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A Longitudinal Financial Analysis of the University of Oxford: Traditional Missions, Innovations, and Comparisons with Select International High Research Universities - Harvard, Stanford, and the National University of Singapore

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Abstract Universities have existed since the turn of the first century with the University of Oxford in England (founded in 1096) recognized as one of the first. The university has weathered centuries of societal changes, balancing historical missions with contemporary challenges in the twenty-first century. In fact, this renowned and historic university was recognized as the fortieth most innovative university in a worldwide ranking published by Reuters in 2018. A longitudinal review of its statistics and financial statements from 2008 to 2017 illuminates how Oxford balances traditional models for education with more contemporary, innovative adaptations. To provide context, the university's financial plan was compared against three international universities that have also been recognized as top innovators; Harvard, ranked third in Reuters list of top innovative universities - aligning to Oxford's longevity and traditional mission; Stanford, ranked first - the top innovative university in the world; and NUS, ranked sixty-third - the newest country to be represented on the Top 100 list. A close review of revenue sources for each university showed Oxford with the highest composition of tuition and fees while Stanford and Harvard demonstrated the most diverse revenue streams. NUS received over twice the composition of government funding relative to Oxford, Harvard, and Stanford. When examining expenditure categories from a cost-per-student basis, Stanford spent significantly more per student, almost twice the rate of Harvard and almost five times the rate of Oxford and NUS. Oxford surpassed NUS on a per student basis. Of note, NUS was the only institution that allocated slightly higher expenditures relative to revenues on a per student basis. NUS did not emphasize the need for reserves in its financial plan as opposed to the prominence financial sustainability efforts receive in the Oxford financial planning documents. Looking forward, Oxford referenced the looming Brexit agreement and impact to the university taking effect in 2020. They are bracing for the loss of governmental funding for research grants from the EU and emphasize financial sustainability, strong endowments, and investment portfolios to serve as a buffer. Regardless of the Brexit outcome, the University of Oxford projects a strong commitment to the ideals of a globally serving university. In sum, in light of innovation continuing to be hotly contested in the higher education sphere, this exploratory examination intends to illuminate current financial practices of institutions ranging from those known for distinct longstanding heritage to some newer institutions that have made strides in the last fifty years. It serves to show that regardless of longevity, reputation, and current financial strengths, twenty-first century challenges suggest no postsecondary institutions to be immune from financial pressures impacting institutional sustainability.

Keywords: Innovation, Finance, Strategy, Higher Education, Organizations, International, Institutional Sustainability, Traditional Mission

1 Introduction

Higher education has existed since the turn of the first century with the establishment of the University of Oxford in England (University of Oxford, 2019f). The university has weathered centuries of societal changes, balancing historical missions with contemporary challenges in the twenty-first century. In fact, this renowned and historic university was recognized

as the fortieth most innovative university in a worldwide ranking published by Reuters (2018a). A closer review of its statistics and financial statements illuminates how Oxford balances traditional models for education with more contemporary, innovative adaptations (University of Oxford, 2017). For comparison purposes, three international innovative universities also recognized by Reuters (2018a) will be examined to provide

additional perspective and context: Harvard University, Stanford University, and the National University of Singapore (NUS). An overview of each country will provide insight for how these countries relate to one another before examining revenue comparisons for each institution. This international comparative analysis examines some of the many complexities and challenges faced in an increasingly global society which require higher education institutions to innovate in unprecedented ways. This research seeks to address how the financial plans of highly innovative universities balance finances of traditional revenues and expenses with the strategic use of innovation.

1.1 University of Oxford Overview

The University of Oxford was founded in 1096, the oldest known university (University of Oxford, 2019e). The University of Oxford comprises thirty-eight colleges governed independently and are not represented in annual financial statements for the central University (except for Kellogg and St Cross colleges) (University of Oxford, 2017).

The vision statement for the university blends the traditional mission with innovation in the twenty-first century at national and international levels (University of Oxford, 2017):

The University of Oxford aims to lead the world in research and education. We seek to do this in ways which benefit society on a national and a global scale. We will build on the University's long traditions of independent scholarship and academic freedom while fostering a culture in which innovation plays an important role. (p. 4)

The financial statement reinforces the vision statement and introduces a human component by emphasizing the students and faculty served and the facilities they use (University of Oxford, 2019e):

The key financial objectives of the University are to provide the long-term resources to strengthen and further its pre-eminent position – nationally and internationally – as a place of outstanding learning, teaching, and research; and to enable it to provide additional support to its three core priorities of students, academic posts, and buildings. (para. 1)

The university matriculated 19,760 students in 2017 (Reuters, 2018a) which comprise a relatively equal percentage of undergraduate to graduate students (University of Oxford, 2018a). The majority of students came from the United Kingdom (UK) at 82.6%, followed by other European Union (EU) countries at 5.6%, with the balance at 11.7% non-EU. For reference, the top non-UK countries included China, Singapore and the United States. Countries outside of the EU incur significantly higher tuition rates as will be discussed in the revenue section. Oxford reports socioeconomically disadvantaged students to comprise 10.6% of its student population. The university reports race/ethnicity composition as BME (black or minority ethnic groups) at 17.9% which includes Asian students at 8.3%, Mixed Heritage students at 6.6%, Black students at 1.9%, and Bangladeshi and Pakistani students at 1.7% (highlighted separately given they are Asian groups considered to be under-represented at highly selective universities) (University of Oxford, 2018a).

2 Methods

A content review of statistics and financial statements illuminates how Oxford balances traditional models for education with more contemporary, innovative adaptations. The content analysis will be approached in two phases:

Phase I: Longitudinal content analysis of Oxford financial plans over a ten-year period from 2008-2017

Phase II: Comparison against three international universities that have also been recognized as top innovators

To provide context, the university's financial plan was compared against three international universities that have also been recognized as top innovators: Harvard, ranked third in Reuters list of top innovative universities - aligning to Oxford's longevity and traditional mission; Stanford, ranked first - the top innovative university in the world; and NUS, ranked sixty-third - the newest country to be represented on the Top 100 list. These universities represent the Top 100 innovative universities internationally: 46 in US, 26 in Europe, 22 in Asia. As background, Reuters (2018b) utilizes an algorithm to include research expenditures, patent volume, patent impact, research published, research cited, and industry collaboration. Figures were converted to constant dollars and U.S. currency for comparison purposes.

3 Results

Results are organized by revenues followed by expenditures. Each section begins with a longitudinal look at the University of Oxford from 2008 to 2017 followed by institutional comparisons in 2017 between Oxford, Harvard, Stanford and National University of Singapore.

3.1 Oxford Revenues

The University of Oxford emphasizes the importance of generating revenue to foster financial sustainability for many years to come. In reviewing revenues over the past ten years, Oxford more than doubled revenues from £912.7 million in 2008 (University of Oxford, 2008) to £1.628.6 billion in 2017 (University of Oxford, 2017). When reviewing source changes from 2008 to 2017, tuition revenue increased from £131.7 million to £307.2 million, government appropriations decreased from £222.2 million to £194.6 million, other grants and gifts increased from £340.3 million to £564.9 million, and other revenue increased at the highest rate from £218.5 million to £561.8 million. Table 1 displays revenues by category based on annual financial statements reported by the University of Oxford over a ten-year period in constant dollars.

Table 1 University of Oxford Revenue 10 Year Review – UK Constant Pounds in Millions

Oxford Revenue Constant £(M)	Tuition	Govt. Funding	Other Grants/ Gifts	Other Revenue	Total Revenue
2007-2008	132	222	340	219	913
2008-2009	144	229	398	243	1014
2009-2010	157	232	419	209	1016
2010-2011	167	220	414	219	1019
2011-2012	186	218	438	255	1096
2012-2013	206	203	457	283	1149
2013-2014	244	188	494	298	1224
2014-2015	267	190	628	404	1489
2015-2016	301	197	551	499	1549
2016-2017	307	195	565	562	1629

Note: Revenues were adjusted to calculate constant dollars by utilizing the Consumer Price Index (CPI) for the United Kingdom (Office for National Statistics, 2019). Revenues are sourced from the University of Oxford annual financial reports.

For reference, constant figures are next converted from U.K. pounds to U.S. dollars as sourced by the Federal Reserve System (2017) in which £1 converts to \$1.34. U.S. Table 2 shows this conversion and includes the composition percentage for each revenue category. Four main revenue categories will be reviewed: tuition, government appropriations, other grants and gifts, and other income.

Table 2. University of Oxford Revenue Ten Year Review – Conversion to US Dollars and Percent per Category

Oxford Revenue Constant	Tuition \$M %	Govt. Funding \$M %	Other Grants/ Gifts \$M %	Other Revenue \$M %	Total Revenue \$M %
2007-2008	177 14%	298 24%	456 37%	293 24%	1223 100%
2008-2009	192 14%	306 23%	534 39%	326 24%	1358 100%
2009-2010	210 15%	311 23%	561 41%	280 21%	1362 100%
2010-2011	224 16%	295 22%	554 41%	294 22%	1366 100%
2011-2012	249 17%	292 20%	587 40%	342 23%	1469 100%
2012-2013	276 18%	272 18%	613 40%	379 25%	1540 100%
2013-2014	327 20%	252 15%	662 40%	400 24%	1641 100%
2014-2015	358 18%	254 13%	842 42%	542 27%	1995 100%
2015-2016	404 19%	265 13%	739 36%	669 32%	2075 100%
2016-2017	412 19%	261 12%	757 35%	753 35%	2182 100%

Note: Constant figures are converted from U.K. pounds to U.S. dollars as sourced by the Federal Reserve System (2017) in which £1 equals \$1.34.

3.1.1 Tuition

The first revenue category, tuition, reinforces the traditional teaching mission of higher education. Specifically, this grouping includes tuition, fees, and educational contracts and comprises 19% of total revenues (University of Oxford, 2017). Oxford includes programming for undergraduate, graduate, and professional certifications/continuing education. Educational contracts refer to the income received for professional, non-matriculate courses and research training support grants.

Undergraduate students residing within the U.K. and pay the tuition price of £9000 or \$12,060 U.S. regardless of major annually. Non-EU students face higher tuition rates that vary based on major. For instance, many of the liberal arts majors are priced at £15,295 (\$20,945 U.S.) versus £22,515 (\$30,170 U.S.) for engineering and pre-medical degree (University of Oxford, 2019j).

At the graduate level, pricing differs for EU versus non-EU students and across programs as well. For instance, the master's degree in African studies is priced for EU students at £14,765 (\$19,785 U.S.) versus the overseas rate of £24,910 (\$33,379 U.S.) (University of Oxford, 2019h). The DPhil degree in cardiovascular science is priced for EU students at £7,970 (\$10,680 U.S.) versus the overseas rate of £26,405 (\$35,383 U.S.) (University of Oxford, 2019c). Interestingly, the MBA program charges the same rate for EU and non-EU students of £59,490 (\$79,717 U.S.) (University of Oxford, 2019g).

3.1.2 Government Appropriations

The next revenue category, government appropriations, is referred to at Oxford as "funding body grants" and comprises 12% of total revenue (University of Oxford, 2017). The national Office for Students and Research England governs national higher education funding for capital, re-

search, and teaching grants (University of Oxford, 2019c). Two government funding issues warrant special attention. First, fallout from the global recession in 2009 negatively impacted spending for five years. An upturn in government funding did not occur until AY 2015 Government funding in the U.K. amounts to 84% of AY 2010 spending as of AY 2017. A special consideration for the U.K. is the political issue of Brexit which would sever the U.K.'s membership in the European Union. In their financial report, Oxford (2017) dedicated a special section to Brexit. Specifically, claiming how "UK's research-intensive universities have benefited greatly from the UK's membership of the European Union" (Oxford, 2017, p. 17) based on EU funding and research networks. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog.

3.1.3 Other Grants/Gifts

The third revenue category, other grants and gifts, refers to the traditional research mission of higher education. Specifically, this grouping refers to the research grants and contracts funded by sources outside of the government – charities, foundations, research councils, trusts, individuals, and industry – and represents 35% of total revenues (University of Oxford, 2017). Oxford reports their funds received from external, non-governmental sources to be the highest of any higher education institutions within the United Kingdom (University of Oxford, 2019e).

3.1.4 Other Revenues

The final revenue category of other revenue exemplifies diversified revenue streams beyond teaching and research and constitutes 35% of total revenue (University of Oxford, 2017). Specifically, other income includes residences, catering, conferences, educational publishing, investment income, other donations and endowments, donation of heritage assets, gains on investments, and share of surplus of joint ventures (University of Oxford, 2019e).

3.1.5 International Context and Comparison

To provide context, the university's financial plan will be compared against three international universities that have also been recognized as top innovators: Harvard, ranked third in Reuters list of top innovative universities - aligning to Oxford's longevity and traditional mission, Stanford, ranked first - the top innovative university in the world, and NUS, ranked sixty-third - the newest country to be represented in the top 100 list (Reuters, 2018a). These universities represent the 100 innovative universities internationally: 46 in US, 26 in Europe, 22 in Asia which suggests the importance of studying these three continents. In addition, consideration was given to whether the universities were public or private which impacts funding sources of which NUS represents the sole public entity included in this comparison (Reuters, 2018a). In looking at institutional longevity, the grouping includes two of the oldest universities, Oxford founded in 1096 and Harvard in 1636, Stanford founded in 1891, and one of the newest universities, NUS, founded in 1980 (Reuters, 2019a). Next, evaluating the annual Gross Domestic Product (GDP in U.S. \$) shows the depth of resources within each nation: Singapore at \$364M, the United Kingdom at \$2,825M, and the United States at \$20,494M (World Bank, 2018). For the final variable, student enrollment, University of Oxford (2018a) figures of 19,760 more closely align with those of Stanford (NCES, 2017b) at 17,534 while numbers increase significantly for Harvard (NCES, 2017a) at 31,120 and 30,602 for NUS (2017) (see Table 3).

Table 3. Institutional Comparison – Oxford, Harvard, Stanford and National University of Singapore

	Oxford	Harvard	Stanford	National University of Singapore
Ranking - International Innovation	40	3	1	63
Country	England (UK)	USA – Northeast	USA - West	Singapore
Public/ Private	Public	Private	Private	Public
Year Institution Established	1096	1636	1891	1980
Year Country Established	927	1776	1776	1965
2017 GDP (US \$B)	2,639	19,475	19,475	338
Students (UG/GR)	19,760	31,120	17,534	30,602

Note: Rankings, public/private designation and year established are based on Reuters (2018a) listing of the top 100 innovative universities. Annual Gross Domestic Product is reported in US dollars based on World Bank (2018) figures. Total number of students are reported from annual financial reports for Oxford (2017) and NUS (2017) and from IPEDS data from the National Center for Education Statistics (2017) for Harvard and Stanford.

Total revenues are similar for Oxford and NUS at \$2.2M and \$1.9M and for Harvard and Stanford at \$6.6M and \$8.3M respectively. Note that revenue figures are converted into U.S. dollars for the University of Oxford from one British pound to \$1.34 U.S. dollars and for NUS from one Singapore dollar to \$.74 in U.S. dollars (Federal Reserve System, 2017). A close review of revenue sources for each university shows Oxford with the highest composition of tuition and fees at 19% while Stanford and Harvard with the most diverse revenue streams from the "other revenue" category at 64% and 54% respectively. NUS is the only public university examined and receives over twice the composition of government funding relative to Oxford, Harvard, and Stanford (see Table 4).

Table 4. University Revenue Comparison – Current U.S. Dollars in 201

Institution (US \$)	Govt. Tuition \$M %	Grants/ Funding \$M %	Other Other Gifts \$M %	Total Revenue \$M %	Revenue \$M %
Oxford	412 19%	261 12%	757 35%	753 35%	2182 100%
Harvard	870 13%	622 9%	1219 18%	3922 59%	6633 100%
Stanford	431 5%	1352 16%	1201 14%	5343 64%	8327 100%

National 330 17% 927 48% 415 22% 246 13% 1918 100% University of Singapore

Note: Revenue data is reported from annual financial reports for Oxford (2017) and NUS (2017) and from IPEDS data from the National Center for Education Statistics (2017) for Harvard and Stanford.

When examining revenue categories from a cost-per-student basis, Stanford receives the most revenue per student with NUS receiving significantly less than all other institutions compared (see Table 5).

Table 5. University Revenue Comparison – Cost per Student (Current U.S. Dollars in 2017)

Institution (US \$)	Tuit \$K		Gov Fun \$K	ding	Oth Gra Gift \$K	nts/	Other Revenue \$K %	Total Revenue \$K %
Oxford	21	19%	13	12%	38	35%	38 35%	110 100%
Harvard	28	13%	20	9%	39	18%	126 59%	213 100%
Stanford	25	5%	77	16%	68	14%	305 64%	475 100%
National University of Singapore	11	17%	30	48%	14	22%	8 13%	63 100%

Note: Revenues per student for each institution is calculated by dividing the revenue reported in Table 4 by the total number of students reported in Table 3.

3.2 Oxford Expenditures

In reviewing expenses over the past ten years, Oxford managed increases at 97%, a rate lower than increased revenues at 113%. Specifically, current expenditures changed from £893.2 million in 2008 (University of Oxford, 2008) to £1.397 billion in 2017 between academic years 2007-2008 and 2016-2017 (University of Oxford, 2017). When reviewing source changes from 2008 to 2017, staff costs increased from £480.7 million to £708.3 million, operating expenses increased from £358.3 million to £576.2 million, and depreciation and finance costs increased from £54.2 million to £112.5 million. Table 6 displays expenses by category based on annual financial statements reported by the University of Oxford over a ten-year period in constant dollars.

Table 6. University of Oxford Expenditures 10 Year Review – UK Constant Pounds in Millions

Oxford Expenditures Constant £(M)	Staff Costs	Operating Expenditures	Depreciation/ Finance Costs	Total Expenditures
2007-2008	481	358	54	893
2008-2009	512	430	72	1014
2009-2010	535	411	63	1010
2010-2011	526	419	52	997
2011-2012	534	445	61	1040
2012-2013	567	454	65	1086
2013-2014	616	490	78	1184
2014-2015	658	534	87	1279
2015-2016	709	559	103	1371
2016-2017	708	576	113	1397

Note: Revenues were adjusted to calculate constant dollars by utilizing the Consumer Price Index (CPI) for the United Kingdom (Office for National Statistics,

2019). Expenses are sourced from the University of Oxford annual financial reports.

Constant figures are next converted from U.K. pounds to U.S. dollars (Federal Reserve System, 2017). Total expenditures have risen by over 50% from \$1,196.9 million to \$1,872.0 million (see Table 7). These increases are reinforced on a cost per student basis of \$67,759 versus \$94,737. The increases in constant dollars over the ten-year period reinforce "Oxford's mission to share its teaching, research and collections as widely as possible and to inform and inspire communities" (Oxford, 2017, p. 8).

Table 7. University of Oxford Expenditures Ten Year Review – Conversion to US Dollars and Percent per Category

Oxford Expenditures Staff Costs			Expenditures		Depreciation/ Finance Costs		Total Expenditures	
Constant	\$M	%	\$M	%	\$M	%	\$M	%
2007-2008	644	54%	480	40%	73	6%	1197	100%
2008-2009	686	51%	577	42%	96	7%	1359	100%
2009-2010	718	53%	551	41%	84	6%	1353	100%
2010-2011	705	53%	561	42%	70	5%	1336	100%
2011-2012	716	51%	596	43%	82	6%	1394	100%
2012-2013	760	52%	608	42%	88	6%	1455	100%
2013-2014	825	52%	657	41%	105	7%	1587	100%
2014-2015	882	52%	715	42%	117	7%	1714	100%
2015-2016	950	52%	750	41%	137	8%	1837	100%
2016-2017	949	51%	772	41%	151	8%	1872	100%

Note: Constant figures are converted from U.K. pounds to U.S. dollars as sourced by the Federal Reserve System (2017) in which £1 equals \$1.34.

Oxford expenditures are summarized in three main categories: staff costs, operating expenditures, and depreciation and financial costs (Oxford, 2017). The primary expenditures of staff costs and operating expenditures will be examined in more detail.

3.2.1 Staff Costs

The largest expense category is comprised of staff costs of \$949.1 million which includes instruction, research, and institutional support (wages and salaries, social security costs, and pension costs). In reviewing expenditures on a percentage basis over the past ten years, staff cost allocations have dropped from 53.8% in AY 2008 to 50.7% in AY 2017. However, Oxford increased employees to 14,400 staff in AY 2017 versus 8,427 in AY 2008. Salaries comprise costs of 80%, social security at 8%, and pensions at 12% in AY 2017. The top three staff categories for AY 2017 include research at 36%, teaching and research support at 22%, and academic staff at 14%. Of note, in AY 2008 reported teaching support of 6% with no additional support designated for research. Additionally, while figures are reported separately for research versus teaching support, tenure/track faculty are expected to research and teach (University of Oxford, 2019a). Total research in AY 2008 registered at 32% which signals an increased focus on staff expenditures tied to research efforts in the last ten years. In fact, Oxford greatly emphasizes research as evidenced by the magnitude of academics, research staff and postgraduate research students

internally and the external collaborations with outside universities, research organizations, healthcare providers, businesses, community groups, charities, and government agencies (Oxford, 2017).

3.2.2 Operating Expenditures

The next spending category includes other core expenses of \$772.1 million, such as bursaries, scholarships, residences, catering, conferences, premises (see Table 6). The university emphasized efforts to improve student access by providing financial assistance through bursary/scholarships and tuition reduction plans (Oxford, 2017). Oxford reported high financial support levels of up to £11,000 for students in the most impoverished-income brackets. Specifically, over £6 million was awarded in bursaries and scholarships to approximately 2,300 undergraduate students. An additional 860 students received tuition fee reductions in the amount of over £2 million. Oxford boasts high performance rates of 1.3% and job placement or graduate school attendance six months after graduation (Oxford, 2019d), thus, not experiencing performance funding pressures more often faced in the United States.

3.2.3 International Comparisons

In reviewing Oxford expenses compared to Harvard, Stanford, and NUS, Oxford spends more on operating expenditures at 41.2%, Stanford leads staff expenditures at 59.5%, and NUS allocates more proportionately to depreciation and finance costs at 13.2% (see Table 8).

Table 8. University Expenditures Comparison – Current U.S. Dollars in 2017

Institution (US \$)	Staff Costs \$M %	Operating Expenditures \$M %	Depreciation/ Finance Costs \$M %	Total Expenditures \$M %
Oxford	949 51%	772 41%	151 8%	1872 100%
Harvard	2455 50%	1879 39%	551 11%	4885 100%
Stanford	3201 60%	1702 32%	474 9%	5378 100%
National University of Singapore	957 49%	730 38%	257 13%	1944 100%

Note: Expense data is reported from annual financial reports for Oxford (2017) and NUS (2017) and from IPEDS data from the National Center for Education Statistics (2017) for Harvard and Stanford.

When examining expenditure categories from a cost per student basis, Stanford spends significantly more per student, almost twice the rate of Harvard and almost five times the rate of Oxford and NUS. Oxford surpasses NUS on a per student basis (see Table 9). Stanford spends 65% of total revenue per student (\$306.7M expenditures of \$474.9M revenue) compared to Harvard at 74% (\$157.0 of \$213.1), Oxford at 62% (\$68.9M of \$110.4M), and NUS at -1% (\$62.7M of \$63.5M) (See Tables 5 and 9). Of note, NUS is the only institution that allocates slightly higher expenditures (+\$800,000) relative to revenues on a per student basis. NUS does not emphasize the need for reserves in its financial plan as opposed to the

prominence financial sustainability efforts receive in the Oxford financial planning documents (Oxford, 2017).

Table 9. University Expenditures Comparison – Cost per Student (Current U.S. Dollars in 2017)

Institution (US \$)	Staff \$K	Costs		rating enditures %		reciation/ nce Costs %	Total Expe \$K	nditures %
Oxford	35	51%	28	41%	6	8%	69	100%
Harvard	79	50%	60	39%	18	11%	157	100%
Stanford	183	60%	97	32%	27	9%	307	100%
National University of Singapore	31	49%	24	38%	8	13%	64	100%

Note: Expenses per student for each institution is calculated by dividing the revenue reported in Table 8 by the total number of students reported in Table 3.

3.3 Oxford Budget Model

While the University of Oxford does not proclaim a specific budgeting approach, evidence would suggest a hybrid model to include centralized, planning, programming, and budgeting systems and incremental spending models. Barr and McClellan (2011) describe a planning, programming, and budgeting systems model as closely aligned with the strategic planning of the university. Oxford's annual financial plan closely aligns the strategic direction of the university with resource allocation separated by core strategies (e.g., research, education, personnel) and enabling strategies (e.g., capital, IT infrastructure, alumni relations). For Oxford, revenue responsibilities fall into four committees at the university level. The Finance Committee addresses the overall revenue and expenditure, overall capital budget, and the five-year finance plan. The Planning and Resource Allocation Committee manages the annual budget for operating and capital expenses and monitors performance. The Investment Committee drives the investment portfolio and the Committee to Review the Salaries of Senior University Officers of key administrative positions and office-holders thereafter.

Additionally, an argument can be made for an incremental/decremental budgeting approach. Barr and McClellan (2011) discuss incremental budgeting as a signal that the current budget justifies sufficiency thus, necessitating more modest adjustments. Decremental adjustments reflect modest downward trends year to year. In reviewing revenue spending by category in Oxford financial plans annually from academic years 2007-2008 to 2016-2017, revenue and expenditure categories experienced incremental or decremental changes annually. Two revenue categories experienced proportional increases relative to the total budget, tuition rose from 14.4% in academic year 2007-2008 to 18.9% in 2016-2017 and other revenue rose from 23.9% to 34.5%. Conversely, government appropriations fell from 24.3% to 12.0% and other grants/gifts fell from 37.3% to 34.7% (see Table 2). In reviewing expenditures, the staffing category faced decremental changes, from 53.7% in academic year 2007-2008 to 50.7% in 2016-2017. The other expenditure categories experienced incremental increases proportionate to the total budget, operating expenditures

from 40.1% to 41.2% and depreciation/other financial expenses from 6.1% to 8.1% (see Table 4).

4 Discussion

The University of Oxford has persevered for over a millennium with a mission focused on balancing "long traditions of independent scholarship and academic freedom while fostering a culture in which innovation" (University of Oxford, 2017, p.4). The institution recognizes the important role the financial plan will play in sustaining a strong position in the long-term by stating (University of Oxford, 2019e):

The key financial objectives of the University are to provide the long-term resources to strengthen and further its pre-eminent position – nationally and internationally – as a place of outstanding learning, teaching, and research; and to enable it to provide additional support to its three core priorities of students, academic posts, and buildings. (para. 1)

Louise Richardson, Vice-Chancellor of Oxford, emphasized key trends in her opening letter of the most recent financial plan (Oxford, 2018b). Specifically, she highlighted the importance of recognition by the Times Higher Education as the top international university, receiving a 100-year bond and other substantial support by investors, increased applications domestically and internationally, and commitments to increase support and programming for underrepresented students. One of the most immediate issues at Oxford is the looming Brexit agreement. The British government received an extension until January 2020 to propose a new agreement as negotiations continue between the UK and the EU (BBC, 2019). Oxford anticipates substantial implications impacting EU students and staff. Oxford provides updates on its websites for students and staff related to tuition rates, visas, and research agreements (University of Oxford, 2019h). Additionally, Oxford braces for the loss of governmental funding for research grants from the EU. Their emphasis on financial sustainability, strong endowments, and investment portfolios may serve as a buffer for decreased funding when Brexit takes effect. For academic year 2020-2021, a small increase in tuition and fees at £9,250 or \$12,395 U.S. is just 2.8% higher than the £9,000 rate in academic year 2016-2017, thus, not a revenue driver at this time to offset the negative financial consequences of Brexit. Additionally, of note, this tuition and fee rate will apply to EU students as opposed to the higher rate published for students outside of the EU (University of Oxford, 2019b). Regardless of the Brexit outcome, the University of Oxford projects strong commitment to the ideals of a globally serving university with the following declaration (University of Oxford, 2019e):

Whatever the outcome, the University of Oxford is, and intends to remain, a thriving, cosmopolitan community of scholars and students united in our commitment to education and research. The departure from the EU will not change this; our staff and students from all across the world are as warmly welcome as ever. (para. 1)

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