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TO THE

HOUSE COMMITTEE ON

ECONOMIC REVITALIZATION & BUSINESS

THE TWENTY-SIXTH STATE LEGISLATURE
REGULAR SESSION OF 2011

Tuesday, March 29, 2011
8:45 a.m.

TESTIMONY ON H.C.R. NO. 159 - CREATING THE TASK FORCE ON ESTABLISHING THE BANK OF THE STATE OF HAWAII

THE HONORABLE ANGUS L.K. MCKELVEY, CHAIR,
AND MEMBERS OF THE COMMITTEE:

My name is Iris Ikeda Catalani, Commissioner of Financial Institutions ("Commissioner"), testifying on behalf of the Department of Commerce and Consumer Affairs ("Department"). We appreciate the opportunity to testify on House Concurrent Resolution No. 159. The Department supports this resolution with requested changes.

This resolution would create a task force to study the feasibility of establishing a bank of the State of Hawaii. In broad terms, its mandate would include conducting a review and investigation of an existing state-owned bank, namely the Bank of North

Dakota, and to recommend such laws as may be required to establish such a bank in this State and to create an implementation plan for the bank.

More specifically, the specific responsibilities of the task force, as enumerated in the resolution, include, but are not necessarily limited to a review and evaluation of the following:

(1) The bank of North Dakota, its enabling statutes, its governing structure, and its programs;

(2) The feasibility of Hawaii creating a state-owned bank similar to that of the bank of North Dakota;

(3) The effectiveness and usefulness of an existing state bank, specifically the economic impact of having a state bank;

(4) The laws, statutes, rules, and regulations applicable to establishing a state-owned bank;

(5) The capital requirements of a state-owned bank;

(6) Initial capitalization options for a state-owned bank;

(7) The cash management and banking needs of the State;

(8) An estimation of the short-term operating costs and projected revenues of a bank of the State of Hawaii;

(9) The long-term broad economic impact and long-term job creation and state revenue impacts of having a bank of the State of Hawaii;

(10) Any impacts to existing banks and financial institutions in the State;

(11) Sound underwriting practices necessary for a state-owned bank;

(12) Standards to ensure that loans result in the outcomes described in the approved loan applications;

(13) Ethics and conflict of interest requirements for the board, offices, and employees of a state-owned bank;

(14) Transparency requirements for the operations of a state-owned bank; and

(15) Any necessary legislation to establish a state-owned bank.

The task force that is envisaged is to be comprised of ten individuals, with the standing or qualifications specified in the resolution. It is to submit an interim report to the legislature no later than twenty days prior to 2012 regular session, and a final report to the legislature no later than twenty days prior to the 2013 regular session. The task force would be assisted with research and organization support services provided by the Legislative Reference Bureau.

While the concept of a state-owned bank has reportedly been successful in North Dakota it should be noted that the banking and financial services landscape in that state is far different that that which prevails in Hawaii. Whereas Hawaii has a relatively small number of comparatively large commercial banks, North Dakota, by contrast, has a greater number of small commercial banks. The Bank of North Dakota serves as a "central bank" for these smaller organizations, providing clearing and payment services, settlement programs and other correspondent banking services, which the larger Hawaii banks either do not need or which they already obtain elsewhere. Additionally, most government deposits are placed with the Bank of North Dakota, as opposed to being distributed among the local banks, a concentration issue which needs careful consideration before implementation.

Without prejudging, in any manner, the merits and desirability of establishing such a State-owned bank in Hawaii, the Department notes, and wishes to emphasize, that this task force, if established, does not solely have a mandate to recommend how a State-

owned bank, along the model of the Bank of North Dakota, can be expeditiously organized in Hawaii. As we understand the mandate of the proposed task force, it would also include studying whether a State-owned bank would be a financially feasible, appropriate, useful, and beneficial enterprise for the State of Hawaii to undertake. Consequently, should the task force interim report determine and recommend that a State-owned bank would not be feasible, appropriate, useful, or beneficial for the State of Hawaii to undertake, the task force, at that juncture, would presumably require the Legislature's further instructions as to whether any further efforts by the task force to develop legislation and finalize cost estimates to capitalize a State-owned bank should proceed, in light of the interim report recommendations, should they be adverse to the concept of establishing a State-owned bank. In my opinion, the task force vehicle, as proposed by this resolution, does not appear to have considered and does not make adequate provision for such an outcome.

Given the potential outcome that the task force could thus find itself using the valuable time of numerous, busy State officials and business leaders in serving out its second year with no remaining viable purpose, should the task force's interim report be adverse to the concept of establishing a State-owned bank in Hawaii, and given, as well, the clear and significant disparities between the banking landscape in North Dakota and Hawaii that I have noted, I respectfully propose the following alternative for your consideration.

Given the interest and importance felt by the legislature in finding revenue generating operations, we believe the legislature would like results in a more timely manner. Consequently, rather than embark on a lengthy task force project that is certain to occupy a significant amount of the time and resources of nearly a dozen State and business leaders over the next two years, without any certainty that the North Dakota

model is even conceptually appropriate for this State, I propose and recommend that in lieu of creating a task force of that size and scope, the Legislature instead appropriate adequate funding for a one-year study to be conducted by my office to thoroughly evaluate the costs and benefits of establishing a State-owned bank in Hawaii, based on the Bank of North Dakota model. DFI would study the feasibility of the evaluation points of the resolution. The Division of Financial Institutions would submit its report to the Legislature, with findings and recommendations, no later than twenty days prior to the 2012 regular session. I estimate that a thorough study and final report to be prepared by my office would require a legislative appropriation of $100,000, inclusive of all costs, including any necessary travel-related expenses and the cost of hiring a research specialist. We believe that this approach will actually save time and money as well as freeing the various State officials and business leaders who would otherwise be called upon to serve on a task force from responsibilities that my office is fully capable of undertaking by itself with the requisite subject matter expertise.

Thank you for the opportunity to testify. I would be happy to respond to any questions you may have.

Charlotte A. Carter-Yamauchi
Acting Director

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LEGISLATIVE REFERENCE BUREAU
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Written Comments

HCR159

CREATING THE TASK FORCE ON ESTABLISHING THE BANK OF THE STATE OF HAWAII

Comments by the Legislative Reference Bureau
Charlotte A. Carter-Yamauchi, Acting Director

Presented to the House Committee on Economic Revitalization and Business

Tuesday, March 29, 2011, 8:45 a.m.
Conference Room 312

Chair McKelvey and Members of the Committees:

The Bureau appreciates the opportunity to comment on this measure.

House Concurrent Resolution No. 159, among other things,

(1) Creates a task force to:

(A) Review, investigate, and study an existing state-owned bank and any applicable laws necessary to establish the Bank; and

(B) Craft an implementation plan for the Bank;

(2) Establishes the membership of the task force;

(3) Stipulates that the Commissioner of the Division of Financial Institutions of the Department of Commerce and Consumer Affairs shall serve as the chair of the task force; and

(4) Requires the task force to submit an interim and final report to the Legislature that includes, among other things, information concerning a review of the Bank of North Dakota model, the feasibility of establishing the Bank, the short-term and long-term economic impacts of the Bank, and estimated costs of establishing the Bank.

The measure also directs the Legislative Reference Bureau to provide the research and organizational support services necessary to assist the task force in achieving its purposes as requested under the measure.

While the Bureau takes no position on the merits of the measure, it is concerned with the research and organizational support services responsibilities charged to it, particularly since the task force seems to not be a temporary entity that would be administratively attached to the Legislature. As currently drafted, the chairperson of the task force is the Commissioner of Financial Institutions, the administrative head of the Department of Commerce and Consumer Affairs Division of Financial Institutions. While it is not explicitly established in the measure that the task force would be administratively attached to any particular agency, it would be reasonable to assume that the task force would be attached to the Department of Commerce and Consumer Affairs since its chairperson is the head of the division that has expertise in the subject matter to be researched.

Historically, when a task force is established and attached to an executive branch agency, the responsibility to provide the research and organizational support services necessary to assist the task force is vested with the executive agency to which the task force is attached. The Bureau, which is a legislative service agency administratively attached to the Legislature, a separate branch of government, is ill-suited to provide such services to entities administratively attached to the executive branch.

In addition, if the Bureau is required to provide organizational support, which could be argued to include administrative support services such as making travel arrangements, finding meeting space and coordinating meetings, and paying for incidental and travel costs incurred by task force members, then the end result would mean that the provision of such services would negatively impact the Bureau's existing operating budget. The Bureau's budget does not currently contain sufficient funds to cover the costs of providing these services.

Thank you for this opportunity to provide written comments on this measure. If you have any questions, please do not hesitate to contact the Bureau at 587-0666.

Testimony on HCR 159 before the House Economic Revitalization & Business Committee – March 28, 2011

Written Testimony of Sam Munger, Center for State Innovation

Good Afternoon Mr. Chairman and Committee Members. Thank you for the opportunity to submit testimony regarding HCR 159, establishing a task force to study the creation of the Bank of the State of Hawaii.

My name is Sam Munger. I am the Managing Director of the Center for State Innovation, an independent state policy think tank based at the University of Wisconsin-Madison. As part of our policy work on state financial systems, we conducted analyses of the effects of a state bank in a number of states. We are currently in the process of analyzing a state bank concept in Hawaii. We report some of our preliminary findings below, and expect to publish our final report in April.

Our analysis is essentially an examination of the Bank of North Dakota—which as you've probably heard by now is the only state bank currently in operation in this country (though there are numerous examples of publicly-financed banking internationally, including the Development Bank of India, the Brazilian Development Bank (BNDES), and the German Landesbanks)—its relationship to North Dakota banks and effects on lending in North Dakota. We then attempted to extrapolate that relationship and effects to another state's banking industry, in this case Hawaii.

The basic results of the analysis were as follows:

1) First, the Bank of North Dakota seems to have had a positive effect on the banking industry in North Dakota, which outperforms similarly-situated states on a number of key indicators, including various measures of lending, number of banks and bank offices, less bank industry concentration (North Dakota in fact has the least concentrated banking sector in the country), and fewer loans in default.

   We also tried to take some account for economic variables such as the strength of North Dakota's extractive industry and the relative stability of its real estate market and concluded that the strength of the state's banking industry did not seem to be linked, or not only linked, to those factors. In other words, the oft-repeated contention that the success of North Dakota's banking sector is due solely, or primarily, to its oil and gas industry is not supported by the data. Moreover, it is worth noting in that regard that there are many states in which extractive industries are as large a part of the state's economy but whose banking sector is less healthy

and who are generally faring more poorly in overall state economy (e.g., Oklahoma, Louisiana, and of course, Texas).

2) Second, if we extrapolate the effect the Bank of North Dakota has had on that state's banking industry to another state—in this case Hawaii—basically assuming that bank here would have roughly the same relationship to Hawaii banks that the Bank of North Dakota has to North Dakota banks, it would result in:

    - Increased lending. A state bank facilitates this in a variety of ways, some of the principle ones being participation loans and buying down interest rates with private community banks, loan guarantees, and letters of credit. This is especially the case during recession and times of tight credit.

    - This would result in credit being more easily available to small businesses in this state. Increased lending to small business would presumably lead to job creation by those businesses. Based on our preliminary analysis, we estimate that job creation in Hawaii due to increased lending by a state bank would be between 1,300 and 4,200 new or retained jobs at small businesses alone. This figure does not include jobs created in other sectors or indirect or induced job creation due to increased lending.

    - In addition, a state bank can return money to the state—either to a rainy day fund or to the general fund—and still be financially viable. Than Bank of North Dakota has returned over $300 million to that state—not including interest paid to the state on state deposits—over the past decade and remained profitable in real terms. In Hawaii, a state bank capitalized with $100 million in state money and conservatively run could return almost $90 million over 10 years (assuming it returned a similar percentage of profits to the state as the Bank of North Dakota) and nearly $300 million over 20 years. By year 20, the bank could be returning over $20 million per year to the state general fund.

    - Obviously the magnitude of the numbers I've just given is very dependent on the inputs—the amount of capital, how the bank is run, the leverage ratio, etc. and we play out some of those possibilities in our report.

3) Costs

There are obviously costs associated with establishment of a bank like this, including:

- The opportunity cost (or debt service cost) of capital to capitalize the bank

- Lost interest on public deposits and tax revenue from private banks
- Overhead and other incidentals

However, we should note that we find that the bank would be profitable in a real sense even when all costs, including lost tax revenue, lost interest on state deposits, and the cost of start-up capital, for instance debt service on a bond—are accounted for.

In short, our analysis indicates that the creation of a state bank would have some beneficial effects on the state's economy by making credit more available in the state, would add stability to the state banking industry particularly in times of recession, and could do this in a revenue-positive way.

I invite you to look at our full report for the Washington state bank, which I will submit into the record along with my written testimony, and a short FAQ on state banks that may be helpful in understanding some of the particulars of the concept. Thank you again for the opportunity to submit this testimony. I'd be more than happy to answer any follow-up questions you might have and invite you to send them to me.

Center for State Innovation

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FAQ on State Banks

1. **Wouldn't a state bank compete with private banks?**
   No:

   Competing over deposits
   Less than 2% of the Bank of North Dakota's deposits come from private individuals. And some state bank legislation would prohibit state banks from taking any private deposits.

   It is true that private banks would no longer receive short-term state deposits, but considering that most community banks receive little of this money to begin with and that many states are still requiring 100% to 110% collateral for these funds it is unlikely to have a great effect on private bank profits. And even if collateral requirements are a function of risk aversion brought on by economic downturns, and are thus in the process of easing, it is precisely when the economy slows down that a state bank can provide a boost in lending.

   Also, a state bank in the model of the Bank of North Dakota would not only *not* take local and municipal deposits, but would help local community banks secure these deposits through letters of credit.

   Competing over loans
   While a state bank could be set-up to originate loans, the Bank of North Dakota, as well as most proposed state banks, requires the state bank to operate in a participatory manner. In most cases a state bank would make participation loans with the private banks acting as the originators and servicers of those loans. The Bank of North Dakota does service some residential mortgages, but this is only after a local lender originates the loan and sells it to the Bank of North Dakota for servicing.

   Overall competitiveness of banking market
   If anything, a state bank helps to keep the banking market strong by supporting small and medium sized-banks (see question #2). In fact, North Dakota has a much smaller Herfindahl-Hirschmann Index (HHI) than such neighboring and comparably-sized states as Montana, South Dakota and Wyoming. [1]

[1] The Herfindahl-Hirschman Index is a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. The HHI takes into account the relative size and distribution of the firms in a market and approaches zero when a market consists of a large number of firms of relatively equal size. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases. See CSI Washington State Bank Analysis for full HHI figures.

2. **How could a state bank help the state banking industry?**

Participation loans

A state bank would primarily interact with the banking community through participation loans. These loans would help to increase a private bank's lending power and/or reduce the interest rates charged to borrowers. A state bank could also purchase part or all of a loan after it has been issued, to help a private bank stay within its capital adequacy and portfolio balance requirements. Or the originating bank could hold onto the loan and collect fees for servicing it. And because the state bank has no interest in competing for the origination or refinance of private loans, private banks need not fear that allowing participation will lead to a loss of customers.

Direct bank stock lending

A state bank could also provide capital to private banks through bank stock loans for M&A, capital refinancing or capital expansion.

Banker's bank functions

The Bank of North Dakota acts as a mini-reserve bank for its state and serves the functions of a bankers' bank. It is estimated that there are only around 20-25 bankers' banks in the country and a state bank could help provide private banks with lower cost/higher quality services. At worst, a state bank is simply another option for private banks to work with—they are still free to continue working with private banker's banks as they did before.

3. **Won't this just increase regulations on private banks in the state?**

No:

This does not add any regulatory hurdles to private banks. A state bank is NOT a financial bailout to private banks, a la TARP. Due to the prudent banking practices of a state bank (which is not pushed into risky lending instruments by stockholder-driven profit-maximization), we would expect that the private banking market would be affected by positive, stabilizing market-driven forces.

4. **Wouldn't this put state funds in a significant amount of risk? And wouldn't political interests end up forcing the state bank to make bad loans?**

No:

The Bank of North Dakota is staffed by a professional banking staff, not an economic development agency, and a state bank would be run based on prudent financial policies, not high risk practices.

The primary asset of a state bank based on the BND model is participation loans where the loan originator is a private bank. This not only serves the purpose of avoiding competition from a state bank, but it also provides market driven checks and balances against manipulation by political actors.

No loan portfolio is immune to loan failures, and a state bank would inevitably have some loan defaults. The Bank of North Dakota's allowance for loan loss ratio (allowance for loan loss/total loans) in Q3 2010 was 1.79%, while the average allowance ratio for comparably-sized (small- and medium-sized) private banks in the U.S. over the same period was about 2.03%. As with other banks around the world, a state bank would have a loan loss provision and would follow prudent banking practices. Thus, even if some

loans held by a state bank fail, a state bank could not only cover its deposits, but provide a profit to both the bank and the state (beyond the deposit interest) – through state dividend payments. In 2009, the Bank of North Dakota showed a profit of $58 million—including loan defaults. And on average, the Bank of North Dakota has returned over $30 million per year to the state general fund over the past decade. Analysis suggests that this would be the case in other states as well.

Also, a state bank would work hand in hand with state bank regulators to evaluate its loan portfolio, risk exposure and profitability. A state bank would also be required to meet certain safety and soundness criteria in order to access its own liquidity sources to manage liquidity and interest rate risk (e.g., S&P ratings).

5. **Don't we already have economic development programs that do these things?**
   A state bank is NOT an economic development program, and does not replace current state ED efforts. There is still a need for economic development programs and individuals to put together deals and work with businesses; a state bank can simply be a source of revenue to fund these programs as well as liquidity to help underwrite those deals. And because a state bank has the power to leverage funds (10 to 1 as a rule of thumb) it can increase the state's ability to fund economic development, along with helping to support private banks, consumers and businesses across the lending industry.

6. **The state treasurer already gets a good return on the investment pools we use, why change that?**
   A state bank is NOT a substitute for an investment manager, and we would expect that the treasurer would retain these functions. For example, in North Dakota, BND does not manage the state pension fund investments.

7. **How can a state bank act as the state's fiscal agent (concentration bank); wouldn't it be cost prohibitive to set-up that operation?**
   There is nothing to indicate that a state bank would not be able to handle the functions of a fiscal agent and still be profitable. The Bank of North Dakota has certainly done so for North Dakota. And state banks tend to have much lower overhead than comparable private banks due to the lack of branch offices, ATM services, marketing costs, etc. Over the last 15 years (1995-2009) the Bank of North Dakota averaged an efficiency ratio of about 28%, while small and medium sized banks in North Dakota averaged about 62%.

   No matter the costs of operating the bank, the cost to the state is nil once the bank is up and running; indeed, as noted elsewhere, the bank should generally return money to the state. The primary difference is that while a concentration bank (like Bank of America) is the only bank to benefit from state deposits, a state bank would spread the benefit to small and medium sized banks throughout the state (through participation loans).

   Also, as mentioned earlier, a state bank does not replace all functions of a state treasurer's office, and we would expect that the same procedures around investment funds would remain.

8. **Would a state bank impair the need for liquidity in state deposits?**
   No. Just like any private bank, a state bank has to carefully manage liquidity in order to be able to meet all its operational needs. However, this is obviously equally true of any other depository institution a state would use to manage state monies. If state deposits are currently deposited at a private financial institution (say Bank of America), that institution has to manage liquidity so that funds are available to the

state to withdraw to meet payroll and other obligations as necessary. A state bank would be no different, and the Bank of North Dakota has demonstrated over the past 90+ years that it can do so capably—and still turn a profit.

9. **How much do you need to start a state bank?**
   There is no set minimum for start-up capital. Of course, a state bank would need to sustain its capital adequacy, so depending on how much state deposits will be held at the state bank, this could drive the capital needs. It seems likely that there will be a transition stage where the state bank's participation loan portfolio grows and there are arguments for growing the capital at a similar rate. Ultimately, a state bank can be thought of as an economic engine that will be greatly impacted by the inflow of state deposits and reinvestment of profits into state bank capital. CSI analysis shows that even after accounting for debt service obligations due to start-up capital, a state bank would still be profitable after a few years and a strong economic tool for a state.

10. **Where would the capital come from?**
    The likely sources of state bank start-up capital are the state General Fund, General Obligation Bonds, or other dedicated state funds.

11. **Isn't setting up a state bank just too complex?**
    While setting up a state bank is more complex than, for example, establishing a single revolving loan fund, and there is only one such bank in the country, there are thousands of banks in operation in the U.S. and new private banks are formed every year. In many ways a state bank would be more straightforward to set-up than a private bank. We expect that a state bank would have one location, no marketing, very little direct lending and a single source of deposits (the state). A reliance on participation loans would also reduce the need for bank loan officers and loan brokers.

12. **Isn't the reason that banks are lending less now due to a decrease in loan demand or good loans?**
    Not completely:

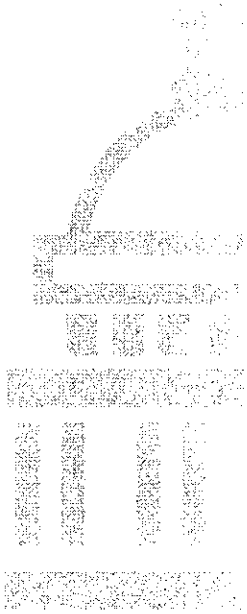
    While a reduction in lending during an economic downturn is in part a reflection of decreased demand for new loans (i.e. businesses holding off expansion plans), some part of the demand curve is directly tied to the cost of debt. As lenders tighten their underwriting standards and increase the interest cost to borrowers, demand for new loans naturally drops. This does not mean that there aren't any "good" loans available, only that there is heightened price sensitivity (especially during less stable economic conditions). CSI analysis shows that banks in North Dakota reduced lending 33%-45% less than comparable states, and we believe that this is in no small part due to the stabilizing effects of its state bank.

13. **Sure, a state bank works in North Dakota, but isn't my state completely different, both politically and economically?**

    No. Of course every state has a unique political and economic context. However, it is important to note that the Bank of North Dakota has enjoyed the support of both Democratic and Republican administrations and legislators. Sen. John Hoeven, the Republican former Governor of North Dakota, was President of the Bank of North Dakota earlier in his career.

Economically, it is, of course, difficult to separate the health of the lending market in a state from the overall economic health of the state. Over the past two years, North Dakota has been one of the states least impacted by the recession and it is difficult, if not impossible, to know to what extent that is due to the presence of the BND as opposed to other factors. However, attempting to tease apart the economy-lending linkage slightly, analysis has found that the health of North Dakota's small and medium sized bank lending market has been strong independent of other major components of the state's economic health (namely, the housing markets and oil and gas industries). This provides circumstantial evidence, at least, that the BND has played an important role in supporting the state's lending market.

It is also worth noting that oil and gas production and extraction tax revenues provided $71 million to the state general fund over the 2007-2009 biennium (the statutory cap), while the Bank of North Dakota returned $60 million; thus the bank's direct impact on the state budget surplus, anyway, has been almost as great as that of the oil and gas industries.[2] In sum, these figures suggest that while oil and gas revenues are certainly important to the state's economy and fiscal health, they are not the only factor driving it, and that a state bank likely plays some role as well.



[2] Source: North Dakota Office of State Tax Commissioner, Comparative Statement of Collections, available at http://www.nd.gov/tax/genpubs/49thbiennialreport.pdf.

Center for State Innovation

Washington State Bank Analysis
Center for State Innovation – December 2010

In the wake of the financial market collapse of 2009, banks sharply curtailed their lending. Bank lending in 2009 declined more sharply than in any year since 1942, according to FDIC data.[1] This drop-off was particularly pronounced for the largest Wall Street banks; in Washington, for instance, Bank of America SBA loans dropped from 555 in 2007 to 19 in 2009. Overall, lending through the Small Business Administration's flagship 7(a) program in Washington declined 35% between 2007 and 2009.

This, in turn, has been one driver of current massive and continued unemployment. The reduction in lending has led policymakers to consider a number of reforms designed to increase bank lending, particularly to small businesses which have been the hardest hit by tightening credit standards.

One such measure that has drawn increasing interest is the creation of a state bank modeled after the Bank of North Dakota (BND), currently the only such state bank in the country, to increase liquidity and spur lending and development in a given state. This paper offers some predictions about the effect of a proposed Washington State Bank (WSB) on the state banking industry, job creation and small businesses, and the state budget. While the sample size of one makes it difficult to accurately predict a public bank's effect on any given state, we have used FDIC bank data and some conservative assumptions to estimate the effects of a BND-like bank in Washington. Highlights include:

Estimated Effect on WA Small Business Loans and Jobs From an 8.2% Increase in Average Loans due to State Bank	
Increased Amount of Small Business Loans	$492,058,125
Small Business Jobs Created or Retained	8,212

- **Job Creation/Retention.** We estimate that a state bank could help create or retain 7,400-10,700 additional small business jobs in Washington, and that about 8,200 jobs would have been supported due to increased loan activity through bank participation loans from a state bank at full lending capacity.
- **New Lending.** BND helped to sustain a loan to asset ratio for North Dakota banks – a key measure of direct economic impact – by mitigating the effects of the recession on lending, resulting in reductions of 33%-45% less than comparable states. In Washington, this would have resulted in roughly 5.22 to 7.55 percentage points greater loan to asset ratios during the current economic downturn. We also estimate that a state bank in Washington could generate roughly 8.2% or about $2.6B in new lending activity due to bank participation loans.
- **New Revenue.** A Washington State Bank could generate dividends for the state starting in year 3, and a bank capitalized at $100M—and conservatively run—could pay total accumulated dividends to the state's General Fund of $71M after 10 years, $206M after 20 years, $382M after 30 years, and $675M after 40 years.
- **Return on Equity.** A Washington State Bank would have a positive Return on Equity (ROE) of real profits to the state within 4 years with prudent banking practices.
- **Other Economic Impacts.** The actual effect of a state bank on the state economy and job market would likely be greater than the above estimates, since this analysis does not look at non-small business lending, nor does it try to account for the indirect and induced economic impacts of increased lending.

[1] "Lending Falls at Epic Pace," *Wall Street Journal*, 2/24/10

I. Introduction

This analysis takes a look at the effect a state bank might have on the state banking industry by helping to provide liquidity and stability, using lending rates as a rough proxy for this effect. Part II compares lending rates in North Dakota small and medium sized banks with the equivalent banks in the comparable states (based on geography, population size and density) of Montana, South Dakota, and Wyoming and finds that loan to asset ratios in North Dakota have averaged over 7 percentage points greater than these states over the period 2005-2009 (so, including years both pre- and post-financial collapse). During the current recession (which started in the 4th quarter of 2007), with the help of BND, North Dakota banks have had the least reduction in loan to asset ratios, compared to neighboring states. This, along with other supporting data, suggests that the Bank of North Dakota has helped to raise and sustain the lending market in North Dakota. We also estimate increased lending due to a state bank based on the amount of participation loans undertaken by the BND.

Part III attempts to provide a rough measurement of the effects of this increase in lending rates on state job creation/retention. We estimate that for every 1 percentage point increase (or sustained) loan to asset ratio in the lending market for small and medium sized banks in Washington, about 1,400 small business jobs in Washington are created or retained.

Parts IV & V look at bank ROA and other financials for four likely sources of bank start-up capital: (1) General Fund Revenue, (2) General Obligation Bond w/20yr maturity payment, (3) General Obligation Bond w/sinking fund, and (4) Bank Stock IPO. It estimates the returns to both the state bank and to the state itself.

State Banks, Generally

It seems first useful to start with some general description of state banks for those who are new to the idea. A state bank is in essence a simple concept—simply put, it is a bank capitalized by state money, that would serve as the repository for state deposits, and would be publicly governed and return a negotiated portion of bank profits to the state. Apart from that, it would operate much as any private bank, though deposits would be guaranteed by the state rather than the FDIC. Currently, only one state has a public state bank—the Bank of North Dakota.

The Bank of North Dakota was formed in 1919 in response to the farm crisis and tightening of credit after the First World War In North Dakota, all state funds (state tax collections and fees, and for all funds of state institutions) are deposited with the Bank of North Dakota. This does not include pension funds or other trusts managed by the state; rather the deposits are the state's cash – revenue that the state collects before it is spent on payroll, contracts, procurement, etc. Non-state deposits (10-20% of total in the case of the BND) could be accepted from other sources, from private citizens (who account for less than 2% of total deposits for BND) to the U.S. government.

The Bank of North Dakota is governed by the state Industrial Commission, made up of the Governor, Attorney General and Commissioner of Agriculture. A seven-member Advisory Board, appointed by the Governor, reviews the Bank's operations and makes recommendations to the Industrial Commission relating to the Bank's management, services, policies and procedures

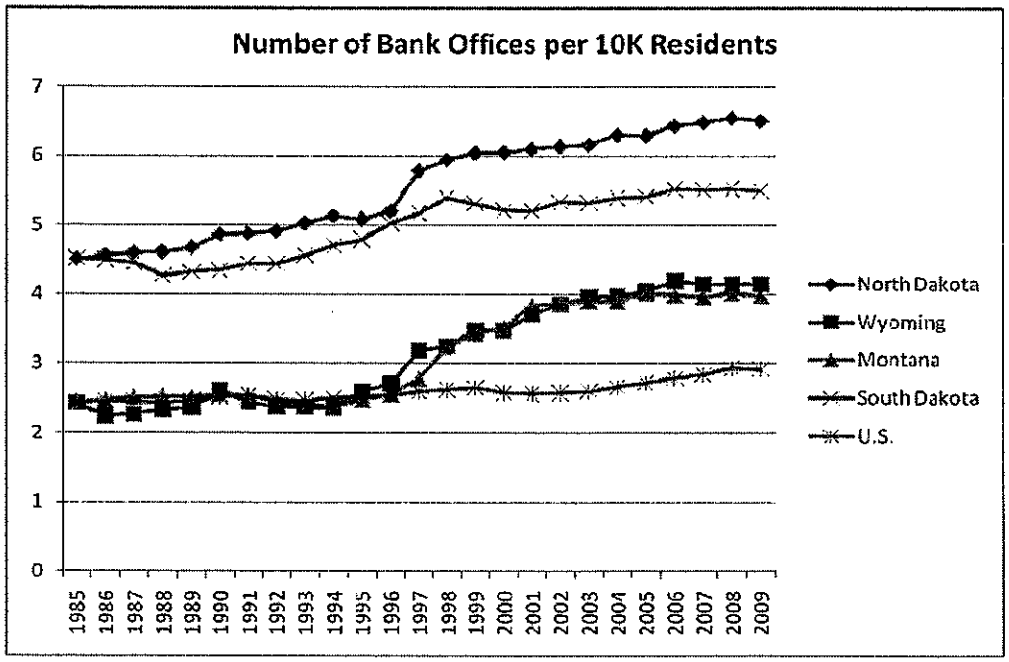
The Bank of North Dakota and, we assume, any state bank, would have a limited portfolio; in that way it is somewhat different than most private banks. One primary activity of the BND is participation lending, participating in loans originated by local banks and credit unions, either by increasing the total size of the loan, buying down the interest rate, or providing loan guarantees. It also performs other banker's bank functions, including check clearing, bond accounting

safekeeping, and providing fed funds lines with excess liquidity. The bank is a participant in the secondary market for residential loans, and also a direct lender for student loans for North Dakotans, thereby decreasing rates, though new student loan origination will decrease markedly due to the recent federal reforms of the student loan market.[2] Finally, the bank can make capital available to local banks via direct bank stock lending, as well as by purchasing loans from their portfolios. The BND also has a couple of specific lending programs that make low-interest loans available to, for instance, agricultural start-ups and new small businesses. In this way, it leverages the income earned through more lucrative market-driven activities to subsidize economic development activities that may carry somewhat higher risks or where borrowers have difficulty accessing capital.

Finally, a state bank typically returns a portion of its profits to the state general fund or Rainy Day fund. In the case of the BND, the size of this "state dividend," explained in more detail below, is set by negotiation between the Legislature and the bank's Governing Board. The amount has varied from year to year (from as little as 0 in some years to up to $50 million in others), but over the past 10 years has averaged $29.4 million (about 72% of bank profits) and totaled almost $300 million.

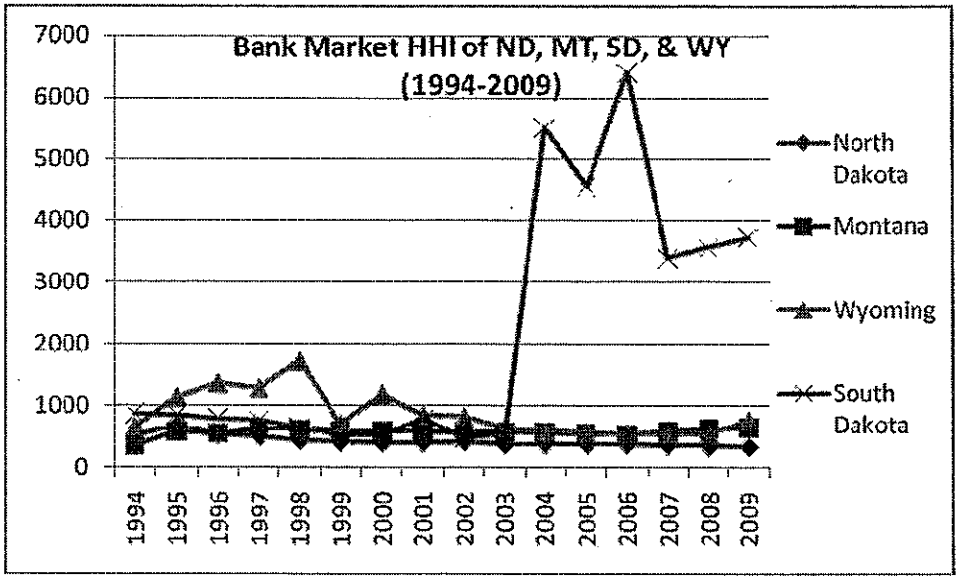
II. Effects on State Banking Market

This section examines the possible effects of a state bank on the state banking market. We attempt to gauge these effects by comparing the lending markets and state banking in North Dakota to similarly-situated states. The bottom line is that on a variety of indicators, North Dakota's banking system appears healthier than that of nearby states.[3] For instance, North Dakota has both more bank offices per capita and less market concentration than comparator states or the US average. In fact, over the last 25 years, North Dakota has had the greatest number of bank offices per capita, compared to like states in both total population and population density. And it has more than double the U.S. average.

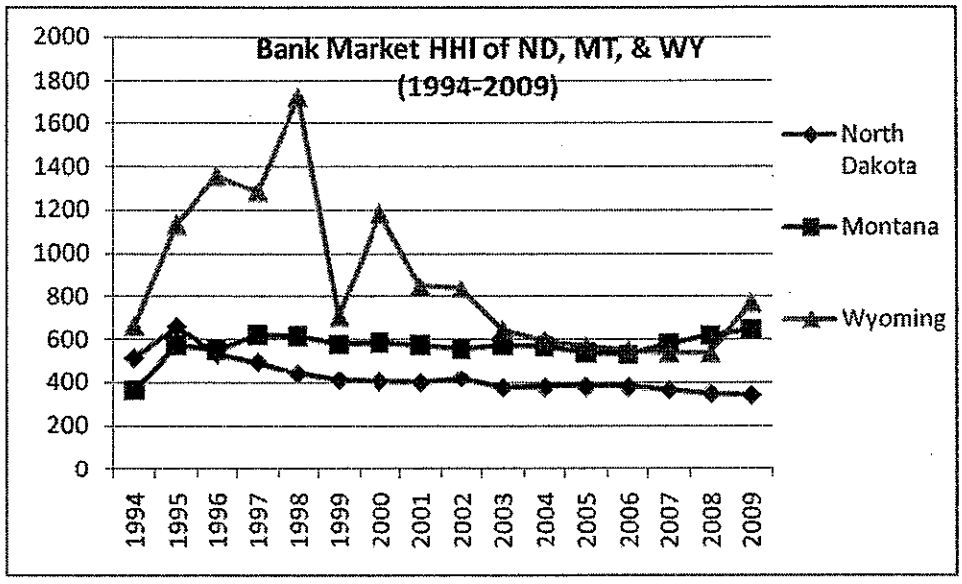


[2] Post-federal reform, the Bank of North Dakota will continue to service existing student loans but will cease to originate federally-subsidized loans through the Federal Family Education Loan (FFEL) program. The bank will continue to originate state-subsidized supplemental student loans through its Dakota Education Alternative Loan (DEAL) program, but this activity is likely to be a much smaller component of the bank's work.

[3] Based on FDIC data for small and medium sized banks in relevant states, with outliers removed to more accurately compare the banks that would actually interact with a state bank. See Appendix 1 for how the data was cleaned.



Similarly, for the last 14 years, North Dakota has had the lowest Herfindahl-Hirschmann Index[4] (HHI)—a measure of market concentration used by the Federal Reserve—and in 2009 it was more than 300 points (or 47%) less than its closest comparator, Montana. While none of the bank markets outside of South Dakota would be considered moderately concentrated, the notably low concentration (and therfore greater competitiveness) of the North Dakota bank market may be indicative of the influence of the state bank. The extra leveraging ability that the state bank provides through participation loans, the increase in municipal deposits from letters of credit, and the other supports that a state bank can provide as a banker's bank are all critical in helping to strengthen small and/or young banks. These indicators would seem to suggest that BND has been effective in broadening and strengthening the banking market, leading to robust competition.



Removing South Dakota—which has had a surge in bank concentration over the past 5 years or so—from the chart to the right provides a better look at the difference between North Dakota and its comparator states.

Bank Branching Laws

North Dakota was a late adopter of bank branching laws; the state did not deregulate statewide branching through mergers & acquisitions (M&A), interstate banking, and statewide de novo[5] branching until the 1980's and 90's, well after most states. While this history may have played some role in driving the current large number of bank offices and low market concentration—particularly vis-à-vis South Dakota, which abolished bank branching restrictions quite early—

[4] The Herfindahl-Hirschman Index is a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. The HHI takes into account the relative size and distribution of the firms in a market and approaches zero when a market consists of a large number of firms of relatively equal size. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms increases.

Markets in which the HHI is between 1000 and 1800 points are considered to be moderately concentrated and those in which the HHI is in excess of 1800 points are considered to be concentrated. Transactions that increase the HHI by more than 100 points in concentrated markets presumptively raise antitrust concerns under the Horizontal Merger Guidelines issued by the U.S. Department of Justice and the Federal Trade Commission. See *Merger Guidelines § 1.51.*

[5] De novo banks are state chartered banks in operation for 5 years or less.

it would not seem to explain North Dakota's variation from the other comparator states, most of whom were similarly late deregulators.

Year Statewide Branching Permitted in ND & Comparator States			
States	Statewide Branching through M&As	Interstate Banking	Statewide De Novo Branching
North Dakota	1987	1991	1996
Montana	1990	1993	1997
South Dakota	1960*	1988	1960*
Wyoming	1988	1987	1999
Average of States that Deregulated After 1960	1986	1987	1990

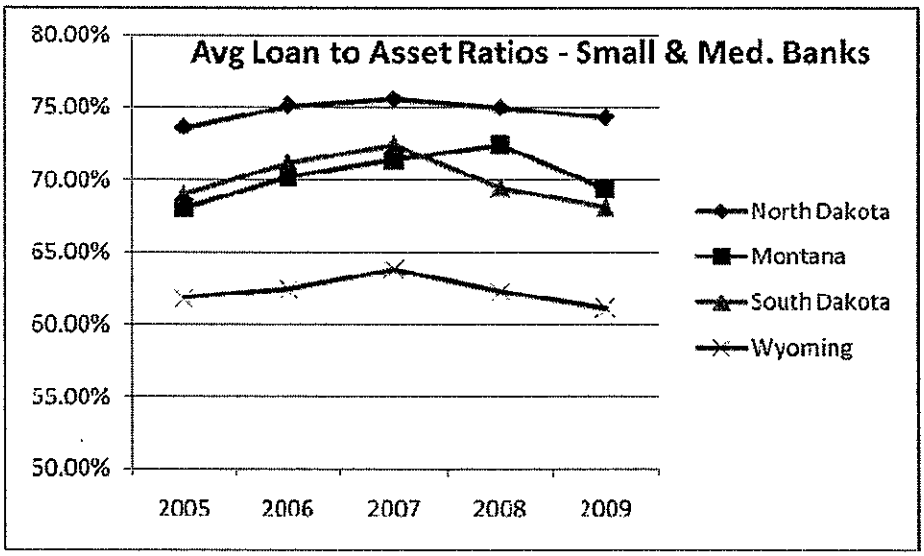
* For states that deregulated before 1960 the dates is listed as 1960.

Source: Demyanyk, Ostergaard, and Sorensen. (December 2007). *U.S. Banking Deregulation, Small Businesses, and Interstate Insurance of Personal Income.* The Journal of Finance, Vol. LXII, No. 6.

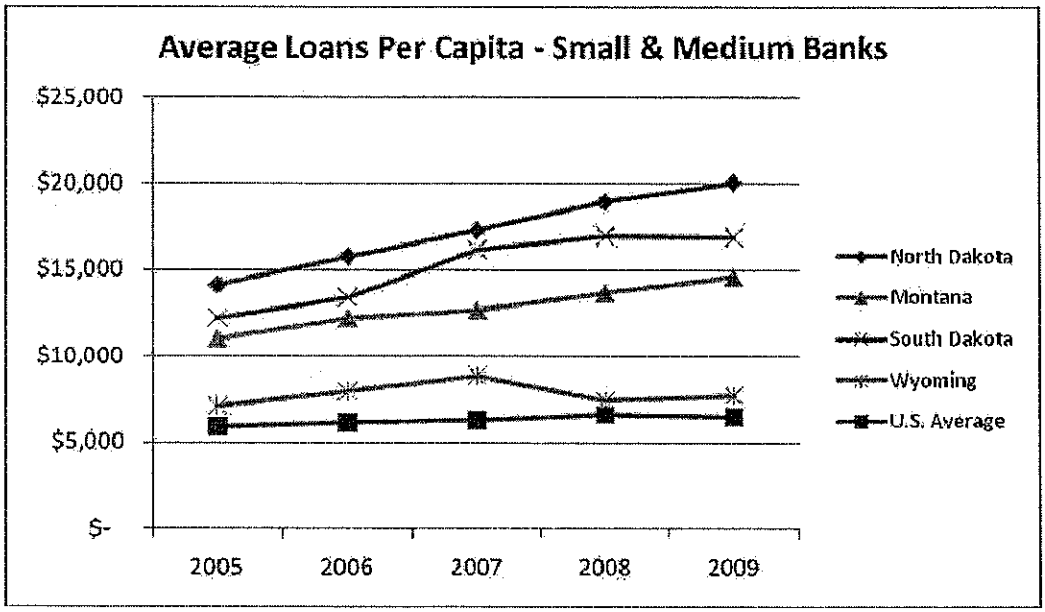
For instance, as can be seen from the table above, Montana deregulated its branching laws after North Dakota. In fact, North Dakota is largely in line with the national average of states that deregulated after 1960.

Lending Rates

Over the last five years, small and medium sized banks in North Dakota had higher loan to asset ratios (4.4 to 12.4 percentage points greater) and more loans per capita (14% to 121% greater) than similarly situated states. To provide some sense of the economic and employment effects of a state bank, we attempted to quantify the effect of a state bank on the lending rates of small and medium sized banks in its state. We've compared the 5-year average lending rates of North Dakota banks with assets<$10B versus the same category of banks (see Appendix 1 for how data was cleaned) in states that are roughly comparable in location, total population, and population density (Montana, South Dakota, and Wyoming in this case). Obviously, this is an imperfect way to parse out the specific effects a state bank has on a state's banking community, but should provide at least some gauge of its effect. As can be seen from the loan activity charts (see Appendix 2 for data), North Dakota banks in the aggregate had significantly higher average loan to average asset and average loan per capita rates than the comparator states.



The previous chart shows the spread between North Dakota and its comparator states, with the average loans to average asset ratios from small and medium sized banks in North Dakota, over the last five years, at 4.42 percentage points greater than its closest comparator (Montana), 7.16 percentage points greater than the average of the like states, and 6.57 percentage points greater than the U.S. average.

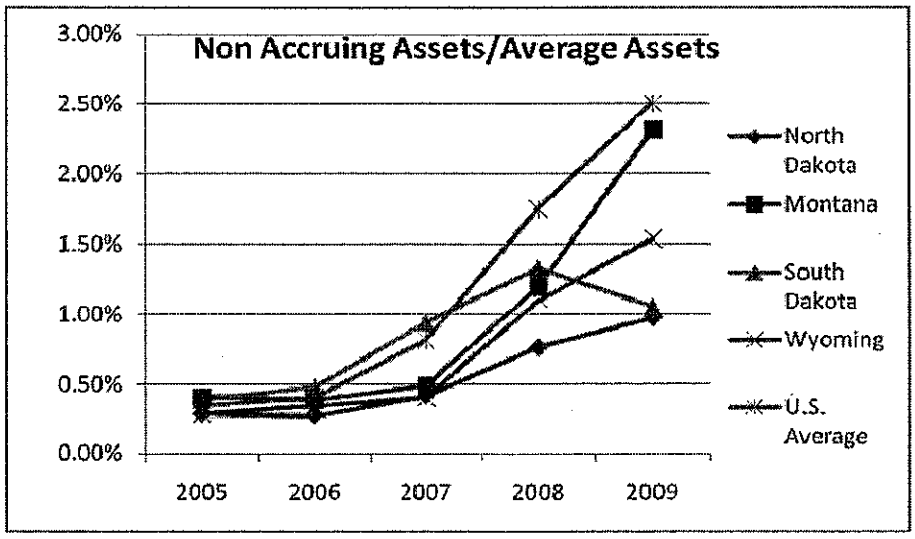


North Dakota also outperforms comparator states and the U.S. in loan activity per capita (see chart to the left), as its average loans per capita over 5-years is 14% greater than its closest comparator (South Dakota), 35% greater than Montana, and a whopping 121% greater than Wyoming and 175% greater than the U.S. average.

While it is hard to attach a specific figure to the effect, the above lending figures provide some support for the claim that a state bank helps to grow and stabilize the loan market in its state.[6] This presumably results from the added liquidity and high rate of participation loans helping to increase or retain loans.

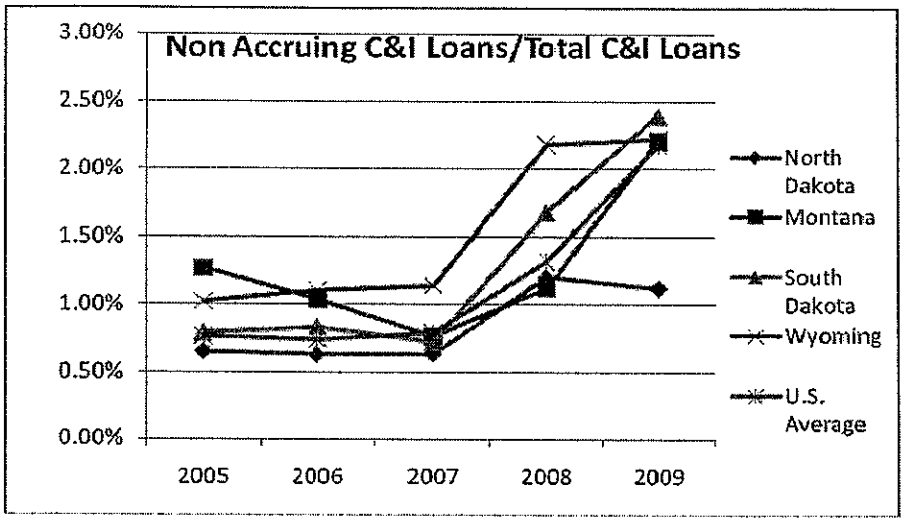
Loan Strength

Over the last five years, small and medium sized banks in North Dakota had 26% to 44% less assets put into non-accrual status (typically when payment in full of the principal is not expected to happen and the account is 90+ days past due) and 34% to 45% less C&I loans put into non-accrual status than the comparator states. Another effect that a state bank should have on the state banking market is to help make loans more secure. One way to measure the security of loans is to look at the number of loans moved into non-accrual status. In theory, a state bank that provides participation loans should spread the risk and reduce the number of loans that a bank would have to put into non-accrual. The "non-accrual" charts look at non-accruing assets over average assets in small and medium sized banks in North Dakota and comparator states. We find that North Dakota banks on average have a lower percentage of non-accruing assets, 26% less than its closest comparator (Wyoming) and 54% less than the U.S. average. This is again, we believe, indirect evidence of the effectiveness of a state bank in supporting the state lending market.



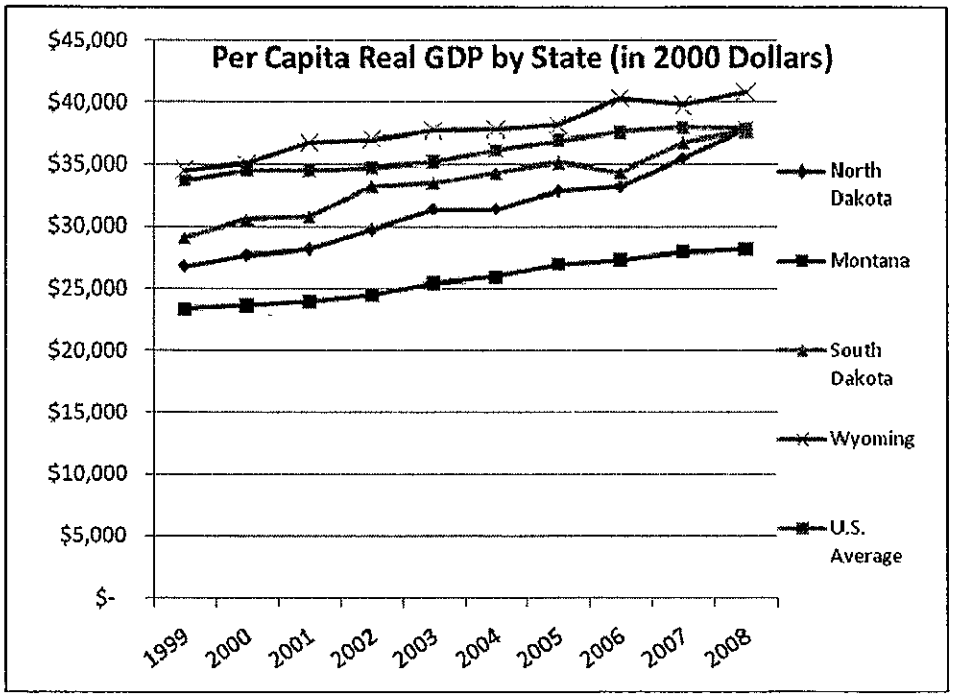
[6] It should be noted that this is a comparison of small and medium sized banks to other small and medium sized banks. Mega banks (banks with assets>$100B) have far worse loan to deposit ratios and have reduced lending even more since the economic downturn.

As most of the participation loans that a state bank would take part in would be commercial and industrial (C&I) loans, we've also looked at non-accruing C&I loans as a percentage of total C&I loans (see chart to the left). By this measure, North Dakota clearly had the safest C&I loans in 2009. Over the last 5 years, North Dakota had 34% fewer non-accruing loans than its closest comparators, Montana and South Dakota. And compared to Wyoming, North Dakota averaged 45% less. In 2009, the numbers are even greater, as North Dakota's ratio was about half of the comparator states and U.S. average.



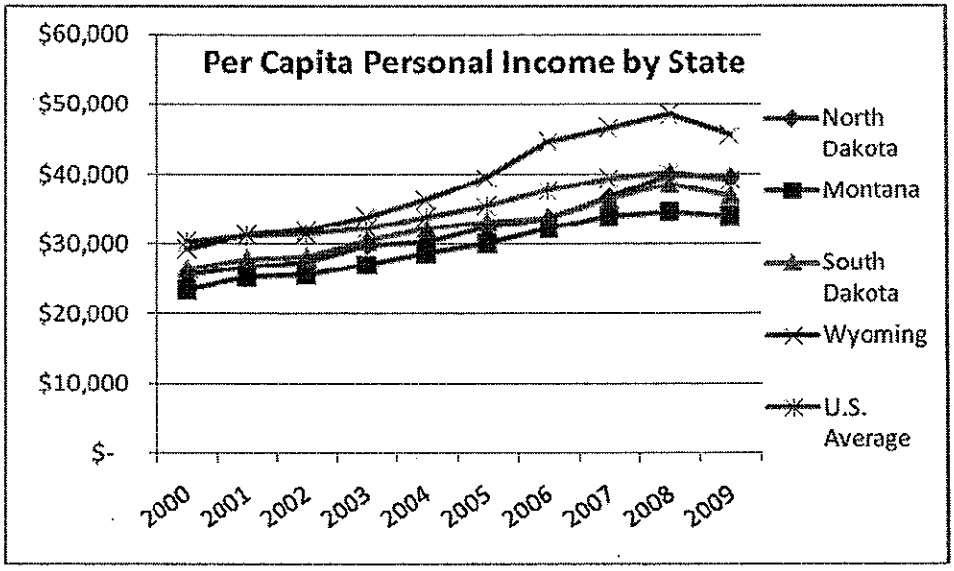
It's the Economy, Stupid (or is it?)

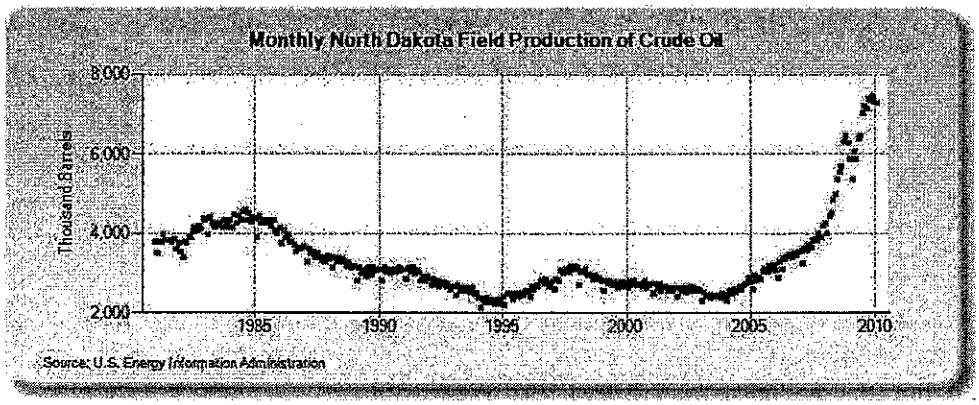
It is, of course, difficult to separate the health of the lending market in a state from the overall economic health of the state. Over the past two years, North Dakota has been one of the states least impacted by the recession and it is difficult, if not impossible, to know to what extent that is due to the presence of the BND as opposed to other factors. However, attempting to tease apart the economy-lending linkage slightly, we find that the health of North Dakota's lending market has been largely independent of other major components of the state's economic health (here, the housing markets and oil and gas industries). This provides circumstantial evidence, at least, that the BND has played an important role in supporting the state's lending market.

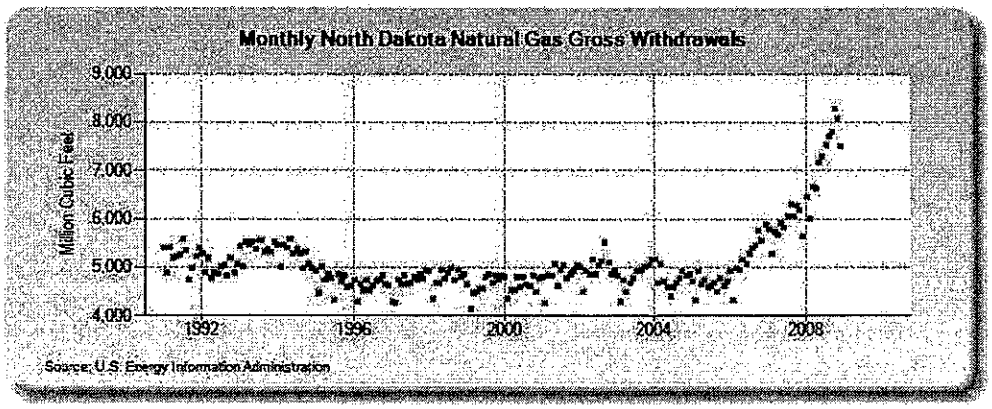


To begin with, North Dakota's per capita real GDP and personal income (reasonable indicators of overall state economic health) have tracked—and for the most part, been lower than—those of its closest neighbors, particularly Wyoming.

There is a slight uptick in these indicators in 2006, when an oil and gas boom in the western part of the state helped strengthen the state's economy (as the charts below show, production of oil and natural gas increased dramatically starting in 2006 and 2007). The strength of North Dakota's extractive industries—generally less affected by recession—could well be one piece of the explanation of the state's general economic health and the health of its lending market in particular.



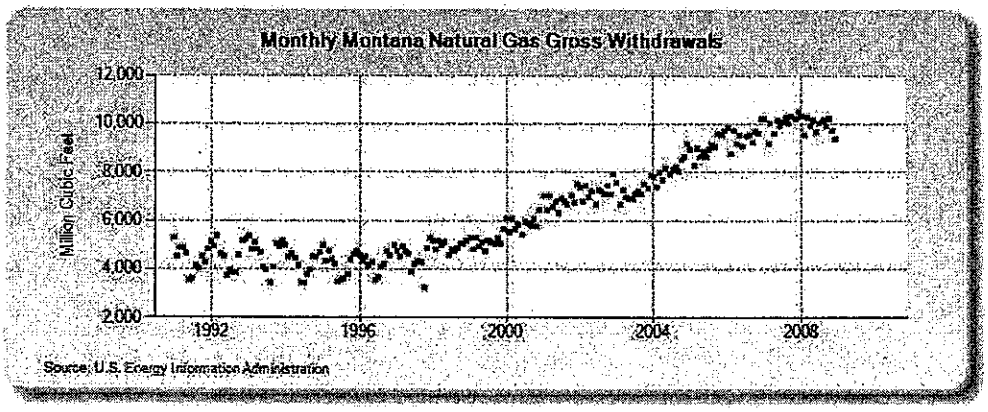


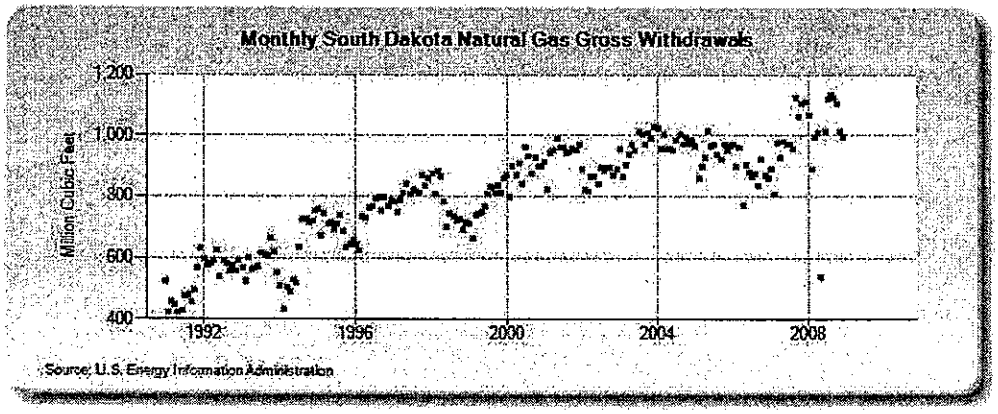


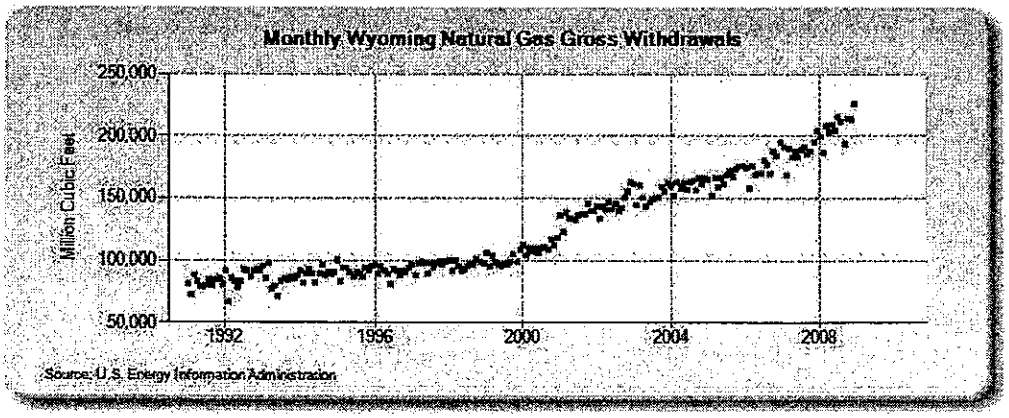
However, neither the generally lower per capita GDP and personal income nor the oil and gas boom in 2006 appears to have had much effect on lending rates at small and medium sized banks in North Dakota, which remained higher than the comparators throughout. In 2006, average loan to asset ratios in North Dakota did rise by 1.5 percentage points compared to 2005, but even in 2005 (before the oil boom) they were already noticeably greater (7.5 percentage points) than the average of the neighboring states. By the end of 2007, when the oil boom was in full swing, the difference in loan to asset ratios between North Dakota and the average of its bordering states was actually down to 6.8 percentage points, not a significant difference from pre-boom (about 70 basis points) and in the opposite direction one would expect if they were being driven by the oil and gas boom. From 2005 to 2007, the difference between the loan to asset ratios of small and medium sized banks in North Dakota and the U.S. average fell from 7.5 to 6.6 percentage points. It

seems likely that larger, mostly out of state, banks were the big loan generators for the oil and gas exploration companies as they ramped up operations in the state; thus the effect on smaller, in-state banks (the BND's target audience) was minimal.

Moreover, it should also be noted that most of the comparator states also had large, albeit generally more gradual, increases in natural gas production during the same period.

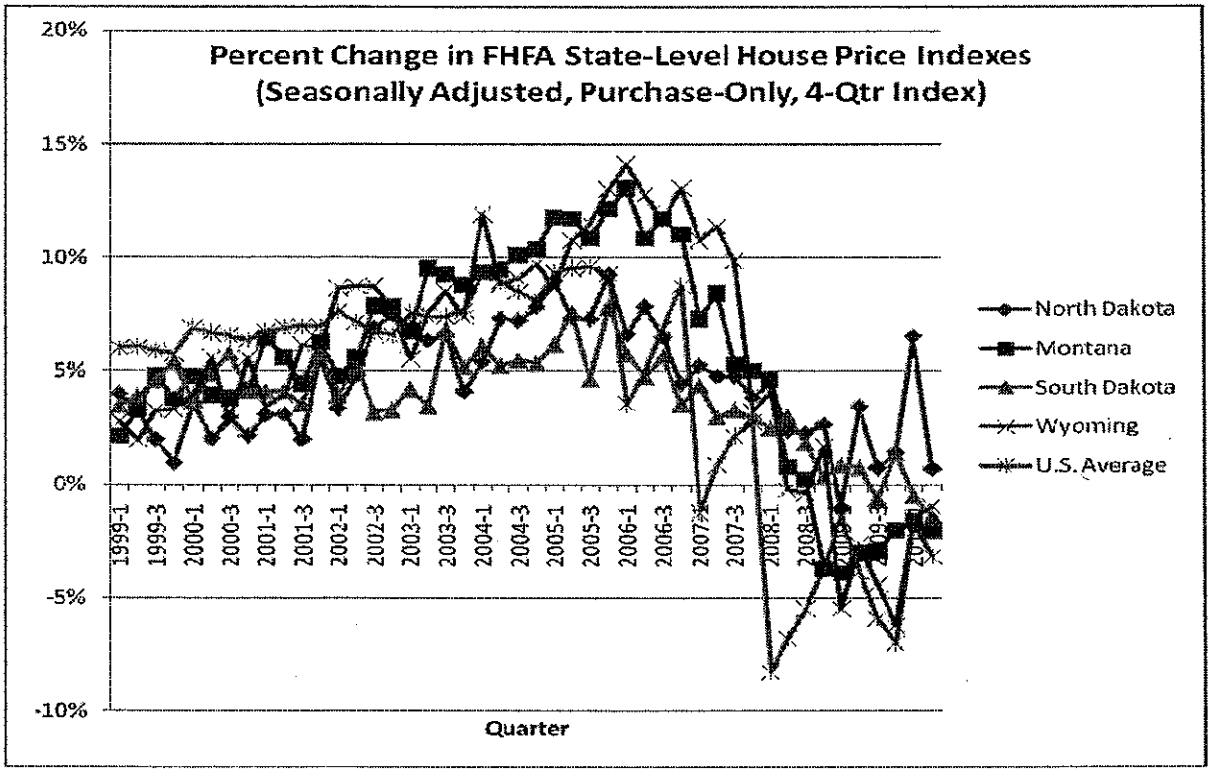






In short, neither the small upswing in overall economic indicators like per capita GDP and per capita personal income (still generally lower than those of its neighbors), nor the boom in crude oil and natural gas production, seems to have greatly affected the loan to asset data for in-state small- and medium-sized banks.

It is also true that North Dakota was less affected by the real estate market crash than other parts of the country.



However, while the previous chart shows that the North Dakota housing market had a softer rise and fall than its neighboring states, it is also clear that the state was not unaffected by the housing bubble.[7] North Dakota housing prices do appear to have rebounded more quickly in the first quarter of 2010 than those of its neighbors but, as noted above, bank lending rates have remained relatively higher—and relatively constant—throughout the past five years, not tracking the real estate crash or the state housing market's price swings.

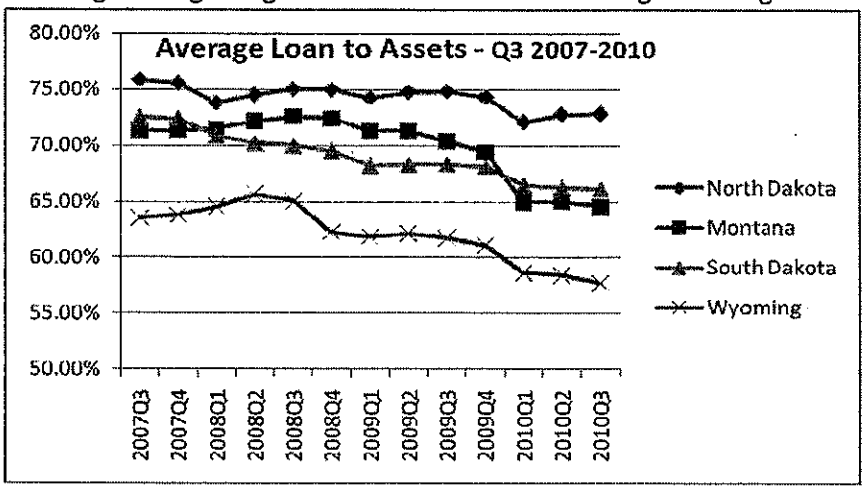
Where the North Dakota loan markets have really shined is in response to the economic downturn of 2009. In fact, the loan to asset ratios of North Dakota banks versus similar state banks rose to 4.92 to 13.19 percentage points greater than the comparators in 2009. The average growth in housing prices from the first quarter of 2009 to the second quarter of 2010 for North Dakota was about 2 to 5.5 percentage points higher than its comparator states. These figures suggest that neither the state's strong extractive industries nor its somewhat more stable real estate market fully explains that strength.

Estimating the Effect of State Bank on Lending Rates Part 2

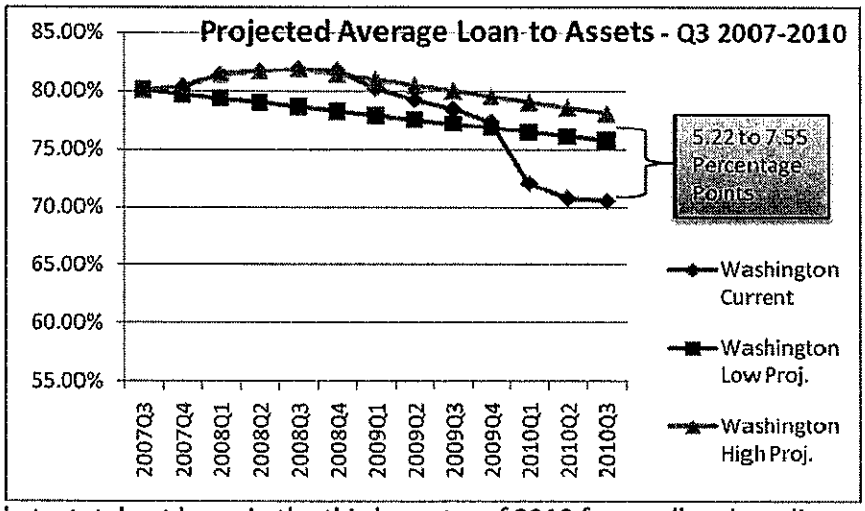
We estimate that a fully functioning state bank in Washington in 2010 could have helped to sustain direct lending by between 5.22 and 7.55 percentage points in the third quarter of 2010. While data to calculate the precise effect of the BND on lending in North Dakota does not exist, nor does the sample size of one allow us to confidently project the effect of a state bank on lending in other states, one relatively straightforward (and rough) way to estimate this effect is to compare the change in loan to asset ratios of banks in North Dakota to those in similar states from pre-recession to current quarterly data. The assumption here is that a state bank would have helped to stabilize the lending market in its

[7] The Bank of North Dakota is a big player in the residential mortgage secondary market (about $500M for a state with a total population of about 650K in 2009, 300K housing units and 200K homes owned in 2008). It is possible that the state bank, which generally followed an atypically prudent loan investment strategy with regard to real estate (i.e. avoiding credit default swaps and high risk mortgage loans), may have had some leveling effect on prices.

state during an economic downturn. Here we examine the drops in loan to asset ratios of small and medium sized banks in North Dakota to its comparator states from the 3rd quarter of 2007 to the most recent FDIC data, 3rd quarter 2010 (the recession officially began in the 4th quarter of 2007). We find that over the last 12 quarters (3 years) North Dakota banks on average reduced their loan to asset ratios by 4%, compared to about 9% for comparator states. And not all of the state averages show a decrease immediately following the beginning of the recession. When looking at the high-points, we see that the comparator states' LTA's dropped from 9 to 12 percent during the recession (see chart to right). This means that North Dakota's reduction in LTA's was about 33%-45% of the reduction seen across the comparator states.



How might this translate to Washington? Theoretically, had a Washington state bank mitigated the effects of the recession on the state's lending market in the same way it appears that BND did in North Dakota, the state's average loan to asset ratios would have fallen to 75.78% to 78.11% (from about 80% in Q3 of 2007 or 82% at its high in Q3 of 2008), rather than to their current level of 70.57% in Q3 of 2010. In other words, loan to asset ratios would have been 5.22 to 7.55 percentage points higher, with resulting increases in the absolute amount of lending (see right chart).



Another way to gauge the increase in lending due to a state bank is by estimating the absolute increase in loan activity due to new participation loans from a state bank. In North Dakota, total net loans in the third quarter of 2010 for small and medium banks were about $13.45B. In the same period, the Bank of North Dakota had participation loans of about $1.16B. BND estimates that their loans generally cover about 50% of the overall loan amount; thus, roughly $2.32B in loans was issued with the help of BND. This amount is an 18.87% increase over the $12.29B in net non-participation loans for the banks in North Dakota (subtracting out the $1.16B for their share of the participation loans).

To estimate the proportion of loans that would be in some sense "new loans" – that is, loans that would not have been made without the participation of state money and would not have been made by another bank—and the amount that would be made to in-state lenders, we extrapolate data drawn from a recent survey of community banks and bankers in New Mexico.[8] That survey found that:

- 57% of new loans were non-replaceable (i.e., does not replace money that would have been used for loans by these banks even absent the state's money)
- 82% of new loans would not have been made by other banks, and

[8] Popp, Anthony V. & Widner, Benjamin. (March 12, 2009). *New Mexico's Public Funds Investment Policies: Impact on Financial Institutions and the State Economy*. Arrowhead Center, New Mexico State University. As far as we know, this is the only publicly-available data of its type.

- 93% of new loans were likely to be made to in-state borrowers/businesses

Discounting by these factors, an 18.87% overall increase in lending would result in about 8.2% "new" lending activity in the state, a not insignificant increase. While we stress that these estimates are just that—estimates, and rough ones at that—we believe that they provide some sense of the scale of new lending that one might attribute to participation loans due to a state bank.

A Note on Direct Bank Stock Lending

Another way that a state bank makes capital available to private state banks is through direct bank stock purchases and lending. BND has estimated that they have a total bank stock portfolio of $150-$160M. This portfolio is from their bank stock and trust preferred securities financing loan programs. These "loans" are typically for bank M&A, capital refinancing, or capital expansion. Loans that expand private banks' capital would presumably result in increased lending by those banks. If we assume that on average banks leverage the expansion capital at a 10% leverage ratio, then BND's $150M of direct bank stock lending could potentially create up to $1.5B in additional lending. To estimate how much of this would be new lending (that is, lending that the private banks would otherwise not have done), one would need to discount for other sources of bank stock loans available to the small and medium sized banks in the state as well as other factors. In any event, the economic impact of direct bank stock lending from a state bank on the overall loan activity of the state is both positive and potentially very significant.

III. Small Business Jobs Created or Retained

This section looks at how an increase in lending would affect small businesses, an engine of economic growth and job creation. Bottom line, we estimate that Washington would have created or retained about 7,400-10,700 more small business jobs with the help of the additional lending generated by a state bank. Via a slightly different method, we estimate that state bank at full loan capacity would have resulted in 8,200 additional jobs created or retained in Washington during the 3rd quarter of 2010 due to participation loan activity.[9]

We arrive at these figures by looking at how the estimated increase in lending activity—and thus, the capital available to small businesses to expand or begin operations—due to the presence of a state bank would impact job creation by small businesses in the state. We use Small Business Administration (SBA) data to derive an estimate of one job created or retained per $31,801 in small business C&I loans or $121,374 in small business real estate loans.[10]

[9] To be clear, this is the number of additional jobs that a hypothetical Washington with a fully-functioning state bank with a full loan portfolio (so, post-start-up period) would have compared to the current Washington due to increased loan activity. Thus, it is not a per year increase, in the sense of 10,000 additional jobs being created in year 1 of state bank, then another 10,000 in years 2, 3, etc. On the other hand, this estimate does not represent a one-time economic boost like, say, a large construction project in which several hundred jobs are created for the duration of the project but then disappear. The additional job creation and economic activity, etc. would be a sustained increase over the baseline, sans state bank, economy. This, of course, necessarily implies some number of new jobs created or retained each year. Our method of estimating job creation does not allow us to break out the per year number; to know that, we would need other data such as the rate of turnover in the state bank's loan portfolio.

[10] SBA 7(a) loans are roughly analogous to private Commercial & Industrial (C&I) Loans. SBA 504 Loans are effectively small business Real Estate Loans.

Small Business Loan to Job Conversion Estimates	
SBA 7(a) Loans (2/2009-5/2010)	
Approved (Total SBA 7(a) Loans)	$15,838,836,235
Jobs Created or Retained (Reported by SBA)	592,928
Estimated Jobs Created or Retained (discounted by 16%*)	498,060
Loan AMT/1 Job Created or Retained	$31,801
SBA 504 Loans (2/2009-5/2010)	
Approved (SBA Backed Portion)	$5,614,730,000
Total Loan Amt (40% SBA Portion + 50% Bank Portion, but not 10% Downpayment)	$12,633,142,500
Jobs Created or Retained (Reported by SBA)	104,084
Loan AMT/1 Job Created or Retained	$121,374
*SBA7(a) job numbers discounted by 16% to account for overestimates highlighted by the SBA OIG in *Review of Controls Over Job Creation and Retention Statistics Reported by SBA under the American Recovery and Reinvestment Act of 2009* - ROM-10-04.	

Using that conversion factor, we estimate that for every 1 percentage point increase (or not decrease) in loans to assets for the small and medium banking market in Washington, about 1,400 jobs are created or retained. Thus, if we take our estimate that by September of 2010, a state bank in Washington could have helped to sustain a loan to asset ratio of roughly 5.22 to 7.55 percentage points greater than present, that difference in lending would translate into 7,400-10,700 additional small business jobs created or retained by the support of a fully functional Washington state bank (see the calculator to the right to test the affect of various assumptions regarding increased lending).[11]

Washington Small Business Jobs Calculator - Jobs Created or Retained Per Percentage Point Increase in Loan to Asset Ratio	
Total Average Assets in Washington Small & Medium Sized Banks in 9/2010	**$ 44,235,476,250**
Percent Higher Loan to Asset Ratio Projected due to a State Bank	**1%**
Increased Amount of Total Loans	**$ 442,354,763**
Increased Amount of Small Business Real Estate Loans	**$ 54,070,699**
Increased Amount of Small Business C&I Loans	**$ 30,966,513**
Increased Amount of Small Business Jobs due to Real Estate Loans	**445**
Increased Amount of Small Business Jobs due to C&I Loans	**974**
Estimated Total Effect on Small Business Jobs due to a State Bank	**1,419**

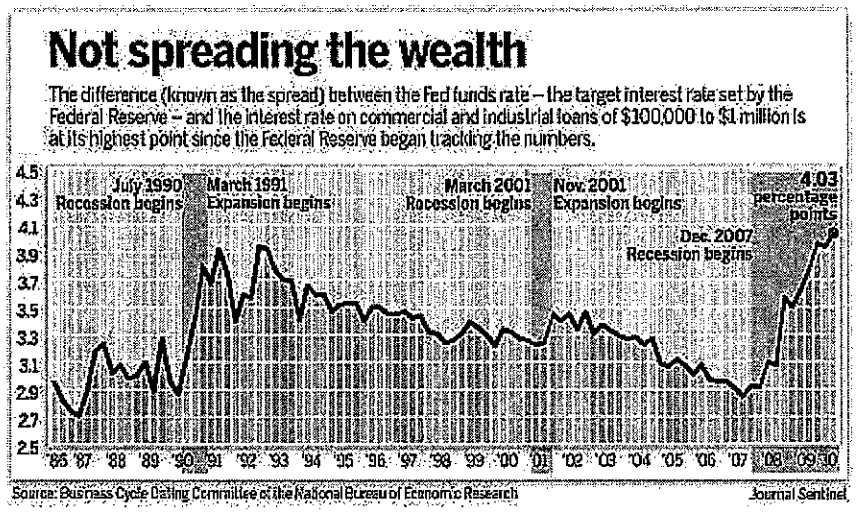
Alternatively, using the increase in new lending activity due to participation loans, which we estimated earlier at 8.2%, we find that if the total average net loans in September of 2010 by Washington small and medium sized banks had been 8.2% greater due to participation loans from an Washington state bank, around 8,200 additional small business jobs would have been created or retained (see following table).

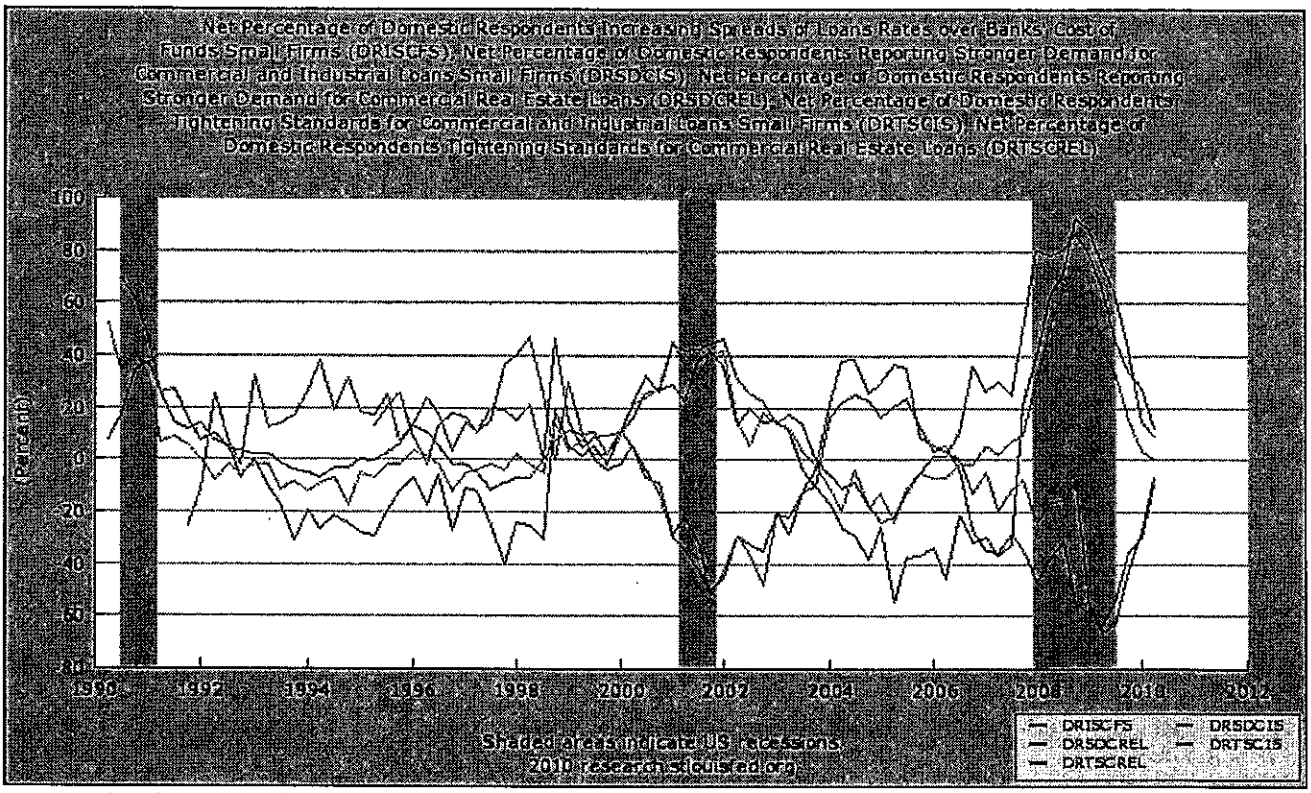
[11] As this analysis does not take into account non-small business lending, nor does it try to factor in the indirect and induced economic benefits to increased small business lending, it seems likely that the actual effect on jobs in the state would be even greater.

Washington Small Business Jobs Created or Retained From an 8.2% Increase in Average Loans	
Total Average Net Loans in Washington Small & Medium Sized Banks in September 2010	$31,215,065,500
Percent Higher Average Loans due to a State Bank	8.2%
Increased Amount of Total Loans	$2,559,635,371
Increased Amount of Small Business Real Estate Loans	$312,873,933
Increased Amount of Small Business C&I Loans	$179,184,192
Increased Amount of Small Business Jobs due to Real Estate Loans	2,578
Increased Amount of Small Business Jobs due to C&I Loans	5,635
Estimated Total Effect on Small Business Jobs due to a State Bank	8,212

A significant open question, and one that has been debated extensively over the course of the recession—and current fledgling recovery—is whether there is sufficient demand on the part of small businesses such that the increased access to funds generated by a state bank would actually result in additional lending. The brief look we have taken at North Dakota and the BND over the course of this paper seems to suggest that, at least in that state, there has been demand for the increased liquidity the BND provides. At least, it seems clear that the BND has had little or no difficultly assembling and maintaining its loan portfolio.

In addition, we believe that there is at least anecdotal evidence that there is demand for small business loans that is currently going unmet (see, e.g., "Slump in small-business lending vexes Washington", *Bloomberg Businessweek*, 6/29/10; "Lending Falls at Epic Pace," *Wall Street Journal*, 2/24/10; "Bernanke: $40B in small biz loans disappears", *CNN Money*, 7/12/10; "Small business loans lacking", *Milwaukee Journal Sentinel*, 7/19/10; "Small business owners await Congress to loosen credit", *Pittsburgh Post-Gazette*, 8/5/10). One reason for this may be that many U.S banks are under pressure from regulators to reduce risk, and one of the main ways that banks have done so is by reducing the amount of higher risk assets on their books, including certain small business loans. This is done by tightening credit standards and increasing the cost of debt for small businesses; this cost is currently at the highest point since the Fed began tracking it (see chart to the right).





Moreover, Federal Reserve data shows a strong inverse relationship between bank loan spread and tightening underwriting standards on the one hand and demand for new loans on the other (see chart above). Note that changes to demand happen right *after* the bank polices occur, as loan demand reacts to the change in banking policies. This suggests that the decrease in demand for loans is being driven at least in part by tightened credit rather than simply suppressed economic activity.

Whether banks are increasing the cost of small business loans due to risk-averse bank regulators or because of internal business decisions, a state bank (which would also operate outside of FDIC regulation) that contributes to lower loan to value ratios for commercial bank loans via participation lending will reduce risk and should lead to a reduction in the spread and an increase in total lending. And, assuming that the demand is there, this should bring increased small business lending and ultimately the creation of new small business jobs.

IV. Returns to the Bank

There is evidence that a state bank would help to strengthen the lending market in its state and thereby increase the amount of jobs created or retained due to that economic activity. We now assess the cost of this economic engine – both to the state bank and to the state itself. We find that with prudent banking practices, Washington could expect a Return on Assets (ROA) for a state bank of around 1% until all start-up debt obligations are expired, after which the ROA would be closer to 1.74%.

Estimating Bank ROA

We first estimate the Return on Assets (ROA) of a Washington State Bank. ROA is equal to Net Income/Average Assets. We calculate Net Income for a state bank by the following formula: Net Income = Total Interest Income[12] – Total

[12] In order to better estimate the effects that policymakers and bank officials can have on the overall return, we broke down Total Interest into Interest Income from Loans and Interest Income from Non-Loan Assets.

Interest Expense + Total Noninterest Income – Total Noninterest Expense – Provision for Loan Loss.[13] A state bank modeled after BND would have a large percentage of its loan portfolio made up of bank participation loans and much of its expenses based on the average market rates. This would presumably result in its financial performance being closely connected to the health and performance of small and medium sized banks in its state. Thus, for the purposes of this analysis, we assume a more-or-less direct correspondence between the performance of a state bank and the banks in its state, and we extrapolate relevant data by assuming a proportional relationship: Bank of North Dakota/North Dakota Small and Medium Banks = Washington State Bank/Washington Small and Medium Banks. The results of that calculation, using these ratios and primarily 15-year averages of average YTD FDIC data, are summarized in the above table (see Appendix 3A for how the variables were derived).

Based on 15-yr Averages (1995 through 2009)	Interest Income (as % of Loans)	Interest Income (as % of Non-Loan Assets)	Interest Expense (as % of Liabilities)	Noninterest Income (as % of Assets)	Noninterest Expense (as % of Net Int. Inc. + Nonint. Inc.)	Provision for Loan Losses (as % of Loans)
North Dakota Small & Medium Banks	7.58%	4.34%	2.99%	1.01%	62.24%	0.42%
Bank of North Dakota	6.40%	2.96%	3.18%	0.44%	28.09%	0.24%
Ratio of BND vs North Dakota Banks	0.8451	0.6823	1.0615	0.4318	0.4514	0.5704
Washington Small & Medium Banks	7.79%	3.69%	3.22%	0.88%	60.83%	0.79%
Washington State Bank Estimates	6.58%	2.52%	3.42%	0.38%	27.46%	0.45%

We then apply the net income percentage estimates for a Washington State Bank (see above) to medium and small Washington banks (assets < $10B), which we assume are the primary market for a bank that effectively expands the leveraging power of private banks.[14] Using a reasonable range of assumptions, that is a leverage ratio between 7% (BND's leverage ratio) 10% and a loan to assets ratio of 65% to 75%, we estimate an ROA for an Washington state bank of around 1.4-1.7% (see box to the right for sample calculation of upper ROA end).[15] This range is slightly higher than the average post-tax ROA for small banks (about 1.2%) but that may be partially explained by the fact that a state bank would be tax-exempt and

BANK ROA EXAMPLE

So, for example, if Loans are 75% of Assets, and Equity Leveraged $10 in assets and $9 in liabilities (Liabilities = Assets – Equity) for every $1 in equity, then Net Income =

(Assets*0.75*0.065796 + Assets*0.25*0.025182)
- (Assets*0.90*0.034152)
+ (Assets*0.003810)
- (Assets* 0.028715*0.274574)
- (Assets*0.75*0.004514)

OR

Net Income = Assets*0.017446

And since ROA = Net Income/Assets,

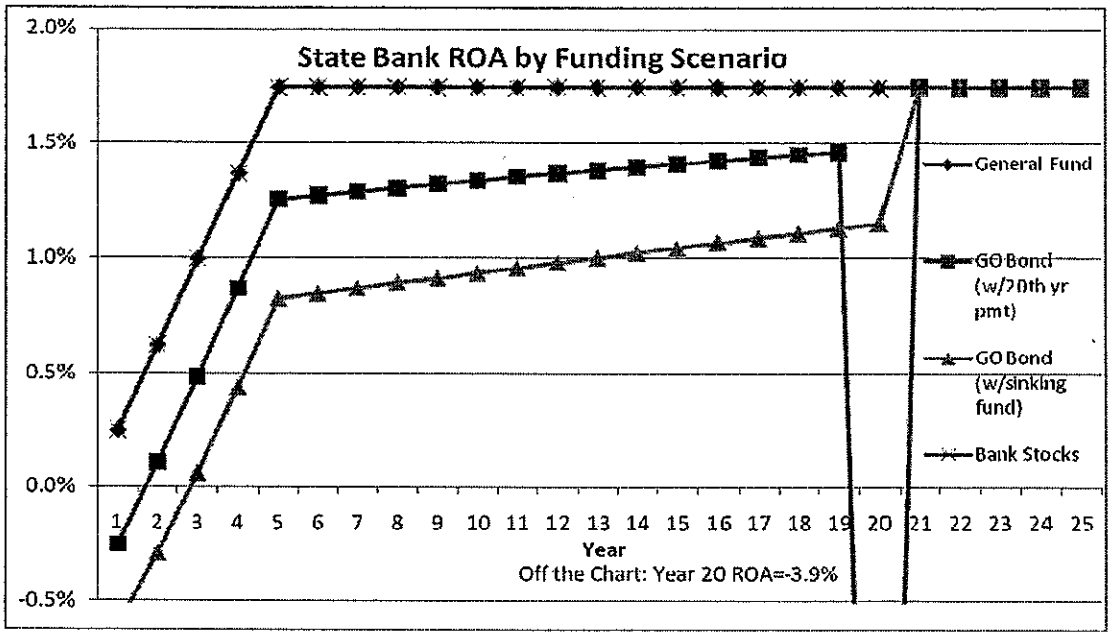
ROA = 0.017446 or 1.74%

[13] Note that net income is usually calculated as Bank Net Income = Total Interest Income – Total Interest Expense + Total Noninterest Income + Securities Gains (Losses) + Extraordinary Gains – Total Noninterest Income – Provision for Loan Loss – Applicable Income Taxes. But because recent FDIC data (2005-2009) indicates that securities gains/losses are extremely small for medium and small sized banks (that is, those with assets less than $10B) in Washington, a mean of -$18,000, and relatively small for BND (.01% of assets) we have not included securities gains/losses in the following calculation. BND also had zero extraordinary gains over the last 5 years and does not pay income taxes, thus those variables are irrelevant to the calculation.

[14] The basic calculation is: Estimated Net Income for OR State Bank = Total Interest Income (Loans*6.58%+ Assets that are Not Loans*2.52%) – Total Interest Expense (Liabilities*3.42%) + Total Noninterest Income (Assets*0.38%) – Total Noninterest Expense [(Net Int. Inc.+Nonint. Inc.)* 27.46%] – Provision for Loan Loss (Loans*0.45%)

[15] The calculation finds, as one would expect, the higher loan to asset ratio, the greater the return (as loans have both a higher risk and return). But it also shows that a smaller leverage ratio (smaller capital to assets or inversely greater assets to capital) returns a smaller ROA and greater ROE. This is because as assets grow, the denominator (assets) grows faster than the numerator (net income) in the ROA calculation.

would almost certainly have very low noninterest expenses (see Appendix 3A). And this estimate is very much in line with the ROA generated by the Bank of North Dakota, which averaged 1.87% over the past 5 years (figures in Appendix 3B). Once the cost of capitalization from a general obligation (GO) bond is factored in, the bank's effective ROA actually falls somewhat below the industry average (see chart to the right).



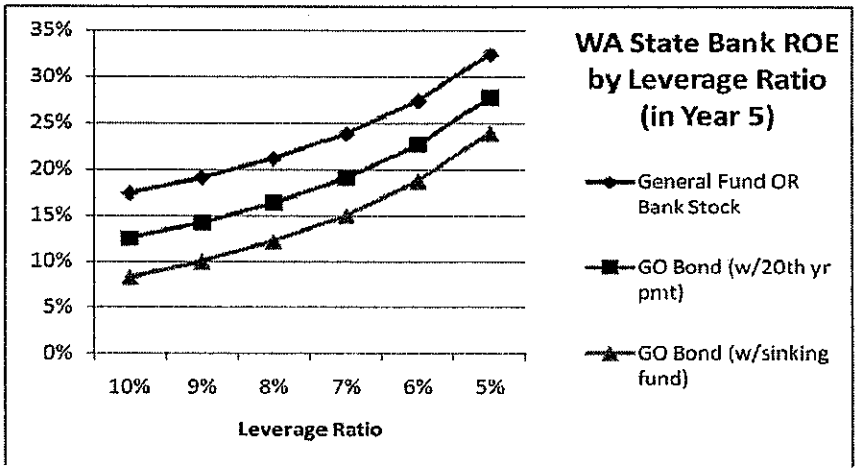
Some argue that while a state bank could become profitable over time, creating the bank in the first place would be cost prohibitive and result in a true loss to the state. We find this not to be the case. Even including the cost of start-up capital for the bank in the form of payment on a GO bond in bank net income (though the state would technically be the entity responsible for repaying the debt), we still estimate that after taking into account bond payments on a 20-year bond with a 5% coupon rate and sinking fund with a 3.2% interest rate, the bank would have an ROA that would grow from 0.82 in year 5 to 1.15% in year 20.

Funding Scenarios

While we believe that a GO bond with a sinking fund is the most likely source of capital for a state bank, this is by no means the only option. For starters, there is no requirement that we are aware of that there be a sinking fund; the bond principal could be paid off in one lump sum when the bond matures. The state could also use general funds for bank start-up capital. While there are obvious political difficulties attendant on this option, it also reaps the greatest returns as the bank is effectively created with no debt obligations. Another option is to raise capital

A Note on Leverage Ratios

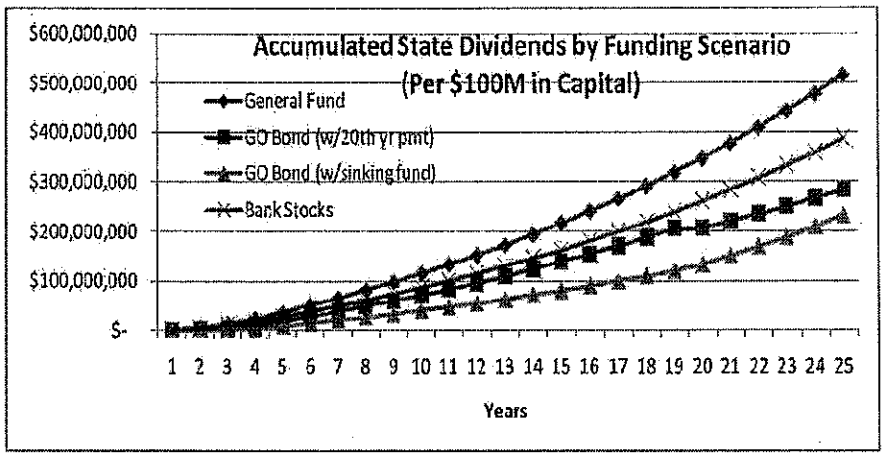
The leverage ratio (capital/assets) is one of the biggest decisions a bank makes. The larger the leverage ratio, the less assets there are for every dollar of capital – which is less risky, but also less profitable. This is because at the end of the day, a bank makes a return off of its profit generating assets (like commercial loans), not its core capital. So, all else equal, the more you leverage capital (a smaller leverage ratio), the more assets you have and the more profits you make. But with more rewards comes more risk, and a bank's capital is a critical cushion when assets default. The chart below shows a state bank's ROE for the four likely capital sources by leverage ratios of 5-10% (other variables are held constant). The General Fund and Bank Stock scenarios yield the same ROE's as neither scenario incurs a debt service cost to the bank itself.



through the sale of bank stock, much like a private bank would. Some start-up funds from the state would also be required in order for the state to earn dividend payments; however, this would also mean that the state would hold shares in the bank which could very well appreciate over time. Pension or other state investment money could also provide bank startup capital, either by investing pension funds in bank stock or by using them in lieu of general funds through some dedicated fund.

Another Note on Funding Sources

As discussed above, the source of the state bank's start-up capital is a critical early decision, and has a great effect on the amount returned to the state. Looking at the below chart, we see that the funding scenarios that rely on state funds (e.g. the general fund and bank stock) return the greatest dividends, as the bank is effectively free from debt service obligations. The bank stock scenario is really only lower than the general fund scenario as it requires 25% less state funds and therefore gets 25% less state dividends. The bond scenarios show that requiring a sinking fund will keep the accumulated dividends the lowest during the first 25 years of operation. It should also be noted that even after the bonds mature in year 20, the general fund and bank stock scenarios accelerate at a quicker rate, as they have built up more capital to compound returned earnings off of.



V. Returns to the State

While we have found that a state bank in Washington could stabilize the banking market, would likely contribute to job creation, and would be financially self-sustaining, policymakers and the public will presumably want some estimate of the bottom-line costs and returns to state taxpayers. We find that after a relatively short start-up phase (3-5 years), the state could not only be getting an annual dividend, but that even after taking into account the opportunity cost of capital, lost tax revenue and other costs of a state bank, it is still a revenue positive economic development tool.

State Dividends

One of the virtues of a state bank is that, while it should primarily be seen as a tool for stabilizing and increasing state lending by providing liquidity to private banks (and as a potential source of leveraged economic development funds), it can also return a portion of its profits to the state. In the case of the Bank of North Dakota, the amount returned the state's general fund is determined by the Industrial Commission (which is composed of the Governor, the Attorney General, and the Agriculture Commissioner and governs the bank's operations) and bank leadership in negotiation with the state legislature. Thus, in flush times the state can choose to plow all bank profits back into the bank, while drawing on them (within reason) in times of fiscal need. For instance, from 2004-2009 the negotiated return from the bank to North Dakota was $30 million per year; in 2001 the BND returned $50

State Dividend Example

A $100M general obligation (GO) bond issuance, with a 5% coupon rate, 20-year term & 3.20% IR on a sinking fund; bank policies that result in a 10% leverage ratio and 75% loan to asset ratio (graduated increase from 15% to 75% over 5 years); and state dividend of 70% of profits per year would result in the following *accumulated* dividends to Washington:

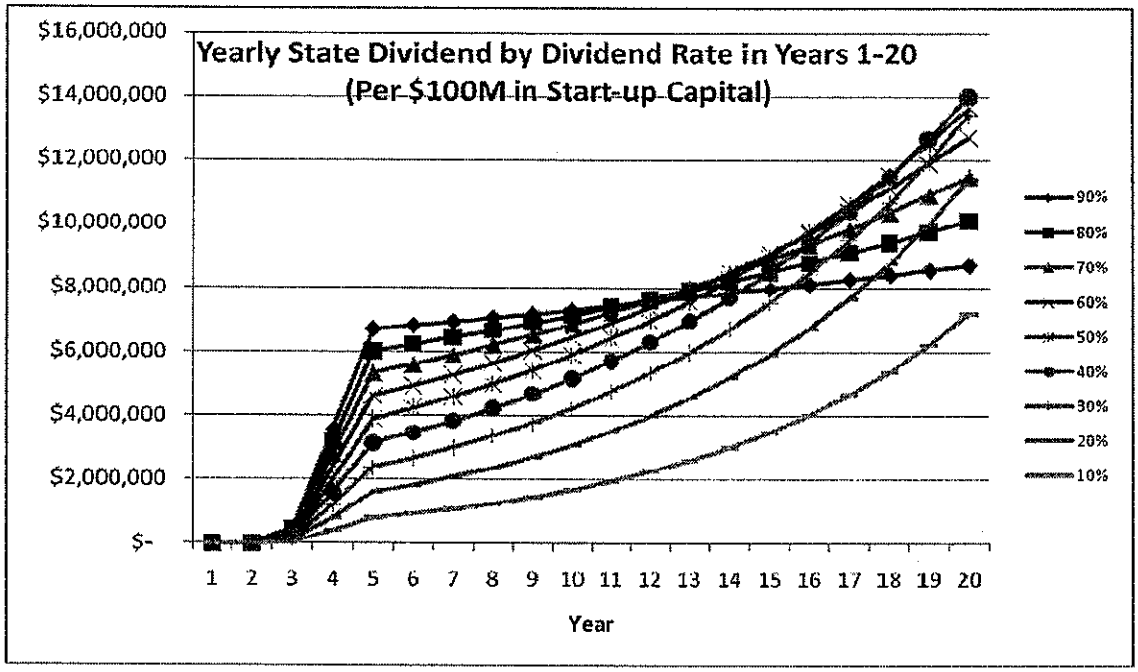
Year 5	**$8,520,630**	**Year 25**	**$232,016,049**
Year 10	**$39,695,522**	**Year 30**	**$361,285,155**
Year 15	**$79,927,806**	**Year 35**	**$528,111,443**
Year 20	**$131,848,971**	**Year 40**	**$743,406,583**

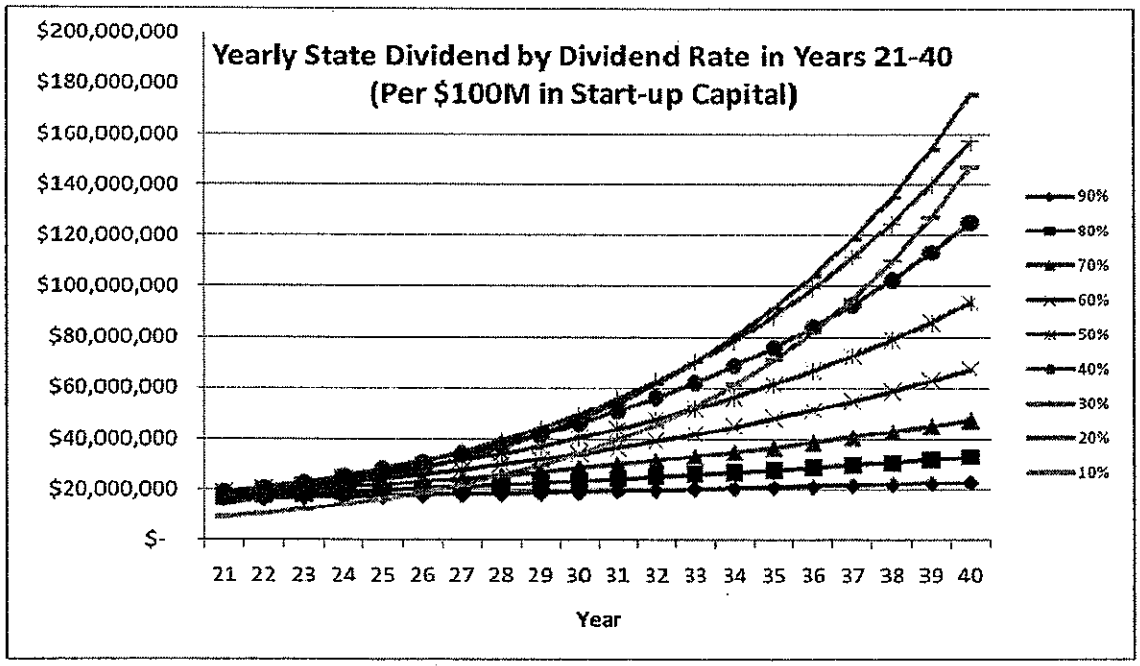
Dividends would be sent to the state starting in year 3. The state ROE (state dividends as a percent of state bank equity) is positive starting in year 3, and would be about 5.8% in year 5, 6.5% in year 10, 7.3% in year 15 and would remain at about 12.2% in years 21 and on (after bond maturity).

Profit projections include the cost of debt and are per $100M in GO bonds (thus, if the state capitalized the bank with a $200M GO bond you would multiply the projections above by 2).

million to the state; while in 2000 the bank did not return any profits to the state.
Since the return to the state—or state dividend as we call it here—is set by bank and the legislature on a yearly or biannual basis, any projection regarding return to the state is obviously completely contingent. And, of course, returning a greater percentage of the profits to the state in the short term hurts bank profitability in the long-term and the converse. That said, under most scenarios, the bank's return to the state would be positive starting in year 3, and would ramp up quickly thereafter, such that if the bank returned an average of 70% of profits (the average return to the state from the BND over the past decade was 72%), by year 5 the bank would have cumulatively returned over $8.5 million to the state per $100 million in start-up capital and by year 10, almost $40 million (see the State Dividend Example box on previous page).

The below yearly state dividend charts illustrate both of these points (both charts assume a GO bond with a sinking fund). For instance, by year 5 (when the bank had fully assembled its loan portfolio) a state bank could return anywhere from less than $1M to close to $7M per year to the state general fund depending on whether the state chose to take





very little (10%) or almost all (90%) of the state bank's profits. However, by year 40, if the bank consistently returned most profits to the state, the year-by-year return would be only about $20mm compared to the $175mm in dividends if the state let the bank keep and accrue most of its profits (see Appendix 4 for the data behind these charts).

In the chart years 1-20, we see that the higher the dividend rate, the greater the state's yearly dividend in the early years (the first 11 years). But as the state bank's capital grows more slowly with a high state dividend, the lower dividend rate numbers start to return a higher profit such that even with the lower rate going back to the state the absolute amount of state dividend becomes greater. The crossover for many of the dividend rates happens in years 12-18. The trend continues in years 21-40, but with more steady growth rates.[16]

These are clearly very long timeframes to be planning out for, and to some extent the above charts are simply meant to show the general effect of the dividend rate on the amount returned to the state. However, like any bank, a public state bank would take some time to start-up operations, to assemble its loan portfolio, and to mature its operations, and it is over the (relatively) long haul that such a bank would both maximize its efficacy and return the most to the state. The Bank of North Dakota has been in operation for over 90 years, progressively increasing both the magnitude of its operations and its return to the state.

Real Profits to the State

The state dividends described above are the amount of money that would go back into a state general fund, and thus clearly important from both a budgetary and political perspective, but this is not a perfect measure of financial return. A more complete accounting would encompass the overall profits of the state bank (since it is an entity of the state in its entirety after all) along with the estimated loss in interest income due to moving state deposits from demand deposit accounts with higher yields (estimated to be about 0.25% or 25 basis points greater) and lost income tax revenues from moving the deposits into a nontaxable financial institution, as well as the cost of start-up debt service as described above.[17]

State Bank Fiscal Impact Calculator	
Capital	$ 100,000,000
Leverage Ratio	10%
Loans to Assets	75%
State Dividend	70%
Bond Coupon Rate	5.00%
Bond Term (in Years)	20
Bond Sinking Fund IR	3.20%
Interest Income	$ 55,642,160
Interest Expense	$ (30,737,192)
Nonint. Income	$ 3,809,936
Nonint. Expense	$ (7,884,365)
Provision for Loan Loss	$ (3,385,593)
Net Income (Before Bond Payments)	$ 17,444,946
Bank ROA (Before Bond Payments)	1.74%
Bank ROE (Before Bond Payments)	17.44%
Bond Interest Payment	$ (5,000,000)
Bond Sinking Fund Payment	$ (3,533,403)
Net Income (After Bond Payments)	$ 8,911,543
Bank ROA (After Bond Payments)	0.89%
Bank ROE (After Bond Payments)	8.91%
State Dividend	$ 6,238,080
State Dividend ROE	6.24%
Loss in Interest Income	$ (1,674,772)
Loss of Income Tax Revenue	$ (589,298)
Actual Profits to State	$ 6,647,474
Actual State ROE	6.65%

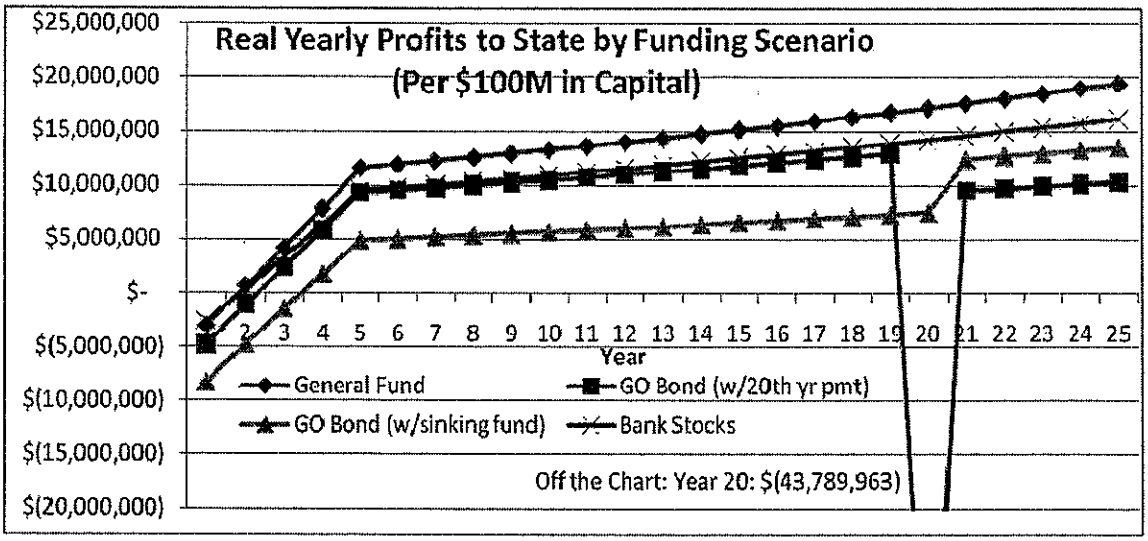
With those amounts included, actual net profit to the state would be about $6.6 million per $100 million in start-up capital (assuming the leverage ratio, etc. outlined above) and net state ROE would be around 6.65%. Since this analysis is meant to inform policymakers, we have set-up a fiscal impact calculator that allows one to set capital, leverage ratio, loan to asset ratio, state dividends, bond coupon rate, bond term, and bond sinking fund interest rate (based on capitalization from a bond

[16] We have not adjusted for inflation and would expect flatter curves but the same underlying points with inflation factored in.

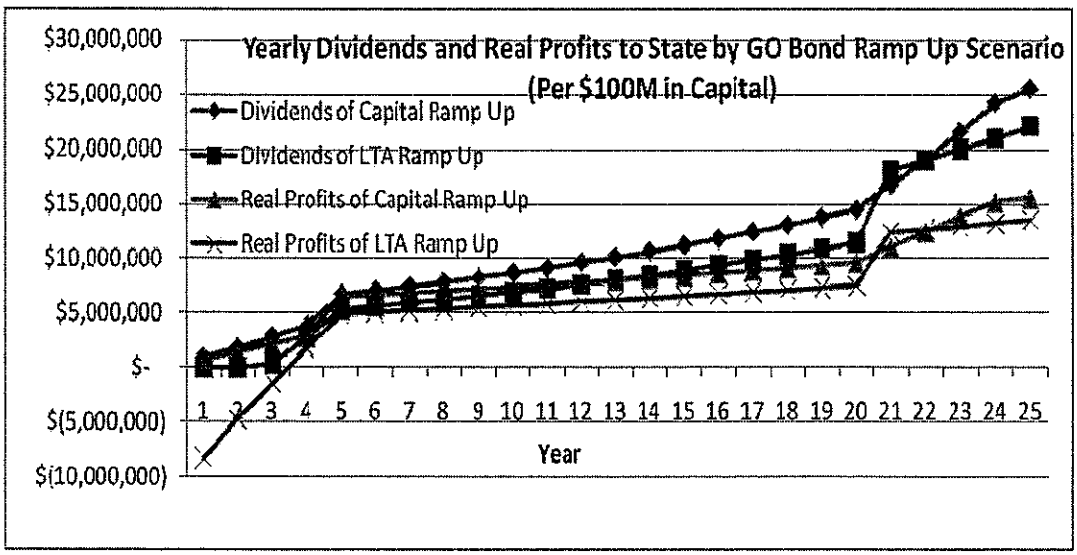
[17] This does not take into account potential savings from reduced fiscal agent fees, which would offset some of this cost.

with a sinking fund; see Appendix 3C for conversion ratios). This calculator is not an accurate tool for projecting out multiple years, but it does demonstrate how decisions by policymakers and bank officials regarding bank set-up and operations can affect the returns to the bank and the state itself (double click on the previous table to input values). For example, you can see that by changing the leverage ratio from 10% to 9%, all else equal, the actual state ROE would rise to over 8%.

The chart below shows actual net profits to the state over a 25-year period based on the four start-up capital scenarios (and discounting the profits back to the state by 3% per year to account for inflation). As mentioned earlier, we assume



a 5-year start-up period, over which the loan to asset ratio gradually ramps up to account for the fact that it will take time to generate the participation loans this analysis is based on. To simplify the applicability of the estimates to other capital amounts, the profits are projected per $100M initial start-up capital. The below chart of real profits highlights three important points: 1) the loan to asset ratio greatly affects profits during the start-up phase, 2) the year 20 maturity has opposite effects on the two bond scenarios, and 3) the general fund scenario is the most "profitable" to the state, even after taking into account the opportunity cost of the funds. It should be noted that while the general fund scenario returns the greatest real profits to the state, it does not come without some drawbacks, namely that 1) the funds are all from state coffers (unlike the bond scenarios) and 2) while the state gets the dividends it does not have stock shares that can appreciate over time like the bank stock scenario.



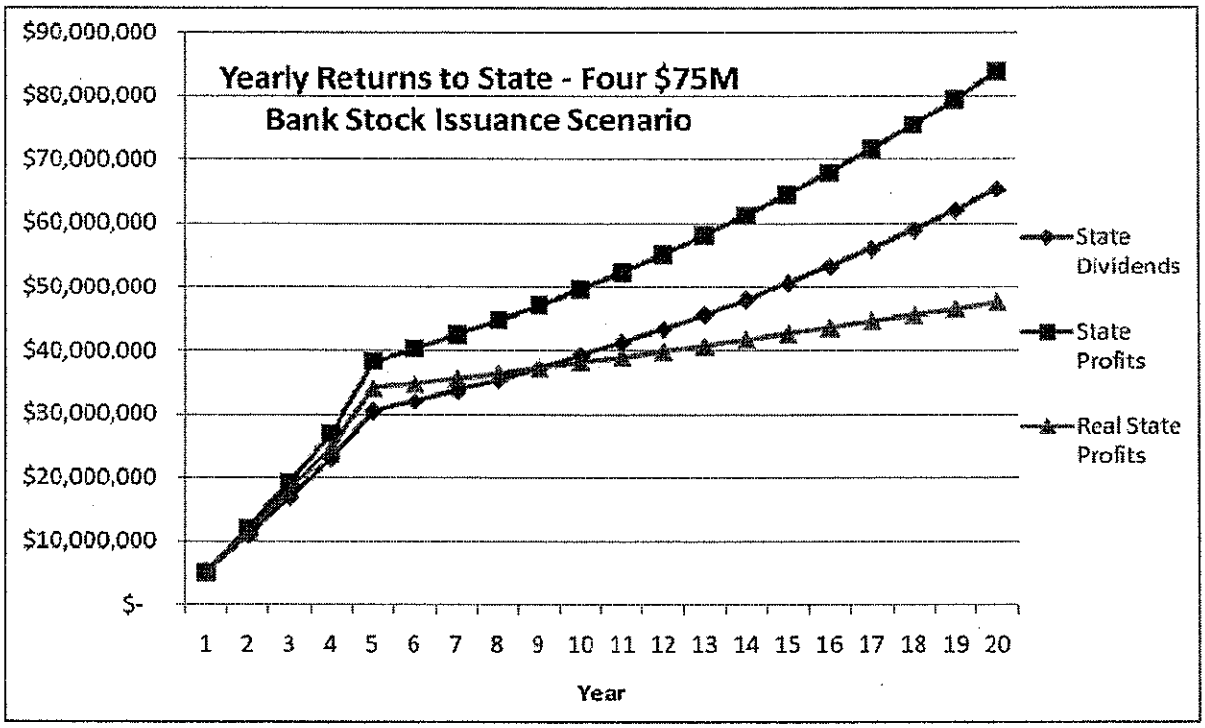
Ramping Up Capital

Given that it will take some time for the bank to ramp up its lending, some have suggested a phased capitalization period as well. This could be done, for instance, by issuing four bonds during the first four years of operation: rather than a $100M bond in year 1, the state would issue $25M in year 1 and another $25M in years 2, 3, & 4. This scenario returns a slightly higher state dividend

and real profit per year (see above chart). Enacting four bonds, e.g., as opposed to one arguably presents more of a political hurdle, but does result in a greater return due to the higher loan to asset ratio over the early years of the bank.

Multiple Bank Stock Scenario

Also, take the example of a state bank created in Washington from a total of $300M in bank stock issuances (which could be, in part, capitalized through state pension funds), with capital investment ramped up gradually ($75M in capital per year for the first 4 years), 75% state ownership, and assuming 75% LTA for years 5 and on and an average 70% state dividend.



In this scenario, accumulated state dividends would cover the initial state investment of $225 (75% of $300M) in about 9 years. Even real state profits, which grow more slowly than state dividends, would pay back the initial start-up capital in year 9. Real annual state profits show that even after accounting for inflation, there is a strong return to the state. In fact, the $225M state investment returns real profits of over $34M in year 5, $38 in year 10, $42 in year 15, and $47M in year 20. So by year 20, the state would be getting a real yearly return of about 21% on the initial investment by the state. And presumably the $225M in bank stock that was purchased in years 1-4 could have appreciated, especially if dividends remain relatively large and stable (see State Dividend Example).

State Dividend Example

A $225M state investment from pension funds; bank policies that result in ramped up capital; a 10% leverage ratio; up to 75% loan to asset ratio; and state dividend of 70% per year would result in the following *accumulated* dividends to Washington:

Year 5	$86,636,429	Year 25	$1,171,572,041
Year 10	$264,338,134	Year 30	$1,664,485,363
Year 15	$493,668,378	Year 35	$2,300,607,187
Year 20	$789,627,054	Year 40	$3,121,544,577

VI. Conclusion

This analysis is a first—and admittedly simplified in many respects—effort to estimate the effect of a Washington State Bank on the state's fiscal health, banking industry, and small businesses. While we were forced to make a number of assumptions, in each case we have endeavored make those as conservative as possible. With more time and the application of more powerful analytical tools, a more comprehensive analysis of the economic impact of a state bank is certainly possible. This first step does, however, strongly suggest that a state bank would have a positive effect on state revenue and could effectively strengthen the banking industry and create and sustain jobs through a revenue positive investment in a state bank.

Questions for Further Consideration

Some of the decisions that policymakers will have to make when designing a state bank:

1) **Start-up Capital:** As mentioned in our analysis, there are many pros and cons to the sources of start-up capital that go beyond the return on equity to the state. Will the most profitable scenarios be politically feasible? Are there other effects to the state from increasing its portfolio of GO bonds? Could the bonds or stock sale be designed in a way that promotes the health of the state pension funds as well? Will the start-up phase see a ramping up of loan to assets or capital itself?

2) **Deposits:** Where will the deposits come from? Will they only be from the state itself? What amount of state deposits will be put into the bank and under what schedule (similar to the capital ramp up decisions)? How can in-state small and medium sized banks best utilize the depository services and letters of credit this banker's bank would provide?

3) **Loans:** What limitations will be put on loans and other economic development tools for the bank? Are only participation loans going to be allowed? Will the bank be allowed to purchase real estate loans from the secondary market, like BND does? Will there be provisions for loans targeted toward specific economic development purposes, such as agricultural start-ups or venture capital investments (again, similar to BND), or even clean energy or infrastructure projects that fit with the goals of the state? How can in-state small and medium sized banks best utilize the participation loans and correspondent lending services?

4) **State Dividend:** This is another subject that we have looked at in the analysis, and while we find that higher dividends make the quickest return to the state, lower dividends grow the state bank's capital and eventually result in higher profits in out years. Policymakers will have to answer the question, is it better to get a return right away or build up a pool of funds that can be leveraged to help future generations? The Bank of North Dakota has been around for over 90 years, how best can a state bank in Washington be designed in a way that your great-grandchild can benefit from its positive economic impact in the 22nd Century?

APPENDICES

Appendix 1 – Cleaning the Data

In order to more accurately compare the banks that we believe a state bank would work with, we started isolating outlier banks based on their loan to deposit ratios (LTD). We found that there were bank trusts with 0 LTD's and credit card processing facilities with well over 400% LTD. We also removed retail store credit card banks as well as banks that are part of a megabank holding company; the financial institutions that we removed from the analysis are listed below:

Financial Institution	State	Big Bank Holding Company	Average Loan to Deposits	Years Removed
Davidson Trust Co.*	Montana	No	0%	2001-2009
U.S. Bank National Association MT (fka First Bank Montana, National Association)	Montana	U.S. BANCORP	86%	1995-2001
Wells Fargo Bank Montana, National Association (fka Norwest Bank Montana, National Association)	Montana	WELLS FARGO & COMPANY	67%	1995-2002
Frontier Trust Company, FSB	North Dakota	No	0%	2000-2006
U.S. Bank National Association ND* (fka First Bank National Association ND; fka First Bank, Federal Savings Bank)	North Dakota	U.S. BANCORP	4774%	1995-2009
Wells Fargo Bank North Dakota, National Association (fka Norwest Bank North Dakota, National Association)	North Dakota	WELLS FARGO & COMPANY	69%	1995-2003
Axsys National Bank (fka Fingerhut National Bank)	South Dakota	No	8.45%	1996-2003
Citibank USA, National Association (fka Hurley State Bank)	South Dakota	CITIGROUP INC.	268%	1995-2005
Department Stores National Bank*	South Dakota	CITIGROUP INC.	31%	2005-2009
First Bank of South Dakota (National Association)	South Dakota	U.S. BANCORP	232%	1995-1997
Green Tree Retail Services Bank	South Dakota	No	12192%	1996-2002
Target National Bank* (fka Retailers National Bank)	South Dakota	No	1469%	1995-2009
Wells Fargo Bank South Dakota, National Association (fka Norwest Bank South Dakota, National Association)	South Dakota	WELLS FARGO & COMPANY	197%	1995-2003
Wells Fargo Financial Bank (fka Dial Bank)	South Dakota	WELLS FARGO & COMPANY	2545%	1995-2008
Community First Bank	Washington	No	NA	1997
Continental Savings Bank	Washington	No	NA	1996
ShoreTrust Bank	Washington	No	0%	1995-1996
Wells Fargo Bank Wyoming, National Association (fka Norwest Bank Wyoming, National Association)	Wyoming	WELLS FARGO & COMPANY	93%	1995-2002

**2010 data removed in quarterly analysis but not reflected in LTD averages here. NA=Not Available.*

For the U.S. Averages, we eliminated all banks with LTD's of less than 0.5% (those that round down to 0%) and those with LTD's of greater than 200%.

Appendix 2 - Average Loan to Asset Ratios and Loans Per Capita for North Dakota and Like States

Average Loan to Asset Ratios for ND and Like States					
	12/31/05	12/31/06	12/31/07	12/31/08	12/31/09
North Dakota	73.61%	75.12%	75.58%	75.00%	74.33%
Montana	68.07%	70.25%	71.37%	72.43%	69.41%
South Dakota	69.10%	71.19%	72.41%	69.51%	68.13%
Wyoming	61.89%	62.44%	63.84%	62.30%	61.14%
U.S. Average	66.11%	67.85%	68.94%	69.72%	68.17%

Average Loans Per Capita for ND and Like States					
	12/31/05	12/31/06	12/31/07	12/31/08	12/31/09
North Dakota	$14,135	$15,792	$17,299	$18,960	$20,074
Montana	$10,975	$12,197	$12,647	$13,670	$14,608
South Dakota	$12,217	$13,393	$16,158	$16,983	$16,887
Wyoming	$7,089	$7,970	$8,839	$7,434	$7,716
U.S. Average	$5,871	$6,143	$6,297	$6,599	$6,467

Average Loan to Assets by Quarter	2007Q3	2007Q4	2008Q1	2008Q2	2008Q3	2008Q4	2009Q1	2009Q2	2009Q3	2009Q4	2010Q1	2010Q2	2010Q3
North Dakota	75.88%	75.58%	73.79%	74.51%	75.04%	75.00%	74.27%	74.76%	74.81%	74.33%	72.11%	72.78%	72.82%
Montana	71.35%	71.37%	71.49%	72.20%	72.59%	72.43%	71.29%	71.31%	70.41%	69.41%	65.00%	65.03%	64.59%
South Dakota	72.56%	72.41%	70.86%	70.19%	69.98%	69.51%	68.21%	68.29%	68.33%	68.13%	66.49%	66.27%	66.11%
Wyoming	63.58%	63.84%	64.53%	65.67%	65.06%	62.30%	61.92%	62.20%	61.78%	61.14%	58.70%	58.49%	57.74%
Washington	80.11%	80.43%	81.44%	81.69%	81.89%	81.80%	80.21%	79.28%	78.46%	77.37%	72.10%	70.79%	70.57%

Appendix 3(A, B, &C) – Calculations & Variables

Appendix 3A – How the Above Variables Were Derived

1. **Total Interest Income:** Interest Income as a percentage of average net loans, in order to take into account the greater return on loans and allow for policymakers to adjust the loan to asset ratio accordingly. BND Loan and Non-Loan Averages are derived from averaging net loans; all others from averaging average YTD loans.
2. **Total Interest Expense:** Interest Expenses as a percentage of average liabilities, in order to take into account a more nuanced effect of the leverage ratio . . . a smaller leverage ratio not only increases assets compared to capital but also liabilities compared to assets (a 10% leverage ratio results in $9 liabilities for every $10 in assets or 9/10 or 90% liabilities to assets, but a 5% leverage ratio would result in 19/20 in liabilities over assets or 95%).
3. **Total Noninterest Income:** Total noninterest income as a percentage of average total assets.
4. **Total Noninterest Expense:** We extrapolate the total noninterest expense by utilizing the standard efficiency ratio, which is noninterest expense/(net interest income + noninterest income). BND has a very low efficiency ratio (which is very good) due in large part to not needing branches and not needing to spend a lot of money o marketing their services. As the state bank and a banker's bank, they avoid much of the overhead seen in private banks. We would expect the same efficiency advantages for a state bank in Washington.
5. **Provision for Loan Loss:** This loan loss is as a percentage of average loans, and acts as a small counterbalance to the higher rate of return, by factoring in a cost to the higher risk of having a larger loan to asset ratio.
6. **Interest Cost of General Obligation Bond:** The other likely funding mechanism for the bank's start-up capital is a General Obligation Bond. For this bond issuance we assume a 20-year maturity and a 5% coupon rate.
7. **Sinking Fund for General Obligation Bond:** Although the state has recently outperformed the blended benchmark, to be conservative we averaged the last 109 months of blended benchmark yields to estimate an annual compounded return of 3.2% on a GO bond sinking fund. For simplicity, we assume the bond will be retired at its maturity and will not have the principle paid down beforehand.
8. **Bank Assets:** Based on capital and leverage ratio (Capital/Leverage Ratio).
9. **Return on Assets (ROA):** Based on leverage ratio and loans/assets (see above for details).
10. **State Dividend:** The percentage of bank profits returned to the state.
11. **Loan to Asset Ratio:** Over the last 5 years, the Bank of North Dakota had an average of about 77% loan to assets. In order to take into account a start-up phase, we assume the following loan to assets: 15% in year 1, 30% in year 2, 45% in year 3, 60% in year 4, 75% in years 5-40.
12. **Loss of Interest Income:** We assume a slightly lower rate of return for deposits in the state bank. We use 0.25% or 25 basis points less interest earned by depositing in state bank vs. commercial banks as a rule of thumb, see Hearings on WA SB 3162 [cite to record].
13. **Loss of Tax Revenue:** The state bank is not taxed, so this would be a loss of business and occupation (B&O) taxes on revenue from in-state private banks (and some out-of-state banks with offices inside Washington) derived from state deposits. Here we estimate the tax losses based on the allocation of state deposits (34.47% to in-state banks), the average percentage of liabilities that are deposits (about 74%), the average 15 years of total interest income (8.69% of deposits) for in-state banks and loan interest income for out-of-state banks, the amount of first mortgages (as a percentage of earning assets for in-state banks and loans for out-of-state banks) which count as tax exemptions, and the B&O tax rate for financial firms (1.8% of gross income).
14. **State Deposits:** For BND's 15-yr average, deposits make up 74.43% of liabilities. For the Washington model, we assume that all deposits will be state deposits.

Appendix 3B – BND ROA for the Past 4 years

Bank of North Dakota ROA					
	12/31/2006	12/31/2007	12/31/2008	12/31/2009	MEAN
Return on Average Assets (Annualized)	1.99%	2.04%	1.86%	1.57%	1.87%

Appendix 3C – Conversions used to calculate fiscal impact on state

Assets = Capital/Leverage Ratio
Liabilities = Assets - Capital or [(Capital/Leverage Ratio) - Capital]
Loans = Loan/Assets*Assets or [(Loan/Assets)*(Capital/Leverage Ratio)]
Non-Loan Assets = {Capital/Leverage Ratio - [(Loan/Assets)*(Capital/Leverage Ratio)]}
State Deposits = Liabilities*0.83245329 or [(Capital/Leverage Ratio) - Capital]*0.83245329

Appendix 4 – Yearly State Dividends based on Dividend Rate - Data Table

Years 1-20

Yearly State Dividends - Bond Issue with Sinking Fund Scenario ($100M in Start-up Capital, 10% Leverage Ratio, Rising Loan to Asset Ratio up to 75%, & 20-yr Bond w/5% Coupon Rate + 3.2% Sinking Fund IR)										
State Dividend	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
90%	$-	$-	$500,102	$3,580,278	$6,717,930	$6,835,123	$6,954,362	$7,075,680	$7,199,115	$7,324,703
80%	$-	$-	$444,535	$3,188,560	$6,034,978	$6,245,538	$6,463,444	$6,688,953	$6,922,330	$7,163,849
70%	$-	$-	$388,968	$2,795,320	$5,336,342	$5,615,618	$5,909,511	$6,218,784	$6,544,243	$6,886,735
60%	$-	$-	$333,401	$2,400,557	$4,621,940	$4,944,458	$5,289,481	$5,658,580	$6,053,435	$6,475,842
50%	$-	$-	$277,835	$2,004,271	$3,891,694	$4,231,146	$4,600,206	$5,001,458	$5,437,709	$5,912,011
40%	$-	$-	$222,268	$1,606,463	$3,145,523	$3,474,763	$3,838,466	$4,240,237	$4,684,061	$5,174,340
30%	$-	$-	$166,701	$1,207,131	$2,383,348	$2,674,389	$3,000,971	$3,367,434	$3,778,646	$4,240,074
20%	$-	$-	$111,134	$806,277	$1,605,088	$1,829,094	$2,084,361	$2,375,254	$2,706,744	$3,084,495
10%	$-	$-	$55,567	$403,900	$810,666	$937,944	$1,085,206	$1,255,588	$1,452,721	$1,680,804
State Dividend	**Year 11**	**Year 12**	**Year 13**	**Year 14**	**Year 15**	**Year 16**	**Year 17**	**Year 18**	**Year 19**	**Year 20**
90%	$7,452,482	$7,582,491	$7,714,767	$7,849,350	$7,986,282	$8,125,602	$8,267,353	$8,411,576	$8,558,316	$8,707,615
80%	$7,413,795	$7,672,462	$7,940,153	$8,217,184	$8,503,881	$8,800,580	$9,107,632	$9,425,396	$9,754,247	$10,094,572
70%	$7,247,151	$7,626,430	$8,025,558	$8,445,574	$8,887,572	$9,352,701	$9,842,173	$10,357,262	$10,899,308	$11,469,721
60%	$6,927,725	$7,411,140	$7,928,288	$8,481,522	$9,073,361	$9,706,498	$10,383,815	$11,108,396	$11,883,537	$12,712,768
50%	$6,427,685	$6,988,338	$7,597,894	$8,260,618	$8,981,148	$9,764,526	$10,616,235	$11,542,233	$12,549,001	$13,643,584
40%	$5,715,937	$6,314,222	$6,975,129	$7,705,214	$8,511,716	$9,402,635	$10,386,806	$11,473,989	$12,674,968	$14,001,653
30%	$4,757,849	$5,338,852	$5,990,804	$6,722,369	$7,543,269	$8,464,412	$9,498,041	$10,657,890	$11,959,375	$13,419,789
20%	$3,514,966	$4,005,513	$4,564,521	$5,201,544	$5,927,469	$6,754,704	$7,697,388	$8,771,632	$9,995,797	$11,390,806
10%	$1,944,698	$2,250,025	$2,603,289	$3,012,017	$3,484,917	$4,032,065	$4,665,117	$5,397,561	$6,245,003	$7,225,496

Appendix 4 (Continued) – Yearly State Dividends based on Dividend Rate - Data Table

Years 21-40

Yearly State Dividends - Bond Issue with Sinking Fund Scenario ($100M in Start-up Capital, 10% Leverage Ratio, Rising Loan to Asset Ratio up to 75%, & 20-yr Bond w/5% Coupon Rate + 3.2% Sinking Fund IR)										
State Dividend	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
90%	$16,539,582	$16,828,114	$17,121,680	$17,420,366	$17,724,264	$18,033,463	$18,348,055	$18,668,136	$18,993,801	$19,325,147
80%	$17,273,493	$17,876,163	$18,499,860	$19,145,318	$19,813,297	$20,504,580	$21,219,983	$21,960,346	$22,726,540	$23,519,466
70%	$18,043,369	$18,987,666	$19,981,383	$21,027,105	$22,127,555	$23,285,597	$24,504,245	$25,786,671	$27,136,212	$28,556,381
60%	$18,719,904	$20,026,175	$21,423,597	$22,918,531	$24,517,781	$26,228,626	$28,058,854	$30,016,795	$32,111,360	$34,352,084
50%	$19,100,344	$20,766,366	$22,577,707	$24,547,041	$26,688,150	$29,016,017	$31,546,931	$34,298,603	$37,290,290	$40,542,925
40%	$18,880,562	$20,856,785	$23,039,858	$25,451,432	$28,115,425	$31,058,258	$34,309,115	$37,900,239	$41,867,245	$46,249,476
30%	$17,618,563	$19,770,047	$22,184,258	$24,893,281	$27,933,114	$31,344,156	$35,171,736	$39,466,719	$44,286,182	$49,694,173
20%	$14,687,183	$16,736,919	$19,072,717	$21,734,497	$24,767,754	$28,224,331	$32,163,306	$36,652,003	$41,767,141	$47,596,145
10%	$9,213,272	$10,659,798	$12,333,434	$14,269,839	$16,510,268	$19,102,454	$22,101,626	$25,571,681	$29,586,550	$34,231,772
State Dividend	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40
90%	$19,662,273	$20,005,280	$20,354,271	$20,709,350	$21,070,624	$21,438,200	$21,812,188	$22,192,700	$22,579,851	$22,973,755
80%	$24,340,058	$25,189,280	$26,068,131	$26,977,646	$27,918,893	$28,892,980	$29,901,053	$30,944,297	$32,023,941	$33,141,252
70%	$30,050,875	$31,623,582	$33,278,598	$35,020,228	$36,853,005	$38,781,702	$40,811,336	$42,947,190	$45,194,824	$47,560,088
60%	$36,749,165	$39,313,514	$42,056,802	$44,991,517	$48,131,015	$51,489,587	$55,082,519	$58,926,166	$63,038,021	$67,436,800
50%	$44,079,271	$47,924,074	$52,104,238	$56,649,016	$61,590,211	$66,962,401	$72,803,178	$79,153,415	$86,057,551	$93,563,897
40%	$51,090,394	$56,438,009	$62,345,357	$68,871,025	$76,079,733	$84,042,974	$92,839,725	$102,557,229	$113,291,861	$125,150,083
30%	$55,762,558	$62,571,982	$70,212,935	$78,786,961	$88,408,001	$99,203,911	$111,318,159	$124,911,734	$140,165,283	$157,281,514
20%	$54,238,642	$61,808,164	$70,434,085	$80,263,835	$91,465,421	$104,230,296	$118,776,631	$135,353,046	$154,242,858	$175,768,925
10%	$39,606,315	$45,824,685	$53,019,368	$61,343,648	$70,974,877	$82,118,254	$95,011,190	$109,928,376	$127,187,627	$147,156,658

Hawaii Bankers Association

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Presentation to the Committees on Economic Revitalization & Business
Tuesday, March 29, 2011, at 8:45 a.m.
Testimony on HR 139 & HCR 159

In Opposition

TO: The Honorable Chair Angus McKelvey
The Honorable Vice Chair Isaac Choy
Members of the Committees

My name is Gary Y. Fujitani, Executive Director of the Hawaii Bankers Association (HBA), testifying in opposition to HR 139 & HCR 159, which establishes a task force to review, evaluate, and create an implementation for the creation of the Bank of the State of Hawaii.

We oppose a policy of putting public deposits meant to pay for current operating expenses/capital items into long term loans that run the risk of not being repaid. Further, an appropriation would be required for an undetermined amount of capital to start up and operate a bank for a period of time without any offsetting revenues. There would be no guarantee that the bank would make money in a reasonable period of time, if ever.

To our knowledge the Bank of North Dakota (BND), started in 1919, is touted as the model to follow. One has to question why in 92 years, no other state has set up a state-owned bank?

The State of North Dakota is very unique in that it has a population of less than 670,000 residents and yet almost 100 banks operate in the state (Hawaii has 11 FDIC insured banks). BND acts as a bankers' bank or a wholesale bank. So BND provides services to banks, whether it's check clearing, liquidity, bond accounting safekeeping or loan participations. Hawaii banks either do it themselves or already obtain these services elsewhere.

Being a bankers' bank, does not serve the needs of consumers and since any state funds placed with the bank are self insured, the State loses the benefit of collateralization of state deposits. Additionally, deposits at BND are insured by the State of North Dakota and not by the FDIC. So the State is liable in the unforeseen event of the bank's failure.

A quote from the 2009 Bank of North Dakota (BND) Annual Report follows:

"BND's 90-year evolution as the only state-owned bank in the nation had humble beginnings with a $2 million bond issuance in 1919, the rough equivalent of $25 million today."

"The State of North Dakota began using bank profits in 1945 when money was first transferred into the General Fund."

So it took 25 years before the State of North Dakota reaped any profits from the bank and a bond issuance was necessary to provide the capital to start the bank. Federal capital guidelines of 8% to 9% of total assets to start a new (de novo) bank would mean that $1 billion in public deposits would require $80 to $90 million in capital that must be appropriated. So while the Bank of North Dakota may be a successful model to following, it took many years to develop before it produced a return.

Additionally, in 2010 BND had a return on average assets of 1.49%. It is our understanding that the Hawaii's return on its investment of state funds was equal to or greater than BND's yield. So the State was able to earn a higher return without tremendous risks to Hawaii's taxpayers and without saddling the State with significant, unwarranted costs to replicate a highly competitive, regulated and federally-insured banking system that exists throughout our islands.

It has been eluded that BND is one of the reasons for North Dakota's budget surplus. However, a quote from an interview of Eric Hardmeyer, Chief Executive Officer of BND, follows:

"Hardmeyer says he's received "tons" of inquiries about the banks' working... North Dakota has the nation's lowest unemployment rate..., soaring oil production and robust state surplus- Hardmeyer says the bank isn't responsible for the prosperity."

A USA Today article attributes the North Dakota surplus to the following:

"North Dakota is enjoying an oil boom in the western part of the state, drawing workers from across the country. Williston, in oil country, grew 17.6% to 14,716. The oil windfall has created a $1 billion state budget surplus.

Agriculture — 90% of the state's area is used for farms and ranches — is productive and profitable, making the state a top exporter of wheat and other crops. Federal agriculture subsidies add nearly $1 billion a year."

A state owned bank could face public pressure to make loans to consumers or businesses that do not meet traditional bank credit qualifications. Thus the state would make riskier loans, which increases the risk of these loans not being repaid as agreed. For example this current legislative session, lawmakers are looking for ways to help

homeowners facing foreclosure. Would lawmakers look to the state owned bank to make loans to these troubled borrowers?

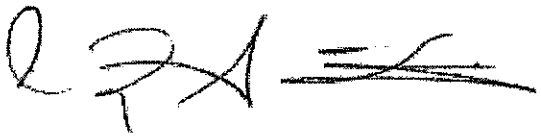
Obviously, a State-Owned Bank would have an unfair advantage over Hawaii financial institutions that have been serving Hawaii since 1858. Hawaii banks are an integral part of the engine that drives Hawaii's economy and the setting up of this unfair competition could have unintended consequences.

Over our long history Hawaii's banks have meet the needs of our community by providing loans, deposit accounts and innovative services to the public and businesses. Banks are very supportive of non-profit human services organizations and other charities by providing monetary assistance and volunteers to help these charities fulfill their missions.

To place public funds meant to pay for current state operations is a risky policy decision to make in these troubling economy times.

Thank you for allowing us to testify on this bill and ask that this bill be held.

Sincerely,



Gary Y. Fujitani
Executive Director

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HACBED

Community Voice, Collective Action

Tuesday, March 29, 2011 at 8:45 a.m.
House Committee on Economic Revitalization & Business
Testimony for HCR 159 & HR 139
Relating to Task Force to Establish a State Bank Of Hawaii

Dear Chair McKelvey and Committee Members:

The Hawai`i Alliance for Community Based Economic Development (HACBED) **supports HCR 159 and HR 139** to create a task force to evaluate the creation of a state Bank of Hawaii based on the model of the Bank of North Dakota.

The creation of a state bank has the potential to build a unique asset base for the state and the evaluation of this model is an appropriate step. HACBED stands to support the taskforce in any capacity should this effort go forward.

Thank you for the opportunity to submit testimony.

Sincerely,

Brent Dillabaugh
Asset Policy Coordinator

Hawaii Credit Union League
Your Partner For Success

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Testimony to the House Committee on Economic Revitalization and Business
Tuesday, March 29, 2011 at 8:45 a.m.

Testimony in opposition to HCR 159 / HR 139 – Creating the Task Force on Establishing the Bank of the State of Hawaii

To: The Honorable Angus McKelvey, Chair
The Honorable Isaac Choy, Vice-Chair
Members of the Committee on Economic Revitalization and Business

My name is Stefanie Sakamoto, and I am testifying on behalf of the Hawaii Credit Union League, the local trade association for 85 Hawaii credit unions, representing approximately 810,000 credit union members across the state.

We are in opposition to HCR 159 / HR 139. Our main concern is simply that public funds being deposited into a state bank would be insured by the state itself. Without the benefit of being insured by a separate entity like the National Credit Union Administration (which insures and oversees all credit unions in the State of Hawaii), the state would be in an extremely precarious situation in the event of any financial difficulty within the bank. While we not necessarily oppose the convening of a task force, we do oppose the creation of a state bank. However, if a task force is convened, we will request that more representatives from the financial institutions industry be invited to participate.

Thank you for the opportunity to testify.

From: mailinglist@capitol.hawaii.gov
Sent: Saturday, March 26, 2011 10:42 PM
To: ERBtestimony
Cc: web@cartoonistforchrist.org
Subject: Testimony for HCR159 on 3/29/2011 8:45:00 AM

Testimony for ERB 3/29/2011 8:45:00 AM HCR159

Conference room: 312
Testifier position: oppose
Testifier will be present: No
Submitted by: Lee McIntosh
Organization: Individual
Address:
Phone:
E-mail: web@cartoonistforchrist.org
Submitted on: 3/26/2011

Comments:
Mr. Chair and Members of the Committee on Economic Revitalization and Business:
Aloha, my name is Lee McIntosh. I live in Kau on the Big Island. I am not in favor of HCR 159, which creates a task force to investigate how to establish a state bank. Hawaii does not need a state bank, so there is not a need to dedicate time and resources to research that could instead be used towards solving the deficit by implementing fiscally accountable solutions. Thank you for the opportunity to testify on HCR 159.

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 28, 2011 2:22 PM
To: ERBtestimony
Cc: KimHarman@FACEHawaii.org
Subject: Testimony for HCR159 on 3/29/2011 8:45:00 AM

Testimony for ERB 3/29/2011 8:45:00 AM HCR159

Conference room: 312
Testifier position: support
Testifier will be present: No
Submitted by: Kim Harman
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Submitted on: 3/28/2011

Comments:
As Policy Director for Faith Action for Community Equity (FACE), I fully support establishing a Task Force to explore the benefits and role a state bank could play in Hawaii.

All of our islands have suffered from the loss of capital and equity to offshore banks, companies and other institutions. We need to full explore any solutions that other states have found that keep capital in the state for economic revitalization and job creation. North Dakota's state bank has been very successful both keeping capital in their state and directing funds to job creation. Several other states have introduced bills to establish state banks this year, including Washington, Oregon and Maine.

FACE will be releasing a report on the potential benefits of state bank in Hawaii later this week. I am sorry it is not ready for distribution for your hearing Tuesday, but I will make sure we deliver a copy of the report to each of your offices as soon as it is available.

Thank you for the opportunity to provide this testimony.