University of Ottawa (UO): Report on Finances

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Executive Summary: We analyzed the published annual financial statements of the University of Ottawa (UO) over the period 2017 – 2022 with a view to assessing the financial condition of UO. Our key results are as follows:

1. UO's stock of non-externally-restricted cash and investments increased significantly in 2020 but has since gone back down to pre-2020 levels. At April 30, 2022 (the end of the 2021-2022 fiscal year), unrestricted cash and investments stood at $774.2 million, an amount sufficient to pay APUO base salaries at current levels for 45 months.
2. UO's total operating grants declined by $64 million in 2018, equivalent to 17% of 2017 operating grants, and have not changed significantly since then. However, other revenue sources, especially tuition and fees, have done well such that total revenue has increased by 21% since 2017.
3. UO's total excess of revenues over expenses has been volatile over the past six years, with the volatility driven largely by erratic changes in the fair value of its investments. UO's excess of *operating* revenues over operating expenses (revenues and expenses other than amortization, interest and changes in fair value of investments) has been consistently positive throughout this period.
4. UO's comfortable level of unrestricted cash and investments, together with its consistent financial operating performance, suggest that its financial condition is solid and stable.

This report was prepared at the request of the Association of Professors of the University of Ottawa (APUO). Our analysis was based primarily on publicly available information on UO's website. Our data comes from the following documents:

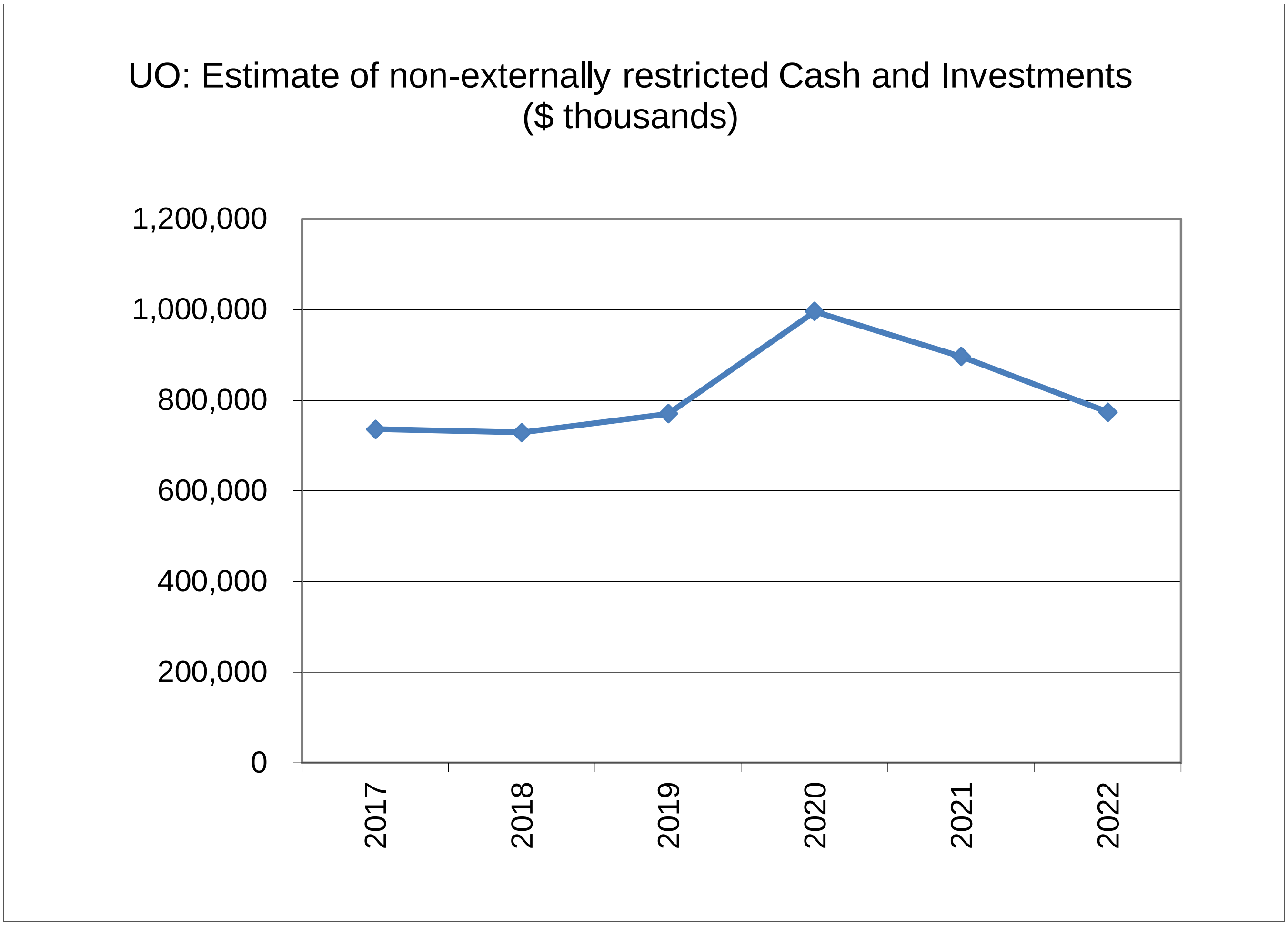
- Annual financial reports for fiscal years 2016-2017 to 2021-2022;
- Student headcounts (graduate plus undergraduate) available from the University of Ottawa
- Information reported to the Canadian Association of University Business Officers (CAUBO) which is publicly available on the CAUBO website
- Member dues information provided by APUO

Universities, like most other not-for-profits, typically receive two sorts of funding. Unrestricted funds generally include government grants, student tuition fees and revenues from so-called ancillary services (e.g., student residence services, conference and catering services, campus bookstore sales). Unrestricted funds can be used for any purpose consistent with the mission of the organization and are generally those used to pay operating costs. Restricted funds can only be used for specific purposes, e.g., Capital (land, buildings, equipment), Research Projects or Endowments. If the specific purpose is identified by a donor, the funds are considered to be externally restricted.

UNRESTRICTED CASH AND INVESTMENTS

Our standard approach to analyzing university financial statements is to start by identifying Cash and Investments that are not externally restricted (see appendix for more information regarding our approach). Money to pay the operating costs of the university (aside from endowed chairs or similar funds that provide additional compensation and/or cover other specific operating costs) will have to come from these resources. Typically, the universities whose statements we have seen do not disclose this information. We believe that we are able to estimate non-externally-restricted Cash and Investments reasonably well.[1] Our estimate begins with of the year-end balance in non-externally-restricted Cash and Investments over the past six years:

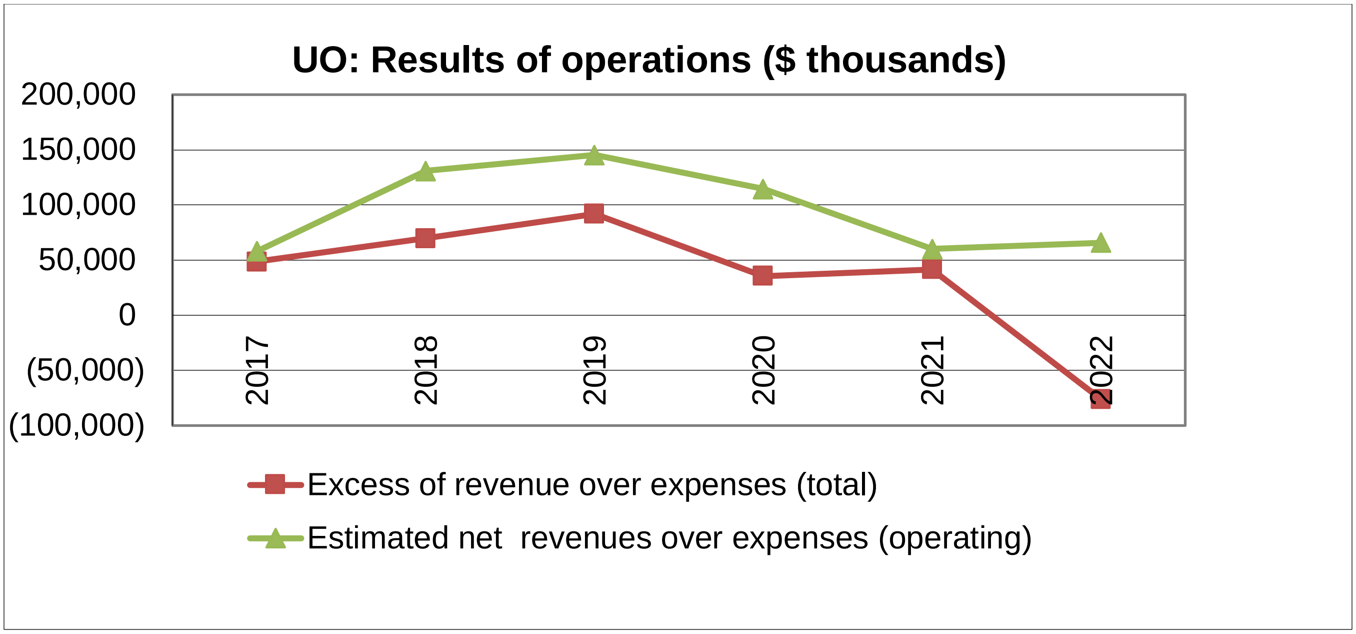
[1] UO Non-externally-restricted Cash and Investments (estimated) = Cash + Short-term investments + Long-term investments - Deferred revenue: Sponsored research and trust – Deferred revenue: Capital – Net assets: Endowments. At April 30, 2022, the end of the 2021-2022 fiscal year, this amount was (in thousands) = $26,328 + 406,040 + 984,215 – 312,039 – 8,997 – 321,301 = $774,246. All amounts come from the 2021-2022 statement of financial position (page 1) and associated notes. UO was one of the examples we used in our CAUT Guide to Analyzing University and College Financial Statements.



Estimated unrestricted cash and investments climbed sharply in 2020 but then returned to pre-2020 levels by 2022. At April 30, 2022, UO's balance of unrestricted cash and investments was sufficient to pay the base salaries for all APUO Members for 45 months. In comparison, the University of Manitoba's balance of unrestricted cash and investments at March 31, 2020 was sufficient to pay base salaries for all UMFA Members for just 20 months.

WHERE DOES THE MONEY COME FROM?

Generally speaking, unrestricted cash and investments increase because of one or more of the following: positive operating income, i.e., operating revenues incurred during the period exceed the operating expenses; and investment gains, particularly on unrestricted investments, incurred during the period. We look first at UO's operations. UO's financial statements present only a combined statement of operations. That presentation combines results related to operations, investing (depreciation of capital assets) and financing (servicing debt).



The chart above shows the evolution of UO total Excess of revenue over expenses and net revenues from operating activities only (equals total Excess of revenue over expenses + amortization and interest charges +/- unrealized investment losses or gains). UO's total operating results have fluctuated considerably over the past six years, varying between $92 M and -$76 M. The loss in 2022 is largely attributable to substantial unrealized investment losses incurred during the year ($76 M). The results of operations from operating activities only, on the other hand, have been consistently positive and averaging $96 M per year.

We will start by exploring where the surpluses came from. We use horizontal analysis to investigate the time series behavior of different components of income and other key figures.

Horizontal Analysis (base year 2017):	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Revenue: Tuition and other fees	1.00	1.06	1.15	1.18	1.23	1.40
Revenue: Operating grants	1.00	0.83	0.83	0.83	0.83	0.84
Revenue: Restricted grants and contracts	1.00	1.61	1.70	1.63	1.80	1.82
Revenue: Sale of goods and services	1.00	0.98	1.07	1.00	0.52	0.76
Revenue: Student housing	1.00	1.08	0.96	0.87	0.22	0.69
Revenue: Donations	1.00	1.07	0.97	1.46	1.31	1.15
Revenue: Investment income	1.00	2.28	1.74	1.58	2.53	2.26
Revenue: Other	1.00	1.01	0.98	1.27	0.57	0.95
Total revenues	1.00	1.07	1.09	1.10	1.12	1.21
Expense: Salaries and benefits	1.00	1.01	1.01	1.08	1.16	1.22
Expense: Scholarships and financial aid	1.00	1.00	1.04	1.06	1.18	1.65
Cost of goods and services		1.00	1.06	1.11	1.12	1.11
Repairs, maintenance, utilities and taxes		1.00	1.01	1.00	0.90	1.13
Contractual services and professional fees		1.00	0.93	1.15	1.12	1.13
Inter-institutional research and other agreements	1.00	0.94	0.95	0.91	1.45	1.13

Travel	1.00	1.01	1.04	1.07	0.18	0.27
Interest and bank fees	1.00	1.21	1.29	1.32	1.72	1.86
Amortization of capital assets	1.00	1.10	1.28	1.34	1.26	1.26
Other expenses	1.00	1.11	1.39	1.09	0.84	1.06
Total expenses	1.00	1.00	1.02	1.08	1.14	1.22
Net revenues over expenses	1.00	7.62	8.11	3.54	(0.81)	(0.34)
Change in fair value of investments	1.00	(0.18)	0.26	(0.30)	1.30	(1.88)
Excess of revenue over expenses	1.00	1.44	1.89	0.73	0.86	(1.56)
APUO salaries	1.00	1.02	1.03	1.09	1.11	1.15

In this table, 2017 – 2022 results are shown as a proportion of 2017 results.[2] Numbers greater than one indicate that this particular item has grown over time, while numbers less than one indicate that results are lower than in 2017.

We start with Revenues. Provincial operating grants were cut sharply in 2018 and have changed little since then. The drop in provincial funding has been more than offset by a 40% increase in Tuition and other fees. The increase in tuition is likely related to a combination of at least three things. First, there has been a healthy increase in student numbers over the past five years. Total student headcount has increased by 15.5% since 2017, and did not appear to be affected by the COVID pandemic. Secondly, there has been an overall increase in tuition and fees on a per student basis over the six-year period, although university tuition for Ontario residents has been frozen for the past three years.

Third, there appears to have been a change in the mix of students to one that includes relatively more international students who (1) typically pay substantially higher tuition than Canadian permanent residents; and (2) have been subject to tuition increases in recent years where Ontario residents have not. Canadian citizen and permanent resident numbers increased by 5.8% since 2017, while international student numbers increased by just under 70%. In 2017, international students made up 15.1% of total UO students. By 2022, that proportion was up to 22.2%.

Revenue from sales of goods and services and student housing declined sharply during the pandemic and are only returning to pre-pandemic levels now. Investment income and donations are both highly volatile items. But all of these are relatively small sources of revenue.

UO's overall profitability increased in 2018-20, but in 2021 returned to something very close to 2017 levels. Then profitability fell substantially in 2022, largely due to the aforementioned fall in the value of UO's investments. Excluding that, profitability in 2021 and 2022 were at virtually the same level as 2017.

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[2] The base year for Cost of goods and services; Repairs, etc.; and Contractual services is 2018. These items were presented differently in 2017 so comparisons that include 2017 would be misleading.

Why is that? The largest single component of expenses for UO is salaries and benefits. They have increased by virtually the same proportion as total revenues. Not all of those salary increases have been enjoyed by APUO members, however: compared to 2017, total salaries and benefits at UO increased by 22%, but APUO salaries have only increased by 15%. Other noteworthy changes have been a 65% increase in scholarships and financial aid, and an 89% increase in interest and bank fees. Neither of these last two expenses, however, are a large component of UO's expenses.

A vertical analysis is helpful to illustrate this point, as it shows us the significance of individual components of revenue and expense, where each item is expressed as a percentage of total revenues for that year.

Vertical Analysis (% of total revenues):	2017	2018	2019	2020	2021	2022
Revenue: Tuition and other fees	37%	37%	39%	40%	41%	43%
Revenue: Operating grants	38%	29%	28%	28%	28%	26%
Revenue: Restricted grants and contracts	13%	20%	20%	19%	21%	20%
Revenue: Sale of goods and services	2%	2%	2%	2%	1%	2%
Revenue: Student housing	3%	3%	2%	2%	0%	1%
Revenue: Donations	1%	1%	1%	2%	2%	1%
Revenue: Investment income	3%	6%	4%	4%	6%	5%
Revenue: Other	3%	3%	2%	3%	1%	2%
Total revenues	100%	100%	100%	100%	100%	100%
Expense: salaries and benefits	61%	58%	56%	60%	64%	62%
Expense: Scholarships and financial aid	9%	9%	9%	9%	10%	13%
Cost of goods and services	15%	6%	6%	6%	6%	5%
Repairs, maintenance, utilities and taxes	0%	4%	4%	3%	3%	4%
Contractual services and professional fees	0%	3%	3%	4%	4%	3%
Inter-institutional research and other agreements	3%	3%	3%	3%	4%	3%
Travel	2%	2%	2%	2%	0%	0%
Interest and bank fees	2%	2%	2%	2%	2%	2%
Amortization of capital assets	6%	6%	7%	7%	6%	6%
Other expenses	2%	2%	2%	2%	1%	2%
Total expenses	99%	93%	93%	97%	101%	100%
Net revenues over expenses	1%	7%	7%	3%	-1%	0%

In this table, each item is divided by total operating revenues in that year. Generally, the vertical analysis provides the same observations as the horizontal analysis. The provincial grants have declined relative to other revenue sources, but have been offset by an increase in tuition and fees. Salaries and benefits are the largest component of UO's expenses, although funds spent on scholarships and financial aid have increased substantially over the last five years.

Other factors affecting UO non-restricted Cash and Investments

There are at least two other factors that might have impacted UO's stock of non-restricted Cash and Investments. The first is an issue of $300 million in debentures, a way of borrowing $300 million, in February 2020. Much of this money was initially invested and resulted in a significant increase in non-externally restricted long-term investments in 2020. This balance declined over the next two years as the money was used, presumably for construction.

The second factor is the volatility in market value of investments that has led to substantial investment losses in some years. While this volatility has no direct effect on Cash, it does affect the value of the some of the Investments that are considered non-externally-restricted. In the case of UO, the short-term investments are all relatively short-term government and corporate bonds whose market values are relatively insulated from market and interest rate variations, so the market value fluctuations are virtually all related to the long-term investments. To the extent that some of these long-term investments are non-externally-restricted funds (and it is not possible to determine this from the information provided in the statements), those market value changes associated with these investments will affect our estimates of unrestricted liquid assets.

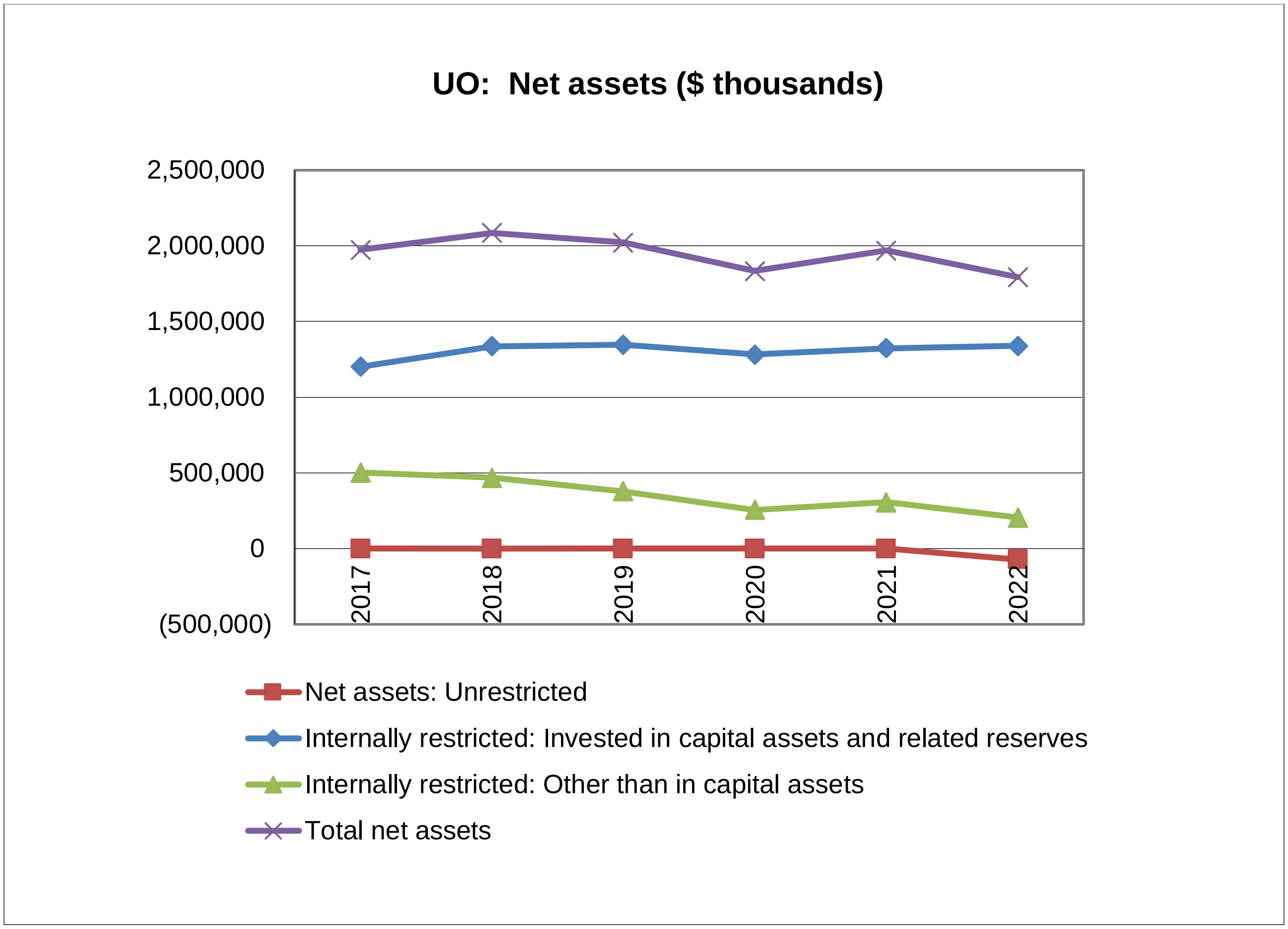
OTHER ASPECTS OF UO MANAGEMENT

Our work has shown us that universities typically use operating funds for primarily two purposes other than current operations: Internal Restrictions, in which funds are set aside or earmarked for specific future purposes and are therefore declared unavailable for current operations; and transfers to Capital, wherein operating funds are used to purchase and/or renovate land, buildings and equipment. To find out more about these aspects of university management, our analysis focuses on UO's Net Assets.

Net Assets: Unrestricted vs. Internally Restricted

Net assets is presented in the Statement of Financial Position (the second "page 1" in the 2022 Consolidated Financial Statements of the University of Ottawa) and is the net worth of an organization, i.e., the difference between its assets and its liabilities. UO's net assets in the Statement of Financial Position contains three components: Unrestricted; Internally restricted; and Endowment. We will focus on Internally restricted net assets as these are net assets that can be used for operating purposes.

The chart below shows the evolution of total net assets and its components over the past six years.



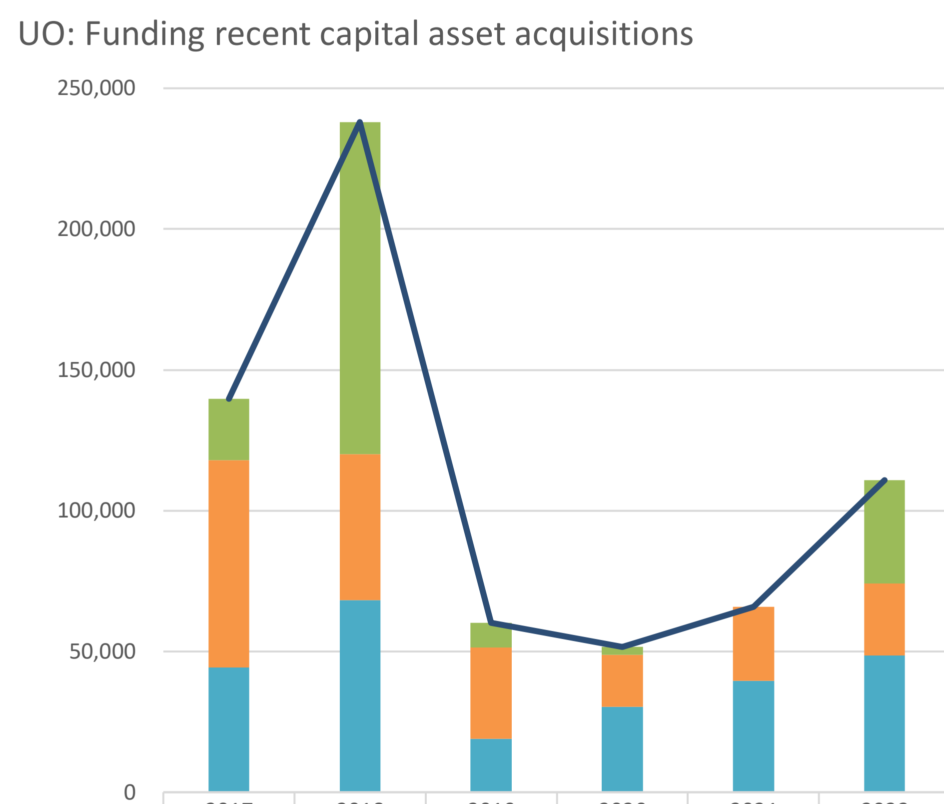
Unrestricted net assets represents net worth of the organization that can be spent on any purpose consistent with the organization's mission. Internally restricted net assets represents net assets of the organization that have been "earmarked" by the Administration for specific purposes. Presenting a consistently low balance in unrestricted net assets gives the impression that an organization's financial situation is precarious and unable to withstand even relatively small unexpected adversity. In UO's case, unrestricted net assets are virtually unchanged in the last six years and very close to zero.

Net assets invested in capital is the amortized cost of capital assets that have been purchased with unrestricted funds. This amount declined slightly in 2020 but otherwise has increased slowly and steadily. Since 2020, this balance has grown by $57.5 million, an increase of 4.4%.

A common tactic that we have seen in many universities is the transfer of unrestricted net assets to internally restricted net assets. This strategy gives the impression that any surpluses that the University has earned are "tied up" and not available for operating priorities. Unlike many other universities, UO does not appear to be growing its internally restricted net assets. Internally restricted net assets, other than Net assets invested in capital, have declined by almost 60% since 2017.

<u>Capital</u>

Like most universities, UO has been spending consistently on capital (e. g., land, buildings, furniture, equipment). Net capital assets have increased $161.5 million since 2017, an increase of 9%. Information on annual capital asset acquisitions is presented in the chart below.



	2017	2018	2019	2020	2021	2022
Funded by borrowing	21,753	117,946	8,681	2,869	0	36,838
Funded by grants and donations	73,631	51,775	32,361	18,340	26,384	25,562
Funded by internal resources	44,418	68,269	19,009	30,397	39,522	48,548
Purchases of capital assets	139,802	237,990	60,051	51,606	65,906	110,948

Capital asset purchases, shown by the dark blue line in the chart above, have been volatile over the past six years. 2017 and, especially, 2018 were busy years for UO where capital spending has dropped off considerably since then. The coloured segments in each bar represent the amount of capital assets purchases funded by borrowing; grants and donations (restricted funds); and internal resources (unrestricted funds, or operating funds). Total purchases of capital assets over this period were $666 M, of which 38% was funded from internal resources, 34% from grants and donations, and 28% from borrowing.[3]

It is normal that some level of capital asset acquisitions is funded from operations. Individual faculties and departments typically have the authority to use some of their operating budgets to invest in furniture and equipment, transactions that will be reported as acquisitions of capital funded from operations. In addition, declining government capital grants have forced universities to use operating funds for necessary acquisitions. At the same time, we have seen cases where Administrations appear to be starving front-line operations of a university to fund what some believe to be vanity projects.

UO finances a large portion of its capital assets with internal (or operating) funds, but it is not clear that its use of operating funds for capital is excessive. As noted above, UO finances 38% of their capital asset purchases with operating funds. This is equivalent to 50% of income from operating activities in an average year.

OTHER ANALYSES

To faculty associations, it is interesting to know how many scarce university resources are deployed to administration, to support staff, to external relations, and to academics. It is also interesting to know how what proportion of academic salaries go to casual or contingent staff.

Financial statements are of little help to answer these important questions. UO only reports total salaries and benefits to all employees. We have therefore supplemented our analysis with information provided to CAUBO (Canadian Association of University Budget Officers). This information is not audited so it must be used with more caution than the financial statements. Horizontal analysis of that information, using 2017 as the base year, indicates the following:

[3] Note that purchases of capital assets since 2017 total $526.5 million, but Net capital assets on the Statement of Financial Position have only increased by $161.5 million. The two numbers are, of course, very different. This is because Purchases includes only the cost of capital assets purchased; whereas Net capital assets increases with purchases but then declines as capital assets are depreciated each year and/or sold off.

Horizontal Analysis: CAUBO data (2017 base year)

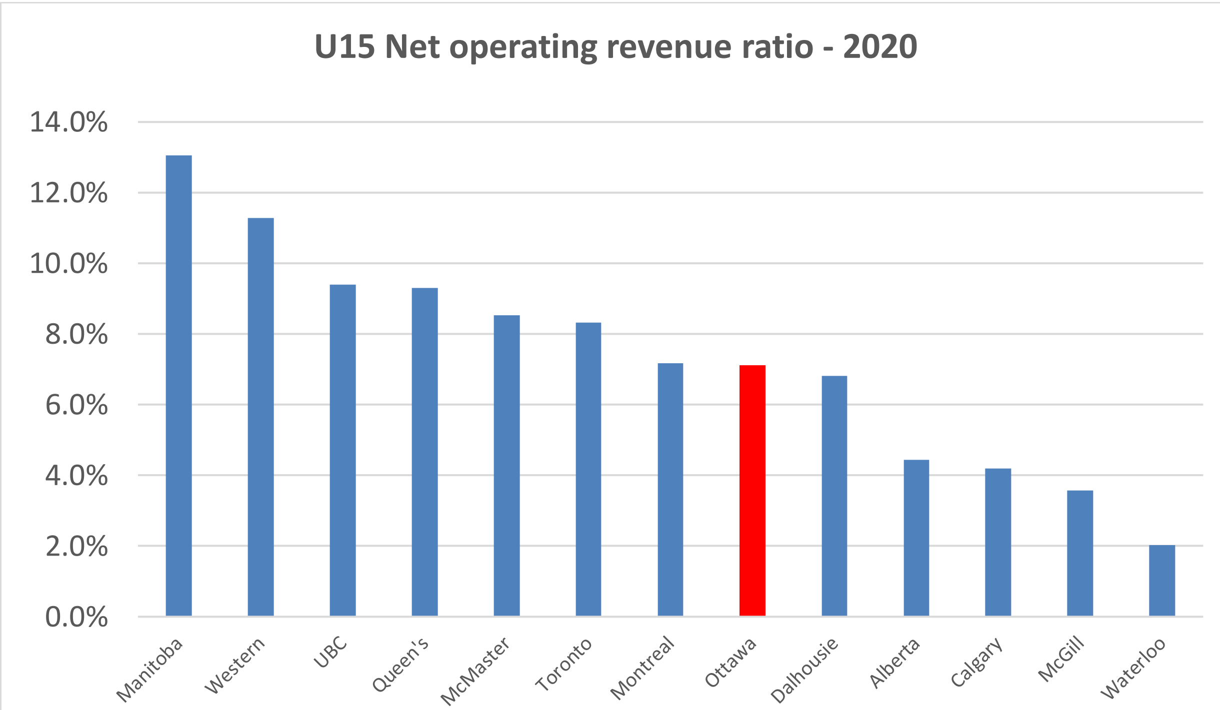
		2017	2018	2019	2020	2021
general operating expenditures: instruction and non sponsored research	CAUBO 2.4C	1.00	1.03	0.90	0.94	0.99
general operating expenditures: library	CAUBO 2.4C	1.00	0.96	1.00	0.99	1.00
general operating expenditures: external relations	CAUBO 2.4C	1.00	0.94	0.92	0.90	1.04
general operating income (revenues)	CAUBO 3.1	1.00	1.03	1.00	0.99	1.07
ancillary income	CAUBO 3.1	1.00	1.06	1.00	0.91	0.30
capital income	CAUBO 3.1	1.00	0.90	0.48	0.20	0.46
within general operating expenditures:						
salaries, academic ranks	CAUBO 3.2	1.00	1.00	1.00	1.04	1.08
salaries, other instruction and research	CAUBO 3.2	1.00	1.07	0.27	0.29	0.34
salaries, other salaries and wages	CAUBO 3.2	1.00	1.01	1.05	1.11	1.15
other salaries and wages in "instruction"	CAUBO 3.4	1.00	1.00	1.05	1.11	1.13
other salaries and wages in "admin and academic support"	CAUBO 3.4	1.00	1.01	1.04	1.14	1.22
other salaries and wages in "external relations"	CAUBO 3.4	1.00	0.95	0.94	0.91	1.03

There are some noteworthy items here. First, while UO's revenues were at approximately the same level from 2017 to 2020 and improved significantly in 2021, general operating expenditures were significantly lower in 2019 and 2020. Even in 2021, general operating expenditures returned to 2017 levels-however, 2021 revenues were much stronger than in 2017. We also note that "other salaries and wages" have increased more than other expenditures; these are mostly in the areas of "instruction", likely indicating greater reliance on academic staff with casual contracts, and more employees (and/or higher salaries) in administration and academic support roles.

UO vs. U15

Evaluating ratios is a challenging exercise. Comparative statistics on other universities are difficult to find and benchmarks for "acceptable performance" are controversial. Most of the analysis reported here relies on a time series approach, comparing UO to itself over a period of time and trying to identify trends.

We have done some cross-sectional comparisons of Canadian universities, but they must be interpreted with caution as (1) different universities sometimes use different accounting standards and so the same accounting item could be measured differently; and (2) observers do not always agree on appropriate comparators. We report one ratio that is broadly comparable across Canadian universities and compare UO's performance with that of the U15, of which UO is a member.[4] The chart below shows how UO compares to the other U15 universities in terms of its net operating revenue ratio for 2019-2020.



The net operating ratio is equal to Cash generated by operating activities, a measure of Cash income generated by the university's operations, divided by its total revenues. This ratio is a measure of the financial viability of a university's operations and is a key ratio in the Composite Financial Index (CFI), a tool designed for, and used by, many US universities to assess their financial condition. Higher values indicate better financial capacity to invest additional funds in operations. In 2020, UO scored 7.1% on this ratio or eighth place among the thirteen U15 universities for which we were able to obtain the data to calculate this ratio.[5] This leaves UO comfortably in the middle of the pack.

[4] The U15 is an "association of fifteen leading research universities across Canada."

[5] Data for Université Laval and University of Saskatchewan were not available at the time that we did these analyses.

CONCLUSION

UO has a solid cushion of non-externally-restricted Cash and Investments, sufficient to pay APUO salaries for 45 months at current salary levels. Its operations have been moderately and consistently profitable over the past six years in spite of sharply reduced provincial government support. UO has been able to generate additional revenue, largely through tuition and fees charged to an increasing number of (particularly international) students. In doing so, it has managed to maintain a strong financial condition in spite of reduced provincial government support.

Appendix. Analyzing University Financial Statements

Our general approach to analyzing university financial statements is to identify the amounts and sources of resources available for additional support for academic teaching and research. We try to establish whether the university has unexpended resources that it could use to improve employee compensation and the sustainability of those resources (i. e., is there a reliable, continuing source of these resources?). The central questions we try to answer are:

- How much Cash and other liquid assets (investments) does the university have? How have those changed over time?
- If there are any surplus Cash and Investments, where does it come from?
- Why is the university not directing these funds towards teaching and research?

The first step is to identify the liquid assets (cash and investments) available to the university to pay employee salary and benefits. This is complicated because universities receive funding that is often restricted for specific purposes. The restrictions faced by each university will depend on its circumstances, but generally, all universities will manage the following types of funding:

- **General or Operating**: These funds are typically unrestricted, which means that the university can use them for any purpose consistent with the overall goals of the university. Employee salaries and benefits and other operating expenses are generally paid out of unrestricted funds. Principal sources of these funds (what accountants call *revenues*) are government grants, student tuition and fees, and ancillary service revenues (e. g., parking services, campus bookstore, student residences).
- **Capital**: These are long-lived assets like land, buildings, equipment and library collections. Capital funds can *only* be used to acquire and/or renovate assets like this. These funds can come from government capital grants and capital fundraising campaigns.
- **Endowment**: These are funds that are established to provide money, sometimes for general operating purposes but often for specific programs, e. g., scholarships and academic chairs. What is unique about an endowment fund is that the original contribution (or capital - unfortunately, the same term used to describe land, buildings, etc.) must remain invested and only the investment income can be spent. Endowment funds often come in the form of bequests and other donations or specific endowment fundraising efforts.

Generally, university employee compensation is principally paid out of Operating funds. Universities typically present financial information on a combined basis whereby both restricted and unrestricted resources are combined into a single figure. We need to rely on other disclosures to estimate the balance of unrestricted funds. We have found that this is not always possible.

The authors

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