

State Notes

TOPICS OF LEGISLATIVE INTEREST

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Cash Flow Borrowing in the School Aid Budget

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Preface

The majority of this article was written before the coronavirus disease 2019 (COVID-19) pandemic. It is likely that cash flow borrowing costs for the School Aid Fund (SAF), which fluctuate with interest rates, will decline substantially for the current year (fiscal year (FY) 2019-20), and potentially for next year as well. However, when interest rates rebound, cash flow borrowing costs will return to higher levels, and the information presented in this article again will be applicable. Until that time, the issue could be reviewed and, if desired, changes could be made that would be impactful when economic conditions return to pre-COVID-19 levels.

Introduction

Monthly payments in the School Aid budget generally do not align with monthly revenue. Each fiscal year, the State begins making payments to schools in October, yet a significant portion of School Aid Fund revenue received by the State in October and November is accrued back to the previous fiscal year. As a result, each fiscal year begins with a situation where School Aid Fund expenditures are likely to exceed revenues. When monthly payments from the SAF exceed monthly revenue collections, the SAF must borrow the shortfall from other State funds. If those other funds receive interest on their accumulated balances, the SAF must reimburse the foregone interest that those other funds would have received had the borrowings not occurred. Over time, with both increasing School Aid budgets and rising interest rates, the cost to the SAF has grown. This article will examine the history of cash flow borrowing in the School Aid budget, along with structural cash flow issues, and methods to mitigate the cost to the School Aid Fund.

History of Cash Flow Borrowing

The table below illustrates the difference between monthly revenue that was deposited into the SAF and monthly outlays (i.e., State school aid payments) made from the SAF, for FY 2018-19. As shown, with the exception of April, monthly State aid payments exceeded monthly revenue collections, until the revenue from September, October, and November 2019 was remitted and accrued back to the 2018-19 fiscal year. This shortfall in cash on hand to make monthly payments necessitated that the SAF borrow from the common cash pool (which is made up of cash balances in all funds) last year, and to reimburse certain funds in the common cash pool for lost interest. While the borrowing during FY 2018-19 resulted in significant reimbursements, this borrowing has been occurring for years, as the SAF has had to borrow funds to make monthly State aid payments.

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Fiscal Year 2018-19 Monthly School Aid Fund Revenue and Expenditures (millions of dollars)				
Month	Revenue	Expenditure	Surplus (Shortfall)	Cumulative Balance
October 2018	\$410.7*	\$1,042.4	(\$631.7)	(\$631.7)
November 2018	775.8*	1,249.4	(473.6)	(1,105.3)
December 2018	994.1*	1,123.1	(129.0)	(1,234.3)
January 2019	988.4	1,139.6	(151.2)	(1,385.5)
February 2019	821.0	1,168.3	(347.3)	(1,732.8)
March 2019	886.2	1,152.5	(266.3)	(1,999.1)
April 2019	1,164.3	1,161.7	2.6	(1,996.5)
May 2019	939.3	1,177.5	(238.2)	(2,234.7)
June 2019	963.8	1,147.9	(184.1)	(2,418.8)
July 2019	990.3	1,139.5	(149.2)	(2,568.0)
August 2019	1,171.8	1,184.4	(12.6)	(2,580.0)
September 2019	1,442.0	0	1,442.0	(1,138.6)
October 2019	1,498.6	0**	1,498.6	360.0
November 2019	398.6	0**	398.6	<u>758.6</u>
Totals	\$13,444.9	\$12,686.3	\$758.6	\$758.6

*Revenue shown in these months reflects that portion received during the month for use in FY 2018-19. The portion of additional revenue received and accrued back to the prior year, FY 2017-18, is not shown here.

**Expenditures in these months are in FY 2019-20; revenue shown is that portion accrued back to FY 2018-19.

How Interfund Borrowing Works and Participating vs. Nonparticipating Funds

The State's pool of common cash comingles investable cash balances from both 'participating' and 'nonparticipating' funds. A 'participating' fund is one that is designated (generally by statute) to receive interest (positive or negative) on any balances, while a 'nonparticipating' fund is one that has not been designated to receive interest on balances.

When a fund within the common cash pool has to borrow from the pool, it reduces the amount of revenue on hand, and the common cash pool generates less interest earnings than if the borrowing had not occurred. However, the foregone interest is made up by payments from funds and shared across: 1) participating funds with negative balances, and 2) nonparticipating funds. The following examples illustrate how foregone interest is made up across participating and nonparticipating funds.

Example 1: Fund A is participating and has a positive balance; Fund B is nonparticipating and has a negative balance. Interest due to Fund A is \$100, but the common cash pool earned only \$80 due to Fund B's needing to borrow for cash flow. The \$20 deficit created in common cash must be resolved. While expenditures from Fund A could be used to make up the shortfall, which would essentially represent Fund A paying its own interest, the practice is to bill Fund B for the shortfall.

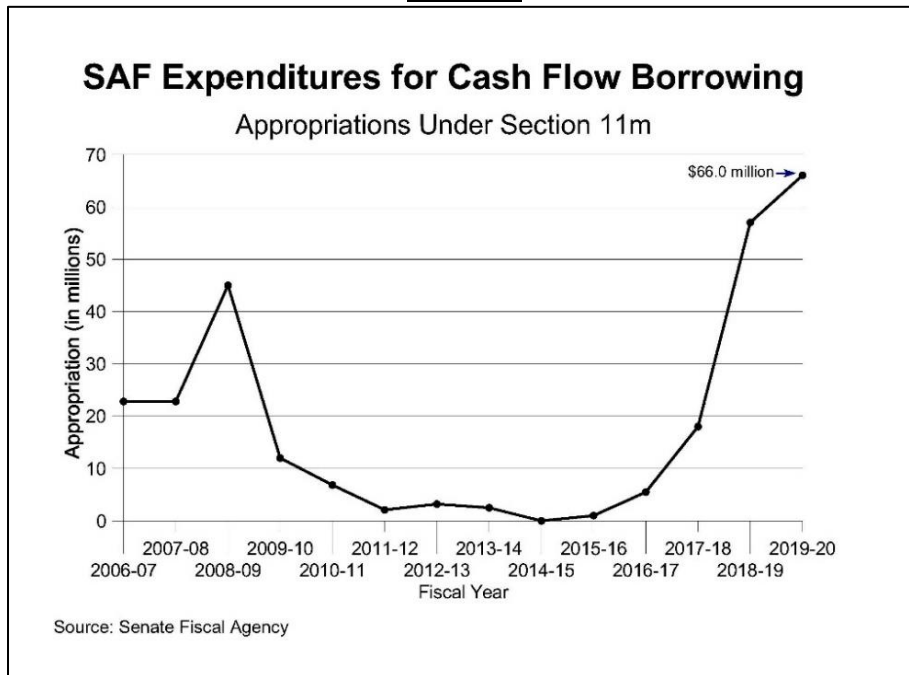
Example 2: Funds A, B, and C are participating, but Fund C had a negative balance. Funds D and E are nonparticipating. Fund D had a positive balance, while Fund E had a large negative balance (like the SAF). Interest due to Funds A and B is \$165 (Fund C earns no interest



because it had a negative balance), but the amount actually earned across all funds (A through E) was \$100. Fund C had a negative balance (Fund C had borrowed from common cash), but if it had not borrowed from common cash, then common cash would have earned \$15 more. As a result, Fund C is charged \$15. After Fund C is charged its share (\$15), the remaining \$50 revenue shortfall needed to pay interest to Funds A and B is effectively charged to Funds D and E. However, Fund D is not explicitly charged because although it had a positive balance and would have earned \$10, as a nonparticipating fund it simply forfeits its interest (which was included in the \$100 that was earned across all funds). After Fund C is billed and Fund D forfeits its interest, a \$50 shortfall would remain. Like in example 1, other options could be used to resolve the common cash deficit, but in the case where Fund E is the School Aid Fund, the current practice is to bill the SAF for the \$50 to cover the deficit. As discussed below, one reason for this practice is that the School Aid Fund represents an overwhelming majority of the negative balance from nonparticipating funds.

The School Aid Fund is a nonparticipating fund; the Michigan Constitution (which provides the legal authority for the SAF) does not indicate that the SAF is to be credited any interest payments. When the SAF needs to borrow, it will "borrow" from any fund that has a positive balance, whether or not it is a participating fund. However, it only needs to reimburse the participating funds for foregone interest. Furthermore, although there are some nonparticipating funds with negative balances that also end up "borrowing" from funds with positive balances (including participating funds), because the SAF represents such a substantial portion of the negative cash balance only the SAF is charged for any shortfall. As discussed later, this arrangement results in the SAF paying less interest than if it were a participating fund.

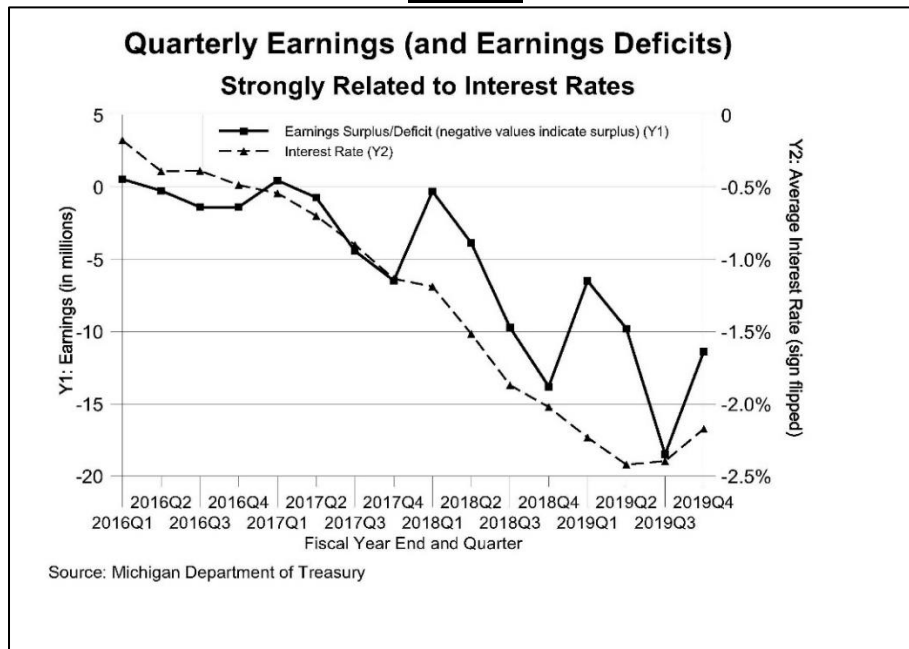
Figure 1





Before FY 2006-07, if the School Aid Fund needed to borrow from other funds to make monthly payments, the General Fund bore any associated interest costs paid to participating funds. Beginning in FY 2006-07, the Legislature and Governor concurred in having the School Aid budget pay at least a portion of the interest costs associated with interfund borrowing to take some budget pressures off the General Fund. Figure 1 shows the history of the appropriations in the School Aid budget under Section 11m, MCL 388.1611m. As shown in the table, the appropriation from the SAF to the General Fund to reimburse the common cash pool for cash flow borrowing is \$66.0 million in FY 2019-20 (although it is expected that, due to drastically lower interest rates than when the appropriation was first enacted, this cost will fall to \$7.0 million by year's end). The appropriations fluctuate with interest rates and the cash flow gap between expenditures and revenue. The primary reason appropriations were so low during the period between FY 2011-12 and FY 2015-16 was not because the negative balance was small or declining, but because interest rates on common cash earnings were close to zero, as shown in Figure 2.

Figure 2



Are There Options to Mitigate the Cost to the School Aid Fund for Borrowing?

The issue of cash flow borrowing costs comes down to the difference between the timing of when revenue accrues to the SAF and when expenditures are made from the SAF. Monthly payments from the SAF begin October 20th of a given fiscal year and continue through August. The only payment not made during the fiscal year occurs in September. Delaying the start of State payments while giving the State more time to accrue revenue to start the fiscal year would burden schools, which are faced with their own cash flow issues: a school's fiscal year starts July 1 but the first State payment does not occur until October 20. One option to address School Aid Fund borrowing may be to delay the School Aid Fund portion of State payments for universities and community colleges, who have other revenue streams available to them (namely, tuition and fees, and, for community colleges, property tax revenue).

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The State has few options for adjusting the timing of revenue collected for the School Aid Fund. The largest revenue source for the SAF is the sales tax and the second largest revenue source is the income tax. Unless some sort of incentive were enacted that could influence consumers' behavior to shop earlier in the year, altering the timing for sales tax revenue is essentially impossible. The only likely option with sales tax would be to lower the threshold for accelerated tax payments, which creates a benefit in the initial year of the change and would potentially represent a long-term solution if enough revenue were moved forward to create a balance that would be unlikely to go negative. Revenue from the income tax is fairly steady throughout the year under current law, reflecting individual income tax withholding payments from employers. Perhaps the only significant adjustment that could be made to the timing of income tax revenue would be to move the due date for annual returns from April 15 to earlier in the year, or change the dates for when quarterly payments are made. This, however, would create other cash flow and revenue problems, including having Michigan due dates that would not correspond with the Federal date. The third largest revenue source for the SAF is the State Education Tax (SET), which is currently collected in the late summer. If the SET due date were moved earlier in the year, it would help the cash flow status of the SAF but would harm property owners, who would end up paying more than one SET assessment during the 12-month period surrounding the shift in timing. (This would be a one-time additional burden to property owners.) One important point to note is that due to the "zero-sum" nature of both tax receipts and State expenditures, any option that shifts the timing of either payments or expenditures merely transfers the cash flow issue faced by the SAF to other funds, payment recipients, and/or taxpayers.

Another possibility for addressing at least a portion of cash flow issues would be to 'deposit' the BSF's year-end balance into the School Aid Fund at the beginning of the fiscal year (i.e., on October 1). Such a deposit would mean that the SAF would have more than \$1.1 billion (the amount currently in the BSF as of May 2020) available at the start of the fiscal year with which to make monthly State aid payments. A deposit of BSF balance presupposes a balance significant enough to offset the SAF need at the beginning of any given fiscal year. Any fiscal need to otherwise use the BSF or policy decision to alter that balance would negatively impact this option. When SAF revenue accrues at the end of the year, the SAF could 'pay back' the BSF. This cycle would repeat itself with the start of each fiscal year. The BSF would lose interest earnings but the SAF would not have to borrow as much from the common cash pool as it currently does.

Related to the idea in the previous paragraph, another possibility involves the distinction between participating and nonparticipating funds. As noted earlier, \$66.0 million has been appropriated from the SAF in FY 2019-20 for paying interest to participating funds to hold them harmless for borrowing from the pool of common cash. Perhaps a policy question that could be asked is, does it make sense to spend \$66.0 million from the SAF to reimburse for foregone interest earnings on funds from which the SAF borrows? Put another way, policymakers may want to examine whether \$66.0 million spent in interest paid to other State funds is more important than \$66.0 million that could be spent on programmatic funding in the School Aid budget.

Policymakers could amend statute and convert some funds that are currently participating into nonparticipating funds, thereby relieving the SAF of paying at least some of the cash flow interest costs. Depending on the average cash balances of the funds that were moved from participating to nonparticipating, the change in designation would not necessarily eliminate a fund's interest earnings but instead would simply reduce them.

How this option would work can be illustrated with a simplified example building on Example 2 above. For Example 3, modify Example 2 by assuming the interest that needed to be paid to Fund A was \$120, and the interest due to fund B was \$45 (thus producing the \$165 total to be paid to A and B). If A were switched to a nonparticipating fund, the State still would have needed \$45 to pay to Fund B. Similarly, Fund C still would be billed \$15 for its negative balance. Recall that actual interest earned in Example 2 was \$100. Therefore, the State had \$100 in actual interest earned plus \$15 in interest billed to Fund C, for a total of \$115.

After paying \$45 in interest to Fund B, there would be \$70 in interest earnings left to be distributed between Funds A and D, in proportion to their balances. As a result, while Funds A and D would have been entitled to \$130 in interest earnings if they were participating funds (Fund A's \$120 plus Fund D's \$10), instead they would receive \$70 between them, or about 54% of the interest they would have received as participating funds. As a nonparticipating fund, Fund E would neither receive interest (because of its negative balance) nor be billed.

As can be seen in Example 3, shifting Fund A to nonparticipating status eliminates the need to bill \$50 to Fund E. Furthermore, instead of forfeiting 100% of its interest, Fund D only experiences a 46% reduction in its interest earnings. However, compared to Example 2, Fund A experiences a 46% reduction in the earnings it receives. Thus, shifting Fund A from a participating fund to a nonparticipating fund has the following impacts: a) no change to Funds B or C, b) the amount Funds E and F are billed is reduced (in this example, it is eliminated), c) earnings paid to Fund D increase, and d) earnings received by Fund A are reduced.

The Appendix below lists 40 participating funds that have historically exhibited large average balances and thus account for a significant portion of interest earnings that must be paid to participating funds. To name a few here, the list includes the School Loan Revolving Fund, the Budget Stabilization Fund, the Michigan Merit Award Trust Fund, the 21st Century Jobs Trust Fund, and the Liquor Purchase Revolving Fund. The Appendix also provides actual interest earnings received during FY 2018-19 and illustrates the interest earnings these funds would receive, based on their estimated FY 2018-19 average fund balances and two sample interest rates representative of rates during a low interest rate period (the first quarter of FY 2015-16) and a more recent, higher rate, period (the second and third quarters of FY 2018-19).

If all 40 funds shown in the Appendix had been nonparticipating funds in FY 2018-19, the following impacts would have occurred:

- 1) No shortfall would have existed between total actual earnings and earnings because of participating funds with positive balances.
- 2) There would have been no need to appropriate any SAF revenue to compensate participating funds for the interest to which they were legally entitled.

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- 3) Nonparticipating funds with positive balances (not shown in Appendix A) would have received interest payments instead of forfeiting all of their interest.
- 4) These 40 funds would have received interest earnings, but less interest than they actually received in FY 2018-19. A rough approximation suggests these funds would have received slightly more than half of the earnings they received as a result of being participating funds (approximately a 50% reduction).

If any funds that are currently participating funds were converted to nonparticipating funds, those funds would receive reduced interest earnings, which could result in less revenue for programming supported by those funds. On the other hand, the change would reduce the revenue that would need to be appropriated from the SAF to reimburse participating funds for lost interest earnings. Therefore, it is a policy question as to whether to continue to appropriate SAF revenue to reimburse other funds for lost interest earnings, or whether that spending instead could be used for programmatic purposes in the School Aid budget.

A variant of this option, converting the School Aid Fund to a participating fund, likely would result in the SAF's incurring greater charges. As indicated above, the shortfall in revenue is calculated after totaling actual interest earnings with charges applied to participating funds with negative balances. As a result, participating funds with negative balances pay the full cost of their "borrowing" and that cost is not offset by the interest earnings from nonparticipating funds with positive balances. As a nonparticipating fund, the charge to the SAF is essentially reduced by the interest earnings from nonparticipating funds with positive balances. The Department of Treasury estimates this offset saves the SAF approximately \$10.0 million per year compared to if the SAF were a participating fund, and in some periods has reduced the cost to the SAF by as much as 60%.

Finally, it should be noted that while the SAF is charged for the entire shortfall (the cost is not spread across all nonparticipating funds with negative balances), the SAF represents the overwhelming majority of the negative balance for nonparticipating funds. Limited reporting is available regarding the balances of nonparticipating funds, and to allocate earnings to nonparticipating funds would require additional programming to build the necessary reports. As a result, no data exist by which the shortfall could be allocated across other funds. Furthermore, given that the SAF represents the majority of these negative balances, finding a way to spread the cost of the shortfall across all nonparticipating funds with negative balances would be unlikely to significantly reduce the cost to the SAF.



Appendix

**Interest Earnings for Selected Participating State of Michigan Funds
 Representative Impacts Under Estimated Average Balance in FY 2018-19**

Department	Fund Description	Average Balance FY 2018-19	Actual FY 2018-19 Earnings	Estimated Full Year Earnings	
				At 0.15%	At 2.40%
Treasury	School loan revolving fund	\$1,145,029,714.92	\$26,406,814.70	\$1,717,544.57	\$27,480,713.16
DTMB	Countercyclical budget and economic stabilization fund	1,098,067,864.01	25,292,134.16	1,647,101.80	26,353,628.74
Treasury	21st century jobs trust fund	374,815,575.00	8,608,355.04	562,223.36	8,995,573.80
Strategic Fund	Jobs for Michigan Investment Fund - Permanent Fund	280,867,314.58	6,395,002.86	421,300.97	6,740,815.55
LEO	Michigan employment security act, contingent fund	175,648,593.06	4,044,769.56	263,472.89	4,215,566.23
LARA	Liquor purchase revolving fund	162,281,741.61	3,735,167.20	243,422.61	3,894,761.80
LEO/Education	Talent Investment Fund	101,962,561.75	2,350,127.77	152,943.84	2,447,101.48
Treasury	Michigan Merit Award Trust Fund	92,735,377.52	2,128,136.54	139,103.07	2,225,649.06
Treasury	Insurance Provider Fund	89,156,177.09	1,607,721.63	133,734.27	2,139,748.25
Treasury	Health Insurance Claims Assessment Revenue	81,751,577.56	1,892,137.31	122,627.37	1,962,037.86
Strategic Fund	Michigan Film Promotion Fund	75,453,739.71	1,715,844.06	113,180.61	1,810,889.75
EGLE	Refined Petroleum Fund	58,596,600.79	1,348,068.29	87,894.90	1,406,318.42
DNR	Park improvement fund	42,270,171.44	974,658.08	63,405.26	1,014,484.11
DNR	Forest development fund	41,475,237.46	955,541.73	62,212.86	995,405.70
LARA	Marihuana registry fund	35,526,750.20	818,519.25	53,290.13	852,642.00
LARA	Health professions regulatory fund	30,246,373.88	697,720.21	45,369.56	725,912.97
DNR	Recreation passport fees	20,609,478.18	474,381.41	30,914.22	494,627.48
Judiciary	Juror compensation fund	16,193,733.55	372,949.34	24,290.60	388,649.61
LARA	Construction code fund	15,860,689.83	365,009.80	23,791.03	380,656.56
EGLE	Scrap tire regulatory fund	14,354,007.16	330,569.78	21,531.01	344,496.17
LEO/Land Bank Authority	Land bank fast track fund	13,292,914.37	306,047.06	19,939.37	319,029.94
DNR	Off-road vehicle trail improvement fund	12,216,142.42	280,380.44	18,324.21	293,187.42
DNR	Snowmobile trail improvement fund	11,861,653.50	273,479.67	17,792.48	284,679.68
Transportation	Movable bridge fund	10,832,303.96	249,310.66	16,248.46	259,975.30
Treasury	Land reutilization fund	10,785,997.20	248,334.13	16,179.00	258,863.93
Transportation	Rail freight fund	10,730,694.19	247,299.81	16,096.04	257,536.66
Judiciary	Judicial electronic filing fund	9,565,757.61	220,605.86	14,348.64	229,578.18
LARA	Second Injury Fund	9,196,184.24	210,684.29	13,794.28	220,708.42
LARA	Marihuana regulatory fund	9,177,159.41	210,294.14	13,765.74	220,251.83
Treasury	Reimburse local exchange providers 911 fund	9,093,618.66	208,574.39	13,640.43	218,246.85
LEO	Going Pro Talent Fund	8,606,052.46	46,752.38	12,909.08	206,545.26
Strategic Fund	Northern Michigan Tourism and Sports Fund	8,507,167.55	148,594.88	12,760.75	204,172.02
MDARD	Agriculture licensing and inspection fees	7,371,727.51	169,674.92	11,057.59	176,921.46
LARA	Survey and remonumentation fund	6,642,370.56	152,895.44	9,963.56	159,416.89
LARA	PMECSEMA fund	6,067,759.91	140,019.11	9,101.64	145,626.24
LARA	Fireworks safety fund	5,934,245.01	136,792.16	8,901.37	142,421.88
State Police	Auto Theft Prevention Fund	5,557,305.49	127,824.84	8,335.96	133,375.33
MDARD	Agricultural preservation fund	4,486,661.24	103,683.23	6,729.99	107,679.87
DNR	Land Exchange Facilitation Fund	4,469,981.68	103,020.51	6,704.97	107,279.56
DNR	Local public recreation facilities fund	4,393,327.90	101,093.24	6,589.99	105,439.87
Total			\$94,198,989.88	\$6,182,538.46	\$98,920,615.30

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