Critique of the *Report of the Commission to Study the Feasibility of Establishing a Bank Owned by the Commonwealth dated 8/8/2011;* arguments in favor of the establishment of such a bank; and a hypothetical presentation of such a bank

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Introduction

The Massachusetts Public Banks Working Group is a group of volunteers who are researching public banking, and looking into the feasibility of the formation of a Massachusetts State Public Bank and the formation of one or more metropolitan area municipal public banks. The issue at the state level has been more or less left with a 2011 recommendation from a state commission against the formation of such a state public bank, with the caveat that there might be a need for such a bank restricted to public infrastructure financing.

This author is a member of the Working Group, and, while most of the viewpoints in this working paper reflect the views of the Working Group as a whole, not all of the views reflect those of the group as a whole. This paper represents, however, a significant contribution toward the Group's effort toward a full Feasibility Study for the creation of a Mass. state public bank and/or the creation of one or more metro-area municipal public banks.

The working paper takes the view that the Commission was set up with the intention of coming up with a negative finding, and was not an objective study, and that all but one of the reasons cited for recommending against a public bank are tautologies or irrelevancies. One reason, however, has great merit: There are institutions in Mass. that already perform functions usually thought to be those of a public bank. The Commission Report mentions a few of these institutions. This working paper complements the Commission Report in this regard, by briefly explaining many additional existing institutions that the Commission could have mentioned in this regard.

The paper then goes on to exemplify some of the analysis that would go into a thorough feasibility study, finding that state or municipal public banks could:
Support, complement, and strengthen small business lending by community banks;
Assist the badly-needed redistribution of bank assets from too-big-to-fail banks to smaller banks;
Protect public funds deposited in private banks from expropriation by too-big-to-fail banks (to pay off losing derivatives bets;
Accrue to the public the benefits of deposits of public funds, which now accrue almost entirely to the largest private banks;
Engage in badly needed public infrastructure financing, including the financing of locally based food systems, and renewable energy infrastructure;
And perform other financing and services that would fill needs, and complement, and not compete with the quasi-publics doing similar work.

Finally, this working paper provides an example of how a Mass. state public bank might be created, what its original and three year balance sheets might look like, and what the balance sheet of the nation's only state public bank looks like--the 95-year old Bank of North Dakota. The paper also presents in some detail the quasi-public Massachusetts Development Finance Agency (MDFA), the closest thing in existence to a Mass. state public bank, and notes the possibility of combining a new such bank with the existing MDFA.

Critique of the *Report of the Commission to Study the Feasibility of Establishing a Bank Owned by the Commonwealth*

This working paper critiques the (the "Commission") (8/8/2011), a report commissioned by Governor Patrick, and refers to a report from the Federal Reserve Bank of Boston that was requested by the Commission, "The Bank of North Dakota: A model for Massachusetts and other states?" The Commission Report was done by commissioners, the majority of whom, in this author's opinion were predisposed in opposition to the creation of a State Bank. The Report was cursory, weak in substance, and gave five reasons for recommending against the creation of a Massachusetts State Bank. Four of the reasons were not reasons at all or were tautologies. Only one reason of substance was given: That there were institutions in Mass. that carried out functions generally thought to be functions appropriate for a state bank, and that it made more sense to strengthen and/or expand these than to create a state bank. The Commission Report noted that the Mass. Executive Office of Administration and Finance (EOAF) was studying the possible need for a new State Infrastructure Bank, and that this worthy effort should continue. The Report also noted the need for strengthening small business lending.

The one reason of substance is a reason worthy of careful examination. Unfortunately, the Commission Report only listed three quasi-public entities to illustrate this financing comparable to the financing that a State Bank might undertake. Much of what follows is an expansion that adds many more existing institutions that perform functions generally thought to be functions that a State Bank might perform. In addition, on- and off-budget state expenditures and financing in areas thought to be areas of State Bank interest are also added. The question is, how might a state bank compliment, or in some cases constructively replace some of these existing functions. If advocates of the creation of a State Bank ever get to the point that their views get a serious hearing, this is the main question they will have to address: What can a State Bank do that is not being done already, or how can a State Bank compliment what is being done already, and why might it be advantageous for a State Bank to replace some functions currently being done by other entities?

It would not surprise me if Massachusetts was one of just a few states in the lead in creating these institutions that do things that a State Bank might do. These many institutions listed all finance to meet social objectives. I have only listed programs that lend or invest in projects which create or preserve low- moderate- and middle income housing, support businesses and/or create jobs in low-income neighborhoods. The exception is the Mass. Development Finance Agency, which also funds hospital and day care development. I have otherwise not included financing of facilities of non-profit institutions (social services, education, health), nor financing that supports operating expenses, since these are not normally functions thought to be appropriate for a state bank (a view that I share).

It is this author's belief that those interested in the formation of a State Bank, must develop a thorough understanding of these issues, and this paper is an effort to develop that understanding.

Finally, there is a brief look at the issue of forming a State Infrastructure Bank.

One issue that is also addressed is the issue of competition and complementarity. Some who think about State Banks see advantages to limiting the power and reach of the largest private banks. I am among them. We see one use of a State Bank as depositing some state funds or making some cash-like state investments through medium-sized, or local banks. This not-only accomplishes the task of diversifying banking, but also creates allies for the formation of a State Bank. It also creates enemies in the largest banks and their allies in other spheres.

There must be no banks too big to fail because such banks hold society hostage, and invariably use this leverage to exploit society to its detriment, as we witnessed in the great recession of 2008-2011, and as we are witnessing now, as such banks get congress to reduce derivative regulation put in place by the Dodd-Frank legislation, thereby making business and individual depositors liable for derivative gambling losses of banks too big to fail.

Regarding these many functions performed by existing institutions which are thought to be functions appropriate for a State Bank, it is my view that the existing institutions do a pretty good and reasonably efficient job. While it may emerge over time that a few of these functions might be better taken under the wing of a State Bank, there is no reason for a State Bank to duplicate any of these functions. In cases where the functions might be similar, the State Bank should always seek to compliment the already existing function in a way that expands the area of work and also increases the effectiveness of the already existing program.

This author's initial tentative conclusion is that a new State Bank should be created, initially be of a moderate scale, include infrastructure financing, compliment small business lending programs in ways that make the existing programs more effective rather than compete against them, make loans to in-state college students, redistribute the reduced state deposits and cash-like investments in giant private banks (those not transferred to the new public bank) in favor of medium-sized and local banks, should explore avenues for expansion, including expansion into bank services. Infrastructure financing would include not only the conventional roads, bridges, utility infrastructure, etc., but also agricultural, forestry, and environmental financing.

Commission membership tells us that the Commission was designed to recommend against the creation of a Massachusetts state bank.

The 21 members of the Commission included 8 private bank executives; 3 quasi-public lender executives; 6 public employees who work closely with banks in their jobs, either in the state executive or house or senate, 3 leaders of advocacy organizations and 1 finance professor. The private and quasi-public lenders combined totaled 11 of the 21, a majority, and the 6 representative of the state work closely with lenders. The l1 lenders represented would all potentially face competition from a state bank. The 8 private lenders would at least end up with far less state funds deposited in their banks and possibly some small business lending competition, and the 3 quasi-public lenders would at least face the possibility of competition from state bank lending in their respective financing arenas. It appears that the Commission was set up with the goal of obtaining a recommendation against the creation of a Mass. state bank.

The Commission's opening statement of what it set out to do (verbatim from the report):

1) Examine the technical, legal and financial feasibility of establishing a Commonwealth-owned bank, including but not limited to a Commonwealth-owned bank for infrastructure investment purposes.
2) Evaluate the experience of other states with state-owned banks, identifying the financial performance of such banks and evaluating the lending practices of such banks to show whether such banks successfully fill lending gaps not filled by the private sector.
3) Evaluate the manner in which public funds are invested or deposited by the Commonwealth and its political subdivisions including funds managed by the State Treasurer, the Massachusetts Municipal Depository Trust, and state and local pension funds.
4) Examine the infrastructure investment activities conducted by other states with state-owned banks.
5) Examine the lending practices, including lending to support infrastructure, of the existing public agencies in the Commonwealth that perform lending services.

It is odd that the Commissioners say that they are going to evaluate existing state-owned banks (plural), when they all knew before they began that there was only one.

The Commission reviewed information prepared by the quasi-public agencies the Massachusetts Development Finance Agency (MDFA), the Massachusetts Housing Finance Agency (MHFA), and the Massachusetts Growth Capital Corporation (MGCC), all three of which were represented by top officials on the Commission. The Commission received testimony from 16 persons. Some advocates of a state owned bank think that the four hearings were deliberately not publicized to minimize testimony and keep the entire subject out of the public eye. One way to minimize advocacy for a state-owned bank is to keep the idea from ever entering people's consciousness.

Bias of the Federal Reserve Bank of Boston as Consultant for the Commission

It is worth noting that the nations federal reserve banks are owned by the large commercial banks in their districts. This includes all of the too-large-to-fail banks that brought us the great recession of 2008, bet against the bundled mortgages that they sold, and then, via the Federal Reserve that they largely control and the US government, bailed themselves out, while leaving the drowning homeowners and public high and dry. The officers of the federal reserve banks are elected by the large banks in their districts who own the bank's stock. These large commercial banks, in turn, are partly owned by foreign interests. It is not surprising, therefore, that, if the large commercial banks represented on the Commission did not want a Mass. public bank, the Boston Fed, that these banks own, would not want one either.

The Commission recommended that the state not create a state bank because (verbatim from the Report):

1) A state-owned bank would require significant initial capital investment and it remains unclear that there is a proven need to justify the investment;
2) The only existing Model of a state-owned bank is that of North Dakota, which is inadequate given the vast differences in the banking industries and the economies of North Dakota and Massachusetts;
3) The public funds of the Commonwealth would be exposed to unacceptably high risk if deposited in a state-owned bank, the public funds would be used to provide risky gap financing, and the rate of return would need to match that currently earned under the management of the Treasurer;
4) The infrastructure investment activities in Massachusetts are substantially more established than in North Dakota; and
5) Massachusetts has a prominent network of public agencies, quasi-public agencies, and non-profits which offer various lending programs and services, including lending to help support infrastructure. We believe that bolstering these programs, policies and agencies is a faster and more effective way to meet gaps in our capital markets than establishing an entirely new organization.

The Commission recognizes that there are unmet needs in the Commonwealth including access to capital for very small businesses and infrastructure needs such as forest lands, waterways, farm lands and other forms of the environment.

Let us examine these reasons for recommending against formation of a state bank as they are stated, before we go into the detail of the Report:

1) Reason 1) above does not say that the cost of capitalizing a state bank is a reason not to have one. It says that the need for one has not been established.

2) Reason 2) above says that examining the North Dakota state bank is not useful for determining the need of a Massachusetts state bank. This statement is listed under the heading of reasons why a Mass. state bank should not be established, but the statement, in fact is completely neutral—it just says that looking at the N. Dakota example is not helpful in answering the question one way or another.

   This author would say that reason 2) if further disingenuous in that the Mass. report acknowledges the need for additional small business lending and agricultural lending, both of which are major North Dakota State Bank activities. In 2012 and 2013 40% of that bank's lending was business lending, including small business lending as a major component; and 18% of its lending was agricultural. Furthermore, 32% was student loans. Massachusetts state government has a college student scholarship program, which has been greatly diminished over the past decade, but no student loan program. While state scholarship support has been ratcheted down, tuition and fees at state public colleges and universities has been more than doubled, resulting in the denial of educational opportunity for a significant portion of the state population that had always been offered such opportunity up until around a decade ago. There is a profound need for a state student loan program designed to increase educational opportunity for lower-income students. Such a program could help address the ongoing devastating increases in inequality of wealth and income in the state. It is clearly worthwhile to examine how the North Dakota example might help meet these three Massachusetts area of need, two of which were acknowledged in the Mass. report.

3) Reason 3) above includes three separate statements, all of which are, at this point in time, false: The level of risk would depend upon the use of the bank funds, currently totally undetermined. Bank funds may or may not be used to provide risky gap financing, depending on what the bank was established to do, or some minor portion of the banks funds might be used that way, while the majority would be used at much lower risk. The rate of return on invested bank funds would not necessarily have to match that currently earned under the management of the Treasurer. That might be legislated to be the case, or it might not. A portion of the bank's funds might be limited to that return, and a portion limited to a lower return, and another portion to a higher return. All of the conditions referred to a priori in reason 3) would, in fact, be determined one way or another during the course of shaping and fine tuning the legislation establishing the state bank. Furthermore, the one extant state bank in North Dakota has obviously not placed its capital or deposits at excessive risk over its entire history from 1919. It has rather consistently grown its capital on its own from its initial public seed capital, and its financing programs and financial services have only deepened and broadened over time, as its customers found the risks inherent in its programs quite acceptable.

4) Reason 4) above says that infrastructure financing is much more developed in Massachusetts than in North Dakota. This statement is supposed to be a reason not to have a Mass. public bank. But the reason says nothing about whether or not Mass. infrastructure needs might or might not be well met by a state infrastructure bank. If Mass. infrastructure needs are different than No. Dakota's, then the Mass. needs must be evaluated in their own right. Furthermore, the Mass. Report states that the state might, in fact, need a state infrastructure bank and that the state should continue to examine this possibility. Why wouldn't it then be useful to examine how the No. Dakota public bank conducts its infrastructure lending, to see if similar guidelines, program eligibility and application requirements and procedures, types of programs, etc. might be applicable for Mass. infrastructure public financing?

5) This statement is a solid statement with real meaning, and if valid, could, all by itself, justify the conclusion of the Report, that a Mass. state bank is not needed.

The first four reasons given, are not reasons at all, and should be disregarded, but that the fifth point is the only substantive reason, and it merits extensive consideration:

One might think that after the details in the report are examined, one might find that, while perhaps worded poorly, there is substance to some or all of the first four reasons. This turns out not to be the case, and the fallacies in the first four reason statements are confirmed in the details of the Report. But, again, the real and only reason is the fifth reason, so all attention needs to be focused there.

The report tells us in reason 5) that instead of creating a state bank, public, quasi-public and non-profit agencies offering lending programs and services should be strengthened, and then the Report goes on to note in a separate statement, that some of these agencies also do infrastructure financing, and that strengthening their infrastructure lending may or may not be enough, and that the state should continue evaluating whether or not the creation of a new state infrastructure bank may be needed. So, we must further examine: 1) these public, quasi-public and non-profit agencies and what they do, 2) the distinct alternatives of:

(i) strengthening existing programs
(ii) creating a state bank;
(iii) strengthening some of existing programs and creating a state bank;
(iv) strengthening some of them, creating a state bank and combining some of them in to the state bank;
(v) creating a state bank and combining some of them into the state bank;
(vi) creating a state bank, and using most of the state bank assets to strengthen existing agency programs;

or

(vii) creating a state infrastructure bank;
(viii) strengthening existing infrastructure programs and creating a state infrastructure bank;
(ix) creating a state infrastructure bank, and combining existing infrastructure lending components into it;
(x) creating a state infrastructure bank, and using most of the state bank assets to strengthen existing agency infrastructure financing programs;

The Commission highlights three state-legislated and controlled "quasi-public" entities to illustrate the institutions that should be expanded instead of creating a state bank:

	Estimated Financing Per Year
Massachusetts Development Finance Agency (MDFA)	**$2,840,000,000 (2012-2013)**
Massachusetts Housing Finance Agency (MHFA)	**1,314,000,000 (2012,2013)**
Massachusetts Growth Capital Corp. (MGCC)	**14,000,000 (2012-2013)**
Subtotal Three Quasi-Publics	**$4,168,000,000**

These are private not-profit institutions that exist because of state legislation, and are capitalized by legislated state bonding authority and/or administer state tax-credit allocations by the federal government where private banks and insurance companies or individuals invest, and are compensated by sheltering income from other activities from federal income taxation. They are called quasi-publics, because 1) they are private, but only exist because of public legislation and publicly-legislated bond authority or tax-credit administrative authority, and 2) state government appoints most or all of their directors.

For the Commission, the Federal Reserve Bank of Boston prepared a report titled "The Bank of North Dakota: A model for Massachusetts and other states?" The Report found that Massachusetts state agencies "perform some of the same functions as the Bank of North Dakota, and in particular, Massachusetts has a particularly rich array of public and quasi-public agencies that fulfill similar economic development and financing objectives as the Bank of North Dakota. Therefore, reforms of existing Massachusetts economic development agency structure may be a viable approach to meeting small business lending goals."

In addition to the three quasi-publics discussed in the Commission Report, The Federal Reserve Report also mentioned four additional state-funded quasi-publics:

Whereas MDFA and MHFA finance nearly entirely through the issuance of bonds via state legislated bond authority, these other four primarily finance via state appropriations. Whereas MDFA and MHFA are financed by the private purchasers of the bonds, and MDFA manages tax-credit investment, the following nonprofits and trusts use public state funds that are passed through them. Some of the funds are federal government funds passed through the state government into these entities.

	Estimated Financing Per Year (2010-2011)
Massachusetts Clean Energy Center (MCEC)	**$8,000,000**
Crude estimate.	
Pension Reserves Investment Management (PRIM)	**3,000,000**
(Amount is a wild guess, needs to be refined).	
Small Business Banking Partnership (SMBP11)	**5,000,000**
Extremely crude estimate of $5,000,000 deposited on average annually.	
Massachusetts Water Pollution Abatement Trust (MWPAT)	**200,000,000**
Subtotal State, or Federal Pass-Through Capital Funds	**$216,000,000**

Existing Concessionary Public-Purpose Financing NOT Mentioned in the Commission Report or the Federal Reserve Report

However, we should look at all financing with characteristics that mirror the kinds of financing we may, generally speaking, want a State Bank to engage in. This would include, in addition to the seven quasi publics above, nonprofits and trusts mentioned in the Commission Report and the Federal Reserve Report:

State Capital Funds (real estate/plant)

Massachusetts State Government Capital Spending	**$607,700,000**
Off-budget state direct capital spending financed	

by the sale of state bonds to private investors.

State Legislated, Privately-Controlled Nonprofits

Lending required by state law, but done with private corporate funds by privately owned and controlled nonprofits.

Massachusetts Housing Partnership (MHP)	**$ 33,800,000**
$6,800,000 of private and public funds Plus $27,000,000 of nearly all private Bank funds.	
Massachusetts Life Insurance Community Investment Initiative (Life Initiative)	**20,000,000**
Life insurance company funds invested in affordable housing.	
Property and Casualty Initiative (PCI)	**2,700,000**
Insurance company funds invested in affordable housing. Estimated from $29,800,000 total of projects listed.	
Capital Access Program (CAP)	**900,000**
Private capital leveraged by $915,000 of state loan guarantee funds.	
Subtotal State Legislated Private Nonprofits	**$ 57,000,000**

MHIC Lending and Bank CRA Lending

Private lending, privately controlled, earning CRA credits

Massachusetts Housing Investment Corp. (MHIC)	**$ 189,600,000**
Funded, owned and controlled by a group of private Banks. Affordable housing development lending. Tax-credit investment management.	
Private Bank Community Lending	**$ 200,000,000**
Lending earning Community Reinvestment Act Credits—affordable housing, job generation in Low-income districts, often slightly below-market Interest rates. This is a crude estimate (doesn't Include CRA investments in MHP, etc.)	
Subtotal MHIC and Bank CRA Lending	**$ 389,600,000**

Municipal Community Development Finance And Infrastructure Capital Finance

Municipal Community Development Departments Loans and Grants	**$ 77,000,000**

The majority of these funds are federal government funds granted to municipalities for affordable housing and business development in low-income districts, or for job generation for low- and moderate-income persons. Estimate multiplies City of Boston by 3.5. Around 7% for businesses and 93% for affordable housing.

Municipal Infrastructure Capital Spending Primarily through off-budget municipal bonds, with a minority through appropriations (excludes municipal buildings, schools)	**crude estimate**	**$ 40,000,000**

Tax Credit Finance

Corporations, primarily banks and insurance companies, invest in low-income housing development. Rapid depreciation makes it appear for tax purposes that the investment looses money, and the negative tax on the losses goes against positive taxes due on other corporate business. The tax savings over the years the credit is taken (10 for Low Income Housing Tax credits) add up to an 8%-12% return on the investment. Tax credits are the source for around 40% of all low-income rental housing finance.

Federal 9% LIHTC The tax savings over 10 years add up to an 8%-12% return on the investment		**$ 14,700,000**
Federal 4% LIHTC		
Mass. LIHTC (Through 2012 $10,000,000, in 2013 and (2014 $20,000,000, then back down to $10,000,000 In 2015; so I am using $15,000,000)		**15,000,000**
Federal 10% Historic Tax Credit	crude estimate	**20,000,000**
Federal 20% Historic Tax Credit	crude estimate	**20,000,000**
Mass. Historic Tax Credit		**50,000,000**
New Markets Tax Credit Private investors invest in qualified lenders which recycle the investment as equity or loans to for-profit businesses operating in low-income communities.	crude estimate	**200,000,000**
Subtotal Tax Credit Financing		**$339,700,000**

CDFIs $15,000,000

A certified Community Development Financial Institution (CDFI) is a specialized financial institution that works in market niches that are underserved by traditional financial institutions. CDFIs provide a unique range of financial products and services in economically distressed target markets, such as mortgage financing for low-income and first-time homebuyers and not-for-profit developers, flexible underwriting and risk capital for needed community facilities, and technical assistance, commercial loans and investments to small start-up or expanding businesses in low-income areas. CDFIs include regulated institutions such as community development banks and credit unions, and non-regulated institutions such as loan and venture capital funds.

CDFI certification is a designation conferred by the CDFI Fund and is a requirement for accessing financial and technical award assistance from the CDFI Fund through the CDFI Program. Perhaps the main advantage of becoming a CDFI is obtaining an average of 7% of the CDFI's finance capital from the federal government.

The Massachusetts Housing Partnership (MHP) and Massachusetts Housing Investment Corp. (MHIC), above, are CDFIs. Among the 24 CDFIs in Massachusetts is one bank, OneUnited Bank, two credit unions in Winthrop and Fall River, four community development corporations in Boston, and other community development corporations and nonprofits around the state. Many of these organizations have a CDFI as a subsidiaty of their organization, which is the case with the four Boston CDCs, MHIC and MHP. Boston Community Capital's entire operation is a CDFI. I don't know the CDFI financing amounts for these CDFIs, and I am taking a wild guess that, excluding MHP and MHIC, their total annual CDFI financing would be around $15,000,000 a year of Massachusetts activity financed.

Summary Estimated Annual State and State-Related and Concessionary Private Affordable Housing, Business Development in Low-Income Communities and Infrastructure Loans, Grants and Equity Investments (includes no services or rental assistance)

	Estimated Financing Per Year
State Legislated and Controlled Quasi-Public Nonprofits	**$4,168,000,000**
State Appropriated Funds through Private Nonprofits	**216,000,000**
Subtotal mentioned by Commission, Federal Reserve	**4,384,000,000**
State Legislated, Privately-Controlled Nonprofits	**73,000,000**
State Capital Funds (real estate/plant)	**607,700,000**
MHIC and Bank CRA Lending	**389,600,000**
Municipal Community Development Finance	**57,000,000**
Municipal Infrastructure Capital Finance	**40,000,000**
Tax Credit Finance	**339,700,000**
CDFIs (not including MHP and MHIC)	**15,000,000**
Subtotal Other Financing not Mentioned in Reports	**$1,526,000,000**
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Grand Total	**$5,910,000,000**

(nearly 2/3 of the total is provided by the Mass. Development Finance Agency (MDDFA) and the Mass. Housing Finance Agency (MHFA).

All of this estimated annual spending, (almost all lending, with a small portion of grants, and tax credits, which are mostly for equity), is for purposes which are generally thought to be purposes which might be financed by a Massachusetts State Bank. The real, and only real, question posed by the Commission Report is the question of what would a State Bank finance, and how would that financing impact existing financing programs. Aside from stating that additional small business and infrastructure is needed, neither the Commission Report nor the Federal Reserve Report say anything about whether or not additional financing is needed in other areas that a

State Bank might finance. Let us assume that all of the types of financing included above should be increased (which is true), and accept for the moment that some degree of priority should be given to infrastructure and small business lending. Let us also assume that the above list of financing entities spend the above-estimated relatively wisely and efficiently (which they do).

This means that a new State Bank would be designed and regulated so that it did not compete with the above-listed financing, but rather strengthened or complimented it. That would allow for one or more of the above financing programs that uses state appropriations; state bonds; non-profit, state authorized private bonds; or state or federal tax credits to benefit from the new state bank, rather than to compete against it. For example, the State Bank could have a gap financing program that would lend to entities or projects that do not qualify for programs using financing from the above organizations, but that would qualify with the additional gap financing offered by the State Bank. Such an approach, not only avoids unnecessary competition, but also makes the existing programs even more effective, by broadening their reach.

The Mass. Executive Office for Administration and Finance (EOAF) had been examining the feasibility of an infrastructure bank. EOAF noted that such a bank would engage in public-private partnerships, attracting private capital into infrastructure investments. Once completed, infrastructure would have to generate revenue, such as tolls or use fees, in order to repay the original financing. An infrastructure bank could get projects completed more quickly, and more private financing would be attracted to infrastructure. After discussing A Mass. State Bank, this paper will briefly discuss a Mass. State Infrastructure Bank.

Review of Existing Massachusetts Entities Providing Functions that Are Generally Thought to Be Functions a State Bank Might Provide

Massachusetts Development Finance Agency (MDFA)
Because, the MDFA is probably the entity that most closely resembles how we might see a state public bank, and because it generates more economic activity than any of the other existing non-bank institutions in the state, we should understand it well. In some ways it already is a state public investment bank. Finance programs include investment banking, lending, New Markets Tax Credits, and community development. There are several grant programs and financial services. The state government grants and loans money to MDFA and MDFA grants and loans money to the state government. Average annual MDFA program expenditures for 2012 and 2013 were $54 million, and the average annual bond issuance was $2.75 billion.

Investment banking consists of conduit bond issuance delivering tax-credit benefits or below market costs to investor bond-holders. Projects financed include manufacturing, affordable rental housing, nonprofits, government projects, public infrastructure, waste disposal and recycling. The bond money is not MDFA money; it is the money of the persons and institutions that purchase the bonds. And the repayments of the bonds, over various periods of time, do not pass through MDFA but go directly to the bond holders, through fiscal agents. However, the bond financing would not happen were it not for the existence of the tax-exempt and taxable below-market costs to the bond purchasers and the projects they finance. This bonding authority, including the amount of bonds that can be issued, is legislated by the state. The same is true of $37,000,000 a year of New Markets tax credit investment in projects due to federal designation of MDFA for tax credit allocation. It is not MDFA money, but institutional investors' money that gets invested in development projects.

Lending and Community Development provide real estate and equipment financing to for-profit and nonprofit organizations. Financial and technical assistance, direct loans, participation loans with banks, and loan guarantees are offered. Higher loan/value ratios and eased underwriting criteria often enable gaps to be filled that are unmet by other lenders. Capitalization is from state and federal funds for specialized programs or from retained earnings.

The New Markets Tax Credit program provides investors with tax credits for investing in projects in low-income census tracts. For-profit and nonprofit business projects include, but are not limited to community health centers, retail and office space projects, performing arts centers, mixed-use projects, and light industrial centers.

Average Annual Massacusetts Development Finance Agency (MDFA) Program Expenditures and Bond Financing for 2012 and 2013

Brownfields Redevelopment Program grants	4,950,000
Emerging Technology Program guarantees	392,000
Cultural Facilities Program grants	6,000,000
Insurance for bank loans to exporters	3,950,000
Partial bank mortgage loan repayment guarantees	7,250,000
Charitable grants to charitable organizations and public colleges and universities	248,000
Grants to state government departments	500,000
Cultural Council grant	3,000,000
Subtotal grants, loan insurance and guarantees	26,290,000
Loan disbursements	26,500,000
Joint venture investments	1,400,000
Grand total annual program expenditures	54,190,000
Bonds issued for 99 projects, including real estate development of properties owned by MDFA	2,750,000,000
Annual tax credits taken by investors in Newmarkets projedts	37,000,000
Grand total annual expenditures by MDFDA and by	2,839,790,000

To provide some insight into the breadth and depth of MDDFA's bond financing, here is a list of less than half the 2013 bond issuance:

	Housing Units	Amount Issued	Bond Purchaser
Chapman Arms LLC/Homeowners' Rehab	50 units	11,800,000	
Brighton-Allston Apartments LLC	60 units	5,300,000	
Eaglebrook School--Deerfield		43,197,300	

Edmonds House Fram., Colonial Estates Spring.		70,800,000	
35 Northampton St.--Boston/Trinity Financial	245 units	27,750,000	TD Bank
St Joseph Hall Apartments LLC--Watertown	25 units	3,200,000	Watertown Savings Bank
Dana Farber Cancer Institute		50,860,000	
John Matouk & Co, manuf. of linens--Fall River		6,920,000	Taunton Avenue Securities Corp.
Laboure College--Milton		9,040,000	
LifeStream, Inc, nonprofit--New Bedford		3,500,000	
Cape Cod Health Care Obligated Group		50,000,000	
Leahy Health--various sites		130,000,000	
North Hill Communities cont. care--Needham		93,625,000	
Arc of Greater Plymouth, Inc., nonprofit		1,200,000	Webster Mass. Securities Corp.
Merrimack Valley YMCA, InAndover		23,750,000	Enterprise Bank
Windor School—Boston		40,000,000	First Republic Bank
WFH Housing LLC/Wayne at Franklin Hill--Dorch.		9,900,000	Eastern Bank
Williams College		126,140,000	
Berkshire Retirement Home, Inc.--Pittsfield		12,000,000	3 banks
SPV Assoc. LP/Swan Pond Vlg--So.th Yarmouth	150 units	18,000,000	
Brookwook School--Manchester		8,900,000	United Bank
Lowell General Hospital		61,005,000	
Trustees of Deerfield Academy		15,000,000	First Republic Bank
Hallmark Health Systems, Inc.--Reading		50,000,000	TD Bank
JP Scattered Site LLC--Jamaica Plain	13 units	3,360,000	Eastern Bank
Wentworth Institute of Technology		69,865,000	
Trinity Taunton Four LP/Taunton Hsng Authority	72 units	14,400,000	Bank of America
Child & Family Services, Inc.--New Bedford		2,450,000	Taunton Avenue Securities Corp.
Masy Systems, Inc., life science storage-Peperell		1,400,000	BDC Capital of New England
Springfield Housing Authority, offices		1,953,000	TD Bank
Dorchester Collegiate Academy Charter School		1,600,000	Boston Private Bank & Trust
Dudley Greenville LLC--Roxbury	43 units	9,000,000	Bank of America
Glenmeadow Inc. continuing care--Longmeadow		3,000,000	Peopples Bank
Cubi Realty LLC/Cumar, Inc., manuf. arch. stone		5,300,000	East Boston Savings Bank
River Valley Charter School--Newburyport		4,580,000	RBS Citizens, NA
St. Camillus Health Center, Inc., Whitinsville		7,500,000	UniBank
This total represents less than half of 2013 bond issuance		996,295,300	

Massachusetts Housing Finance Agency (MHFA)

MHFA raises capital through the sale of tax-exempt and taxable bonds to individuals and institutions. Bond authority is legislated by the state. No state funds are expended. Over its 47-year history through 2013, it has loaned nearly $15 billion for homeownership and multifamily programs, including 75,000 homeowner loans and 110,000 mixed income rental units, totaling over 4% of Massachusetts housing stock. Banks, the state government, and municipalities are lending partners in many projects. In 2013 MHFA had its greatest lending year with $1.66 billion in financing. The average annual financing for 2012 and 3013 was $1,314,000,000. The multifamily portfolio has a delinquency rate of 1% and the homeownership portfolio 4.5%. Nearly all the housing financing is for low and moderate income households. While MHFA sometimes refinances bonds and gains from arbitrage, nearly all of the funds it lends are the revenues from state-authorized bond sales to institutions and individuals. MHFA takes the revenue from the bond sales and loans it to developers of rental and homeownership housing, or directly to low- and moderate-income homebuyers. The developers of affordable multifamily housing and the low- and moderate-income homebuyers pay back MHFA, which, in turn, pays back the bond holders.

Most of the bond funds comply with federal guidelines for state housing finance agencies. Each state may have one such agency. A small share of MHFA's funds come from other sources. One such source is the state's Affordable Housing Trust Fund (AHT). It is funded by the state's housing bond bill, by which every three-five years, the state finances a number of affordable housing development finance programs, one of which is the AHT. In 2012 and 2013, MHFA loaned $41 million of AHT funds each year. The vast majority of the funds finances multifamily affordable rental housing developments.

Massachusetts Growth Capital Corp. (MGCC)
The mission of the new (November 2010) MGCC is to create and preserve jobs at small businesses, women and minority owned businesses, and to promote economic development in underserved gateway municipalities and in low and moderate-income communities. MGCC provides subordinate debt financing, over-advances, lines of credit, and partial loan guarantees, including micro-lending of under $100,000, contract and purchase order financing, and technical assistance whose costs are split 50/50 with the client. Through 2013 MGCC has loaned $49,600,000 153 small businesses. A quarter of borrowers are women/minority owned. The MGCC was capitalized in 2010 with $35 million of state funds. Through 2013 MGCC awarded $700,000 in grants to 24 nonprofits that provide technical assistance to small businesses.

Because the Commission found (p.23) that access to small business capital was a problem, it recommended monitoring the two new programs in this arena, the MGCC and the Treasurer's Small Business Banking Partnership program, to see to what extend they fill this lending gap. The state should also seek to bolster the small business lending of the community of quasi-public and private lenders.

Other public, quasi-public and concessionary private lending that fulfills social objectives:

Massachusetts Housing Investment Corp. (MHIC)
MHIC was founded in 1990 as a private non-profit by a consortium of banks to fill a critical gap in meeting the credit needs of affordable housing developers. MHIC attracts investor capital for low-income housing tax credit and new markets tax credit projects, packages and sells the tax credits to investors; has a loan pool for construction and acquisition lending; and a Neighborhood

Stabilization Loan Fund to address the mortgage foreclosure crisis. MHIC has raised $1.86 billion from 96 institutional investors in the tax credit programs ($650 million LIHTC, $517 million NMTC). MHIC can have $60 million outstanding in its construction, acquisition and stabilization loans. Since 1990 it has financed $1.741 billion in 414 projects. Neighborhood stabilization capital includes some federal funds. In 2011 total financings from all programs totaled $189.6 million.

Massachusetts Housing Partnership (MHP)
MHP is a public non-profit affordable housing organization established in 1985 to increase affordable housing production. In 1990 Massachusetts became the first state in the U.S. to pass an interstate banking act that requires companies that acquire Massachusetts banks to make funds available to MHP for affordable housing. MHP lends these private bank funds to affordable housing developers producing rental and homeownership housing. Most loans require that the housing financed be for households of up to 80% of metro area median income for 30 years. Low or no interest-rate second mortgages are provided to first-time, income-qualifying homebuyers to further reduce monthly loan repayment costs. To some extent financing is coordinated with the affordable housing loan programs of the state Department of Housing and Community Development (DHCD), part of the state Executive Office of Housing and Economic Development (EOHED). MHP has over $1 billion in private capital to work with. MHP has helped finance 17,000 rental units. 15,000 second mortgages have been provided to first-time homebuyers. Through the state law that established MHP, 27 banks provide its capital, including the largest banks in the state.

Massachusetts Life Insurance Community Investment Initiative (Life Initiative)
The Life Initiative is a $100,000,000 community investment fund created in 1999 by Massachusetts-based Life Insurance Companies. It has invested $200,000,000 in affordable housing developments, commercial properties, businesses and community facilities over the last decade. The Life Initiative was created by state legislation. It has helped finance 2,335 affordable housing units, 2,100 jobs, 975 child care slots and 8 community facilities with 85 borrowers.

Property and Casualty Initiative (PCI)
Pursuant to 1999 state legislation, 13 Massachusetts-based property and casualty insurance companies established PCI LLC as a state-wide community loan fund to promote economic development by providing loans that improve the health and welfare of low income residents and communities. The insurance companies have contributed $84,000,000 to capitalize PCI. Loans range from $250,000 to $5,000,000. PCI finances: affordable rental housing for residents of up to 80% of metro area median income for household size; small businesses; commercial and industrial properties in distressed areas; community health centers, child care centers and other services

Capital Access Program (CAP)
The Boston Federal Reserve Report informs us (p. 19) that "the Capital Access Program uses Mass. state funds to capitalize "a loan-loss reserve for small business loans, facilitating access to credit. CAP has received $15.5 million in appropriations and facilitated over 4,400 loans with a total value of roughly $280,000,000 during the past 17 years. More than 60 banks in

Massachusetts participate in CAP. For every dollar appropriated by the state, the program funds $18 in business loans. Much CAP activity is done through the Business Development Corporation, which operates throughout New England, and which has banks as investors. The loan loss reserve function makes state funds available to pay a portion of loan repayments to participating banks, if the business borrower fails to make payments. This reduces the banks' risk and makes the bank willing to make given loans that their normal underwriting would reject. In essence, CAP increases small business access to bank lending.

Massachusetts Clean Energy Center (MCEC)

MCEC was created by the Mass. Green Jobs Act of 2008, and I 2009 another act transferred the state's Renewable Energy Trust Fund to MCEC. The fund was created in 1998, and is capitalized by the state's electrical users, who each contribute an average of 29 cents per month. MCEC makes direct investments in clean energy companies; provides $4,000,000 per year in rebates for the installation of photovoltaic systems up to 10 kilowatts and all residential systems regardless of size; provides rebates for the installation of wind projects at residential and commercial sites of less than 100 kilowatts; provides financial assistance for feasibility studies for clean energy installation; provides grants for hydropower upgrades; provides rebates for clean energy development companies; through the Low Income Energy Assistance Network (LEAN) Partnership, the Clean Energy Choice (CEC) program, and the Green Affordable Housing Initiative (GAHI), has committed $34.6 million to support green buildings, energy efficiency measures and renewable energy installations benefitting low and moderate-income Mass. residents; is investing $13.2 million as a partner in the Charlestown Wind Technology Testing Center.

Private Bank Community Lending

Federal law (the Community Reinvestment Act) (CRA) requires banks that acquire other banks to make community lending investments in the region of the acquired bank. For this lending, the banks earn CRA credits, and they have to earn a certain amount of credits to comply. Some of the credits are earned through banks' participation in capitalizing the Massachusetts Housing Partnership (MHP), and other investing/lending activity through intermediary institutions, but the majority of CRA-qualifying community lending is done directly by the banks in first-mortgage lending to affordable housing projects, and job-generating commercial projects in low-income census tracts. This lending is always concessionary either through below-market interest rates, or the assumption of unusual risk.

Massachusetts State Government, with examples: Massachusetts State Executive Office of Housing and Economic Development (EOHED) and Transportation

EOHED directly lends to affordable housing developments, businesses and infrastructure projects through a variety of programs. The state pays for the services it provides through the state operating budget, and the services are paid for almost entirely by annual revenue. Buildings and equipment are almost entirely finances through the sale of "off-budget" state bonds. The only part of this financing that appears in the budget is the amount required to repay principal and interest on state bonds. The ultimate source of the bond expenditures are the institutions and individuals who purchase state bonds. The same is true of municipalities, which pay for their services through annual revenues, and sell municipal bonds to finance buildings and equipment.

Commonwealth of MA Five-Year Capital Investment Plan
The Plan includes building and equipment spending financed both by the sale of state bonds and by other state revenue. In 2010, 54.3% of the over $3 billion spent was financed by the sale of state bonds:

p. 17 Total Spending Major Investment Categories

	Total Spending	of Which State Bonds
Community Investments	294,307,000	234,607,000
Corrections	26,234,000	21,134,000
Courts	111,825,000	111,825,000
Economic Development	106,780,000	86,780,000
Energy & Environment	120,591,000	106,817,000
Health & Human Services	93,352,000	92,352,000
Higher Education	98,764,000	83,764,000
Affordable Housing	297,318,000	168,000,000
Information Technology	78,131,000	75,260,000
Public Safety	39,200,000	13,300,000
State Office Buildings & Facilities	85,258,000	72,758,000
Transportation	1,686,906,000	583,402,000
Total	3,038,667,000	1,650,000,000
State Bonds % of Total Spending		54.3%
Divided by 5 for annual average	607,733,000	330,000,000

2010 Economic Development Includes:

$22,000,000	public infrastructure supporting business expansion and relocation
$13,000,000	predevelopment and site preparation for infrastructure in growth areas
$30,000,000	building of life sciences research centers academic and industry
$15,000,000	broadband infrastructure in underserved areas
$80,000,000	

The portion not financed by state bonds will be financed by non-state sources generated by the projects that the infrastructure is for.

2010 Affordable Housing Includes:

$ 99,400,000	public housing
$ 35,000,000	affordable housing trust fund for households of up to 110% of AMI
$ 5,000,000	capital improvement and preservation fund for existing housing
$ 5,000,000	community-based housing for disabled persons
$ 7,500,000	facilities consolidation fund for dept. mental health, retardation clients
$ 1,000,000	housing near transit nodes
$ 9,000,000	housing innovations fund for special needs housing
$ 13,000,000	housing stabilization fund to compliment federal HOME funds
$ 5,500,000	other affordable housing finance
$180,000,000	

The portion of affordable housing development financing not provided by state bonds is provided by federal funds. The vast majority of these programs loan funds to affordable housing developers at no or low interest rates, and after provision of affordable housing for 30 to 60 years, most of the loans are forgiven.

2010 Transportation Includes:

$ 137,000,000	federally-assisted road and bridge projects
$ 100,000,000	non-federally-assisted road and bridge projects
$ 46,900,000	fairmount commuter rail project
$ 8,700,000	green line extension
$ 6,000,000	red line-blue line connector study
$ 4,000,000	parking spaces initiative
$ 15,600,000	fall river, new bedford rail extension planning
$ 18,500,000	dept. of conservation & recreation parkways & bridges
$ 12,800,000	mass transit (AARA)
$ 65,300,000	road and bridge (AARA)
$ 414,700,000	Total

In addition to the affordable housing capital bond spending (off-budget), the Department of Housing and Community Development of the Executive Office of Housing and Economic Development (EOHED) spent an on-budget $297,734,000 of state funds, $619,666,207 of pass-through federal funds, and $4,013,810 of other funds, for a total of $921,414,414. The primary categories of spending of the $297,734,000 of state funds were:

Family shelters and services	$ 97,797,000
Homeless individuals assistance	$ 37,733,000
Transitional housing	$ 38,562,000
Subsidies to Public Housing Authorities	$ 62,500,000
Rental assistance (MRVP)	$ 36,000,000
Total	$281,592,000

Pension Reserves Investment Management (PRIM)

The Boston Fed Report tells us that PRIM has made a strong commitment to Massachusetts through its venture capital portfolio. PRIM has backed two managers through its Economically Targeted Investment Program, creating 1,085 jobs in Massachusetts. PRIM also has traditional venture capital investments with nine Boston-based VC firms. In total, PRIM's private equity portfolio has sponsored 189 unique Massachusetts companies representing $232.6 million in market value. This portfolio has created approximately 6,083 jobs."

Small Business Banking Partnership (SMBP)

The Boston Fed Report also informs us (p. 12) that the Mass. Treasurer's SMBP program "provides state deposits of up to $5 million each to smaller local, regional, and community banks to support loans to creditworthy small businesses….More than 50 banks are in some state of negotiation. A total of $106 million has been deposited, exceeding the original goal of $100 million, and the Treasurer has announced he will commit another $100 million to the program."

Massachusetts Water Pollution Abatement Trust (MWPAT)
The Fed Report also informs us (p. 12) about the Treasury's MWPAT program, which "leverages federal grants through a State Revolving Fund to provide low-interest loans for the construction of clean water and safe drinking water projects in Massachusetts. Since 1989 MWPAT has loaned $4.6 billion to cities and towns within the Commonwealth, dealing with 292 entities, encompassing an estimated 97% of Massachusetts' citizens. The revolving fund approach is a model that could be adapted to meet other infrastructure needs."

Public Small Business Lending

Since the State/Federal Reserve public banking report stated that there needed to be a significant increase in small business lending in the state, let us recap from the above existing public, or public-induced (tax credit) small business lending already happening; and then reflect on how a state, and/or metro area public bank/banks might help fill the gap.

Existing Public Small Business Lending

Massachusetts Growth Capital Corp. (MGCC) **$14,000,000**

The mission of the new (November 2010) MGCC is to create and preserve jobs at small businesses, women and minority owned businesses, and to promote economic development in underserved gateway municipalities and in low and moderate-income communities. MGCC provides subordinate debt financing, over-advances, lines of credit, and partial loan guarantees, including micro-lending of under $100,000, contract and purchase order financing, and technical assistance whose costs are split 50/50 with the client. Through 2013 MGCC has loaned $49,600,000 153 small businesses. A quarter of borrowers are women/minority owned. The MGCC was capitalized in 2010 with $35 million of state funds. Through 2013 MGCC awarded $700,000 in grants to 24 nonprofits that provide technical assistance to small businesses.

New Markets Tax Credit crude estimate **$120,000,000**

The federal government issues a dollar amount of tax credit financing a state or municipality may undertake, The vast majority of such financing in Boston is for small business real estate development, fit out, and equipment. I am guestimating that about 150,000,000 of $200,000,000 a year goes to businesses, and that $120,000,000 of that goes to small businesses. An entity sells bonds to a bank, which sells them, in turn, or most of them, to investors. The bank loans the funds obtained by selling the bonds to the small business. The small business repays the loan and the bank uses the loan repayments to repay the bond holders. The bond holders get 80%-95% of their bond purchase divided by 7 into annual tax credits, that protect the equivalent amount of income from other operations from federal taxes. Over the 7 years the tax credits add up the equivalent of an 8%-12% return on the bond investment. Depending on the structure of the deal, the financing may be equity or debt. In the Boston case, is nearly always equity. The financing is for small businesses located in low-income communities.

Municipal Community Development Departments **$4,500,000**
Loans and Grants

Around 7% of federal Community Development Block Grant funds granted to municipalities, around $6,000,000, is loaned or granted to businesses annually, the vast majority, say $4,500,000 to small businesses, and a significant portion of that to start ups. About _ is loaned and _ granted.

Small Business Banking Partnership (SMBP11) **$5,000,000**

Extremely crude estimate of $5,000,000 deposited annually in medium- and small-sized community banks annually. By some mechanism that I fail to understand, this is supposed to result in a roughly equivalent increase in small business lending by the banks.

Approximate total annual small business lending **$144,500,000**

How Might A State and/or Metro-Area Public Bank/Banks Increase Small Business Lending

Let us first note that the public Bank of North Dakota's (BND) loan portfolio is over half commercial loans, with about 1/3 to agricultural businesses and 2/3 to non-agricultural businesses. I don't know what portion of this lending is for small businesses, but would guess that it is a substantial portion. The commercial lending activity includes loans, participation loans (where BND partners with a community bank and each makes part of a single loan), letters of credit, loan guarantees, start-up loan guarantees, and interest rate buydowns for loans to day care centers.

Since the idea is to enhance rather than compete with existing small business lending, public bank participation lending with mid-sized and small community banks would be an excellent way to do so. There are probably two primary reasons why more small business lending by such banks isn't greater: risk and loan size. Small business lending is risky and small community banks that don't find the risk overwhelming, may be unable to make loans large enough to meet the particular business need. On both counts participation loans, with the public bank providing a portion of the loan funds and sharing a proportionate amount of the risk, is an excellent way for a public bank to support and enhance such bank lending.

Letters of credit and partial loan guarantees serve the same end. If the bank is unwilling to make the required loan, but the borrowing business could afford a bit higher cost, it could buy a letter of credit (LOC) from the public bank. If the business failed to make required loan repayments to the private bank, the public bank would make the payments, and the business would pay the money back to the public bank. If the loan was a bit too risky for the private bank, the public bank could guarantee a portion of the loan, say the first _ of the repayments due to the private bank. This would reduce the risk to the private bank enough that it would be willing to make the loan to the small business.

If the small business is a start up, and can't afford to pay all of the interest due to the private bank for its loan, the public bank could do an interest-rate buydown, by paying a portion of the interest for a few years, and then the small business would begin paying that interest portion back to the public bank, with interest, a few years later. There are many ways a public bank could partner with or enhance private bank small business lending.

The Federal Reserve Bank report contracted by the commission that did the Mass. public bank report found that "much of the Bank of North Dakota's lending derives from participating in or purchasing business loans originated by smaller banks….serving as a lending partner for small banks in North Dakota is the Bank's most important current role. In North Dakota, small banks account for a large share of the banking market." The Federal Reserve Bank found that the North Dakota public bank model may not be appropriate because "smaller banks would view it as a partner, but larger financial institutions would see it as a competitor."

This is precisely one of the main reasons for the establishment of a Mass. public bank and its use to complementarily strengthen business lending by community banks. For numerous reasons, one of the greatest national needs is to reduce too-big-to-fail banks to banks not-too-big-to-fail, to redistribute bank assets toward smaller banks, and to strengthen the business lending competitiveness of small community banks. As the Fed report noted on p. 17, "In Massachusetts, the top three banks account for nearly one-half of bank deposits, and banks with less than $500,000,000 in deposits account for only about 16% of total deposits. Thus, larger private banks already exist to meet the credit and other service needs that smaller banks are unable to satisfy." As the Fed noted on p. 18: Because there are large banks in Mass. able to finance large projects, these banks "would likely view a new public bank as an undesired competitor rather than a welcome partner." This is why such banks on the Commission, used their influence to have the Commission recommend against the formation of a state public bank.

Derivatives Super Priority and the Safety of Public Deposits—Is the Full Faith and Credit of the State Better than FDIC Insurance?

In what is an aside for this working paper, permit me to note that the December 2014 federal spending bill included a reversal of Dodd-Frank bank deposit protections and enhances the already existent super priority of too-big-to-fail bank derivative gambling losses. Since the FDIC can only cover pennies on the dollar in terms of total bank deposits for accounts up to $250,000, a derivatives crash could vaporize FDIC coverage and subject deposits in FDIC-insured banks to seizure to cover derivatives losses. This incredible fact leads to the question: Are municipal and state deposits safer in public banks that do not have FDIC insurance, precisely because they do not have FDIC insurance, and thus are not subject to the "bail-in" super priority enjoyed by derivative gambling losses.

Many city and town CAFRs (Consolidated Annual Financial Reports) reveal investments in hedge or equity funds and other risky vehicles. Because too-big-to-fail banks that hold the lion's share of sizeable public deposits invest heavily in derivatives, local governments should be concerned about confiscation of their deposits in the next Wall Street crash. See Ellen Brown's "Winner Takes All: The Super Priority Status of Derivatives."

How would a Massachusetts Public Bank Be Established?

First, let us look at where and how the state is depositing and investing its cash:

2011 Mass. State. Deposits, Cash-Like Investments, and Short Term Bond Investments

Bank Deposits	**$ 522,000,000**
Cash-Like Investments & Short Term Bonds	**3,500,000,000**
Total	**$4,022,000,000**

According to Banknet, the $522,000,000 of cash deposits in 2011, was distributed as follows: 4 banks held 54%, three additional banks held another 10%, and another 174 banks held the remaining 36%. These 184 banks held a total of $231,328,000,000 (231.3 billion) in deposits, of which .23% (one quarter of one percent) was the state's $522,000,000. While only a portion of the MMDT $3.5 billion is held by banks, the $3.5 billion is an amount equaling 1.51% of the state's bank deposits, and the combination of the cash and the MMDT funds equals the equivalent of 1.74% of the state's bank deposits.

Bank of America, NA	$ 52,766,315,000	22.81%
State Street Bank & Trust Co.	28,614,029,000	12.37%
RBS Citizens, NA	28,614,029,000	12.30%
Sovereign Bank	15,398,332,000	6.66%
Subtotal Top Four	$125,229,851,000	54.14%
TD Bank North, NA	$ 9,806,515,000	4.24%
Bank of New York Mellon	7,081,836,000	3.06%
Eastern Bank	6,186,454,000	2.67%
Subtotal Next Three	$ 23,074,805,000	9.97%
Subtotal Top Seven	$148,304,656,000	64.11%
Total All 184 in Mass.	$231,328,429,000	100.00%
Mass. State Government (not including state institutions)	$ 522,000,000	0. 23%.
Mass. Municipal Depository Tr.	$ 3,500,000,000	1.51%
Subtotal State Deposits	$ 4,022,000,000	1.74%

Hypothetical Massachusetts State Bank Lending

Let us say that lending regulation require the State Bank to maintain reserves of 15% of deposits, and that certain accounts usually totaling 15% of deposited funds are completely segregated from loan operations, and do not secure loans, and cannot be attached to cover obligations of loan operations. The amount of loans could safely equal 85% of deposits, and seven times capital, assuming that the overall risk of the loan portfolio is higher than that of the average commercial bank.

The Federal Reserve Report informs us (p. 19) that 2011 "Massachusetts state government deposits in private financial institutions total $522 million. Another $3.5 billion in state funds are managed by the Mass. Municipal Depository Trust (MMDT), an investment fund overseen by the state treasurer. (These figures do not include the funds of state institutions, such as the University of Massachusetts System." The MMDT invests state funds and funds of about 290 of the state's municipalities (there are quite a few that don't invest funds via MMDT). The Fed Report states that there is about $3,500,000,000 of "state" funds invested in money market and short-term bond holdings in the Trust. The 2011 MMDT Annual Report lists $8,637,000,00 of net assets in cash/money market instruments/repurchase agreements/etc.; and $286,000,000 of net assets in short-term bond fund investments, for a total of $8,923,000,000 of net assets.

If $3,500,000,000 of that is state funds, then state funds would comprise about 39.23% of the total, and, presumably, municipal funds would constitute the remaining 60.77%. The Trust has given over management of all of these funds for 35 years to Fidelity's Pyramis Global Advisors, but in 2012 the funds were shifted to Fidelity Investors, Inc. (FII). The manager of these funds invests the funds in hundreds of accounts with a large number of financial institutions, many of them banks.

One Hypothetical Massachusetts State Bank Scenario

Let us begin exploring one Mass. State Bank scenario with the assumption that the around half ($260,000,000) of state deposits now in private banks, and $830,000,000 out of $3,500,000,000 of municipal MMDT deposits managed by the state are deposited in the state public bank. The other half ($260,000,000) of state deposits remains deposited in private banks. Of the remaining $2,570,000 of MMDT funds managed by the state, some might be transferred to one or more metro area municipal public banks, and some might remain as currently managed by the state. After a few years, more of the MMDT funds might be transferred to the state public bank. Nearly all of the $830,000,000 of MMDT deposits (liabilities) in the state public bank, are invested (public bank assets) in money market instruments and repurchase agreements and short-term bond investments. MMDT assets would initially be the main asset of the State Bank. The bank would be initially capitalized by a one-time $150,000,000 state appropriation, followed by a $20,000,000 long-term, 0% interest equity loan. The balance sheet of the state public bank might look like this on day one: Initially only $500,000,000 of MMDT funds have been transferred to the new bank.

Initial Assets

Initial Investments	
Highly liquid state cash investment	$ 50,000,000
Highly liquid MMD municipal Cash investment	$ 6,000,000
State cash	$ 30,000,000
MMDT municipal cash	$ 4,000,000
MMDT municipal funds: money mkt, repurchase agreements, short-term bonds.	$ 490,000,000
State funds: money mkt, repurchase agreements, short-term bonds.	$ 180,000,000
Invested capitalization	$ 150,000,000
Initial Assets	$ 910,000,000

Initial Liabilities and Capital

Initial Capitalization	
State appropriation	$ 150,000,000

State cash deposits	$ 80,000,000
State deposits (invested)	$ 180,000,000
MMDT cash deposits	$ 10,000,000
MMDT deposits (invested)	$ 490,000,000
Initial Liabilities and Capital	$ 910,000,000

After three years, by which time a meaningful loan portfolio will have developed, the balance sheet might look like this: By this time, municipal confidence in the new bank has resulted in an additional $330,000 of MMDT funds being transferred to the public bank, bringing the amount up to $830,000,000.

Assets After 3 Years

Investments	
Highly liquid state cash investment	$ 120,000,000
Highly liquid MMD municipal Cash investment	$ 13,000,000
State cash	$ 50,000,000
MMDT municipal cash	$ 7,000,000
MMDT municipal funds: money mkt, repurchase agreements, short-term bonds.	$ 810,000,000
State funds: money mkt, repurchase agreements, short term bonds.	$ 80,000,000
Invested capitalization	$ 0
Loans	$ 290,000,000
Total Assets	$1,370,000,000

Liabilities and Capital After 3 Years

Capitalization	
State appropriation	$ 150,000,000
State long-term 0% equity loan	$ 20,000,000
Retained Earnings	$ 20,000,000
Total initial capitalization	$ 190,000,000
State cash deposits	$ 170,000,000
State deposits (invested)	$ 80,000,000
State deposits	$ 50,000,000
MMDT cash deposits	$ 20,000,000
MMDT deposits (invested)	$ 810,000,000
MMDT deposits	$ 60,000,000
Initial Liabilities	$ 1,370,000,000

After a few years of operations:
MMDT had $8,923,000,000 of net assets in 2011, only $3,500,000,000 of which were managed by the state. It may make sense after a few years of public bank operations for much more of MMDT assets to be transferred to or become managed by the public bank. Likewise, the $522,000,000 of state deposits in private banks that was initially split, with half being deposited in the new public bank, did not include deposits of state institutions, such as the five University of Massachusetts campuses. After a few years of operations, it may make sense for around half of the deposits of these and other state institutions to be deposited in the public bank.

Let us compare this hypothetical balance sheet of an infant Mass. Public State Bank to the 2012 balance sheet of the only state public bank, North Dakota's, a mature 93-year-old public state bank. The assets and liabilities are four times larger than those of the hypothetical Mass. bank, reflecting BND's century of growth and the fact that it plays a larger role in the state that that projected for the Mass. bank, because ND does not have such a large collection of quasi-public and specialty private institutions performing roles associated with those of a public bank. However, this balance sheet also suggests a long road of growth that could follow the establishment of the Mass. bank.

North Dakota Public State Bank 2012 Balance Sheet

Assets

Cash and due from other banks	$ 500,778,000
Securities	$2,125,236,000
Federal funds sold & reverse repo agreements	$ 39,350,000
Net loans and leases	$3,136,109,000
Other assets	$ 67,523,000
Total Assets	$5,868,996,000

Liabilities and Capital

Capitalization

Stock	$ 2,000,000*
Surplus	$ 42,000,000*
Retained earnings	$ 396,585,000
Total Capitalization	$ 440,585,000

Liabilities	
Deposits	$4,842,545,000
Federal funds purchases & repo agreements	$ 172,200,000
Other borrowed funds	$ 407,011,000
Other liabilities	$ 6,655,000
Total Liabilities	$5,428,411,000
Total Liabilities and Capital	$5,868,996,000

*ND chose to create a BND stock and issued $2,000,000 of nominal shares. This has not changed in 97 years. The surplus indicates that the value of the nominal shares is 22 times larger than their nominal value.

Note that the outstanding balance of the loan portfolio is over seven times the capitalization of the bank. Loan portfolios don't arise overnight. Loans are painstakingly built, as are the projects they finance, and a useful and strong portfolio is built over many years. So the Mass. bank's portfolio would probably expand over one or two decades before stabilizing.

The Federal Reserve Report (p. 11) states that according to the Mass. Treasurer's office, "The banking services the Commonwealth requires are extensive, sophisticated, and costly. Banks that do business with the Commonwealth, for example, must have the financial capability to pay millions in state bills at times when the bank balance is temporarily negative, which happens routinely during the course of a business day. Not every financial institution can provide the necessary services, and it would be expensive to replicate them in a new institution. Moreover, any alternative institution—if it were to protect the public's money according to the Treasurer's principles—would have to secure its deposits and provide an adequate rate of return."

In line with this thinking, a portion of the new Mass. State Bank's deposits would be deposited by the State Bank in State Bank accounts in private banks, capable of providing these services, security and rate of return. Hence, our hypothetical start up has split state deposits in half, with $260,000,000 going to the public bank and $260,000,000 remaining in private banks.

For advocates of relative decentralization and demonopolization in the banking sector, it would be desirable to require that the $260,000,000 of cash deposits in private banks not be deposited in the four banks with most deposits (54.14% of statewide deposits among the four), or even among the seven banks with most deposits (together 64.11%). However, the banks receiving the state deposits must be able to efficiently and cost-effectively provide the services as described above in the Federal Reserve Report.

One Possible Scenario: Combine a New State Public Bank with the Mass. Development Finance Agency

Because, the MDFA is probably the entity that most closely resembles how we might see a state public bank, and because it generates more economic activity than any of the other existing non-bank institutions in the state, some combination of the MDFA with a new state public bank may be the logical option. MDFDA is a quasi-public—a nominal private nonprofit with officials appointed by elected public officials, and operating programs created by state legislation. A public bank would share these characteristics, so organizational forms present no problem in considering a combination. The two institutions could operate within one quasi-public holding company, or one could be a subsidiary of the other.

As noted above, MDDFA in some ways already is a state public investment bank. Finance programs include investment banking, lending, New Markets Tax Credits, and community development. There are several grant programs and financial services. The state government grants and loans money to MDFA and MDFA grants and loans money to the state government. The reader may wish to go back and review the MDFA section on pages 11-13, while considering this option.

The Commission report, while recommending against the formation of a state public bank, did not close the door to the creation of a state public bank with a narrow mission: public infrastructure financing. The report noted that all parties agreed that under-financing of public infrastructure was a serious problem in the state, that existing institutions were not adequately meeting the challenge, and that a state public infrastructure bank was one way to address the issue. It notes that the states Administration and Finance secretaraiat was going to look into the issue.

Let us review the current state of public infrastructure financing:

Mass. State and Municipal Government and Quasi-Public Infrastructure Financing

Here is a crude estimate of annual Mass. state government, municipal government and quasi-public infrastructure financing based on 2010-2011:

Massachusetts State Government Infrastructure Financing		
Through state appropriations (55%) and sales of state capital bonds (45%)		$ 416,000,000
Municipal Infrastructure Capital Spending	crude estimate	40,000,000
Primarily through off-budget municipal bonds, with a minority through appropriations (excludes municipal buildings, schools)		
Massachusetts Water Pollution Abatement Trust (MWPAT)		210,000,000
Loans to municipalities that leverage far more in federal grants		
Massachusetts Development Finance Agency (MDFA)	roughly	500,000,000
Primarily through the sale of tax-exempt bonds		
Massachusetts Clean Energy Center (MCEC)	roughly	10,000,000
Clean energy development loans, grants, rebates		
Total Mass. State Government and Quasi-Public Infrastructure Lending		$1,176,000,000

Commonwealth of MA Five-Year Capital Investment Plan

	Total Spending	of Which State Bonds
Economic Development	106,780,000	86,780,000
Energy & Environment	120,591,000	106,817,000
Information Technology	78,131,000	75,260,000
State Office Buildings & Facilities	85,258,000	72,758,000
Transportation	1,686,906,000	583,402,000
Total	2,077,666,000	925,017,000
State Bonds % of Total Spending		44.5%

More detailed examples from above:

Economic Development 2010 total: $106,780,000; of which state bonds: $86,780,000

2010 Economic Development Includes:

$22,000,000	public infrastructure supporting business expansion and relocation
$13,000,000	predevelopment and site preparation for infrastructure in growth areas
$30,000,000	building of life sciences research centers academic and industry
$15,000,000	broadband infrastructure in underserved areas
$80,000,000	

The portion not financed by state bonds will be financed by non-state sources generated by the projects that the infrastructure is for.

2010 Transportation Includes:
Transportation 2010 Total: $1,686,906,000; of which state bonds: $583,402,000

2010 Transportation Includes:

$ 137,000,000	federally-assisted road and bridge projects
$ 100,000,000	non-federally-assisted road and bridge projects
$ 46,900,000	fairmount commuter rail project
$ 8,700,000	green line extension
$ 6,000,000	red line-blue line connector study
$ 4,000,000	parking spaces initiative
$ 15,600,000	fall river, new bedford rail extension planning
$ 18,500,000	dept. of conservation & recreation parkways & bridges
$ 12,800,000	mass transit (AARA)
$ 65,300,000	road and bridge (AARA)
$ 414,700,000	Total

Massachusetts Development Finance Agency (MDFA)
MDFA programs include financing of public infrastructure, waste disposal and recycling. Infrastructure financing, extends from Brownfields analysis and hazardous materials removal, to a $45.8 million bond issue for infrastructure at Wellesley College, to the creation of an entire mini industrial, scientific and residential city at the former Fort Devens, MDFA finances around $500,000,000 of infrastructure annually, almost entirely through the issuance of tax-exempt and taxable bonds. Bonding authority is legislated.

Massachusetts Clean Energy Center (MCEC)
The MCEC is capitalized by the state's electrical users, who each contribute an average of 29 cents per month. MCEC makes direct investments in clean energy companies; provides $4,000,000 per year in rebates for the installation of photovoltaic systems up to 10 kilowatts and all residential systems regardless of size; provides rebates for the installation of wind projects at residential and commercial sites of less than 100 kilowatts; provides financial assistance for feasibility studies for clean energy installation; provides grants for hydropower upgrades; provides rebates for clean energy development companies

Massachusetts Water Pollution Abatement Trust (MWPAT)
The MWPAT leverages federal grants through a State Revolving Fund to provide low-interest loans for the construction of clean water and safe drinking water projects in Massachusetts. Since 1989 MWPAT has loaned $4.6 billion to cities and towns in a revolving fund approach that could be adapted to meet other infrastructure needs."

Hypothetical Massachusetts State Infrastructure Bank Lending

It is widely acknowledged that there is a significantly greater deficiency in infrastructure financing by state government and quasi-publics than in other areas of state and quasi-public financing, with infrastructure broadly defined, including not only the conventional roads, bridges, utility infrastructure, etc., but also agricultural, forestry, environmental, etc. If further analysis and debate results in the conclusion that it is a Mass. State Infrastructure Bank that needs to be established, the question of its role in relation to existing state government and quasi-public entities arises. It is estimated above that the state and quasi-publics are financing over $1 billion of infrastructure a year. A state public bank could significantly increase infrastructure financing. It need not be an either or issue: either a new state public bank with a broad mandate or a new state public bank restricted to infrastructure lending. It could be the former, which focuses on infrastructure financing for an initial period of years, and then broadens its programs.

It would then need to be determined whether

1) the roughly $500,000,000 of annual quasi-public infrastructure financing should be transferred to the new State Bank, which could then do about $1.2 billion of financing a year;
2) the new State Infrastructure Bank should make loans to the existing quasi publics—primarily MDFA—and merely enhance the capacity of these quasi publics; or
3) some mixture of 1) and 2) above.
4) infrastructure financing would be done through a new public bank merged with MDFA.