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Reducing the cost of California debt by establishing a state-owned bank

Abstract

This paper is based on the recent political movement in quite a few states of the United States of America for establishing state-owned banks. The authors first review and summarize these ideas and initiatives across the US states, and review the relevant academic literature on government-owned banks. Then, the paper focuses on applying this concept of a state-owned bank to the State of California, and estimate how much California can save on its cost of debt by establishing a state-owned bank. Using two different models, the authors calculate how much a difference a state-owned bank can make on the California debt outstanding over a number of years into the future. Finally, the paper discusses other advantages a state-owned bank could possibly bring to California.

Keywords: California debt, state bank, state-owned bank.

JEL Classification: G21.

Introduction

Recently, a Democratic candidate for Florida governor, Farid Khavari, who is also an economist, proposes that Florida create a state-owned bank, as a way to help alleviating the state's financial problems (Khavari, 2010).

The idea that a state creates its own bank goes back to at least about a century ago. In 1919, Bank of North Dakota was established. Today, it is the only state-owned bank in the USA. Not coincidentally, North Dakota is among the very few states in the nation that has a more or less balanced budget for 2010.

Besides Farid Khavari, recent proponents of the idea of state-owned banks include Ellen Hodgson Brown, a prominent author on economic and political issues (Brown, 2009). In the election of 2010, quite a few candidates across the United States put forward the idea of a state-owned bank as a way to help solve their states' economic problems. It is becoming a political movement in that sense.

Wisconsin has a state-owned bank initiative, put forward by a candidate for the Wisconsin State Assembly (Redick, 2010).

In Michigan, former Lansing mayor Virg Bernero was the Democratic candidate for governor of Michigan. He states: "Even after the Wall Street bailout that was supposed to fix the nation's credit crisis, Main Street businesses in Michigan are still frozen out of the credit markets that are essential to their growth – and thus their ability to create new jobs". He says his "innovative state bank proposal will open up credit opportunities for businesses of all sizes by partnering with Michigan-based community banks and credit unions to make loans for new equipment and facility expansions that create new jobs" (Bernero, 2010).

In Illinois, too, the Green Party candidate for governor, Rich Whitney, has a plan for a state bank. He writes in a very comprehensive working paper (Whitney, 2010): "Create a state bank, in which to deposit our tax revenues, supplemented by funds from private depositors and the state pension funds. This will allow the State of Illinois to invest in productive ventures that benefit the people of Illinois, and keep the interest collected for the benefit of the people, rather than pay interest to enrich the same private financial institutions that have already preyed upon workers, homeowners and taxpayers."

Another Green Party candidate for governor of California, Laura Wells, also plans on establishing a state bank: "We can create a State Bank and invest in California not Wall Street" (Wells, 2010).

Yet another Green Party candidate for governor of New York, Howie Hawkins, supports establishing a state bank: "A State Bank for Democratic Direction of Investment toward Worker and Consumer Cooperatives, Democratic Public Enterprises, Affordable Mortgages, and a Sustainable Green Economy" (Hawkins, 2010).

In Vermont, independent for governor Emily Peyton writes: "I want a Bank of Vermont to make the loans for the things we wish to see here in Vermont. The interest returns to the State Treasury, in the same manner that the only state to have job and income growth has done since 1919, North Dakota" (Peyton, 2010).

In the academic literature, banks owned by the US state are not heavily studied. There is a book on the Bank of North Dakota, about its experience until 1979 (Junker, 1989). There is another book about the Bank of the State of South Carolina, which existed between 1812 and 1870 (Lesesne, 1970).

However, there is an extensive academic literature on public banks – banks owned by a government, usually a national government. The advantages and

disadvantages of these public banks should shed light on the benefits and costs of a bank owned by the US state.

The literature on public banks gives a mixed assessment of these banks. La Porta, Lopez-de-Silanes and Shleifer (2002) discover that “higher government ownership of banks in 1970 is associated with slower subsequent financial development and lower growth of per capita income and productivity.” However, a subsequent study by Koerner and Schnabel (2011) finds that “public ownership is harmful only if a country has low financial development and low institutional quality.”

Haw, Ho, Hu and Wu (2010) find that “banks with concentrated control exhibit poorer performance, lower cost efficiency, greater return volatility, and higher insolvency risk, relative to widely held ones.” Along the same line, Morck, Yavuz and Yeung (2011) observe less efficient capital allocation in countries which banking systems are more thoroughly controlled by tycoons or families. Hence what affects the performance of a bank may not be whether it is owned by a government or privately-owned, but whether the bank has concentrated ownership or not and how the bank is managed.

Boubakri, Cosset, Fischer and Guedhami (2005) suggest that bank “privatization yields significant improvements in economic efficiency and credit risk exposure.” Clarke, Cull and Shirley (2005) further conclude “that although bank privatization usually improves bank efficiency, gains are greater when the government fully relinquishes control, when banks are privatized to strategic investors, when foreign banks are allowed to participate in the privatization process and when the government does not restrict competition.” In addition, Berger, Clarke, Cull, Klapper and Udell (2005) think that much of the performance improvement after bank privatization “is likely due to placing nonperforming loans into residual entities, leaving ‘good’ privatized banks.”

Micco and Panizza (2006) find that the lending of government-owned banks “is less responsive to macro-economic shocks than the lending of private banks”. On the other hand, Dinc (2005) shows that government-owned banks increase their lending during election years in comparison with relative to private banks.

Studies focusing on a particular country or a few countries also give a mixed picture, although the mixed picture is more in favor of privately-owned banks than government-owned banks. In a study of six Eastern European countries, Bonin, Hasan and Wachtel (2005) conclude “that foreign-owned banks are the most efficient and government-owned banks are the least efficient.” Studying banks in Russia,

Karas, Schoors and Weill (2010) “find that foreign banks are more efficient than domestic private banks and, surprisingly, that domestic private banks are not more efficient than domestic public banks.” Hau and Thum (2009) have “evidence for a systematic underperformance of Germany’s state-owned banks in the current financial crisis”. For banks in Korea, An, Bae and Ratti (2007) find that “banks controlled by government are less efficient than privately-controlled banks”. For banks in Turkey, Baum, Caglayan and Talavera (2010) “show that government-owned banks underperform both domestic and foreign-owned private-sector counterparts”.

1. Estimation of the direct benefit of a California state bank

The current governor of North Dakota, John Hoeven, already in his third term as governor, used to be the president and CEO of the Bank of North Dakota. We don’t think this is just a coincidence. It is testimony of the success and importance of the state-owned bank there.

A State Bank of California can learn much from studying the experience and success of the Bank of North Dakota, and to see which parts of it can be ported to California, and which other parts need modification. For example, the Bank of North Dakota is not a member of the FDIC (Federal Deposit Insurance Corporation). Instead, all deposits there are guaranteed by the state. Given the current financial shape of the FDIC and the fees it prepares to levy, this might make sense. On the other hand, a bank with deposits not guaranteed by the FDIC, will that feature hinder its ability to attract deposits?

A state-owned bank can access funds via deposits and via the Federal Reserve, both of which are much cheaper than the yields on California bonds in general. As the state-owned bank can lend to California at just above the bank’s cost of funds, it can possibly lower the cost of borrowing for California by 2% to 3%. On a \$70 billion principal, that will be savings of around \$2 billion a year. The potential savings to California on the cost of debt could be in **billions** each year.

How much is the total debt of California? To answer that question, we first visited the website of the California Debt and Investment Advisory Commission (<http://www.treasurer.ca.gov/cdiac/>), or CDIAC in short, a part of the California State Government. CDIAC has the “California Public Debt Issuance for the Period of January 1, 2010 to July 31, 2010” listed on its front page. But not the total debt outstanding for California. Deeper into the website of CDIAC, there is a table named “California Public Debt Issuance Yearly Totals for the Period January 1, 1985 Through July 31, 2010”, however, without

data on matured debt, it is still difficult to estimate the total debt outstanding.

At the website (<http://www.sdn.com/sandiego/2009-12-22/politics-city-county-government/california-budget-politics-city-county-government/california-budget-crisis-diaries-state%E2%80%99s-public-debt-is-68-billion>) it is reported that “the worst case would be the mother of all financial crises. According to the California State Treasurer’s office, California has over \$68 billion in public debt, but the *Sacramento Bee*’s Dan Walters has tried to count total California public debt, including that of local municipalities, and its total reaches \$500 billion.”

What is the average interest rate California pays for the debt it issues? The most recently available version of the State of California Debt Affordability Report is dated October 2009, from CDIAC. Averaging the “True Interest Cost” in Figure 9 of that report gives us a number of 4.23%. This is a very rough approximation. But we suspect that a systematic and accurate accounting by going through all the debt issues will give a number that is not too far off from what we have here. Hence we will use some big round numbers in our calculation below: the total debt outstanding for California could be either \$70 billion or \$500 billion, depending on how you define California debt, and the interest rate cost is about 4.25%.

What about interest rate banks pay for deposits? A check at bankrate.com suggests that 1.25% to 1.5% would be a good estimate for the high-end of what banks are paying. Given that banks can borrow from the Federal Reserve at 0.25% these days and from other banks at 0.30% (3-month LIBOR), we can safely say that 1.25% is a conservative estimate of the state bank’s cost of funds, including the cost of running the state bank. It is a conservative estimate because it likely overestimates the cost of funds for the banks these days.

A state bank of California can raise funds at 1.25% and lend the funds out to California at that same rate, freeing California from paying the current 4.25% on borrowing. That’s a 3% savings on interest rates. If applied on \$70 billion of principal, it will be a savings of \$2.1 billion a year for the State of California. If applied to \$500 billion of principal, it will be a savings of \$15 billion per year for the state and local governments in California!

In the year of 2009, we see near record bonuses and good profits for the major banks in the US. A state-owned bank likely can also provide a good revenue stream for the state.

However, in our opinion, its more important function will be to lower the cost of borrowing for Cali-

fornia, and to improve the availability of funds when California needs it.

California can require itself to use this state-owned bank for all its banking need. California can also create incentives for state workers to bank with this state-owned bank. If both are done, it will bring huge amounts of deposits to the state bank, and it might help the multiplier effect to kick in faster, in that lending creates deposits, which in turn creates additional lending, which in turn creates additional deposits, so on and so forth. When this happens, it will greatly improve the availability of funds to lend to the State of California. In addition, if we take the view that fractional reserve banking enables banks to lend much more than their reserves, the interest rate charged on loans to California could be even lower and the availability of funds could be even higher.

In some sense, when California borrows from the bond market, the market punishes California for its current fiscal shape, and its credit and default risk, and hence the high interest rate we have to pay there. Also, we are paying the loan rate there, not the deposit rate. However, by creating a state-owned bank, attracting deposits and tap the line with the Federal Reserve, then lend to California at just above cost of funds, we are not being punished as severely for credit and default risk, also we are paying close to the deposit rates in the market, rather than the loan rates. That’s where the huge savings come from.

For the rest of this section, we will estimate the savings in interest payment a state bank can bring to California over time, using two different models. Because the exact size of the budget and budget deficit, size of the debt and interest rates all change all the time, we will use big round numbers rather than the exact numbers. Savings on interest rate is assumed to be at 3%, with interest rate California pays in the bond market assumed to be 5%, but that interest rate comes down to 2% with a state bank in our models. Initial size of the debt used in the models is \$70 billion, and size of the budget is \$120 billion. At the beginning of 2011, governor Brown faces a budget shortfall of about \$26 billion. However, as budget cuts get approved, the shortfall shrinks significantly.

In the first model, we assume a more or less balanced budget every year, in the sense that the only expense not covered by revenue is the interest payment on debt, hence the outstanding debt don’t shrink in size, but increase in size at the pace of interest being added to the principal.

Table 1. California debt outstanding over the years under the first model (in billions of dollars)

| Year | 0 | 5 | 10 | 15 | 20 | 25 | 30 |
|--|------|------|-------|-------|-------|-------|-------|
| Debt outstanding (\$bn) without a state bank | 70.0 | 89.3 | 114.0 | 145.5 | 185.7 | 237.0 | 302.5 |
| Debt outstanding (\$bn) with a state bank | 70.0 | 77.3 | 85.3 | 94.2 | 104.0 | 114.8 | 126.8 |

Table 1 presents the California debt outstanding over the years under the first model. As can be seen from the table, by year 25, the California debt outstanding is more than twice when without a state bank than with a state bank. By year 30, the debt outstanding without a state bank is over \$300 billion dollars, while the debt outstanding with a state bank is over \$100 billion. We are curious on how long it takes for the debt without a state bank to be 10 times the debt with a state bank. Turns out, it is going to take a mere 80 years for that to happen. Give it another 79 years, at year 159, California's debt without a state bank will be 100 times its debt with a state bank! In a single year, the savings on interest payments from having California's own bank is already in the billions of dollars. However, that single-year savings become rather minor when compared to the savings for California over the years from having a state-owned bank.

As it is well known, when borrowing from the bond market, if the borrower has too much debt and the likelihood of default therefore increases, the market will demand a higher interest rate from the borrower. We incorporate this idea into the first model, in order to arrive at the second model. All the numbers and assumptions are the same as the first model, except now we assume that if borrowing from the bond market, when California carries more debt, the interest the market demand on its debt increases. For each billion dollars of debt in excess of the initial \$70 billion, we assume that the market adds one basis point to the interest rate on all of California's debt. One basis point per extra billion dollar of debt is rather minimal. Nevertheless, as we shall soon see, it eventually adds up. There is no such penalty on interest rate for funds obtained via deposits at a state-owned bank. The bank does not have to raise the interest rate it pays to depositors according to the size of the debt the State of California carries.

Table 2. California debt outstanding over the years under the second model (in billions of dollars)

| Year | 0 | 5 | 10 | 15 | 20 | 25 | 30 |
|--|------|------|------|-------|-------|-------|-------|
| Debt outstanding (\$bn) without a state bank | 70.0 | 89.7 | 116 | 152.4 | 204 | 281.2 | 404.7 |
| Debt outstanding (\$bn) with a state bank | 70.0 | 77.3 | 85.3 | 94.2 | 104.0 | 114.8 | 126.8 |

Table 2 shows the California debt outstanding over the years under the second model. When comparing Table 1 and Table 2, one can see that the effect of the extra interest rate charge is barely noticeable initially, but it starts to take off over time, and becomes quite significant at year 30. This take-off effect is even more dramatic when we try to find out how long it takes for the debt without a state bank to be 10 times the debt with a state bank, and how long it takes to be 100 times. It takes only 43 years for the 10-times mark to be reached. And then, just 7 years later, at year 50, the debt without a state bank surpasses 100 times the debt with a state bank. A state-owned bank is, especially in the long run, extremely helpful in reducing California's debt burden.

2. Other benefits of a California state bank

A bank owned by the State of California can do more than just lowering the cost of debt for California. It can promote economic development and help better people's lives.

When banks lend freely, the economy expands. When banks restrict lending, the economy suffers. Even in the current "economic recovery", the effect of bank lending on the economy, and the difference between privately-owned banks and state-owned banks, can be seen by comparing the US and China.

The current recovery in China is stronger than that of the US. One reason is that in the US, despite that hundreds and hundreds of billions were pumped into the banks, the banks are cautious about lending these days. They are privately-owned, they worry about their bottom lines, they worry about their own risks, and their own survival, above all. However, in China, the banks are owned partly by the nation state. They were told by the government to lend, and lending freely they are. In fact, the recovery is so strong in China, since January of 2010, the central bank of China has repeatedly raised the reserve requirement for the banks there, which is equivalent to tightening the monetary policy.

A bank owned by the state of California, via its lending activities and lending policies, can promote economic growth in California. If, via its online operations, it attracts deposits from all over the nation, but lend and invest mainly in California, in some sense, it will provide an "extra" boost to the California economy.

A non-trivial portion of the population of California does not have checking accounts, or any bank accounts. It is said that if we can just get everybody to have a bank account, that will help them start savings, manage their finances better, and be able to do other things they could not do before (in this society, there are things one cannot do, or cannot conveniently do, without a bank account). Perhaps a

bank owned by the state of California can help on this, if it has the right policies to outreach and to provide incentives.

Conclusion. Future work

One of the future works that can be done is a case study of the only state-owned bank in the US. One or both of the authors may need to travel to North Dakota and interview people who can provide exclusive information about the state bank there. For example, one of the questions that need to be answered, and we believe, can be answered by studying the existing cases, is how a state-owned bank competes or relates to private banks, how it functions as a commercial bank, while at the same time serving the government and people of California.

In other future studies, we may also try to answer questions related to the operations of the state-owned bank, if they turn out to be important. For example, should the state-owned bank have many retail branches, or should it be a mostly online bank, like the highly successful ING Direct?

From the literature reviewed in the introduction section, government-owned banks, if not well managed and well monitored by the stakeholders, can be less efficient than the private banks, and can become a tool of politics, too. In studies related to the establishment of a state-owned bank for California, and in the actual establishment of such a bank, these concerns should always be kept in mind.

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