

RESEARCH REPORT

STRENGTHENING ISRAEL'S REGIONS

CREATING NEW SOURCES OF CAPITAL FOR ECONOMIC
DEVELOPMENT IN THE NEGEV AND GALILEE



MILKEN INSTITUTE

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Executive Summary

This paper proposes creating a Regional Development Financing Initiative (RDFI) to make private capital available for important projects in Israel's Galilee and Negev regions.

Despite decades of philanthropic and public contributions to regional development, there has been little improvement in the economic prospects for these economically distressed regions. Nevertheless, there are new opportunities for growth due to the Israel Defense Force's upcoming transfer of major training activities to the Negev; a new medical school at Bar-Ilan University's Safed campus in the Galilee; recent investments in roads, rail, water, and other regional infrastructure; and new initiatives in health services, energy, agriculture technologies, and tourism. Capital is needed to build on these initiatives and help the regions realize their potential.

The RDFI includes new techniques to leverage capital market investments to fuel regional growth and development through a permanent capital vehicle. In the proposed financial model, philanthropic investments and government funding provide a limited guarantee for pools of strategic projects. The guarantee lowers the cost of issuing bonds to capital market investors in Israel and abroad, and it acts as an investment incentive by lowering the investors' risk. The bonds are repaid, and the guarantee is recycled for new pools of projects.

The initiative—based on research and development work done in partnership with the Ministry of Economy (formerly the Ministry of Industry, Trade and Labor) after a 2007 Milken Institute Financial Innovations Lab[®] in the wake of the Second Lebanon War—is intended to spark discussion among government agencies and philanthropic and private investors about a financial solution to mainstream what is known as Israel's "periphery."

Background

This report presents a financial initiative for accessing new sources of capital to support significant projects in Israel's Galilee and Negev regions.¹ This report, based on the research and development work after a Milken Institute Financial Innovations Lab® in 2007, is intended for discussion among government agencies and philanthropic and private investors seeking to craft public-private partnerships to accelerate regional economic development.² The initiative is based on proven structures used in public finance and public-private partnerships around the world.

CONTEXT AND NEED

Regional development is an iterative process of investment in a variety of economic activities—investments by government in infrastructure, industrial parks, education, and communities and investments by businesses in startups, expansions, and relocations. When done well, these investments create and strengthen communities and the quality of life, reinforcing and attracting subsequent investment in infrastructure and commerce.

REGIONAL NEED

The demographic and economic conditions in Israel are well-known: higher rates of poverty, lower wages, high unemployment that forces youth and skilled workers to relocate, fewer businesses per capita, and lower rates of fixed-asset investment.³ (See table 1 for summary data comparisons for several key factors.) Inadequate growth shared unequally historically has contributed to uneven regional development in Israel. The national consensus is that these divisive regional patterns of income, employment, and business formation must be addressed. This report proposes how to finance and implement this initiative.

The Ministry of Economy (formerly the Ministry of Industry, Trade and Labor) has begun an extensive strategic planning effort to document these trends and create a baseline for comparison. Together, these factors create more expensive and riskier conditions⁴ for business development and growth: higher costs, lower revenues, and thinner

1 Based on Resolutions Nos. 3960, 3961, and 3976, dated August 24, 2008; the government determined that the periphery is a national priority. Accordingly, the government embarked on strategies to promote economic activity in the peripheral regions, including education, industry, local government finance, infrastructure, and economic development.

2 "Financial Innovations for Economic Recovery and Development in Northern Israel," Financial Innovations Lab Report, Milken Institute, March 2007.

3 Hagit Peleg-Rotem, "Israel Should Eliminate the Concept 'Periphery,'" *Globes*, December 26, 2011.

4 Daniel Felsenstein, A. F. (Spring 2002). "Small-Scale Entrepreneurship and Access to Capital in Peripheral Locations: An Empirical Analysis," *Growth and Change*, Vol. 33, pp. 196-215.

margins. As demonstrated by studies of businesses' access to credit in the regions,⁵ investment capital usually goes to locations with lower risk and more robust economic conditions. This suggests that leveling the playing field between the regions and the country's center requires building access to the capital needed for business growth and development.

TABLE
1

Selected socioeconomic comparison of Israel's regions

		Galilee	Negev	Center
Socioeconomic scale ⁶	Socioeconomic cluster 4-5 deciles	62%	86%	13%
	Socioeconomic cluster 6-7 deciles	35%	2%	42%
	Bedouin and Arabs only – 1-3 deciles	82%	100%	42%
	Bedouin and Arabs only – 4-5 deciles	15%	0%	50%
Labor force and income	Unemployment rates (2012)	11.3%	6.8%	5.1%
	Monthly income - men		NIS 8,635	NIS 12,204
	Monthly income – women		NIS 5,576	NIS 7,389
Health and financial services	Banking services – population per branch (2008)	2,980	6,105	1,503
	Hospital beds (per 1,000 pop.)	1.5	1.4	2.6
	Doctors (per 1,000 pop.)	11	12	20
Employment by sector	Traditional manufacturing (2008)		22%	17%
	Tourism		7%	5%
	Business services		11%	18%
Firm density ⁷	Manufacturing firms (per 1,000 pop. 15 yrs+)	4.70	3.50	5.00
	Financial services firms (per 1,000 pop. 15 yrs+)	1.15	1.27	2.42

5 Schwartz, D. F. a. D. (1993). "Constraints to small business development across the life cycle: some evidence from peripheral areas in Israel," *Entrepreneurship & Regional Development: An International Journal*, Vol. 5, Issue 3, pp. 227-246.

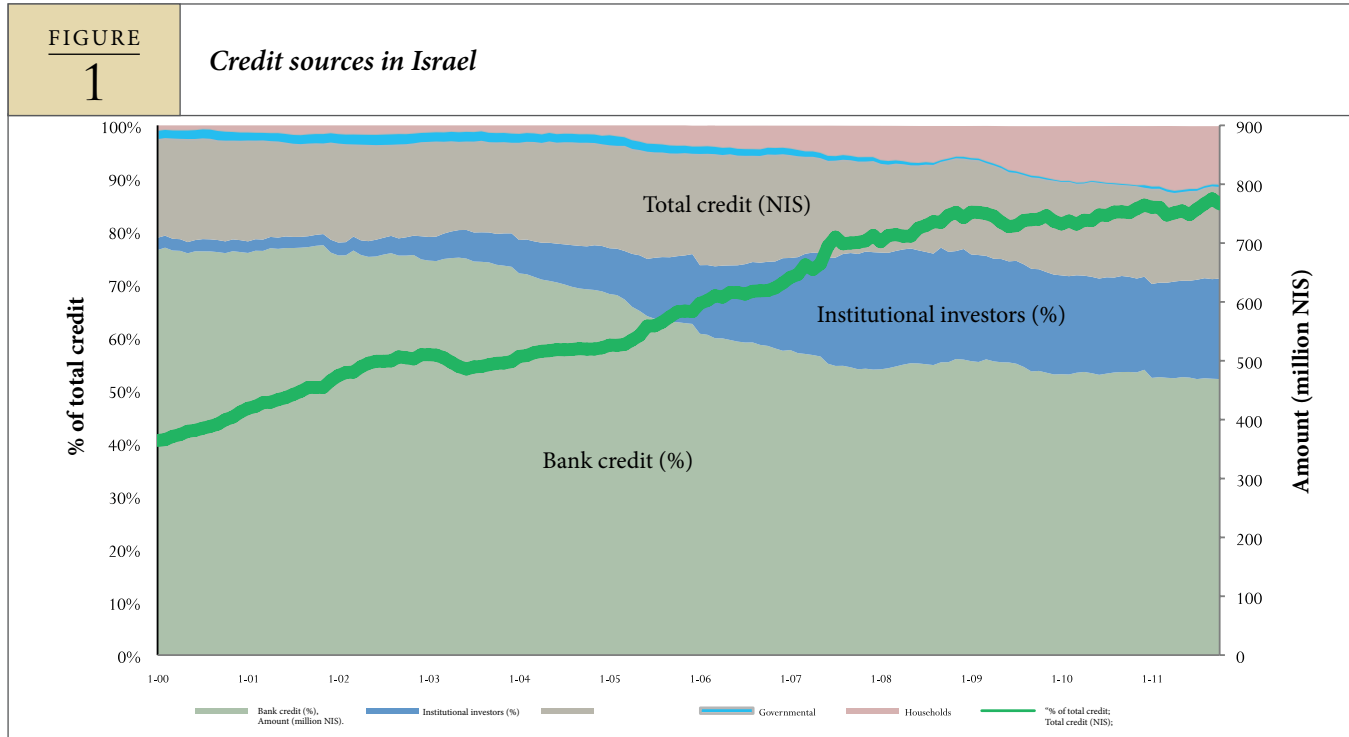
6 The Israel Central Bureau of Statistics classifies localities into deciles based on an index of multiple socioeconomic variables, including dependency, household income, workforce, education, etc. Source: Central Bureau of Statistics, 2008. The lower the decile, the lower the socioeconomic status of the population. For example, the table shows that most of the Galilee and Negev have significantly higher portions of their populations at lower socioeconomic levels (4-5) than the center of the country. Conversely, the table shows that populations at higher socioeconomic levels (6-7) are more prevalent in the center than in the Negev and Galilee. Finally, the table shows that Bedouins and Arabs in the Negev and Galilee are not only at the lowest socioeconomic levels (1-5), but also fare worse than their counterparts in the center of the country.

7 This is a calculation of the number of firms by industry per 1,000 population (age 15 and older) reported by the Bank of Israel in 2008. Source: Central Bureau of Statistics.

BUSINESS CREDIT NEED

Bank credit to small businesses in Israel has been declining. Bank credit is only available for terms of fewer than five years, which does not match the life of the assets being financing or the ability of the borrower to pay the interest. This mismatch between the useful life of the business assets (five to seven years for equipment and seven to 15 years for fixed assets such as leasehold improvements and buildings) results in a dangerous imbalance in a business' financing, threatening cash flow and the ability to leverage assets for growth. Because of this mismatch, small businesses are not pursuing credit. In addition, banks and other financial services companies are poorly represented in the regional economies. This creates a lost opportunity⁸ for investment and business growth.

In most developed markets, banks play the intermediary role of bringing the “capital markets” to business at a reasonable cost. In many developed markets, large businesses and projects can access the capital markets directly by selling corporate or project debt. Small and medium-size businesses lack this ability because of their relatively small projects and the high costs of documenting and placing such a transaction in the market. Institutional investors such as pension funds or insurance funds are interested in large transactions (to make it worthwhile economically) with long terms (to match the long terms of their assets).



Source: Weinberger, M. H. G. (2012). “Evaluation of the Status of the Implementation of the Bachar Report.” Milken Institute Fellows Report 69.)

8 Daniel Felsenstein, A. F. (January 2000). “Capital Assistance for Small Firms: Some Implications for Regional Economic Welfare.” *Geographical Analysis*, Vol. 32 (Issue 1): pp. 36–49.

CAPITAL MARKET NEEDS

The domestic capital markets hold many times the capital in Israeli banks—and many more times the capital available in Israeli banks for small and medium-size business. Moreover, the international capital markets are the largest source of funds for growth and development in the world. Most of the capital in these markets is held by institutional investors, such as insurance and pension funds, that are able to invest in long-term, fixed-asset vehicles, such as long-term bonds, at competitive interest rates.

These transactions are typically large and complicated and are accompanied by high professional fees for making the connection to institutional buyers and documenting the legal and financial terms of the transaction—all of which are out of scale with small and medium-size businesses.

Institutional investors are interested in steady, long-term investments with few disruptions or adjustments to the underlying security—the business that is repaying the debt. In exchange for these benefits, they receive a lower return (interest rate) on their investments.

PHILANTHROPIC NEEDS

Philanthropies have been investing in regional development in Israel for years, supporting community institutions, business development, and special projects. However, these gifts are often unexpected, too small to complete a project, and unleveraged. Increasingly, philanthropies are becoming “impact investors,” looking for projects that provide both a financial and social return either instead of or in addition to their traditional roles. Through regional development efforts, philanthropies can invest in important economic development projects, create a new source of leveraged capital, and reinvest their returns in new projects. Philanthropies need the flexibility to capitalize on economic development financing programs and leverage their balance sheet by investing in these regional developments.

SUMMARY

New sources of capital are needed to fuel regional growth and development in the Negev and Galilee regions of Israel. Neither private nor public capital is sufficient.

In terms of private capital, bank credit for small businesses and project development finance has been declining since 2006,⁹ and the costs of entering the capital markets to finance regional development projects are currently too high. In terms of public funding, government budgets cannot keep up with the demand for new infrastructure (industrial parks, incubators, etc.). This lack of capital hinders the ability to build on the budgetary commitments that do exist—such as the Israel Defense Force's upcoming transfer of major training activities to the Negev and a new medical school at Bar-Ilan University's Safed campus in the Galilee—and create an economic growth plan for these underdeveloped regions that are central to Israel's future. Without sources of financing, these business opportunities will not be realized. The Negev and Galilee regions are poised for growth, thanks to these developments; recent investments in roads, rail, and water; and new initiatives in health services, energy, agricultural technologies, and tourism. In fact, economic development in the two regions is an important element of the national strategy to create jobs and improve economic conditions there. However, existing resources are insufficient to drive progress (see appendix B for financial conditions and solutions at the project level based on the Milken Institute's financial modeling for similar projects), and a range of project and financial issues must be addressed.

Key challenges for economic development in the Negev and Galilee

Many projects do not reach the implementation stage because of:

- Insufficient infrastructure
- Limited capacity to advance projects with regional importance
- Slow growth and limited markets

The current limits on project and financing innovations lead to:

- Fragmented local governments that compete for resources, discouraging the promotion of broader interests
- The inability to use the projected increases in value created by regional projects
- Limited access to capital from investors and philanthropists. Available access is constrained by short timeframes, various limitations, and unpredictability.

⁹ Maya Haran and Gila Weinberger, "Evaluation of the Status of the Implementation of the Bachar Report," Milken Institute Fellows Report, Publication No. 69, November 2012.

Benchmarking Best Practices

We examined several examples of regional financing programs and practices (for a fuller review, see appendix C). Table 2 details applicable features and design lessons.

TABLE 2	<i>Examples of regional financing programs</i>		
Example	Description	Key features	Design lessons
Czech Municipal Finance Company	This quasi-public company provides guarantees to secure long-term capital from domestic commercial banks for municipal infrastructure projects.	<ul style="list-style-type: none"> • Uses international credit enhancement to support weak conventional lenders • Compensates for currency risk with international credit support • Uses local municipalities as intermediaries to support local projects 	<ul style="list-style-type: none"> • International credit enhancement • Currency risk mitigation
Pennsylvania Industrial Development Authority	The regional (statewide) public authority provides direct loans to targeted SMEs, using loan repayments to secure new sources of loan capital from the bond markets.	<ul style="list-style-type: none"> • Uses direct subsidized loans to enhance creditworthiness of bank loans • Bundles and securitizes subsidized loans through a capital market bond issue to secure long-term, low-cost capital • Uses local development agencies to package and approve projects 	<ul style="list-style-type: none"> • Direct loans for small and medium-size enterprises (SMEs) • Securitized loans in the capital markets • Local review; central credit approval
State pooled bond financing authorities	Statewide public authorities provide a conduit for bundles (or pools) of SME and municipal projects to secure loans from the capital markets.	<ul style="list-style-type: none"> • Create a conduit for eligible projects to access the capital markets • Pool projects in each bond issue to spread issuance costs and bond risks and receive long-term, low-cost credit • Use credit enhancement pledge (by bank letter of credit) to individual projects to limit recourse to issuer 	<ul style="list-style-type: none"> • Revenue bond project financing • Conduit for capital market access • Project pools for effective bond issues and pricing • Local project review; independent credit review

<p>Maine Municipal Bond Bank</p>	<p>The state bond issuer provides a conduit for bundles (or pools) of municipal projects to access credit in the capital markets.</p>	<ul style="list-style-type: none"> • Brands bonds to encourage capital market acceptance • Offers limited government guarantee • Creates project-based reserve funding to support credit • Uses local development agencies to package and approve projects 	<ul style="list-style-type: none"> • Capital market access for small municipal projects • Established market presence in capital markets • Pooled credit risk • Local project review and equity
<p>Indianapolis Local Public Improvement Bond Bank</p>	<p>The local authority uses philanthropic credit enhancements to support access to affordable credit for municipal projects in the capital markets.</p>	<ul style="list-style-type: none"> • Uses credit as a conduit for projects to access capital markets • Includes a broad scope of eligible projects to amortize organization and issuance costs • Uses program-related investments by foundations to provide credit enhancement 	<ul style="list-style-type: none"> • Philanthropic credit enhancement used as a support • Capital market access • Leveraged public investment in traditional activities
<p>Calvert Foundation Community Investment Notes</p>	<p>The private, nonprofit financing program matches non-traditional capital markets with targeted economic and community development projects.</p>	<ul style="list-style-type: none"> • Opens capital market access to eligible projects through crowdsourcing and retail market channels. • Uses philanthropic investments to provide credit enhancement • Targets eligible projects in underserved domestic areas 	<ul style="list-style-type: none"> • Leveraged philanthropic investment • Capital markets access for non-traditional projects

Source: Milken Institute Israel Center.

Alternatives

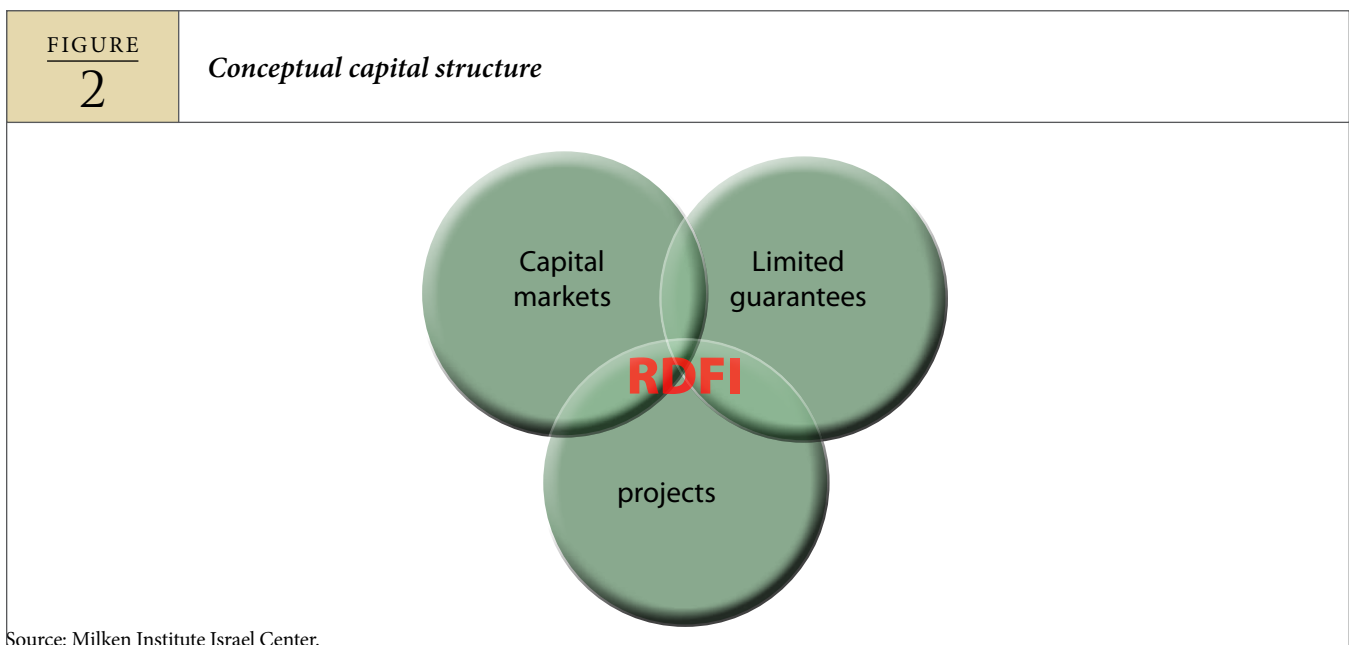
A variety of alternative capital sources could be considered; table 3 highlights their pros and cons. See appendix C for other examples of capital market programs.

TABLE 3		<i>Alternatives to benchmarking examples</i>		
Source	Positive features	Negative features	Potential uses	
Individual banks	<ul style="list-style-type: none"> Simple and direct contact 	<ul style="list-style-type: none"> High, uncompetitive fees Limited maturity Limited amount Collateral and guarantee requirements 	<ul style="list-style-type: none"> Limited involvement in regional projects without guarantees 	
Bank syndicates	<ul style="list-style-type: none"> Spread risk among participating banks 	<ul style="list-style-type: none"> Complex Expensive 	<ul style="list-style-type: none"> Public-private partnerships 	
Regional incentives	<ul style="list-style-type: none"> Capital grants Lower corporate tax rates Accelerated depreciation 	<ul style="list-style-type: none"> Insufficient to overcome financial gaps Unavailable or not applicable for certain project types 	<ul style="list-style-type: none"> Incentives for Israel's Encouragement of Capital Investment Law 	
Targeted guarantees	<ul style="list-style-type: none"> Flexible and targeted Lower borrowing costs Low management costs Good leverage factor 	<ul style="list-style-type: none"> Small amounts Limited terms and conditions Requires bank loan, conditions, and costs 	<ul style="list-style-type: none"> Koret Fund/OPIC guarantees Small and Medium Enterprises Authority guarantees 	
Philanthropy	<ul style="list-style-type: none"> Highly flexible Targeted Variety of forms and uses 	<ul style="list-style-type: none"> Limited amounts Sporadic funding Not sustainable 	<ul style="list-style-type: none"> Family foundations United Jewish Israel Appeal/ United Jewish Appeal Keren HaYesod/Keren Kayemeth LeIsrael funds 	
Revolving loan fund	<ul style="list-style-type: none"> Flexible and targeted Low cost and long term Able to recycle funds Sustainable operations 	<ul style="list-style-type: none"> Higher operating costs Large initial cash infusion 	<ul style="list-style-type: none"> State industrial development authorities Clean water revolving funds 	
Revenue bonds	<ul style="list-style-type: none"> Lower costs Longer terms Flexibility Able to pool projects to reduce costs 	<ul style="list-style-type: none"> High transaction costs Limited market among Israeli buyers Credit enhancement required 	<ul style="list-style-type: none"> State industrial development bond issuers Bond banks 	

Our proposed approach includes structured revenue bonds with special credit enhancement to leverage government and philanthropic investment in the region. The proposal, however, does not exclude consideration of alternative and mixed sources, including banks, bank syndicates, and revolving loan funds.

PROPOSED CAPITAL STRUCTURE

The Regional Development Financing Initiative (RDFI) includes a capital structure that leverages capital market sources of financing for projects by using government and philanthropic investment to provide a limited guarantee. As shown in figure 2, the RDFI is at the intersection of capital market loans, limited guarantees, and the projects themselves; it facilitates the overlapping relationships—legal, financial, and programmatic—within this capital structure.



The mechanics and stages of this capital structure are shown in figure 3.

Step (1): The government contributes funding for the organizational costs, initial operating costs, and working capital for the Regional Development Financing Agency (RDFA) (described below). The RDFA acts as a conduit (an entity whose purpose is to aggregate projects or enterprise financial assets in order to lower overall financing costs) to the capital markets.

Step (2): The Israeli government and private U.S. and Israeli philanthropies fund the organization and establish a limited guarantee fund (described below).

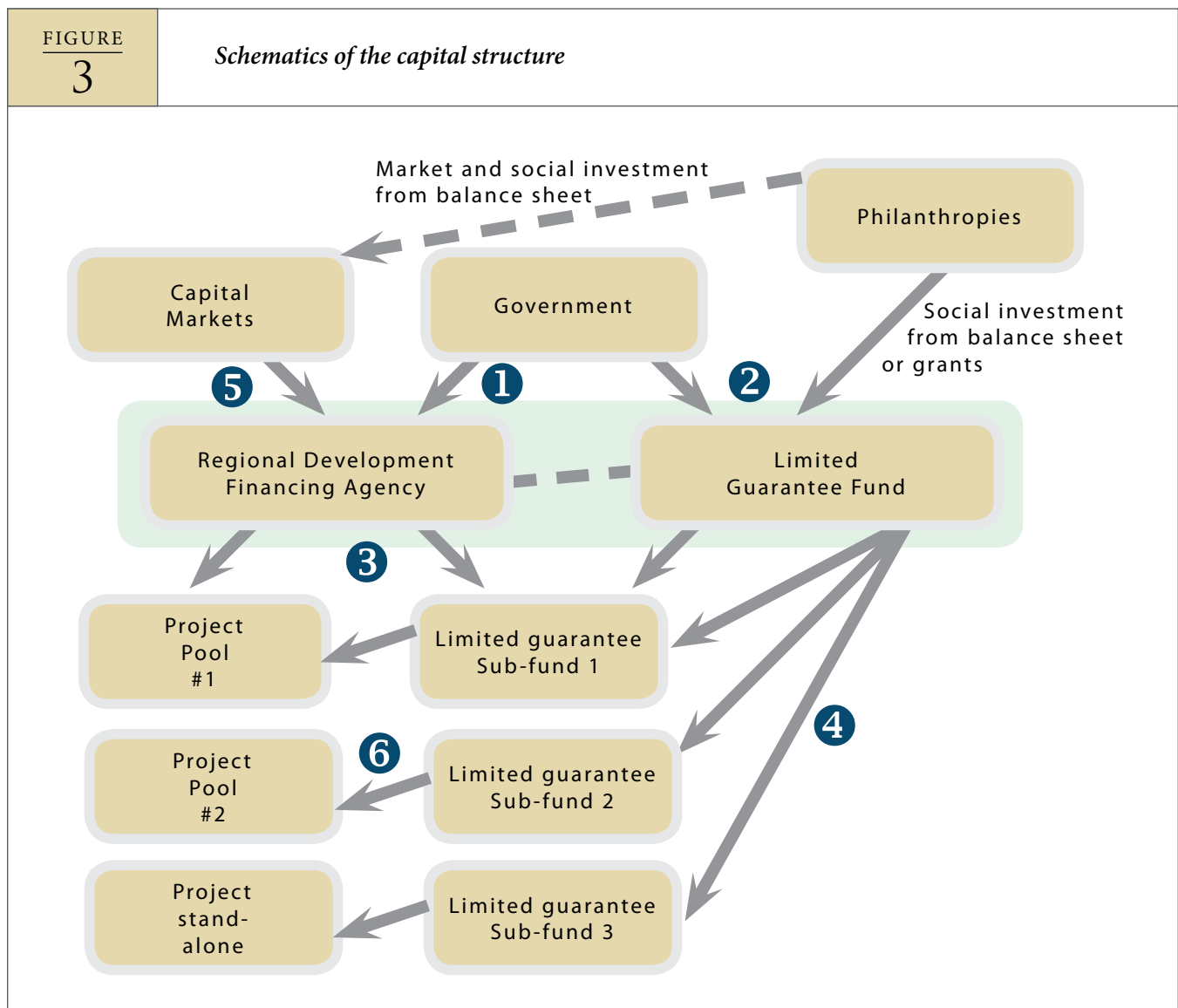
Step (3): The RDFA markets and packages projects, underwrites project credit, and recommends allocation and pricing credit enhancement.

Step (4): The limited guarantee fund allocates a portion of its assets to sub-funds for each project pool.

Step (5): Bonds are sold in the capital markets to Israeli and international buyers, including pension funds, insurance funds, and philanthropic endowments as social and market-rate investments. The borrowers are obligated to repay principal and interest to the bondholders according to a loan agreement between the RDFA and each borrower. With 501(c)(3) eligibility status for selected projects, bonds issued in the U.S. may be tax-exempt for U.S. bond buyers.

Step (6): The limited guarantee sub-funds cover first-dollar losses up to a certain level, depending on the project. The limited guarantee for each pool does not have recourse to the general guarantee funding.

Each of these elements and structures are described more fully in the following sections.



REGIONAL DEVELOPMENT FINANCING AGENCY (RDFA)

The following is an overview of the proposed structure and design of the Regional Development Financing Agency (RDFA):

1. Purpose: The RDFA will act as a conduit for loans to finance eligible projects through the capital markets.
2. Startup funding: The government will make an initial investment of NIS 500,000 to cover staffing; legal, financial, and organizational support; and the first few years of operational losses (see the later Financial Model chapter for the use of startup capital in the operating projection for the RDFA).
3. Operating budget: Fees from each project will fund the RDFA's ongoing operations.
4. Capital market sources: Funding for projects will come from private placement bond offerings and limited retail bond sales (described in the Capital Markets section below).
5. Management: The RDFA's management should include an agency manager, professional project development and packaging staff, and a professional services manager responsible for contracted accounting, due diligence, documentation, and legal support. The fund may be managed by a governmental entity such as the Small and Medium Enterprises Authority in the Ministry of the Economy or by a separate legal entity.
6. Activities: The RDFA will be involved in the following:
 - a. Market development, working with local and regional project developers to understand the project standards and financing requirements.
 - b. Project packaging, working with project developers to prepare program and financial applications.
 - c. Project due diligence, reviewing project applications, assigning technical reviews to legal and accounting professionals, and assembling project recommendations.
 - d. Project reviews and approval, preparing and recommending projects for inclusion in the financing program, including recommendations for limited guarantee structure and funding.
 - e. Bond program, assembling and structuring bond pools or stand-alone projects for inclusion in capital market placement, including management of legal and accounting teams.
 - f. Monitoring program activities, including pipeline, financings, and performance; reporting program activities on a quarterly basis to investors; and preparing the annual report and annual plan for RDFA operations and programs.
 - g. Loan receivables management, monitoring loan performance, including meeting the program and financial obligations, as well as recommending program and legal recourse, as needed.
7. Term: The RDFA may not be terminated as long as there is an outstanding loan or bond obligation, unless the limited guarantee fund investors approve a transfer of responsibilities.
8. Security: The RDFA will enter into a loan agreement, evidenced by a note and security agreement, with each project. The RDFA will be named as a secured party and will be additionally insured in the loan agreement and all documentation, allowing it to assume secured creditor actions as needed.
9. Collateral position and assignment: The RDFA will take a senior lien position on the project revenue and assets being financed and on other project assets as available. To the extent of the limited guarantee, the security interests will be assigned to the limited guarantee fund. When the project has other private financing, the RDFA may take a shared first-lien position (prorated) on the project revenue and assets.

LIMITED GUARANTEE FUND

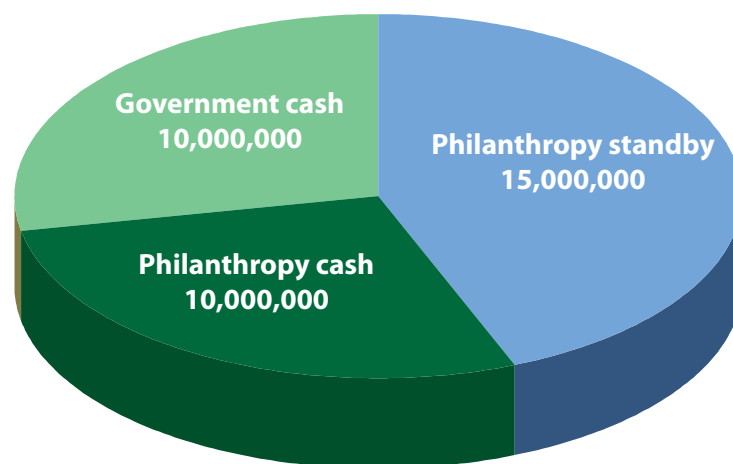
Here is a summary of the major design, financial, and legal issues with the limited guarantee fund:

1. Purpose: The limited guarantee fund will provide credit enhancement for RDFA-issued bonds to lower the coupon rate and cost to the borrower.
2. Structure: The limited guarantee fund will be composed of deposits and secondary letters of credit from participating endowments in the U.S. and Israel. The limited guarantee fund may also be used to match or provide leverage for a bank letter of credit if available. The limited guarantee fund may create sub-funds for project pools (groups of projects combined in a single bond issue) or for individual projects (with their own bond issue if they are large enough).
3. Location and placement: The limited guarantee fund will be established as two funds—one in the U.S. and the other in Israel—with a common board of directors and mission.
4. Organization and tax status:
 - a. The U.S. limited guarantee fund will be organized as a tax-exempt 501(c)(3). It will be eligible to receive contributions and program-related investments, allowing U.S.-based endowments to make “balance sheet” commitments that can be leveraged to activate private capital.¹⁰
 - b. The limited guarantee fund in Israel will be organized as a corporation for public benefit (Cheletz), eligible to accept tax-exempt contributions and investments from Israel’s private sector and government.

¹⁰ The market includes Jewish Federation endowments, insurance funds, pension funds, and family endowments. Recent rule changes in program-related investments would significantly expand the amount of philanthropic capital that would qualify for this U.S. tax benefit. See <https://www.federalregister.gov/articles/2012/04/19/2012-9468/examples-of-program-related-investments#p-3> (accessed June 14, 2013). These rule changes were adopted after the Federal Register review and are now part of the Code of Federal Regulation, Title 26, Internal Revenue, Subchapter D.

FIGURE

4

Limited guarantee funding sources (NIS)

Source: Milken Institute Israel Center.

5. Funding sources:

- a. Government—The government funding of the limited guarantee will be in cash so that draws on the limited guarantee can be paid in a timely fashion.
 - b. Philanthropic—NIS 10 million of the philanthropic funding for the limited guarantee will be in cash. The remaining NIS 15 million of the philanthropic funding may be in the form of a standby guarantee from philanthropic endowment funds.
 - c. Organizational and startup funding: An estimated NIS 750,000 is necessary from philanthropic and government investors each for a total of NIS 1.5 million to organize the limited guarantee fund, including legal and financial documentation, presentations, and the initial investment rounds. These funds will be recouped through fees and interest on the pledged funds.
6. Funding flow (in the event of a delinquency): In the event of a draw on the limited guarantee to pay debt service on bonds, the money will be taken from the cash portion of the limited guarantee funds on a prorated basis. Each fund will seek reimbursement from the project's management. If reimbursement is not forthcoming, the fund will tap the standby guarantee for repayment.
 7. Fees: The limited guarantee fund will be paid fees of 1.25 percent to 1.85 percent for funds pledged as part of the limited guarantee.
 8. Coverage: The amount of the limited guarantee will vary by project type (see table 4). The amount will be based on the percentage of principal outstanding. The percentage will be calculated based on the principal outstanding divided by the original principal. The guarantee coverage is reduced as the principal is repaid.

TABLE
4

Guarantee coverage by project type

Outstanding principal to be repaid*	Small/medium businesses	Social enterprise	Public
>75%-90%	20%	40%	30%
25% to 75%	10%	20%	15%
< 10%-25%	0%	10%	5%

*Amount of the outstanding principal to be guaranteed

Source: Milken Institute Israel Center.

9. Maximum guarantee amount: A single limited guarantee for a project may average 20 percent of the total amount of the guarantee in a project pool and may not exceed 10 percent of the total amount in the limited guarantee fund as whole.
10. Limitations: The limited guarantee will be used to cover the debt service obligation of the project up to the coverage amount. The limited guarantee fund may create sub-funds for each bond pool or project type. Each sub-fund will have the same limitations, fund flows, and recourse provisions as the general guarantee funds.
11. Default: In the event of a project or bond default, any recovered funds will first reimburse the government portion of the limited guarantee funds or sub-funds, and then the philanthropic portion. The RDFA will execute liens and judgments, as provided, to try to recover the principal and interest from the project assets. In turn, the liquidated assets will be used to reimburse each limited guarantee fund on a prorated basis.
12. Recourse: The project or bondholders will have no recourse to any funds, government, philanthropic, or corporate entities beyond the limited guarantee fund or appropriate sub-fund for the project.
13. Management: The limited guarantee funds will engage a professional financial manager. All funds will be held by insured depository institutions and will be subject to the terms of a trust agreement covering all aspects of deposits, investments, payments, and reporting.
14. Term: The limited guarantee funds will remain as long as there is outstanding debt and a coverage requirement (provided above). When a project guarantee is completed, the sub-fund guarantees are returned to the limited guarantee fund and made available for new projects.
15. Rollover: After the initial term, the limited guarantee fund will permit investors to roll over their commitments or remove their portion as guarantee commitments terminate for each project.

16. **Investment:** The portion of the limited guarantee funds forwarded to the fund will be invested in a balanced, low-risk portfolio under the guidance of an investment committee (composed of a representative of the investors and the RDFA). The proceeds will be used to cover the guarantee costs and offset defaults, as needed.
17. **Refinancing:** Projects may refinance with other sources of funding. Upon refinancing, the guarantee is removed, and money pledged to the project will be returned to the limited guarantee fund and made available for new projects.
18. **Risks:** The limited guarantee fund will absorb the first losses in the event of a delinquency or default. The funds are at-risk and may be partially or completely lost.
19. **Reporting:** The limited guarantee fund managers will report the loans, guarantees, coverage, and project status on a quarterly basis to all funds and investors. Each year, the fund manager will report the annual activity and projections for coverage, income, and rollover.

Capital Markets

The Regional Development Financing Initiative will provide access to the capital markets. The following items describe the main terms and conditions of a capital market offering.

1. Bond structure: Bonds will be issued in the capital markets to provide financing for eligible projects (see Projects section below).
2. Market pricing: Bonds will be priced according to market conditions and sensitivity to limited guarantees provided by the limited guarantee fund. It is expected that market-rate bond coupon prices will be comparable to revenue bonds of comparable maturities issued without government guarantees in the U.S.
 - a. For eligible projects, bonds will be issued on a tax-exempt basis by U.S.-based bond issuers, such as state or regional bond issuing authorities in New York, Pennsylvania, Florida, or California.¹¹
3. Tranches: Each bond series may be issued in multiple tranches, providing market-rate and sub-market coupon prices, for social enterprises as appropriate.
4. Documentation: Bonds will be sold through a bond indenture, representing all terms, conditions, obligations, and requirements of all parties. As required by law, the bonds will include a loan agreement and note with the borrower, security agreement, and other documents to ensure disclosure of all requirements for repayment of the bond and in the event of a default.
5. Market sources: Bonds may be issued through institutional and retail channels if available:
 - a. The bonds will be issued on a private placement basis to sophisticated buyers, including high-net-worth individuals, and to institutional buyers, such as pension funds, philanthropic endowments, and insurance funds.
 - b. Under certain conditions, bonds may be issued to individual buyers through the retail marketing channels established by Israel Bonds or a similar U.S.-Israel program. These retail bonds will be sold in relatively small denominations and will not exceed more than 25 percent of any single bond issue.
6. Currency: U.S.-issued bonds will be based on dollars. Because payment will be in Israeli shekels, all bonds will carry a modest currency risk premium priced according to the market but not to exceed 10 basis points (0.10 percent) on the payments due.
7. Term: Bonds will be structured to match project revenue. Maturities may be based on 120 percent of the depreciable life of the asset being financed. Bond terms will not exceed 20 years, but amortizations may extend to 25 years.
8. Deferrals: Principal payment deferrals will be available for up to two years, depending on the project.
9. Regulatory compliance: All bonds issued in the U.S. must be reviewed by appropriate bond counsel and approved by the Securities and Exchange Commission and Internal Revenue Service as needed. The structure of the RDFA and its bonds issued in Israel must be reviewed by appropriate counsel and approved by the tax authorities, Israel Securities Authority, and Bank of Israel as needed.

¹¹ See “Financial Innovations for Economic Recovery and Development in Northern Israel,” (appendix II: Potential Use of U. S. Tax-Exempt Financing) Milken Institute, March 2007, pp. 26-27.

Eligible Projects

The Regional Development Financing Initiative targets several project types. All projects must be submitted by eligible applicants acting on behalf of the projects during the application, review, and approval process.

ELIGIBLE APPLICANTS

Eligible applicants will submit the applications on behalf of the eligible beneficiaries. The applicants must be organized as governmental, public, or charitable entities or have a public purpose and benefit. Eligible applicants include:

1. Local and regional authorities
2. Regional development and management authorities (e.g. water agencies)
3. National government or quasi-governmental organizations
4. Nongovernmental organizations and social enterprises involved with schools, colleges, universities, and research

ELIGIBLE BENEFICIARIES

Beneficiaries must have a public purpose and benefit in the region. Eligible beneficiaries include:

1. Applied research centers and industry incubators
2. Business and industrial parks
3. Technology, service, and logistics companies
4. Manufacturers and distribution enterprises (involved in exports)
5. Real estate developers (with specific leases/sales for at least 75 percent of eligible beneficiaries)
6. Infrastructure (including energy, water, and solid waste)
7. Environmental projects (including contaminated property cleanup with an approved reuse plan for eligible beneficiaries)
8. Community and commercial services
9. Amenities (including regional recreation, education, and tourism)

Projects involved in real estate speculation are excluded.

ELIGIBLE USES OF FUNDS

Activities may include:

1. Acquisition of land and buildings
2. Site development (including site preparation, on-site infrastructure, grading, and landscaping)
3. Equipment and machinery
4. Building construction
5. Infrastructure construction, directly required by eligible beneficiaries
6. Design and engineering
7. Legal fees (including organization, documentation, and closing, but excluding litigation and court costs)
8. Financial fees (including placement fees, trustee fees, registration and documentation costs, and management fees)
9. Interest costs (including capitalized interest during startup period)
10. Reserve funding (must provide up to one year of principal and interest payments)

Refinancing may be permitted on a case-by-case basis.

REVIEW AND SELECTION CRITERIA

1. Eligibility: Each project must be submitted by an eligible applicant, include an eligible beneficiary, and be used for eligible activities.
2. Local and regional priority: The project must be reviewed, approved, and recommended by the local or regional authority.
3. Project: The project will be evaluated based on the eligibility of the beneficiary and uses of the funds.
4. Management: The management will be evaluated on the basis of the experience and expertise of the project team.
5. Financial: The financials will be evaluated on the basis of the strength of the revenue model, contracts, financial projections, and collateral value of the project assets.
6. Impacts: Projects will be evaluated on the basis of job creation, strategic investment related to regional strategy, and targeted activity for distressed places and populations.

TABLE
5

Selected conditions and criteria by project type

	Small and medium-size business	Social enterprise	Public
Revenue model	Competitive	Contracted and sales	Budget authorization
Loan-to-value ratio	75%	90%	100%
Guarantees	Corporate and personal	Corporate	None
Term	120% depreciable life	20 years	20 years

Source: Milken Institute Israel Center.

Financial Model

MODEL ASSUMPTIONS

The RDFI projection assumes a startup of bond pools for mixes of three to seven projects, depending on the size, with a bond series for each project within the bond pool. The annual total will be approximately NIS 33 million in the first year and will grow, adjusting only for inflation thereafter. Each series within the bond pools will have an average 4 percent to 5 percent coupon rate and will reach maturity in 20 years. Also, each project assumes a one-year principal deferral, requiring interest-only payments during the first year of each project. For purposes of illustrating the model, the bonds are fully amortizing, with principal and interest payments due on a quarterly basis. Of course, the actual coupon rate and maturity will depend on the capital market conditions at the time of each bond issue.

Bond fees will be approximately 3.5 percent of the principal amount. Program management will include approximately 2.1 percent of the new bond proceeds. Also, the RDFI will charge 0.11 percent of the outstanding bond amount on an annual basis to support operating costs. Finally, project consulting fees, including legal, project structuring, and accounting work, will cost 1.5 percent of the bond amount (see table 5). These one-time fees will total approximately 7 percent of the bond issue amount and will be financed in the bond issue. It may require more effort to sell the bonds and manage the program with a rate that is higher than market rates, a foreign source of repayment from the U.S. bond buyer's point of view, and an unusual capital structure and bond placement from the Israeli buyer's point of view.

TABLE 6		<i>Bond assumptions</i>	
Pool terms			
Amount		33,600,000	
Interest		4.5%	
Term		20	
Amortization		20	
Principal deferral		1	
P&I deferral		-	
Escalation		2.5%	
Number of pools		5	
Bond fees			
Bond issuance		3.5000%	on new bonds
Program management	Bond management	2.1000%	of new bonds
	Operations	0.1100%	of outstanding bonds
Project consulting fees		1.5000%	on new bonds

Source: Milken Institute Israel Center.

MODEL RESULTS

For purposes of the projection included in this analysis (described and summarized in this report), the RDFI will generate NIS 180 million in bonds over a five-year period—95 percent of which will be used for project financings. The limited guarantee will leverage over 5:1 (the maximum amount of the guarantee compared to the amount of the bonds issued). Based on the average amount outstanding on the guarantee, the leverage ratio rises to almost 13:1.

The guarantee will pay back the limited-guarantee investors an estimated 1.1 times the amount of the guarantee—or a 12 percent return on investment over the life of the guarantee. This is based on the fees earned on the limited guarantee and the interest earnings on the invested guarantee capital, and it accounts for a 1.5 percent default rate (nonpayment of principal and interest and no chance of recovering from liquidation of assets—a worst-case scenario). Again, this assumes only 10 years of new bond activity and a 30-year repayment period (20-year bond term for 10 years of bond issues).

TABLE 7		<i>Bond results</i>	
Bonds and guarantees	Estimated Amount		
Estimated bond volume	180,000,000		
Estimated net bond proceeds	170,510,158	95%	of the bond volume
Estimated maximum guarantee amount	34,637,701	5.2	:1
Estimated average guarantee amount	14,173,496	12.7	:1
Interest on guarantee reserve	1%		
Estimated guarantee fees & interest	7,723,896	2%	on guarantee adjusted for losses
Estimated total losses/draws on guarantee	3,675,140	11%	of the maximum guarantee
Estimated net income on guarantee	4,048,756	12%	on maximum guarantee
Estimated payback multiple on guarantee	1.1		based on maximum guarantee

Source: Milken Institute Israel Center.

As the bonds are repaid and the amount of the limited guarantee needed to cover the outstanding principal is reduced for the current bond issues, the limited guarantee can be “recycled” and used to guarantee new bonds. As a result, the leverage ratio for the limited guarantee will increase as more bonds are issued.

PROGRAM IMPACTS

The Regional Development Financing Initiative will result in approximately NIS 180 million in capital markets financing for small business during the first round alone. This amount reflects a 6:1 leverage rate for the whole guarantee, including government and philanthropic investments and an 18:1 leverage ratio for the government portion alone. The investment in the limited guarantee will be recycled as projects repay their debt and new financings will be possible, increasing the amount of financing from the capital markets.

Assumptions

1. All investments are in Israel's regions, designated Priority "A" locations.
2. Among the projects to be financed are businesses in technology and/or manufacturing/production, which are eligible for incentive capital grants, lower corporate tax rate, and accelerated depreciation on capital investments.
3. Of these projects, 25 percent of technology business activity is "net new" for Israel— meaning it has not happened anywhere else in the country; 50 percent of the manufacturing/production business activity is "net new."¹²

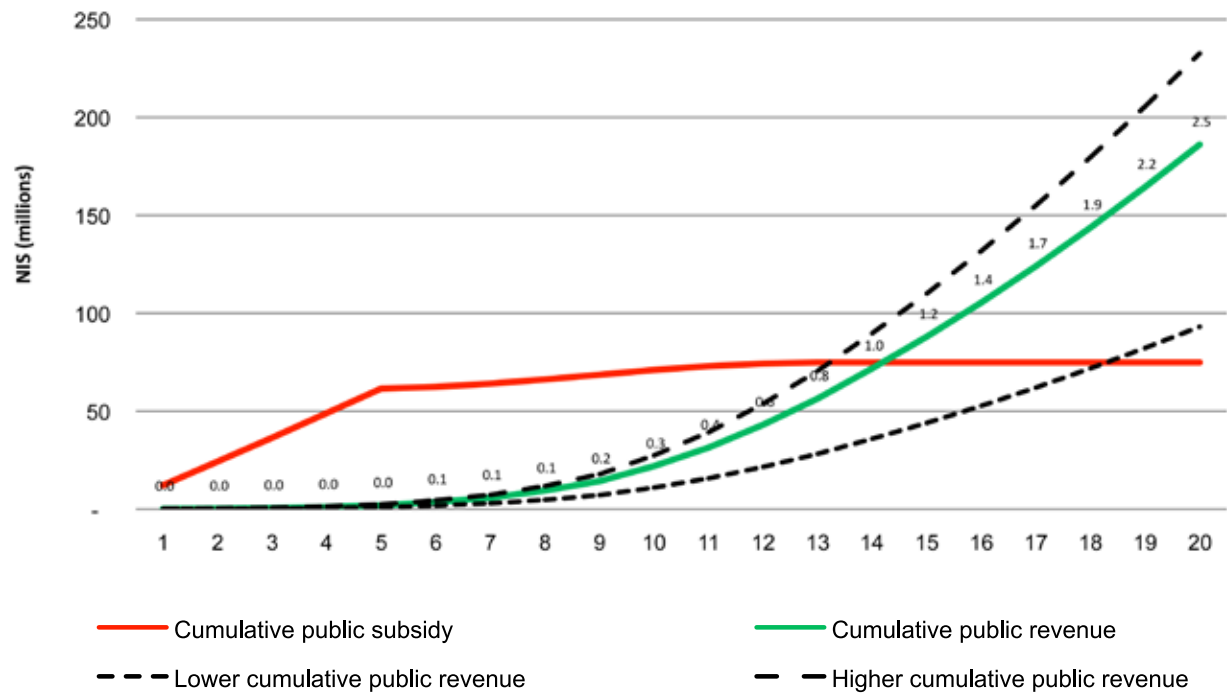
Results

1. The initial program will yield five years of capital market financings.
2. Approximately 17 businesses (relocations and expansions) will be financed, generating NIS 574 million in new corporate income.
3. An estimated 723 net new jobs will be created with a new payroll of NIS 155 million per year.
4. Based on multipliers from the financed technology and production businesses, an estimated NIS 98 million in net new indirect payroll and almost NIS 175 million in net new corporate income will be added to the regional economy.
5. Based on the cost of the direct public investments in these businesses, including the use of the guarantee and regional incentives and the discounted public revenues (taxes), the public breakeven (1.0X) is expected to occur between years 13 and 18.
6. Based on this projection, the discounted public benefit multiple on public investments is expected to be about 2.5X by year 20. The investment in the limited guarantee will be recycled as projects repay their debt and new financings become possible, increasing the amount of financing from the capital markets.

¹² These are conservative assumptions to illustrate the point that the regions compete with the center of the country for business investments - so the substitution effect discounts the net new impact from investments in the regions.

FIGURE
5

*Regional Development Financing Initiative
20-year discounted projection (activity period: 5 years)*



References

- Pennsylvania Development Authority, Chapter 73, Sec. 73.1-73.101, Session of 1991, H. B. 804, Legislative Reference Bureau, Commonwealth of Pennsylvania.
- “Financial Statements and Independent Auditor’s Report.” Indianapolis Local Public Improvement Bond Bank, 2009 and 2010.
- “The Indianapolis Local Public Improvement Bond Bank.” City of Indianapolis, <http://www.indy.gov/eGov/City/BondBank/Official/Documents/2011%20A%20and%20B%20North%20of%20South%20OS.pdf>
- “Maine Municipal Bond Bank.” <http://www.mmbb.com/Index.aspx>.
- “Measures of Performance.” Maine Municipal Bond Bank, September 2011.
- “Pennsylvania Industrial Development Authority Act.” Pennsylvania General Assembly, 1955.
- “Pennsylvania Industrial Development Authority, Program Guidelines.” Pennsylvania Department of Community & Economic Development, October 2009.
- “Proposed Rules: Examples of Program-Related Investments.” In *Federal Register* 77, 2012.
- “Prospectus Information.” Calvert Foundation, April 2011.
- Assli, Abed. “Northern Israel Tourism Improvement District.” Milken Institute Fellows Report. Jerusalem, Israel: Milken Institute, July 2009.
- Bachar, Yitzhak. “Financial Tools for the Development of Northern Israel: Project Survey, Milken Institute, 2008 (Hebrew).
- Maine Municipal Bond Bank. “General Bond Resolution Rating Agency Presentation.” April 2012.
- The World Bank. “International Development Association, Regional Integration.” <http://www.worldbank.org/ida/theme-integration.html>.
- Cowan, Michelle, and Matthew Levin. “An Analysis of State Bond Banks.” Edited by Government Finance Group (GFG): Council of Infrastructure Financing Authorities, February 1997.
- European Investment Bank. “Project Loans.” <http://www.eib.org/products/loans/index.htm>.
- Haran, Maya, and Gila Weinberger. “Evaluation of the Status of the Implementation of the Bachar Report.” Milken Institute Fellows Report. Jerusalem, Israel: Milken Institute, November 2012.
- McDonald, Michael. “Maine Quashes Wall Street Negotiated Debt Deals Declaring No Free Lunches.” Bloomberg, August 8, 2011.
- Baker Newman Noyes. “Basic Financial Statements and Management’s Discussion and Analysis.” Edited by Maine Municipal Bond Bank, 2011.
- OPIC. “Structured Financial Products.” <http://www.opic.gov/what-we-offer/financial-products>.
- Richman, Idan. “Financial Model for Leveraging Philanthropy toward Regional Development in the Negev and Galilee.” Milken Institute Fellows Report: Milken Institute, November 2012.
- Yago, Glenn, and Teresa Magula. “Financial Innovations for Economic Recovery and Development in Northern Israel.” Financial Innovations Lab® Report. Jerusalem, Israel: Milken Institute, March 2007.

Appendices

APPENDIX A - FINANCIAL PROJECTIONS

Capital Market Activities

Year	Gross bond proceeds	Placement fees	Outstanding loans	Payment	Interest payments
1	33,600,000	1,176,000	33,600,000	1,512,000	1,512,000
2	35,275,353	1,234,637	68,875,353	4,170,429	3,099,391
3	36,144,100	1,265,043	103,948,414	6,921,356	4,677,679
4	37,034,242	1,296,198	138,738,978	9,740,031	6,243,254
5	37,946,306	1,328,121	173,188,507	12,628,124	7,793,483
6	-	-	168,353,865	13,837,706	7,575,924
7	-	-	162,092,083	13,837,706	7,294,144
8	-	-	155,548,521	13,837,706	6,999,683
9	-	-	148,710,499	13,837,706	6,691,972
10	-	-	141,564,765	13,837,706	6,370,414
11	-	-	134,097,474	13,837,706	6,034,386
12	-	-	126,294,154	13,837,706	5,683,237
13	-	-	118,139,685	13,837,706	5,316,286
14	-	-	109,618,265	13,837,706	4,932,822
15	-	-	100,713,381	13,837,706	4,532,102
16	-	-	91,407,777	13,837,706	4,113,350
17	-	-	81,683,421	13,837,706	3,675,754
18	-	-	71,521,469	13,837,706	3,218,466
19	-	-	60,902,229	13,837,706	2,740,600
20	-	-	49,805,123	16,309,513	2,241,231
21	-	-	35,736,841	13,849,723	1,608,158
22	-	-	23,495,275	11,201,800	1,057,287
23	-	-	13,350,763	8,488,665	600,784
24	-	-	5,462,882	5,708,712	245,830
25	-	-	-	-	-
26	-	-	-	-	-
27	-	-	-	-	-
28	-	-	-	-	-
29	-	-	-	-	-
30	-	-	-	-	-

Limited Bond Fund Activity

Year	Guarantee on outstanding principal	Principal losses	Guarantee fee	Interest on guarantee reserve	Cumulative fee & interest
1	6,720,000	22,680	126,000	33,487	159,487
2	13,775,071	62,556	258,283	68,563	486,332
3	20,789,683	103,820	389,807	103,429	979,568
4	27,747,796	146,100	520,271	138,008	1,637,847
5	34,637,701	189,422	649,457	172,241	2,459,546
6	33,670,773	207,566	631,327	167,316	3,258,189
7	32,418,417	207,566	607,845	161,054	4,027,088
8	31,109,704	207,566	583,307	154,511	4,764,906
9	29,742,100	207,566	557,664	147,673	5,470,243
10	14,156,477	207,566	265,434	69,745	5,805,421
11	13,409,747	207,566	251,433	66,011	6,122,865
12	12,629,415	207,566	236,802	62,109	6,421,776
13	11,813,968	207,566	221,512	58,032	6,701,320
14	10,961,826	207,566	205,534	53,771	6,960,625
15	10,071,338	207,566	188,838	49,319	7,198,782
16	9,140,778	207,566	171,390	44,666	7,414,837
17	4,084,171	207,566	76,578	19,383	7,510,799
18	3,576,073	207,566	67,051	16,843	7,594,693
19	3,045,111	207,566	57,096	14,188	7,665,976
20	2,490,256	244,643	46,692	11,228	7,723,896
21	-	-	-	-	7,723,896
22	-	-	-	-	7,723,896
23	-	-	-	-	7,723,896
24	-	-	-	-	7,723,896
25	-	-	-	-	7,723,896
26	-	-	-	-	7,723,896
27	-	-	-	-	7,723,896
28	-	-	-	-	7,723,896
29	-	-	-	-	7,723,896
30	-	-	-	-	7,723,896

						Net operating income		
Other bond issuance costs	Program management staffing & direct costs	Packaging - legal	Packaging - financial	Packaging - project	Total expenses	Revenues - expenses	Interest earnings on cumulative net income	Cumulative net
84,000	612,056	84,000	168,000	168,000	1,789,568	1,209,144		1,209,144
88,188	616,647	88,188	176,377	176,377	2,031,831	(127,213)	6,046	1,087,976
90,360	621,272	90,360	180,720	180,720	2,073,957	(54,177)	5,440	1,039,238
92,586	625,931	92,586	185,171	185,171	2,117,041	18,393	5,196	1,062,827
94,866	630,626	94,866	189,732	189,732	2,161,106	90,380	5,314	1,158,521
-	127,071	-	-	-	140,909	44,280	5,793	1,208,594
-	128,024	-	-	-	141,862	36,440	6,043	1,251,077
-	128,984	-	-	-	142,822	28,281	6,255	1,285,614
-	129,952	-	-	-	143,789	19,792	6,428	1,311,834
-	130,926	-	-	-	144,764	10,957	6,559	1,329,350
-	131,908	-	-	-	145,746	1,761	6,647	1,337,758
-	132,898	-	-	-	146,735	(7,812)	6,689	1,336,635
-	133,894	-	-	-	147,732	(17,778)	6,683	1,325,540
-	134,898	-	-	-	148,736	(28,156)	6,628	1,304,012
-	135,910	-	-	-	149,748	(38,963)	6,520	1,271,569
-	136,930	-	-	-	150,767	(50,219)	6,358	1,227,708
-	137,957	-	-	-	151,794	(61,942)	6,139	1,171,904
-	138,991	-	-	-	152,829	(74,155)	5,860	1,103,608
-	140,034	-	-	-	153,871	(86,879)	5,518	1,022,247
-	141,084	-	-	-	157,393	(102,608)	5,111	924,751
-	142,142	-	-	-	155,992	(116,681)	4,624	812,693
-	143,208	-	-	-	154,410	(128,565)	4,063	688,192
-	144,282	-	-	-	152,771	(138,085)	3,441	553,548
-	145,364	-	-	-	151,073	(145,064)	2,768	411,252
-	-	-	-	-	-	-	2,056	413,308
-	-	-	-	-	-	-	2,067	415,375
-	-	-	-	-	-	-	2,077	417,452
-	-	-	-	-	-	-	2,087	419,539
-	-	-	-	-	-	-	2,098	421,636
-	-	-	-	-	-	-	2,108	423,745
-	-	-	-	-	-	-	2,119	425,863
-	-	-	-	-	-	-	2,129	427,993
-	-	-	-	-	-	-	2,140	430,133
-	-	-	-	-	-	-	2,151	432,283
-	-	-	-	-	-	-	2,161	434,445

APPENDIX B - PROJECT NEEDS¹³

Technology Building

Financing barrier

- Startup funding insufficient; initial losses drain cash flow.
- Project runs out of money and fails before return on investment is possible.



Finance solution

- Startup capital is sufficient to cover initial losses.
- Longer-term debt with lower interest rates reduces the burden on cash flow.
- Project is able to provide returns on investment to investors and participants.

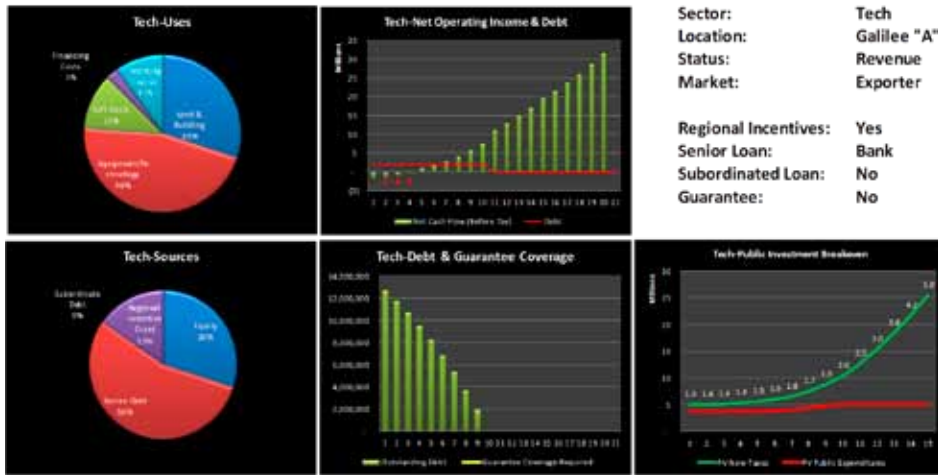


13 These project scenarios are prototypes based on industry standards and various industry and development projects identified in the market in the Galilee and Negev in 2010–2012. Each scenario is meant to illustrate the financing conditions and financial solutions offered by the Regional Development Financing Initiative proposal.

Tech Firm

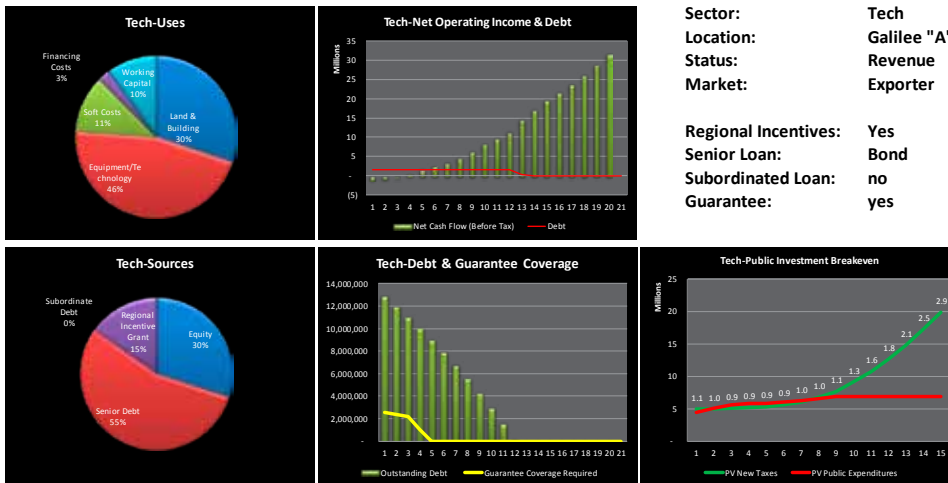
Financial barrier

- Startup funding insufficient; initial losses drain cash flow;
- Project runs out of money and fails before return on investment is possible.



Finance solution

- Startup capital is sufficient to cover initial losses.
- Longer-term debt with lower interest rates reduces the burden on cash flow.
- Project is able to provide return on investment to investors and participants.



Manufacturing Company

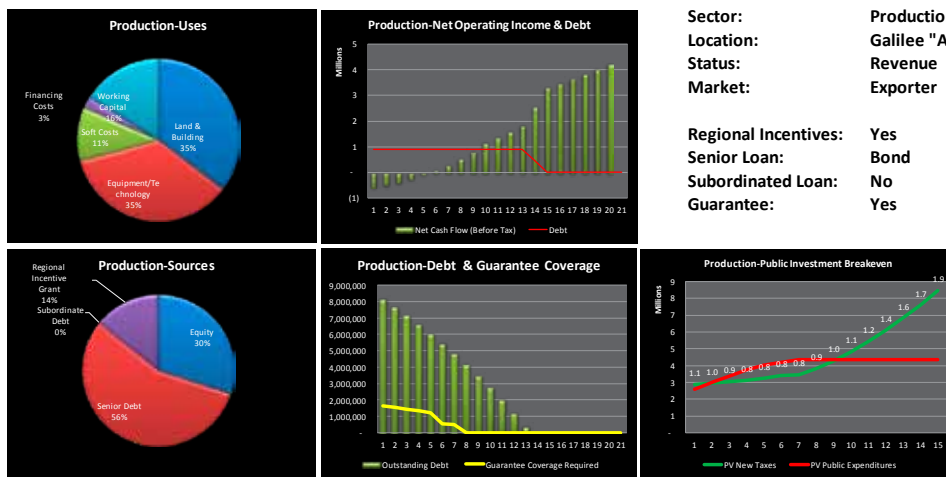
Financing barrier

- Startup funding insufficient; initial losses drain cash flow.
- Project runs out of money and fails before return on investment is possible.



Finance solution

- Startup capital is sufficient to cover initial losses.
- Longer-term debt with lower interest rates reduces the burden on cash flow.
- Project is able to provide return on investment to investors and participants.



APPENDIX C – EXAMPLES OF CAPITAL MARKET PROGRAMS

Czech Municipal Financing Company (MUFIS)

Program

- A partnership program sponsored by USAID involving the Czech Republic and the Municipal Finance Company (“MUFIS”), a regional financial authority.
- \$100 million available for long-term financing of municipal environmental infrastructure.
- MUFIS receives the funds and provides long-term capital to commercial banks for lending to municipal infrastructure projects.

Financial structure

- USAID guarantees bank debt, enabling favorable terms (loans up to 30 years with a 10-year grace period). Fees include 1 percent of the initial principal and 0.5 percent annually of the unpaid balance.
- Extends the available terms for projects from three years available on the Czech capital market to 15 years at competitive fixed rates.

Significant features

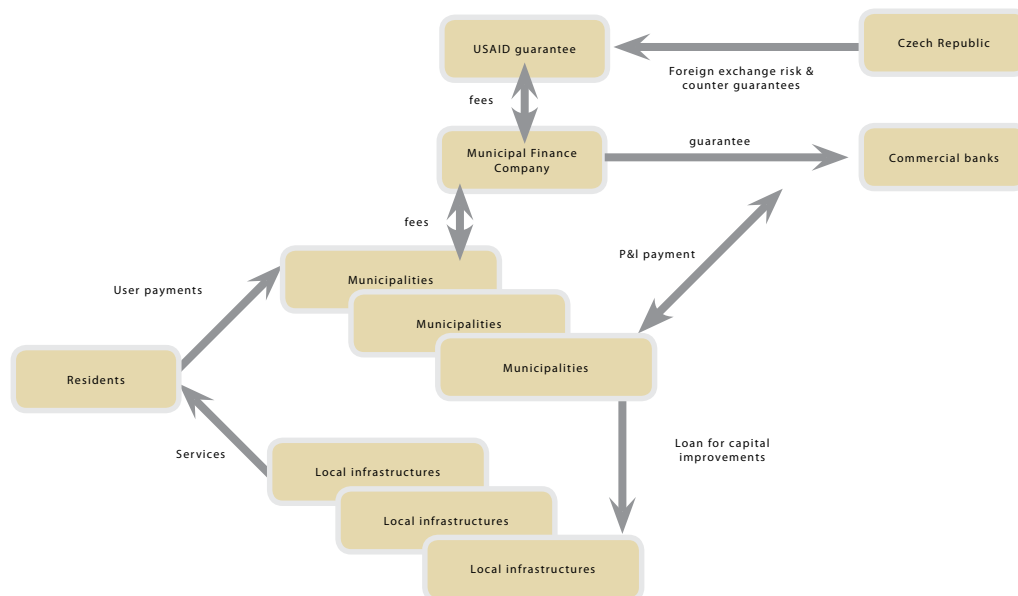
- Leverages participation of banks, covering credit and collateral risks.
- Sovereign underwrites the foreign exchange risk.

Lessons

- Use international credit enhancement to support weak conventional lenders.
- Compensate for currency risk with international credit support.
- Use municipalities as intermediaries to support local projects.

FIGURE
6

MUFIS program credit and capital flows



Category:	Czech Municipal Finance Company (Details) ¹⁴
Organized	It has both a Board of Supervisors that sets policy and an Executive Board (BoD) that oversees administration. The boards consist of representatives from investors and governments as well as independent experts on municipal finance. In addition, there is a Shareholders' General Assembly that is the supreme governing body of the company. The Board of Supervisors consists of seven members elected by the General Assembly for three-year terms. The Board of Supervisors appoints and confirms members of the BoD. The BoD is responsible for supervising individual contractors and ensuring the quality of services.
Management and authority	<ol style="list-style-type: none"> 1. USAID's regional development office in Poland and the U.S. Embassy in Prague jointly carried out management and monitoring of the guaranty-funded municipal finance program under which MUFIS falls. 2. The Czech and Moravian Guaranty and Development Bank (CMZRB) is MUFIS's founder and 49 percent owner. The Czech government, represented by the Ministry of Finance, also owns 49 percent. The third shareholder, the Union of Towns and Communities, owns the remaining 2 percent.
Budget	<ol style="list-style-type: none"> 1. MUFIS does not have any employees because of the cost of full-time administrative positions. Instead CMZRB handles MUFIS's administrative responsibilities. 2. MUFIS does not have a staff to conduct financial or credit analysis. Instead banks are trained in the methods of credit assessment for municipal lending.
Sources	<ol style="list-style-type: none"> 1. As of 1998, MUFIS can borrow up to \$60 million from private U.S. investors. 2. Funding also comes from private investors in foreign markets who want to transfer funding to the domestic market.
Deal structure	<ol style="list-style-type: none"> 1. MUFIS lends to municipalities through private commercial banks, which bear the full credit risk of loans they make. 2. Innovative security agreement includes indirect pledging of future revenue streams from municipalities instead of requiring real property as collateral.
Credit issues	No debt service limit; some municipalities are over 34 percent of operating revenue (taxes and fees).
History	The first tranche (a \$20 million loan from HG) was borrowed in March 1995. MUFIS's role is threefold: (a) to solicit and receive funds from U.S. investors who are guaranteed by USAID under its guaranty program; (b) to make loans to participating financial institutions that only lend to municipalities for eligible infrastructure projects; (c) to purchase a portion of municipalities' bond issues. MUFIS will come to an end under first tranche funding after 10 years. All payments will then be needed to finance operations and repay the guaranteed loan.
Outcome	<ol style="list-style-type: none"> 1. Development of a functioning market-driven municipal credit market. 2. Less than 3 percent non-performance rate. 3. Between 1995 and 1998, a total of \$44 million has been borrowed to finance some 260 municipal projects benefiting over 70,000 households.
Other issues	<ol style="list-style-type: none"> 1. Uses public subsidy in the form of coverage of foreign exchange losses (borrowing in foreign currency, paying back in local). 2. MUFIS does not screen participating banks for creditworthiness.

14. "Monitoring Report Municipal Infrastructure Financing Program Czech Republic". USAID. June 1997 - http://pdf.usaid.gov/pdf_docs/PNACD925.pdf

Pennsylvania Industrial Development Authority

Program

- Revolving loan fund structure with state-level board of directors, credit analysis and loans, receivables management.
- Network of local industrial development agencies.
- Targets industry, R&D, and headquarters facilities.

Financial structure

- 40-60 percent loan-to-value loans to/through local agencies to industrial developments; credits limited to beneficiary, not local agency.
- State provides interest subsidy to allow below-market interest rates to targeted areas and projects (distressed areas and advanced tech).

Significant features

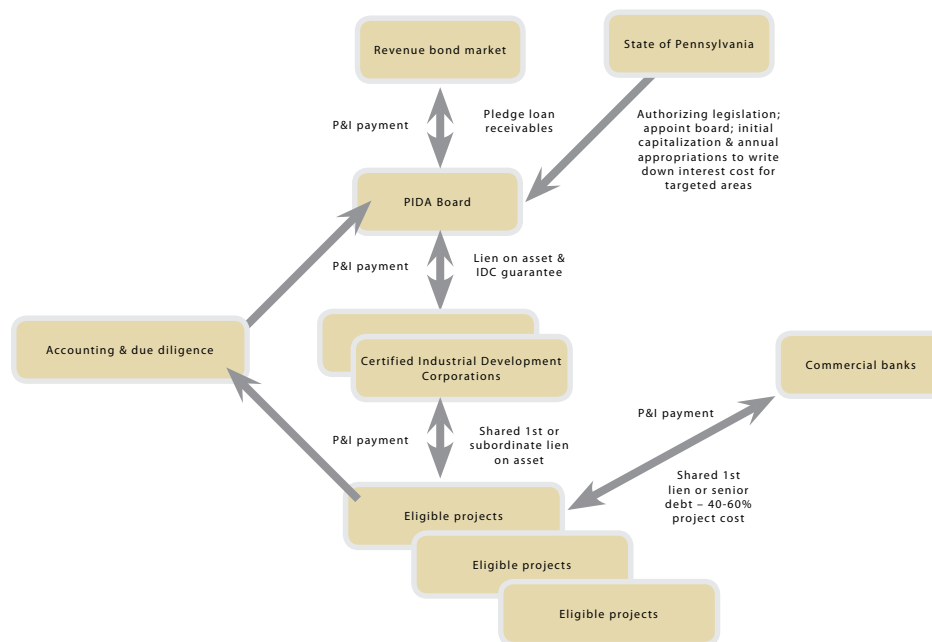
- Initially capitalized through state appropriations.
- Securitized receivables in tax-exempt and taxable bonds to raise additional funding.
- Local role – project packaging and in “chain of title.”
- 1.5 percent default rate; sustainable program for 56 years.

Lessons

- Use direct subsidized loans to enhance creditworthiness of bank loans.
- Bundle and securitize subsidized loans through a capital market bond issue to secure long-term, low-cost capital.
- Use local development agencies to package and approve projects.

FIGURE
7

PIDA program credit and capital flows diagram



Category	Pennsylvania Industrial Development Authority Details ¹⁵
Organized	<ol style="list-style-type: none"> 1. The PIDA board has 12 members—five members of the governor’s Cabinet and seven public members appointed by the governor and confirmed by the Senate. The secretary of commerce serves as chairman. Other Cabinet officers are the secretaries of labor and industry, community affairs, agriculture, and banking. 2. The board is authorized to employ staff and retain consultants.
Management and activities	The role of the PIDA is to cooperate with industrial development agencies in promoting the growth of qualified enterprises in critical areas; investigate and approve loan applications according to statutory guidelines; make loans from a revolving industrial development fund, a special account owned by the State of Pennsylvania, and provide for their repayment and redeposit in the fund; ensure repayment of loans through security interests in the project assets; and borrow money and issue bonds with principal and interest payable solely from PIDA’s mortgage income.
Budget	The PIDA staff, composed of two professional administrators and two clerical personnel, hire professional services on a contractual basis, including a law firm, an engineering company, and two accounting organizations, one of which reviews applications for loans while the other audits the PIDA program.
Sources	<ol style="list-style-type: none"> 1. Annual appropriations to write down interest rates for targeted areas. 2. Revenue bond funding and refunding through capital market bond issues.
Deal structure	<ol style="list-style-type: none"> 1. PIDA can lend from 30 percent to 70 percent of the land and building costs, up to \$2 million for any one project. 2. For each \$35,000 loaned, PIDA requires that at least one full-time job be retained and/or created at the project site within three years after the PIDA loan has closed.
Credit issues	<ol style="list-style-type: none"> 1. In a project with an eligible industrial occupant, the PIDA will take a shared first or second lien on project assets. 2. All loans for industrial parks must be secured by no less than a first mortgage on the property financed.
History	To stimulate the growth of private enterprise and create new jobs, the General Assembly in 1956 established the PIDA to make loans at below-market interest rates for the acquisition and construction of industrial facilities. The average PIDA loan covers 37 percent of the total cost of the loan project.
Outcome	The PIDA program has lent over \$1.5 billion for industrial projects and leveraged over \$5 billion in additional financings for plants and equipment.

15 “Pennsylvania Industrial Development Authority, Program Guidelines”. Pennsylvania Department of Community & Economic Development. October 2009 - <http://www.newpa.com/sites/default/files/uploads/PIDA-Guidelines---October-2009.pdf>

“Pennsylvania Industrial Development Authority Act”. Pennsylvania General Assembly - <http://www.legis.state.pa.us/WU01/LI/LI/US/PDF/1955/0/0537..PDF>

State Bond Financing Authorities

Program

- Issues tax-exempt and taxable bonds on behalf of eligible projects, including industrial, nonprofit, energy, or environmental projects.
- Bond proceeds can be used to finance acquisition of fixed assets such as land, buildings, and equipment as well as building construction or renovation.
- Bond issues as low as \$1.5 million (but may be much larger).

Benefits

- Financing at interest rates lower than conventional.
- Fixed- or variable-rate financing; can finance up to 100 percent of project cost.

Potential use of bond proceeds

- Hard costs: buildings, equipment, machinery, and furnishings
- Soft costs: architects, engineers, attorneys, and permits
- Land
- Financing: costs of bond issuance

Significant features

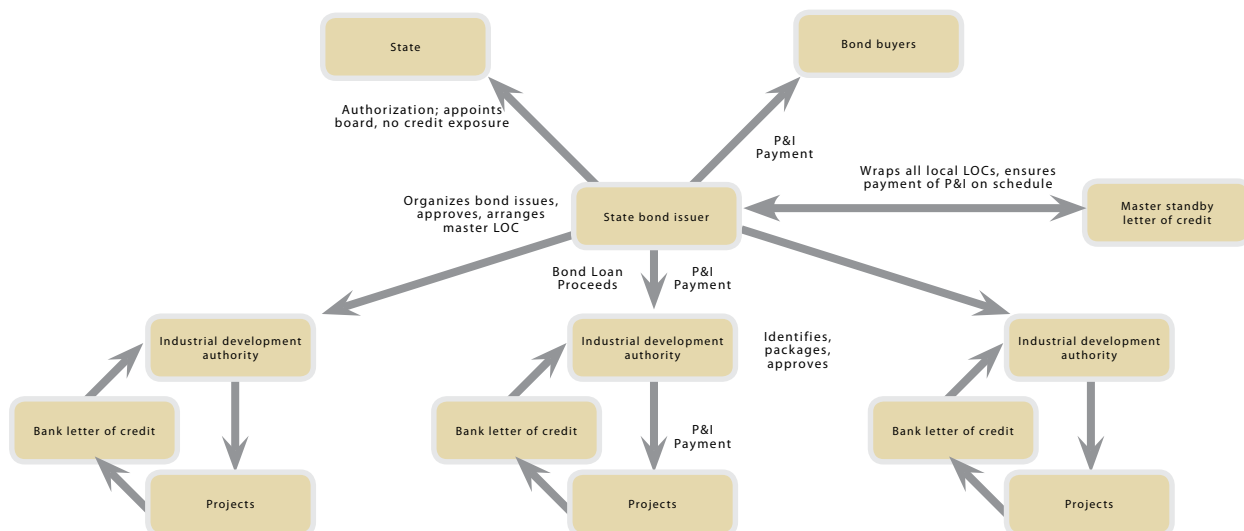
- Credit based on strength of beneficiary and project and/or guarantor/credit enhancement.
- Usually involves local agency to package and “approve” project, though not for credit.
- Usually requires credit enhancement through a bank letter of credit or insurance.

Lessons

- Create a conduit for eligible projects to access the capital markets.
- Pool projects in each bond issue to spread issuance costs and bond risks and receive long-term, low-cost credit.
- Use credit enhancement pledge (by bank letter of credit) to individual projects to limit recourse to issuer.

FIGURE
8

State bond programs credit and capital flows diagram



Maine Municipal Bond Bank

Program

- State-sponsored financing authority.
- Issues bonds in the capital markets on behalf of municipalities.
- Funds municipal projects, including transportation, solid waste, water, sewer, etc.
- Has issued over \$4 billion since 1972; \$1 billion outstanding.

Financial structure

- Pledges state funds to cover bond obligations; uses a reserve fund model to cover debt service obligations.
- Able to offer taxable and tax-exempt rates.

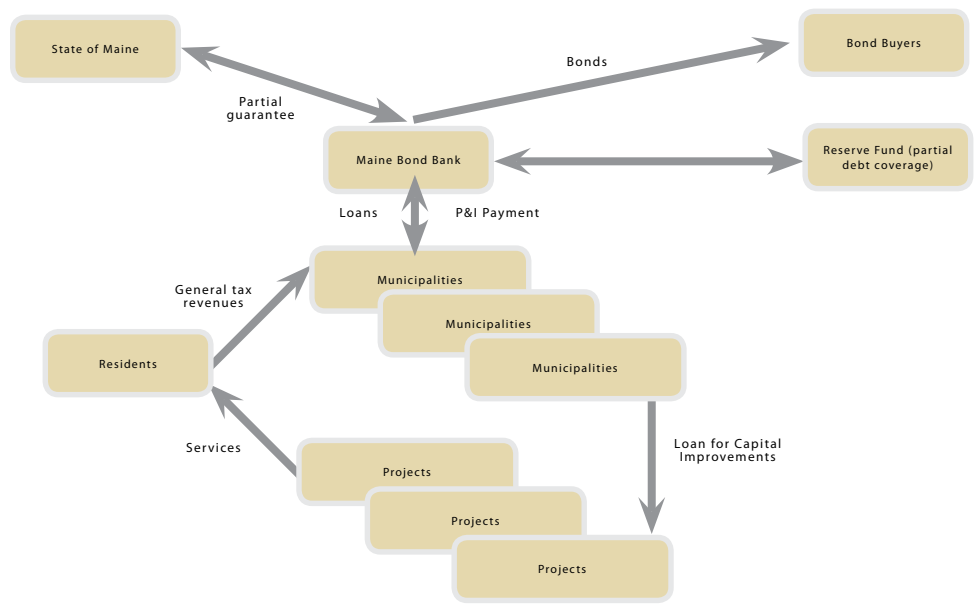
Significant features

- Pools bond risks among municipalities, blending asset classes.
- Offers bond buyers a diverse municipal bond portfolio.

Lessons

- Create a conduit for pools of eligible projects to access capital markets.
- Brand bonds for a portfolio of projects to encourage capital market acceptance.
- Limit guarantee by sovereign.
- Create project-based reserve funding to support credit.
- Use local development agencies to package and approve projects.

FIGURE 9 *Maine Bond Bank program credit and capital flows diagram*



Category	Maine Municipal Bond Bank (Details) ¹⁶
Organized	The MMBB was created in 1972 by the Maine Legislature to issue bonds so it could lend money to counties, cities, towns, school districts, or other quasi-municipal corporations in the state.
Management and authority	The MMBB is administered by a board of commissioners appointed by the governor.
Budget	<ol style="list-style-type: none"> 1. The MMBB does not receive any state appropriations for its operations. 2. The direct and shared operating expenses in 2012 totaled \$6.3 million. However the bank also administers other loan and grant programs in conjunction with the state government. 3. The MMBB allocates payroll and general overhead expenses from its operations to the Maine Health and Higher Educational Facilities Authority and the Maine Governmental Facilities Authority.
Sources	Property taxes are used to repay bonds.
Deal structure	Bonds are private placements with institutional bond buyers.
Credit issues	<ol style="list-style-type: none"> 1. Each project provides a pledge of revenue and capitalizes a debt service reserve fund. 2. Pools of projects provide portfolio support, spreading the risk among projects in the pool.
Outcome	<ol style="list-style-type: none"> 1. The MMBB has made 1,646 loans to 457 different governmental units. 2. More than 60 percent of the portfolio is school district bonds. Currently \$1.1 billion is outstanding. The bank has sold over \$4.2 billion in bonds as of February 2012.
Other Issues	Concerned about competitive pricing issues with institutional placements. Considering holding open bond auctions in place of the privately negotiated debt sales.

16 “Maine Municipal Bond Bank”. Maine Municipal Bond Bank Company website - <http://www.mmbb.com/Index.aspx>
“Maine Municipal Bond Bank, Basic Financial Statements and Management’s Discussion and Analysis and Additional Information, Year Ended June 30, 2011” Baker Newman Noyes - <http://www.mmbb.com/documents/AuditedFinancialstatements/6-30-11AuditedFinancials.pdf>
McDonald, Michael. “Maine Quashes Wall Street Negotiated Debt Deals Declaring No Free Lunch”. Bloomberg. August 2011 - <http://www.bloomberg.com/news/2011-08-09/maine-quashes-wall-street-negotiated-deals.html>
“Maine Municipal Bond Bank, General Bond Resolution Rating Agency Presentation”. Maine Municipal Bond Bank. April 2012 - <http://www.mmbb.com/documents/RatingAgencyPresentations/GeneralResolution.pdf>
“Measures of Performance”. Maine Municipal Bond Bank. September 2011 http://www.mmbb.com/documents/MMBB_MOP_2011.pdf
“An ACT - Session of 1991”. Commonwealth of Pennsylvania, Legislative Reference Bureau. 1991 - <http://www.palrb.us/pamphletlaws/19001999/1991/0/act/0035.pdf> 3

Indianapolis Bond Bank

Program

- Municipal-based bond authority designed to provide access to tax-exempt bonds for public works and major economic development projects.
- In 2002, foundations supported feasibility studies and plans for development of charter schools; Indianapolis expanded the bond bank to include development of charter schools.

Financial structure

- The city supports operating costs of new charter schools but not capital costs. Operating payments can include debt service costs.
- Bond bank uses a “moral” obligation by the city to lower the cost of bond debt.
- Ford Foundation provided a \$1 million match with the Annie E. Casey Foundation for a \$2 million guarantee to cover “first dollar losses.”
- U.S. Department of Education funded a reserve for a full year of debt service payments.
- Foundation supports planning and developing projects and preparing them for financing.

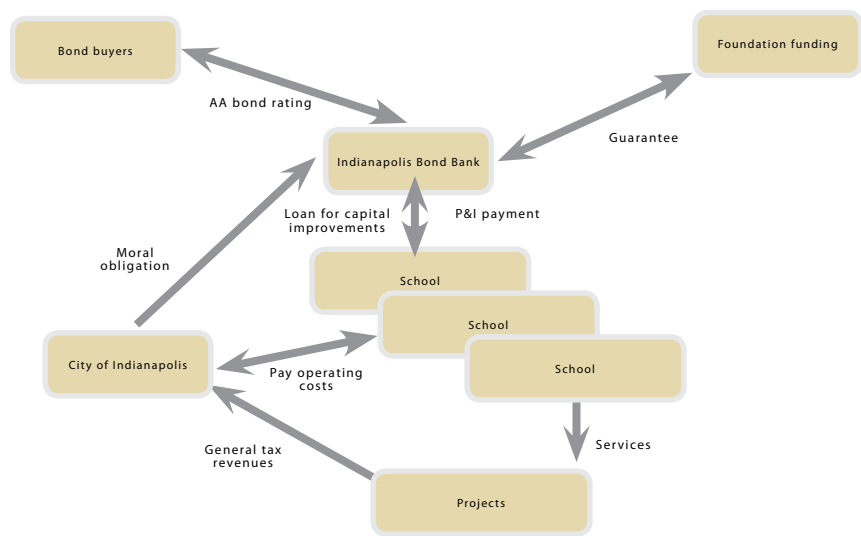
Significant features

- Guarantees leverage \$20 million in debt for 15 charter schools over five years.
- Guarantee is returned to foundations upon repayment of the bonds and returns income to the foundations during the term of the bonds.

Lessons

- Create a conduit for projects to access capital markets.
- Include a broad scope of eligible projects to amortize organization and issuance costs.
- Use program-related investments by foundations to provide credit enhancement.

FIGURE 10 *Indianapolis Bond Bank program credit and capital flows diagram*



Category	Indianapolis Bond Bank (Details) ¹⁷
Organized	The Indianapolis Bond Bank is governed by a five-member Board of Directors. Each director is appointed by the mayor of Indianapolis. The directors appoint an executive director who serves as secretary-treasurer. The directors serve three-year terms and may be reappointed. No director may be an officer of the city, county, or similar entity.
Management and authority	<ol style="list-style-type: none"> 1. The bond bank staff consists of the executive director, deputy director/general counsel, project managers, trust accountant, finance manager, office manager, and executive assistant/human resource manager. 2. The bond bank also supports and/or manages the operations of miscellaneous city projects, including Union Station, Indianapolis Downtown Canal, Indianapolis Downtown Inc., and various city-owned parking facilities.
Budget	Administrative costs were \$1.1 million in 2010.
Sources	<ol style="list-style-type: none"> 1. The Indianapolis Bond Bank issues bonds or notes. 2. A bond of the bond bank is not a liability of a qualified entity, but is a limited obligation of the bond bank payable solely out of the revenue and funds of the bond bank. 3. These revenue and funds are received in the form of debt payment from qualified entities. The source of funds for the debt payments may be from taxes, revenue, assessments, or other funds available to the qualified entity.
Deal structure	<ol style="list-style-type: none"> 1. Revenue bond with dedicated sources of repayment. 2. Credit enhancement is available on a deal-by-deal basis, including special limited credit enhancements through philanthropic program-related investments for specific projects. 3. Local municipality provides a “moral” obligation not a “general” obligation.
Credit issues	On special revenue bonds, the bond bank has organized a philanthropic pledge to provide credit enhancement on repayments of bonds.
Outcome	The Indianapolis Bond Bank is not a city agency and has no taxing power. It was created to buy and sell securities of certain qualified entities, including the city, county, all special taxing districts of the city, all entities whose tax levies are subject to review and modification by the City-County Council, and certain authorities or entities that lease land or facilities to other qualified entities.
Other	As of March 2011, the bond bank has issued and had outstanding an aggregate long-term principal amount of close to \$5 billion.

¹⁷ “The Indianapolis Local Public Improvement Bond Bank”. The official website of the City of Indianapolis. March 2011 - <http://www.indy.gov/eGov/City/BondBank/Official/Documents/2011%20A%20and%20B%20North%20of%20South%20OS.pdf>

“Indianapolis Local Public Improvement Bond Bank Website”. The official website of the City of Indianapolis - <http://www.indy.gov/eGov/City/BondBank/Pages/home.aspx>

“Indianapolis Local Public Improvement Bond Bank Financial Statements and Independent Auditors’ Report”. Indianapolis Local Public Improvement Bond Bank. December, 31, 2010 and 2009 - <http://www.indy.gov/eGov/City/BondBank/Documents/Dec.%2031,%202010%20and%202009%20Audit%20Report.pdf>

Calvert Community Note Fund

Category	Calvert Community Fund (Details) ¹⁸
Organized	The foundation has a 12-member Board of Directors, responsible for its overall policy and direction. The board has established an Investment Committee that reviews due diligence and makes investment recommendations to the board. Board members are reimbursed for out-of-pocket expenses related to board activities.
Management and authority	The staff consists of a president and CEO, chief financial officer, chief lending officer, president of community investment partners, and additional staff to maintain the day-to-day operations; investor, lending, and donor relations; and administrative duties.
Budget	In 2010, management and general expenses were approximately \$1.3 million.
Sources	<ol style="list-style-type: none"> 1. The foundation's community investment program is funded by individual and institutional investors as well as program-related investments, grants, and loans that are subordinate to the notes, providing a layer of credit enhancement. To create this credit enhancement, the Calvert Foundation received unrestricted grants from such institutions as the Rockefeller Foundation, the Ford Foundation, the Case Foundation, the F.B. Heron Foundation, Child Relief International, the William and Flora Hewlett Foundation, and the Michael and Susan Dell Foundation. 2. Starting at just \$20 per note, the community investment note is available in various terms and interest rates up to 2 percent. By creating innovative financial products and services, retail buyers, not just institutions, are able participate in financial instruments that directly serve communities. Notes include various terms from three months to 10 years; rates vary from 0 percent to 3 percent.
Credit issues	Senior unsecured debt – The notes are unsecured general obligations of the foundation and are not deposits or obligations of, or guaranteed or endorsed by, any bank, and are not insured by any federal or state agency.
History	The Calvert Foundation was incorporated in 1988 as an independent 501(c)(3) nonprofit corporation, though its current programs of issuing notes to the general public were launched in 1995, the result of a collaboration between Calvert Investments, Inc. (formerly Calvert Group), the socially responsible mutual fund company, and the Ford, MacArthur, and Mott foundations. The notes primarily focus on direct investments in community development organizations.

18 "Calvert Social Investment Foundation - Prospectus Information". Calvert Foundation. April 2011 – http://www.calvertfoundation.org/images/literature/cin_prospectus_2011_updated.pdf
 Calvert Foundation Website - <http://www.calvertfoundation.org/index.php>

Category	Calvert Community Fund (Details)
Outcome	<ol style="list-style-type: none"> 1. Calvert Notes have been used to build or rehabilitate over 17,000 homes, create 430,000 jobs in the U.S. and developing countries, and finance over 25,000 cooperatives, social enterprises, and community facilities. 2. The Calvert Foundation has nearly \$200 million invested in 250 community organizations in all 50 states and over 100 countries. Its portfolio is composed of direct investment in a diversified mix of high-impact organizations whose missions cover a range of social causes and innovations, including affordable housing, microfinance, fair trade coffee, small-business development, and community facilities such as charter schools, day-care centers, and rehabilitation clinics.
Lessons	<ul style="list-style-type: none"> • Open capital market access to eligible projects through crowdsourcing and retail market channels. • Use philanthropic investments to provide credit enhancement. • Target eligible projects to emerging domestic markets (e.g. distressed areas and populations).



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