



BNB Resiliency and Recovery Program

Sponsored by BNB Bank

Small Business Cash Flow

Presented by Gifty Ostrander, Business Advisor

Center of Entrepreneurial Finance Research Assistant: Yaci Chen





BNB Resiliency and Recovery Program
Sponsored by BNB Bank

Center For Entrepreneurial Finance Program Advisors

[Richard Chan, Ph.D.](#)

Director, **[Center of Entrepreneurial Finance](#)**

Associate Professor, College of Business, Stony Brook University

[Danling Jiang, Ph.D.](#)

Associate Director, **[Center of Entrepreneurial Finance](#)**

Associate Dean for Research and Faculty Development

Professor of Finance, College of Business, Stony Brook University

[Stony Brook SBDC Program Business Advisors](#)

Ann Garbarino, Senior Business Advisor

Robert B. Harrison, MBA/CPIM Business Advisor

Gifty Oduro-Ostrander, MBA, Business Advisor

Brenda Zhang, MBA/CPA, Business Advisor

Ronni Rosen, Senior Business Advisor

[College of Business Program Advisor](#)

[Margot Palermo](#)

Director, Business Honors Program



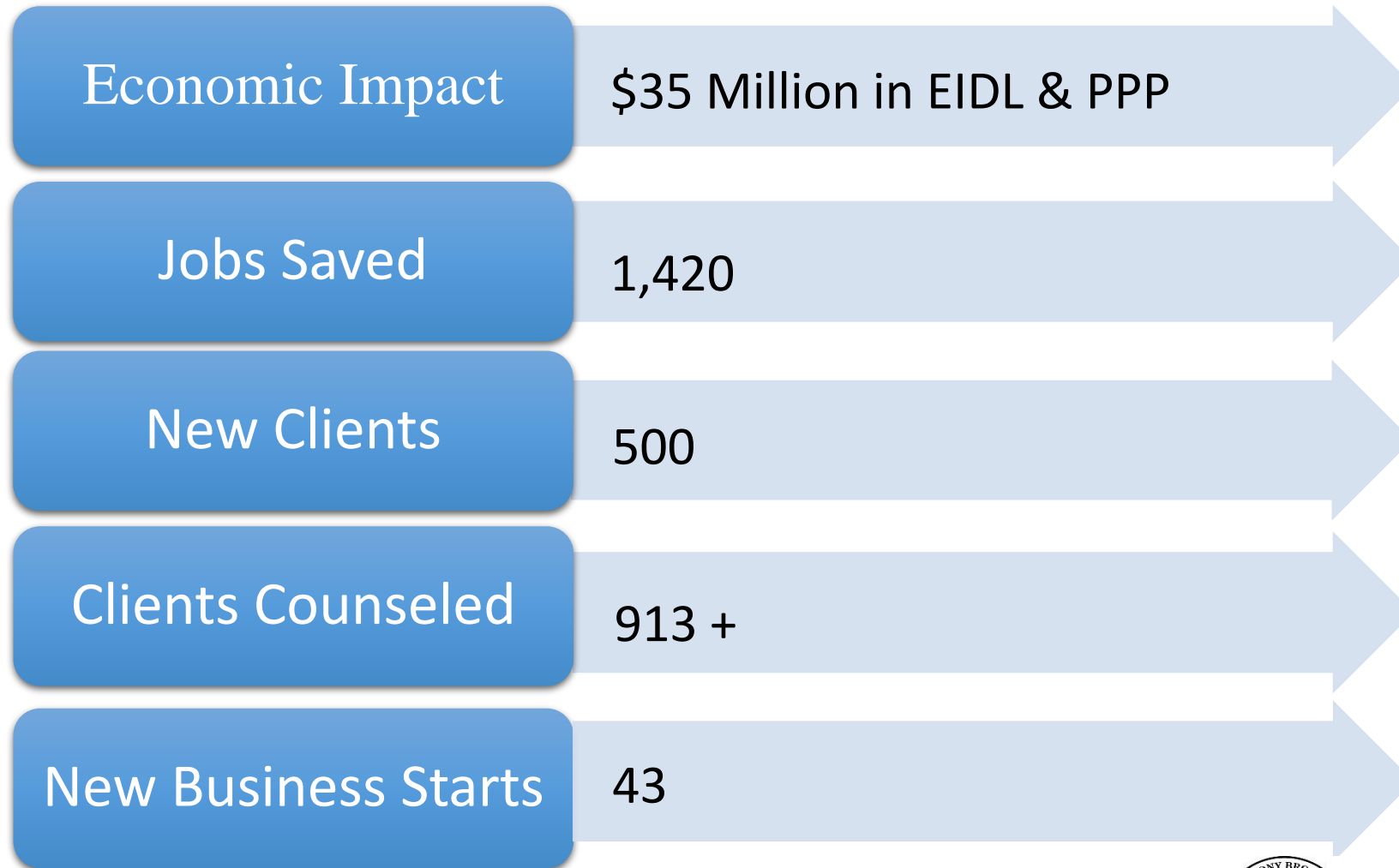


Stony Brook Small Business Development Center:
Helping You Start Up or Grow Your Established Business

The mission of the Small Business Development Center is to strengthen the small and medium size business community by providing customized business solutions through free and confidential one-on-one business advisement, education, research and advocacy for entrepreneurs and innovators.



STONY BROOK SBDC 6 Month Pandemic Overview



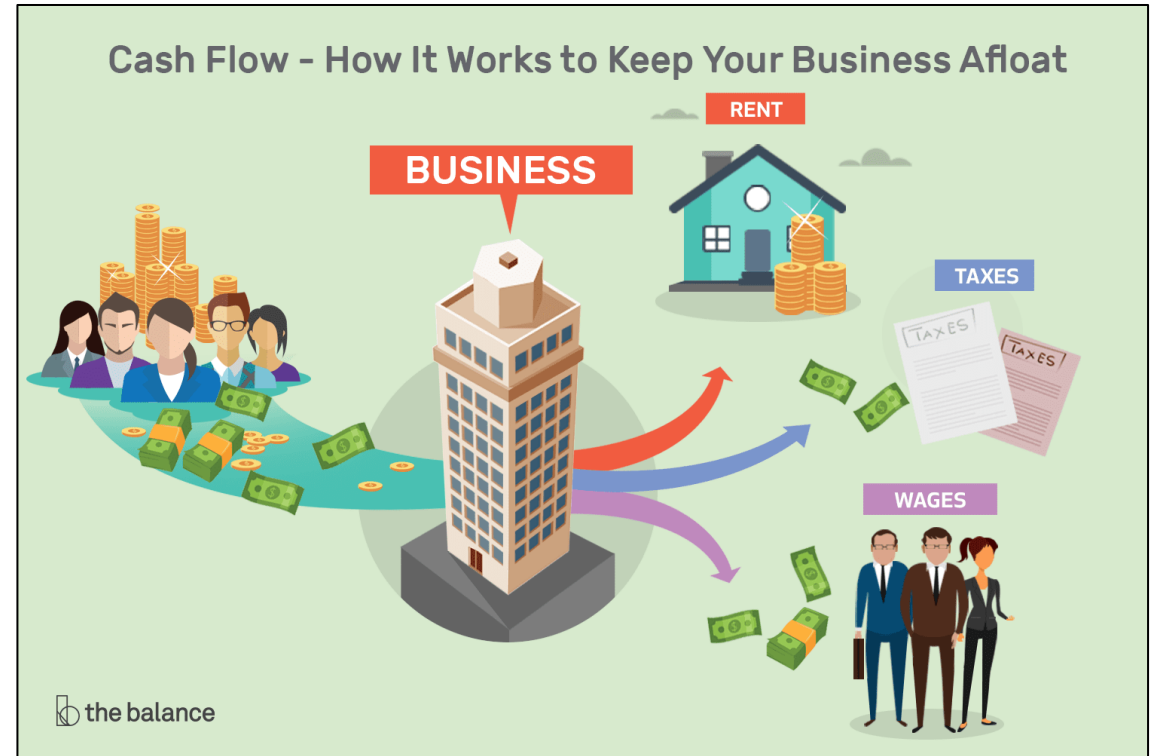


Small Business Cash Flow



What is Cash Flow?

- Movement of cash in and out of a business.
- **Positive** cash flow: more cash inflow than outflow
- **Negative** cash flow: more outflow of cash than inflow
- **Objective:** Retain as much cash as possible
- NOT the same as profit
- Operating Activities, Investing Activities, Financing Activities.



Building Your Cash Flow Statement:

Cash from Operations

- Operating Activities - day-to-day business operations; related to core products or services; analyze cash flow from net income.
 - **Cash In**
 - Cash received from sales of goods and services/receivables
 - **Cash Out**
 - Payments to suppliers
 - Salary and wage payments
 - Income tax payments
 - Interest payments
 - Other operating expenses – rent, utilities, etc.

Net Cash Flow from Operations = Cash In - Cash Out

Building Your Cash Flow Statement: Cash from Investing

- Investing Activities – sale or purchase of property and equipment (fixed assets) investments, security investments
 - **Cash In**
 - Cash received from sale of equipment, buildings, other divestments;
 - **Cash Out**
 - Purchase of equipment, buildings, assets, short term assets including marketable securities

Building Your Cash Flow Statement: Cash from Financing

- Financing Activities - loan or capital contributions from investors or banks
 - **Cash In**
 - Acquisition of loans
 - Cash from investors
 - Cash raised by selling stock
 - **Cash Out**
 - Reducing debt such as repayment of loans
 - Payment of dividends
 - Buying back stocks

Simple statement of cash flow

Net income	\$125,000	
Less income not yet paid by customers	(\$75,000)	
Add expenses not yet paid to vendors	\$25,000	
Cash flow from operations		\$75,000
Investment in equipment	(\$45,000)	
Cash flow from investing		(\$45,000)
Owner's draw	(\$35,000)	
Cash flow from financing		(\$35,000)
Add beginning cash		\$10,000
Ending cash		\$5,000



Net Income Vs. Cash Flow



Understanding Profit & Loss Statement

P&L summarizes revenues generated by your business and the costs incurred to generate those revenues

- **Revenue**
 - Sales revenue
 - Service revenue
 - Other revenue
- **Expenses**
 - Cost of goods sold
 - Salaries and wages
 - Utilities
 - Rent
- **Net Income:** difference between your revenue and expenses

Financials for Walmart

- Cash Flow Statement for Walmart
- Profit and Loss Statement for Walmart

Why is cash flow analysis so important

- Without cash and liquidity, the business will become insolvent
- Are you running out of cash? Can you make payroll, can you pay your suppliers and other operating expenses? It helps you to determine the pattern of cash flow - when it is positive and when it becomes negative, and if you have enough to pay the bills.
- Micro-monitor cash position; plan ways to cut costs and obtain short term financing if the business is running low on cash
- If the business is doing well and has surplus cash on hand, examine the possibility of investing in new equipment or save for future needs

The Ultimate Guide to Cash Flow Analysis, Retrieved from: <https://www.fundera.com/blog/the-ultimate-guide-to-cash-flow-analysis#:~:text=Cash%20flow%20analysis%20is%20a,have%20at%20any%20given%20time.>

Cash Flow Scenario Analysis

- Mitigate uncertainty with predictive scenario analysis
 - Not universal; progression of events will differ amongst industries.
 - There are tools and software including LivePlan to perform a scenario analysis to determine how much cash will be needed.

Statements

Projected Profit and Loss

	2020	2021	2022
Revenue	\$571,000	\$740,000	\$940,000
Direct Costs	\$246,000	\$361,000	\$491,000
Gross Margin	\$325,000	\$379,000	\$449,000
Gross Margin %	57%	51%	48%
Operating Expenses			
Salaries & Wages	\$30,000	\$30,000	\$30,000
Supplies	\$24,000	\$24,000	\$24,000
Total Operating Expenses	\$54,000	\$54,000	\$54,000
Operating Income	\$271,000	\$325,000	\$395,000
Interest Incurred			
Depreciation and Amortization			
Gain or Loss from Sale of Assets			
Income Taxes	\$67,750	\$81,250	\$98,750
Total Expenses	\$367,750	\$496,250	\$643,750
Net Profit	\$203,250	\$243,750	\$296,250
Net Profit / Sales	36%	33%	32%



NET INCOME

- **Profitability** of the business
- Money you have made after paying for your expenses

Example:

- Food Truck generates **\$571,000** in sales revenue and pays **\$367,750** in total expenses. The food truck's net income is **\$203,450**

- $\$571,000 - \$367,750 = \$203,250$

Projected Cash Flow Statement

	2020	2021	2022
Net Cash Flow from Operations			
Net Profit	\$203,250	\$243,750	\$296,250
Depreciation & Amortization			
Change in Accounts Receivable	\$0	\$0	\$0
Change in Inventory			
Change in Accounts Payable	\$0	\$0	\$0
Change in Income Tax Payable	\$15,125	\$5,187	\$4,375
Change in Sales Tax Payable	\$12,506	\$3,450	\$4,313
Change in Prepaid Revenue			
Net Cash Flow from Operations	\$230,881	\$252,387	\$304,938
Investing & Financing			
Assets Purchased or Sold			
Net Cash from Investing			
Investments Received			
Dividends & Distributions	(\$30,000)		
Change in Short-Term Debt			
Change in Long-Term Debt			
Net Cash from Financing	(\$30,000)		
Cash at Beginning of Period	\$0	\$200,881	\$453,268
Net Change in Cash	\$200,881	\$252,387	\$304,938
Cash at End of Period	\$200,881	\$453,268	\$758,206

CASH FLOW

- **Liquidity** of the business: business can pay for immediate obligations

Example:

- Food Truck made **\$203,250** in net income
 - Food Truck generates \$27,631 cash from other operations
 - **\$203,250 + \$27,631 = \$230,881**
- Food Truck pays **\$30,000** in dividends/distributions
 - **\$230,881 - \$30,000 = \$200,881**

Inventory Management and Cash Flow

- Inventories are essential to business operations.
- Inventory management refers to the process of procurement, storage, and utilization of supplies.
- Cash flow cycle relies heavily on inventory. Business spends available cash to order supplies and that inventory is turned back into cash when it is sold.
- Inventory must be purchased ahead of time unlike receivables which accumulate after product or service have been provided.

Inventory Management and Cash Flow

- If inventory moves quickly, the sooner business brings in more cash. The right inventory levels will help manage accounts receivable.
- Forecasting revenue volumes accurately before establishing target inventory levels is necessary. It is not an easy task.
- Poor inventory management practice or making errors in inventory levels can be costly.
- The key to cost effective inventory management is information technology. Investing in appropriate software is beneficial.

Inventory Management and Cash Flow

- Automation provides insights into the processes, and the necessary information to make informed decisions.
- Inventory Management Approach
 - Just-in-time (JIT)
 - Point-of-service distribution
- Key Performance Indicators

Monitoring Your Operating Cycle

Monitor your metrics to understand their variability and where you have room to stretch to retain cash

- **Days Inventory Outstanding (DIO):**
 - how quickly inventory is sold
 - minimize where you can
- **Days Sales Outstanding (DSO):**
 - how long it takes to collect cash from customers
 - minimize where you can
- **Days Payables Outstanding (DPO):**
 - how long it takes to pay suppliers
 - maximize where you can

Beginning Inventory	2000
Ending Inventory	5000
Cost of Goods Sold	50000
Beginning Account Receivable	5000
Ending Account Receivable	6000
Credit Sales	120000
Beginning Account Payable	2000
Ending Account Payable	4000
DIO is calculated using the formula given below DIO = (Average Inventory / Cost of Goods Sold) * No of Days	
DIO	25.55
DSO is calculated using the formula given below DSO = (Average Account Receivable / Total Credit Sales) * No of Days	
DSO	16.73
DPO is calculated using the formula given below DPO = (Average Account Payable / Cost of Goods Sold) * No of Days	
DPO	21.9
Cash Conversion Cycle is calculated using the formula given below Cash Conversion Cycle = DIO + DSO - DPO	
Cash Conversion Cycle	20.38



Stimulating Cash Flow (Accounts Receivables)

- Incentivize cash payments by offering discounts
- Gift card services
- Secure near-term sales by offering warranties, guarantees, and return policies; reassures customers who are navigating lots of uncertainty
- During the 2008 recession, Hyundai introduced Assurance return program and 10-year, 100,000-mile warranty program. The campaign promised that if you lost your job after recently buying a Hyundai, the company would buy it back from you. Hyundai's sales grew nearly 24% the following year.

Stimulating Cash Flow (Accounts Receivables)

- Incentivize cash payments by offering discounts
- Gift card services
- Secure near-term sales by offering warranties, guarantees, and return policies; reassures customers who are navigating lots of uncertainty
- During the 2008 recession, Hyundai introduced Assurance return program and 10-year, 100,000-mile warranty program. The campaign promised that if you lost your job after recently buying a Hyundai, the company would buy it back from you. Hyundai's sales grew nearly 24% the following year.

Accounts Payables

- Micro-monitor accounts payables with Excel
- Classify payments as critical or non-critical
- Defer payments where possible
- Negotiate with suppliers regarding outstanding debts
 - Recalibrate stock replenishment schedule
 - Change payment frequency

Small Business Funding

Small Business Funding Options



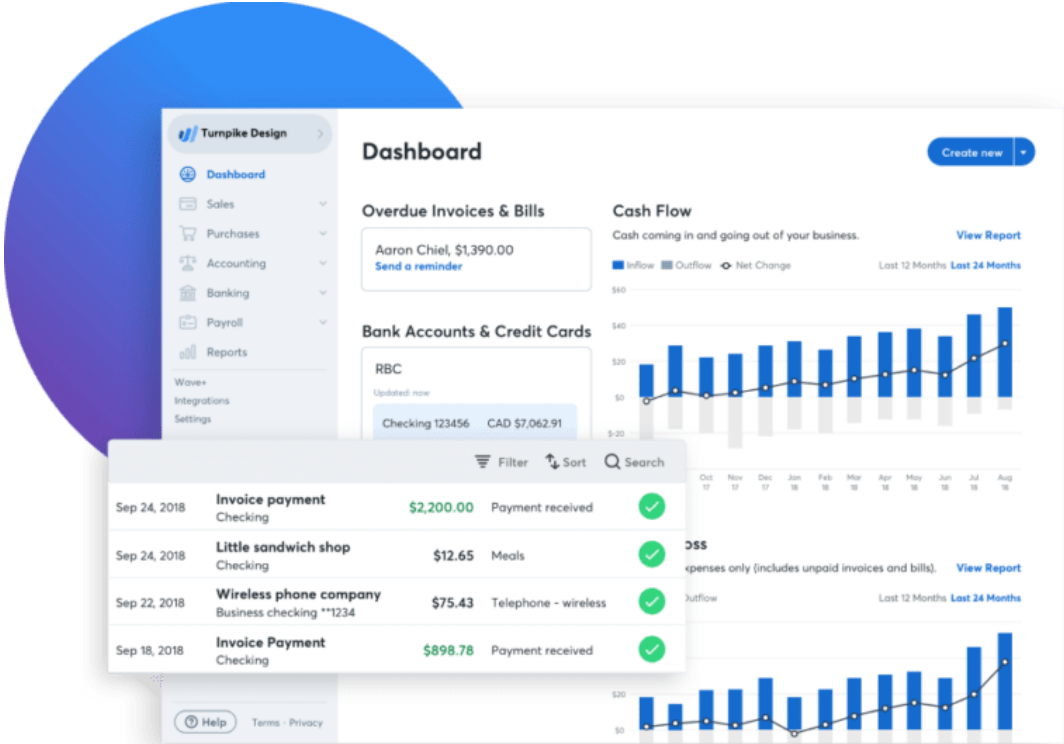
- Compare relative costs of borrowing
 - Loans
 - Credit Lines
 - Invoice Factoring
- SBA Economic Injury Assistance Loan (EIDL)
- NY Forward Loan Fund

Track Your Accounts: Accounting Software

- **SlickPie (free)**

SlickPie offers an awesome free plan to kick-start your micro business management	Starter Free	Pro \$39.95/month
MagicBot - Automated Receipt Data Entry <small>Beta</small>	Unlimited	Unlimited
Companies	10	50
Support	Email Support	Phone and Email Support
Send Online Invoices	✓	✓
Multi-Currency	✓	✓
PayPal, Stripe, and Credit Card Processing	✓	✓
Create Quotes and Estimates	✓	✓
Track Expenses	✓	✓
Manage Bills	✓	✓
Track Sales Tax	✓	✓
Get Live Bank Feeds	✓	✓
Reconcile Bank Transactions	✓	✓
See Financial Performance Reports	✓	✓
Set Up Recurring Invoices	✓	✓
Set Up Late Payment Reminders	✓	✓
Add Multiple Companies And Users	✓	✓
See Transactions History	✓	✓
Bank-Grade Security	✓	✓
Run Your Business on Any Device	✓	✓
Upload and Attach Files	✓	✓

- **Wave (free)**



Digitize and Track Finances

- **Quickbooks**
 - <https://www.quickbooks.com>
- **Quicken (free)**
 - <https://www.quicken.com>
- **FreshBooks**
 - <https://www.freshbooks.com>
- **Mint (free)**
 - <https://www.mint.com>

Manual Tracking: Excel Payable Ledger

Business Name																	
Payable Ledger																	
Current Date: 9/27/20				Total Dues Till date: ₹ 22,200.00		today()											
Date	Invoice Number	Supplier Name	Total Amount	Due Date	Balance Due	Payment Date	Payment 1	Payment Date	Payment 2	Payment Date	Payment 3	Payment Date	Payment 4	Payment Date	Payment 5	Payment Date	Payment 6
09/15/20	1-1005	Supplier 1	₹ 25,700.00	10/30/20	₹ 7,200.00	9/25/20	₹ 10,500.00	9/30/20	₹ 3,000.00	5/10/20	₹ 5,000.00						
10/10/20	256X5	Supplier 2	₹ 15,000.00	11/24/20	₹ 15,000.00	10/15/20		10/30/20					₹ -		₹ -		
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												
					₹ -												





College of Business, Stony Brook University
Center of Entrepreneurial Finance

- College of Business COVID-19 Economic Recovery Assistance
https://www.stonybrook.edu/commcms/business/about/_COV19-for-Business/
 - Virtual Expert Network Office Hours
 - Small Business Tech Enhancement Program
 - Pandemic Shift Business Survival Workshops
 - Videos, articles, and more
- Center of Entrepreneurial Finance COVID-19 Resources
<https://www.stonybrook.edu/commcms/cef/covid19resources/index.php>
- COVID-19 Long Island Small Business Survival Guide
<https://tinyurl.com/coronavirusfinance>





College of Business, Stony Brook University
Center of Entrepreneurial Finance

Request an Appointment

Reach out to an advisor for further assistance and customized cash flow and financial projections

Phone: [\(631\) 632-9837](tel:(631)632-9837)

Email: sbdc@stonybrook.edu



Stony Brook University
College of Business



The State University
of New York

References

<https://www.cashanalytics.com/working-capital-metrics/>

<https://www2.deloitte.com/us/en/insights/economy/us-economic-forecast/united-states-outlook-analysis.html>

<https://www.liveplan.com/blog/metrics-in-a-minute-cash-burn-rate/>

<https://treasury.govt.nz/sites/default/files/2020-04/c19-4265378-t2020-973-economic-scenarios-v3.pdf>

<https://hbr.org/2009/02/seize-advantage-in-a-downturn>

<https://squarmilner.com/cash-flow-during-covid-19/>

<https://www.fundera.com/blog/the-ultimate-guide-to-cash-flow-analysis#:~:text=Cash%20flow%20analysis%20is%20a,have%20at%20any%20given%20time>