Mexico’s New Infrastructure Investment Vehicles: The Case of the Cerro de Oro Hydroelectric Project
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INTRODUCTION

In recent years, government officials from around the world and representatives from the private sector have come to agree that infrastructure constitutes a key pillar of development and global economic growth. This view is based on the argument that infrastructure investment represents an opportunity for promoting sustainable and inclusive growth, as well as creating jobs, which in turn improves health, education, and other development indicators. Worldwide, infrastructure spending is estimated at US$2–3 trillion per year, and it is believed that an additional US$4 billion is needed annually between now and 2030 to meet infrastructure needs.

The dominant trend for mobilizing such financing is to create new investment vehicles that facilitate the private sector's involvement in infrastructure projects and that rely on public resources, meaning that the risk is not only shared but, to a large degree, borne mainly by taxpayers. One important source of funding is pension funds; in this regard, governments have recently loosened their regulatory frameworks to allow these funds to be invested in infrastructure projects that are often risky and a threat to local communities' human rights. As we will demonstrate in this article, Mexico is a clear example of this trend. We will show this by analyzing the changes in the country's laws, policies, and programs and examining how such changes are reflected in the case of Cerro de Oro.

In the first section, we will explore global trends in infrastructure financing. In the second, we will analyze how such trends have manifested themselves in Mexico, particularly through the use of Mexican pension funds and the creation of new infrastructure investment vehicles. In the third, we will explain how the new financing framework can be seen in the Cerro de Oro hydroelectric project in Oaxaca, including the impacts of this project on local communities. We will conclude the article by offering some reflections on this new infrastructure investment model within the Mexican context.

I. TRENDS IN INFRASTRUCTURE FINANCING

In recent years, world leaders and international organizations have placed increasing importance on infrastructure financing within the international economic agenda. By infrastructure, we mean both economic infrastructure (e.g., transportation, energy, communications, water) and social infrastructure.
(e.g., schools, hospitals, prisons, stadiums). The G20’s Multi-Year Action Plan on Development,\(^4\) issued in 2010, states that “gaps in infrastructure, including with respect to energy, transport, communications, water and regional infrastructure, are significant bottlenecks to increasing and maintaining growth in many developing countries.”\(^5\) Since the publication of this action plan, infrastructure has evolved from being a thematic focus of one of the G20’s working groups—groups that operate on the margins of the G20’s agenda—to being a central part of the G20’s plenary session agenda. Such is the issue’s importance that it has been one of the few to remain on the G20’s agenda and to gain increasing visibility over the years, despite changes in the group’s presidency.

In this sense, after establishing a consensus on the level of investment required for driving development through infrastructure, global forums such as the abovementioned G20 and the Business 20 (B20) have focused their attention on how to guarantee the level of resources necessary to finance infrastructure, as well as the policy and regulatory changes required to facilitate and accelerate investment in this sector.

As a result, the G20 has proposed a new model for infrastructure investment and financing that aligns with the models embraced by other international entities, such as the Organisation for Economic Co-operation and Development (OECD) and various multilateral development banks and financial institutions. Among other things, this new model promotes the following:\(^6\):

- A strengthened investment climate that facilitates the policy reforms needed to attract and protect the interests of private investors in public-private partnerships within the infrastructure sector.
- The identification of infrastructure megaprojects that promote economic integration and trade at the regional, continental, and global levels.
- The use of “project preparation facilities” to compile lists of projects eligible for financing in each geographic region.
- The use of public money, such as taxes and pension funds, to offset the risk for institutional investors. Institutional investors are entities that collect and consolidate the funds of a group of members and invest them in the members’ collective interest. They include pension funds, insurers, sovereign wealth funds, and investment companies.

In this vein, a key element of this new model is the conception of infrastructure as a class of financial asset that requires designing, creating, and marketing various financial instruments in order to raise funds for infrastructure. Globally, more than US$79 billion are estimated to be in the hands of pension funds, insurance companies, mutual funds, investment funds, and sovereign wealth funds and are thought to be apt for investment in infrastructure projects that promise long-term returns.\(^7\) This model’s hypothesis is thus sustained on the premise that such entities (or at least the majority of them) are interested in long-term investments—a premise that harmonizes well with the cycles of infrastructure projects.

\(^4\) The G20 comprises nineteen member countries and the European Union. It represents one of the key decision-making arenas in terms of economic cooperation among its members. For more information, see https://g20.org/about-g20, accessed June 17, 2015.


In this case study, we aim to demonstrate how macro-level discussions, such as those taking place within the G20 and the OECD, are reflected at the national level and are materialized in a specific project at the local level. As we will reveal, Mexico has embraced the OECD’s principles for long-term investment through a number of actions: (1) it has ensured that its legal and institutional environment is amenable to the development of long-term institutional investors; (2) it has promoted policies for mobilizing savings and has created various mechanisms for this purpose; and (3) the financing instruments that it has created distribute risk in such a way that offers increased security to the private sector. In general, this approach implies direct negative impacts on the communities who live in the areas surrounding such projects, while failing to offer any real benefits to these communities, as we will see in the case of Cerro de Oro.

II. THE CERRO DE ORO HYDROELECTRIC PROJECT

The Cerro de Oro project involved the conversion of the Cerro de Oro dam—also known as Miguel de la Madrid Hurtado—into a hydroelectric plant. The dam was built on the Santo Domingo, San Juan Evangelista, and Tesechoacan Rivers in the county of Tuxtepec in the state of Oaxaca, Mexico, between 1974 and 1989 under the “developmental state” model—that is, a model that placed development within a national framework through the promotion of large-scale infrastructure projects (Figure 1). The hydroelectric project involved the expropriation of the territory of 26,000 indigenous Chinantecs inhabiting thirty-seven ejidos in order to allow the government to flood 36,000 hectares of fertile land. In Mexico, ejido refers to a rural communal landholding shared by a group of indigenous or mestizo farmers, who are referred to as ejidatarios. Ejidos function according to their own internal regulations.8

Figure 1. Tuxtepec, Oaxaca, Mexico

8 Ejidos’ organizational structure includes a general assembly comprising all ejidatarios; a commission comprising a commissioner, secretary, and treasurer, each with a substitute; and a supervisory board comprising three individuals tasked with monitoring the performance of the commission and the implementation of agreements adopted by the general assembly. See Ley Agraria. Available at http://www.diputados.gob.mx/LeyesBiblio/pdf/13.pdf, accessed April 10, 2015.
The hydroelectric project consisted of the construction and operation of a turbine generator with a 10.8-megawatt output; an electrical substation to raise the output voltage from the central station to 115 kilovolts; and a 10.5-kilometer double-circuit transmission line that would connect with the energy transmission and distribution network of the Federal Electricity Commission. In total, the project required a surface of 268,624 square meters (6,072 square meters for the hydroelectric plant and the substation, and 262,552 square meters for the transmission line).

The project’s partners estimated that the hydroelectric plant would have a useful life of fifty years, subject to the acquisition of concessions and revalidations from the National Water Commission. In the project’s environmental impact assessment, the partners calculated that it would take approximately twenty-four months to obtain the appropriate credits and permits for the project; thirty-six months for the site’s preparation and construction; and fifty years for the operation and maintenance of the hydroelectric plant. From start to finish, the project would span fifty-five years.

Project Costs

The partners projected an investment of US$29.614 million for the dam’s conversion into a hydroelectric plant. Table 1 contains a breakdown of this figure.

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount (millions of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil works</td>
<td>9.06</td>
</tr>
<tr>
<td>Electric systems and equipment</td>
<td>8.63</td>
</tr>
<tr>
<td>Transmission line and interrupters</td>
<td>2.90</td>
</tr>
<tr>
<td>Development costs</td>
<td>2.81</td>
</tr>
<tr>
<td>Financial costs</td>
<td>4.11</td>
</tr>
<tr>
<td>Incidentals and other</td>
<td>1.90</td>
</tr>
<tr>
<td>Training</td>
<td>0.20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29.61</strong></td>
</tr>
</tbody>
</table>


In addition, the partners projected six years for the recovery of the investment, subject to the project’s financial and credit conditions, as well as the power generated during the production stage. In the environmental impact assessment, they estimated that 2 percent of the project’s costs would be spent on unforeseen expenses, prevention measures, and the mitigation of impacts. Financing for the

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9 The Federal Electricity Commission is a state-owned enterprise responsible for controlling, generating, transmitting, and marketing electricity throughout Mexico; it has held this function since 2009. See http://www.cfe.gob.mx/ConoceCFE/1_AcercaDeCFE/CFE_y_la_eletricidad_en_Mexico/Paginas/CFEvlaelectricidadMexico.aspx, accessed April 10, 2015.


hydroelectric plant was in line with the new infrastructure investment model, which promotes the use of public funds for infrastructure projects through investment vehicles that simultaneously place the bulk of risk on taxpayers and impede due diligence, as we will show later below.

**Institutional Investors: Their Role within the New Model**

As mentioned above, institutional investors play a prominent role in this new financing model for infrastructure, and they are arguably the factor that requires and conditions several of the model's aspects.

The idea of redirecting a small percentage of public resources—such as savings in institutional funds—toward infrastructure in order to satisfy a country's pressing unmet needs is, at first glance, rather attractive. Nonetheless, there are several aspects in this regard that the model's proponents have been unable to adequately address.

Given that institutional investors seek stable and inflation-adjusted income streams, they are interested primarily in mature assets, which are assets with a demonstrated operating history and a predictable cash flow.\(^\text{14}\) The classic example of a mature asset is infrastructure that has already been built and that is generating a revenue stream through the payments of users (or others stipulated in the contract). Moreover, one of the main arguments for infrastructure investment is that infrastructure assets offer greater-than-average returns, even when adjusted for risk.\(^\text{15}\) It is important to bear in mind that for more than a decade, the rates of return offered by low-risk assets, such as government bonds, have been depressed\(^\text{16}\) and that several institutional investors, such as pension funds, are under pressure to ensure solvency in the face of elevated needs and lower revenues.\(^\text{17}\)

Institutional investors with a long-term investment horizon do not like risk. In some cases—as with pension funds—managers’ or trustees’ authority to assume risk is extremely restricted.

In reality, however, infrastructure investment is highly risky. Arguments that infrastructure assets offer relatively high returns in the long term are based on measurements that amalgamate different sectors of infrastructure as if they all belonged to the same category, and they do not control for the excessive use of debt leverage. They also attribute more benefits to diversification than would be possible through the inclusion of infrastructure assets in investors’ asset portfolios. Here, it is important to point out that these same virtues were preached at the beginning of the century with regard to commodities. But the growth of financial investments in this sector soon led to these assets evolving in the same direction. In other words, the involvement of financial actors in a certain type of asset tends to influence the asset’s behavior, as well as the real economy itself. If infrastructure follows the same path, there is no reason to believe that we will not witness the same effect, which could quickly eradicate any advantages offered in terms of diversification.

\(^{14}\) World Bank, *op. cit.*, p. 5.

\(^{15}\) Ibid., p. 2. In theory, in any investment, increased risk is what justifies bigger gains or returns for the investor. Adjusting the returns for risk implies measuring an asset’s returns by evaluating how much risk is involved in generating these returns, thereby enabling a comparison of profitability among assets with similar levels of risk.


How, then, can risk for private investors in infrastructure be reduced while simultaneously guaranteeing the desired returns? The answer is simple: by transferring this risk to others. In order for the scheme to function, it is essential to mitigate investors’ risk, especially during the initial stages of the project—for example, during the design and construction phases, when risks are usually elevated. One way to achieve this is for governments to establish new financing vehicles that utilize public resources. In addition, in order to decrease investment risk, governments can modify their laws to bolster private financing for infrastructure. In both cases, the result is essentially the transfer of risk to the public sector, taxpayers, and the communities that supposedly stand to benefit from the infrastructure projects.

This transference of risk is evident in the words of a senior executive at an asset management company: “Infrastructure assets tend to hold monopolistic or quasi-monopolistic market positions and thus enjoy high barriers to entry and sustainable competitive advantage. Infrastructure assets offer stable, predictable current returns that are frequently linked to inflation via either a regulated return framework or a contracted rate of return. These assets … have relatively low operating risk with a demand and price profile that tends to be relatively inelastic. Thus, tolls can be raised or the rates for electricity, water, or gas can be increased without having a material negative impact on demand.”

This explains investors’ preference for brownfield opportunities—projects that are already in operation or that have a predecessor on the same site—over greenfield ones, which are entirely new and begin from scratch.

The creation and marketing of financial instruments that are secured by cash flows or physical assets in infrastructure, coupled with the conception of infrastructure as a “class” of financial asset, could worsen some of the aforementioned problems by leading to a greater “financialization” of the sector. Financialization refers to the increased presence, interest, and influence of financial markets, financial elites, and financial institutions in the economy.

Financialization is associated with a greater transfer of income from the real sector to the financial sector, as well as increased income inequality. In addition, at the macroeconomic level, it translates into greater volatility—which, in turn, contributes to deepening income inequality. Some authors have referred to the financialization model in infrastructure as a case of “financial extraction.”

As the layers of financial intermediation rise, so does the need to compensate the various intermediaries, thereby increasing the returns required for a project to be viable. In many cases, institutional investors are not those who invest in the project but rather those who entrust this work to other entities, such as asset management companies.

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22 Ibid.
This tendency calls into question another underlying pillar of the model: that institutional investors are interested in long-term projects. While this holds true for many such investors, it is important to keep in mind that they frequently entrust the investment to other actors whose eyes are fixed on the short term—in part because the incentives of those entrusted with the investments are based more on the number of transactions performed than on the intrinsic returns that certain assets may yield. It is estimated that more than 80 percent of pension funds with infrastructure investments have these investments through intermediaries such as investment funds or venture capital firms.

In addition to recommending that the state absorb the investment risk via its taxpayers, this new model calls for financial institutions to cluster projects into packages according to country, sector, or region, thereby allowing investors to purchase shares within a wider—and thus, supposedly, less risky—range of projects. Although it is true that diversification might reduce the risk associated with investing in infrastructure, the recommendation to securitize packages or sets of projects could also create precisely the opposite result. The more layers of securities there are between the funds’ final destination and the certificate acquired by the investor, the more difficult it becomes for the investor to obtain an exact panorama of the projects being financed, which inhibits the ability to exercise due diligence. This leads to increased risks and opportunities for unscrupulous market players to speculate on the basis of asymmetrical information.

While there are many instruments for channeling financing toward infrastructure projects, some are more common than others. Figure 2 outlines a few of the vehicles that have been created to finance infrastructure projects. For example, in developing countries and emerging economies, direct shareholding is less common, while infrastructure bonds and public-private partnerships are more prevalent. There are also many examples of the indirect or fund route, which offers access to more than one project, thereby diversifying risk. In addition, various commercial funds for infrastructure investment have emerged—namely, venture capital, mutual funds, and infrastructure trusts listed on international stock indexes.

The vehicles for structuring infrastructure financing are growing increasingly diverse. The most common ones include the following:

- **Debt financing:** loans to the owners or operators of infrastructure projects.
- **Public infrastructure companies:** capital investment in companies related to the infrastructure sector. Investors gain visibility through passive investments in stock indexes or actively managed strategies.
- **Infrastructure funds:** the investment of resources—often pension funds—in equity funds listed on a public stock exchange (e.g., Brookfield, Macquarie Power and Infrastructure Corporation) or in unlisted funds that focus on infrastructure investments (e.g., Cube Capital, Alinda).

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26 Alexander, op. cit., p. 7.
27 “Securitization” is the process by which the income streams accompanying a contract or set of contracts with similar characteristics—for example, mortgages or phone bills—are transformed into a security. This security can then be traded in financial markets, enabling the holder to collect revenue from the products of the underlying assets.
Direct investment or co-investment in infrastructure funds: capital investment in a single-project company or in a portfolio of assets for infrastructure that provides diversification into sectors and distinct geographical locations.

To encourage countries to facilitate long-term investments by institutional investors such as pension funds, insurers, and sovereign wealth funds, the OECD and G20 have adopted the High-Level Principles of Long-Term Investment Financing by Institutional Investors. These principles outline preconditions for long-term investments and promote the implementation of savings mobilization policies, fiscal and tax policies conducive to investment, and financing vehicles that provide risk mitigation to investment projects, among other things.²⁰

The principles reflect a desire to protect investors and encourage regulatory changes that foster and accelerate investments. In the case of pension funds, alternative assets have forced fund administrators to plan and monitor risks within their portfolios in a different way. The OECD recommends that pension funds quantify their risk tolerance depending on the risk level of the fund as a whole, but also that they understand how such risk is distributed across various assets and specific investments.²¹

The allocation of pension fund investments is affected by the type of retirement plan supported by these funds. Retirement plans can be characterized as being defined-benefit, defined-contribution, or hybrid plans—and different types of plans give rise to different liabilities. In defined-benefit plans, investors react to market information, while in defined-contribution plans, investments are subject to behavioral


In recent years, reforms in Mexico have led to a transition from defined-benefit pension schemes to defined-contribution ones. In the latter, responsibility for growing the fund, as well as for the risks involved, is transferred to individual members. Compared to defined-benefit plans, defined-contribution plans require members to share various kinds of risk, such as market risk, inflation risk, and longevity risk. In defined-contribution schemes, one key area of risk has to do with the investments made. In effect, this risk is transferred to pension fund members, but the reputation of pension fund managers depends fundamentally on the investment performance achieved. Figure 3 shows the types of pension plans that are prevalent in selected OECD countries, including Mexico.

This tendency to adopt new and complex financing strategies poses a challenge for the traditional governance of pension fund models, as it requires technical knowledge of risk management vis-à-vis new and diverse financing vehicles, as well as knowledge of infrastructure projects in which these resources have historically not been invested. Moreover, the methodologies and definitions currently used to classify infrastructure investments vary widely, making it difficult to draw comparisons. Each country seems to be undertaking regulatory reforms and implementing the aforementioned principles in its own way; nonetheless, the foundations of this new model are reflected in these reforms. Here, Mexico is no exception, as we will see in the following section.

Figure 3. Relative shares of defined-benefit and defined-contribution pension funds in selected OECD countries, 2013

This figure shows the relative shares of defined-benefit and defined-contribution pension funds in selected OECD countries, 2013. The chart indicates the percentage of total assets devoted to each type of pension fund. Data refer to occupational pension plans only, and the source is OECD Global Pension Statistics.


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Mexico’s Infrastructure Investment Model

his new infrastructure investment model is at the center of Mexico’s infrastructure financing policy. The country’s 2014–2018 National Infrastructure Program\(^{34}\) identifies infrastructure investment as a strategic and priority issue for the country, noting that it represents a means to foster development and economic growth and is key to increasing competitiveness. One of the program’s challenges is financing. The program envisages a total investment of US$575 billion\(^{35}\) through 743 projects, as shown in Table 2.

Table 2. 2014–2018 National Infrastructure Program budget distribution

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of projects</th>
<th>Billions of dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications and transportation</td>
<td>223</td>
<td>98.5</td>
</tr>
<tr>
<td>Agricultural, territorial, and urban development</td>
<td>4</td>
<td>138.9</td>
</tr>
<tr>
<td>Energy (Federal Electricity Commission)</td>
<td>133</td>
<td>39.6</td>
</tr>
<tr>
<td>Energy (Pemex)</td>
<td>129</td>
<td>251.26</td>
</tr>
<tr>
<td>Hydraulics</td>
<td>84</td>
<td>31.17</td>
</tr>
<tr>
<td>Health</td>
<td>87</td>
<td>5.43</td>
</tr>
<tr>
<td>Tourism</td>
<td>83</td>
<td>13.53</td>
</tr>
</tbody>
</table>


To meet the program’s large investment requirements, the government has projected at least 37% of the financing to come from the private sector.\(^{36}\) One incentive for this sector to invest is Mexico’s reformed retirement savings system, as described below.

Reforms to the Retirement Savings System

In the 1980s, Mexico’s pension system was run by the Mexican Social Security Institute. The system was a defined-benefit scheme, and active workers’ contributions covered a large part of retired workers’ pensions. In the early 1990s, increased life expectancies and a decreased birth rate in Mexico meant that the share of active workers with regard to retired ones dropped considerably, affecting the funds available for pension payments.\(^{37}\)

As a response to this situation, in 1996, the government passed a new Retirement Savings System Law, replacing the defined-benefit program with a defined-contribution one based on individual capitalization accounts in which the contributions of workers, employers, and the government are pooled together. With this reform, pension funds were transformed into a source of capital for financial markets and created a permanent source of long-term capital.


\(^{35}\) In pesos, 7.7 billion. We converted pesos to dollars using the exchange rate set by the Bank of Mexico for April 28, 2014: http://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?accion=consultarCuadro&idCuadro=CF373&sector=6&locale=es.

\(^{36}\) Ibid.

The following year, the government amended this new law. Ángel Gurría, then treasury secretary and currently OECD’s Secretary-General, wrote in a document submitted to the International Monetary Fund: “The government plans to relax investment restrictions by (1) allowing the private pension funds to invest more in private sector instruments and (2) allowing private pension fund managers to offer more than one fund (with varying degrees of risk).” This reform facilitated private sector participation through AFOREs, privately managed pension funds in charge of managing individual savings accounts. In addition, the reform created SIEFOREs, investment companies specializing in pension funds, which are used by AFOREs to invest workers’ funds.

In 2009, the Retirement Savings System Law was amended yet again with the aim of easing restrictions on SIEFOREs, allowing them to perform indirect capital investments through an instrument known as a development capital certificate (certificado de capital de desarrollo, or CKD). As of May 2014, SIEFOREs’ net assets represented 22.54% of domestic savings. The assets managed by AFOREs occupy second place within the financial system, as demonstrated in Figure 4.

![Figure 4. Mexican financial system assets](https://www.consar.gob.mx/principal/pdf/elsar_mayo2014.pdf)

Figure 4. Mexican financial system assets


Currently, the assets invested in SIEFOREs represent 14.2% of Mexico’s gross domestic product, and there are twelve AFOREs in the Mexican market that manage 51.1 million accounts. Between 2008 and 2015, Mexican pension funds’ assets under management more than doubled, reaching US$163.7 billion (see Figure 5).

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39 Asociación Mexicana de Afores, *op. cit.*


Through reforms to the Retirement Savings System Law, Mexico’s investment regime has been gradually loosened, permitting AFOREs to invest in infrastructure, properties, and private equity through a number of instruments (see Table 3).

This broadening of investment opportunities has translated into a lower concentration of securities issued by the Mexican federal government, as shown in Figure 6.
Mexico’s investment regime allows AFOREs to invest in infrastructure through a variety of instruments, among them the following:\(^\text{42}\):

- Development capital certificates, or CKDs, which create sources of capital for companies in any economic sector doing infrastructure projects. Such projects include public-private partnerships involving the concession of management contracts and leases.
- Real Estate Investment Trusts (known as FIBRAs), which specialize in the acquisition, construction, and financing of infrastructure and housing. FIBRAs are listed on the stock exchange and enjoy dividend benefits and special tax benefits.
- Real estate investment trusts, which are similar to FIBRAs, but which are listed only in eligible countries. They may be international or national.
- Debt aimed at solving the financial needs of medium and large companies. Eligible companies must comply with a minimum credit rating.

Thus, investment in productive domestic activities has increased rapidly in recent years, benefitting private enterprises and firms of varying sizes. This investment constituted US$51.7 billion in April 2014.\(^\text{43}\) By the end of May 2014, AFOREs were investing US$53.6 billion\(^\text{44}\) in Mexico’s private sector, largely in infrastructure projects (US$17.66 billion) and energy projects (US$7.51 billion), with CKDs being the most frequently used mechanism.\(^\text{45}\)

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\(^{44}\) We converted pesos to dollars using the exchange rate set by the Bank of Mexico for May 30, 2014: http://www.banxico.org.mx/SigInternet/consultarDirectorioInternetAction.do?accion=consultarCuadro&iCuadro=CF373&sector=6&locale=es.

Capital Development Certificates

CKDs are trust securities used to channel investment resources. They are issued for a specific period of time, and their returns are linked to underlying assets held in trust.\(^46\)

They possess a number of characteristics: (1) they are issued by a trust and are listed on the Mexican Stock Exchange; (2) they represent a portion of the capital or assets of a company, such as a hospital or a concessioned road; (3) their terms are generally between ten and thirty years, or whatever is established in the prospectus; (4) upon the certificate's maturity date, the assets are liquidated and the revenue is distributed among certificate holders; (5) CKD investors are funding partners, although they formally appear as trustees, and they may participate in the issuing trust’s technical committee and holders’ meetings; (6) CKDs do not pay interest, instead sharing profits only when the underlying assets generate earnings; (7) the issuing trust does not necessarily have a trading history, which can make it difficult to assess the risk involved.

The CKD cycle consists of the following steps\(^47\):

- Creation of issuing trust: The issuing trust is established upon an initial contribution (minimum US$74,627\(^48\)).
- Public offering: The issuing trust publicly offers the CKD on the Mexican Stock Exchange. The offering includes the issuing trust’s contract, the investment prospectus, a public offering notice, and the certificate.
- Acquisition by investors: Investors, including pension funds, may acquire the CKD through the Mexican Stock Exchange.
- Investment in empresas promovidas, companies selected to be the object of investment of the funds collected through the CKD: Investors’ resources are used to acquire shares representing the capital stock of these companies, to administer loans to the companies, or to acquire securities that are convertible into shares representing the capital stock of these companies.
- Income earned by the issuing trust: As a result of its investment, the issuing trust earns income through shareholder profits, the sale of shares of the empresas promovidas, loans to empresas promovidas, and returns on investments allowed in governmental instruments.
- Distribution of profits: Once the issuing trust's administrative costs and performance-related bonuses are paid, the surplus is distributed to investors.

Figure 7 illustrates the operating structure of these certificates.

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\(^{47}\) Ibid, p. 13.

AFOREs have used CKDs to invest in a wide range of companies, projects, and sectors, as demonstrated in Table 4.

### Table 4. AFOREs’ financing via CKDs

<table>
<thead>
<tr>
<th>Type of CKD</th>
<th>% of AFOREs’ investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital expenditures</td>
<td>34.6%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>30.0%</td>
</tr>
<tr>
<td>Real estate</td>
<td>23.0%</td>
</tr>
<tr>
<td>Energy</td>
<td>5.2%</td>
</tr>
<tr>
<td>Forestry</td>
<td>4.1%</td>
</tr>
<tr>
<td>Financial service</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

Many have hailed Mexico’s creation of CKDs as innovative due to the fact that these certificates, unlike other instruments, can be used to finance one or several projects from their investment stage forward (see Figure 8).
As of February 2014, AFOREs had used thirty CKDs to invest US$5.385 billion, which has allowed private equity financing in Mexico to increase. Figure 9 shows some of AFOREs’ investments through CKDs.

Recently, five AFOREs announced the creation of an investment consortium for large infrastructure projects. Teaming up with a Canadian investor, the Caisse de dépôt et placement du Québec, the consortium has used CKDs to acquire a set of highways. The highways consist of the Mérida-Cancún, Río Verde-Ciudad Valles, Libramiento La Piedad, and Túnel de Acapulco, all built and operated by the company Ingenieros Civiles Asociados.

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51 Ibid.
In 2014, the government modified the Retirement Savings System Law once again, allowing AFOREs to take part in private offerings limited to private equity and infrastructure investments in Mexico. One of the key features of this reform is that AFOREs are now permitted to participate in investments arising from the country’s recent energy reform and its National Infrastructure Program that engage in public-private partnerships.  

**Cerro de Oro’s Financing Scheme**

The Cerro de Oro hydroelectric project’s financing scheme availed itself of the aforementioned reforms and is thus an example of how these reforms can be expected to promote infrastructure financing in the future. The hydroelectric project was owned by Latin Power III, a private equity fund focused on infrastructure investment and managed by the US company Conduit Capital, which relied on Mexican pension funds to invest in a private equity fund via CKDs. Conduit Capital is an “investment firm focused on the significant investment opportunities presented by the independent electric power industry in Latin America and the Caribbean.” As a result of Mexico’s creation of CKDs, investment funds seem to have proliferated, since CKDs facilitate a larger menu of investment options, as shown in Figure 10 (the green arrow points to Conduit Capital’s infrastructure investment fund).

![Figure 10. Funds operating in Mexico with CKDs, 2012](http://imef.org.mx/CDMexico/descargas/5sept2013/FcoVelazquez.pdf)


The managers of Latin Power III charge investors a 1–2.5% annual management fee and retain a 20% of realized profit, which is paid out to the managers after the return of 100% of the capital plus a predetermined return rate to the investors. The private equity funding cycle has three stages (Figure 11).

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52 CONSAR. 2014. *Retos y oportunidades de invertir a largo plazo en el Sistema de Ahorro para el Retiro*, p.11. Disponible en [http://www.consar.gob.mx/sala_prensa%5CPDF%5Cpresentaciones%5CAMEXCAP%20CRF%20%20marzo%202015.pdf](http://www.consar.gob.mx/sala_prensa%5CPDF%5Cpresentaciones%5CAMEXCAP%20CRF%20%20marzo%202015.pdf), recuperado el 2 de julio de 2015.


The private equity fund Latin Power III was created via twelve investments totaling US$392 million. Investors in this type of vehicle may be either domestic or foreign, and they are generally pension funds, insurance companies, banks, university endowments, and natural or legal persons. Part of the investment came through CKDs and also US$60 million was invested by the Overseas Private Investment Corporation (OPIC), a development finance institution of the US government whose mandate is to advance US foreign policy through support to the private sector. OPIC “helps U.S. businesses gain footholds in emerging markets, catalyzing revenues, jobs and growth opportunities both at home and abroad.” To carry out the project, Conduit Capital joined forces with Electricidad de Oriente and ComexHidro, Mexican companies that make up the Corporación Mexicana de Hidroelectricidad, a subsidiary of the Italian multinational corporation Enel. Conduit Capital held 70 percent of the shares, while Corporación Mexicana de Hidroelectricidad held the remaining 30 percent.

Projects such as this one can be divested in a number of ways: (1) list (or float) shares of participating companies on a stock exchange; (2) sell the equity interest in the project to a strategic buyer; (3) sell the equity interest to another, larger fund that can continue growing the empresa promovida; (4) resell the equity interest to the original owners.

In the case of Cerro de Oro, the most likely scenario is that the hydroelectric plant, once completed and operating, would be sold to another investment fund, just as happened with the projects of Latin Power II. The Latin Power II fund was used by Conduit Capital and the Corporación Mexicana de Hidroelectricidad to build Mexico’s first private “mini” hydroelectric plants: the Trojes plant (8 megawatts) in Jalisco, the Chilatán plant (14 megawatts) in Michoacán, and El Gallo plant (30 megawatts) in Guerrero. These projects—which had the same 70:30 shareholding distribution as Cerro de Oro (Conduit 70, Corporación Mexicana 30)—were sold in 2007 to a Dutch subsidiary of Enel for US$156 million (equity value) and US$193 million (enterprise value).

As will be seen below, this financing scheme is lucrative for private investors, as the energy that would be generated by the Cerro de Oro hydroelectric plant had already been concessioned to three private plastic packaging companies. Thus, the risk would be assumed by the state and taxpayers through vehicles such as CKDs, while the benefits would remain squarely within the realm of investors.

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56 Corporación Mexicana de Inversiones de Capital, op. cit., p. 17.
58 Enel has markets in Europe and Latin America and is Europe’s second largest utility in terms of market capitalization.
60 Corporación Mexicana de Inversiones de Capital, op. cit., p. 13.
III. ENABLING AN INVESTMENT CLIMATE

The Cerro de Oro hydroelectric project was anchored in a series of regulatory reforms offering enhanced security and protection to investors while opening the door for greater violations of human and environmental rights, thereby exacerbating existing inequalities. The modifications to Mexico’s retirement savings system, discussed above, are but one example of legal reforms promoting private investment. In the eyes of the government, these reforms go hand in hand with several others. For example, the government has noted that Mexico is creating a variety of new investment opportunities, and it has alluded to various reforms that allow AFOREs to play a greater role in financing sectors that are opening up as a result of the energy reform and that are defined in the National Infrastructure Program (see Figure 12).

Figure 12. Mexican government presentation during the 2014 Private Capital Summit

By way of further example, some of the complementary reforms relevant to the Cerro de Oro hydroelectric project are described below.
Energy Reform and Security for Private Investments

In late 2013, Mexico passed a sweeping energy reform. With regard to hydrocarbons, articles 25, 27, and 28 of the Constitution were modified to eliminate the state’s exclusive rights—which it had enjoyed since 1938—to hydrocarbon exploration, production, and refining. With these modifications, private actors were permitted to engage in contracts for natural resource exploitation and to receive permits for activities related to refining and petrochemicals.

Other aspects of the energy reform included a series of subsidiary laws strengthening the entry of the private sector. For example, according to the 2014 Hydrocarbons Law, the oil industry is in the public interest and the exploration and production of hydrocarbons is in the social interest and public order, meaning that private companies are given priority for accessing land, regardless of who lives there and what activities are being carried out.

Under these laws, companies negotiate directly with landowners regarding compensation for the rental or purchase of their land. In the event that the parties cannot reach an agreement, the company can appeal to the courts or the executive branch to issue an easement, which obligates the owners to rent their land. In addition, the laws require counties and states, within the limits of their power, to expedite and ensure the awarding of permits for the development of oil activities. These reforms violate not only the right to property but also a number of human rights and collective rights of communities.

Creation of the Gendarmerie

In order to ensure the safety of investments, the Mexican government created a new gendarmerie on August 22, 2014—one day after the subsidiary laws of the energy reform were enacted. Consisting of more than 5,000 members, the gendarmerie is an elite force with police-military training. It is made available to private companies undertaking projects in Mexico and is activated, among other scenarios, when these projects’ production cycles or revenue sources are threatened by any actor. The gendarmerie “is a means of policing the public in order to defend the interests of private investment and has the authority to take action against any threat to theses interests, including the repression of any legitimate exercise of social opposition.”

Law on Public-Private Partnerships

In 2012, just months before the G20 meeting in Los Cabos, the Mexican government approved the Law on Public-Private Partnerships. This law offers greater legal certainty to infrastructure investments in the form of public-private partnerships, projects in which AFOREs may now participate.

According to this law, “the acquisition of properties, goods, and rights necessary for the implementation of a public-private partnership project in terms of the present law” are in the public interest for the purposes of expropriation. In other words, the mere fact that a property or good is necessary for a project’s

The law also establishes a quicker-than-usual process for expropriation by abolishing safeguards that would normally be available in legal proceedings, whether during a trial or during an appeal of a ruling. Moreover, the law eliminates the need to even attempt to negotiate a price with the titleholders of the properties being expropriated. The only applicable recourse for titleholders is the amparo (an extraordinary constitutional appeal), which does not suspend the effects of a ruling—in other words, a project can make considerable progress without being subject to restrictions. In any case, projects are often of a nature that, practically speaking, such restrictions are of little use.

The law sets limits to the guarantees required of the developer. These guarantees may not exceed, during the construction of the infrastructure in question, the equivalent of 15 percent of the infrastructure’s value, and during service delivery, the equivalent of 10 percent of the annual compensation for the services. But the law does not establish reciprocal limits to the guarantees that the state may need to provide.

**Self-Sufficiency and Benefit-Sharing Regimes**

In 1992, Mexico began opening up the country’s energy and electricity sector to private investors. These reforms, which were made to the Electric Energy Public Service Law (LSPEE, for its Spanish initials), sought to amplify and define private actors’ participation in the generation, exportation, and importation of electricity.

Toward the end of 2013, another energy reform completely liberalized this sector. With the passage of subsidiary laws regulating new constitutional provisions, the government repealed the LSPEE and in 2014 passed the Electric Industry Law, which provides separately for generation, transmission, distribution, and power marketing activities; the planning and management of the National Electric System; and the operation of the Wholesale Electrical Market. This law covers the type of self-sufficiency that had previously applied to the Cerro de Oro hydroelectric project under the LSPEE.

Since the Cerro de Oro project was governed under both the Electric Industry Law and the LSPEE, this section explores their key normative provisions to allow for a deeper understanding of the model surrounding this kind of infrastructure project. The LSPEE and its rules of procedure defined six types of permits for activities not considered public service—self-sufficiency, cogeneration, independent production, small-scale production, importation, and exportation—and established the conditions under which each permit was to be granted (art. 36 of the LSPEE).

Under article 36(l) of the LSPEE, self-sufficiency was understood as the use of electricity for self-consumption purposes, provided that the electricity was derived from plants intended to satisfy the needs of the co-owners or partners. This concept applied to partnerships between a development partner or investor and at least two consumer-partners.

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68 Ibid., arts. 76-86.
69 Ibid.
70 Ibid. art. 67 et seq and art. 76 et seq.
71 Ibid., art. 99.
72 Although the Electric Energy Public Service Law was repealed in August 2014, it provided the policy framework for the Cerro de Oro project. Later, we will address the regulatory changes in Mexico at the root of the energy reform, as well as their principal impacts. The full text of the Electric Energy Public Service Law (in Spanish) is available at [http://www.diputados.gob.mx/LeyesBiblio/abro/lspee/LSPEE_abro.pdf](http://www.diputados.gob.mx/LeyesBiblio/abro/lspee/LSPEE_abro.pdf), accessed April 13, 2015.
Under the new legal framework, the electricity sector was opened up to private companies that could sell the energy generated—regardless of whether it constituted a public service—to third parties. According to the scheme, “electricity producers will be able to freely dispose of the electricity that is generated, without limiting consumers to the Federal Electricity Commission—as in the case of the Independent Power Producer—or to consumer-partners of a self-sufficiency partnership.”74

With regard to permits for power generation, article 17 of the Electric Industry Law75 states that the power plants represented by a generator in the Wholesale Electrical Market require prior approval from the Energy Regulatory Commission.

And in terms of permits issued before the energy reform—as is the case with the Cerro de Oro hydroelectric plant—provisional article 3 of the Electric Industry Law76 states that “the terms of the permits issued under the law being repealed will be respected. Permits for self-sufficiency, cogeneration, small-scale production, independent production, importation, exportation, and own uses will remain in force, and holders of these permits shall undertake their activities according to the terms established in the Electric Energy Public Service Law and other provisions emanating from it and, insofar as it is not incompatible with the aforementioned law, with the provisions of the Electric Industry Law.”

In this regard, article 36 of the LSPEE identified the Energy Regulatory Commission as the body responsible for issuing permits, for reviewing the criteria and guidelines of national energy policy, for considering the perspective of the supplier (the Federal Electricity Commission), and for serving the general interest and the safety, efficiency, and stability of the public service. Self-sufficiency permits were granted only to companies whose aim was to generate electricity to satisfy their needs. Self-sufficiency projects were allowed to have an electricity-generating capacity above the needs of those who would make use of the electricity.77 Permit applicants had to commit to making available to the supplier any surplus electrical energy that was generated, up to 20 megawatts (art. 36(l)(b) of the LSPEE).

It was under this normative framework that Electricidad de Oriente submitted an application for power generation. As demonstrated in Table 5, the sole beneficiaries of the infrastructure in question are companies, which were assigned various distributions of peak demand.

<table>
<thead>
<tr>
<th>Shareholder</th>
<th>Peak demand (megawatts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plásticos Envolventes S.A. de C.V.</td>
<td>1.50</td>
</tr>
<tr>
<td>Envases Universales de México, S.A.P.I. de C.V.</td>
<td>4.10</td>
</tr>
<tr>
<td>Envases Innovativos S.A. de C.V.</td>
<td>11.00</td>
</tr>
<tr>
<td>Total</td>
<td>16.60</td>
</tr>
</tbody>
</table>


76 Ibid.
In 2008, the companies Comexhidro and Electricidad de Oriente began the necessary paperwork to obtain permits and concessions. And in November 2010—without having informed, consulted, or obtained the consent of local communities—they began blasting for the Cerro de Oro hydroelectric plant.

The Project’s Environmental and Social Impacts

As mentioned earlier, part of the project’s financing came from the US development agency OPIC. Cerro de Oro’s environmental and social impacts came to light during a complaint alleging the project’s failure to comply with the policies and standards to which OPIC-supported projects are subject.

OPIC’s Environmental and Social Policy Statement\textsuperscript{78} lays out the institution’s environmental and social commitments, as well as the requirements for evaluating prospective projects and monitoring ongoing OPIC-supported projects. The policy governs both direct loans and support provided through financial intermediaries. Moreover, OPIC has adopted the Equator Principles and the performance standards of the International Finance Corporation (IFC), the arm of the World Bank that provides financing to the private sector.\textsuperscript{79} It also has its own policies on transparency\textsuperscript{80} and environmental and social evaluation,\textsuperscript{81} as well as the obligation to establish a complaints mechanism in cases where OPIC-supported projects fail to comply with these policies and cause harm to local communities.\textsuperscript{82} This means that OPIC is responsible for ensuring that its beneficiaries—whether recipients of direct loans or of indirect financing—comply with these policies. In other words, OPIC was responsible for ensuring that Conduit Capital, Electricidad de Oriente, and Comexhidro complied with its policies during their execution of the Cerro de Oro hydroelectric project.

The hydroelectric project was classified as “Category A,” meaning that it had the potential to cause diverse and irreversible impacts. OPIC outlines a number of requirements for Category A projects, among them the following\textsuperscript{83}:

- OPIC must publish a detailed project summary at least sixty days prior to its approval for financing by its board of directors. This summary should include (1) the total project costs; (2) the project’s potential impact on the US economy; (3) a description of the main environmental and social risks; (4) measures for mitigating such risks; (5) actions required to achieve compliance with applicable environmental and social standards; and (6) a description of investors’ engagement with local stakeholders on environmental and social issues.
- Project investors must formally consult with locally affected communities, providing project information in a language, format, and medium that is accessible.
- OPIC must publish on its website its notification provided to the project’s host country regarding the contract’s execution.
- Project investors must develop and implement an environmental and social action plan.
- Project investors must conduct a third-party audit to verify compliance with OPIC’s social and environmental standards.

\textsuperscript{79} Ibid, p. 2.
\textsuperscript{80} OPIC. Transparency. Available at \url{http://www.opic.gov/who-we-are/transparency}, accessed April 14, 2015.
\textsuperscript{83} OPIC. Transparency. Available at \url{https://www.opic.gov/content/transparency-and-accountability}, accessed April 14, 2015.
Most community members learned of the hydroelectric project in mid-2010, when blasting caused cracking in the houses of residents who lived close to the detonations. Although company representatives had met bilaterally with some community members beginning in late 2007 to negotiate the project’s execution, they did not extensively inform local communities about the project, nor did they consult with or obtain the consent of community organizations representing families who owned the land and who would be directly affected by the plant’s construction. Table 6 lists some of the companies’ key violations of the standards outlined by OPIC, the IFC, and Mexican law.

<table>
<thead>
<tr>
<th>Policy / Standard</th>
<th>Infringement</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFC performance standard 1: Assessment and management of environmental and social risks and impacts</td>
<td>Failure to conduct free, prior, and informed consultation with affected individuals and communities during the project’s initial stages&lt;br&gt;Failure to hold discussions on potential environmental and social impacts during the project’s selection process&lt;br&gt;Failure to establish a complaints mechanism and a means for people to obtain information</td>
</tr>
<tr>
<td>IFC performance standard 2: Labor and working conditions</td>
<td>Exaggeration of project benefits&lt;br&gt;Failure to carry out community development projects</td>
</tr>
<tr>
<td>IFC performance standard 3: Resource efficiency and pollution prevention</td>
<td>Inadequate identification of adverse environmental and social impacts&lt;br&gt;Lack of pollution prevention and control measures, and inadequate mechanisms for waste disposal</td>
</tr>
<tr>
<td>IFC performance standard 4: Community health, safety, and security</td>
<td>Noncompliance with Mexican laws on the acquisition of lands and environmental impacts&lt;br&gt;Bad-faith negotiations and inadequate compensation for the purchase of lands&lt;br&gt;Failure to compensate people for the loss of their livelihoods and loss of fishing opportunities&lt;br&gt;Disappearance of La Sal Creek due to its utilization as an output channel&lt;br&gt;Dumping of cement in wells, springs, and local reservoirs&lt;br&gt;Lack of an emergency action plan</td>
</tr>
<tr>
<td>IFC performance standard 5: Land acquisition and involuntary resettlement</td>
<td>Inadequate, unfair, and inappropriate compensation processes&lt;br&gt;Lack of risk mitigation&lt;br&gt;Power and information asymmetries during negotiations&lt;br&gt;Noncompliance with the principle of good faith and with the mitigation of social and economic impacts upon land purchase</td>
</tr>
<tr>
<td>IFC performance standard 6: Biodiversity conservation and sustainable management of living natural resources</td>
<td>Inadequate assessment of threats to biodiversity and failure to mitigate risks&lt;br&gt;Threats to biodiversity, including impacts on the local bird sanctuary without obtaining permits from the relevant government agency</td>
</tr>
<tr>
<td>IFC performance standard 7: Indigenous peoples</td>
<td>Lack of information about the project and its impacts&lt;br&gt;Lack of consultation and failure to obtain the consent of those affected by the project&lt;br&gt;Failure to involve representative community bodies&lt;br&gt;Inadequate compensation for land acquisition and impacts on livelihoods&lt;br&gt;Lack of culturally appropriate development opportunities</td>
</tr>
</tbody>
</table>
Infringement | Policy / Standard
---|---
Impacts on La Sal Creek, a cultural resource and a source of livelihood, recreation, and identity | IFC performance standard 8: Cultural heritage
Lack of formal consultation with locally affected communities | OPIC’s transparency policy
- Lack of information in a language, format, and medium that is accessible
Noncompliance with the minimum notice period and with the quorum for consultations in ejido assemblies | Mexico’s Agrarian Law
Failure to meet standards regarding the modification of ejido land parcels | Mexico’s General Law on Ecological Balance and Environmental Protection
Fraudulent land acquisition | International Labour Organization Convention 169
Failure to obtain communities’ free, prior, and informed consent | Mexico’s General Law on Ecological Balance and Environmental Protection
Failure to obtain authorization from the cabildo (municipal council) regarding a permanent license | Mexico’s General Law on Ecological Balance and Environmental Protection
Lack of written evidence of the environmental impact assessment in the Directorate for the Environment | Mexico’s General Law on Ecological Balance and Environmental Protection


In November 2010, three of the affected communities submitted a complaint before OPIC’s Office of Accountability, together with a group of civil society organizations consisting of the Accountability Counsel, Educa, Habitat International Coalition–Latin America, and Fundar. In early 2011, OPIC representatives visited the project zone, where they verified the violations committed by Conduit Capital and the two Mexican companies in terms of OPIC standards and those established under Mexican law. As a result, in March 2011 the project was suspended, and the companies agreed to undertake a study on the dam’s safety, propose an alternative hydroelectric project that would not affect La Sal Creek, and respect the communities’ decision as to whether to proceed with this alternative project. After several months of roundtables and mediations, the communities—through their ejido leaders—rejected the companies’ proposal, and the project remains suspended to this day. This suspension is an exception to the rule, as most infrastructure projects are successfully executed under these same schemes and poor practices.

The Cerro de Oro hydroelectric project was confirmed to have violated communities’ rights to consultation, to consent, to participation, to self-determination, to a healthy environment, and to water, among others. In addition, the project failed to offer any benefits to local communities in the short, medium, and long terms. Meanwhile, it represented a relatively quick and easy investment for investors by relying on existing infrastructure, and it was expected to offer quick returns through the use of mechanisms such as CKDs, which burdened pension fund contributors with most of the investment risk both during the project’s execution and after the project’s useful life was over. Despite the fact that the communities rejected the project and it remains suspended, the threat of its reinstatement looms large in light of Mexico’s favorable investment climate.

IV. CONCLUSION

The Cerro de Oro dam hydroelectric project—despite being a project that is relatively small (US$60 million) compared to other infrastructure projects—illustrates the complexity of Mexico’s financial regulatory system. It also shows that compliance with the standards that govern these types of projects throughout their cycles—both within the human rights framework and soft law—remains a challenge, regardless of how robust Mexico’s legal and financial frameworks may be.

What this means in practical terms is that infrastructure projects undertaken in the name of development often violate human rights. Further, the financing vehicles used by investors place the bulk of the risk on taxpayers to the benefit of the private sector, without informing the former of where or how their savings are being invested. As demonstrated by Cerro de Oro, current benefit-sharing schemes reward the private sector and financial and private equity firms, while failing to offer direct benefits to the populations who bear the brunt of the impacts and who are supposed to be the first to benefit.

Generally speaking, we can observe a number of reforms undertaken by the Mexican government in favor of the new financing model for infrastructure:

1. Constitutional and legislative reforms to deregulate investment in sectors where the private sector has traditionally not participated, as well as the creation of police forces to protect the interests of private investors. Recent reforms in this regard include the following:

   a) Reforms to the Retirement Savings System Law
   b) Energy reform and a package of subsidiary laws
   c) Enactment of the Law on Public-Private Partnerships
   d) Creation of the gendarmerie

2. The identification of infrastructure megaprojects, as exhibited by the 743 projects of the 2014–2018 National Infrastructure Program, and the relaxation of restrictions on investment.

3. The creation of vehicles—such as CKDs—to facilitate Mexican pension funds’ investment in infrastructure projects, thus minimizing investment risks for private parties and opening the door for pension funds to perform more investments in private sector instruments.

Despite these many changes, the Mexican government wishes to go even further in incentivizing AFOREs to direct more resources toward long-term investment projects. It thus plans to undertake additional regulatory reforms that offer greater flexibility during the investment process. Some of the changes it seeks are (1) relaxed requirements for issuance of securities and the funding of the related investments; (2) facilitated decision making within investment vehicles; (3) promotion of an appropriate selection of investment vehicle managers; (4) mitigation of conflicts of interest; and (5) alignment between the interests of managers and investors. For Category A projects, such as Cerro de Oro, this translates into increased risks for taxpayers and for local communities’ human rights and territories.

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85 Comisión Nacional del Sistema de Ahorro para el Retiro. 2014. Retos y oportunidades de invertir a largo plazo en el Sistema de Ahorro para el Retiro, p. 22. Available at [http://www.consar.gob.mx/sala_prensa%5CPDF%5Cpresentaciones%5CAMEXCAP%20CRF%20%20marzo%202015.pdf](http://www.consar.gob.mx/sala_prensa%5CPDF%5Cpresentaciones%5CAMEXCAP%20CRF%20%20marzo%202015.pdf), accessed July 2, 2015.
It is important that the use of public resources be made more transparent so that the projects in which they are invested can be monitored, thereby allowing taxpayers to see how their funds are being used and to have the opportunity to give their consent. The CKDs created by the Mexican government and invested in a wide range of companies, projects, and sectors are managed through trusts, which present critical barriers in terms of transparency and accountability.

Mexico is not an isolated case—indeed, the increasing presence of new infrastructure financing models with the abovementioned characteristics and the use of public resources such as pension funds is a global one. In this sense, given the wide range of methodologies and definitions used to classify long-term investments, it is important to standardize approaches in order to facilitate the international monitoring of such investments.86 The definitions used by pension funds also vary, highlighting the need to ensure that the information gathered and reported is comparable across experiences. The complexity and technical nature of the financing framework for infrastructure investment is yet another challenge, as is the ability to communicate relevant information in a manner accessible to citizens.

Recent years have seen the emergence of a consensus around the idea that infrastructure is a key pillar of development and global economic growth. Worldwide, infrastructure spending is estimated at US$2–3 billion per year, and it is believed that an additional US$4 billion is needed annually between now and 2030 to meet infrastructure needs. The model being promoted for achieving these numbers calls for, among other things, (1) regulatory and legislative reforms that attract infrastructure investors and protect their interests; (2) the identification of megaprojects that hold the promise of generating economic growth; and (3) the use of public funds such as taxes and pension funds to minimize risk for institutional investors. This article undertakes a macro-level analysis of global trends in financing for infrastructure. At the meso level, it looks at changes in Mexico's laws, policies, and programs and their correlation with the abovementioned infrastructure investment model. At the micro level, it examines how this model is reflected in the case of the Cerro de Oro hydroelectric project in the state of Oaxaca, which has involved numerous violations of the rights of local communities.