FORECASTING THE ECONOMIC IMPACT OF COVID-19 ON UNIVERSITIES IN THE UNITED STATES: A CASE STUDY OF THE UNIVERSITY OF OREGON

by

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A THESIS

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Title: Forecasting the Economic Impact of Covid-19 on Universities in the United States: A Case Study of The University of Oregon

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Primary Thesis Advisor

This research project attempts to analyze the short-term effects of administrative responses to Covid-19 upon universities within the United States in order to forecast impacts in the long-term. It does so primarily by researching shifts in enrollment records during the Covid-19 pandemic, changes in sports and events, and increases in gifts, grants, and contracts. This project involves a case study of the University of Oregon in an attempt to use Oregon as an example of the average University response to Covid-19 and the administrative decisions thereof. The virus itself had an indirect impact on these effects, which is why the project primarily studies the results of such administrative responses from the administrations of American Universities, primarily the University of Oregon's administration, the state government, and the federal government. These responses were oriented primarily in protecting the welfare of staff and students and the surrounding community, limiting economic loss as it pertains to the schools' finances and the surrounding communities revenue from the school's events, and the capability of the administration to maintain previous levels of enrollment and engagement.

This work is done by comparing empirical enrollment data from the fall term before the pandemic, fall of 2019, to the fall term following the early stages of the pandemic, fall of 2020. It goes even further by analyzing enrollment data over the last 25 years in order to better derive the effect of the responses to Covid-19. Furthermore, estimations are given to the loss in revenue from the cancellation of sporting events, concerts, fairs and more. Although there is normally a sort of auxiliary wall between university revenue from athletics and other traditional revenue streams, this paper includes the impact on athletics in order to highlight the overall effects of Covid-19 on Universities and because these revenue streams appear to be increasingly blending during this time period, likely accelerated by Covid-19 closures. It also uses financial records from the UO to determine the level of funding and donations, known in this paper as gifts, grants, and contracts, over the last fiscal year.

This project finds evidence of a severe decrease in revenue for universities in terms of enrollment as well as sports and events in the short-run. State and federal funding during this time increased significantly however, as well as public and private donations to individual universities. Several dozen universities were forced into closure during this time, and a few others have shifted to fully online course offerings.

However, there is significant evidence that in the long-term these effects will primarily disappear entirely, resulting in this event being a sort of outlier. Enrollment estimates for the next academic year across the US show signs of massive increases in students in-state, out-of-state, and international. There is, as well, the possibility of continued increased state and federal funding.

Due to the novelty of Covid-19 and the resulting pandemic this project could not with certainty find conclusive enough evidence to believe all universities will shift to fully online formats, as was suggested early on, although there were a few cases of this occurring over the last 18 months. This study also finds that the University of Oregon had one of the better responses to Covid-19 and seems to be coming out of the pandemic relatively unscathed for multiple reasons, resulting in it being a poor example of the average University responses.

Acknowledgements

I would like to thank Professor of Economics Benjamin Hansen, Professor of History Ian McNeely, and Professor of Earth Sciences Samantha Hopkins for serving as my thesis committee. Professor Hansen served as my main thesis advisor and was an invaluable asset in structuring my research and methods therein. Professor McNeely serve as my second reader and was invaluably in offering advice on legitimate sources concerning the American university system. Professors Hansen and McNeely were also the original inspiration for this project as I took an Economics course with Professor Hansen and a Clark Honors course with Professor McNeely during the spring term of 2020 when classes went remote. Both courses heavily involved some analysis of Covid-19 and its possible effects on the economy and on universities. Despite the lack of clear information and data I chose to delve deeper within this project, with their ample support. I would also like to thank Professor Hopkins for serving not only as my Clark Honors College representative but also as my Honors advisor over the past four years of my collegiate career and offering the greatest of support during this time. All three instructors were truly invaluable during this process.

Secondly, I wish to thank all the instructors I have had in my academic career as I feel it draws to a close. To all those retiring, in their prime, and just beginning. Each and every one was a unique individual I am glad to have learned from, no matter the subject or length of the course. I also wish to thank the University of Oregon and more specifically the Clark Honors College, particularly as it pertains towards Covid-19 policies and support.

Additionally, I would like to acknowledge my parents and grandparents financial sacrifices, to get me through college debt free. I appreciate all they have done for me and will always cherish their efforts.

Finally, I wish to deeply thank my fiancé, soon to be wife, for all her support over the last 6 years. She has been my rock since day 1 of college, even including the process of being admitted to such a prestigious program and has driven me to every success. I owe all I am today to her and this project would not be of the same quality without her patient advice and suggestions.

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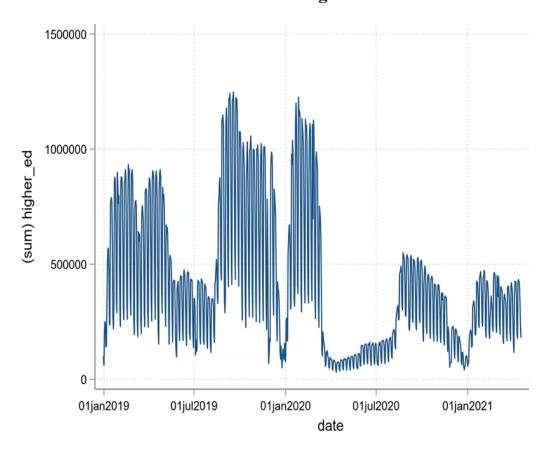


Figure 1. is a graph formed by the company Safegraph in analyzing foot traffic data at the largest 3000 centers of higher education. This is used to estimate the effect on closures and possible reopenings of Covid-19. Found on page 3.

Y19 Actuals Quarter 4 Report	All Funds except Ag																			
	Education and		esignated Ops and Service						estricted Gift											
	General		Center		Auxiliaries		Grant Funds		Funds		Other Funds		Plant Funds	In	iternal Bank		Total	Reporting Adj.		Total
tate Appropriation	\$ 72,712,010	Ś			452.924	Ś		Ś	runus	Ś		Ś		Ś		Ś	74,397,481			Total
total Photosophic Control	\$ 418,454,072		-1-1-0			ś		š	100	ś		Š		ś		š	463,683,518	2 (2)		
	\$ 323,334			Š	,,			Ś		Ś		Ś		Ś	-1	š	275,888,729			
	\$ 24,619,477			ś		ś	,	š		Š		Ś		Š		Š	24,619,477			
	\$,023,417	Š		Š		ś		Š		Š		Š		Š		Ś	25,683,829			
nterest and Investment	\$ 7,259,112	Š	13,927,936	Ś	84,592	Ś		Ś	83,985	Ś	538.317	Š	649.020	Š	11,438,358	Ś	33,981,386			
nternal Sales	\$ 2.821.527	Ś	50,383,105	\$	24.658.015	Ś	65	Ś	200	Ś		Ś				Ś	113,272,164			
ales & Services	\$ 4,168,451					ś	106,537			ś		Š		š		š	186,617,269			
Other Revenues	\$ 2,191,003	Ś	2,676,513	Ś	4.649.001	Ś	12,582	Ś	17.914	Ś		Ś	562,247	Ś		Š	10,109,261			
	\$.	Š		š		Š		š		Š		Š		Š		Ś	86,099,524			
Total Revenue	\$ 532,548,986	\$	86,854,200	\$ 2			162,406,023	\$	82,005,234	5	538,317	\$	138,311,566	Ś	49,965,370	\$	1,294,352,638			
alaries and Wages	\$ 257,825,362	Ś	23,603,943	\$	59,405,653	Ś	41.606.255	Ś	17.876.156	Ś		Ś	10.056	Ś	167,185	Ś	400.494.610			
	\$ 23,011,905	Ś		Ś		Ś	1,690,602	Ś	255,643	Ś		Ś		Ś		Ś	25,346,628			
PE Retirement	\$.	\$		\$		\$		\$		\$		\$		\$		\$				
PE Other	\$ 7,175,151	s	75,534	Ś	38,486	Ś	1.041.543	Ś	79,741	Ś		Ś		Ś		Ś	8,410,454			
PE GTF Remissions	\$ 136,924,333	Ś	17,431,439	\$	32,187,193	Ś	20,755,825	\$	10,499,476	Ś		Ś	2,890	Ś	102,022	Ś	217,903,178			
Total Personnel Services	\$ 424,936,751	\$	41,347,381	\$	91,783,343	\$	65,094,225	\$	28,711,016	\$		\$	12,946	\$	269,208	\$	652,154,869			
ervice & Supplies	\$ 114,237,981	\$	21,259,779	\$ 1	106,487,401	\$	30,162,583	\$	22,800,940	\$	(1,030,455)	\$	7,620,466	\$	30,474,379	\$	332,013,075			
Merchandise-Resale/Redistribution	\$ 4,171	\$	18,970,194	\$	13,018,228	\$		\$	222	\$		\$		\$		\$	31,992,816			
nternal Sales Reimbursements	\$ (18,172,375)) \$	(3,000)	\$	(1,521,269)	\$	(26,463)	\$		\$		\$	(2,881,709)	\$		\$	(22,604,815)			
ndirect Costs	\$ 71,589	\$	2,955,133	\$	7,435,758	\$	24,651,977	\$		\$	298,489	\$		\$		\$	35,412,946			
epreciation/Amortization Expense	\$ -	\$	4,288,036	\$	30,801,152	\$		\$		\$		\$	30,464,025	\$		\$	65,553,212			
tudent Aid	\$ 5,882,527	\$	347,554	\$	6,527,102	\$	40,692,062	\$	24,853,656	\$	19,794,785	\$		\$		\$	98,097,685			
Total General Expense	\$ 102,023,894	\$	47,817,695	\$ 1	162,748,373	\$	95,480,159	\$	47,654,818	\$	19,062,819	\$	35,202,783	\$	30,474,379	\$	540,464,919			
Net Transfers Out/(In)	\$ 11,829,666	\$	(2,337,222)	\$	(1,745,741)	\$	(2,953)	\$	5,578,303	\$		\$	(15,460,031)	\$	2,137,979	\$				
Total Expense	\$ 538,790,310	\$	86,827,854	\$ 2	252,785,975	\$	160,571,431	\$	81,944,136	\$	19,062,819	\$	19,755,698	\$	32,881,565	\$	1,192,619,788			
Net before CapEx	\$ (6,241,324) \$	26,346	\$ ((11,063,033)	\$	1,834,593	\$	61,098	\$	(18,524,502)	\$	118,555,868	\$	17,083,805	\$	101,732,850			
Beginning Fund Balance	\$ 77,206,732	\$	58,616,371	\$ 3	323,394,855	\$	(1,599,304)	\$	14,532,235	\$	25,980,293	\$	569,073,914	\$	19,911,269	\$	1,087,116,366			
Capital Expenditures	\$ (5,215,820)) \$	(506,147)	\$	(43,330)	\$	(1,216,504)	\$	(1,901,353)	\$		\$	(147,156,559)	\$		\$	(156,039,713)			
Net (from above)) \$	26,346	\$	(11,063,033)	\$	1,834,593	\$			(18,524,502)	\$	118,555,868	\$	17,083,805	\$	101,732,850			
Fund Additions/Deductions*	\$ -	\$	1,934,843	\$	7,956,595	\$		\$		\$		\$	147,814,476	\$		\$	157,705,914	\$ (246,136,516)		
Ending Fund Balance	\$ 65,749,587	\$	60,071,414	\$ 3	320,245,087	\$	(981,215)	\$	12,691,981	\$	7,455,791	\$	688,287,700	\$	36,995,073	\$	1,190,515,418	\$ (246,136,516) \$	9	44,378
Year-End Accounting Entries **	\$ (1,927,913) \$	(130,597)	\$	(1,002,489)	\$	(236,012)	\$	(90,094)	\$	298,489	\$		\$	(1,858)	\$	(3,090,475)	\$		(3,090)
Net Capital Assets		\$			286,085,007	\$		\$		\$		\$		\$	(2,364,856)	\$	878,571,567			78,57
	\$	Ś		\$		Ś	(1,217,227)	Ś	12,601,887	\$	7,754,280	Ś	99,142,814	Ś		Ś	118,281,754	\$ (673,429) \$	1	17,608
Other Restricted Net Assets Unrestricted Net Assets					33,157,590	Ś		Ś		ś		Ś	21,172,000			Ś		\$ (245,463,087) \$		54,891

^{* -} Due to Capital Improvements and Debt Accounting entries, includes Elimination of State Paid Debt from UO Books
**- Year-End Accounting - e.g. Allocate Pension Liability, Reclass Cash to Investments, Allocate Debt

Adjusted report presented as of 9/29/20. Minor adjustments to E&G, Designated Operations & Service Centers, Grant, and Internal Bank Funds. Major adjustments to Auxiliaries and Plant Funds to account for Hayward Field capital asset additions (highlighted in blue).

Figure 2. is the actual Fourth Quarterly report for the University of Oregon's financial records in 2019, highlighting the total revenues and expenditures for the university during this time, none of which was affected by the Covid-19 pandemic and response. Found on page 10.

FY20 Actuals Quarter 4 Report	All F	funds except Age	ncv	and Clearing														Page
		and the property		signated Ops														
		Education and		and Service						Restricted Gift								
		General		Center		Auxiliaries		Grant Funds		Funds		Other Funds		Plant Funds	ı	nternal Bank		Total
itate Appropriation	\$	79.520.551	Ś	1.170.784	Ś	396.550	Ś		Ś		Ś		Ś		Ś		Ś	81,141,90
Fuition and Fees	\$	425.005.337	Ś	2.343.829	Ś	40.263.479	Ś	-	Ś		Š		Š		Š	3.006,669	Ś	470,619,3
Gifts Grants & Contracts	Ś	136,496	Ś	5,403,198	Ś	296,177	Ś	137.021.446	Ś	98.025.211	Š		Ś	372.641.532	Š	-	Ś	613,524,0
CC Revenue	Ś	25.087.226	Ś	-	Ś	-	Ś	,	Ś	-	Š	-	Ś	-	Š		Ś	25,087,2
Federal Student Aid	Š		Ś		Ś		Ś	24,594,879	Ś		Š	-	Ś		Š		Ś	24,594,8
nterest and Investment	Š	7.124.366	Ś	12,776,445	Ś	101.704	Ś	1,651	Ś	2.343	Š	449,897	Ś	860.954	Ś	10.006.794	Ś	31,324,1
nternal Sales	Ś	2.084.941	Ś	52,165,528	Ś	23.088.903	Ś	40	Ś	6,000	Ś	-	Ś	-	Ś	35.840.165	Ś	113.185.5
ales & Services	Ś	4.005.521	Ś	11.025.310	\$	159,762,254	Ś	(3,620,318)	Ś	-	Ś		Ś	243.040	Ś		Ś	171,415,8
Other Revenues	Š	2.506.221	Ś	895,509	Ś	3,655,368	Ś	4-1	Ś		Š		\$	275.640	Ś		Ś	7,332,7
Transfers From Ore State Agencies	Š	-	Š		Ś	13,201	Ś	9,287,180	Ś		Ś		Ś	21,201,340	\$		Š	30,501,7
Total Revenue	\$	545,470,658	\$	85,780,602	\$	227,577,636	\$	167,338,953	\$	98,033,554	\$	449,897	\$	395,222,505	\$	48,853,628	\$	1,568,727,4
Total Personnel Services	\$	447,088,937	\$	43,017,463	\$	95,029,369	\$	67,638,403	\$	28,543,059	\$		\$	13,300	\$	298,873	\$	681,629,4
ervice & Supplies	\$	108.458.297	s	17.615.751	Ś	98.798.325	Ś	29.656.339	Ś	18.543.146	Ś	11.396	Ś	8.558.657	s	33.550.560	Ś	315,192,4
Aerchandise-Resale/Redistribution	\$	12.351	Ś	17.185.209	Ś	9.363.390	Ś	,,	Ś	-	Š		Ś	-	Ś		Ś	26,560,9
nternal Sales Reimbursements	Ś	(19.258,716)	Ś	(2,000)	Ś	(1,310,428)	Ś	(21,800)			Ś		Ś	(543,331)	Ś		Ś	(21,136,2
ndirect Costs	Ś	24,246	Ś	3,175,566	Ś		Ś	. ,,	Ś		Š		Ś	-	Š		Ś	35,810,7
Depreciation/Amortization Expense	Ś	-	s	4,251,402	Ś	32,869,763	Ś	-	Ś		Ś		Ś	33,221,350	Ś		Ś	70,342,5
Student Aid	Ś	5.515.265	Ś	2,784,161	Ś	2.183.558	Ś	42,807,766	Ś	33,789,032	Ś	2,082,044	Ś	-	Ś		Ś	89,161,8
Total General Expense	\$	94,751,443	\$	45,010,089	\$	149,410,826	\$	97,547,032	\$	52,332,178	\$	2,093,440	\$	41,236,676	\$	33,550,560	\$	515,932,2
Net Transfers Out/(In)	\$	7,007,520	\$	593,902	\$	1,216,522	\$	333,114	\$	732,048	\$	549,333	\$	(12,264,226)	\$	1,831,786	\$	
Total Expense	\$	548,847,900	\$	88,621,455	\$	245,656,717	\$	165,518,550	\$	81,607,284	\$	2,642,773	\$	28,985,750	\$	35,681,219	\$	1,197,561,6
Net before CapEx	\$	(3,377,242)	\$	(2,840,853)	\$	(18,079,081)	\$	1,820,404	\$	16,426,270	\$	(2,192,877)	\$	366,236,755	\$	13,172,409	\$	371,165,78
Beginning Fund Balance	\$	63,821,674	\$	59,940,817	\$	319,242,597	\$	(1,217,227)	\$	12,601,887	\$	7,754,280	\$	688,287,700	\$	36,993,215	\$	1,187,424,9
Capital Expenditures	\$	(3,721,532)	\$	(1,073,488)	\$	(661,453)	\$	(1,448,244)	\$	(1,876,342)	\$	-	\$	(452,136,088)	\$		\$	(460,917,1
Net (from above)	\$	(3,377,242)	\$	(2,840,853)	\$	(18,079,081)	\$	1,820,404	\$	16,426,270	\$	(2,192,877)	\$	366,236,755	\$	13,172,409	\$	371,165,7
Fund Additions/Deductions*	\$	(70,749)	\$	598,250	\$	293,340,326	\$	-	\$	(135,380)	\$		\$	168,461,602	\$		\$	462,194,0
	\$	56,652,151	\$	56,624,726	\$	593,842,389	\$	(845,068)	\$	27,016,434	\$	5,561,403	\$	770,849,969	\$	50,165,625	\$	1,559,867,6
Ending Fund Balance																		TBD
Ending Fund Balance Year-End Accounting Entries **		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD		
		TBD TBD		TBD TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD
Year-End Accounting Entries **																		
Year-End Accounting Entries ** Net Capital Assets		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD

Figure 3. is the actual Fourth Quarterly report for the University of Oregon's financial records in 2020, highlighting the total revenues and expenditures for the university during this time, all of which is affected by the Covid-19 pandemic and response. Found on page 11.

^{* -} Due to Capital Improvements and Debt Accounting entries, Includes Elimination of State Paid Debt from UO Books

** - Year-End Accounting - e.q. Allocate Pension Liability, Reclass Cash to Investments, Allocate Debt
Service Centers, Grant, and Internal Bank Funds. Major adjustments to Auxiliaries and Plant Funds to account for Hayward Field capital asset additions (highlighted in blue).

Enrollment		- 1	Residency				Majors	
Undergraduates	18,903		Oregon Resident		11,753	52.0%	This term, matriculated students a	
Graduates	3,712		Nonresidents		10,862	48.0%	degrees in 155 different majors. A	
TOTAL	22,615		Geographic Or	iain			Freshmen, 23.8% have not declare	
Full time: 20.643	Part time: 1.972		Geographic Of	giii			undergraduates, the most popula	
Continuing Education	Part time: 1,972	- 1	Alaska 48				Pre-Business Administration	8.1%
(included in total also) 347	- 1	Arizona 144				Psychology Psychology	7.3% 6.7%
	,	- 1	California 5,492		al, NE	264	Business Administration Human Physiology	6.7% 5.1%
Enrollment by S	chool or Colle	ge	Colorado 332		al, SE	77	Pre-Journalism	4.2%
Arts & Sciences	12.503	55.3%	Hawaii 197		al, NW	266		-112/0
Business Administration		15.1%	Idaho 89		al, SW	60	Degrees Conferred 20	110-2010
Design	1,665	7.4%	Illinois 195		tlantic	288	_	10-2019
Education	1,321	5.8%	Montana 45 Nevada 145		England Atlantic	185 475	Baccalaureate	4,828
Journalism	2,346	10.4%	New Mexico. 39		US	11	Masters	973
Law	456	2.0%	Oregon 11,153		countries		Doctoral Certificates	280 74
Music	499	2.2%	Texas 294	Other	countries	2,002	Certificates	/4
Interdisciplinary Studie		0.0%	Utah				"	
Unclassified or nonmate	ic. 397	1.8%	Washington 688				Course Enrollment by	Headcount
Sex		- 1	Wyoming 19				TOTAL	86,302
00%	Male Fer	nale	, , ,				Continuing Education	
Undergraduates		2 (54.0%)					(included in total)	469
		8 (53.8%)	International S	tude	nts		Undergraduate	72,886
		0 (53.9%)	Enrollment:		1.823	8.1%	Graduate	12,924
	0,415 (40.170) 12,20	0 (33.374)	Number of countries re	epresent			Community Education	492
Age		- 1	10 countries with great					
Median, undergraduate	s 20.4	- 1	China, Japan, Taiwan,			Arabia,	Course Enrollment by	Credit Hours
Median, graduates	27.5	- 1	Canada, India, Viet Na				TOTAL	313,354
Median, freshmen	18.7						Full-Time Equivalency*	22,034
Median, all	20.9	- 1	Entering Fresh	men l	Fall + Su	ımmer)	Continuing Education	
Estable Identifica			ziiteinig i resiii				(included in total)	3,434
Ethnic Identity				Fall	Summer	Total	000-399 Courses	233,128
Asian	1,440		Male	1,922	34	1,956	400-499 Courses	36,958
African-American	550		Female	2,576	28	2,604	500+ Courses	43,268
Hispanic	2,880		TOTAL	4,498	62	4,560	APTE and and address	
Native American	155						*FTE calculation: Credit taken by undergraduate stu	dents is divided
Native Hawaii/Pac Isl			High School mean grad			3.65	by 15. Credit taken by masters, po	
Multi-racial	1,637	29.9%	SAT mean score (new r	ead/writ	te + math):	1,199	graduate, and nonadmitted gradu	
Ethnic minorities	6,759	29.9%	Previous Atten	d	_		divided by 12; credit taken by doc	
White, non-Hispanic	13,575	- 1	Previous Atten	aance	2		divided by 9; credit taken by law s	
International	1,823		Maur			6.800	divided by 14.	
Unknown	458	- 1	New Continuing or returnin	a		15,815		
		- 1	continuing or returnin	6		13,813		
							-	

Figure 4. shows the University of Oregon enrollment statistics of the fall term of 2019 at a glance, one of the most helpful measures in this paper in comparing the enrollment statistics from before the pandemic and its resulting policies took place. Found on page 13.

Enrollment		Residency			Majors	
Undergraduates	18,054	Oregon Resident		52.4%	This term, matriculated students	
Graduates	3,746	Nonresidents	10,366	47.6%	degrees in 162 different majors.	
TOTAL	21,800	Geographic Or	iain		Freshmen, 23.6% have not decla	
		Geographic Of	igiri		undergraduates, the most popul	lar majors are:
Full time: 19,716	Part time: 2,084	Alaska 52			Business Administration	8.8%
Continuing Education		Arizona 171			Psychology	7.7%
(included in total also)	120	California 5,335	Central, NE	269	Pre-Business Administration	6.9%
Enrollment by Scho	ool or College	Colorado 362	Central, NE	84	Human Physiology	5.2%
,		Hawaii 194	Central, NW	283	Biology	4.0%
Arts & Sciences	11,755 53.9%	Idaho 85	Central, SW	58		
Business Administration	3,505 16.1%	Illinois 193	Mid-Atlantic	333	Degrees Conferred 20:	19-2020
Design	1,648 7.6%	Montana 41	New England	190		
Education	1,327 6.1%	Nevada 146	South Atlantic	493	Baccalaureate	4,550
Journalism	2,304 10.6%	New Mexico 43	Other US	7	Masters	947
Law	501 2.3%				Doctoral	338
Music	484 2.2%	Oregon 10,832	Other countries	1,462	Certificates	100
Interdisciplinary Studies	2 0.0%					
Unclassified or nonmatric.	274 1.3%	Utah			Course Enrollment by	Headcount
Sex					TOTAL	81.447
		Wyoming 22			Continuing Education	01,447
Mal					(included in total)	226
Undergraduates 8,077 (4		International S	tudonte		Undergraduate	68.027
Graduates 1,732 (4					Conducts.	13.030
TOTAL 9,809 (4	15.0%) 11,991 (55.0%)	Enrollment:		1,280 5.9%	Community Education	390
100		Number of countries		95	Community Education	050
Age		10 countries with gre			C	C
Median, undergraduates	20.4	China, Republic of Kor		bia, Canada,	Course Enrollment by	Credit Hours
Median, graduates	27.3	India, Japan, Viet Nar	n, Iran, Thailand		TOTAL	300,693
Median, freshmen	18.8		/- !!	_	Full-Time Equivalency*	21,185
Median, all	20.9	Entering Fresh	men (Fall + :	Summer	Continuing Education	
		_		nmer Total	(to alcoded to be to 1)	892
Ethnic Identity					000 300 Causas	219.673
Asian	1,428	Male	1,660	4 1,664	400 400 Courses	36,656
African-American	545	Female	2,266	10 2,276	500+ Courses	44.364
Hispanic	2.924	TOTAL	3,926	14 3,940		
Native American	136				*FTE calculation:	
Native Hawaii/Pac Island	102	High School mean gr				tudents is divided
Multi-racial	1.644	SAT mean score (new	read/write + math	1,188	by 15. Credit taken by masters, p	oost-baccalaureate
Ethnic minorities	6.779 31.1%	1			graduate, and nonadmitted grad	fuate students is
Military and Military 11		Previous Atten	dance		divided by 12; credit taken by do	
White, non-Hispanic	13,246	ct.ous Atten	a a i i c		divided by 9; credit taken by law	students is
International	1,280	New		6.094	divided by 14.	
Unknown	495	Continuing or returni	ng	15.706		
		- Continuing of letuini	6	23,700	•	

Figure 5. shows the University of Oregon enrollment statistics of the fall term of 2020 at a glance, one of the most helpful measures in this paper in comparing the enrollment statistics from during the pandemic and the results of policies that took place during this time. Found on page 13.

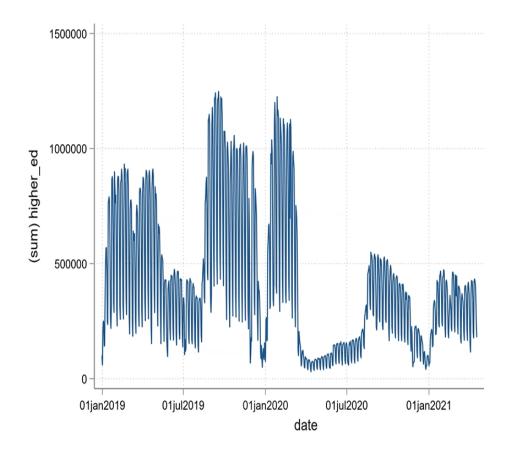
Chapter 1: Introduction: The World's Most Recent Pandemic

In the fall of 2019, there were rumors beginning that a deadly virus was about to lay waste to the world. As is now the norm with this generation of internet trolls it was almost immediately made into a meme and circulated much of social media as other rumors and conspiracy theories had before. During the academic winter term of the year 2020 however, the virus did emerge as a true threat to everyone's way of life, and a pandemic titled coronavirus disease 2019, eventually shortened to Covid-19, struck the world. The total resulting economic impact alone of this virus may be incalculable for years to come, as it affected almost every conceivable market of every nation, but the short-term impacts on the economy of the world and of each individual nation is being well-researched. The year of 2020 turned from what was going to be, for many, the bright start to a new decade, into a nightmare. The Coronavirus was present the whole time, infecting greater and greater rates of populations around the world, spreading unlike any other disease in modern times.

The United States had one of the worst responses to the pandemic of all nations, especially as it concerns first world countries. This was partly due to the differences in administrative responses across each individual state, as the western and eastern coastal states took extremely defensive actions, including shutting down all non-essential businesses, limiting public activity, and pushing for mask mandates, quarantines, and curfews. The mid-western and southern states were somewhat more liberal with their policies, reacting too late to the spread of the virus to slow it down meaningfully. Nationwide shortages of supplies such as toilet paper plagued the country even further,

and the federal government appeared to also have a late response to such issues, much less the impact of the virus on the American people. Early on, President Trump did little to encourage the American people and further damaged the nation's reputation by consistently belittling other countries, medical professionals, scientists, and by referring to Covid-19 as the "Chinese Flu" or "Kung Flu". Eventually, he was able to begin operation warp speed, which greatly helped advance the research on capable vaccines. These vaccines were put into effect late into his presidency, after he had already lost the election to Joseph R. Biden. The election had weighed heavily on people's minds during the year, along with various civil rights protests, government protests, anti-mask protests and more. Much of this was directly or indirectly caused by Covid-19 as well. Thankfully, an ever-increasing number of people have begun to get the vaccines, with Pfizer and Moderna holding over 90% effectiveness rates following two weeks after the second vaccination.

In terms of higher education, virtually none were exempt from the pandemic. Universities across the world were hard hit, but most especially in the United States were they truly function as a business. Several dozen universities were forced to close permanently, although there is some debate as to how well they were truly doing before the pandemic. Almost every single university in the US closed its doors in favor of an online orientation for the spring term of 2020, as shown in figure 1, with little success in returning in person in the fall of 2020, winter of 2021, or spring of 2021. Again, much of this was differentiated regionally. The total cost of the pandemic on universities is virtually incalculable, especially when its effects are still being felt.



The University of Oregon, which is a public flagship research university centered in Eugene, Oregon, is one such college affected by Covid-19 and policy responses. During the first 18 months of living with Covid-19, a variety of administrative decisions were made, and are continuing to be made, in order to help combat the spread of the virus. The UO has taken the welfare of its student population very seriously, despite the possible increases in future economic fallout. Such examples of this include switching to an online based format for the majority of classes, although it is designated as a "remote" environment, both to differentiate itself from other schools during the time and to help reduce an increase in student fees for online courses. It also restricted on-campus resources and began offering a variety of new, online-based

resources such as academic advising and public welfare forums. This has come at no small cost to the University, who, to this day, maintains a stance on prioritizing students and staff. As of today, all three vaccine types are being offered to the public at the UO.

Chapter 2: Resources

Literature Review

This was one of the most difficult sections of this project as the literature for the topic primarily alternates between non-existent and or unreliable material. At the time this paper is submitted Covid-19 will only have had effects on the world for roughly 18 months, resulting in a lack of truly substantive papers and studies upon it. At this time, this is one of the first proper research papers to attempt to analyze the effects Covid-19 and the resulting policy responses upon the economies of universities. The literature used for this project mainly stems from articles and research forecasting and hypothesizing the economic impacts upon universities and economies overall. Doubly unfortunately, many of the works originally researched have already become too outdated for use, due to the creation and implementation of Covid-19 vaccines, as well as the incorrect assumptions that were hypothesized early on. Lastly, as the UO was in the middle of a two year business cycle and a 5-year enrollment cycle, the overall data for the pandemic, showing if it is just an outlier, will not be available until 2023, and nothing truly statistically significant may be available until 5 years past that.

The main literature used for this project stems from several online articles published by various university research centers and university professors. *Higher Education Responses to Coronavirus (COVID-19)* by senior research analyst Andrew Smalley is the most recent article published in this paper, by the National Conference of

State Legislatures on March 22^{nd1}. This article summarizes the main effects of Coronavirus across the United States with accurate depictions and data representation. It also contains the major policy responses by the federal government to combat the economic fallout of universities, including relief packages and new fiscal policies. This work does little to estimate or forecast the ongoing impacts of Covid-19 on US universities but is an important tool for summating the most recent data from the last 18 months.

The Association to Advance Collegiate Schools of Business, known as AACSB, also was, on the other hand, the most helpful citation in summarizing the short term effects of Covid-19 on American Universities, although it had little substance. The article, *Economic Impacts of COVID-19: B-School Outlooks and Opportunities* by collegiate dean Mickey Hepner helped relate the economic impacts on American Higher Education through the lens of business schools and how they may fare in the future².

Other notable works in this project come from various online resources, including Forbes, Chronicles of Higher Education, and Inside Higher Ed. The literature from Forbes was mainly used to estimate the cost and revenue generated by sporting events, while the articles from Chronicles of Higher Education and Inside Higher Ed

¹ Smalley, Andrew. "Higher Education Responses to Coronavirus (Covid-19)," March 22, 2021. https://www.ncsl.org/research/education/higher-education-responses-to-coronavirus-covid-19.aspx.

² Hepner, Mickey. "Economic Impacts of COVID-19: B-School Outlooks and Opportunities." AACSB. AACBS, October 27, 2020. https://www.aacsb.edu/insights/2020/october/economic-impacts-of-covid-19-b-school-outlooks-and-opportunities.

were mainly to track large shifts in student enrollment over the last 18 months and the projection for future enrollment.

Lastly, the UO itself has published some studies and findings of the pandemic, as well as being the main source for all information regarding its policy responses to the virus, primarily made through email to students and accessible online in various formats.

Data

While the above articles helped summarize and estimate future economic activity, data was still a much needed ingredient in order to review the fiscal activities of universities over the last eighteen months. The main site that data was mined from for this project comes from the University of Oregon's own Office of the Registrar. The datasets of "Facts at a Glance", figures 2 and 3, were used primarily to find enrollment statistics. Meanwhile, the fall quarterly reports, figures 4 and 5, were used to show expenditure and revenue data³. An additional dataset used as reference but not included was the UO's enrollment figures ranging from the fiscal year of 1994 to the fiscal year of 2020. These were vital in analyzing the changes in enrollment and sources of income and expenditures for the University of Oregon before Covid-19 and the resulting policy implications. Currently, the UO is in a two-year business cycle and a 5 year-enrollment

³ Roweb. "Office of the Registrar." Statistics & Historical Data, September 19, 2014. https://registrar.uoregon.edu/statistics.

cycle, so the full data from the last few years and for the effects of Covid-19 are not currently available.

Another main data tool used in this paper originates from the National Student Clearinghouse® Research CenterTM, which has been gathering and publishing a wealth of higher education data in the US for the last 28 years. These datasets were important in comparing the impact Covid-19 had upon the University of Oregon's finances to the general trend of American Universities following policy changes both local and federal. One such dataset that proved most useful in comparing the UO to the average university in the US was the table labeled, "Estimated First-Time Postsecondary Student Enrollment by Institutional Sector: 2018 to 2020" found in the dataset titled "Term Enrollment Estimates Fall 2020"4. This dataset highlighted the stark contrasts between the last three years of fall term enrollment at universities across the United States of America, measuring ages of new students against rates of enrollment. This was particularly useful as the fall of 2020 was planned to be the first fully-online term of a new academic year for nearly all institutions of secondary education, meaning enrollment data would be likely be more accurate than in the spring of 2020 where universities had more mixed responses. This term was forced to be online due to Covid-19 and the resulting administrative policies.

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⁴ "Working With Our Data." National Student Clearinghouse Research Center, April 19, 2021. https://nscresearchcenter.org/workingwithourdata/.

An additional data set that was used in this paper in order to properly estimate the number of closures comes from the company Safegraph, who have published a wealth of Covid-19 related datasets for free. The one used in this paper is the foot traffic data set from the last 18 months on American University foot traffic. This data is invaluable in estimating the number of short-term closures of universities and enforcing the knowledge that universities were primarily fully closed during this time. The data is somewhat skewed however due to universities with hospitals that experienced only a small decrease in foot traffic, the fact that the dataset only contains information on the 3000 largest higher education schools, and the fact that the data itself is difficult to process⁵.

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⁵ "SafeGraph Data for Academics." SafeGraph. Accessed May 22, 2021. https://www.safegraph.com/academics.

Chapter 3: Revenues of Higher Education

Enrollment

The single highest source of funding for most institutions of higher or secondary education comes from students. Tuition costs, associated fees, housing costs, dining costs, revenue from engagement in events, and more all originate from students. These costs at the average public university run upwards of hundreds of millions of dollars, constituting nearly half of the total revenue for schools.

UNIVERSITY OF OREG	ON			_		_		_										Page 2			
FY19 Actuals Quarter 4 Report	All Funds exce	pt Age	ncy	and Clearing														r age 2			
			De	signated Ops																	
	Education	and		and Service					R	estricted Gift											
	General			Center		Auxiliaries	(Grant Funds		Funds	(Other Funds		Plant Funds	Int	ternal Bank		Total	Reporting Adj.		Total
State Appropriation	\$ 72,71	2,010	\$	1,170,784	\$	452,924	\$	61,762	\$		\$		\$		\$		\$	74,397,481	\$ (1)		
Tuition and Fees	\$ 418,45	4,072	\$	171,673	\$	41,939,915	\$		\$	100	\$		\$		\$	3,117,759	\$	463,683,518			
Gifts Grants & Contracts	\$ 32	3,334	\$	6,120,403	\$		\$	126,069,217	\$	81,903,035	\$		\$	61,472,740	\$		\$	275,888,729			
ICC Revenue	\$ 24,61	9,477	\$		\$		\$		\$		\$		\$		\$		\$	24,619,477			
Federal Student Aid	\$		\$		\$		\$	25,683,829	\$		\$		\$		\$		\$	25,683,829			
Interest and Investment	\$ 7,25	9,112	\$	13,927,936	\$	84,592	\$	66	\$	83,985	\$	538,317	\$	649,020	\$	11,438,358	\$	33,981,386			
Internal Sales	\$ 2,82	1,527	\$	50,383,105	\$	24,658,015	\$	65	\$	200	\$		\$		\$	35,409,252	\$	113,272,164			
Sales & Services	\$ 4,16	8,451	\$	12,403,786	\$:	169,938,494	\$	106,537	\$		\$		\$		\$		\$	186,617,269			
Other Revenues	\$ 2,19	1,003	\$	2,676,513	\$	4,649,001	\$	12,582	\$	17,914	\$		\$	562,247	\$		\$	10,109,261			
Transfers From Ore State Agencies	\$		\$		\$		\$		\$		\$		\$		\$		\$	86,099,524			
Total Revenue	\$ 532,54	8,986	\$	86,854,200	\$ 7	241,722,942	\$	162,406,023	\$	82,005,234	\$	538,317	\$	138,311,566	\$	49,965,370	\$	1,294,352,638			
annual an	\$ 257,82	5,362	\$	23,603,943	\$	59,405,653	\$	41,606,255	\$	17,876,156	\$		\$	20,000	\$	167,185	\$	400,494,610			
OPE Health Benefits		1,905	\$	236,465	\$	152,012	\$	1,690,602	\$	255,643	\$		\$		\$		\$	25,346,628			
OPE Retirement	\$		\$		\$		\$		\$		\$		\$		\$		\$				
OPE Other	\$ 7,17	5,151	\$	75,534	\$	38,486	\$	1,041,543	\$	79,741	\$		\$		\$		\$	8,410,454			
OPE GTF Remissions	\$ 136,92		\$	17,431,439		32,187,193	\$		\$		\$		\$		\$		\$	217,903,178			
Total Personnel Services	\$ 424,93	6,751	\$	41,347,381	\$	91,783,343	\$	65,094,225	\$	28,711,016	\$		\$	12,946	\$	269,208	\$	652,154,869			
Service & Supplies	\$ 114,23		\$	21,259,779		106,487,401	\$	30,162,583	\$		\$	4-1		-,,		30,474,379	\$	332,013,075			
	-	4,171	\$	18,970,194		13,018,228	\$		\$	222	\$		\$		\$		\$	31,992,816			
Internal Sales Reimbursements			\$	(3,000)		(1,521,269)		(26,463)	\$		\$		\$	4-1-0-1	\$		\$	(22,604,815)			
Indirect Costs		1,589	\$	2,955,133			\$		\$		\$	298,489	\$		\$		\$	35,412,946			
	\$		\$	4,288,036			\$		\$		\$		\$		\$		\$	65,553,212			
Student Aid			\$	347,554			\$		\$				\$		\$		\$	98,097,685			
Total General Expense	\$ 102,02	3,894	\$	47,817,695	\$:	162,748,373	\$	95,480,159	\$	47,654,818	\$	19,062,819	\$	35,202,783	\$	30,474,379	\$	540,464,919			
Net Transfers Out/(In)	\$ 11,82	9,666	Ş	(2,337,222)	\$	(1,745,741)	Ş	(2,953)	ş	5,578,303	Ş		\$	(15,460,031)	\$	2,137,979	\$				
Total Expense								160,571,431				19,062,819					-	1,192,619,788			
Net before CapEx	\$ (6,24	1,324)	\$	26,346	\$	(11,063,033)	\$	1,834,593	\$	61,098	\$	(18,524,502)	\$	118,555,868	\$	17,083,805	\$	101,732,850			
Beginning Fund Balance			\$			323,394,855	\$				-	25,980,293	5			19,911,269		1,087,116,366			
Capital Expenditures		5,820)		(506,147)		(43,330)	\$			(1,901,353)			\$	(147,156,559)			\$	(156,039,713)			
Net (from above)		1,324)		26,346		(11,063,033)	\$	1,834,593	\$	61,098	-	(18,524,502)				17,083,805	\$	101,732,850			
Fund Additions/Deductions*	•	-	\$	1,934,843	_	.,,	\$		\$		\$		\$		\$		\$		\$ (246,136,516)		
Ending Fund Balance	\$ 65,74	9,587	\$	60,071,414	Ş :	320,245,087	\$	(981,215)	\$	12,691,981	\$	7,455,791	Ş	688,287,700	\$	36,995,073	Ş	1,190,515,418	\$ (246,136,516)	5 5	944,378,902
Year-End Accounting Entries **	\$ (1,92	7,913)	\$	(130,597)	\$	(1,002,489)	\$	(236,012)	\$	(90,094)	\$	298,489	\$		\$	(1,858)	\$	(3,090,475)		5	(3,090,475)
****													ı			in nea ne-					
Net Capital Assets			\$	26,878,531		286,085,007	\$		\$		5		ş			(2,364,856)	5	878,571,567			878,571,567
Other Restricted Net Assets			\$		\$		\$	(1,217,227)		12,601,887	\$		5		\$		\$	118,281,754			
Unrestricted Net Assets		1,674	_	33,062,286	_	33,157,590	\$		\$		\$		\$	21,172,000	_		\$		\$ (245,463,087) \$	_	(54,891,465)
Total Net Assets***	\$ 63,82	1,674	\$	59,940,817	\$:	319,242,597	\$	(1,217,227)	\$	12,601,887	\$	7,754,280	\$	688,287,700	\$	36,993,215	\$	1,187,424,943	\$ (246,136,516) \$	5 5	941,288,428

^{* -} Due to Capital Improvements and Debt Accounting entries, Includes Elimination of State Paid Debt from UO Books
**- Year-End Accounting - e.g. Allocate Pension Liability, Reclass Cash to Investments, Allocate Debt

Adjusted report presented as of 9/29/20. Minor adjustments to E&G, Designated Operations & Service Centers, Grant, and Internal Bank Funds. Major adjustments to Auxiliaries and Plant Funds to account for Hayward Field capital asset additions (highlighted in blue).

As shown above in Figure 2, the UO had revenues from tuition in 2020 that were 10% greater than the previous year. According to the following figure 3, at the UO, the fiscal year of 2020 resulted in the generation of \$470,619,314 from tuition and fees alone, constituting over a third of the school's total revenue. This amount was on par from recent years dating back to 2012 but experienced a nearly 10% decrease in the rate of the University's total revenues from tuition and fees from the previous year of 2019, which had followed an increase in the similar financial trend in years dating back to 1994⁶.

UNIVERSITY OF OREG				and Clearing					ı									Page
Y20 Actuals Quarter 4 Report	All I	funds except Age																
				signated Ops														
		Education and General	•	and Service Center		Auxiliaries		Grant Funds	•	Restricted Gift Funds		Other Funds		Plant Funds		nternal Bank		Total
Anto Announciation	•				,				,		_		,	Plant Funds	_		÷	81.141.96
tate Appropriation	\$	79,520,551	\$	-,,	\$	396,550	\$	54,075	\$		\$		\$	-	\$		\$	
uition and Fees	\$,,	\$	2,343,829	\$,,	\$	-	\$		\$		\$	-	\$	-,,	\$	470,619,3
Sifts Grants & Contracts	\$	136,496	\$	5,403,198		296,177		137,021,446	\$	98,025,211	\$		Τ.	372,641,532	\$	-	\$	613,524,0
CC Revenue	\$	25,087,226	\$	-	\$	-	\$		\$	-	\$		\$	-	\$	-	\$	25,087,2
Federal Student Aid	\$	-	\$	-	\$	-	\$	24,594,879	\$	-	\$		\$		ş		\$	24,594,8
nterest and Investment	\$	7,124,366	\$	12,776,445	\$,	\$	1,651	•	2,343	\$,	\$	860,954	\$	10,006,794	•	31,324,1
nternal Sales	\$	2,084,941	\$	52,165,528	\$		\$		\$	6,000	\$		\$	-	\$	35,840,165	\$	113,185,5
Sales & Services	\$	4,005,521	\$	11,025,310		159,762,254	\$	(3,620,318)		-	\$		\$	- 10,010	\$	-	\$	171,415,8
Other Revenues	\$	2,506,221	\$	895,509	\$	3,655,368	\$	-	\$	-	\$		\$	275,640	\$	-	\$	7,332,7
Transfers From Ore State Agencies	\$	-	\$	-	\$	13,201	\$., ,	\$	-	\$		\$	-,-,-	\$		\$	30,501,7
Total Revenue	\$	545,470,658	\$	85,780,602	\$	227,577,636	\$	167,338,953	\$	98,033,554	\$	449,897	\$	395,222,505	\$	48,853,628	\$	1,568,727,4
Total Personnel Services	\$	447,088,937	\$	43,017,463	\$	95,029,369	\$	67,638,403	\$	28,543,059	\$		\$	13,300	\$	298,873	\$	681,629,4
ervice & Supplies	\$	108.458.297	Ś	17.615.751	Ś	98.798.325	Ś	29.656.339	Ś	18.543.146	Ś	11.396	\$	8.558.657	s	33.550.560	Ś	315,192,4
Merchandise-Resale/Redistribution	\$	12.351	Ś	17,185,209	Ś	9,363,390	Ś	-	\$	-	Ś	-	\$	-	Ś	-	Ś	26,560,9
nternal Sales Reimbursements	Š	(19,258,716)		(2,000)	Š	(1,310,428)		(21,800)			Š		Ś	(543,331)	Š		Š	(21,136,2
ndirect Costs	Š	24.246	Š	3,175,566	Ś		Ś	. , ,	Ś		Š	_	Ś	(=,,	Š	_	Ś	35,810,7
Depreciation/Amortization Expense	Š		S	4.251.402	Ś	32.869.763			Š		Š		Ś	33.221.350	Š	_	Š	70,342,5
Student Aid	Š	5.515.265	Š	2,784,161	Š	2.183.558	Š	42.807.766	Š	33.789.032	Š		Š	-	Š		Š	89.161.8
Total General Expense	\$	94,751,443	\$	45,010,089	_	149,410,826	\$		\$	52,332,178	\$	-100-100	\$	41,236,676	\$	33,550,560	\$	515,932,2
Net Transfers Out/(In)	\$	7,007,520	\$	593,902	\$	1,216,522	\$	333,114	\$	732,048	\$	549,333	\$	(12,264,226)	\$	1,831,786	\$	
Total Expense		548.847.900	s	88.621.455	¢	245.656.717	Ś	165.518.550	s	81.607.284	Ś	2.642.773	ė	28.985.750	Ś	35.681.219	s	1,197,561,6
Net before CapEx	_	(3,377,242)	_	(2,840,853)	_		_		\$	16,426,270	\$	(2,192,877)	<u> </u>		\$		\$	371,165,7
B. d.		63 834 6T1		50.040.0:-		240 242 557	,	(4 242 255)		42 504 5		7.754.705				20022		
Beginning Fund Balance		63,821,674	\$	59,940,817		319,242,597	\$	(1,217,227)		12,601,887	\$.,,	\$,,	\$	36,993,215	\$	1,187,424,9
Capital Expenditures		(3,721,532)		(1,073,488)	\$	(661,453)		(1,448,244)		(1,876,342)	\$		\$	(452,136,088)	\$		\$	(460,917,1
Net (from above)		(3,377,242)	_	(2,840,853)	_	(18,079,081)		1,820,404		16,426,270	ş	(2,192,877)	•		\$	13,172,409	\$	371,165,7
Fund Additions/Deductions*	_	(70,749)	_	598,250	_	293,340,326	_	-	\$	(135,380)	_		\$	168,461,602	_	-	\$	462,194,0
Ending Fund Balance	\$	56,652,151	\$	56,624,726	\$	593,842,389	\$	(845,068)	\$	27,016,434	\$	5,561,403	\$	770,849,969	\$	50,165,625	\$	1,559,867,6
Year-End Accounting Entries **		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD
Net Capital Assets		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD
Other Restricted Net Assets		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD
Unrestricted Net Assets		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD		TBD

^{* -} Due to Capital Improvements and Debt Accounting entries, Includes Elimination of State Paid Debt from UO Books

^{** -} Year-End Accounting - e.q. Allocate Pension Liability, Reclass Cash to Investments, Allocate Debt
Adjusted report presented as of 9/29/20. Minor adjustments to E&G, Designated Operations &
Service Centers, Grant, and Internal Bank Funds. Major adjustments to Auxillaries and Plant Funds
to account for Hayward Field capital asset additions (highlighted in blue).

⁶ Business Affairs." Financial Reports | Business Affairs. Accessed March 29, 2021. https://ba.uoregon.edu/finance-and-accounting/financial-reports.

This change comes from the decline in UO enrollment between the fall of 2019 shown in figure 3 below, which had 22,615 part and full-time students, and the fall of 2020, shown in figure 5 below, which had 21,800 part and full-time students. Of these 815 enrollees, 543 were international students, a substantial 30% decline from the university's international student enrollment in 2019. This huge loss of revenue, as each individual international student pays, on average \$55,656 to the school just for tuition, fees, and housing. This differs greatly from the average in-state costs of attending, which run at an average of \$33,000⁷. The main reason international enrollment seemed to decrease was due to the policies made by the administrations of the University of Oregon, the US, and the students' own home countries. Many students were trapped in Eugene Spring term of 2020 and wished to not experience this again. Some could not return to classes following Spring break due to travel restrictions. Others dropped out due to the fully online presence the academic year of 2021 was forecasted to have, making the act of attending an international school in person seemingly pointless. This impact was even stronger at other universities, with decreases up to 43% for incoming international students. As a sort of blessing in disguise, the UO had already been experiencing such decreases before, likely due to a combination of a 5% planned tuition increase at the university and the Trump administration's foreign and immigration policy. Thus, the overall effect on the university due to the sharp decline in international student enrollment may have been decreased.

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⁷ "Admissions." Cost of Attendance. Accessed May 11, 2021. https://admissions.uoregon.edu/international/cost.

4.2%

Enroi	lment

Undergraduates	18,903
Graduates	3,712
TOTAL	22,615

Full time: 20.643 Part time: 1,972 Continuing Education (included in total also)

Enrollment by School or College

Arts & Sciences	12,503	55.3%
Business Administration	3,417	15.1%
Design	1,665	7.4%
Education	1,321	5.8%
Journalism	2,346	10.4%
Law	456	2.0%
Music	499	2.2%
Interdisciplinary Studies	11	0.0%
Unclassified or nonmatric.	397	1.8%

Sex

	Male	Female
Undergraduates	8,701 (46.0%)	10,202 (54.0%)
Graduates	1,714 (46.2%)	1,998 (53.8%)
TOTAL	10,415 (46.1%)	12,200 (53.9%)

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Median, undergraduates	20.4
Median, graduates	27.5
Median, freshmen	18.7
Median, all	20.9

Ethnic Identity

Asian	1,440	
African-American	550	
Hispanic	2,880	
Native American	155	
Native Hawaii/Pac Island	97	
Multi-racial	1,637	
Ethnic minorities	6,759	29.9%
White, non-Hispanic	13,575	
International	1,823	
Unknown	458	

Residency

Oregon Resident Nonresidents 11,753 52.0% 10,862 48.0%

Geographic Origin

Alaska	48		
Arizona	144		
California	5,492	Central, NE	264
Colorado	332	Central, SE	77
Hawaii	197	Central, NW	266
Idaho	89	Central, SW	60
Illinois	195	Mid-Atlantic	288
Montana	45	New England	185
Nevada	145	South Atlantic	475
New Mexico	39	Other US	11
Oregon	11,153	Other countries	2,002
Texas	294		
Utah	107		
Washington	688		
Wyoming	19		

International Students

Enrollment:	1,823	8.1%
Number of countries represented:	100	
10 countries with greatest enrollment	tt	
China, Japan, Taiwan, Republic of Korea	, Saudi Ar	abia,
Canada, India, Viet Nam, Iran, Thailand		

Entering Freshmen (Fall + Summer)

	Fall	Summer	Total	
Male	1,922	34	1,956	
Female	2,576	28	2,604	
TOTAL	4,498	62	4,560	
High School mes SAT mean score			3.65 1,199	

Previous Attendance

New	6,800
Continuing or returning	15,815

Majors

Pre-Journalism

This term, matriculated students are pursuing degrees in 155 different majors. Among Freshmen, 23.8% have not declared a major. For undergraduates, the most popular majors are: Pre-Business Administration 8.1% Psychology Business Administration Human Physiology 7.3% 6.7% 5.1%

Degrees Conferred 2018-2019

Baccalaureate			4,828
Masters			973
Doctoral			280
Certificates			74

Course Enrollment by Headcount

TOTAL	86,302
Continuing Education	
(included in total)	469
Undergraduate	72,886
Graduate	12,924
Community Education	492

Course Enrollment by Credit Hours

TOTAL	313,354
Full-Time Equivalency*	22,034
Continuing Education	
(included in total)	3,434
000-399 Courses	233,128
400-499 Courses	36,958
500+ Courses	43.268

*FTE calculation: Credit taken by undergraduate students is divided by 15. Credit taken by masters, post-baccalaureate graduate, and nonadmitted graduate students is divided by 12; credit taken by doctoral students is divided by 9; credit taken by law students is divided by 14.

Facts at a Glance Fall Term 2020, Fourth Week

University of Oregon

Enrollment

Graduates TOTAL	3,746 21,800	
Full time: 19,716 Continuing Education	Part time:	2,084
(included in total also)		120

Enrollment by School or College

Arts & Sciences	11,755	53.9%
Business Administration	3,505	16.1%
Design	1,648	7.6%
Education	1,327	6.1%
Journalism	2,304	10.6%
Law	501	2.3%
Music	484	2.2%
Interdisciplinary Studies	2	0.0%
Unclassified or nonmatric.	274	1.3%

Sex

	Male		Fem	ale
Undergraduates	8,077	(44.7%)	9,977	(55.3%)
Graduates	1,732	(46.2%)	2,014	(53.8%)
TOTAL	9,809	(45.0%)	11,991	(55.0%)

Age

20.4
27.3
18.8
20.9

Εt

thnic Identity		
Asian	1,428	
African-American	545	
Hispanic	2,924	
Native American	136	
Native Hawaii/Pac Island	102	
Multi-racial	1,644	
Ethnic minorities	6,779	31.19
White, non-Hispanic	13,246	
International	1,280	
Unknown	495	

Residency

Oregon Resident Nonresidents 11,434 52.4% 10,366 47.6%

Geographic Origin

Alaska	52		
Arizona	171		
California	5,335	Central, NE	269
Colorado	362	Central, SE	84
Hawaii	194	Central, NW	283
Idaho	85	Central, SW	58
Illinois	193	Mid-Atlantic	333
Montana	41	New England	190
Nevada	146	South Atlantic	493
New Mexico	43	Other US	7
Oregon	10,832	Other countries	1,462
Texas	322		
Utah	119		
Washington	704		
Wyoming	22		

International Students

E	nrollment:	1,280	5.9%
1	lumber of countries represented:	95	
1	O countries with greatest enrollment		
	China, Republic of Korea, Taiwan, Saudi Ar	abia, Car	nada,
	India, Japan, Viet Nam, Iran, Thailand		

Entering Freshmen (Fall + Summer)

Male	Fall 1,660	Summer 4	Total 1.664
Female	2,266	10	2.276
		14	3.940
TOTAL	3,926		3,940
High School m	ean grade point a	average:	3.68
CAT	e (new read/writ	and the same of th	1.188

Previous Attendance

New	6,094
Continuing or returning	15,706

Majors

This term, matriculated students are pursuing degrees in 162 different majors. Among Freshmen, 23.6% have not declared a major. For undergraduates, the most popular majors are:

Business Administration	8.8%
Psychology	7.7%
Pre-Business Administration	6.9%
Human Physiology	5.2%
Biology	4.0%

Degrees Conferred 2019-2020

Baccalaureate	4,550
Masters	947
Doctoral	338
Certificates	100

Course Enrollment by Headcount

Continuing Education	
(included in total)	226
Undergraduate	68,027
Graduate	13,030
Community Education	390

Course Enrollment by Credit Hours

TOTAL	300,693
Full-Time Equivalency*	21,185
Continuing Education	
(included in total)	892
000-399 Courses	219,673
400-499 Courses	36,656
500+ Courses	44,364

*FTE calculation:

TE calculation: Credit taken by undergraduate students is divided by 15. Credit taken by masters, post-baccalaureate graduate, and nonadmitted graduate students is divided by 12; credit taken by doctoral students is divided by 9; credit taken by law students is divided by 14.

Two key points forecasting next year's enrollment can now be made here. While there is no substantial data on the effects of universities from the last worldwide pandemic a century ago, this pandemic has also caused a unique type of recession economically. In 2008, the last major recession in the US, enrollment greatly increased the following year, likely due to a number of incentives drawing people away from work⁸. This effect is forecasted to occur again in the fall of 2021, as students are again drawn to studies as opposed to work. Enrollment projections that are currently published across the nation are setting new records and showing increases even greater than followed the 2008 recession⁹. Graduation rates during this time have been increasing as well however, unlike in the previous recession. Thus, the net increase in enrollment seems to be oriented solely on the incoming freshmen. This is fitting due to the increase in graduation rates in high schools during this time as well however, a trend that seems likely to continue for a few years as Covid-19 affected high school students continue to graduate¹⁰.

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⁸ Enrollment numbers grew during recession but graduation rates slipped. Accessed February 15, 2021. https://www.insidehighered.com/news/2014/11/18/enrollment-numbers-grew-during-recession

Olleges continue losing undergraduate enrollment this spring, even as graduate enrollment climbs. Accessed May 22, 2021. https://www.insidehighered.com/news/2021/03/11/colleges-continue-losing-undergraduate-enrollment-spring-even-graduate-enrollment.

 $^{^{\}rm 10}$. Sundberg/ESTO, David. "Students." The Chronicle of Higher Education. The Chronicle of Higher Education, September 22, 2020.

 $https://www.chronicle.com/article/students?bc_nonce=5yf3lzqnplgifty56yfki\&cid=reg_wall_signup.$

Overall, the UO was able to minimize its loss in rate of tuition revenue due to a planned increase in overall tuition by 5% that was made before Covid-19 took hold of the world. This was decided in fall of 2019, around when Covid-19 originated. Other universities were not so lucky, experiencing greater than an average of a 15% loss in revenue from tuition, fees, and housing alone 11. This effect will likely continue to increase the cost of tuition, despite legislature being worked upon that aims to slow its growth in the education sector, hoping to ease the student debt crisis. The positive projections for future enrollment however give great hope to the continued success of all universities, and while the UO has not yet published its own enrollment projections for next year, signs are looking hopeful so far.

Sports and Events

While most public universities have a sort of auxiliary wall between their normal sources of revenue and revenue from athletics and other events, this paper includes such effects to give greater scope of the effects of the pandemic. Additionally, this wall seems to be shrinking as time goes on. Even more importantly, the UO has been a major athletics school in the last few decades, which has brought in a priceless amount of student athletes and fans, not to mention increasing the overall average wealth of UO alumni. This additionally increases donations made to the school, as well as provides even more incentive to attend it.

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¹¹ Hepner, Mickey. "Economic Impacts of COVID-19: B-School Outlooks and Opportunities."

Due to the spread of Covid-19 College sports programs across the United States were cancelled until further notice between January and March of 2020. According to Dean of the Austin Peay State University College of Business, Mickey Hepner, "When the National Collegiate Athletic Association canceled March Madness—the association's annual basketball tournament—and its other spring championships, it was forced to reduce its yearly distribution to member schools by 375 million USD. Coupled with the decline in attendance and the difficulties of fundraising during a recession, athletic department budgets across the U.S. are now facing unprecedented deficits" 12. This type of funding, considered a contract which will be further analyzed in the next section, is normally vital to a school's sports programs. The effect of sports cancellations was emulated worldwide, as even the Tokyo 2020 Summer Olympics were postponed, the first time an Olympic event has been postponed since the 1940s due to WWII.

The University of Oregon was one of few universities to feel the effect of a cancellation/band on both collegiate and international sports in this category, as the 200 million dollars that were spent reconstructing the Track and Field, Hayward Field, where Olympic Trials have normally been held since 2008, were not put to immediate use as expected. The estimations for this effect alone cost the university, and the city of Eugene, millions of dollars. In 2016, the trials brought the university and the city

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¹² Hepner, Mickey. "Economic Impacts of COVID-19: B-School Outlooks and Opportunities."

overall a combined amount of 16 million dollars ¹³. Furthermore, the school missed out on the revenue normally generated from the NCAA March Madness tournament and championship. Although the total loss in revenue is incalculable, this event in recent years was extremely profitable and marketable for the UO as both the Men's and Women's basketball teams have been in the playoffs and often make it into the sweet sixteen, the top sixteen basketball teams of the entire nation. The whole of the University was disappointed by the choice to cancel the event, particularly as graduating captain and multiple NCAA record-holder Sabrina Ionescu missed out on her final chance to win a championship for her school. The UO also cancelled softball and baseball, as well as all intramural sports. Additionally, in the fall of 2020, the 2020-2021 football season was delayed, due to Covid-19 and player protests. Only half a normal season was played and there was no attendance for home games, losing millions of dollars in estimated revenue. Normally, the UO ranks in the top 15 most profitable football programs, drawing a record 96 million dollars in 2019¹⁴. While the Oregon Ducks football squad was still able to become Pac-12 Champions, possibly regaining some of the lost revenue, millions were still lost just in the short-term. This impact may be eliminated or reduced in 2021, as the school looks to open up fully, reinstating all sporting events.

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¹³ Gusinow, Sander. "Eugene Prepares for COVID-19 Olympics." Oregon Business. Oregon Business, February 8, 2021. https://www.oregonbusiness.com/article/restaurants-retail/item/19255-eugene-prepares-for-covid-19-olympics.

¹⁴ Smith, Chris. "College Football's Most Valuable Teams: Reigning Champion Clemson Tigers Claw Into Top 25." Forbes. Forbes Magazine, May 10, 2021. https://www.forbes.com/sites/chrissmith/2019/09/12/college-football-most-valuable-clemson-texas-am/?sh=5ca04065a2e7.

Many non-sporting events are held in Eugene each year, generating millions in revenue for the school. Due to Covid-19 however, many such events were cancelled. Resulting in an extreme decrease in sales for the university 15. Such events include concerts, street-fairs, and graduation itself. Without these in most of the year of 2020, as well as the winter and spring term of 2021, the UO has missed out on much of its non-academic revenue. With the policy implications of requiring Covid vaccinations in Fall of 2021, this may remain consistent, due to personal choice and university policy. Little is known about the overall effect this decision will have on any aspect of the UO's revenue, but especially concerning the non-academic revenues generated as the school has little control over non-students' or staffs' choices regarding the vaccine. This information has only recently been published and not every contingency yet planned.

Gifts, Grants, and Contracts

Finally, some more positive effects. In 2020 and into 2021, universities across the United States of America received an influx in state and federal funding, as well as in donations, grants, gifts, and contracts. In late March of 2020, the Coronavirus Aid, Relief, and Economic Security, known as CARES, Act was provided by the federal government and included 14.25 billion dollars for emergency relief for institutions of higher education in order to respond to Covid-19. Later on, in December of 2020, the COVID-19 Economic Relief Bill provided 22.7 billion dollars for the Higher Education

¹⁵ "Business Affairs." Financial Reports | Business Affairs.

Emergency Relief Fund, followed by the American Rescue Plan in March of 2021, which provided \$40 billion through the existing Higher Education Emergency Relief, known as HEER, Fund. Overall, the United States government provided 76.95 billion dollars for struggling universities doing the full effect of the Covid-19 pandemic, so far. More will likely be made available in the future as well, due to promises by the current president of the United States, POTUS, and his fellow associates and congressmen and congresswomen.

The University of Oregon certainly benefited from these acts, as well as a massive influx in donations and gifts, primarily from past alumni. One such alumni is Nike Co-founder Phil Knight, who has donated more than 750 million dollars to the university of Oregon in the last 20 years, including pledging 500 million dollars to be used to build a brand new science complex at the UO in 2016, which has been under construction for the last 5 years and will be for another 5¹⁶. These gifts and donations have always been a part of the funds for universities of higher learning, but due to the pandemic universities doubled their efforts in fundraising from such sources, resulting in a dramatic increase in gifts.

State funding during this time also increased, although by little of significance when compared to the increase in federal funding. The UO, especially when compared to other universities, has gradually weaned itself off of state funding in recent decades

¹⁶ "Accelerate." Around the O, June 25, 2018. https://around.uoregon.edu/accelerate.

Thusly, even the effects of a new budget cycle, possible departmental raids, and budget cuts if the federal government does not bail out the states will possibly be minimized at the UO.

In the long-term, all these effects will likely become ambiguous. Donations will decrease to levels similar to before the pandemic, as will federal and state funding. In fact, budget cuts and union negotiations in the next year, due to the two-year business cycle, may greatly decrease state funding, if the federal government chooses to not bail out states. While this may appear to be in the works, there is no conclusive evidence as of yet for what comes next for this revenue stream.

Conclusion

The University of Oregon was largely able to overcome the complications of operating a renowned, international university during the global pandemic due to an increase in tuition costs, donor support, federal support, and well-planned policy implications. This case study does not find comparable evidence to all universities in the US, however. Many schools experienced severe declines in revenue that led to closures. As this pandemic begins to lift across the US as vaccines become readily available and massively supplied to the general populace, schools will begin to reopen in-person activities, albeit slowly, in an attempt to minimize exposure concerns to non-vaccinated individuals. While the short-term effects of Covid-19 on universities was primarily negative in an economic sense, the long-term effects can be forecasted in a more positive light.

Tuition costs will remain high across the board, unless newly introduced federal legislature can have an impact on tuition rates but may slow in their rate of growth as enrollment numbers are forecasted to rebound. Sporting events opening up again will also contribute to the rebuilding of universities' economies, as well as the United States economy as a whole. Finally, the increased amount of state funding to institutions of higher education should remain consistent as a more liberal administration leads the nation into an era of greater educational emphasis across the board. With 76.95 billion dollars already provided by federal action in three separate acts between March of 2020 and March of 2021, universities were bailed out and protected by the government for

the first time in modern memory¹⁷. If the states are bailed out as well, there may be few issues for university funding in years to come. Furthermore, the massive influx of donations by past alumni and other institutions during this time also helped to protect the American university system.

As far as a tracker for the average economic impact of universities of Covid-19 goes, the UO was a failure. The University of Oregon itself experienced a 449% increase in Gifts, Grants, and Contracts between 2019 and 2020, helping to strongly offset the negative effects of Covid-19's impact on the UO's sales. This level looks to decrease slightly in the following years but maintain a far higher volume than in any previous years. Additionally, the UO made a distinct choice to operate under a "remote" environment as opposed to "online", which reduced many of the fees other universities incurred upon their students, possibly helping decrease loss in enrollment. Additionally, the UO had already primarily weaned itself off of state and federal funding in the last few decades, as well as already experiencing and dealing with decreases in international student enrollment For these reasons and more besides, the University of Oregon appears as one of the higher standards for Covid-19 responses in the United States, and not a clear indicator of the average American University during the Covid-19 pandemic. The UO has had great success for nearly 150 years despite war, disease, and civil rights movements, and seems to be sturdy enough to continue this, even if another pandemic strikes.

¹⁷ Smalley, Andrew. "Higher Education Responses to Coronavirus (Covid-19),"

There were many issues in securing solid data for this project, so a frontrunner in forecasting universities futures, there is a hope this will be used as an example for other, similar studies. With the promise of additional data in years to come, it would be interesting to revisit this topic and test some different types of economic-related impacts that Covid-19 had on universities, including FAFSA rates and a more in-depth analysis of how the academic year of 2020-2021 compares to future years. The real question of whether this year will be an outlier can only be answered with more time.

Closing Remarks

As a graduating senior I can say with pride that my university handled itself quite proficiently when faced with a global pandemic and gave its students every possible resource it could to continue to learn as best as possible. Together, we have accomplished something truly historical, and I hope my paper can be a testament to the success of the University of Oregon, knowing it is one of the first to broach this subject Go Ducks!

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