



What's it Like to Work in Banking and Finance?

Have you ever wondered what it's like to work at a bank? How are banking and financing transactions really done on the other end? What it looks like in the vault (if it looks like how it does in the movies, stacked from the top with money)? How did it feel to hold millions of dollars? To almost be robbed as a teller? I'll answer all these for you at the end. In this article, I'll be sharing what it's like to work in the banking and finance industry. I'll also share by using SQL and Tableau to do some data detective work and uncover insights from loan transactions from the World Bank.

Why This Project?

I was motivated to explore this project because of my knowledge of working for almost 5 years in the banking and finance industry. I wanted to share what I've learned analyzing World Bank data while applying SQL and on-the-job experience. I believe this would bring valuable knowledge to others, especially those curious about how financing works and working in this industry. So sit back, enjoy, grab some popcorn, and let me tell you all about the banking world or at least some very interesting things I found in this data.

What Readers Will Gain

By reading this article, you will learn about:

- Some interesting things about banking operations and finance.

- Insights from real-life loan transactions at the World Bank, that will make you wonder.
- Key findings about loan trends, including regions receiving the most funding and canceled debts.

Key Takeaways

- The World Bank has a lot of canceled debt (41 billion). Can you imagine giving out just 1 billion dollars and having to erase it like it never happened? Wow, but 41 billion is a bit excessive. How is the World Bank still functioning?
- Africa received the most funds of all regions. I wonder why this is. Perfect credit? Solid Banking Relationship? What's with the favoritism?
- The fastest loan approval and disbursement ever was given to Bolivia, a 2-year loan for COVID-19 relief.
- Some loans were approved in just one day, and disbursed before closed. That's not normal? Is that legal?

Dataset Details

The dataset used was from the World Bank Group [website](#). It has 10,610 rows and 30 columns, sharing different types of loan transactions. The dataset provided general names, project names, disbursed amount, cancelled, repayment status, and several other helpful columns to help me locate some interesting trends.

Analysis Process

I began my World Bank analysis by cleaning the dataset. I added extra columns such as "signed to approved" based on how long it took to get approval from the board from the original sign date. I ran SQL queries to extract insights such as customer information based on agreement signing dates and the amounts of canceled loans. I couldn't believe how much-canceled debts there were—41 billion dollars—I started asking questions like: Are we doing okay World Bank? Are we on the verge of closing up shop? I was surprised to learn that 29% of loans were canceled. It just makes you wonder are any of those charged off or what does canceled mean exactly? Sadly, the data does not share this information.

How My Banking Journey Began

I was working in a call center taking inbound calls and decided to try a new industry. I gave my resume to a friend who worked on the teller line. She took my resume next door to the hiring manager. I had an interview almost immediately and was hired a couple of weeks later. Probably the easiest hiring process I've ever experienced. The power of networking, right?

Visuals and Insights

The OGs

One of the things I loved the most as both a teller and loan officer was interacting with my regulars. Especially the ones that have been with the bank since the beginning. I mean they have been with the bank since day 1, their loan folders were so thick like an encyclopedia, and had the oldest account numbers which were very short. I hope by now they eliminated those folders and put them in the system electronically. I remember some being so thick they would need multiple manila folders. So this made me wonder about the customers at World Bank, who were their OG's?

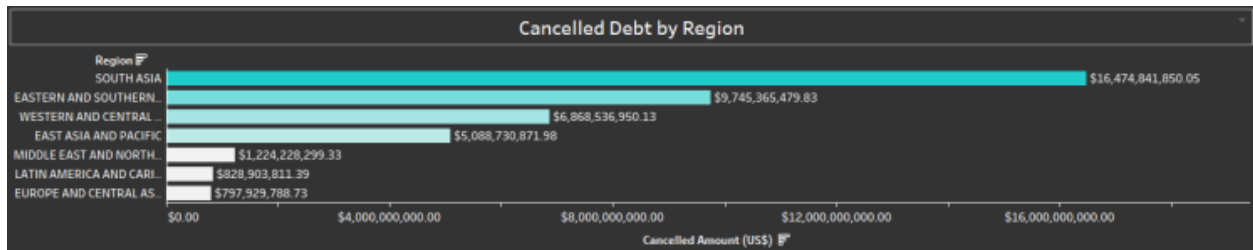
This visual shows the SQL query of the top 5 oldest loans of the World Bank based on the agreement signing date. #1 is the Ministerio De Hacienda Y Credito Publico, for funding on Western Highway in Honduras with a disbursed amount of over \$8.4 Million.

```
SELECT "Agreement Signing Date", "Borrower", "Project Name", "Country / Economy", "Disbursed Amount (US$)" FROM banking_data LIMIT 5
```

	Agreement Signing ...	Borrower	Project Name	Country / Economy	Disbursed Amount (...)
1	12-May-1961	MINISTERIO DE HACIENDA Y CREDITO PUBLICO	WESTERN HIGHWAY	Honduras	8427973.97
2	14-Jun-1961	Ministry of Finance & Economic Planning	ROSEIRES IRRIGATION	Sudan	14876498.94
3	21-Jun-1961	CONTROLLER OF AID ACCOUNTS & AUDIT	HIGHWAYS	India	71582713.47
4	28-Jun-1961	MINISTERIO DE OBRAS PUBLICAS	ROAD CONSTRUCTION	Chile	22876674.49
5	28-Aug-1961	MINISTERIO DE HACIENDA Y CREDITO PUBLICO	ROAD CONSTRUCTION	Colombia	23480995.92

Monthly Loan Meetings

As a loan officer, we had monthly meetings. Everyone from all the other branches nearby would join, some via conference call, and we would discuss our loans for the month. We would talk about how we are doing as a bank, issues/trends we were noticing, and any issues if people were not repaying their loans. This made me wonder how much was actually being paid and if there were any cancelled or charged off debts with World Bank. The Tableau bar chart, SQL Query, and table below displays South Asia having the highest canceled debt at 16.4 billion dollars. Is everything okay South Asia? What's happening over there?



```
SELECT region, SUM("Cancelled Amount (US$)") AS total_canceled_debt
FROM banking_data
GROUP BY region;
```

	Region	total_canceled_debt
1	SOUTH ASIA	16474841850.050014
2	WESTERN AND CENTR...	6868536950.129997
3	EASTERN AND SOUTH...	9745365479.830006
4	EAST ASIA AND PACIFIC	5088730871.980001

Are We Doing Okay World Bank? Are we Running out of Money?

After seeing all this canceled debt, I had to look closer to see if it's balancing out okay. So I ran the SQL query to find out how many customers they had, and their credit statuses. Thankfully there are 4,054 customers in repayment status and 2,460 fully repaid.

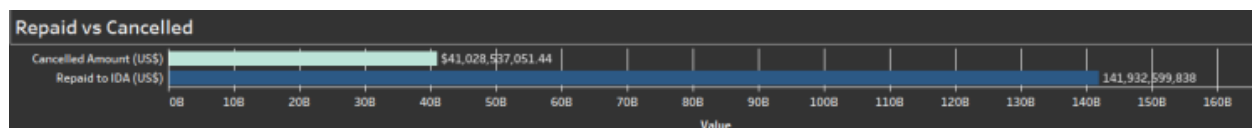
```
SELECT "Credit Status", COUNT(*) AS "Customers"
FROM banking_data
GROUP BY "Credit Status";
```

	Credit Status	Customers
1	Repaying	4054
2	Disbursing&Repaying	340
3	Fully Cancelled	125
4	Disbursing	1739
5	Fully Disbursed	1483
6	Effective	216
7	Terminated	41
8	Fully Repaid	2460
9	Signed	94
10	Approved	57

Then I started thinking that's good, there are only a few customers that canceled and terminated. What really matters is how much the bank has to continue to give out these massive loans. So I ran this query too...

```
SELECT
    SUM("Repaid to IDA (US$)") AS TotalRepaidToIDA
FROM
    banking_data;
```

	TotalRepaidToIDA
1	141932599837.5902



A++ to Denials

The worst part of the job is when you have to deny people because their credit did not meet the bank's rules, but I loved helping customers fix their credit. Helping customers get their dream car or money needed for xyz after 6 months by only doing a few things, was the best feeling. I loved helping my A++ Credit Customers too because they were already pre-approved and could literally buy whatever they wanted. They had 800+ credit scores, solid income, the whole enchilada. I used to tell them, that they were approved for WHATEVER car they wanted, boat, RV, you name it, they could get it. This made me wonder who may have had the best credit or relationship with World Bank. So I ran a query on the most disbursed loans at World Bank. Most disbursed must mean they have great credit or a great relationship with them, or they wouldn't keep disbursing loans to them. In this case, it was Eastern and Southern Africa receiving 127 billion dollars in disbursed loans.

```
SELECT region, SUM("Disbursed Amount (US$)") AS total_disbursed_amount
FROM banking_data
GROUP BY region;
```

	Region	total_disbursed_am...
1	SOUTH ASIA	120260233824.05997
2	WESTERN AND CENTR...	92465514361.3901
3	EASTERN AND SOUTH...	127057239392.84013
4	EAST ASIA AND PACIFIC	42195674583.35002
5	LATIN AMERICA AND ...	11504924901.429989

Then I thought about this some more, maybe more disbursed doesn't mean the best credit. So I decided to do one last SQL query to check how many canceled debts to repaid debts by region to see who would have a lower canceled %. It looks like Europe Central Asia and Latin America have a lower cancel to repaid % than all the others. So why are we giving more money to Africa when they have so much canceled debt? Hmmm, definitely worth looking into.

```

SELECT
  Region,
  SUM("Cancelled Amount (US$)" ) / NULLIF(SUM("Repaid to IDA (US$)"), 0) AS CancelledToRepaidRatio
FROM
  banking_data
GROUP BY
  Region;

```

	Region	CancelledToRepaid...
1	SOUTH ASIA	0.33950376453086806
2	WESTERN AND CENTRAL AFRICA	0.28102722799049595
3	EASTERN AND SOUTHERN AFRICA	0.3026148336951502
4	EAST ASIA AND PACIFIC	0.23969306017088848
5	LATIN AMERICA AND CARIBBEAN	0.13936783623454793
6	EUROPE AND CENTRAL ASIA	0.131887282299419
7	MIDDLE EAST AND NORTH AFRICA	0.34643479575227704

Main Takeaways

The insights from this project reveal some financing operations from my experience and World Bank transactions:

- The high percentage of canceled debts is definitely a red flag and needs to be analyzed more thoroughly to prevent more losses.
- Africa receiving the most funds doesn't mean they are a good risk after all, why are we not giving more money to those in Latin America and Europe. When they actually repay their loans.
- Quick loan approvals could be done fast based on case-by-case (like the Covid 19 efforts) but still don't agree with closing after disbursing. Maybe they need to find a faster way to close, so that way the data matches the disbursing date. I know I was able to approve, fund, and close on my loans on the same day. I'm sure there is a way.

These findings not only emphasize the complexities of banking, but also suggest areas where improvements could be made to enhance loan recovery rates.

Conclusion and Personal Reflections

Reflecting on this project, I remembered that the banking industry is both interesting and complex. One of the biggest challenges I faced was understanding what are the canceled debts exactly, I wish I knew more about which loans was actually a charge-off or canceled due to life insurance claims. Which did not hurt the bank financially so I could get accurate percentages. I really enjoyed using SQL to find the

information I needed for this project. I hope you learned something new and decide maybe the banking industry is a little interesting after all.

Answers to the questions in Intro:

Have you ever wondered what it's like to work at a bank?

It's very interesting, I learned a lot about wires, transactions, check cashing, loan processing, all the different types of loans, credit, and credit approval.

How transactions are really done on the other end?

Also very interesting, if your drawer is off as in the amount you have in there doesn't match what the bank says you have, you have to wait until everyone is done balancing their drawer. Then you have to look at every single receipt you did to find out where the balance is off. No one goes home until everyone balances. As far as the financing, paperwork, lots of paperwork. You must be on top of it, no room for any error or it goes to the board of directors.

What it really looks like in the vault, if it looks like how it does in the movies, stacked from the top with money?

It's definitely very dark, there is no light in there. It's like a closet with no light and money is not stacked up from the floor high. It's more like a shelf of money (at least in the one I worked at)

How it feels to be in a room with millions of dollars and fill ATM machines and money dispensers? It feels regular, but know they are lying in the movies when they put millions of dollars in a brief case or in a gym bag. Millions of dollars is actually very heavy. It's in a clear plastic bag that is delivered on a dolly by armed guards with guns and their armed vehicle. When we take the money from the armed guards, we need at least two people to help hold the bag full of millions.

To be almost robbed as a teller? Yes, this happened to me, there was tall man in a black hoodie that had his hands in his pocket. He told me to give him all the money with a serious face. I started laughing and after I laughed he said just kidding. I told him not to play around because that's like saying bomb in an airport. Who knows, maybe he was serious, but because I laughed it off it gave him a chance to think about if robbing me was a good idea. What do you think?

Call To Action

I would love to hear your thoughts! Connect with me on LinkedIn, or if you or someone you know is looking to hire a data analyst, let's talk! Feel free to leave a comment with your thoughts or questions.