages information and communication technology (ICT)-related issues (Appendix 5).

48. Within PSCM, two professional staff members are responsible on a part-time basis for identifying new investments, conducting due diligence, processing the investment within ADB, monitoring fund manager reports, participating in advisory committees (or boards of directors if the PEF is structured as a company), approving investment drawdowns, monitoring repayments, and preparing reports for the Board and Management. The PAU is led by one professional staff member who administers PEFs on a part-time basis, with support from two administrative staff. The PAU is responsible for back-office functions such as coordinating payments and collections of funds, and recording data on the management information systems. A benchmark study prepared by OED in 2006 of staff allocation numbers for project origination and management functions for PSOD against comparator MDBs such as the EBRD and IFC29, which indicated PSOD is seriously understaffed, and this is especially apparent in the area of fund management (Table 4).

<table>
<thead>
<tr>
<th>Staff (FTE)</th>
<th>2002</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Administration</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

FTE = full time equivalent, PSCM = Capital Markets and Financial Sector Division.
Source: Asian Development Bank records.

49. While the existing team has strong skills, it is far too small for the size of the management task presented by 40 investee funds. There has been a reduction in PSCM full-time-equivalent professional staff numbers for PEF projects of 50% between 2002 and 2007. The reduction in staff numbers and increased use of part-time staff, where the average years of experience of replacement staff fell substantially, has occurred over a period when the number and volume of PEFs approved rose significantly (Table 5).

---

Table 5: Private Equity Fund Staff Work Indicators  
(as of 30 December 2007)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2002</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved transactions $(million) per professional staff</td>
<td>94</td>
<td>338</td>
</tr>
<tr>
<td>Approved number of transactions per professional staff</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Approved transactions $(million) per administrative staff</td>
<td>157</td>
<td>338</td>
</tr>
<tr>
<td>Approved number of transactions per administrative staff</td>
<td>11</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: Asian Development Bank records.

50. The staff workload will further increase in 2008 when an additional four projects with a total value of $165 million are invested. Most funds are still in the investment stage and, as they mature, the numbers of investee companies will probably more than double by 2010.30 To date, most staff members have skills in financial aspects of PEF management. PSOD has not chosen to recruit staff with specialist technology knowledge or sector-specific operational knowledge due to the extensive range of industries in which ADB's PEF investee companies are engaged. The PEF portfolio requires staff with specialized skills who can attend advisory committee meetings and ensure that the investment decisions of highly experienced international fund managers are in line with ADB's development and financial performance requirements. Qualified people are difficult to attract as ADB salary rates are substantially lower than the amounts that can be earned in the private sector. Fund management skills are highly specialized and sought-after in the rapidly growing private equity market in Asia.

51. PSCM’s budget for in-house operations is limited and there are few opportunities to obtain funds from PEFs and outsource functions. Regional departments will normally cover the costs of preparing country partnership strategies (CPSs) where PSCM forms part of country programming missions. PEFs will only cover costs for activities such as conducting due diligence and attending advisory committee meetings. PSCM has not established a pool of external nominee directors to sit on advisory committees, and it has limited budget funds for performing tasks such as marketing. In addition to a shortage of staff and an inadequate operating budget, PSCM has limited access to technical assistance funds that can be used to strengthen the enabling environment or train fund managers in frontier environments.

52. PSCM’s management processes are labor intensive. PSCM provides capital dispersal requests and capital repayment notices to the Controller’s Department and Treasury Department which manually record the data on ADB’s primary financial system, the comprehensive loan administration and servicing system (CLASS). This data is then automatically uploaded on a quarterly basis into the PSIM which is maintained on a separate system, and then manually adjusted to prepare PSOD’s quarterly report. In parallel, the data is again manually recorded by PSCM on PRISMS, along with other supporting data obtained from quarterly and annual reports supplied by the fund managers. Reports received from fund managers vary widely in format and detail, and require extensive analysis to extract the relevant data to enter into ADB systems.

53. PSOD’s quarterly reports are the primary mechanism for reporting internally within ADB on PEF performance. The quarterly reports limit information to financial details such as date of approval; amounts approved, drawn down and repaid; financial risk rating; and critical issues.

30 On average, each PEF will invest in at least 10 investee companies, indicating that the two full-time-equivalent professional staff will each be overseeing at least 200 investee companies.
Details on targeted development and financial objectives are defined in the RRP{s}, but they are not maintained on the management information system or reported upon by PSOD. There is a requirement for fund managers to submit annual environmental and social performance reports, but this information is not included in ADB’s management reporting system. Similar to other parts of ADB, there are no departmental business plans and operating plans specifying targets—such as financial internal rates of return (FIRRs)—against which development and financial performance of PEFs can be formally benchmarked. PSOD intends to create a database of performance indicators on its PEFs and there is capacity within PRISMS to record this information, but the system is not populated at this point. PSCM does not prepare annual reports on individual investments and the PEF portfolio (although it has indicated it intends to introduce such a system at some stage in the future).

54. While back-to-office reports are prepared by investment officers, the PRISMS features for storing and linking fund documents (e.g., minutes of advisory committee meetings or fund boards) are not being used by PSOD. There is no standardized system for reporting to the Board and Management on key issues arising from fund-level meetings. There is a lack of formal checks and balances when a fund manager is seeking a change in investment scope, which happens frequently. In comparison to public sector operations, there are no provisions in ADB’s project administration instructions defining criteria for major and minor changes to the scope of investments and associated approval authorities. As a result, the classification is determined by the PSCM director who refers to the relevant Project Administration Instruction by analogy, in consultation with OGC and the Central Operations Services Office. Minor changes can be approved by the PSCM director, whereas major changes require the approval of the ADB vice-president who may seek approval of the Board. There has been a large number of changes in scope of PEF investments in recent years, some of which were approved by the PSOD director general, and more material changes by the vice-president. No evidence has been found by OED that a request has been forwarded to the Board seeking a change in scope for a PEF investment.

55. There are concerns about the lack of independent review of PSCM’s development, financial, social, and environmental performance and risk ratings. PSCM does not prepare annual reports on PEFs. The RMU does not independently review PEF risk ratings once they have been approved by the Board, and it does not rate the PEF portfolio as a whole. There is no independent review of PEFs post-approval to confirm compliance with ADB’s safeguard requirements. OED has only prepared four independent assessments of PEFs. When PEFs are evaluated, either by OED or PSOD on a self-assessment basis, the OED guidelines require that evaluations do not occur within a period after the vintage year of the fund of at least 7.5 years from when it becomes operationally mature.

IV. PRIVATE EQUITY FUND EVALUATION

A. Overview

56. The PEF investment portfolio is evaluated using criteria defined in OED’s guidelines. (footnote 5). The rationale and objectives for PEFs is presented initially to provide the context for pursuing PEF investments. The PEF portfolio is then appraised under four headings: (i) development impacts and outcomes, (ii) ADB investment profitability, (iii) ADB work quality, and (iv) ADB additionality. An overall evaluation is then presented. The primary sources of data used

---

in the evaluation are country and sector evaluations, PPERs, PCRss, PSOD studies and quarterly operational reviews, interviews with ADB staff, and desk reviews.

B. Rationale and Objectives

57. PEF investments are typically justified in RRPs in qualitative terms on the grounds of supporting development impacts such as economic growth. RRPs will often list four or five development objectives, such as catalyzing foreign investment, supporting SMEs, or restructuring former state-owned enterprises (SOEs). In line with the PSDS, all PEF investments need to be profitable and create positive development impacts in areas such as governance, supporting businesses, infrastructure, employment, and the environment. In recent years, PSOD has started to include design and monitoring frameworks in RRPs that define quantifiable development targets, but quality is inconsistent and it does not collect data on these indicators.

C. Development Impacts and Outcomes

1. Overview

58. Development impacts and outcomes are evaluated under the following subheadings: (i) private sector development; (ii) business success; and (iii) environmental, social, health, and safety performance.

2. Private Sector Development

59. Private sector development is appraised under two subheadings: (i) beyond company impacts, and (ii) direct company outcomes.

   a. Beyond Company Impacts

60. This criterion refers to factors such as expansion of the private sector, increasing competition, innovation, strengthening industry links, catalyzing availability of finance, improving laws and regulations, and demonstrating new standards in areas such as corporate governance.

61. OED’s independent country assistance program evaluation (CAPE) assessments provide few details on PEF investments as they have not been a common feature of most CSPs, apart from in India and the PRC. In these countries, references to PEFs are included in the country programming documents, but typically they are very general and not linked to specific enabling environment reforms. PSOD has expanded its PEF activities in the PRC in recent years, investing in several special-purpose environment funds, an asset reconstruction fund, and an SME fund. OED prepared a CAPE for the PRC in 2007 and it concluded that, despite these PEF initiatives, ADB’s private sector operations had fallen short of potential. While lack of capacity was part of the problem, there was a need for greater clarity and a strategic vision to guide decision making.

62. In India, PSOD has been increasingly active in the PEF market since 2003, having invested in three SME funds and an infrastructure fund. OED prepared a CAPE for India in 2007 which found that ADB had provided assistance to help free up PEF investment constraints for

---

32 Since 2006, as part of the RRP, PSOD has prepared a table of development impacts with specific indicators, but they have not been used in this evaluation as the projects are not yet operationally mature.
long-term sources of funding such as pensions. Nevertheless, it appears that reforms directly impacting on PEFs in India were limited and the main focus of enabling environment activity in the financial sector has shifted to issues such as microfinance. Similarly, OED's evaluations of the financial sector have not focused on PEFs. Potential regional department reforms supporting funds are necessarily widely dispersed and they have not been directly targeted at PEFs per se due to the nature of their operations and the fact that they only account for a small proportion of the financial sector's resource mobilization activities. It is apparent that even when regional departments have provided assistance, such as law reform in the PRC, and pensions in India, there have been delays in seeing actual results.

63. OED’s impact evaluation study prepared in 2002 (footnote 3) concluded that PEFs had achieved major development impacts in the following areas: (i) mobilizing large amounts of resources for infrastructure development, direct investments in enterprises, and portfolio investments; (ii) supporting SMEs, new entrepreneurs, and technology development; (iii) helping develop the capital markets of the region; and (iv) generating employment opportunities. For 18 of the 29 PEFs reviewed, there was medium or high impact at fund level mobilizing resources. For every dollar of ADB investment, third-party investment from other sources ranged from $4.00 to $42.40. There was no discernible variation in resource mobilization based on style of fund, country, or sector. There were seven funds evaluated that supported SMEs and five had positive impacts. Out of 11 PEFs involved in the capital markets, seven had a positive impact. Data was only available on employment for four funds, and impacts were medium or high.

64. OED prepared three PPERs on PEFs in 2007 (Appendix 4) which found mixed results for beyond company development impacts. The first PPER reviewed a PEF investment in India approved by the Board in 1995 that was rated "excellent" for development impacts and outcomes as it helped mobilize third-party foreign investors. In addition, the fund had significant demonstration effects helping develop PEFs, and more specifically private investment in infrastructure in India. The second PPER evaluated a regional fund approved by the Board in 1996 and it was successful in attracting a large US pension fund to invest in Asia at a time when it was difficult to mobilize foreign private equity investments in the region. However, ADB participation in the PEF was not successful in catalyzing other third-party foreign investors. The anticipated demonstration effects in DMCs did not materialize due to negative effects of the Asian financial crisis and problems with style drift as the final investment portfolio was materially different to the investment concept approved by the Board. Fund investments were primarily targeted at companies operating in newly industrialized economies rather than DMCs. The third PPER evaluated a PEF that targeted SMEs in the PRC, and there were similar problems to the regional fund in the sense that ADB participation was not able to attract third-party investors, there was a lack of demonstration impacts, and there were significant problems with style drift.

65. It is apparent from the review of previous evaluation studies that mobilization of private finance from third parties has been a prime objective underpinning ADB's investments in PEFs. As illustrated in Figure 7, a review of ADB's active portfolio investments indicates that, while the level of capital mobilized by PEFs has been highly variable, there has been an average ADB investment of $16.7 million per PEF with an average capitalization of $135.4 million, equating to $8.08 for every dollar invested by ADB. This leverage is further increased as PEFs then take minority investments in SMEs and help stimulate further private investment. This result indicates that private capital mobilization continues to be an important feature of PEF investments. However, the share of the ADB PEF portfolio of the total PEF market in Asia has fallen dramatically with the rapid growth of the private equity industry, and estimated private equity investments in Asia in 2007 were $23.1 billion (Table 2). The high level of awareness in the private equity industry of potential returns that can now be generated in countries such as India,
the PRC, Thailand, and Viet Nam indicates that ADB’s catalytic role stimulating investment in SMEs in these countries has been diminishing over time.

![Figure 7: Third Party Mobilization of Private Investment](image)

**Figure 7: Third Party Mobilization of Private Investment**

<table>
<thead>
<tr>
<th>Time of Fund Approval</th>
<th>$ millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-May-88</td>
<td>0%</td>
</tr>
<tr>
<td>12-Apr-94</td>
<td>5%</td>
</tr>
<tr>
<td>27-Oct-94</td>
<td>10%</td>
</tr>
<tr>
<td>14-Dec-96</td>
<td>15%</td>
</tr>
<tr>
<td>5-Dec-96</td>
<td>20%</td>
</tr>
<tr>
<td>28-Apr-97</td>
<td>25%</td>
</tr>
<tr>
<td>6-Oct-97</td>
<td>30%</td>
</tr>
<tr>
<td>7-Sep-01</td>
<td>35%</td>
</tr>
<tr>
<td>29-Oct-01</td>
<td>40%</td>
</tr>
<tr>
<td>16-Dec-01</td>
<td>0%</td>
</tr>
<tr>
<td>14-Mar-02</td>
<td>5%</td>
</tr>
<tr>
<td>26-Dec-02</td>
<td>10%</td>
</tr>
<tr>
<td>23-Mar-03</td>
<td>15%</td>
</tr>
<tr>
<td>7-Mar-04</td>
<td>20%</td>
</tr>
<tr>
<td>15-Mar-05</td>
<td>25%</td>
</tr>
<tr>
<td>9-Jan-06</td>
<td>30%</td>
</tr>
<tr>
<td>31-May-06</td>
<td>35%</td>
</tr>
<tr>
<td>8-Jun-06</td>
<td>40%</td>
</tr>
</tbody>
</table>

**Sources:** Private Sector Operations Department.

### b. Direct Company Outcomes

66. This criterion is concerned with outcomes of ADB’s PEF investments in areas such as adding value to the structure and operations of PEF investments, and introducing new standards in areas such as corporate governance.

67. OED’s CAPEs and sector assistance program evaluations have tended not to analyze outcomes on individual funds and investee companies. Similarly, OED’s impact evaluation study prepared in 2002 (footnote 3) was primarily focused on impacts beyond the fund rather than outcomes from individual PEFs and investee companies. The three PPERs prepared by OED in 2007 (Appendix 4) found the PEFs’ direct company outcomes ranged from excellent to unsatisfactory. The most successful fund evaluated attracted an internationally recognized fund manager which was able to provide sufficient expertise that its local partner subsequently became a leading fund manager in its own right. The fund manager was able to directly influence the performance of investee companies through its presence on their boards, and in some cases improved access to business management skills and finance. Similar results were found for the second fund manager evaluated as it played an active role in boards and strengthened the management systems of investee companies. The third fund was not so successful, and while it initially had a strategy of being actively involved in the restructuring of former SOEs in the PRC, it was difficult to generate profits by restructuring these companies. A revised strategy of short-term minority investments in late-stage, pre-initial public offer companies has proved to be more profitable. While this strategy made sense from a commercial perspective, it meant a consequent reduction in the level of demonstration outcomes and direct value addition, apart from in relatively minor areas such as upgrading accounting systems and meeting Hong Kong stock exchange listing requirements.
68. The PCRs prepared by PSOD (Appendix 4) have tended to focus on performance at the fund level and provide few details on specific outcomes at the investee company level. Fund manager reports provided to ADB tend to be high level and lack details on individual investee companies. To help address this issue, PSOD prepared case studies (footnote 9) in 2006 on 67 selected investee companies administered by 15 fund managers. The studies were based on survey data that covered 20 funds invested in 90 investee companies in 15 countries across Asia. These investments primarily occurred between the late 1990s and 2006. The PSOD study found that ADB's PEF investments had helped contribute to economic growth by providing support to mid-market SMEs. Support was derived from improved access to risk capital, and strategic and financial advice. In particular, outcomes of reforms introduced by fund managers to investee companies were significant in areas such as technology and skills transfer (89% of survey respondents), corporate governance practices (83%), externalities such as development of industry practices (76%), financial diversification (71%), and job creation (70%). Less significant factors were demonstration effects (30%) and exit through an initial public offer (22%). While there are potential problems with fund selection bias (there were only 15 funds appraised out of approximately 24 funds approved between 1997 and 2005), and optimism bias on the part of fund managers and investee companies responding to the survey, the overall results indicate a positive result for direct company outcomes.

c. Conclusions on Private Sector Development

69. The CAPEs for India and the PRC, and sector assistance program evaluations for the financial sector, suggest that enabling environment reform targeted at PEFs is not a priority and there is a lack of strategic clarity as to what direct PEF investments are trying to achieve. In many respects, this result is not surprising given the nature of PEFs, which are designed to assume much higher levels of risk than other forms of financial investments. PEFs are not critically dependent upon the enabling environment in the same way as financial institutions such as banks. It is apparent that regional departments have pursued a wide range of reforms in the financial sector—such as strengthening stock exchanges and initiating pension reforms that will help develop the PEF industry—but these initiatives are not specifically targeted towards supporting PEFs. While it is difficult to demonstrate strong synergies between regional departments and PSCM programs, this result does not undermine the potential for PEFs to demonstrate significant private sector development impacts by operating within existing financial systems.

70. The evaluation study prepared in 2002 (footnote 3) presented a highly favorable view on the impact of ADB's PEF investments, particularly in regard to mobilizing resources for SMEs and helping develop capital markets. The study indicated that ADB was able to play an important pioneering role, although development impacts of its PEF investments declined following the Asian financial crisis. A review of OED's three PPERs prepared in 2007 (Appendix 4) indicates that PEF private sector development impacts and outcomes performance ranged from excellent to partly satisfactory. A pervasive problem was the issue of style drift where the investment portfolio of the PEFs reviewed changed markedly from the original objectives identified in the RRPs. In part this outcome was due to the negative impact of the Asian financial crisis on traditional venture capital strategies pursued by PEFs in which ADB had invested in the late 1980s and early 1990s. Following the Asian financial crisis, there was a marked slowdown across the region in venture capital and private infrastructure investments which continued until 2003 when the market started to recover. As a result, funds approved in the mid-1990s were obliged to operate in an extremely challenging environment. Further problems have arisen in recent years due to the dramatic growth in the size of the private equity market, particularly in
India and the PRC, which has offset the pioneering development impacts that were a feature of the PEF investments initiated from the late 1980s through to the mid-1990s.

71. The 10 PCRs prepared by PSOD (Appendix 4) covered investments approved from the late 1980s up until 1997 and provide a similar message to the OED impact evaluation study (footnote 3). The PCRs indicate positive private sector development impacts at the beyond company level, particularly in regard to its venture capital investments initiated in the late 1980s and early 1990s. While these projects were small, performance was of a high standard in many cases, with large amounts of funds being mobilized via the PEFs in which ADB had invested. However, the PPERs (Appendix 4) indicate that it can be misleading to place too much reliance on the amount of private capital invested in PEFs as a single indicator of success. It is possible that in a number of cases ADB may have simply been acting in a reactive role, participating in funds that were likely to be financed irrespective of its participation. Strong market conditions in countries such as India and the PRC lend additional support to the view that potential for demonstration and funding impacts are diminishing in these markets.

72. The survey conducted by PSOD in 2006 (footnote 9) provides evidence of the beneficial impact of funds, particularly in the period following the Asian financial crisis. This result supports material obtained from the literature review (Appendix 3) that indicates PEFs in general, and venture capital in particular, can play an important role in developing early-stage investments in SMEs. However, there continue to be issues of style drift and how PEFs can be given incentives to pursue niche developments in areas such as SOE reform and infrastructure development in DMCs, rather than investing in mature companies in newly industrialized economies such as the Republic of Korea. There is also the issue of how ADB can add value in increasingly mature PEF markets such as India and the PRC.

73. Overall, it appears that, while the earlier investments in venture capital funds targeting high growth potential sectors in emerging middle income countries were beneficial, the development impacts and outcomes of ADB’s PEF strategy has been declining over time. It is difficult to see how regional, non sector specific SME funds, and infrastructure funds, that target late stage investee firms in sectors such as telecommunications in countries such as India and the PRC that have well developed PEF sectors are generating significant development impacts. For these reasons, a rating of "satisfactory" is assigned to the private sector development criterion.

3. Business Success

74. Business success is regarded by PSOD in its strategic documents as one of the prime demonstration impacts of its investments in PEFs. The OED impact evaluation study prepared in 2002 (footnote 3) found that financial results were poor, primarily due to the impacts of the Asian financial crisis, and the three PPERs (Appendix 4) found similar results. Most PCRs prepared by PSOD (Appendix 4) do not report on financial performance as there was no standardized evaluation framework available when most of these documents were prepared. A review of PSOD’s portfolio in total (based on data drawn from PRISMS) indicates PEFs achieved a nominal financial internal rate of return (FIRR) net of management fees of 7.5%, although there was a wide range of results underpinning this figure. A regional analysis of ADB’s PEF investments is presented in Table 6.

33 FIRRrs are quoted in nominal terms in this report, unless otherwise stated, to facilitate comparisons with market comparators.
Table 6: Private Equity Fund Business Success on a Geographic Basis  
(as of 30 June 2007)

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of ADB Investments</th>
<th>Value of ADB Approvals ($ million)</th>
<th>FIRR (%) Net of Fund Management Fees</th>
<th>Investment Multiple (x)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>1</td>
<td>5.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>China, People’s Republic of</td>
<td>6</td>
<td>122.8</td>
<td>7.2</td>
<td>1.5</td>
</tr>
<tr>
<td>India</td>
<td>8</td>
<td>138.2</td>
<td>10.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>3</td>
<td>7.0</td>
<td>9.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2</td>
<td>3.8</td>
<td>0.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>3</td>
<td>9.2</td>
<td></td>
<td>0.8</td>
</tr>
<tr>
<td>Samoa</td>
<td>1</td>
<td>0.4</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1</td>
<td>1.6</td>
<td></td>
<td>0.4</td>
</tr>
<tr>
<td>Thailand</td>
<td>3</td>
<td>35.5</td>
<td>10.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Regional</td>
<td>27</td>
<td>420.3</td>
<td>7.2</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>744.2</strong></td>
<td><strong>7.5</strong></td>
<td><strong>1.9</strong></td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank, FIRR = financial internal rate of return, x = times.  
Source: PRISMS database.

75. The most successful geographic region is India, which has generated an FIRR of 10.6%, based on investments in eight PEFs, with five being approved since 2000. Within this total, only one of the Indian funds is generating a commercial return of 13.4%, and the overall country performance can only be regarded as provisional given the lack of maturity of most of the Indian PEF investments. Thailand was the next most successful region with three PEF investments, generating an FIRR of 10.0%. The first Thailand investment was approved in 1998 and it achieved an FIRR of 7.2%. The other two Thailand funds were approved in the early 2000s, being designed to help stimulate growth following the Asian financial crisis; one achieved an FIRR of 20.7% and the other a loss of –5.9%. The Republic of Korea, realized an FIRR of 9.1%, and this result was based on three investments that ADB made in the 1980s. The PRC was the next most profitable region, achieving an FIRR of 7.2% from six investments. Within this total, five investments are loss-making, but this result was offset by the performance of a single PEF which has generated an FIRR of 103%. These results are only indicative, as five of the six investments in the PRC have been approved since 2000. Regional funds rank relatively low, generating an FIRR of 7.2%. This group of PEFs has dominated ADB’s portfolio since 1987, and there was a rapid increase in 2006 with seven regional funds being approved by ADB’s Board. The financial performance of other individual countries such as Pakistan, the Philippines, Samoa, and Sri Lanka has been uniformly poor.

76. An analysis of ADB’s PEF investments on a style basis is presented in Table 7.  
Investment performance of portfolio funds achieved the highest FIRR. This result was based on a high-risk activity, where only one of the three PEFs achieved a material FIRR of 26.6%, and PSOD no longer invests in this style of fund. Infrastructure funds were not successful, primarily due to the negative impacts of the Asian financial crisis. Only two infrastructure funds (approved in 2002 and 2006) have been initiated since 1997, and both were located in India. Special-purpose funds have been slightly more successful, achieving an FIRR of 12.5%. With a single exception, ADB has only been investing in special-purpose funds since 2003. Special-purpose funds performance is dominated by a single PEF which targets regional integration investments,

---

34 The latest figures available from PEF fund managers at 31 December 2007 were for 30 June 2007.
and it has achieved an FIRR of 81.5% since its vintage year in 2004. Non sector specific SME funds dominate ADB's portfolio and this category has achieved the third-highest FIRR (8.0%) among the different PEF styles. Almost 50% of the SME funds have incurred losses, and overall performance is dominated by one PEF in the PRC that commenced investments in 2005 and has earned an FIRR of 103%.

Table 7: Private Equity Fund Business Success on a Style Basis
(as of 30 June 2007)

<table>
<thead>
<tr>
<th>Style of Fund</th>
<th>Number of ADB Investments</th>
<th>Value of ADB Approvals ($ million)</th>
<th>FIRR (%) Net of Fund Management Fees</th>
<th>Investment Multiple (x)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio Funds</td>
<td>3</td>
<td>18.9</td>
<td>12.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Infrastructure Funds</td>
<td>9</td>
<td>201.0</td>
<td>3.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Special Purpose Funds</td>
<td>12</td>
<td>188.4</td>
<td>12.5</td>
<td>1.6</td>
</tr>
<tr>
<td>SME Funds</td>
<td>31</td>
<td>336.0</td>
<td>8.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>744.2</td>
<td>7.5</td>
<td>1.9</td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank, FIRR = financial internal rate of return, SME = small and medium-sized enterprise, x = times.
Source: Asian Development Bank records.

77. Financial performance of the PEF portfolio in total has been poor, although there are a number of factors that need to be considered when analyzing these figures. It is difficult to precisely evaluate the financial performance of PEFs prior to closure of the funds (typically 10 years) due to a phenomenon commonly referred to as the "j curve effect", which is illustrated in Figure 8. PEFs show low or negative returns in the early years of an investment as cash outflows occur up-front, whereas cash inflows rise as the investee companies mature. This effect of understating returns in the early stages of a fund is partially mitigated by accepted accounting practices where investments are valued at the lower of cost or net realizable value. As a result, PEF investments will be valued at cost until the investee company fails and the investment is written off, it is listed and shares can be valued at market rates, or the fund divests its shareholding to a third party through a trade sale.

Figure 8: J Curve Effect

Source: Private Sector Operations Department.
78. Details on ADB’s PEF portfolio performance at 31 December 2007 are presented in Table 8. Data is recorded on PRISMS net of management fees, which are typically in the order of 2.0%–2.5%. For the purpose of analysis of business success, management fees are assumed to be 2.0%, and this figure is added to the results net of management fees to obtain an estimate of the business success of investee companies.

Table 8: Private Equity Fund Portfolio Performance
(as of 30 June 2007)

<table>
<thead>
<tr>
<th>Stage</th>
<th>FIRR to ADB (net of management fees) (%)</th>
<th>FIRR to Fund (estimated, gross of management fees) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exited Funds (actual)</td>
<td>8.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Active Funds (estimated based on net asset values)</td>
<td>7.3</td>
<td>9.3</td>
</tr>
<tr>
<td>All Funds</td>
<td>7.5</td>
<td>9.5</td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank, FIRR = financial internal rate of return.
Source: Private Sector Operations Department.

79. There is some controversy over how PEFs should be benchmarked, with industry practice typically referring to fund performance benchmarks such as the Asian Private Equity Statistics published by Cambridge Associates. These figures are based on small samples, being less than or equal to six PEFs per annum for 11 of the 20 years covered, and results are volatile (Figure 9). Due to high volatility and small samples from which the statistics are derived, these benchmark statistics can be misleading when considered in a single year, with nominal financial performance net of management fees ranging from –11.6% to 59.9%. Cambridge Associates note that benchmarks from 2003 onwards are too young to provide meaningful results. The Cambridge benchmark is low for PEFs initiated during 1990–1999 (the period over which most of ADB’s PEF funds have been evaluated) as the benchmark did not exceed 6.6%.

Figure 9: Cambridge Associates Benchmark Statistics
Asian Private Equity

80. While these figures are probably based on actual results rather than indicative book values, they are not an acceptable indicator of performance as the sample is too small and, more importantly, they are unrelated to the market-based cost of funds for these types of investments. Even if this benchmark was accepted as reasonable, ADB’s performance on an investment weighted basis has not been strong when compared to other funds (Figure 10). ADB’s average annual nominal return (net of management fees) for 1986–2005 was 6.9% compared to the benchmark averages of 12.6% for Asia, 24.4% for Western Europe, and 20.4% globally (excluding the US).

![Figure 10: Cambridge Associates Benchmark Statistics](image)

81. Conceptually, the average return that can reasonably be expected from high-risk illiquid equity investments in SMEs in an emerging market context should be based on market-based parameters, which is usually calculated using a methodology such as the capital asset pricing model (CAPM) that is used to derive the weighted average cost of capital (WACC) for an investment. When performance of the ADB’s PEF investments (inclusive of management fees) is compared to the average CAPM result of 14.3% over 24 years, the business success of the PEF investments, are significantly below market outcomes (Appendix 6). As the nominal results for ADB’s PEF investments (inclusive of management fees) of 9.5% exceeds the average cost of US 10-year treasury bonds of 6.4%, and yet is less than the hurdle rate of 14.3%, the OED guidelines indicate a rating of "partly satisfactory”.

4. Environmental, Social, Health, and Safety Performance

82. RSDD reviews all PEF investments prior to approval to ensure compliance with environmental, involuntary resettlement, and indigenous peoples safeguard policies, and if needed specific requirements are applied prior to issuing a safeguard compliance memorandum. Under current versions of ADB’s standard fund agreement, all fund managers are required to attend an ADB safeguard course, establish an environmental management system, and ensure investee companies are in compliance with ADB requirements and applicable environmental laws and regulations. PEFs cannot draw down capital from ADB
without confirming compliance with ADB safeguard requirements. Fund managers are required to report on their compliance with ADB social and environmental safeguards on an annual basis.

83. While these procedures are effective at ensuring safeguard systems are in place in investee companies, they do not provide details on actual environmental, social, health, and safety (ESHS) impacts. There is some anecdotal evidence presented in the OED impact evaluation study prepared in 2002 (footnote 3) which highlighted the significance of employment impacts in the case of four funds. Similarly, the PSOD case studies prepared in 2006 (footnote 9) demonstrated the significance of employment impacts, and the results of the literature review (Appendix 3) tend to support these findings. Successful SMEs supported by private equity demonstrate high rates of growth and therefore employment creation. SMEs are not usually subject to the same level of risks of resettlement and negative environmental impacts that are often associated with large greenfield infrastructure projects. SMEs are also required to comply with environmental regulations within countries, further mitigating against risks in this area. To date, PSOD has not implemented PEF projects that specifically pursue environmentally positive outcomes, as opposed to those that "do no harm", although these circumstances may change with ADB’s sponsorship of a $100 million clean energy fund that will be processed in 2008.

84. At a more general level there is an issue about whether ADB should require fund managers to collect data on environmental and social impacts, over and above compliance requirements, if they are not a specific objective of the fund. No MDBs appear to require this data to be collected by fund managers as it imposes additional costs and in many cases it is not clear that the data is meaningful. It is difficult to argue that investments that promote labor for capital substitution have greater social impacts than companies that generate high levels of profits and can pay high wages to staff and expand their businesses. As a result, the main focus when considering ESHS requirements is ensuring compliance with ADB’s safeguards policies, unless the ESHS impacts are a specific objective of the fund. OED’s evaluations and PSOD’s PCRs have not derived evidence to suggest any material problems have arisen in this regard, resulting in a rating of "satisfactory".

5. Conclusions on Development Impacts and Outcomes

85. The private sector development criterion was assigned a rating of "satisfactory" due to generally positive beyond company impacts, especially in regard to resource mobilization, and evidence of positive direct company outcomes. Business success is less evident and it was assigned a rating of "partly satisfactory". On the basis of available evidence, ESHS issues appear to have been addressed effectively. As development impacts in the past appear to have been positive, and PEFs are profitable (although FIRRs have not exceeded their cost of capital), and ESHS was in line with expectations, an overall rating of "satisfactory" has been assigned to the development impacts and outcomes criterion.

D. ADB Investment Profitability

86. As shown in Figure 11, ADB has been rapidly increasing its exposure to PEFs since 1983 when it approved its first investment, reaching a maximum of $197.7 million approved investments in 2006. Following a hiatus in 2007, PSOD has forecast for 2008 it will process projects with a total value of $165 million, indicating this trend is set to continue. The OED

---

35 Figure 13 shows approved and invested funds; it does not include an investment approved in 2006 of $20 million that has not yet been finalized and drawn down.
impact evaluation study prepared in 2002 (footnote 3) found that while large amounts of capital had been mobilized, financial performance was low due to the negative impact of the Asian financial crisis. International performance of PEFs in Asia since the crisis have been more positive and this result is reflected in ADB's PEF portfolio, which has demonstrated an improvement when FIRRs for PEFs are weighted by investment approval amounts, although returns have become increasingly volatile since 2004. For most of the period of analysis, ADB’s investment-weighted FIRR has been less than its WACC.

![Figure 11: ADB PEF Investment Approvals](image)

87. While there has been an improvement in PEF performance, the upswing in ADB’s FIRR in 2004 and 2005 needs to be treated with caution as it was offset by a decline in 2006. As noted by Cambridge Associates, any results from 2003 are insufficiently mature to draw strong conclusions. This result is confirmed by analyzing PEFs in terms of stage of fund life cycle, as summarized in Table 9.
Table 9: ADB’s Private Equity Fund Portfolio: Investment Results  
(as of 30 June 2007)

<table>
<thead>
<tr>
<th>Fund Stage</th>
<th>No. of Funds</th>
<th>ADB Investment Approved ($ million)</th>
<th>ADB Capital Contributed ($ million)</th>
<th>Capital Returned to ADB ($ million)</th>
<th>Value of Remaining ADB Investment ($ million)</th>
<th>FIRR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Ended</td>
<td>2</td>
<td>8.9</td>
<td>(8.8)</td>
<td>8.6</td>
<td>6.3</td>
<td>4.9</td>
</tr>
<tr>
<td>Fully-Divested</td>
<td>15</td>
<td>67.8</td>
<td>(44.0)</td>
<td>66.0</td>
<td>0.0</td>
<td>8.0</td>
</tr>
<tr>
<td>In Divestment Period</td>
<td>13</td>
<td>181.5</td>
<td>(145.3)</td>
<td>125.5</td>
<td>64.7</td>
<td>4.6</td>
</tr>
<tr>
<td>In Investment Period</td>
<td>19</td>
<td>486.1</td>
<td>(149.9)</td>
<td>36.7</td>
<td>178.5</td>
<td>20.4</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>744.2</td>
<td>(348.0)</td>
<td>236.8</td>
<td>249.5</td>
<td>7.5</td>
</tr>
</tbody>
</table>

( ) negative, ADB = Asian Development Bank, FIRR = financial internal rate of return. 
Source: Private Sector Operations Department.

88. ADB has invested in two "open-ended funds", which have no fixed termination date and usually hold relatively liquid investments which can be realized at short notice. ADB approved investments of $8.9 million in open-ended funds, and it is in the process of exiting from these investments, expecting to achieve an FIRR of 4.9%. ADB no longer invests in this form of PEF.

89. Fully divested funds are PEF investments which have completed their lives after liquidating all assets and distributing all returns to their investors. Fifteen of the 55 funds in ADB’s historical and current portfolio fall within this category. ADB approved investments of $67.8 million, made actual investments of $44 million (65% of approval), and derived an FIRR net of management fees of 8.0%. Funds that are still in their divestment period are a slightly more risky category as they have stopped making new investments and are in the process of liquidating their portfolios and distributing the proceeds back to fund investors. ADB approved total investments of $181.5 million in 13 funds that fall within this category, and 80% was actually invested. The returns from this type of investment may be understated as residual investments are carried at conservative valuations (based on cost) and they are expected to be liquidated at higher prices. Returns from PEF investments in their divestment stage have derived an FIRR of 4.6%

90. The final category of PEF investments are those funds which are still in their investment period and they are the most risky category as they are actively drawing committed capital from their investors and finding and making investments. As a result of implementation requirements, only 31% of Board-approved investments within the investment period category had occurred at 30 June 2007. Returns from these investments would normally be expected to be valued almost exclusively at book value. In the case of ADB's portfolio of PEFs in their investment phase, the profile is atypical as a number of funds have already made repayments and others have already been listed on the stock exchanges in India and the PRC, which were performing well at 30 June 2007, achieving a significant upward revaluation. As a result, the estimated FIRR was 20.4%, but the proportion of invested committed capital was only 31%, the range of outcomes was widely dispersed, and final performance is speculative, as shown in Figure 12. Recent volatility in the global financial markets can only add to this uncertainty, indicating the FIRR of 20.4% is unlikely to be sustainable.
91. Despite concerns about the financial sustainability of current FIRR, PEF investments are reported by PSOD to be performing well in operational terms based on ADB’s risk rating system, with more than 75% rated 3 (satisfactory) or better (Figure 13). PSOD meets quarterly to consider risk assessments and, if necessary and prudent, revise them to reflect the current situation with the PEFs and their investee companies.

92. While the risk ratings are positive and market conditions have been strong in recent years, it is important to recognize that PSOD is subject to a conflict of interest in valuing and
rating its own portfolio, and the ratings appear to be biased upwards. PSOD risk ratings are not based on quantitative criteria, although logically, a risk rating of satisfactory would indicate that a PEF was likely to exceed its average cost of capital of 14.3%. A comparison of Figures 12 and 13 indicate that this is not the case and the upward bias of PSOD’s risk ratings is material.

93. Overall, as defined in the OED guidelines, ADB profitability has been rated “unsatisfactory” as the net investment FIRR of 7.5% is only slightly more than 50% of the average WACC of 14.3%.

E. ADB Work Quality

94. Evaluation of ADB work quality addresses (i) screening, appraisal, and structuring; (ii) monitoring and supervision; and (iii) its role and contribution to the project.

1. Screening, Appraisal, and Structuring

95. When screening projects, evidence indicates there has been limited consideration given to factors such as regional department reform programs, country, sector, stage of firm development, investment style, level of fund manager experience, or impact on overall portfolio composition. There is no mapping of upcoming funds based on target geographic regions, sectors, types of firms, or seeking specific types of funds to fill gaps in the target portfolio structure. Most of ADB’s PEF investments have a broad geographic focus and limited specialization in terms of sectors and stages of company development.

96. There is a lack of a clear strategy being pursued for PEFs that balances development and financial objectives within the context of managing the overall PEF portfolio. PSOD has continued to focus to a substantial extent on funds managed by experienced fund managers that target late-stage non-sector specific SME funds in the rapidly transforming middle tier economies, rather than gradually moving into smaller funds managed by less experienced fund managers that target defined categories of firms in high growth potential sectors in middle tier and frontier countries. Where there has been diversification, it has often occurred in high-risk environments such as Afghanistan and Samoa that are not ready for PEF investments. PSOD has only targeted middle-tier countries such as Indonesia and the Philippines indirectly through the use of regional funds. While this outcome may reflect market realities and the historically low rates of return achieved by PEFs in secondary markets, more could have been done in these high-development potential and relatively low-financial risk countries.

97. Due to historical problems with a lack of strategic focus and resource constraints, the identification of PEFs has been primarily reactive in response to sponsors approaching ADB, chance meetings at investment conferences, referrals, and presentation of new fund offerings by managers with whom ADB has invested in the past. As a result, PSOD appraisal and selection process has been driven to a significant extent by due-diligence criteria summarized in Box 1.

36 Even if the current WACC of 12.5% was used, performance would still not exceed the hurdle of 8.8% needed to achieve a "partly satisfactory" rating.
The PSOD due-diligence checklist has been augmented by a set of guidelines prepared by OGC on Key Provisions for Fund Documentation that was prepared in 2003. This document covers issues such as (i) investment objectives and restrictions; (ii) size of the fund; (iii) term of the fund; (iv) minimum commitment for closing; (v) ADB's commitment; (vi) fund manager's commitment; (vii) commitment period; (viii) drawdown procedures; (ix) management fees; (x) use of debt by the fund; (xi) investment restrictions; (xii) environmental and social safeguards; (xiii) anti-corruption, anti-money-laundering, and anti-terrorism undertakings; (xiv) allowable expenses and repayment provisions; (xv) investment decision rights; (xvi) board supervisory rights; (xvii) no-fault divorce clause for the fund manager; (xviii) reporting requirements; (xix) valuation practices; (xx) ADB investment abstention and withdrawal mechanism; (xxi) key person requirements; (xxii) limits on ADB liability; and (xxiii) dispute resolution and governing law.

Both the PSOD due-diligence checklist and OGC documentation requirements are regarded as being live and are updated in the light of experience. These due-diligence requirements are comprehensive by industry standards and reasonably successful at identifying relatively low-risk PEFs. While overall financial performance has been poor, problems with outright loss have been rare. The final PEF structure is independently reviewed by the RMU from a financial risk perspective prior to review by the Board. Similarly, RSDD is involved in ensuring compliance with social and environmental safeguards up to project approval, although it does not provide any form of rating on risks, as PEFs are treated as financial institutions. There do not appear to have been any material problems with social and environmental protection, and reputation management. Similarly, there have not been any material issues in regard to litigation, either between PEFs in which ADB has invested and third parties, or between PEFs and ADB. While ADB has managed to avoid material financial and non-financial risks to date through comprehensive screening techniques, the lack of clarity of development and financial objectives and subsequent performance has been less than what could reasonably have been expected.

# Box 1: Private Sector Operations Department's Due-Diligence Checklist for Private Equity Funds

Due diligence of funds and prospective fund managers is based on the following main factors: (i) they should have proven local infrastructure and network to access deals, and (ii) have a multi-country focus when possible to support deal flow and diversification. Other factors taken into consideration include (i) quality of the fund documentation; (ii) other prospective investors in the private equity fund; (iii) structure and quality of the fund manager's operations; (iv) caliber, experience, and financial commitment of the management team; (v) quality of the fund manager's reporting systems; (vi) composition of the investment and advisory committees; (vii) quality of the investment strategy; (viii) potential investment restrictions in areas such as sector and geographic focus of the fund, size of investee companies, stage of development of investee companies, types of financial instruments, and size of investments (minority or majority shareholdings); (ix) restrictions on fund financing and use of leverage; (x) due-diligence process and its use of external consultants; (xi) policies and systems for monitoring social and environmental safeguards; (xii) methods of deal sourcing; (xiii) ways in which it will add value; (xiv) exit strategy; (xv) potential conflicts of interest with affiliated institutions; (xvi) potential contingent liabilities on the private equity fund; and (xvii) risk-management systems in areas such as cross-border investment risk, legal and regulatory constraints, foreign exchange, commercial risks, and exit risks.

Source: Private Sector Operations Department.

---

100. Structuring impacts have been mixed. Structural characteristics of PEFs, such as the term of investment and the fund manager remuneration formula, tend to be standardized across the industry. In comparison, the legal and governance structures used by PEFs can vary significantly depending on the requirements of the various stakeholders and the legal and regulatory environments within which they operate. Legal structures can encompass partnerships, companies, and trusts. Tax considerations can play a central role in the design of the structure of PEFs. Governance arrangements typically consist of an advisory committee that acts in a fiduciary investor oversight capacity, and an investment committee that is led by the fund manager and makes investment decisions. Due to factors such as staffing constraints, PSOD has an investment policy of limiting its participation in PEF investment decisions to acting as a member of the advisory committee. ADB's limited role in fund decision-making is further restricted by its role as minority shareholder, reducing its potential to influence management decisions once funding is committed.

101. A review of the PPERs for PEFs indicates that ADB has difficulty managing problems of conflicts of interest within funds as fund managers often administer multiple PEFs, and on occasion can be involved in advising on transactions in which the fund invests. While there are conflict of interest provisions in the fund documents it can be difficult enforcing these rights. In some cases this issue has led to poor financial performance of PEF investments. The finite life of PEFs, coupled with a remuneration formula where fund managers are paid based on investment commitments during the investment period and invested funds during the divestment period, can create perverse incentives for fund managers. If existing investments are performing poorly, then there is a risk that fund managers can focus on making investments independent of long-term returns in an effort to maximize annual management fees, rather than rely upon the performance bonus in the form of carried interest. As a result, financial performance of PEFs is likely to be lower than might otherwise be the case.

102. The PPERs prepared in 2007 found that PSOD’s hands-off approach to investment decisions and difficulties in defining investment restrictions in the fund agreements created problems on a number of occasions with style drift, where the fund manager does not pursue the original investment strategy outlined in the RRP and the private placement memorandum, and provided the basis for the Board’s approval of the investment. In part this problem has arisen as there has been a lack of clarity about development objectives, and ADB does not have sufficient rights to influence the fund manager’s decisions. Reference to other investment agencies' methods of operations suggests this problem could be reduced through more intensive due diligence and the preparation of much tighter investment restrictions and planned investment programs, where ADB draw-downs are linked to achievement of defined performance targets, which are included in the fund agreements. Other possible options include more active participation in investment committees, coupled with ADB investment opt-out and veto rights, and use of self liquidating funding instruments (see Appendix 3 for examples of the types of provisions that can potentially be adopted by ADB).

103. Another remedy might be to replace the fund manager, but in practice this option is difficult to enforce, even when a no-fault divorce clause is present in the fund agreement, as there is usually a requirement to obtain the approval of the other shareholders and demonstrate a convincing case of negligence. This remedy is not useful in circumstances where the PEF’s investment strategy has been modified due to factors such as changes in the market that has led to a revised investment strategy where development impacts are not so readily apparent,

38 An example is the New Zealand Venture Investment Fund that requires the inclusion of a detailed investment plan as an appendix to the fund agreement.
removing the need for ADB to remain in the fund. Once problems occur, it is not straightforward for ADB to exit from funds, although it has been achieved in a small number of cases. Difficulties with exit arise due to issues such as provisions in the fund agreements to obtain the permission of the fund manager and the other shareholders in the fund. More importantly, when there are serious financial problems, the divestment value of the investment may be substantially below cost. As a result, an exit would require PSOD to immediately record a loss rather than pursue a turnaround in fund performance.

104. In conclusion, the screening process has been rated “unsatisfactory”, and structuring and appraisal are “satisfactory”, although subject to weaknesses, resulting in an overall rating of “partly satisfactory”.

2. Monitoring and Supervision

105. There are two dimensions to PSOD’s monitoring and supervision framework for PEFs consisting of (i) oversight and control of the PEFs, and (ii) reporting to ADB Management and the Board. In many respects these reporting arrangements should be symmetrical, with PSOD providing summarized consolidated information to the Board and Management based on the information it receives from fund managers. However, it must by definition incorporate mechanisms for aggregation, consolidation, and comparison of data received from fund managers. Aggregation is needed to enable PSOD to view and manage its PEF investments as a portfolio, and for the Board to understand ADB’s PEF portfolio as a coherent business. PSOD monitors PEFs through (i) quarterly reports and audited annual accounts from fund managers, (ii) using its observer status to gather information about investment committee decisions, and (iii) participating in the advisory committee which considers issues such as conflict of interest and meets on an ad hoc basis when required. PSOD reports to ADB Management through its quarterly reports on private sector operations and PCRs.

Box 2: Reporting Systems for Private Equity Funds

Reporting systems for private equity funds typically fall under five headings: (i) investor relations, (ii) deal flow management, (iii) portfolio management, (iv) administration, and (v) operations. Reports to investors encompass issues such as tracking limited partners, implementing fund raising, and measuring management service quality such as timeliness of reports. Deal flow management is concerned with providing information on prospective investments. Portfolio management tracks investee companies by collecting quarterly data and integrating it into summary reports, monitoring performance milestones, recording management changes, and detailing cash flows and financial performance relative to budgeted targets. Administration refers to issues such as preparing accounts, valuing assets, managing capital calls and distributions, and tax filings. Operations addresses issues such as security arrangements providing staff with permission to access and enter data.


106. Weaknesses in reporting arrangements may be playing a role in the problem of style drift. When considering the adequacy of reporting systems, it is important to consider the scope of the reports and their contents. PRISMS is PSOD’s primary management information system for funds, and a substantial amount of time and effort has been invested in developing this facility. Investor relations information is reasonably comprehensive in areas such as fund manager contact details, capital contributions by other fund investors, details on investee companies, and ADB’s cash contributions and receipts. However, data fields on items such as ADB participation at meetings and development impacts are present but are often not populated.
107. PRISMS includes in its database tables fields for all relevant portfolio management data including (i) details on fund terms, fees, and milestone dates; (ii) contact details for fund managers and key staff; (iii) financial performance at both fund and investee levels; (iv) capital calls and repayments, and distributions of investment gains; (v) historical and projected dates for advisory board and investment committee meetings; (vi) fund reporting dates; (vii) FIRRs for individual investees, individual PEFs, and for the PEF portfolio as a whole; (viii) ADB commercial risk ratings; (ix) fund life-cycle status (such as investment period, liquidation phase, and cancelled); (x) data on development impacts (e.g., employment and tax payments); (xi) details on compliance with social and environmental safeguards; and (x) numerous other data elements required for PEF portfolio management.

108. PRISMS was conceived and developed beginning in mid-2004 as a stand-alone portfolio management system and reporting database for the PEF investment portfolio. Prior to that, the portfolio (which already had approximately 35 funds) was administered using a series of spreadsheets. By design, PRISMS is not integrated with CLASS, as the CLASS system was being developed by the OIST at the same time as PRISMS. Similarly, PRISMS does not share data structures or links with the PSIM notes, which was considered by PSOD as not being useful for PEF portfolio management. Data in PRISMS is entered almost entirely manually from paper reports received from fund managers. This is a laborious process as fund managers each use their own report formats and there is no standardization in reporting at the fund level. Repeated attempts to have fund managers present data on their funds’ investment development impacts have not produced results as the concept remains alien to managers’ thinking about investment. PSOD’s process for reviewing and extracting data from fund managers’ reports could be streamlined significantly if fund managers could be persuaded to use standardized electronic reporting templates. Data received from managers in these templates could then be automatically uploaded into CLASS and PRISMS to save on staff time and minimize the risk of transcription errors. Similarly, there should be a standard template for preparing internal reports used within ADB.

109. There are concerns about the actual reports prepared by PSOD for internal use as they do not support transparent strategy and management decision-making processes. The PSIM notes, which form the basis of the quarterly reports on private sector operations, provide a highly abbreviated financial summary of individual projects, including details on date of approval, rationale, approval amount, disbursements and repayments, net asset valuation, risk rating, and key issues. Independent financial risk ratings are initially assigned to investments by the RMU at the time of investment approval, but there are no subsequent independent reviews of these ratings as this task is performed by PSCM using a qualitative methodology. RSDD independently reviews environmental and social safeguard risks for PEFs prior to investment approval, but there is no independent monitoring following approval, and this function is performed by PSOD. There is no data on fund managers’ compliance with annual social and environmental safeguards reports in PRISMS. There are concerns about accounting practices which do not follow industry standards for PEF fund investments. PSOD does not prepare annual reports on PEF investments that provide an overview of market developments and an analysis of individual PEF’s performance against development and financial objectives, critical issues, and expected developments. Neither does PSOD prepare an overview of the PEF portfolio, which is subsumed in ADB’s non-sovereign-guaranteed portfolio. PSOD does produce PCRs, but these reports are only prepared at a minimum of 7.5 years after the investment period for the fund commences. Given the rapid changes that can occur in market structures and fund management performance, PCRs can only provide limited guidance on lessons learned and appropriate management responses.
110. The lack of transparency at fund and PSOD levels make it difficult for the Board to understand and influence PSOD’s PEF operations, and for PSOD to influence fund managers in accordance with ADB policies. Once funding is committed, PSOD is almost entirely dependent upon the fund managers to achieve positive development and financial results by relying upon a combination of commercial incentives and a set of high-level investment restrictions that have almost no bearing on development objectives. Even if the PSCM investment officers have a substantial awareness of fund operations, there are few mechanisms in place to pass this information on to ADB Management or influence development and financial outcomes.

111. As a result of these considerations, a rating of "partly satisfactory" has been assigned to this criterion.

3. Role and Contribution to the Project

112. There are strong conceptual arguments as to why investments in PEFs can facilitate economic development by accelerating growth and reducing poverty, and how ADB can stimulate investment in these types of financial instruments. However, weaknesses in PSOD’s strategic planning processes, management information systems and reporting arrangements make it almost impossible to determine from internal records what role ADB actually played in establishing PEFs, and enhancing the value of its operations. On the basis of PSOD’s PEF strategy, the two main areas where ADB seeks to play a role in establishing and operating PEFs are (i) attracting largely foreign investors to invest in frontier markets, and (ii) providing assistance and guidance to inexperienced fund managers within an acceptable risk-management framework. Without a database that systematically records progress on these types of impacts and outcomes it is necessary to rely upon evidence drawn from previous evaluation reports and PCRs and a general review of operations. This evidence is scarce and, where available, the results are mixed.

113. The impact evaluation study prepared by OED in 2002 (footnote 3) and most of the PCRs prepared by PSOD (Appendix 4) have focused on the beneficial impacts of the funds in which ADB invested rather than its precise role and contribution to catalyze the establishment and good performance of the PEFs. The PPERs prepared by OED in 2007 (Appendix 4) provide a conflicting picture, with two out of the three funds reviewed demonstrating positive impacts from ADB participation by providing foreign investors with the necessary confidence to invest. In the third PPER, ADB did not play a significant role attracting investment. In terms of strengthening fund operations, beyond due-diligence processes to identify credible fund managers, ADB has limited opportunities to add value. PSOD does not make use of its up-front due-diligence process to develop comprehensive plans of action that are subsequently reviewed by a combination of internal and independent external sources. It appears to be difficult to enforce ADB’s decision rights, even when they are included in the fund documents. PSOD’s decision to limit involvement in PEF governance to oversight through participation in advisory committees, coupled with a minority shareholder interest, further limits its ability to contribute to PEF operations.

114. The combination of these factors suggests that, while ADB participation is valued, especially by enhancing the credibility of the fund manager, the potential for actually adding value to PEF operations is heavily constrained. Given these considerations, a rating of "partly satisfactory" is assigned to this criterion.
4. Conclusions on ADB Work Quality

115. Due to lack of resources, limited use of mechanisms to ensure ADB’s development objectives are met, and weaknesses in reporting systems, the overall rating for ADB’s work quality is “partly satisfactory”.

F. ADB Additionality

116. This criterion is based on whether (i) ADB finance was a necessary condition for the timely realization of PEF investments, and (ii) ADB's contribution and function improved the development impact.

117. The evidence gained from the historical review of ADB's PEF portfolio indicates that ADB’s participation in PEFs has provided additionality by catalyzing private investment in PEFs, but this impact has been declining over time. There is evidence that ADB’s early investments in PEFs through the 1980s up to the financial crisis in 1997 played an important role in developing a nascent private equity industry in Asia. Additionality for PEFs initiated from 1997 to 2003 has been less evident due to poor financial returns following the Asian financial crisis which made it difficult to attract foreign capital. From 2003 to 2007, there is a lack of evidence demonstrating significant value addition as ADB has continued to target traditional products such as late-stage regional SME funds and funds operating in relatively developed countries such as India and the PRC where the size of the private equity market has grown exponentially since 2003.

118. To a significant extent, the strategic rationale for PEFs has declined in recent years in what has become an increasingly globalized and complex market, and PSOD has not responded adequately to new market conditions. The current rebalancing of PEF projects to more niche markets such as the regional clean energy fund that is being actively sponsored by PSOD is a positive development in this regard. However, there appears to be a need for PSOD to revisit its target countries, and move away from large established markets such as India and the PRC to middle-tier countries such as the Philippines and Indonesia, which are experiencing an upturn in market conditions and yet the private equity sector is largely absent. PSOD also needs to consider ways of investing in venture capital funds that target more technology-intensive sectors and meet the needs of early-stage SMEs, or more mature SMEs that require restructuring, rather than late-stage, pre-initial public offer candidates. Specialist niche markets, such as NPLs and clean energy, offer significant potential. In terms of targeting managers of start-up funds, this strategy does not seem feasible under current arrangements given the shortage of resources in PSCM and the lack of controls applied to funds once capital is committed by investors.

119. The overall rating for ADB additionality is "partly satisfactory".

G. Overall Assessment

120. The overall rating of the PEF operation, as justified by the underlying ratings of development impact, investment profitability, work quality, and additionality, is "partly successful".
### Table 11: Overall Assessment of the Project

<table>
<thead>
<tr>
<th>Indicator/Rating</th>
<th>Unsatisfactory</th>
<th>Partly Satisfactory</th>
<th>Satisfactory</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Outcomes and Impacts</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Private Sector Development</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Success</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Environment, Social, Health, and Safety Performance</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>ADB Investment Profitability</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADB Work Quality</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>ADB Additionality</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Rating</th>
<th>Unsatisfactory</th>
<th>Partly successful</th>
<th>Successful</th>
<th>Highly successful</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB = Asian Development Bank.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: Operations Evaluation Department.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### H. Conclusions

121. PEFs have strong conceptual justifications that are supported by empirical evidence, to promote private sector development from a bottom-up perspective. PEFs provide a means of attracting international expertise to help identify business opportunities in developing economies, and they provide investors such as ADB with decision rights. Reflecting this result, it is common for MDBs to use PEFs as an instrument to support growth of SMEs. In the past, evidence confirms that ADB has achieved a reasonable degree of success in catalyzing private investment through the use of funds that demonstrate the benefits of PEFs. In countries such as India and the PRC, the level of international investment in PEFs has been growing rapidly, and the scope for ADB to achieve demonstration impacts in these markets has declined. There is a need to move away from broadly defined regional non sector specific SME funds and adopt a more focused strategy that clearly demonstrates the realization of development impacts. Such a strategy requires adequate resources and effective management systems to ensure that development goals are achieved, while ensuring that risks to ADB are effectively managed.

### V. ISSUES, LESSONS, AND RECOMMENDATIONS

#### A. Issues

1. Development Justification for Funds

122. A review of various Management review and Board discussion documents indicates that a common issue of discussion has been the development justification for ADB investments in PEFs. As noted previously, there is a large amount of evidence that supports the view that PEFs are successful in generating jobs as their investees expand, and in attracting risk capital from global sources, provided they build successful track records in making and exiting investments. Reflecting this result, MDBs have traditionally had a significant involvement in PEFs, with justifications for participation primarily being based on rationales such as demonstration and risk mitigation effects.

123. One of the most persistent concerns expressed by the Board has been the issue of whether PEF investments support pro-poor growth and poverty alleviation. As PSOD has noted in various documents in the past, its mandate is to “contribute to growth and strengthening of the private sector, which is itself the engine of economic growth. PSOD functions as an indirect,
medium- to long-term instrument in ADB’s toolkit of interventions. There is a demonstrated and strong empirical link between economic growth and poverty alleviation. ADB’s own literature states that “the Asian experience shows that growth is the most powerful weapon in the fight against poverty”. Given this position, it follows that economic growth itself is pro-poor. If private sector development is crucial for economic growth, and economic growth is crucial for poverty alleviation, then PSOD’s business must be considered to be inherently pro-poor.39

124. The logic of PSOD’s arguments is clear, and evidence supports the view that improved availability of private sector equity, either directly through domestic and foreign direct investment (FDI), or indirectly through PEFs, has material impacts supporting economic growth. As such, the key issue is not whether private sector development and PEF investments are useful, but how well ADB’s investments in PEFs are contributing to the private sector development process, relative to ADB’s other development instruments. As discussed in the PSDS, ADB’s public sector loans and technical assistance are needed to strengthen the enabling environment from a top down perspective. Private sector funding through equity, loans and guarantees are important from a bottom up perspective for demonstrating the feasibility of concepts and helping to mitigate financial risks. Both public and private sector instruments play a complementary role in facilitating private sector development.

125. When considering private sector development from a bottom up perspective, equity is potentially the most powerful development instrument available to ADB as it can handle high levels of risk and equity holders participate fully in corporate governance, having full decision rights on how investment capital is to be used to accomplish corporate and development objectives. Equity can be invested directly by an MDB, giving it a high degree of involvement in investee corporate governance, or indirectly via a PEF, where influence is limited to the management of the fund. The use of equity needs to be balanced against the much higher risk of incurring losses relative to other ADB instruments.

2. Private Equity Funds Versus Direct Investments

126. When considering the use of equity, ADB has a choice between an indirect involvement through PEFs, or direct equity investment. PEFs have a number of important development advantages. They provide a mechanism for attracting world-class fund managers to DMCs to develop new companies and restructure existing companies. Through involvement of corporate investors, PEFs provide a means of transferring new technology from developed economies and accessing additional risk capital from foreign sources that would not otherwise be available. Fund managers can target large numbers of SMEs in DMCs and recruit specialized staff locally to help manage investments. PEFs provide a means of attracting local sources of finance to high-potential SMEs, further leveraging funding impacts. PEFs have fund managers who have strong incentives to achieve tangible physical and financial results in a short time, and in most cases have the necessary level of control to achieve these results. The combination of these factors suggests that PEFs provide an important instrument for developing the private sector from the bottom up. The main disadvantages with PEFs are that they require a congruence of development and financial incentives, which may not always be the case. ADB is required to place a high degree of trust in fund managers in terms of acting responsibly in the areas of managing funds, minimizing negative social and environmental impacts, and behaving ethically. PEFs are relatively inflexible, and they have a high opportunity cost in terms of the amount of

39 These references were drawn from a memorandum from PSOD Director General, to a member of the Board, dated 15 December 2005.
fees that are paid to fund managers rather than on development of internal ADB staff and systems to manage these investments directly.

127. The evaluation findings indicate PSOD has been reasonably successful in finding reliable fund managers. Although there have been instances of fraud and mismanagement at the investee level, there is no evidence of systematic problems arising in areas such as unacceptable co-investors, negative social and environmental impacts, unethical investments, or money laundering. PSOD has resolved these issues through a range of mechanisms, such as not committing funds until it knows the identity of co-investors in the fund, and it typically has a right in the fund agreement to approve new investors in the fund. Fund managers must now attend an ADB and IFC course on compliance with social and environmental standards and ADB’s safeguards. Fund agreements contain provisions on sectors that are not permitted on social, environmental, or ethical grounds (e.g., alcohol production, armaments, and tobacco). Capital drawdowns by ADB are not permitted until it has been confirmed that investments are in compliance with the fund agreements. There is also a requirement in the fund agreements that fund managers behave ethically and they must confirm in their annual reports that investments are in compliance with agreed standards. All annual reports are independently audited by reputable firms in accordance with international standards.

128. However, funds are very rigid structures from ADB’s perspective. The finite life of funds means that fund managers must exit from investments within a defined period. This restriction may mean that the fund manager has to exit at a point when market conditions are not attractive, or its value-added strategy for investee companies has not reached its full potential, requiring an exit at a less-than-optimal value. While it is possible to recapitalize funds and extend their life, this requires the approval of other investors and the fund manager. There is potential for conflicts of interest in funds. Successful fund managers typically manage several funds simultaneously, and in some cases are involved in originating transactions which they may then seek to sell to the fund at inflated values. While there are conflict of interest provisions in the agreements, they are difficult to enforce without ADB conducting due diligence into the ownership of the investee companies, and this is an expensive exercise for which it does not have funding.

129. The formula for remunerating fund managers can potentially create difficulties as it is not directly aligned with fund investors’ interests. Fund managers receive an annual payment that is typically in the order of 2% of committed capital during the first five years of the fund (the investment period) and 2% of invested capital in the subsequent five years of the fund (the divestment period). In theory, the performance bonus in the form of 20% of profits in excess of the 8% guaranteed return to investors is meant to ensure the fund manager invests capital responsibly. This incentive may not be effective when initial investments perform poorly, and the fund manager seeks to maximize the annual payments by making high-risk investments towards the end of the investment period to maximize annual fees in the divestment period (payable then on invested rather than committed capital), as they lose hope of receiving significant payments through the carried interest in profitable investments (performance bonus). Closely related to this issue is the size of the annual fund management fees, which is substantial. At 31 December 2007, ADB had an active portfolio of approved investments of $676.4 million. If it is assumed that ADB is paying an annual management fee of 2% on these funds, that funds are fully drawn down, and repayments occur towards the end of the divestment period, this is equivalent to $13.5 million annually. ADB could potentially be using this money in its own right to develop and improve internal staff and systems if it chose to focus instead on direct investments, particularly for large projects in sectors such as infrastructure.
130. Direct equity investment has the advantage of providing ADB with a higher degree of involvement in investee corporate governance, through stronger decision rights that can be used to promote development objectives. Direct investments are not subject to the perverse incentives created by the finite life and imperfectly aligned management incentives of PEFs. Offseting these results, direct equity involves more direct costs to manage these investment compared to PEFs. Hence, both direct equity and PEFs have their uses. As to the balance between these instruments, ADB's prudential guidelines for equity investments indicate an equal allocation between direct equity investments and PEFs in the limit. A comparison with other private sector–oriented MDBs such as EBRD and IFC indicates that PSOD is currently making greater use of PEFs than direct equity investments. PEFs account for about 10% of PSOD’s approved portfolio, compared to the EBRD and IFC where they represent about 5% of the active portfolio. Reflecting the general trend among investment institutions towards more active involvement in investee governance, EBRD’s annual report for 2006 notes, "part of the strategy of the Bank’s new environment is to engage ever more closely in the projects we finance by becoming active shareholders".\(^{40}\) Similarly, in the IFC’s annual report for 2007, it notes it is expanding its equity investments, with most of this growth occurring in direct investments in finance and insurance, with investments in funds being constant in 2006 and 2007 in dollar terms. To date, ADB has limited most direct equity investments to infrastructure projects and a small number of banks, and it has moved away from investing directly in industry, which continues to be a priority for international financial institutions such as the IFC and EBRD. While there are slight differences in MDB investment strategies, this result does not detract from the fact that a key issue for ADB is how it should prioritize investments in PEFs relative to other private sector instruments such as direct equity investments.

131. Overall, the choice between PEFs or direct equity will be driven by the specific development objectives that are being sought by ADB in a particular country and sector, relative to ADB’s available resources and the financial risks it is prepared to assume. PEFs will tend to be more suitable for sectors such as SME start ups where performance and management control of individual companies is not critical relative to the performance of the portfolio of investments, whereas direct equity will tend to be more important when individual company performance, such as large infrastructure projects, is key.

2. Strategic Focus of Fund Operations

132. A persistent issue that emerges from the evaluation of PEFs is the lack of strategic focus. While the arguments supporting the benefits of PEFs are well documented, the way in which PSOD pursued private sector development objectives through the use of PEFs is often not clear. The lack of involvement in the CSP process and operations of funds by limiting participation to due diligence, investing capital, and providing oversight through participation in advisory committees, significantly weakens the case for achieving development impacts. This result is particularly apparent in markets such as India and the PRC where there are large amounts of private equity capital available. Investing in second- and third-generation funds organized by successful fund managers does little for the industry as a whole. The highest barrier to entry for new fund managers is raising their first fund, and this is an area where ADB could play a more catalytic role.

133. ADB needs to develop a clearly defined operational strategy for PEFs. This strategy should address issues about which countries, sectors, types of firms, and styles of funds in which PSOD intends to invest and form the basis of a business plan, which is integrated into the

\(^{40}\) Available: http://www.ebrd.com
country programming process. A review of the CSPs indicates that the level of discussion on PEFs has been limited, and PEF investments have often been unrelated to enabling-environment reforms pursued by regional departments. In part this result is driven by the regional departments which have not always had the same priorities as PSOD, focusing on direct poverty reduction rather than indirect poverty reduction initiatives such as private sector development and use of PEF investments that are oriented to economic growth. This outcome is also a function of lack of resources for PEF operations in PSOD.

134. A further problem is the country programming frameworks as in the past they have covered anything up to 10 years, which is an excessively long time frame for managing commercial transactions. There are difficulties with the nature of PEFs which have a high degree of flexibility in pursuing different investment strategies, and mitigating risks, relative to other forms of financial institutions. This flexibility makes it difficult to define the nature of PEF operations in the future. Despite these factors, country strategies can provide an effective mechanism for coordinating operations across ADB and regional departments. Country strategies have the potential to address important regulatory constraints on PEF operations and coordinate the provision of conventional credit lines with PEF investments. PSOD has not made sufficient effort to provide feedback to regional departments on critical constraints on PEF investment, such as restrictions on cross-border capital flows, or alternatively presented its own analyses in the country strategies as part of the strategic justification for PEFs within a particular country. (PRISMS includes a module to capture such information.) An issue in this regard is whether PSCM should be given greater access to technical assistance funds, or greater levels of influence in decisions on the allocation of these funds in the future as part of the CPS process. Such a strategy would need to be coordinated with an increase in staff to perform these functions.

135. A closely related issue is the lack of information on why ADB has not taken a more proactive stance on private equity in middle-income countries such as Indonesia and the Philippines. While PSOD lacks funding for marketing, this is not a critical constraint in the case of the Philippines. Similarly, PEFs are an obvious target for regional departments, as nonbank financial institutions were a particular focus of financial sector reforms in the Philippines. Economic and political difficulties have undermined financial returns for PEFs operating in the Philippines; the Asian financial crisis was probably the most important constraint, but this event occurred a decade ago. Even if it is difficult to attract international investors and fund managers, ADB should have taken a more proactive role by sponsoring credible fund managers and supporting local venture capital associations.

136. There is a need to develop a clear view on which sectors PSCM wishes to target using PEFs, the stage of development of the investee SMEs, and the size of the funds. PSCM’s traditional strategy of targeting non sector specific late-stage SME funds in India, the PRC, and regional funds is losing its relevance, and the gradual strategic shift towards special-purpose funds has not yet been clearly articulated. The proactive sponsoring by ADB of a regional clean energy fund is an innovative development that demonstrates a catalytic role and positive environmental impacts. Consideration can be given to reentering the infrastructure fund sector as this would help support some of ADB’s wider efforts to catalyze investments in these sectors. PSOD might consider sponsoring fund managers directly that could act as funds of funds in their own right. This approach contrasts with the traditional ADB strategy of taking minority interests in existing experienced fund managers of PEFs in which it has invested, without
playing a clear role in strengthening fund management operations.\textsuperscript{41} In terms of investment size, PSOD’s current approach of targeting mid-sized funds and investee companies seems logical in the sense that very large funds probably don’t need ADB support, and small funds involve high levels of expense on the part of ADB Management. However, small funds make more sense in high-risk frontier countries. Overall, a flexible approach should be adopted when considering the size of fund, and investment decisions should be driven by the trade-offs between development impacts and portfolio and risk considerations.

3. Style Drift

137. The three PPERs prepared in 2007 (Appendix 4) found that style drift is a problem, and there is evidence that changes in investment parameters for PEFs that have required ADB Management approval have been common. Under its current hands-off policy, ADB has very little influence over investment decisions once it commits to participating in a fund. While it may be a correct decision to limit ADB involvement in fund management operations, it should have rights to protect its investment, and to ensure its capital is usefully employed to achieve the development impacts which originally supported the investment rationale presented in the RRP. There are a number of potential options available to ADB to strengthen control of PEF investments. It can seek to place tighter investment restrictions in the fund management documents and prepare detailed investment plans that are linked to performance targets and ADB drawdown provisions, which are closely monitored and enforced. Opt-out clauses can be included in the fund agreement and these provisions could potentially be extended to encompass veto rights. ADB can strengthen its rights to access and independently audit fund accounts. ADB can take a more proactive stance selling shareholdings in funds, and where there are problems with the fund manager, enforcing measures so they are replaced.

138. These options need to be balanced against considerations such as problems forecasting PEF investment programs five years in advance, and the need for ADB to ensure requirements are commercial and acceptable by other fund managers and investors. In regard to share divestments, there are usually restrictions in the fund agreements, such as approval of the fund manager and other co-investors, and historically they have tended to trade at a discount due to “j curve effects” and PEFs’ historically poor financial rates of returns on investment. No-fault divorce clauses are not useful in circumstances where the fund manager has changed strategy due to commercial imperatives but the new strategy no longer meets ADB’s development objectives. ADB also has fiduciary responsibilities where it cannot require the fund manager to act in a way that undermines commercial returns.

139. These factors reinforce the conclusion that ADB needs to tighten its investment focus and target PEFs that have a clearly defined niche market from which they cannot easily diversify without breaching their investment mandates defined in the fund agreements. Closely allied to this issue is the matter of more formally defining ADB’s procedures for approving changes in investment strategy. A project administration instruction should be promulgated so that when changes occur they are transparent and, if material, endorsed by the Board.

4. Management Reporting

140. While PSCM staff is active reviewing PEF investment decisions and management reports and attending advisory committee meetings, it is apparent that reports from fund

\textsuperscript{41} CDC Group has pursued this strategy and established subsidiary special-purpose development fund managers, Aureos and Actis, that act as funds of funds and have separate target markets.
managers are of variable standard and internal reporting procedures and systems within ADB are poor. This lack of information is contributing to the lack of strategic focus, and potentially problems with style drift. The quarterly reports on private sector operations do not provide a sufficient amount of detail for Management to take decisions on corrective operational actions or strategic decisions such as the relative allocation of resources across different funding modalities. There is no time series analysis of trends in the market or economic and financial performance, or a linking of strategic objectives with operational resources.

141. PSCM does not prepare annual reports that clearly identify major milestones or issues raised in advisory committee and investment committee meetings, and how they are being addressed. Regular reports on individual funds and the portfolio as a whole should be prepared for the Board and Management on at least an annual basis. In recent years, as part of its RRPs PSOD has started to prepare a development monitoring framework that includes development indicators, but they are not explicitly placed in the context of market trends or the CPS, there tends to be too many indicators, and it does not collect the data. It is critical that PSOD start to collect data and report on its development impacts and financial performance so it can provide current tangible evidence of success, and possess information so that if problems arise it can respond appropriately. A good example of best-practice PEF reports is provided in the European Private Equity and Venture Capital Association Reporting Guidelines, Professional Standards.42

142. It is not an objective of this evaluation to define PEF performance targets, but it is apparent they should consist of a small set of relevant, transparent, and consistent indicators. These indicators should be measurable, demonstrate a causal link with stated objectives in the RRP, and be available in a time frame that allows the Board and Management to take action where required. The indicators should reflect the measures in OED’s guidelines so investments are evaluated consistently over the entire life of the fund. Among MDBs engaged in private sector development, the IFC is a leader in measuring project performance and it has put in place a development outcome tracking system that is designed to track projects continuously over their life. For a project to be considered a success it must meet the following criteria:43

(i) **Private sector development impact.** Projects need to improve the condition of the private sector.

(ii) **Environmental and social performance.** Projects have to meet IFC’s environmental and social performance standards, and demonstrate improvements in these indicators over time.

(iii) **Financial performance.** Projects need to yield a financial return in excess of their weighted average cost of capital.

(iv) **Economic performance.** Projects need to generate benefits to society beyond those generated to financiers of the project, generally an economic rate of return of over 10%. Not all benefits are easily valued in dollar terms, and qualitative aspects are considered equally in this rating.44

143. Private sector development indicators are the most critical area where information is lacking in ADB’s framework for monitoring PEFs. The PRISMS database developed to support PSOD’s PEF portfolio management has the capacity to record development impact data and produce reports to collate and present this information. To date, no procedures have been put in

---

43 Available: http://www.ifc.org/ifcext/results.nsf/Content/home
44 PEFs are not normally subject to a formal cost–benefit analysis as they are financial institutions that only interact indirectly with projects in the real economy that may have quantifiable externalities.
place to gather development data on a regular basis. PSOD did commission a survey in 2006 of PEF development impacts, but this was an expensive undertaking which cannot be performed annually and it is not a substitute for a regular flow of data provided by fund managers. Data on targets need to be straightforward to collect without imposing significant costs on ADB and fund managers. Fund managers need to be told in advance that ADB requires this information and that providing it regularly is a condition of receiving ADB funding. Possible targets could include an increase in the level of investment in municipal infrastructure, a reduction in the amount of environmental emissions, the expansion in the size of the venture capital industry, an increase in the availability of micro-finance, or a reduction in NPLs. Indicators should then be presented on a time-series basis illustrating changes in the absolute level of targets and the level relative to a relevant benchmark. Trends in these indicators demonstrating the actual results against the targets specified in the RRPs should be presented in reports to Management.

144. In addition to development impacts, there is a lack of useful data available at the individual fund level on management issues, financial performance, and risk ratings. At present FIRRs for individual PEF investments and the PEF portfolio as a whole are only calculated in a spreadsheet on an ad hoc basis. Following an independent review by the RMU of the financial risk ratings at the time of investment approval, subsequent assessments are performed by the investment officers responsible for managing the investments, creating a conflict of interest. No risk ratings are prepared on social or environmental impacts after investments have been approved. Data on confirmations from fund managers that they are in compliance with ADB’s social, environmental, and ethical safeguards are not recorded on PRISMS, or reported upon to Management.

145. There are concerns about the lack of independent reviews after investment approval of PEF compliance with social and environmental safeguards. Even if there is a low probability of problems arising in these areas, the experience of firms such as Nike with child labor in Viet Nam indicates that impacts can be significant and risk-management systems need to be in place to monitor and control these risks. Initial pre-investment due diligence and ongoing monitoring and reporting should encompass both financial and non-financial issues such as labor law compliance, environmental impact, and fund and investee corporate governance, and assign ratings to these risks. Fund manager and ADB reporting systems can easily be adapted to incorporate this data and report on nonfinancial risks as they are identified. Review processes of nonfinancial risks post approval can be strengthened. In the first instance fund managers could be given a risk rating by RSDD at the time of investment approval, and managers for high risk PEFs can be required to provide ADB with independently prepared certifications of compliance with social and environmental safeguards. These reports could be complimented by reviews by PSOD of the adequacy of PEF and investee company safeguard risk management systems. The results of these safeguard reviews should be reported upon to Management and specialist agencies such as RSDD that are responsible for developing the safeguard framework.

5. Organization of Private Equity Fund Operations

146. In 2003 it was proposed in PSOD’s internal paper on its PEF strategy (footnote 10) that it would adopt a fund of fund concept when managing its PEF investments. When interpreted as a move towards managing the PEF investments as a portfolio, this approach has many advantages and it reflects the strategies of other development agencies such as the CDC Group, which invests in a range of different funds and maintains a portfolio of PEF interests.45 The EBRD maintains a portfolio of PEF interests and stated that it manages these investments

45 Available: http://www.cdcgroup.com
using fund of fund principles (Appendix 3). The IFC has had a separate Private Equity and Investment Funds Department since 2001.46

147. One of the most important reasons for managing the PEF investments as a stand-alone portfolio is that ADB primarily finances its equity investments with debt. Equity investments can be subject to much greater risks than debt and therefore requires much closer monitoring. ADB’s PEF portfolio has grown substantially in recent years, and most of the PEFs are still relatively immature. Irrespective of the level of new projects processed, ADB’s actual investment exposure to PEFs will increase over the next five years as existing PEFs complete their investment programs. As a result, even though resource requirements and risks for individual funds maybe low at present, this situation will change quite rapidly.

148. By establishing the PEFs in a distinct entity (such as a division or department) the investments can be managed as a portfolio and reports prepared more frequently than is required for debt. The reports can provide information on (i) the strategic approach, (ii) performance against objectives, (iii) critical issues, and (iv) potential management actions that can be taken to improve performance. In addition to supporting management of operations, a portfolio structure would allow the development and financial performance of the PEF strategy to be compared to the performance of PSOD’s other operations, and allows decisions to be taken on the relative allocation of resources across operations. Initially, the establishment of the PEF operation as a portfolio could be done on a notional basis by treating the PEF portfolio as a stand-alone entity for reporting purposes.

149. There is an issue of whether a single division within PSOD should manage equity investments (both direct and indirect) rather than the current practice of organizing operations by sector (infrastructure and finance). Under such a structure, strategic planning and investment origination in PSOD could be organized on a sector and geographic basis, but management and reporting would be based on the type of financial instrument. Equity investments require a separate set of skills and management systems to debt and guarantees. Such an approach would help risk management by facilitating the diversification of systematic risks, such as currency movements, in a structured manner. The PRISMS system and an expanded PAU could be dedicated to manage (as opposed to originate) all direct and indirect equity transactions. This approach would have the added benefit of eliminating the potential for conflict of interest that is arising in PSOD’s operational departments where investment origination and many management functions are performed by a single investment officer.

150. A third option would be to establish the PEF operation as an arm’s-length affiliated entity of ADB using a similar structure to CDC Group or the Swiss Investment Fund for Emerging Markets (Sifem), both of which have in effect been privatized by their respective bilateral agency parents. In addition to improving transparency of management, such an entity would not be subject to ADB’s pay scales and budgeting arrangements, and could attract more experienced talent from the private equity market. A variation on this option would be to follow the example of many large institutional investors who outsource management functions to firms that act as “gatekeepers” (Appendix 5). However, the additional management costs incurred by this option will further reduce returns on PEF operations.

151. A further possible organizational reform that can be considered is to expand the scope of Office of Cofinancing Operation’s operation so that it acts in a brokering capacity and provides assistance to fund managers seeking to identify and contact other investors.

---

46 Available: http://www.ifc.org/funds
Irrespective of which organizational structure is used, there is a strong case for placing PSOD staff in resident missions to proactively support PEF origination and management functions.

6. Resources

An important determinant of the selected strategy and organizational structure for PEFs is the availability of resources to implement the required functions. Presently, there is a material disconnect between the volume of projects that are originated, the length of time needed to process PEF investments through the ADB approval machinery, and the level of resources allocated to manage them once they are in place. In many cases in the past, it appears PSCM has indicated it could deliver more than what was feasible in areas such as fund manager support with the resources it had at its disposal. The current allocation of PSCM resources relative to the size of the PEF portfolio indicates PSCM is significantly constrained in terms of how much value addition it can provide to PEFs, and has the potential to create financial risks for ADB over the next five years as approved PEFs draw down on commitments.  

The main options available to ADB to address this issue are (i) reallocating staff within PSOD; (ii) recruiting additional professional staff from the fund management industry; (iii) outsourcing aspects of fund monitoring, portfolio management, and investment reporting; or (iv) selling down all or part of its portfolio of PEF interests. This last option may be desirable, regardless of any decisions made on resource allocation, as it would help free up investment headroom, allow PSOD to recycle realized gains into fresh PEFs that are more aligned with ADB’s development objectives, and allow PSOD to focus on encouraging the market to develop new funds rather than supporting existing operations that no longer require ADB assistance. There is an active secondary market in PEF interests, and ADB could explore bundling PEF interests into thematic packages, or even create a vehicle that could be sold by listing it on a stock exchange.

In terms of managing the PEF portfolio, the current budgeting arrangements for originating and managing the funds are restrictive and unrelated to achievement of strategic and financial objectives. PEFs need to be actively managed to avoid downside risks, and it is likely that fund financial performance could be improved if staff were allowed to take a more proactive role in seeking potential investment candidates. PEF staff requires resources to undertake marketing activities and generally take a proactive stance in the market through activities such as attending conferences, in some cases possibly even sponsoring PEF conferences, and networking among fund managers to encourage development of new types of funds.

There is a strong case for increasing the level of technical assistance made available to PSCM to strengthen the enabling environment for PEFs, or at least have a voice in how these funds are used when developing programs to strengthen the enabling environment for SMEs. Consideration can be given to using technical assistance in selected cases to support inexperienced fund managers in frontier countries, and this may be a better use of funds than direct investments in PEFs in these economies.

A useful industry rule of thumb is that a private equity fund should have no more than 10–15 individual investees—more than that strains management resource and fewer does not provide adequate diversification of risk. At 31 December 2007, PSOD employed only two full-time-equivalent professional staff to oversee a pool of 40 individual PEFs—20 per staff member. The size of the portfolio is growing, and a more appropriate staffing level for a portfolio with as many separate PEF interests as ADB has would be at least five professionals, each employed full-time in monitoring and engaging with 8–9 investee funds.
157. Consideration needs to be given to further upgrading PRISMS and linking it to CLASS and PSIM notes to reduce the level of unnecessary administrative tasks, and free up resources to prepare reports that use the data in more efficient and effective ways. There are many options available to ADB to support system integration while maintaining control of data quality and the integrity of ADB’s overall ICT system. There is a strong case for developing standard report templates for fund managers that are electronically linked to ADB’s management information systems, and support the preparation of time-series data to facilitate analysis of trends in key indicators. Measures to streamline the inputting of fund manager data and extraction of data in electronic format for internal report preparation should be reasonably low cost, whereas upgrading of PRISMS will need to be prioritized with other ICT projects.

B. Lessons

158. Much of the debate within ADB in recent years about the relative merits or otherwise of PEFs has not been well focused, and has stalled over arguments of whether indirect instruments such as equity are pro-poor. There is a large body of evidence confirming that equity instruments such as PEF investments are pro-poor, and the more important issue is whether PEFs are an efficient and effective means of facilitating the achievement of development objectives, relative to ADB’s other instruments. Equity provides decision rights and incentives that can be used to enhance performance. As a result, equity has greater capacity to demonstrate immediate and tangible evidence of development impacts relative to traditional instruments such as sovereign-guaranteed SME credit lines, but it needs to be balanced against the higher risks of ADB incurring losses.

159. Based on a review of peer MDBs such as the EBRD and IFC, direct equity investments play a more significant role in development programs than PEF investments. Direct investments are more labor-intensive than PEFs, and if PSOD decided to make greater use of this instrument, it would require an increase or reallocation of resources. In many respects PEFs are a logical response by PSOD when internal resource allocation is unrelated to operational requirements and financial performance. By using PEFs, the investee companies finance management costs that would otherwise be borne by PSOD, whereas direct investments would require a proportion of company finances in investee companies to be directly assigned to PSOD so it could maintain the same level of market exposure. However, the development impacts of PEFs are lower as PSOD loses a corresponding level of control over management decisions. PEFs also suffer from a number of disadvantages relative to direct equity investments, such as problems aligning incentives of fund managers with ADB’s development objectives, and structural issues such as finite life and illiquid shareholdings. PEFs will tend to be more suitable for sectors such as SME start ups where performance and management control of individual companies is not critical, whereas direct equity will tend to be more important when individual company performance, such as large infrastructure projects, is key.

160. PSOD needs to make greater use of mechanisms such as CPSs to coordinate development strategies for SME financing using instruments such as PEFs relative to other development instruments such as debt. Strategies need to reflect the development needs of the individual countries and sectors, stage of development of target firms and the nonbank financial sector, while balancing available resources and financial risks to ADB. In frontier countries in sectors such as manufacturing and services and in middle tier economies higher growth potential technology intensive sectors such as ICT and energy efficiency, early stage firms can
be targeted. In frontier and middle tier economies in sectors such as energy, roads, or water restructuring and expansion initiatives by firms that have difficulties accessing capital can be targeted. In frontier countries, the focus should be on institution building in the PEF industry, and multiple small investments, with greater reliance being placed on debt instruments. Larger more concentrated equity investments in PEFs should be targeted at emerging middle-tier countries such as the Philippines that do not have active PEF sectors compared to countries like India and the PRC. These parameters broadly reflect ADB’s financial sustainability requirements, as financial risks are reduced if it focuses in frontier markets on PEF industry and fund manager institution-building initiatives that do not require significant capital outlays and help develop sectors such as infrastructure that have relatively low financial risks. In middle income countries the focus should be on using experienced fund managers for larger investments in sectors with high growth potential that is not presently being met by the PEF sector.

161. Underpinning these strategic considerations, there is a need for clear business plans and management reports on actual results relative to targets so PSOD can take a more proactive management role achieving development impacts, and managing the PEF portfolio. To date, PSOD has managed to side step this problem by taking a hands-off approach to PEF management so there is limited input required by ADB Management, and it has relied upon the incentives inherent in fund structures to achieve a reasonable outcome. This approach has been moderately successful, and there have been relatively few problems in the area of negative social, environmental, or reputation impacts, and the PEFs have helped mobilize large amounts of foreign private capital. However, the growth in ADB’s PEF exposure that will occur over the next five years as existing funds draw down on investment commitments indicates this type of strategy will create risks if supporting institutional arrangements are not strengthened.

162. There are a number of trade-offs that need to be considered by ADB Management in determining the most appropriate PEF strategy and organizational structure, and the final arrangement will be driven to a significant extent by resource availability and risk-management considerations. Without increasing the level of staff and strengthening reporting and risk-management systems through actions such as managing the PEFs as a stand-alone portfolio and putting in place independently administered risk-management systems, PSOD will be heavily constrained in the use of equity and the level of demonstration effects it can achieve.

C. Recommendations

163. To help resolve these issues, the following options can be considered by ADB Management:

(i) Strengthening country programming arrangements so there is better coordination within ADB at the country and sector level when seeking to develop the nonbank financial sector for private sector development.
(ii) Preparing an operational strategy for PEFs, setting out principles for managing the overall portfolio, identifying targeted countries and subnational regions, sectors, stages of firm development, styles and sizes of funds, and desired development impacts that is circulated to all regional departments.

---

48 These types of investments could potentially be pursued in the context of cluster development programs for SMEs that seek to develop supply chains to meet the needs of new markets, or incubators linked to universities.
(iii) Upgrading PEF portfolio planning, management and reporting systems to facilitate management of PEFs as a standalone portfolio and facilitate development impact monitoring.

(iv) Strengthening the risk-management systems for PEFs by putting in place capacity to independently monitor projects post-approval from a financial, social, and environmental perspective.

(v) Clarifying organizational roles and responsibilities, with particular regard to making greater use of resident missions for PEF operations, and the need to complement regional department operations.

(vi) Allocating sufficient resources in the areas of budgeting and staff to efficiently and effectively manage PEF operations.

164. A broader menu of options to address these issues is presented under conclusions in Appendix 5. Given the wide scope and interconnected nature of these options, and their interrelationship with other PSOD and ADB operations, the adoption of an ADB wide collaborative approach to address these issues may be considered.
## ADB’S PRIVATE EQUITY PORTFOLIO

### Table A1: Approved Projects in $million
(As of 31 December 2007)

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of Company</th>
<th>Date Approved</th>
<th>Under-Writing</th>
<th>Line of Equity</th>
<th>Direct</th>
<th>Total</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOR</td>
<td>Korea Dev. Investment Corp.</td>
<td>08-Dec-83</td>
<td>0.0</td>
<td>0.0</td>
<td>1.0</td>
<td>1.0</td>
<td>Closed</td>
</tr>
<tr>
<td>KOR</td>
<td>Korea Technology Finance Corp.</td>
<td>26-May-87</td>
<td>0.0</td>
<td>0.0</td>
<td>3.0</td>
<td>3.0</td>
<td>Closed</td>
</tr>
<tr>
<td>KOR</td>
<td>Korea Technology Banking Corp.</td>
<td>29-Oct-87</td>
<td>0.0</td>
<td>2.0</td>
<td>3.0</td>
<td>5.0</td>
<td>Closed</td>
</tr>
<tr>
<td>REG</td>
<td>Asian Development Equity Fund</td>
<td>15-Dec-87</td>
<td>5.0</td>
<td>0.0</td>
<td>5.0</td>
<td>10.0</td>
<td>Closed</td>
</tr>
<tr>
<td>THA</td>
<td>Thai Agri Business Venture Capital</td>
<td>05-Apr-88</td>
<td>0.0</td>
<td>0.0</td>
<td>1.0</td>
<td>1.0</td>
<td>Cancelled</td>
</tr>
<tr>
<td>THA</td>
<td>Thailand Growth Fund</td>
<td>17-May-88</td>
<td>0.0</td>
<td>0.0</td>
<td>5.0</td>
<td>5.0</td>
<td>Closed</td>
</tr>
<tr>
<td>PHI</td>
<td>H &amp; Q Philippine Ventures</td>
<td>15-Sep-88</td>
<td>0.0</td>
<td>0.0</td>
<td>2.5</td>
<td>2.5</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Asean Fund Ltd.</td>
<td>03-Nov-88</td>
<td>15.0</td>
<td>0.0</td>
<td>0.0</td>
<td>15.0</td>
<td>Closed</td>
</tr>
<tr>
<td>IND</td>
<td>IL&amp;FS Investment Managers Ltd.</td>
<td>02-Nov-89</td>
<td>0.0</td>
<td>0.0</td>
<td>0.8</td>
<td>0.8</td>
<td>Closed</td>
</tr>
<tr>
<td>REG</td>
<td>Pacven Investment Ltd.</td>
<td>09-Nov-89</td>
<td>0.0</td>
<td>0.0</td>
<td>2.0</td>
<td>2.0</td>
<td>Closed</td>
</tr>
<tr>
<td>INO</td>
<td>PT Indonesia Development Fund</td>
<td>19-Dec-89</td>
<td>6.0</td>
<td>0.0</td>
<td>0.0</td>
<td>6.0</td>
<td>Closed</td>
</tr>
<tr>
<td>REG</td>
<td>Asian Conv. and Income Fund</td>
<td>19-Dec-89</td>
<td>5.2</td>
<td>0.0</td>
<td>5.2</td>
<td>10.4</td>
<td>Closed</td>
</tr>
<tr>
<td>REG</td>
<td>Asia Pacific Ventures Ltd.</td>
<td>14-Jun-90</td>
<td>0.0</td>
<td>0.0</td>
<td>5.0</td>
<td>5.0</td>
<td>Closed</td>
</tr>
<tr>
<td>PAK</td>
<td>Pakistan Investment Fund Inc.</td>
<td>13-Sep-90</td>
<td>4.3</td>
<td>0.0</td>
<td>1.1</td>
<td>5.4</td>
<td>Cancelled</td>
</tr>
<tr>
<td>PAK</td>
<td>International Asset Mgt Co.</td>
<td>13-Sep-90</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Closed</td>
</tr>
<tr>
<td>PAK</td>
<td>Dawood Capital Ltd. (formerly Pakistan Venture Capital Ltd.)</td>
<td>04-Dec-90</td>
<td>0.0</td>
<td>0.0</td>
<td>1.2</td>
<td>1.2</td>
<td>Ongoing</td>
</tr>
<tr>
<td>PRC</td>
<td>China Assets (Holdings) Ltd.</td>
<td>19-Sep-91</td>
<td>0.0</td>
<td>0.0</td>
<td>4.0</td>
<td>4.0</td>
<td>Closed</td>
</tr>
<tr>
<td>SRI</td>
<td>Lanka Ventures Limited</td>
<td>26-Mar-92</td>
<td>0.0</td>
<td>0.0</td>
<td>1.2</td>
<td>1.2</td>
<td>Closed</td>
</tr>
<tr>
<td>REG</td>
<td>Asian Divest. and Privatn. Fund</td>
<td>11-Jun-92</td>
<td>5.2</td>
<td>0.0</td>
<td>5.2</td>
<td>10.5</td>
<td>Cancelled</td>
</tr>
<tr>
<td>PAK</td>
<td>PAK Asian Fund</td>
<td>13-Aug-92</td>
<td>0.0</td>
<td>0.0</td>
<td>2.6</td>
<td>2.6</td>
<td>Closed</td>
</tr>
<tr>
<td>REG</td>
<td>Asian Infra. Fund (AlF)</td>
<td>12-Apr-94</td>
<td>0.0</td>
<td>0.0</td>
<td>20.0</td>
<td>20.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Asian Infrastructure Fund Mgt Co.</td>
<td>12-Apr-94</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
<td>Ongoing</td>
</tr>
<tr>
<td>IND</td>
<td>SARA Fund</td>
<td>20-Sep-94</td>
<td>0.0</td>
<td>0.0</td>
<td>4.8</td>
<td>4.8</td>
<td>Ongoing</td>
</tr>
<tr>
<td>IND</td>
<td>Credit Capital Venture Fund</td>
<td>20-Sep-94</td>
<td>0.0</td>
<td>0.0</td>
<td>0.6</td>
<td>0.6</td>
<td>Closed</td>
</tr>
<tr>
<td>PHI</td>
<td>Walden AB Ayala Ventures Co., Inc.</td>
<td>27-Oct-94</td>
<td>0.0</td>
<td>0.0</td>
<td>2.9</td>
<td>2.9</td>
<td>Ongoing</td>
</tr>
<tr>
<td>PHI</td>
<td>Walden AB Ayala Mgt Co., Inc.</td>
<td>27-Oct-94</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>SRI</td>
<td>Lanka Ventures Limited</td>
<td>25-Nov-94</td>
<td>0.0</td>
<td>0.0</td>
<td>0.4</td>
<td>0.4</td>
<td>Closed</td>
</tr>
<tr>
<td>PHI</td>
<td>Walden AB Ayala Mgt Co., Inc.</td>
<td>26-Jul-95</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Asian Infrastructure Dev. Co., Inc.</td>
<td>19-Oct-95</td>
<td>0.0</td>
<td>0.0</td>
<td>30.0</td>
<td>30.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Greater Mekong Capital Fund</td>
<td>16-Nov-95</td>
<td>0.0</td>
<td>0.0</td>
<td>7.3</td>
<td>7.3</td>
<td>Cancelled</td>
</tr>
<tr>
<td>IND</td>
<td>AIG Indian Equity Sectoral Fund</td>
<td>14-Dec-95</td>
<td>0.0</td>
<td>0.0</td>
<td>15.0</td>
<td>15.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>IND</td>
<td>AIG Indian Equity Advisors LLC</td>
<td>14-Dec-95</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
<td>Ongoing</td>
</tr>
<tr>
<td>PHI</td>
<td>Mutual Fund Co. of the Philippines</td>
<td>09-Apr-96</td>
<td>0.0</td>
<td>0.0</td>
<td>3.9</td>
<td>3.9</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Lombard Asian Private Invest. Co.</td>
<td>05-Dec-96</td>
<td>0.0</td>
<td>0.0</td>
<td>25.0</td>
<td>25.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>LAPIC Management Co.</td>
<td>05-Dec-96</td>
<td>0.0</td>
<td>0.0</td>
<td>1.0</td>
<td>1.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Asian Infra. Mezz. Capital Fund</td>
<td>17-Dec-96</td>
<td>0.0</td>
<td>0.0</td>
<td>25.0</td>
<td>25.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>AMF Capital Mgt Ltd.</td>
<td>17-Dec-96</td>
<td>0.0</td>
<td>0.0</td>
<td>2.0</td>
<td>2.0</td>
<td>Cancelled</td>
</tr>
<tr>
<td>REG</td>
<td>Kula Fund (formerly Pacific Invest. Capital Fund.)</td>
<td>29-Apr-97</td>
<td>0.0</td>
<td>0.0</td>
<td>3.0</td>
<td>3.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Asia Equity Infrastructure Fund L.P.</td>
<td>11-Nov-97</td>
<td>0.0</td>
<td>0.0</td>
<td>20.0</td>
<td>20.0</td>
<td>Closed</td>
</tr>
<tr>
<td>Country</td>
<td>Name of Company</td>
<td>Date Approved</td>
<td>Under-</td>
<td>Line of</td>
<td>Direct</td>
<td>Total</td>
<td>Status</td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
<td>---------------</td>
<td>--------</td>
<td>---------</td>
<td>--------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>REG</td>
<td>Asian Management Ltd.</td>
<td>11-Nov-97</td>
<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
<td>0.5</td>
<td>Closed</td>
</tr>
<tr>
<td>REG</td>
<td>Capital Asia Investment Ltd.</td>
<td>11-Nov-97</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Cancelled</td>
</tr>
<tr>
<td>THA</td>
<td>Thai Recovery Fund LLC</td>
<td>09-Mar-00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>THA</td>
<td>Thai Recovery Mgt Co. LLC</td>
<td>09-Mar-00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>PRC</td>
<td>Liberty New World China Ent.</td>
<td>06-Oct-00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Asian Banking Fund</td>
<td>10-Oct-00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Ankar Capital Management LLC</td>
<td>10-Oct-00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Cancelled</td>
</tr>
<tr>
<td>SAM</td>
<td>Samoa Venture Capital Fund</td>
<td>21-Nov-00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Mekong Enterprise Fund</td>
<td>07-Sep-01</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>THA</td>
<td>Lombard Thailand Int., Fund LLC</td>
<td>07-Sep-01</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>PRC</td>
<td>China Envt. Fund 2002, LP</td>
<td>29-Oct-02</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>PRC</td>
<td>China Envt. Fund 2004, LP</td>
<td>29-Oct-02</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>IND</td>
<td>The Infrastructure Fund of India (formerly Henderson Infra. Fund)</td>
<td>16-Dec-02</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>ASEAN-China Investment Fund, LP</td>
<td>15-Apr-03</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>FEGACE Asian Sub-Fund L.P.</td>
<td>02-Dec-03</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>PRC</td>
<td>Yangtze Special Situations Fund</td>
<td>09-Mar-04</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>ADM Maculus Fund L.P.</td>
<td>19-Mar-04</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Shorecap International Fund</td>
<td>05-May-04</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>IND</td>
<td>Baring India Private Equity Fund</td>
<td>26-Nov-04</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>PRC</td>
<td>Actis China Fund 2 LP</td>
<td>26-Nov-04</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Lombard Asia III</td>
<td>15-Mar-05</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Aureos South-East Asia Fund</td>
<td>15-Mar-05</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Flagship Capital Corporation</td>
<td>30-Jun-05</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>AFG</td>
<td>Afghanistan Renewal Fund</td>
<td>28-Jul-05</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Inter Asia Capital Inc.</td>
<td>28-Jul-05</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>IND</td>
<td>BTS India Private Equity Fund</td>
<td>23-Nov-05</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>ADM Maculus Fund II</td>
<td>09-Jan-06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>IND</td>
<td>IDFC Private Equity Fund II</td>
<td>01-Feb-06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>AIF Capital Asia III</td>
<td>31-May-06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Mekong Enterprise Fund II</td>
<td>31-May-06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>IND</td>
<td>Blue River Capital</td>
<td>08-Jun-06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>East West CPs. - Asia Health. Fund</td>
<td>08-Jun-06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Aureos South Asia Fund</td>
<td>08-Jun-06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Kula Fund II</td>
<td>29-Jun-06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>REG</td>
<td>Darby Asia Mezzanine Fund II</td>
<td>10-Nov-06</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
<tr>
<td>PAK</td>
<td>JS Private Equity Fund 1</td>
<td>17-Jul-07</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

| Total   | 45.7 | 2.0 | 852.3 | 900.0 |

ADB = Asian Development Bank, AFG = Afghanistan, Co = company, Corp. = corporation, IND = India, INO = Indonesia, KOR = Republic of Korea, Ltd = limited, LLC = limited liability company, LP = limited partner, PAK = Pakistan, PHI = Philippines, PRC = People’s Republic of China, REG = regional, SAM = Samoa, SRI = Sri Lanka, THA = Thailand.

Source: Asian Development Bank database.
OVERVIEW OF TRENDS IN INVESTMENT FUNDS IN THE ASIA AND PACIFIC REGION

A. Introduction

1. In recent years, private equity funds (PEFs) in emerging economies have experienced significant growth, especially in Asian countries such as India and the People’s Republic of China (PRC). As illustrated in Figure A2.1, Asia has outranked every other emerging market every year since 2003.

![Figure A2.1: Emerging Markets Private Equity Funds Raised 2003-2007](image)

Source: Emerging Markets Private Equity Association. 2007 full-year figures are extrapolated by doubling June 2007 half-year figures.

B. Trends in Private Equity in Asia

2. Of the $69 billion private equity raised in the past four years for emerging economies, $40 billion (58%) has been invested in Asia, primarily being directed to the India and the PRC. In 2004-05 Ernst and Young concluded that the PRC had moved up the rankings and become the third most important private equity market in the world, with India being in seventh place. In 2004 it was estimated that PEFs had invested $2.06 billion in the PRC, an increase of 23% over the previous year. In India, PEFs had invested $1.34 billion, an increase of 56% over the previous year. By 2006, the Emerging Markets Private Equity Association (EMPEA) estimated that annual investment in the PRC had increased to $4.3 billion, and in India to $2.9 billion. The EMPEA estimated that the PRC accounted for 22% of emerging Asia funds, India 15%, and 51% was allocated to regional funds which also included India and the PRC among their portfolios.

---

1 In this review, Asia includes all countries in the region with the exception of Australia, Japan, and New Zealand. Conversely, it comprises all developing member countries plus Brunei; Hong Kong, China; the Republic of Korea Singapore; and Taipei, China.

3. Private equity in Asia has not been limited to India and the PRC, and countries such as Thailand and Viet Nam have benefited from this form of investment. The Asian financial crisis in 1997 created demand for external equity and European and United States (US) investors reentered the market in the late 1990s to purchase distressed assets, particularly in the financial services sector in Japan, the Republic of Korea, and Thailand. From this narrow base, PEFs in Asia expanded into the high-growth economies of India and the PRC, with investment being targeted at a wide range of industries. Growth in Western-financed PEFs in Asia has subsequently been supported by the emergence of domestic PEFs.

4. Private equity investors have realised significant capital gains from sales of Asian private equity assets. Since 2004, more than $60 billion has been returned to investors in Asia at an average multiple of 2.8 times invested capital with an annualized nominal minimum financial internal rate of return (FIRR) of approximately 30%. Figure A2.2 illustrates the relative amounts of capital being invested and realized from initial public offerings and other forms of sale transactions.

![Figure A2.2: Private Equity Capital Invested and Realized 2004-2007](AsiaRegioninUS$million)

Source: Asian Private Equity Review October 2007
2007 figures are as of October 2007.

5. As shown in Figure A2.3, the volume of secondary market transactions among domestic and foreign private equity firms for Asian corporate assets has grown substantially from $242.6 million in 2005 to $701 million in 2006 and $5.47 billion in 2007 (up to September only), an annual growth rate of over 1,000%. In the PRC, the secondary market among private equity investors for corporate assets has only just started. In 2007, a landmark transaction was the sale by General Atlantic Limited Liability Company of its stake in China Digital Holdings Limited to a consortium of other private equity investors including SAIF Partners (based in Hong Kong, China), the PRC domestic buyout firm Hony Capital, and IDG-Accel Partners (a California and London-based US venture firm).
6. Despite, or in fact because of, such flows back to investors (the best advertisement of Asia’s success in private equity is the returns achieved by investors) the net pool of capital for Asian private equity continues to grow. While reported figures vary and data for years prior to 2003 is less available, published sources indicate the total pool of capital available for private equity investment in Asia (excluding Japan) is currently likely to be in excess of $125 billion, with an additional $50 billion allocated to Japan. Shortage of capital is not an issue in the Asian private equity market.

7. In addition to the increasing size of the secondary market for PEFs in Asia, there has been a rapid increase in the size of private equity transactions. By 2006, transactions with a total value of more than $1 billion were becoming common, although they are still not occurring as frequently as in Europe or the US, where transactions sizes now regularly exceed $10 billion and $5 billion deals are considered ordinary daily business for larger market participants. As transaction sizes grow, so does the popularity of “club deals”, large transactions in which an investment is syndicated among several private equity funds or direct investors. In 2006, of the transactions exceeding $10 billion closed in the Asia and Pacific region as a whole (including Japan), only 30% consisted of a single investor. An important corollary of these club private equity transactions is that they are often taking the form of control deals, where private equity investors purchase a controlling stake in an operating business to effect change, compared to the more traditional noncontrol deals, where private equity investors take minority stakes to help finance a company’s growth and play an advisory role, but do not assume voting control.

3 For example, the Asian Private Equity review. Available: http://www.asiape.com
4 An example of this type of transaction is the $2.59 billion buyout of Sanyo Electric Company Limited in Japan by a US–Japanese consortium consisting of Goldman Sachs, Daiwa Securities, SMBC Principal Investment Co. Ltd., and the Sumitomo Mitsui Banking Corp.
8. This trend is appearing initially in markets where transactions sizes can exceed the country or transaction size limits of the largest local investors and foreign participants. However, club structures are likely to spread to other markets as transaction sizes grow, and it indicates an increasing ability among international and domestic private equity investors within Asia to network and communicate, as well as the growing efficiency in the market. The significance of this trend is that the Asian private equity market is evolving along the same lines as the European and US markets, with an active mix of local and international participants. The main difference is that transaction sizes are smaller due to the generally smaller market capitalization of even the largest Asian corporations relative to the United Kingdom (UK) or the US.

9. Historically, international private equity investors have had an advantage over domestic Asian counterparts in terms of sophistication of deal structures, capacity, lead time, numbers, and available capital. This dominance is declining, with the emergence of a local private equity industry in countries such as India, Japan, and the Republic of Korea, where major local financial institutions regularly participate in transactions and manage domestic private equity funds. There are also strong public sector equity investment vehicles operating at both the sovereign and subsovereign levels of the market. A recent development is the emergence in the PRC of state-controlled funds and private equity investment holding vehicles such as Beijing Capital and the Bohai Industrial Investment Fund ($750 million equivalent). A new fund for Tianjin City is being established by the municipal government. The Government of the People’s Republic of China recently announced the establishment of a state fund for investment of foreign exchange reserves, the China Investment Company, modeled after Singapore’s sovereign wealth fund, the Government Investment Corporation.

10. Another important development in the Asian private equity market is the increasing significance of infrastructure assets. In Indonesia, the Islamic Development Bank stated in 2006 that it would help the Government of Indonesia to set up a $1.5 billion infrastructure fund which will invest in infrastructure projects in the country. In the Philippines, a group of investors, including TPG Newbridge Capital, have been bidding for the 25-year concession to operate the national electricity grid. Most recently, the Hong Kong-listed First Pacific Company Limited took control of Mayniland Water Services by committing $447.23 million to the financially constrained operation. More recently, Temasek Holdings, the investment arm of the Government of Singapore, announced its intention to launch a listed $513 million infrastructure fund. Temasek Holdings will transfer its existing water and gas assets into the listed investment vehicle. This move reflects the return of infrastructure funds, which have been largely absent from the Asian private equity scene for 10 years.

11. The first infrastructure fund in Asia was raised by the Washington-based EMP Global Partners (then known as Emerging Markets Partnership) in 1994, and it consisted of the AIG Asian Infrastructure Fund, which achieved a final closing of $1.08 billion. Following the Asian financial crisis, infrastructure funds disappeared and did not return until 2003, when Australia’s Macquarie Bank initiated a joint venture infrastructure fund with the Republic of Korea’s Shinhan Financial Group. Following its dual public debut on both the Korea Exchange and the London

---

5 As PRC municipalities compete with each other to attract new investment, and to assist their local businesses to grow, the trend seems to be to raise funds at the municipal level through various forms of local investment and infrastructure holding company.

6 The Government Investment Corporation of Singapore makes private equity investments throughout the world through its investment vehicle Temasek Holdings that was started in 1974. Since then, total shareholder return has averaged 18% per annum, with a 27% return in 2006. Through this steady compounded internal growth, Temasek Holding’s assets now stand at about $108 billion.

7 Asia Private Equity Review. 2006. The return of infrastructure funds. Hong Kong, China.
Stock Exchange, the Macquarie Korea Infrastructure Fund (formerly known as the Korean Road Infrastructure Fund) has brought its fund pool from an initial $294 million to over $2.3 billion. It is the largest publicly listed Asian infrastructure fund for a single market on record (Table A2).

Table A2: Selected Infrastructure Funds in Asia

<table>
<thead>
<tr>
<th>Management Firm</th>
<th>Fund</th>
<th>Geographic Focus</th>
<th>Closing Date</th>
<th>Fund Size ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macquarie Shinhan Infrastructure Management Company Limited</td>
<td>Macquarie Korea Infrastructure Fund</td>
<td>Korea, Republic of</td>
<td>2003</td>
<td>2,322</td>
</tr>
<tr>
<td>Darby Hana Infrastructure Fund Management Company</td>
<td>Korea Emerging Infrastructure Fund</td>
<td>Korea, Republic of</td>
<td>2006</td>
<td>610</td>
</tr>
<tr>
<td>IDFC Private Equity</td>
<td>IDFC Private Equity Fund II</td>
<td>India</td>
<td>2006</td>
<td>430</td>
</tr>
<tr>
<td>IL&amp;FS Investment Manager Limited and Orix Corporation</td>
<td>Pan Asian Project Development Fund</td>
<td>Pan Asia</td>
<td>2006</td>
<td>84(^a)</td>
</tr>
<tr>
<td>South East Asian Strategic Assets (General Partner) Limited</td>
<td>South East Asian Strategic Assets Fund LP</td>
<td>ASEAN</td>
<td>2006</td>
<td>250(^a)</td>
</tr>
</tbody>
</table>

ASEAN = Association of Southeast Asian Nations; IDFC = Infrastructure Development Finance Corporation; IL&FS = Infrastructure Leasing & Financial Services Limited; LP = Limited Partner.
\(^a\) Target fund size only.
Source: Asia Private Equity Review. Hong Kong, China.

12. Macquarie’s dominance maybe short-lived as investors from the Middle East become increasingly important investors in Asia’s unlisted infrastructure assets. It is reported that sovereign wealth funds such as the Kuwait government’s Kuwait Finance House are intending to invest in energy and commodities in Indonesia and the PRC.8

C. Trends in Private Equity in the People’s Republic of China

13. Figure A2.4 illustrates the sector spread of private equity transactions in the PRC in 2007. Among the sectors most favored by investors are financial services, media, information technology, and telecommunications. Infrastructure, health care, and energy resources together only add up to the amount invested in either financial services or media.

---

8 Asia Private Equity Review. 2007. Asian infrastructure gains investors’ growing interest. Hong Kong, China.
14. The range of investors participating in PEFs in the PRC ranges from high-net-worth individuals, including many domestic investors (the PRC now has 66 billionaires in US dollar terms), to foreign and domestic funds backed by pension funds, university endowments, family offices, trusts and foundations, insurance companies, sovereign wealth funds, local government investment authorities, banks, and other international institutional, corporate, and private investors.

15. The growth in private equity in the PRC is no longer a purely domestic phenomenon, as local funds are beginning to invest outside their home markets. The Government of the People’s Republic of China has taken the step of making a $3 billion investment in the recent initial public offer of leading US private equity manager Blackstone Group to improve its capacity to make and manage such large-scale private equity investments. This transaction indicates the beginning of a new growth phase in domestic and international activity of the private equity industry in the PRC and provides an example which other Asian funds, including sovereign wealth funds, can emulate. PRC state-owned enterprises (SOEs) such as PetroChina, have established large market valuations through initial public offers in Hong Kong, China or the PRC. Of the 65 initial public offers in the PRC in 2006, 39 traded at between 20 and 30 times earnings, and more than 50 of them (75%) appreciated more than 50% immediately on the day they became listed. The combination of being valued at high earnings multiples and having

---

9 PetroChina, the PRC’s flagship SOE in the petrochemicals sector, had an IPO on the Shanghai A-share exchange and recently enjoyed a market capitalization of over $1 trillion—larger than that of ExxonMobil and Royal Dutch Shell combined.

only a relatively small number of shares actually traded on the public market\textsuperscript{11} provides these firms with access to additional capital to make international corporate acquisitions.

16. This capacity makes the PRC’s listed SOEs an important source of private equity in domestic and international markets. Reflecting this trend, the China Investment Company, investee, the US-based private equity Blackstone Group, agreed in September 2007 to buy a 20% stake in the SOE China National Blue Star (Group) Corporation for up to $600 million, marking its first big investment in the PRC. The transaction was approved in January 2008 by the National Development and Reform Commission. This single transaction is approximately the same size as the Asian Development Bank’s (ADB) entire portfolio of Asian private equity fund investments.

17. Private equity exits in Asia in general, and the PRC in particular, are now more varied and based on proven strategies. According to an Asian Private Equity Review analysis of exits from private equity investments in the PRC in 2005, $1.86 billion was returned to investors through 48 exits, including high-profile transactions such as Baidu’s NASDAQ\textsuperscript{12} listing, which rose 354% on its first trading day. According to Asian Private Equity Review, half of the 2005 exits analyzed had FIRR of greater than 200%. Trade sales to domestic and foreign corporations, and initial public offers on the stock exchanges of Shanghai, Shenzhen, and Hong Kong, China remain the preferred exit for many investors. The PRC market is also developing a healthy secondary market through private sales to financial investors rather than to corporate (“trade”) buyers. This trend will further attract financial investors to participate in the PRC market, as it comes more closely to resemble the familiar secondary markets of the US and Europe, and provides another liquid alternative market to exit investments if public markets do not offer attractive pricing for investee assets.

18. The following transactions, announced or completed in the 18 months to November 2007, illustrate the size of transactions and the wide range of market participants and sectors in the PRC’s private equity sector:\textsuperscript{13}

(i) Deutsche Bank and Hambrecht and Quist Asia Pacific announced an investment of $550 million in the PRC hotel sector through Hilton Garden Inns.

(ii) CITIC Capital Partners announced a $425 million China Private Equity Fund.

(iii) Barings Asia, a subsidiary of ING Bank, invested $100 million in two PRC steel companies.

(iv) Blackstone announced it is considering an unspecified investment in Minsheng Banking Corporation, the PRC’s only privately held bank.

(v) Sequoia Capital, a US-based private equity firm, announced a $200 million China fund.

(vi) Carlyle Group has reportedly invested $45.78 million in New Century, the PRC’s leading private hotel operator. New Century expects an additional $100 million in 2008 as Carlyle seeks to acquire a 40% stake in the company. New Century currently operates over 20 hotels in the PRC and has plans to add 35 more by 2010.

(vii) Purchase of 3Com’s PRC businesses for $2.2 billion by Huawei Technologies, a PRC networking components manufacturer, and Bain Capital, a US private equity firm.

\textsuperscript{11} For example, PetroChina only listed 2.18% of its shares in its IPO, and 86% is still held by its original parent, the China National Petroleum Corporation.

\textsuperscript{12} National Association of Securities Dealers Automated Quotation System is a US securities exchange for technology stocks.

\textsuperscript{13} Asian Private Equity Review (various issues up to November 2007). Hong Kong, China.
(viii) Goldman Sachs–led investment in Industrial and Commercial Bank of China of $2.6 billion.
(ix) Goldman Sachs and US-based private equity group York Capital Management announced a $148 million private investment in the Hong Kong, China publicly listed Tian An Investment Company Limited, a developer of and investor in PRC residential, corporate, commercial, and hotel properties.
(x) Permira, a UK-based private equity group, invested $888 million in Hong Kong, China listed Galaxy Entertainment Group Limited, operating in the PRC and Macau.
(xi) CDH China Fund III closed with commitments of $1.6 billion, including a $75 million commitment from the Commonwealth Development Corporation.
(xii) Kohlberg Kravis Roberts announced an Asia fund scheduled for final closing of $4 billion in 2007.
(xiii) CVC Asia Pacific has invested $213.5 million in Zhuhai Zhongfu Enterprise Company, Limited (noncontrol deal).
(xiv) Tsing Capital announced a China Environment Fund III of $150 million.
(xv) IDG Ventures and China Film Group Corporation announced the IDG Chinese Media Fund ($50 million), targeting investments in the PRC film industry.
(xvi) Richlink International Capital Research Company Limited, a Hong Kong, China–based fund manager announced the $68 million Bohai Value Investment fund, focusing on high-tech growth companies.
(xvii) Merrill Lynch, China Development Bank, and Shenzhen Capital Group invested $65.9 million in Guangdong Mingyang Electric Group Company Limited, a manufacturer of electronics and electrical equipment.
(xviii) Standard Chartered Private Equity, a division of the UK-based international bank, invested $88.5 million in the PRC-based real estate firm Soho China Limited.

D. Trends in Private Equity in India

19. The private equity investment sector in India continues to grow rapidly. From small beginnings in the 1980s, this investment activity has benefited from India’s economic reforms and liberalization program that was implemented in the early 1990s. In India, PEFs initially focused on the information and communication technology (ICT) sector, but this sector was negatively affected by the collapse of the dot-com bubble in 2001. By 2005, PEFs were starting to recover and began to look beyond the ICT sector to investment opportunities in sectors such as health care and manufacturing, by businesses whose growth could come from increasing disposable income in India and increased domestic consumption. In 2005, the Securities and Exchange Board of India opened the field of property and real estate for private equity investment. Figure A2.5 shows the extent of the diversification away from the ICT market of the late 1990s. Although ICT and ICT-enabled services are still the largest single sector (29%), it is a minority. Manufacturing, financial services, health care, and engineering and construction, taken together, outweigh ICT by 50%. Most investee industries are now focused on investing in firms that service the growing
domestic demand as incomes rise, rather than target high-tech exports of goods or services to world markets.

![Figure A2.5: Indian Private Equity 2006 Number of Deals by Industry](image)

Source: Venture Intelligence.

21. When viewed by development stage of investee company (Figure A2.6) PEF investments show a fairly even distribution over the stages of the small and medium-sized enterprise (SME) life cycle, encompassing the stages of early, growth, late, and private investment in public equity. Late-stage buyouts are expected to grow in the future as the Indian market converges with the major international markets of the UK and the US.
22. While the range of PEF investments is expanding, most PEF transactions are still small by global standards (Figure A2.7). Out of a total of 299 transactions in 2006, 42% were less than $10 million equivalent, and 77% were smaller than $25 million.

23. The west of India (focusing on Mumbai) and the south (including Bangalore and Chennai) attract more than 66% of the country's total private equity investment activity. As communications and road transport infrastructure improve, it is likely specialty private equity
Appendix 2

funds with a development focus will be established to channel investment to less-popular investment destinations in eastern and central India.

Figure A2.8: Indian Private Equity 2006 Investment by Region

Source: Venture Intelligence.

E. Conclusion

24. The growth in the size of the domestic private equity market in countries such as India and the PRC may be expected to continue for the foreseeable future. In the PRC, private equity transactions financed domestically increased at a rate of approximately 20% annually from 2004 to 2007, while the volume of foreign-funded transactions remained level.\textsuperscript{14} With the rapid growth in the PRC’s private equity market now taking place spontaneously, it is difficult to see where ADB can continue to add value in the mainstream private equity market. Morgan Stanley’s latest Asia fund, Morgan Stanley Private Equity Asia III, at $1.5 billion, is three times larger than ADB’s entire portfolio of private equity interests covering all of Asia. The total amount of private equity funding raised for Asia from investors globally over the past two years alone was $42 billion, which is approximately 8–10 times ADB’s annual loan approvals and substantially more than its disbursements net of repayments over the same period. Individual transactions in Asia now regularly exceed the total capital of funds in which ADB invested in private equity transactions only five years ago.

25. While growth in the total size of the private equity market in India and the PRC has been dramatic in recent years, both countries continue to need investment in less-attractive sectors such as energy (particularly clean and renewable energy), health care, housing, urban transportation, and social infrastructure. ADB may be able to use its market presence at the margins to help attract capital, especially international institutional equity, in these overlooked sectors. These sectors reinforce and overlap with ADB’s policy objectives. Furthermore, sectors which directly enable and support further economic growth, such as water and power infrastructure and utilities, may present other opportunities for ADB, particularly in the area of

privatization and improving the efficiency of assets currently owned and managed by municipal and provincial SOEs. As private equity and infrastructure investors converge and the private equity market and infrastructure asset markets continue their evolution within the broader Asian market, ADB may be able to play a catalytic role by supporting the emergence of new forms of private equity aiming at further privatization and reform of SOEs such as municipal infrastructure entities. ADB may also need to place greater emphasis on direct investments, such as the investment in the Bank of China which has achieved a strong financial result for ADB and its co-investors.\textsuperscript{15}

\textsuperscript{15} This investment is now worth some 3.6 times the original $74 million over a period of only two years.
A LITERATURE REVIEW OF GOOD PRACTICES

A. Introduction

1. Due to the benefits that private equity can offer to small and medium-sized enterprises (SMEs), particularly in the start-up period, venture capital has provided an important development tool for governments and multilateral development banks (MDBs) seeking to strengthen SMEs.\(^1\) While it is difficult to measure the impact of firms supported by private equity due to their small size, and difficulties finding a counterfactual to determine whether they would have emerged without private equity support, evidence provides a persuasive case in favor of this type of finance. Growth in private equity has been rapid in recent years. In the United States (US), private equity investment grew at an annual compound rate of 55%, going from $2 billion in 1990 to over $105 billion in 2000.\(^2\) Most of these funds were sourced from banks, pension funds, and insurance companies seeking long-term investments. It was estimated in the US in 2005 that venture capital had supported the development of firms that generated total revenues of $2.1 trillion, equivalent to 16.6% of gross domestic product (GDP), and accounted for 9% of US private sector employment (10 million jobs). Firms in this list include Apple, Cisco, eBay, Federal Express, Genentech, Google, Intel, Microsoft and Starbucks.\(^3\) In a separate study conducted in the US, it was concluded that during the period 1970–2000 firms backed by private equity relative to those not backed by private equity had generated twice the level of sales, paid almost three times the amount of federal taxes, generated almost twice the exports, and invested three times as much in research and development.\(^4\)

2. In the United Kingdom (UK), the British Venture Capital Association estimated that private equity–financed companies created jobs at a considerably faster rate than other private sector companies. Over the five years to 2005-06, the number of people employed worldwide by UK private equity–backed companies grew on average by 9%. This result compares with companies in the FTSE 100 index, which grew at 1%, and companies in the FTSE Mid-250 index\(^5\), which grew at 2%. Over the same period, private equity investment in the UK rose by 18%, and private equity–backed companies generated total sales of £424 billion and exports of £48 billion.\(^6\) The European Venture Capital Association conducted a survey that investigated the economic impact of private equity in 2002.\(^7\) The survey found that among the companies that replied, 95% believed that without private equity they would not have existed or would have developed more slowly, 60% considered they would not exist without private equity, and they all estimated on average an additional 46 jobs were created as a consequence of accessing private equity. Similar findings have been demonstrated by studies in countries such as Israel and Taipei,China.\(^8\)

\(^1\) The term private equity is used in preference to venture capital in this appendix as it is broader than venture capital, which in technical terms only applies to early-stage SMEs, but in practice is used interchangeably with private equity which covers both early- and late-stage SMEs.


\(^3\) Venture Impact. 2006. *Global Insight*.


\(^5\) These indices are prepared by the Financial Time Stock Exchange Group and respectively refer to the 100 and 250 most highly capitalized companies on the London Stock Exchange.


B. Types of Venture Funds

3. Private equity financiers can be differentiated into high-net-worth business angels that make third-party equity investments on an ad hoc basis, and institutional private equity funds (PEFs) managed by full-time professionals. The private equity industry, in terms of professionally managed closed-end pools of equity capital, started in the US after World War II and it has subsequently developed in Europe and more recently in emerging economies in regions such as Asia. PEFs can be structured as (i) financial venture-capital funds that are often subsidiaries of commercial banks, (ii) corporate venture funds that are typically subsidiaries of firms seeking to gain access to emerging technology, and (iii) limited partnership PEFs that are managed by general partners. The private equity industry is dominated by limited partnerships as they are not subject to conflicts of interest with parent company objectives, fund remuneration packages can be tailored to reflect different risk–reward profiles of start-up ventures, and they provide flexibility as they have a finite life, mitigate risk through limited liability, and can often provide investors with tax advantages relative to a corporate structure.

4. Most private equity firms in the US operating as fund managers are organized as general partnerships and create distinct limited partnership funds, typically with a life of 7–10 years, and there is usually a target amount of funds to be raised. Private equity funds are closed-end in contrast to open-ended mutual funds, as they do not operate in highly liquid public markets where assets can be easily created and extinguished. The general partner sponsors and manages the fund and has unlimited liability. Limited partners act as co-investors in private equity funds and they are dominated by institutions such as pension funds. Limited partners make commitments which the general partner then draws upon as the fund becomes fully invested. The general partner is responsible for (i) identifying investment opportunities, (ii) monitoring performance and providing funding and expertise as required, (iii) identifying exit opportunities such as a trade sale or initial public offering, (iv) distributing returns to limited partners, and (iv) terminating the fund. In exchange, the general partner will receive 20% of realized returns (referred to as carried interest) net of a minimum threshold rate of return that is typically 8% at the end of the life of the fund, and an annual management fee equal to 1%–3% of the fund’s total committed and invested capital.

5. Investments are usually directed towards high-growth sectors such as information and communication technology (ICT), biotechnology, and health care. The private equity industry tends to be concentrated in specific locations. For example, Silicon Valley in the US is a regional hub where specialized technology firms have formed clusters to capture knowledge externalities and benefit from specialized labor markets and associated support services. PEFs add value to these firms by (i) providing equity or quasi-equity funding; (ii) often seeking a position on the board of investee companies and exercising managerial oversight; (iii) exiting within five years, ideally through a liquid local stock market; and (iv) seeking annual returns in the 25%–50% range, depending on the level of risk of the transaction. PEFs tend to focus on financing expansions and buyouts of mature firms, with only a small proportion of funds being allocated to high-risk seed and start-up operations. Funds are often allocated in stages with small amounts being provided for start-up at very high required rates of return, followed by larger amounts at lower rates of return as risks decline. This type of funding mechanism allows funds to manage risk and creates incentives for entrepreneurs to create value to access future funds at a lower cost.

---

6. There are many risks associated with fund investments as limited partners must commit large amounts of money for periods up to 10 years to nontransparent and illiquid investments where they cannot exert direct control without forfeiting limited liability. Funds are typically committed over years 0–4 and divestment occurs in years 5–10. The long investment periods, “j curve” cash flows, and lack of information mean that general partners have many opportunities for expropriating limited partners’ wealth, such as by setting up new funds that exclude the old limited partners to take advantage of the best deals. These risks are managed through mechanisms such as reliance on reputation and numerous covenants included in the limited partnership agreements that restrict activities of general partners in areas such as (i) the type of investments, (ii) the size of investments in any one firm in the fund, and (iii) co-investors in the fund.

7. PEFs have standard contracts for investee companies, consisting of positive and negative covenants. Covenants standard to most finance documents include restrictions such as specifying the maximum level of leverage and dividend payout ratios, providing various forms of insurance, and restricting the firm’s ability to divest assets without prior approval. Other covenants specific to PEF investments can include (i) details on ownership-right agreements that specify how equity ownership will be apportioned after initial investments and allocation of directorships with pre-specified voting rights, such as veto of corporate actions, access to accounts and facilities, and removal of the management team if performance targets are not achieved; (ii) ratchet provisions that require the PEF’s ownership interest to be revised upwards at the expense of the investee company in the event that there is a need for the investee company to issue additional equity at reduced prices; (iii) registration rights that allow the PEF to override the investee company if necessary to publicly register shares to allow for an initial public offer; (iv) participation rights that permit the PEF to participate in the private sale of shares arranged by management, and exercise an overriding put option back to management if the investee firm is unable to execute an initial public offer or arrange a private sale within a defined time frame; (v) stock option plans for current and prospective management to reward performance and attract talented new staff; (vi) terms by which additional funds will be provided to the investee company; and (vii) termination rights for the investee company shareholders in the event they are forced out of the investee company.

8. In the US, PEFs almost always finance investments with convertible debt, or more frequently, convertible preferred stock. The coupon on the private equity convertible instruments is typically set close to zero, as capital gains and contract flexibility are the primary justifications for structuring agreements in this way. These hybrid instruments are preferred as PEFs are not subject to the provisions for common stock that require equal treatment of all shareholders, and this means they can gain effective control without investing in a majority of the shares in the company. Convertible instruments avoid problems where creditors are exposed to liability and the firm may not be able to deduct interest for tax purposes if the creditors start to exercise management decision rights. Hybrid instruments provide PEFs with a more senior claim than the shareholders in the investee company, while at the same time it is a more junior claim than debt, preserving borrowing capacity. Most convertible stock is converted to common stock prior to initial public offer, trade sale to third party, or redeeming the shares back to the shareholders in the investee company.

9. There are a number of differences between the European and US private equity sectors. Historically, European PEFs did not target high-tech firms in the ICT sector but this began to change from the mid-1990s and it is now the dominant target investment sector. Britain has a

---

10 This structure contrasts with business angels that almost always invest in common stock.
much larger private equity industry that the rest of Europe and this appears to be due to its reliance on common rather than civil law. In Europe, financial institutions such as banks are more important sources of funding for PEFs than pension funds are in the US. European PEFs are rarely structured as stand-alone limited partnerships and tend to be organized as investment companies. Part of the reason for this approach is the traditional focus in Europe on financing later-stage developments, although this trend is changing with an increasing level of interest becoming apparent in early-stage investments. Part of the problem with the lack of interest in high-risk start-ups has been the poor historical rates of return and the absence of a large liquid stock market for small high-tech firms. The German Neur Market stock exchange was established in 1997 to cater to high technology stocks, and despite a promising beginning it did not survive the fallout of the dot-com collapse and it was closed in 2003. A further important difference between the European and US private equity industries is the high level of government intervention in Europe. Similar to other forms of private sector support, evidence indicates that governments would achieve better results by focusing on strengthening the investment environment rather than identifying, protecting, and subsidizing emerging industries.

C. Development of the Private Equity Sector in the People’s Republic of China and India

1. People’s Republic of China

10. The Government of the People’s Republic of China (PRC) has placed a high priority on science and technology as a means of stimulating development. The PRC’s centralized planning system and use of production targets meant there was a lack of incentives to pursue innovation and adopt new methods of production. In the 1980s, the Government introduced a series of reforms designed to increase the level of science and technology outputs and decentralized resource allocation decisions to research institutes, manufacturers, and others. These changes were accompanied by increased responsibility and alternatives for improving financial performance. By the 1990s most technology came from research and development institutes and universities and they were the main participants at the start-up stage, providing both technology and seed capital under the Torch Program.

11. Once projects had been developed by the research institutes, they were financed in the expansion phase by banks, using the Government’s designation of these projects as having priority as justification for providing loans. New ventures were typically located in special purpose technology zones and the local governments responsible for these facilities would provide support such as recognition, licenses, tax exemptions, and subsidized facilities to facilitate access to banks and private equity firms. Further assistance was provided in areas such as development of suitable infrastructure and providing training and education that would support the use of new technology. Special-purpose incubators were established within the zones, initially as extensions of local government, and subsequently as commercial entities in their own right.

12. From the mid-1990s private equity was seen by the Government as a means of linking science and technology and economic development. Research institutions and universities did not have the necessary resources to develop start-ups due to public sector funding constraints. Similarly, banks had become cash constrained due to high levels of nonperforming loans (NPLs).

---


12 The Torch Program was established in 1988 with the aim of developing new high technology industries in the PRC.
and they were not prepared to fund high-risk start-ups. Further problems arose due to the lack of clarity of property rights and difficulties enforcing contracts. Following a Government announcement in 1998 allowing corporate-backed private equity firms to be established, there was rapid growth in these types of companies involving Government, local companies, and foreign investors. Subsequently there were reforms to strengthen company law in areas such as intellectual property and shareholder rights, regulation of foreign capital and enterprises, and the stock market. As a consequence of these changes, technology-based industry grew dramatically and by 2001 there were more than 86,000 new technology ventures employing 5.6 million people located in 465 technology business incubators in 53 high-tech zones. Private equity played a central role supporting this process through more than 200 firms and 130 publicly listed companies. As the 1990s progressed, private equity firms in the PRC shifted investments from low technology to the ICT sectors and to a lesser extent areas such as biotechnology, energy, and environmental protection. Over the 1990s private equity progressively shifted from state-owned enterprises (SOEs) to purely private firms.

13. An example of this method of development is Legend Holding, which was founded in 1984 with 11 researchers and an investment of approximately $25,000 by the Institute of Computing Technology of the Chinese Academy of Sciences. By 2006, Legend’s total assets had grown to approximately $8 billion. It has five investment arms that operate in the sectors of information technology, real estate development, capital investment, and providing investees with assistance in strategic decisions on issues such as business direction, recruitment, general management, and resource allocation. Primary holdings include Lenovo, the computer manufacturer built around the assets acquired in the acquisition of IBM’s former laptop computer division. In many ways, Legend resembles the early 1960s Boston-area US venture firms which evolved from institutions such as the Massachusetts Institute of Technology and Harvard University. Legend retains its links to the Chinese Academy of Sciences and it is otherwise employee-owned.

![Figure A3.1: Legend Holdings Ownership and Operating Subsidiaries for Private Equity Investment](http://legendholdings.com)

14. In 2003, the Asian Development Bank (ADB) conducted a review of PEFs as part of its preparation of a private sector assessment for the PRC and found there were approximately
100 domestic venture capital centers nationwide and 3,600 firms under incubation. In addition, there was a further 92 foreign private equity firms that had $1.2 billion in funds. The private sector assessment concluded that the main constraints on private equity were (i) a lack of long-term investors such as mutual funds and pensions; (ii) a limited pool of private equity managers with experience; (iii) legal obstacles and inconsistencies in legislation in the company law that make share transfers difficult and preclude establishment of limited partnerships; and (iv) most importantly, the lack of a reliable exit mechanism. In 2005, an external review of private equity in the PRC reinforced these views by concluding the main constraints on further development of the industry were (i) the lack of a local NASDAQ type exchange to provide exit, (ii) weak intellectual property regulation and protection making it difficult to capitalize innovation, (iii) the lack of a comprehensive venture capital law defining structures and taxation, (iv) the shortage of management talent at both company and investor levels, (v) an undeveloped system for technology transfer, (vi) the high degree of intervention from central government, and (vii) the lack of stability in regulations.

2. India

India has a long history of centralized public sector development and extensive regulation. State-owned banks dominate the financial system and they were primarily used as an instrument of social policy from 1969 to 1991, leading to a weakening in their capital base due to loss-making branch expansions, overstaffing, and directed lending to meet political objectives. Poor capital adequacy and depositor interest rates set at levels below inflation discouraged deposits, while interest on loans at below market rates encouraged excessive use of debt by low-risk SOEs and large private firms such as Birla and Tata. The net effect of these arrangements was an inefficient use of resources and SMEs were unable to access capital. Offsetting these factors, India had a well-developed public equity market, an educated workforce and low wage costs, a reasonably mature software industry that began operations in the 1980s, and a number of engineers who had been successful in the US and were prepared to act as angel investors.

The lack of bank debt helped create incentives to develop the use of stock exchanges as a means of accessing capital. The Government of India was keen to support this process and a Securities and Exchange Board of India was created in 1991. An important reform introduced in the 1990s was the removal of profitability as a requirement for listing, allowing venture capitalists to exit from high-tech firms through an initial public offer. While the strengthening of the stock exchange helped provide PEFs with an exit, it did not directly contribute to the development of a venture capital industry due to an inability to access long-term capital from third parties. Mutual funds have been an important source of long-term funds in India, and are substantial investors in shares. Mutual funds were not permitted to invest in private equity companies until 1999, when they were allowed to invest up to 5% of their portfolio in this type of investment. Despite these reforms, mutual funds are conservatively managed and they have not been active investors in the Indian private equity sector. In the US, pension funds have been the single largest source of funding, but in India this source of funding is precluded by law. Overall, there has been a continued shortage of long-term equity capital available within India to support private equity, and nonresident Indians successful in the US ICT industry have played a prominent role in developing the private equity industry in India.

---

17. The roots of the modern Indian private equity industry may be traced back to as early as 1975, when the state-owned Industrial Finance Corporation of India, established the Risk Capital Foundation. In 1984 the state-owned Industrial Credit and Investment Corporation of India (ICICI) made its first allocation of funds for venture capital–type investments. In 1986–1988, ICICI launched a venture capital initiative to encourage private start-up ventures in emerging technologies. The initiative was supported by the Unit Trust of India, through the Technology Development and Information Company of India, now known as ICICI Venture Funds. In 1988, with encouragement from the World Bank, the Government of India published its first guidelines for venture capital funds. The World Bank sought to improve local access to long-term risk capital in the late 1980s by agreeing to provide a state-guaranteed loan of $45 million that would be allocated to private equity firms established as subsidiaries of state-owned banks. The Government provided capital gains rebates and removed constraints such as the legal requirement for shares to be sold at prices below par. At the same time, private equity investments were restricted in size, exclusively directed to technology firms, and subject to Government approval. Despite these restrictions, the World Bank project was reasonably successful and it helped establish a private equity industry centered on a small number of ICT-related centers such as Bangalore and Mumbai, and states such as Gujarat and Andhra Pradesh. At the same time, the Government-owned Canara Bank established a private equity arm, Canbank Venture Capital, and the first private sector funds were organized: (i) Credit Capital Venture Fund (India) Limited, organized by Lazard Credit Capital Limited with support from ADB and the Commonwealth Development Corporation; and (ii) the India Investment Fund of ANZ Grindlays Bank.

18. During the 1990s, following the Indian economic reform initiatives of 1991, private equity in India drew strength from three developments. First, established US and European firms—including Baring Private Equity Partners, CDC Capital, HSBC Private Equity, Draper International, and Warburg Pincus—began to enter the market looking for investments. Second, Indian nationals with international banking and investment management experience established “returnee” investment firms such as ChrysCapital and WestBridge capital. Third, corporate venture and investment arms of multinationals such as Intel and General Electric established operations in India. To regulate the fast-growing private equity industry, the Securities and Exchange Board of India issued the Venture Capital Funds Regulations in 1996.

19. By the late 1990s, private equity firms in India were following the example of PEFs in the US and Europe and were predominantly seeking opportunities in the ICT and internet-related technology sectors. By 1999, about 80% of Indian private equity funds were sourced from overseas firms registered in Mauritius. In the early years after 2000, the collapse of the dot-com bubble worldwide and a US recession and consequent slowdown in technology investments caused private equity activity in India to decrease. Funds which remained in business in India refocused operations on private investment public equity transactions and later-stage transactions where available. In 2002, the Indian Infrastructure Development and Finance Corporation (IIDFC) established its subsidiary IIDFC Private Equity. ICICI Ventures and Actis,

---

17 Lazard Credit Capital, an affiliate of the Lazards Group, London, was one of the first modern merchant banks to operate in India.
18 Credit Capital Venture Fund was subsequently acquired (1996) from Lazard Credit capital by Infrastructure Leasing & Financial Services Limited (IL&FS) in the construction of IL&FS Investment Managers Limited (IIML), managers of the Trust component of the Fund (Appendix 5).
19 Amended in 2000 further to recommendations of the K. B. Chandrasekhar Committee
20 Private investment public equity is private investment in public equity—direct off-market investment in already listed companies through negotiated private placements of securities.
among other private equity fund managers, became active in buyouts in 2003. By 2004, investment activity had resumed and the viability of exits was demonstrated by the successful initial public offer of six private equity–backed companies, including Patri computer systems and Biocon.

20. Overall, PEF investments have been successful in India. A recent study\textsuperscript{21} of 200 Indian businesses which received private equity investment revealed a number of interesting effects on Indian enterprises. Private equity investors contributed significantly to capacity building in their Indian investees, and were responsible for introducing international standards of management and technology, showed a high degree of additionality, and generally had a positive development impact. Key findings of the review included the following:

(i) Private equity–backed companies grew at a faster rate than businesses not backed by private equity or market indices of listed companies.

(ii) Salaries and wages for employees of private equity–backed companies grew at a significantly faster rate than those at companies not backed by private equity.

(iii) Thirty-three percent of executives of private equity–backed companies believe that without private equity investment, their companies would not have existed at all, and 63% believe that they would have grown more slowly.

(iv) Sixty percent of executives at private equity–backed companies reported the number of employees had increased after the private equity investment.

(v) Private equity–backed pharmaceutical companies reported a compound annual growth rate (CAGR) in sales of 23%, compared to the 19% index of listed pharmaceutical companies.

(vi) Overall, private equity–backed companies reported 23% CAGR in sales, compared with 10% for private businesses not backed by private equity.

(vii) Private equity investment is used for long-term investment and capacity building: 50% of private equity investment is spent on capital expenditure, 29% on research and development, and 21% on marketing.

(viii) Private equity–backed firms report CAGR in research and development of 23%, compared to 20% for private companies not backed by private equity.

(ix) Private equity firms boost India’s export economy; private equity–backed companies report 33% CAGR in exports, compared to 22% for businesses not backed by private equity; 36% of executives of private equity–backed firms report that their exports had increased as a result of the investment.

(x) Private equity is good for employees; private equity–backed companies experienced CAGR in wages of 32%, compared to 6% for firms not backed by private equity.

(xi) Private equity investors bring more than money; 65% of executives of investees report their private equity investors added to strategic direction, 52% report assistance with financial advice, 22% with recruitment, and 9% with marketing.

(xii) Private equity investors spend time with their investees; 56% of executives of investees report having contact with their private equity investors at least once a week or more frequently, another 24% report at least monthly meetings, and a further 20% report meeting at least quarterly with their private equity investors.

(xiii) Private equity investors are not taking business away from domestic financial institutions (Figure A3.2). Most entrepreneurs (60%) are self funding, 36%
received investments from family and friend investors, and 24% received investments from "angels". Only 24% reported receiving funding from banks.

![Figure A3.2: Sources of Funding for SMEs Prior to Receiving Private Equity Investment](image)

**SMEs** = small and medium enterprises.


21. While there has been significant progress, there continues to be numerous regulations that restrict private equity in areas such as foreign investment, taxation, stock exchange rules, and foreign currency convertibility. The Ministry of Finance and the Reserve Bank of India closely regulate the private equity sector. All foreign private equity investments and divestments are subject to regulatory approvals unrelated to market parameters. The company law lacks flexibility in areas such as establishing limited partnerships, and making payments to PEFs in the form of capital payments or in-kind contributions rather than dividends. All partners have limited liability, reducing flexibility in risk-sharing arrangements. Each fund has to be established as a limited life company or trust rather than as a fund within a firm to allow termination under Indian law, which is an expensive and time-consuming process. PEFs cannot invest in public listed securities or in foreign securities. Stock options are not permitted for employees of publicly listed companies. In addition to restrictions on foreign ownership, there are limitations on the extent to which Indian private equity firms can invest overseas.

**D. Performance of Private Equity Funds in Emerging Economies**

22. Despite the high level of sophistication of the financial structures often used in the private equity industry, financial performance has been low and highly skewed. Only a small number of fund managers make high returns, and strong performance is persistent, with good managers tending to consistently outperform the market over time. While financial performance has often been poor, MDBs have become increasingly interested in developmental impacts in areas such as corporate social responsibility in private equity investments in recent years. In Africa, 25 venture capitalists were surveyed in 2005 and it was found that hardly any of the

---

funds interviewed reported on corporate social responsibility, even when the concept of sustainable entrepreneurship was integrated into the policy and implementation frameworks of the projects. In part this result was arising as very few development finance institutions and commercial PEFs have an explicit corporate social responsibility strategy with clearly defined indicators for measuring performance. In the few cases where the impact of private equity on sustainable development had been measured, it appeared to have been significant, particularly in terms of employment creation. The most important issue that emerged from the survey was the inadequate level of PEFs available to help meet the funding gap for SMEs, which meant the overall impact on sustained economic growth and employment was small.

23. The World Bank Institute carried out a series of case studies in 2004 on community investing and social venture capitalists located in the US that measured performance in accordance with a “triple bottom line”.23 The study found that both types of investment could make a substantial contribution to alleviating poverty, but there were problems meaningfully measuring social returns. It was difficult to measure poverty impacts as there were no broadly accepted metrics and the cost and labor intensiveness associated with monitoring and evaluation programs was significant. It was concluded that a standard set of indicators would be valuable, but noted there was a range of challenges including: measuring the direct and indirect impact on poverty, comparing qualitatively different outcomes, comparing impacts in developed versus developing countries, discounting the timing of effects, and managing limited budgets for measuring poverty impacts.

E. Donor Assistance to Support the Development of Private Equity Funds

1. Overview

24. The European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC) are two of the most active MDBs in the area of investing in private equity funds and they have had broadly similar objectives and experiences pursuing these forms of investments.

2. European Bank for Reconstruction and Development

25. The EBRD prepared a special study of its investments in PEFs in 2002.24 At that time, EBRD had more than 70 funds under 55 managers with joint capital totaling €5.2 billion, of which €1.5 billion had been committed and €789 million disbursed. In terms of sector concentration, 50% of the PEFs were in ICT, services, and trade, and 20% was allocated to primary and secondary energy and manufacturing. About 50% of EBRD’s PEF investments were allocated to late-stage expansion and buyout funds that took average-sized investments of €6 million in medium-sized firms. Donor-supported funds accounted for 33% of the portfolio and focused on smaller firms in less advanced economies. The third category of PEF held by EBRD was the SME-oriented venture capital fund that had average stakes of €2 million and accounted for the remaining 17% of the portfolio. Almost all profits were derived from only four countries and 70% of profits came from the ICT sector.

26. The evaluation found that PEFs were a selective and relatively costly instrument. Transition impacts were strongly linked to sustainability and financial returns. PEFs were more

---

likely to be financially successful and sustainable if investments were large and targeted at medium-sized enterprises in advanced economies. Conversely, SMEs in low-reform economies were most likely to demonstrate development impacts. Invested amounts in individual funds remain minute relative to the needs of the region, whereas assistance to strengthen the enabling environment can help develop fund infrastructure and attract international and ultimately domestic investors. There were further opportunities to strengthen links between undertaking enabling environment reforms and pursuing direct investments. A number of investee fund managers were able to demonstrate the successful issue of second- and third-generation funds. The funds were able to demonstrate additionality, but performance was poor, ranging from negative to a peak of 15%, and did not cover risk-adjusted costs of capital. It was difficult to sell stakes valued at less than $2 million at a profit. The region lacked liquid stock exchanges that could provide valuation benchmarks.

27. EBRD’s PEF team had good skills but it was small, making it vulnerable to staff turnover. Management information systems were improving and increasingly the PEF portfolio was being managed using state-of-the-art portfolio management principles. Staff was taking a more proactive stance on troubleshooting and insolvency cases, but there continued to be limits to what could be done to support SMEs in riskier environments. Further staff specialization was seen as a positive development for strategic management, as was participating in supervisory boards and as investment committee nominees.

28. The main issues identified by the study were (i) the focus on enterprise transactions rather than supporting longer-term financial intermediation, (ii) considering remaining with funds that have repeat capital-raising prospects rather than exiting as soon as possible, (iii) the need for stronger financial PEF financial returns, and (iv) conflict between EBRD’s development aspirations for SMEs in emerging economies and poor financial performance of these investments. It was concluded the main strategic options available to EBRD were to (i) focus on large repeat funds in high-transition economies and phase out funds with a venture capital and SME orientation in low-transition economies; and (ii) option (i) plus retain SMEs in advanced economies and donor-supported funds in intermediate economies. It was recommended that (i) option (ii) was the preferred approach and this would require greater attention being paid to long-term institution building and portfolio demonstration effects rather than focusing on specific transactions, (ii) the portfolio should be separated into three portfolios to reflect the revised strategy and facilitate divestment of mature investments, (iii) for SMEs in high-risk low-transition economies the focus should be on providing debt credit lines with local private banks, and (iv) greater specialization should be encouraged among the PEF team that is supported by a specialized credit committee.

3. International Finance Corporation

29. The IFC has built up a large portfolio of investments in emerging market investment funds, and by 2003 it had commitments of about $1 billion in 100 funds, over 80% of which was private equity. The IFC also had stakes in 25 fund management companies. IFC’s role typically includes

(i) acting as a catalyst for mobilizing institutional capital,
(ii) supporting experienced fund managers who can implement value-added strategies,
(iii) working with fund managers on corporate governance and sustainability at the fund and company levels, and
(iv) enhancing the transparency and accessibility of emerging market funds to commercial investors.

30. The IFC works closely with fund managers and seeks to add value in areas such as selection and structuring of funds, and transferring knowledge and experience on industry best practice. These reforms complement IFC’s activities providing business development services to SMEs, strengthening banks, and reforming the enabling environment for accessing finance. The IFC has evaluated its fund investments and concluded that management is the single most important determinant of the success of investment funds. It was important the IFC ensure the selection process for fund managers was transparent, the IFC should participate actively with the sponsors when selecting a manager, and the managers needed to have relevant training and experience. The IFC should not invest in funds that were too small, and disbursements should be staged to avoid problems of excess liquidity and risks of devaluation. Clear restrictions should be put in place on investment exposures and borrowing limits for funds. During due diligence of funds, the fund manager’s budgeting and internal control systems should be analyzed in detail. Management contracts should be designed so that incentives are linked to project commitments and performance objectives.\textsuperscript{25}

\textsuperscript{25} Available: http://www.ifc.org
PERFORMANCE EVALUATION REPORTS

A. Operations Evaluation Department Evaluations

1. Impact Evaluation

1. In 2002 the Operations Evaluation Department (OED) conducted an impact evaluation study of ADB’s investment fund operations. The study covered 29 private equity funds (PEFs) that were approved by the Asian Development Bank (ADB) Board between 1983 and 1997. The study concluded that major development impacts were achieved in five areas: (i) mobilizing large resources for infrastructure development, direct investments in enterprises, and portfolio investments; (ii) supporting small and medium-sized enterprises (SMEs) and new entrepreneurs and technology development; (iii) helping develop the capital markets of the region; and (v) generating employment opportunities. In many cases there was a shortage of data and sample sizes varied depending on the type of funds and issues being investigated. For 18 of the 29 PEFs reviewed, there was high or medium impact for mobilizing resources at fund level, with $9.00–$41.40 being invested from other sources for every dollar of ADB investment. Resource mobilization at the investee level was high for four out of eight funds studies, with each dollar of ADB investment being matched by $241–$441 from other sources. For SME funds, five out of seven were successful in supporting entrepreneurs and technology development. Liquidity and breadth of the capital markets was enhanced by seven out of 11 PEFs, and eight of these funds helped develop the private equity industry in the region. There was limited data on employment, but where available the impact of PEFs was high or medium.

2. Project Performance Evaluation Reports

2. Table A4.1 provides details on the three project performance evaluation reports (PPERs) on PEFs prepared by OED in 2007.

<table>
<thead>
<tr>
<th>Name</th>
<th>Geographic Scope</th>
<th>Target Sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIG Indian Sectoral Fund</td>
<td>India</td>
<td>Infrastructure</td>
</tr>
<tr>
<td>Lombard Asian Private Fund</td>
<td>Regional</td>
<td>small and medium enterprises</td>
</tr>
<tr>
<td>Liberty New World China</td>
<td>People’s Republic of China</td>
<td>small and medium enterprises</td>
</tr>
<tr>
<td>Investments²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AIG = American International Group, OED = Operations Evaluation Department, PPER = project performance evaluation report.
Source: Operations Evaluation Department.

3. Each of these three projects were evaluated in accordance with OED’s Guidelines for Preparing Performance Evaluation Reports on Nonsovereign Operations. The PEF’s were appraised under four headings: (i) development outcomes and impacts, (ii) ADB investment profitability, (iii) ADB work quality, and (iv) ADB additionality. An overall evaluation was then presented. Development outcomes and impacts are disaggregated into (i) private sector

---

² This project did not meet the guideline requirement for project selection of at least 30 months following final material subproject disbursement, as the investment period is not yet completed, but it was evaluated as it was the oldest project in the People’s Republic of China (PRC) that is in operation.
³ The guidelines are based on the harmonized Good Practice Standards for Evaluation of Private Sector Investment Operations prepared by the Multilateral Development Bank Evaluation Cooperation Group and were approved in 2006.
Appendix 4

development (which is further separated into beyond company impacts and direct company outcomes); (ii) business success; and (iii) environmental, social, health, and safety performance.

a. AIG Indian Sectoral Fund

4. ADB’s Board of Directors approved an investment of $15 million in AIG Indian Sectoral Fund (AISF) in 1995 and it was the first PEF targeted primarily at infrastructure in India. AISF was approved at a time when it was difficult to mobilize finance for infrastructure and it had material demonstration impacts, with more than 50% of its portfolio being invested in private infrastructure. AISF played an important demonstration role in mobile telecommunications, which was the first Indian infrastructure sector opened to private investment. Subsequently, foreign investors began to invest heavily in the telecommunications sector in India, increasing available capacity and the level of competition, and causing prices of services to fall dramatically. AISF was a pioneer helping to develop the public–private partnership (PPP) model in the transport sector and introducing the user-pays concept for toll roads. The PPP model is now being scaled up in India and the National Highway Authority of India is in the process of developing one of the largest PPP road programs in the world.

5. AISF played an important role in the energy sector in its capacity as a founding shareholder in a clean energy project. The project had a dramatic impact on the air quality in Delhi and the project is being applied to other major cities in India. AISF played a catalytic role in helping develop the private equity industry by developing a legal structure that is still commonly used by foreign investors in Indian PEFs. However, AISF was not successful in meeting its stated objectives in the report and recommendation of the President (RRP) of investing in sectors such as water due to weaknesses in the enabling environment, and it had limited impact on the development of the capital market. Resource mobilization at the fund level from a total of 10 foreign shareholders and further local investors was $7.32 for every dollar invested by ADB.

6. The PPER for AISF found that the presence of an experienced international fund manager, American International Group (AIG), provided a direct and important means of allowing private equity technology to be transferred to its local partner in the fund management company, Infrastructure Leasing & Financial Services Limited (IL&FS), and the investee companies. AIG provided IL&FS with management operation procedures, and guidelines and templates for reporting on performance to the investors in the fund. Similarly, IL&FS was able to impart its knowledge of the Indian financial sector to AIG, which has subsequently established its own fund, the India Equity Fund. The AISF fund manager was able to directly influence the performance of investee companies through its presence on their boards of directors, and in some cases improved access to business management skills and finance.

7. Overall, development impacts and outcomes was rated “satisfactory” based on the following three sub-criteria: (i) private sector development, which was rated “excellent” as the objective of catalyzing foreign private equity investment in infrastructure in India was achieved to a significant extent; (ii) business success, which was rated “excellent” based on gross financial internal rate of return (FIRR) achieved relative to the benchmark specified in the OED guidelines; and (iii) contribution to environmental, social, health, and safety performance, which was rated “excellent” because of the award-winning way in which the fund manager addressed these issues when they arose in projects. ADB investment profitability was rated “satisfactory” based on the net FIRR accruing to ADB after management fees and expenses, relative to the benchmark specified in the OED guidelines. ADB work quality was rated “satisfactory”. While performance was acceptable, the structure permitted the potential for conflicts of interest to
arise, disclosure requirements of the fund manager negotiated by ADB were not particularly strong, and ADB lacked critical decision rights. ADB additionality was rated “excellent”. The fund was a pioneering structure that helped develop private infrastructure projects in India using an innovative financial structure, which helped lay the foundation for a large and rapidly growing private equity industry in India. Overall, the project was rated “successful”. The summarized results of the evaluation are presented in Table A4.2.

Table A4.2: Overall Assessment of the Investment in AIG Indian Sectoral Fund

<table>
<thead>
<tr>
<th>Indicator/Rating</th>
<th>Unsatisfactory</th>
<th>Partly Satisfactory</th>
<th>Satisfactory</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Outcomes and Impact</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Private Sector Development</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Success</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Environment, Social, Health, and Safety Performance</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>ADB Investment Profitability</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>ADB Work Quality</td>
<td></td>
<td></td>
<td>Te</td>
<td></td>
</tr>
<tr>
<td>ADB Additionality</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Rating</th>
<th>Unsuccessful</th>
<th>Partly successful</th>
<th>Successful</th>
<th>Highly successful</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


b. Lombard Asian Private Investment Company

8. ADB approved an investment of $25 million in Lombard Asian Private Investment Company (LAPIC) in 1996. Beyond company impacts were rated by OED as "partly satisfactory", primarily due to a lack of developmental relevance. The investment in LAPIC was justified in the RRP on the grounds it would (i) attract significant amounts of capital from major pension providers in the US such as California Public Employees Retirement System (CalPERS) and from other member countries of ADB to invest in developing member countries (DMCs), (ii) support infrastructure development and restructuring of privatized industrial companies, and (iii) help develop the capital markets and provide equity financing to unlisted and new companies.

9. At the time that CalPERS agreed with ADB to invest $225 million in an East Asian fund, private equity in the region was still quite limited. Private equity began to grow in Asia in the early to mid-1990s but it did not take off until 2003. By mid-2005, the pool of Asian private equity under management was $111.3 billion, compared with $33.4 billion in 1995, and Asia was the third-most important private equity market after the US and Europe. ADB’s investment in LAPIC contributed to achieving the original project objective of mobilizing foreign institutional funds for investment by helping to demonstrate the feasibility and attractiveness of investing in East Asia. LAPIC played an early role in East Asia, acting as a source of funding and emphasizing the importance of issues such as corporate governance and socially and environmentally responsible investments. The level of funds mobilized for each dollar of ADB investment was $10.08, but ADB’s presence was not beneficial in attracting other investors apart from CalPERS.

10. LAPIC changed its investment focus significantly following the Asian financial crisis. PEF investment in infrastructure in Asia did not recover until 2003. There has only been limited
privatization in Asia and it has not been an important area of activity for PEFs. The impact of the fund transactions on the rate of development of the capital market was positive, although relatively minor. The fund manager helped develop the capital market by exiting from two investments via public share offerings, and it invested in three brokerage houses.

11. The PPER for LAPIC found the fund manager had a direct impact on private sector development at the investee company level by strengthening corporate governance and management capacity. Reforms helped reduce investment and financial risks by upgrading company competencies in areas such as due diligence, strategic planning, and financial reporting. The fund manager set a good example through proactive representation on boards of investee companies and interaction with management on occasion. The fund manager was most successful in financing expansion and restructuring later-stage enterprises, particularly listed companies.

12. In the light of these factors, development outcomes and impact was rated "partly satisfactory" on the basis of three subcriteria: (i) a “partly satisfactory” rating was given to private sector development because most investment had occurred in sectors that were not relevant to ADB’s development objectives; (ii) a “partly satisfactory” rating was assigned for business success, based on the gross FIRR achieved relative to the target weighted average cost of capital (WACC); and (iii) a “satisfactory” rating was given to contribution to environmental, social health, and safety performance. The second evaluation criterion, ADB’s investment profitability, was rated “partly satisfactory” on the basis of the net FIRR accruing to ADB after management fees and expenses, relative to the target WACC. ADB’s quality of work was rated “satisfactory”, as the overall structure and ADB’s role in monitoring the project was acceptable. The fourth criterion, ADB’s additionality, was rated “satisfactory”. It was clear that CalPERS’ entry into the Asian private equity market in 1997 would not have occurred at that time without ADB’s participation, and it helped lay the basis for the phenomenal growth of private equity investment in the region. Overall, the project was rated “partly successful”. The summarized results of the evaluation are presented in Table A4.3.

Table A4.3: Overall Assessment of the Investment in Lombard Asian Private Investment Company

<table>
<thead>
<tr>
<th>Indicator/Rating</th>
<th>Unsatisfactory</th>
<th>Partly Satisfactory</th>
<th>Satisfactory</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Outcomes and Impact</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector development</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business success</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Environment, social, health, and safety performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADB Investment Profitability</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADB Work Quality</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADB Additionality</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Rating</th>
<th>Unsatisfactory</th>
<th>Partly Successful</th>
<th>Successful</th>
<th>Highly Successful</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank.
Source: Operations Evaluation Mission.

c. Liberty New World China Enterprise Investments

13. A proposal to invest $25 million in Liberty New World China Enterprises Investments Limited Partner (LNWCEI) was approved by the Board in 2000. Similar to LAPIC, beyond company impacts for this investment were rated by OED as "partly satisfactory", due to a lack of
developmental relevance. The Board approved the investment in LNWCEI on the grounds that the investment would help (i) catalyze foreign investment into the private sector in the People's Republic of China (PRC), (ii) develop SMEs, and (iii) restructure former state-owned enterprises (SOEs). While the development of the private equity industry in the PRC has been a success, it seems unlikely the investment in the LNWCEI contributed much to this process. At the time of ADB’s investment, the two other participants in the fund had already developed the concept of establishing LNWCEI and had thought ADB participation might encourage further institutional investors, but this did not happen. As a result, ADB's actual investment of $18.75 million only supported co-investment of $4.03 for each dollar invested, with no evidence to suggest that ADB participation was critical to the transaction.

14. Initially, the fund invested in a series of former SOEs but most of these investments were not successful and the fund manager has been progressively moving to a more conventional private equity strategy for the PRC, operating as a late-stage venture capital investor. While this approach is probably a sound decision from a commercial perspective, it eliminated one of the prime development justifications for ADB participation in LNWCEI.

15. LNWCEI has strengthened investee companies’ management practices in some cases. Examples include replacing key staff in investee companies, developing Hong Kong, China accounting standards, and upgrading financial reporting systems. Increasingly over time, improvements in management practices have tended to be related to investments made by LNWCEI in anticipation of an initial public offering. The shift from investing in early-stage companies and restructuring SOEs as defined in the RRP, to investing in late-stage, pre-initial public offer companies has meant that opportunities for adding value to investees operations have become more limited in favor of pursuing a speculative strategy where expected fund profits were being generated by the strong market conditions that were occurring in Hong Kong, China in 2006 and 2007.

16. Overall, the first evaluation criterion, development outcomes and impacts, was rated “partly satisfactory” based on the following subcriteria ratings: (i) private sector development was rated “partly satisfactory”, as the objective of catalyzing foreign private equity investment in SOEs and SMEs was not achieved; (ii) business success was “unsatisfactory” based on the poor FIRR achieved relative to the benchmark specified in the OED guidelines; and (iii) contribution to environmental, social, health, and safety performance was rated “satisfactory”. The second criterion, ADB investment profitability, was rated “unsatisfactory” based on the net FIRR accruing to ADB after management fees and expenses, relative to the benchmark specified in the guidelines. ADB’s work quality was rated “partly satisfactory” as the structure of the fund created conflicts of interest, disclosure requirements of the fund manager negotiated by ADB were not strong, and ADB lacked critical decision rights. The fourth criterion of ADB’s additionality was rated “unsatisfactory”.

17. There was no evidence that ADB funding had a material impact mobilizing additional private sector funding. New World Group had already invested in five of the original investments, and both of the original sponsors were already participating in the fund before ADB became involved. ADB’s contribution was primarily limited to the “halo effect” that its participation provided when the fund manager made subsequent acquisitions. These investments are unlikely to have influenced foreign direct investment transactions funded from Western institutional sources given the poor performance of the first five investee companies.

---

4 This result is only preliminary as the final result will not be known until the fund has closed and repaid capital and profits owed to the investors.
and the lack of information available on subsequent investments. Similar to other private equity fund investments, there is no sign ADB was able to pass information on private sector constraints back to regional departments that could then be used to initiate reforms to strengthen the enabling environment. Overall, the project was rated as “unsuccessful”. The summarized results are presented in Table A4.4.

Table A4.4: Overall Assessment of the Investment in Liberty New World China Enterprises Investments, Limited Partner

<table>
<thead>
<tr>
<th>Indicator/Rating</th>
<th>Unsatisfactory</th>
<th>Partly Satisfactory</th>
<th>Satisfactory</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Outcomes and Impacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private sector development</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Success</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment, Social, Health, and Safety Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADB Investment Profitability</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADB Work Quality</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADB Additionality</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Overall Rating                            |                |                     |              |           |
|-------------------------------------------|                |                     |              | X         |

Source: Operations Evaluation Mission.

B. Private Sector Operations Department Evaluations

18. Private Sector Group\(^5\) prepared a study in 1999 which concluded that the performance of PEF investments had positive and far-reaching effects. PSOD has prepared 10 self-assessment project completion reports (PCRs) on PEFs and the investment parameters are summarized in Table A4.5.

\(^5\) Private Sector Group was the precursor to PSOD, which was established in 2001.
### Table A4.5: Project Completion Reports – Investment Parameters
(as of 31 December 2007)

<table>
<thead>
<tr>
<th>Year</th>
<th>PCR</th>
<th>Country</th>
<th>Project</th>
<th>Year</th>
<th>Investment Approved</th>
<th>ADB Shareholding (%)</th>
<th>ADB Investment ($ million)</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>REG</td>
<td>Pacven Investments Ltd.</td>
<td>1989</td>
<td>6.0</td>
<td>2.0</td>
<td>Mobilizing venture capital for regional investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>PHI</td>
<td>H&amp;Q Philippine Ventures Inc.</td>
<td>1988</td>
<td>14.5</td>
<td>2.5</td>
<td>Mobilizing venture capital in Philippines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>REG</td>
<td>Asian Convertibles and Income Fund</td>
<td>1989</td>
<td>8.0</td>
<td>5.2</td>
<td>Establish convertible bond market and other forms equity linked bonds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>PRC</td>
<td>China Assets Holdings Ltd</td>
<td>1991</td>
<td>9.3</td>
<td>4.0</td>
<td>Invest in SMEs and infrastructure in PRC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>IND</td>
<td>IL&amp;FS Venture Capital Ltd.</td>
<td>1989</td>
<td>8.6</td>
<td>1.4</td>
<td>Mobilizing venture capital in India</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>PHI</td>
<td>Mutual Fund Company of the Philippines</td>
<td>1996</td>
<td>21.9</td>
<td>3.9</td>
<td>Develop capital markets in the Philippines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>REG</td>
<td>Asia Pacific Ventures Ltd.</td>
<td>1990</td>
<td>14.3</td>
<td>5.0</td>
<td>Mobilizing venture capital for regional investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>PHI</td>
<td>Walden AB Ayala Ventures Co. Inc.</td>
<td>1994</td>
<td>5.2</td>
<td>0.4</td>
<td>Mobilizing venture capital in India</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>IND</td>
<td>AIG Indian Sectoral Equity Fund</td>
<td>1995</td>
<td>17.0</td>
<td>15.0</td>
<td>Invest in infrastructure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>REG</td>
<td>Lombard Asian Private Investment Company</td>
<td>1997</td>
<td>10.0</td>
<td>25.0</td>
<td>Mobilize foreign investment in DMCs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


19. Pacven Investments Limited (Pacven) was a regional fund that targeted SMEs in Association of Southeast Asian Nations (ASEAN) countries with investments in 21 early-stage companies primarily operating in the building materials and information and communication technology (ICT) sectors. There are few details on development impacts in the PCR, although it is reasonable to assume that as a result of the high FIRR of 26.25%, and its early entry in the Asian venture capital market, it had important demonstration effects. H&Q Philippine, Ventures Incorporated (HQPV) was also engaged in the venture capital sector focusing on the Philippines and performance was negatively affected by the large depreciation of the peso following the Asian financial crisis. HQPV was the first institutionally managed venture capital fund in the Philippines, and it helped establish a venture capital industry within the country where the pool of venture capital grew from $36 million in 1990 to $650.6 million in 1999. Asian Convertibles and Income Fund was the first regional fund in Asia investing in convertible securities issued by
local corporations. Following the establishment of Asian Convertibles and Income Fund, a further nine regional funds specializing in convertible instruments had been established by 2000 and Nikko Global Asset Management estimated the market in Asia had the potential to grow to $25 billion at that time.

20. China Assets Holdings Limited targeted SMEs in the PRC and it sought to attract foreign investors who could transfer technology to the investee companies. Most China Assets Holdings Limited investments did not perform well as the enabling environment in areas such as contract enforcement was weak, and investments were affected by the Asian financial crisis causing a decline in investor interest in venture capital in the PRC. IL&FS Venture Capital Limited (IVCL) was a listed fund management company that was successfully restructured and acted as an incubator for SMEs in the ICT sector in Bangalore and Mumbai. IVCL was able to support the development of the Indian capital markets by providing risk capital and management services. The number of venture capital funds had risen substantially since 1989 when IVCL was established. The Mutual Fund Company of the Philippines was established to help develop the capital market in the Philippines and it successfully attracted foreign institutional investors, but performance was affected by an absence of necessary legal reforms, the Asian financial crisis, and the Philippine political crisis.

21. Asia Pacific Ventures Limited (APVL) made 61 investments in 13 countries. The average total investment per company was $0.81 million, representing on average 3.65% of the investee company's total equity. APVL initially targeted early-stage companies in manufacturing and consumer services and then moved into sectors such as ICT and financial services after the Asian financial crisis. APVL was an important pioneering venture capital company that helped provide the foundation for the venture capital industry in Asia. Walden AB Ayala Ventures Company Incorporated (WAAVC) was active in start-ups and was affected by the Asian financial crisis following a promising start. While financial performance of WAAVC was low, it played an important demonstration role developing the capital market in the Philippines.

22. AISF was one of the first PEFs established in India and it participated in a number of pioneering investments, such as the PPP-based Noida Toll Bridge project, that would not have taken place, or would have occurred much later, if it was not financed by the fund. By 2004, India had more that 50 private equity and venture capital funds, and the amount of capital under their management had increased by 7–8 times the pool of funds available for this purpose when AISEF was established. LAPIC was established just prior to the Asian financial crisis at a time when it was difficult to attract foreign investment in the region and it was able to play an important role in restructuring companies, such as a brokering house in the Republic of Korea and one of Thailand's largest listed companies. LAPIC helped establish and sponsor the Asian Corporate Governance Association and it encouraged further investments by CalPERS in Asia.
<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>Project Name/Company</th>
<th>FIRR (%)</th>
<th>EIRR(%)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>REG</td>
<td>Pacven Investments Ltd.</td>
<td>26.3</td>
<td></td>
<td>Not formally rated but appears satisfactory</td>
</tr>
<tr>
<td>2000</td>
<td>PHI</td>
<td>H&amp;Q Philippine Ventures Inc.</td>
<td>14.0</td>
<td></td>
<td>Not formally rated but appears partly satisfactory</td>
</tr>
<tr>
<td></td>
<td>REG</td>
<td>Asian Convertibles &amp; Income Fund</td>
<td>8.8</td>
<td></td>
<td>Not formally rated but unsatisfactory financial performance</td>
</tr>
<tr>
<td>2001</td>
<td>PRC</td>
<td>China Assets Holdings</td>
<td></td>
<td></td>
<td>Not formally rated but unsatisfactory financial performance</td>
</tr>
<tr>
<td></td>
<td>IND</td>
<td>IL&amp;FS Venture Capital Ltd.</td>
<td></td>
<td></td>
<td>Not formally rated but appears partly satisfactory</td>
</tr>
<tr>
<td>2002</td>
<td>REG</td>
<td>Asia Pacific Ventures Ltd.</td>
<td></td>
<td></td>
<td>Partly successful</td>
</tr>
<tr>
<td></td>
<td>PHI</td>
<td>Walden AB Ayala Ventures Co. Inc.</td>
<td></td>
<td></td>
<td>Partly successful</td>
</tr>
<tr>
<td>2004</td>
<td>IND</td>
<td>AIG Indian Sectoral Equity Fund</td>
<td></td>
<td></td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>


REVIEW OF ADB’S PRIVATE EQUITY FUND MANAGEMENT OPERATION

A. Staffing and Organization

1. The Private Sector Operations Department’s (PSOD) Capital Markets and Financial Sector Division (PSCM) has been responsible for originating and managing the Asian Development Bank’s (ADB’s) portfolio of investments in private equity funds (PEFs) since 2002. Investments in PEFs have been a relatively small although growing part of PSCM’s operations, which encompass trade finance, small and medium-sized enterprise (SME) partial credit guarantees, structured finance, and the support functions of PSCM portfolio management.

<table>
<thead>
<tr>
<th>Staff/Year</th>
<th>2002</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Administration</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: Asian Development Bank records.

2. Although PSCM’s staff numbers have increased by 23% since 2002 (Table A5), there has been a reduction from eight to four in full-time-equivalent staff allocated within PSCM to manage PEFs. This reduction needs to be balanced against the increase in funds assets under management during the same period. Since 2002, ADB’s capital committed to operational investment funds has more than tripled (274% increase) from $187 million to almost $700 million, and the number of funds which need to be monitored has more than doubled from 16 to 40, an increase of 150%. All PSCM staff are responsible for a range of financing operations—not only investment funds. Of the 19 staff in PSCM, there are only three officers dealing with funds, and they all have other duties. Despite the amount of capital involved and the number of funds to monitor, at the time of evaluation, there was no PSCM staff dedicated exclusively to PEFs. Staff responsible for funds is subject to the competing demands of direct investments, securitization transactions, and other PSCM divisional activities.

3. This lack of resources will become more acute in the near future as most of the funds in which ADB has made recent commitments are still in their investment phase. As the funds progress and make their quotas of investments, the number of investee companies (subprojects) which ADB will need to monitor will grow rapidly, potentially more than doubling between now and 2010, with consequent increased demands on staff and pressure on PSCM resources.

4. The current PSCM organization structure and allocation of resources does not provide the focus and capacity to achieve acceptable levels of development and financial performance. Because there are too few staff and they are not 100% assigned to funds operations, the existing organization is inadequately equipped to support the investment funds operation. Reorganization is necessary to provide for dedicated staff with clear reporting lines and leadership to (i) manage these funds prudently for ADB, and (ii) enhance ADB’s role in the

---

1 A PEF will typically have at least 10 investees, indicating that PEF staff in PSCM will have more than 400 companies to monitor.
market by stimulating the creation of innovative new funds and structures to achieve its development objectives.

5. PSCM staff has the necessary skills but, with two of the part-time professional staff being relatively junior dealing officers, the department is inadequately resourced, which creates financial risks for ADB. Staff incentives lag behind the funds industry, where similar staff are paid 3–4 times ADB salary levels and often receive substantial financial bonuses depending on fund performance. This salary gap will inevitably lead to staff turnover. Because it seems unlikely this discrepancy can ever be addressed within ADB’s existing salary structure, which is benchmarked against other multilateral development agencies, other options might be examined, including placing PEFs in an arm’s-length entity affiliated with ADB but not subject to ADB salary scales, or outsourcing the PEF functions to a specialist services provider better able to attract and compensate staff. Such an entity could subsidize the provision of funds portfolio management services to ADB by performing similar services for other institutional clients and achieving economies of scale unavailable to ADB on its own.

B. Private Equity Fund Interaction With Other ADB Departments

1. Regional Departments

6. Fund investments are made largely independent of country partnership strategies (CPSs) and other ADB development planning exercises carried out in the regional departments. Given that funds are externally managed and their managers are not familiar with the public-sector side of ADB’s business, there may be little scope for changing these arrangements. Nevertheless, staff in regional departments might benefit from periodic presentations on funds and an invitation to liaise with PSCM if they become aware of investment opportunities in their respective developing member countries (DMCs) which might be pursued through PEFs. Another area in which interaction between PSOD and the regional departments could be improved is by facilitating feedback from fund managers and executives of investee businesses on regulatory impediments and obstacles encountered when doing business in DMCs. This input on business conditions could be useful to regional department staff in designing sector reform programs and other public sector operations that impact on business regulations and the general economic environment in DMCs.

2. Treasury Department

7. PSCM’s only contact with ADB’s Treasury Department with regard to PEFs occurs when funds are drawdown on ADB’s capital commitments to make investments or pay fund expenses. Capital calls are made by the investment manager and they are sent to each investor in proportion to their capital commitments. For example, if a fund has four investors (including ADB) each with a 25% stake in the fund, and the fund needs to make an investment of $1 million, each of the investors will receive a capital call of $250,000. These capital calls must be met within a short time frame (usually 5–10 working days). Upon receipt of such a capital call,

---

2 In the PEF management industry, the functions performed by PSCM investment funds staff and project administration unit are often contracted out by institutional investors to firms called “gatekeepers”, which occupy a market niche between fund managers and their institutional limited partners. Among other things, gatekeepers screen new fund proposals, assist institutional investors to formulate fund portfolio investment objectives and strategies, liaise with fund managers, monitor fund performance, represent their institutional clients vis-à-vis managers, and prepare financial and nonfinancial reports on fund performance. Gatekeepers can operate competitively through their ability to take on multiple clients for similar services and achieve economies of scale unavailable to end-investors such as ADB. Because they are private sector entities, they can offer competitive compensation and thus attract highly qualified staff.
PSCM notifies the Treasury Department so that funds can be made available. All funds are denominated in dollars and drawdowns are generally relatively small—up to several million dollars. As drawdowns are driven by the fund manager’s deal processing timetable, these disbursements are unpredictable from ADB’s point of view, but they generally have a 10-working-day notice period and can be funded by the Treasury Department easily from its regular daily pool of liquidity. There are no material issues arising in this area.

3. Controller’s Department

8. The Controller’s Department (CTL) interacts with PSCM continuously with regard to fund accounting and accounting treatment of each investment transaction. An issue that has been raised is CTL’s treatment of fund values that can be on either a cost or equity accounting basis, depending upon the fund’s legal structure and the way in which a fund manager prepares and distributes individual investor accounts. According to PSCM, CTL’s practice does not comply with standard international procedures in the PEF industry and this issue should be addressed with CTL staff. Although PSOD knows how to account for and report on funds, and the private investment securities management system (PRISMS) was designed to accommodate these differences, this information is not included in ADB reporting due to systems issues and CTL unfamiliarity with industry practice. There does not appear to be any issues raised with regard to PSCM procedures as they relate to CTL and information flow or accounting for funds flows in and out of ADB.

4. Office of the General Counsel

9. The Office of the General Counsel (OGC) is involved closely in the negotiation and review of the terms and conditions of each of ADB’s fund investments. Fund documentation generally consists of a private placement memorandum, which may also incorporate an executive summary and other marketing literature and a legally binding partnership agreement (in the case of a fund structured as a partnership) or shareholders’ agreement (in the case of a fund structured as a corporation). OGC plays an active role in reviewing structures proposed by fund managers, suggesting changes, and ensuring that ADB safeguards and standard conditions are incorporated into the documents. OGC and PSOD have prepared an extensive checklist of terms for these documents and a due-diligence checklist for use in evaluating funds and managers. These documents are on a par with, or exceed, standards in the industry, and may be considered an important way in which ADB’s participation in funds contributes positively to raising the overall standards of care and quality in the industry.

5. Risk Management Unit

10. The Risk Management Unit (RMU) is involved with PSCM in due diligence and evaluation of each proposed fund investment, and reviews and comments on each proposal. The RMU has the same real-time access to PRISMS as PSCM staff and it can potentially continuously monitor each fund as information is received from fund managers and entered into the system. This arrangement makes PSOD among the most transparent departments in ADB from the point of view of making operational data available in real time. The RMU also receives private sector investment management (PSIM) notes and other reports from ADB’s information systems. However, the RMU does not formally and independently rate the risk of PEF investments once they have been approved by the Board.
6. **Regional and Sustainable Development Department**

11. The Regional and Sustainable Development Department (RSDD) provides oversight of investment proposals to ensure compliance with ADB’s social and environmental safeguards. This arrangement appears to be working effectively at the time of investment approval but RSDD does not provide any material input once the investment is committed. There is no risk-rating system in place for social and environmental impacts (as PEFs are categorized as being financial institutions) or independent monitoring of compliance with requirements once PEF investments are approved.

7. **Office of Cofinancing Operations**

12. ADB, through the Office of Cofinancing Operations, could theoretically play a role in the establishment of new funds, if a manager were to approach ADB with an attractive concept for a fund and needed assistance identifying and contacting other potential investors. Office of Cofinancing Operation does not currently play such a role, but this type of function could fit well with ADB’s stated goals of mobilizing institutional investment into DMCs.

8. **Budget, Personnel, and Management Systems Department**

13. PSCM is constrained in its ability to hire staff to run the funds investment operation. In part this outcome maybe a result of Budget, Personnel, and Management Systems Department constraints, such as the ADB-wide salary structure, which is out of line with private equity industry standards.

9. **Office of Information Systems and Technology**

14. There are issues arising over the adequacy of the management information system. Interaction between the Office of Information Systems and Technology (OIST) and PSCM seems to be confined to the comprehensive loan administration and servicing system (CLASS) and the PSIM notes system. OIST was not been directly involved in the development of PSOD’s departmental PRISMS database, although it did review and approve the overall system architecture when the design phase began in July 2004. An issue that has been raised has been the integration of PRISMS into the broader ADB systems architecture and possible migration of the system from departmental servers to ADB’s mainframe computers, and from Microsoft Access to a true database engine such as Oracle. This integration can only be accomplished using OIST resources, and those resources are already stretched with other larger projects.

15. As the number of funds and their investees grows, greater efforts will be required of PSOD and OIST to automate and streamline data collection from fund managers. OIST has raised concerns about giving fund managers access to the ADB system. As an interim step, OIST and PSCM have devised a system of requiring fund managers to complete and return spreadsheet templates with their quarterly fund financial data. This information can then be imported directly into the database, whereas paper reports must be manually entered by ADB staff, giving rise to risk of clerical error. This system is not yet operational due to ongoing security concerns. To help resolve this issue, ADB can consider following the example of other large institutional fund investors who contract out management to gatekeeper service providers.
C. Access to and Use of Technical Assistance

16. PSOD gained limited access to technical assistance funds from 2005. These funds are being used to help support investee projects in the case of Shorecap International Limited. Shorecap is a $25 million specialty fund established to invest in microfinance institutions in Asia, and ADB has committed $2.5 million as an investor. In addition to the fund investment, ADB made available technical assistance up to a total of $400,000 to certain investees of the fund to assist with strengthening management and developing information systems. This type of assistance brings PSOD into line with regional department operations, where technical assistance is extended in parallel with loans to assist with implementation, capacity building and other areas to increase the effectiveness of a loan. If the Shorecap experience is positive, consideration should be given to expanding this type of PSOD technical assistance activity.

D. Sourcing and Evaluating Investment Proposals

17. ADB has traditionally targeted medium-sized funds (Figure A5.1).

18. Fund investment opportunities are presented more or less spontaneously to PSOD by PEF managers through a variety of conventional channels for new business such as (i) proposals for new funds from managers of existing funds in which ADB is an investor, (ii) proposals from contacts made at conferences, and (iii) referrals by other investors or managers. These proposals and ideas for funds come to ADB’s attention primarily from the private equity industry itself, and most members are unaware of CPS programs and ADB’s development priorities. PSCM evaluates proposals using an internal due-diligence methodology which conforms to, and exemplifies, standards of best practice in the international private equity industry. Following evaluation and due diligence, regular ADB project processing occurs, including preparation and submission to the Board of reports and recommendations of the President (RRPs). Following Board approval, PSCM staff, assisted by OGC, complete the
investment, create records for the fund in ADB’s information systems, and initiate the operation of the PEF.

19. PSOD categorizes funds according to a matrix of (i) the countries in which they invest or propose to invest, and (ii) the experience level of the fund manager. Figure A5.2 presents an analysis of ADB’s exposure according to these categorizations, showing the number of investees and total amount invested in each cell of the matrix. The largest exposure, totaling 135 investees with an investment value of $1,901.9 billion, has been made by PEFs investing in middle-tier countries such as India and the People’s Republic of China (PRC), which are being managed by the most experienced fund managers. The next largest exposure is 66 investees with an investment value of $984.38 million, which is allocated to funds in middle-tier countries that are being managed by less-experienced management teams. Highly experienced management teams operating in newly industrialized economies such as the Republic of Korea are the third-highest exposure, and so on down to the 10 investees with a total investment value in funds of $15.42 million being managed by the least experienced managers operating in frontier markets such as Cambodia, Fiji, Papua New Guinea and Sri Lanka. This structure represents a prudent approach to portfolio management. However, it raises the issue of whether ADB, by concentrating its resources on relatively established fund managers operating in countries which already attract large volumes of investment capital from other sources, is playing as much of a developmental role as it could.

![Figure A5.2: ADB’s Private Equity Fund Portfolio ($million) (as of 30 September 2007)](image)

ADB = Asian Development Bank.
Source: PRISMS database.

20. In July 2007 PSCM issued a call for proposals from the fund management community for clean energy thematic PEFs.³ This is the first time ADB has developed a thematic fund concept

internally and taken it to the market. This initiative arose from joint discussions between PSOD and RSDD about how to extend ADB’s Energy Efficiency Initiative into the private sector in DMCs. The call for proposals is intended to stimulate the Asian private equity industry to create and raise funds for new energy-focused investment vehicles. It remains to be seen whether the call for proposals model can be refined, expanded, and applied to attract private sector investment to other ADB development priorities such as in education, health care, water, sanitation, and urban services.

21. PSCM’s approach to selection of viable funds once investment opportunities have been presented to ADB is working effectively. An issue is whether ADB can do more to stimulate the emergence of new funds and new types of funds which are closely aligned with ADB’s development objectives. On the whole, ADB’s current approach is passive—devoting most resources to screening and investing in funds where prospective investors directly approach PSCM. As a development institution, ADB could more effectively stimulate the development of the private sector in DMCs by investing more in new types of funds and new (especially local DMC) management teams, where capacity exists or can be developed, perhaps through an ADB-led program of making partnerships with international private equity firms.

22. A related issue is ADB’s practice of investing in “follow-on” funds—second or third funds organized by a given fund manager. Once a manager and its investment themes and strategy are sufficiently well established for them to raise another fund along the same lines as the prototype, it is open to question whether ADB is playing a developmental role by investing in subsequent funds. There is a strong argument that ADB should refrain from investing in second- or third-generation funds run by already established managers and concentrate instead on identifying and stimulating investments in new areas where the private sector needs support.

23. A greater percentage of ADB resources might be allocated to new and emerging fund managers, especially where they are focusing on new and experimental areas of private equity such as difficult markets, new sectors, closer involvement with public–private partnerships (PPPs), new appropriate technologies, and new ways to attract private financing to the provision of basic needs and services such as clean water and sanitation. Conversely, it can be argued that established successful managers are more effective at creating positive private sector development impacts through private sector investment as they have personnel on the ground in investee countries, proven investment strategies, management systems in place, and experience. There is also a question of financial sustainability of PEF investments that needs to be considered when establishing strategic priorities.

E. Portfolio Management and Reporting Systems

24. In 2004, PSOD began developing PRISMS, a departmental relational database and management information system to monitor and report on performance of PSOD’s investee funds and subinvestments. Prior to PRISMS being commissioned, PSOD relied on paper reports from managers and partial encoding of data into a series of spreadsheets. At that time, apart from PSIM notes (which were considered inadequate for the task), there was no integrated departmental monitoring or reporting system covering ADB’s exposure to investment funds and their investees. Currently, after going through two major development phases, PRISMS is maintained by the PSCM Portfolio Administration Unit (PAU), and reports from the system are primarily used for internal administrative purposes within PSOD. Future plans for departmental systems include migration of PRISMS onto an OIST mainframe computer, improved integration of reporting, and wider internal dissemination of reports.
25. The current portfolio management information flow consists of the regular quarterly reports and accounts prepared by each fund manager. These documents contain detailed information on issues such as each of the fund’s investee companies, new investments under consideration, and transactions being prepared to liquidate investments. Generally, fund managers prepare accounts for each of the fund’s investor partners which reflect that partner’s prorated share of all fund activities, investments, income received, and expenses. These reports are received by ADB and the information is entered into PRISMS by PAU staff and passed to CTL for entry into CLASS where appropriate. Fund managers are being encouraged to issue these reports in electronic format to enable electronic processing by ADB. PSOD is working with OIST to streamline this process, but it has raised a range of issues, including whether outside fund managers should be allowed to access ADB systems directly and, if not, how information should be transmitted so it can be imported directly into the database.

26. Similar to other parts of ADB, there are no departmental business plans against which development and financial performance of the department or its investments in PEFs can be formally benchmarked. In mid-2004, PSOD addressed this issue by commissioning and implementing PRISMS, and it is working to update its project performance evaluation system in association with the Operations Evaluation Department (OED). Currently PSCM does not prepare annual reports on investments in private equity funds projects, although there is an intention to introduce this type of system. PSCM receives quarterly and annual reports from all fund managers. PRISMS data is entered when it is received from managers and includes changes in managers’ valuation of outstanding investments (which is not tracked by CTL), so it presents the most up-to-date information available in ADB on the PSCM funds portfolio. The only OIST-generated reports which track PSCM’s funds performance are PSIM notes. The PRISMS database and management information system is the primary source of data on the funds. PRISMS contains actual data such as cash proceeds of realized investments, and estimated data such as fund managers’ valuations on open investments. While there is an acceptable level of financial information, there is a lack of data on development, environmental, and social impacts at the investee level. Fund managers should be required to report on their “triple bottom line” in a similar manner to the International Finance Corporation’s (IFC) evaluation system for its investees. Fund managers’ compliance with ADB’s data-gathering requirements could be made a condition of investment, particularly where positive social and environmental impacts are an explicit objective of a fund.

27. The overall reporting systems and procedures for PEFs needs to be improved to better measure performance, manage critical risks, and achieve investment objectives. The evolution of the PRISMS system should continue so reports can be mainstreamed within ADB, and the accounting treatment and performance reporting on funds be brought into line with international norms, such as those defined by the European Venture Capital Association.

F. Risk Management

28. Although financial risks seem to be well understood and addressed through PSOD’s regular quarterly meetings at which investment risk-ratings are reviewed and, if necessary, adjusted, there seems to be no regular internal ADB assessment, reporting, or focused management of reputational, environmental, or other nonfinancial risks. This issue is particularly important at the investee level where any problems such as environmental damage, child labor, or other forms of corporate misconduct, are most likely to occur. It is highly unlikely that a PEF manager will engage in activities such as employing underage workers in its Hong Kong, China fund management office. However, ADB should consider that it is conceivable an investee company in which a fund invests might do so. If such corporate misconduct were to come to the
public’s notice through an event such as a widespread product safety issue arising at an investee\(^4\) that was uncovered by a nongovernment organization, the press, or by regulators, it could damage ADB’s reputation. To help address this issue, mechanisms can be put in place to regularly review PEFs on at least an annual basis, and rate and independently monitor these risks.

G. Conclusions

29. To help resolve some of the issues identified above, the following options can be considered by ADB Management:

(i) Reorient future fund activities to middle-tier markets such as Indonesia, Pakistan, and the Philippines that are not subject to the same buoyant private equity conditions as countries such as India and the PRC, and where ADB can play a more catalytic role.

(ii) Strengthen country programming arrangements so there is better coordination between the use of debt and equity for SME development, with a focus on facilitating private sector development and financial intermediation within countries, rather than pursuing individual transactions.

(iii) Establish a formal mechanism for PSOD to report to regional departments on PEF constraints and consider pursuing opportunities for fund managers to make presentations to regional departments on PEF needs.

(iv) Assign greater responsibility to PSOD for diagnosing SME funding constraints within CPSs and providing it with additional voice when allocating technical assistance to address SME enabling environment constraints.

(v) Regional departments can develop technical assistance programs to address enabling environment constraints for PEFs, such as developing venture capital associations and regulations, strengthening intellectual property and minority shareholder rights, developing NASDAQ type secondary boards at stock exchanges for SMEs, removing constraints on foreign direct investment, and improving access to domestic equity.

(vi) Investigate potential for participating in more special-purpose PEFs that have a tighter development focus in areas such as infrastructure, clean energy and venture capital.

(vii) Develop new SME programs in areas such as cluster development, and strengthen links between universities, technical institutes, and SMEs using private equity as a catalyst.

(viii) Prepare a formal operational strategy for PEFs setting out principles for managing the overall portfolio, identifying targeted countries and subnational regions, sectors, styles and sizes of funds, and desired development impacts, and linking where appropriate to regional department initiatives in areas such as financial, state-owned enterprises, and infrastructure investment and reform.

(ix) Review ADB’s policy on the level of investments in PEFs relative to direct equity.

(x) Investigate ways of strengthening future fund financial agreements in areas such as more clearly defining PEF investment plans, linking ADB drawdowns to performance targets, and making greater use of ADB decision rights such as opt-out and veto clauses.

---

\(^4\) There have been numerous such cases recently, in a wide range of industries such as toothpaste and toys, where problems would not normally be expected.
(xi) Review PSOD strategy on fund governance, and whether it should pursue a more nuanced strategy of participating in investment committees and advisory boards of less-experienced fund managers in frontier counties.

(xii) Develop a project administration instruction defining procedures for PSOD to obtain approval to make changes in investment scope of PEF investments.

(xiii) Consider establishing PEF operations as a stand-alone portfolio that could potentially manage both direct and indirect equity investments.

(xiv) Note that based on industry experience, the current staff allocation for professional staff originating and managing PEFs is less than half the amount that would be effective to achieve development objectives and prudent to manage financial and nonfinancial risks.

(xv) Consider selling a proportion of the PEF portfolio, possibly by establishing the PEF operation as a stand-alone fund of funds packaged to attract outside investors, to help release ADB capital to recycle it into new and emerging funds.

(xvi) Consider outsourcing some or all of the PEF management functions to a private firm (in which ADB could be a shareholder as well as a client).

(xvii) Consider broadening Office of Cofinancing Operation’s operations to include a PEF brokering function to strengthen ADB’s role of catalyzing third-party private investment.

(xviii) Assign PSOD staff to resident missions to support PEF origination and management functions in specific target countries.

(xix) Put in place contractual provisions and a budget to allow for independent audits of PEFs where there are concerns about conflicts of interest in transactions between the fund manager and related parties.

(xx) Establish a continuous performance monitoring system for PEFs along the lines of the IFC’s Development Outcome Tracking System.

(xxi) Define procedures to collect data from fund managers in areas such as development impacts, and compliance with social and environmental safeguards, and submit information using a standard electronic format that can be easily uploaded to PRISMS.

(xxii) Prepare annual business plans within PSOD at the beginning of each year that link proposed development strategies with operational resource needs including staff, budget, technical assistance, and systems development initiatives.

(xxiii) Develop standardized output tables for fund financial reports that are electronically linked to PRISMS and PSIM notes, and which reflect best-practice PEF reporting standards, such as those defined by the European Venture Capital Association.

(xxiv) Align ADB’s accounting systems for PEFs with industry practice.

(xxv) Require PSCM to review and report on each PEF on at least an annual basis.

(xxvi) Extend the scope of the RMU to independently review post-approval PEF risk ratings on financial risks on at least an annual basis.

(xxvii) Require PSCM to prepare end of year annual reports for the Board, Management, and other stakeholders on the performance of the entire PEF portfolio, illustrating the degree of achievement of financial and development objectives, management of risks, and linking with operational issues identified in the business plan on PEF portfolio management and resources.
EVALUATION OF FINANCIAL INTERNAL RATE OF RETURN
AND WEIGHTED AVERAGE COST OF CAPITAL

A. Overview

1. The Asian Development Bank’s financial internal rate of return for investing in private
   equity funds is calculated and compared with its weighted average cost of capital (WACC). The
   critical assumptions underpinning these calculations are set out below.

B. Financial Internal Rate of Return

2. The financial internal rate of return is calculated in nominal terms based on cash flows
   paid to and received from the private equity funds.

C. Illustrative Calculation of the Weighted Average Cost of Capital

3. The WACC is calculated using a methodology developed by the Stern School of
   Business, New York University and it is as follows:

   \[
   \text{Required return} = \text{risk-free rate} + \beta (\text{Risk premium})
   \]

   \[
   \text{where:}\n   
   \begin{align*}
   \text{Risk-free rate} & = 4.5\%, \text{ being the current long-term US Treasury bond rate}^3 \\
   \beta & = 1.0, \text{ on the assumption that the volatility of the asset} \\
   & \text{composition of the portfolio will be a reasonable reflection of} \\
   & \text{the asset volatility of the Asian market} \\
   \text{Risk premium} & = \text{Market risk premium} + \text{country risk premium} + \text{liquidity risk premium} \\
   \text{Market risk premium} & = 4.15\%, \text{ based on US market observations (Damodaran,} \\
   & \text{footnote 2)} \\
   \text{Country risk premium} & = \text{a regional default spread of } 1.2\% \text{ multiplied by } 1.5,^4 \text{ deriving} \\
   & \text{a premium of } 1.8\% \text{ based on Asian regional market} \\
   & \text{observations (Damodaran, footnote 2)} \\
   \text{Liquidity risk premium} & = 2\%, \text{ based on market observations (Damodaran, footnote 2)}
   \end{align*}
   \]

1 The calculations have been prepared in accordance with the evaluation procedure presented in the Operations
   Evaluation Department’s Guidelines for the Preparation of Performance Evaluation Reports of Nonsovereign
   Operations. As private equity funds consist exclusively of equity finance, there is no debt component included in
   the WACC.

2 The methodology is elaborated on in the paper by Aswath Damodaran, Equity Risk Premiums. Available:
   http://pages.stern.nyu.edu/~adamodar/


4 This figure is based on an observation noted by Damodaran (footnote 2), that the ratio of the volatility of the equity
   market relative to the bond market is typically in the order of 1.5.
4. The current derived WACC in dollar terms is 12.5% and the average WACC over the last 24 years is 14.3%. Trends in the WACC over time are illustrated in Figure A6, based on the return from 10-year US Treasury Bills.

Figure A6: Returns from 10 US Treasury Bills and the Derived Indicative CAPM Benchmark

CAPM = capital asset pricing model; US = United States. Source: Federal Reserve Bank; OED Estimates.