FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

Centre for Applied Risk Management

Annual Report 2017

Report number: UARM18d0003

Date: 31 March 2018

Prepared by: Neels Erasmus & Hermien Zaaiman

Approval Sheet

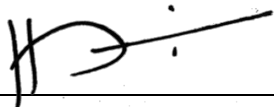|	
Title:	Centre for Applied Risk Management Annual Report 2017
Synopsis:	The report provides a retrospective view of the activities undertaken and outputs delivered by UARM during 2017, as well as a view of the road ahead.
Client:	NWU Internal
Document nr:	UARM18d0003
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Prepared by:	Neels Erasmus & Hermien Zaaiman
Approved by:	

Prof Hermien Zaaiman
Manager: Centre for Applied Risk Management

Note on report coverage:

This report covers all the activities of the centre that took place during 2017, as well as the Class of 2017 Graduation, which occurred in 2017. The date of the report is 31 March, being the date on which the results of the Class of 2017 were finalised, as well as the cut-off date for 2018 enrolments.

Distribution Sheet

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- UARM Team
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Executive Summary

The Centre for Applied Risk Management (UARM) was established in June 2012 at the Vaal Triangle Campus of the North-West University. UARM's main aims are postgraduate teaching at master's and PhD levels, ground-breaking qualitative research in applied risk management with behavioural risk management as specific research focus, as well as developing behavioural risk tools that can be used in practice.

<u>Staff Profile</u>

In 2017, the Centre had three full-time permanent, one part-time permanent, two contracted academic staff members and one shared administrative assistant. We also had one extra-ordinary professor from the Vrije Universiteit in Amsterdam. There were no changes with respect to 2016.

<u>Teaching Profile (Students)</u>

The total number of registered UARM masters students in 2017 was seventeen.

- Split per academic year: Twelve students enrolled for the first academic year (of which three were historic second years) and five for the academic second year (mini-dissertation), all of whom graduated.

The following is a summary of this student body in 2017 compared to 2016[1]:

- The ACIW (African/Coloured/Indian/White) breakdown of the 17 students was 7/1/2/7 (4/2/5/6 in 2016)
- Gender: 6 out of 17 = 35% of the students were female (same as 6 out of 17 = 35% in 2016)
- The average enrolment age for master's students in 2017 was 41 years, varying between 24 and 61 years (35 years in 2016, varying between 23 and 51)
- Five 2017 second year master's students graduated, with 1 achieving the degree with distinction (7 in 2016, with 3 distinctions)

<u>Training Profile (Dissertations)</u>

All Five of the six students who registered for their mini-dissertations in 2017, completed these fulfilled all the requirements for the MCom degree in Applied Risk Management. The total minimum duration throughput rate for the programme (% of candidates completing the qualification in two

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[1] Note that because we incorporate the total student body, this does result in a degree of double counting in the comparisons with respect to the previous year because the same people that were included in the first year may be again included in the second year. This should however not materially impact the general trends.

years), is now 59% (60% in 2016). The total throughput rate for the programme (overall % from all possible graduates of enrolled students that have graduated) is now 66% (70% in 2016).

Research Profile

The behavioural risk research focus of the Centre was redefined in 2016 to primarily focus on Risk Culture. The five masters level mini-dissertations that were completed in 2016 all fall within this area, and consisted of an applied research project in the candidate's organisation, focussing on either a qualitative study or the application of the UARM Risk Culture questionnaire.

Centre Income

The total teaching, research and consultation income generated by the Centre in 2017 was R1.858m (R1.149m in 2016).

Centre Highlights

The top achievement for UARM in 2017 was the delivery of another five masters graduates, with one achieving a distinction. Also noteworthy is the progress that has been made in promoting the UARM training and research programme, specifically in the public sector. Another aspect worth mentioning is the broadening of its international academic network, and more specifically the positive contact that has been established with the Central Bank of the Netherlands, which focuses on organisational culture, including risk culture.

Centre Challenges

The biggest concern is the little time that UARM team members have for their own research, given their teaching loads.

The Road Ahead

Going forward, the main focus for the Centre will be to start generating academic publications from its research programme. A second priority is the further development of the UARM Risk Culture Scale with the view to generate research-based consulting income. However, fulfilling these aims will require investment from the NWU into expanding the UARM small permanent staff cohort. We look forward to building the UARM programmes with the support of the relevant NWU management teams.

1. Introduction

The Centre Applied Risk Management (UARM) was established in June 2012 at the Vaal Triangle Campus of the North-West University, with the aim of doing postgraduate training and research on risk management as an applied discipline. This applied approach includes qualitative risk education and training at masters and PhD levels and behavioural-risk-related research projects, and more specifically, risk culture. UARM's two-year part-time MCom in Applied Risk Management is a taught programme with main aim to satisfy the need of full-time employees across the public and private sectors. The Centre's qualitative approach to risk management was intended to fill the gap created by the dominance of quantitative risk management academic programmes at the tertiary level.

The remainder of this report is structured as follows: The next section provides a summary of the personnel (full-time and part-time/contract) involved in UARM in 2017. This is followed by Section 3 which contains graphs and tables summarising the UARM student profiles and in Section 4 the current status of master's dissertations and PhD theses since the inception of the programme. Section 5 provides an overview of the research profile of the Centre including published research and research in progress. This is followed in Section 6 by the international profile of the Centre. Section 7 summarises teaching income generated from study fees and subsidies, compared to the total income generated by the Centre (Teaching, Research and Consultation). This is followed in Section 8 with an overview of UARM's highlights during 2017, which is then juxtaposed with the challenges experienced in Section 9. The report is concluded in Section 10 with an overview of the road ahead. Appendix A provides a summary of the UARM research focus, followed by Appendix B that contains a summary of the external industry and academic collaborative networks that the Centre has formed in support of its mission. Appendices C and D provides some comments from students and other stakeholders respectively, and Appendix E finally provides some photos of notable events that took place during the year.

2. Staff Profile

The Centre has a small team of full-time staff members, complimented by part-time contributors and contractors to the programme. The composition of the team has changed over time – Table 1 provides a summary of the status as at the end of 2017.

Table 1: UARM Staff Overview

Name	Roles/Responsibilities	Comments
Prof Hermien Zaaiman	- Full-time Associate Professor - UARM Manager - MARM teaching (taught three modules, coordinated the dissertation research module, supervised one and co-supervised another MARM dissertation in 2017) - UARM Research Leader - Workshop Facilitator	
Mr Fred Goede	- Full-time Senior Lecturer - MARM teaching (taught two modules, assisted with teaching in a third module, supervised two MARM dissertations in 2017) - Researcher - Workshop Facilitator	PhD student, supervisor dr.ir. Gert Jan Hofstede, Wageningen University.
Dr Sonja Gilliland	- Part-time Senior Lecturer - MCom Leader (mini-dissertation supervisor, supervised one MARM dissertation in 2017) - Researcher	Part-time role in UARM; Subject Head of IT in the School of IT
Mr Emmanuel Mulambaya	- Full-time Lecturer from 1 Jun 2016 - MARM teaching (taught one module, assisted with teaching in another module, and supervised one MARM dissertation in 2017) - Researcher	Potential PhD student – expects to register in 2018.
Ms Hedre Pretorius	- Part-time contractor on the data analysis of the UARM RCS studies - Co-supervisor for M Dissertations - Co-researcher on research projects - Data analysis on master's dissertations and research projects	Employed by XDS
Dr Neels Erasmus	- Part-time Consultant: UARM Ops Manager - Networking with industry and research institutions on research initiatives - Obtaining skills and financing for collaborative research projects - Contribute to teaching in the UARM modules – Statistics workshops for M1 and M2 students. - Back-up examiner of mini-dissertation projects in case of emergency	Extra-ordinary Professor (NWU Potch Campus Faculty of Natural and Agricultural Sciences)
Ms Helei Jooste	- Administrative Staff - Part-time UARM Administrative Assistant	
Prof Theo Kocken	- Extra-ordinary professor Vrije Universiteit Amsterdam - Teaches in the 821 module. - Risk culture research contact.	

3.   Teaching Profile (Students)

Figure 1.1 shows the profile of the registered master's students since 2014, namely 12 in 2014, 18 in 2015, 17 in 2016 and 17 in 2017. The negative DNR numbers (the red bars in the graph) indicate students that were on the programme in the previous year but chose to not register again in the current year, e.g. two of the registered students in 2016 did not register again in 2017.   The graph is further subdivided to show the students per historical year, e.g. three of the registered students in 2016 were registered for the third time on the programme, therefore taking (at least) three years to complete this part-time degree.
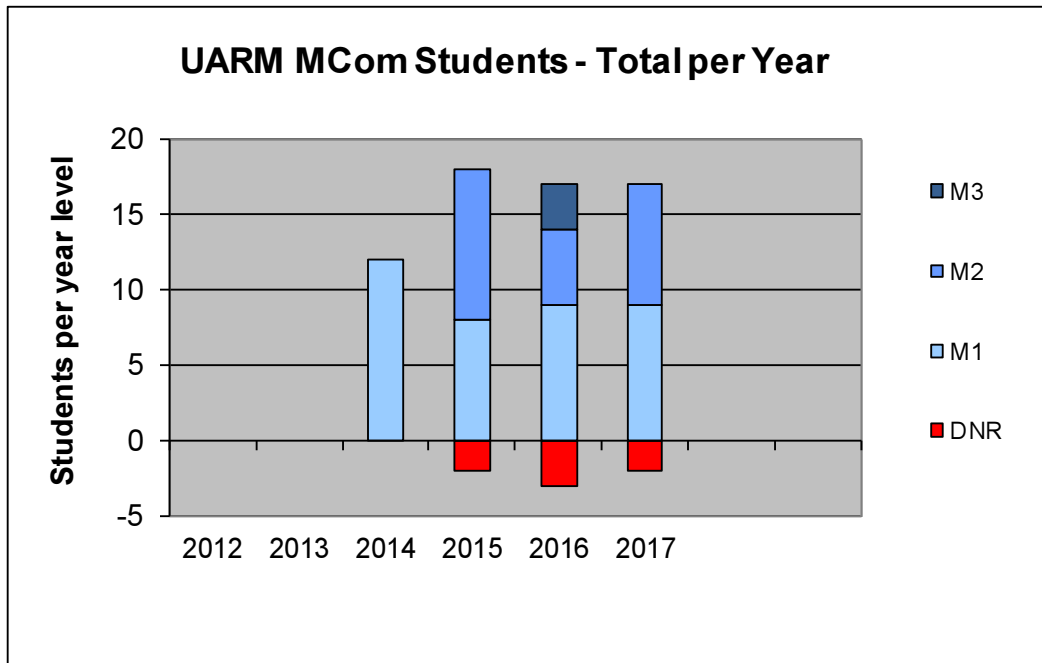
UARM MCom Students - Total per Year

Figure 1.1

UARM MCom Students

DNR MCom		Total per Calendar & Historic Year			
		M1	M2	M3	Total
0	2012	0	0	0	0
0	2013	0	0	0	0
0	2014	12	0	0	12
-2	2015	8	10	0	18
-3	2016	9	5	3	17
-2	2017	9	8	0	17
		0	0	0	0
		0	0	0	0

DNR = Student from previous year did not re-register in following year.

Figure 1.2 provides a breakdown the 17 students registered in 2017 into historical and academic years, showing that twelve students enrolled for the first academic year (of which three were historic second years) and five for the academic second year (mini-dissertation).

Data Table				
	M1	M2	M3	Tot
MFirst	9	3	0	12
MScnd	0	5	0	5
Total:	9	8	0	17

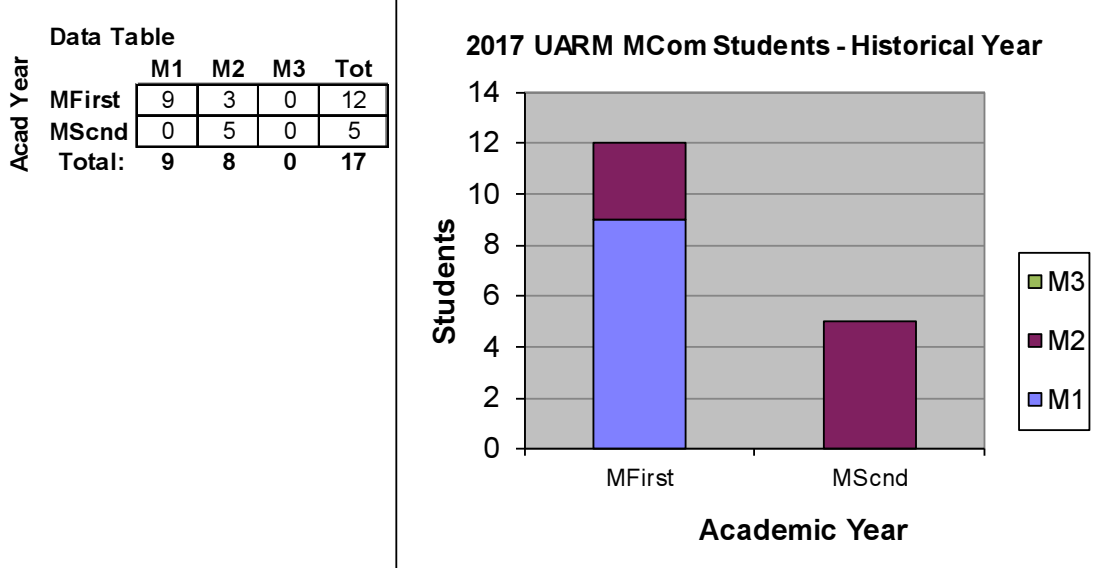**2017 UARM MCom Students - Historical Year**

Figure 1.2

Not shown here is a PhD student in Risk Management that was registered from 2012 to 2015 at UARM, but then changed to a different school in 2016 to complete her qualification.

Figure 2 shows the throughput rate profile of the master's graduates over time, measured with respect to their first year of enrolment. Of the 12 that enrolled in 2014, 7 (58%) graduated within the prescribed two years and a further two (17%) took three years to graduate. The remaining three have not graduated and we have no knowledge of their intentions – they may well re-join the programme in future, which means that the split between the "> 3 Years" and "Not graduated" categories may still change in future.

Of the 8 students that enrolled in 2015, 5 (63%) graduated in the prescribed two years. So far, there has been no further students that graduated in three years.

Of the 9 students that enrolled in 2016, 5 (56%) graduated in the prescribed two years, i.e. in 2017. The throughput for three years is not yet available at this time, so the remaining 4 (44%) are classified as "Not graduated"

From the above discussion it is clear that an average of 59% of students have graduated within the minimum of two years has so far, with a maximum of 63% for students enrolled in 2015 and a minimum of 56% for students enrolled in 2016. In addition, the table shows that, in total, 66% of the enrolled students have graduated from the programme to date.
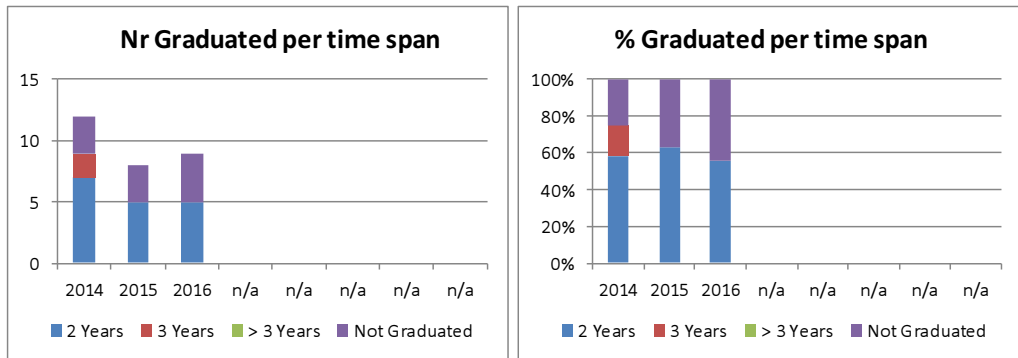

Figure 2

Year first Enrolled	Number Enrolled	Nr graduated per time span			Total Graduated	Total not Graduated	% Graduated per time span			Total % Graduated	Total % not Graduated
		2 Years	3 Years	>3 Years			2 Years	3 Years	> 3 Years		
2014	12	7	2		9	3	58%	17%		75%	25%
2015	8	5	0	n/a	5	3	63%	0%	n/a	63%	38%
2016	9	5	n/a	n/a	5	4	56%	n/a	n/a	56%	44%
n/a					0					0%	
n/a					0					0%	
n/a					0					0%	
n/a					0					0%	
n/a					0					0%	
TOTAL:	29	17	2	0	19	10	59%			66%	34%

Figure 3.1 and 3.2 show the race profile (broken down into African/Coloured/Indian/White) of the registered students, over time (Figure 3.1) as well as for 2017 only (Figure 3.2), with the latter broken down per academic year. Figure 3.3 shows the A/C/I/W split for all the graduates up to 2017.

Data Table

	A	C	I	W	Tot
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	2	2	5	3	12
2015	5	2	5	6	18
2016	4	2	5	6	17
2017	7	1	2	7	17
	0	0	0	0	0
	0	0	0	0	0
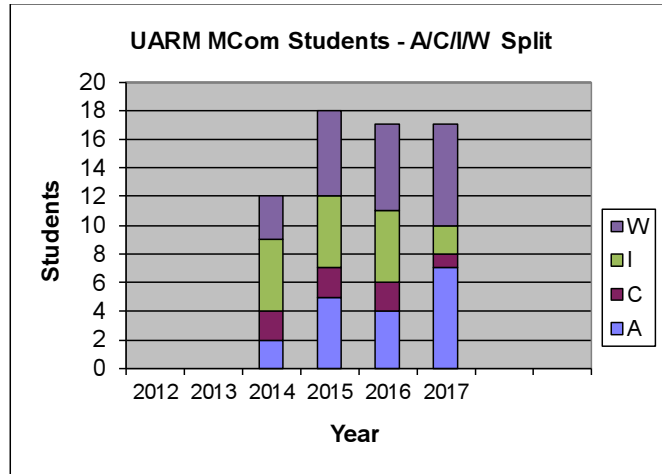
Figure 3.1

Data Table

Acad Year	A	C	I	W	Tot
MFirst	5	0	2	5	12
MScnd	2	1	0	2	5
Total:	7	1	2	7	17

Figure 3.2

Data Table

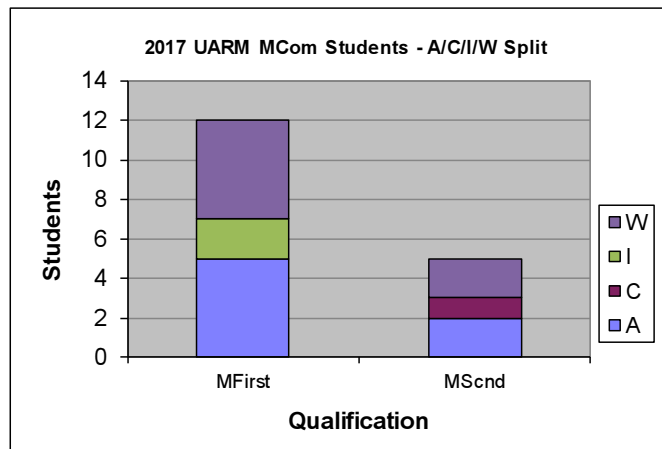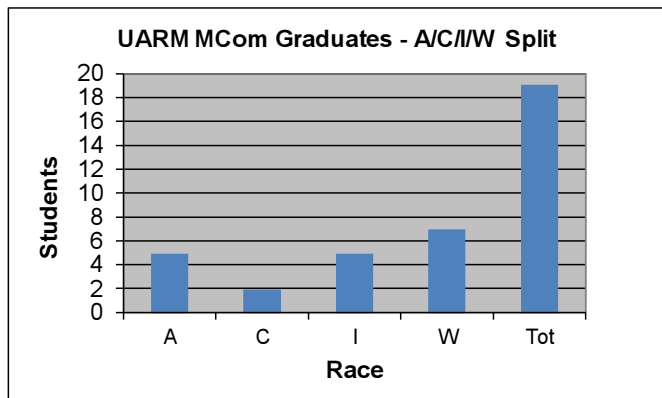| A	C	I	W	Tot
5	2	5	7	19

Figure 3.3

Figure 4.1 and 4.2 show the Male/Female profile of the active students, over time (Figure 4.1) as well as for 2017 only (Figure 4.2), with the latter broken down per academic year. Figure 4.3 shows the Male/Female split for all the UARM graduates up to and including 2017.

Data Table

	M	F	Tot
2012	0	0	0
2013	0	0	0
2014	10	2	12
2015	12	6	18
2016	11	6	17
2017	11	6	17
	0	0	0
	0	0	0
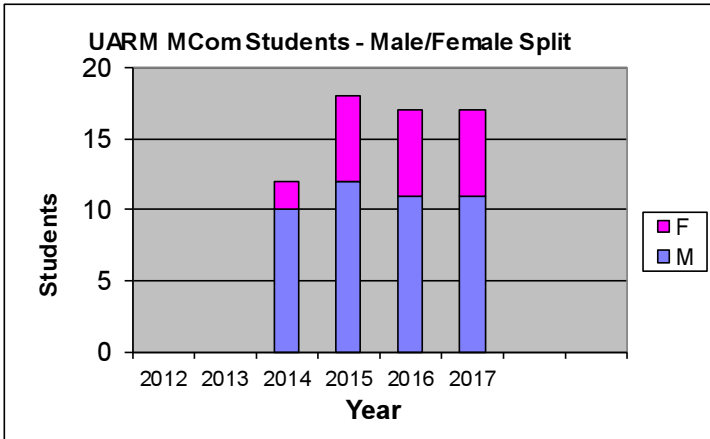
Figure 4.1

Data Table

Acad Year	M	F	Tot
MFirst	9	3	12
MScnd	2	3	5
Total:	**11**	**6**	**17**

Figure 4.2

Data Table

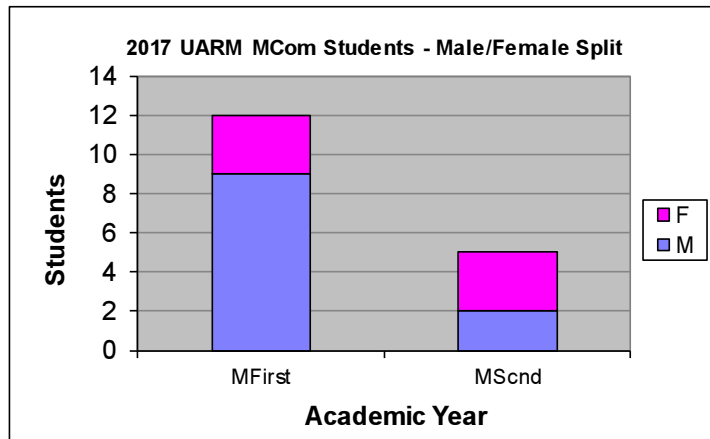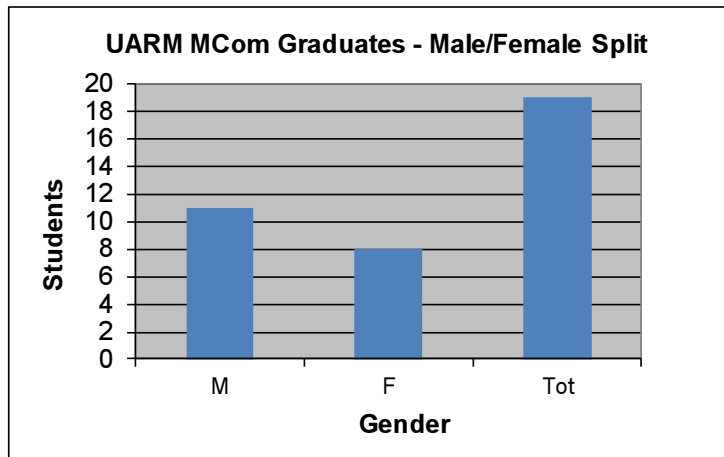| M	F	Tot
11	8	19

Figure 4.3

Figure 5.1 shows the age profile of the registered new intake master's students over time, with the age taken as the candidate's age at the start of the year when he/she first enrolled for the master degree. The graph is a so-called "box and whiskers plot", which summarises the underlying distribution by using the minimum, first quartile, median, third quartile and maximum values.

It is apparent that there was a significant downward shift in the 2016 age distribution compared to the previous years, followed by a significant upward movement in 2017. The lower age distribution in 2016 may explain the lower graduation rate for this group as they are typically in more junior positions with less work experience than the older students.
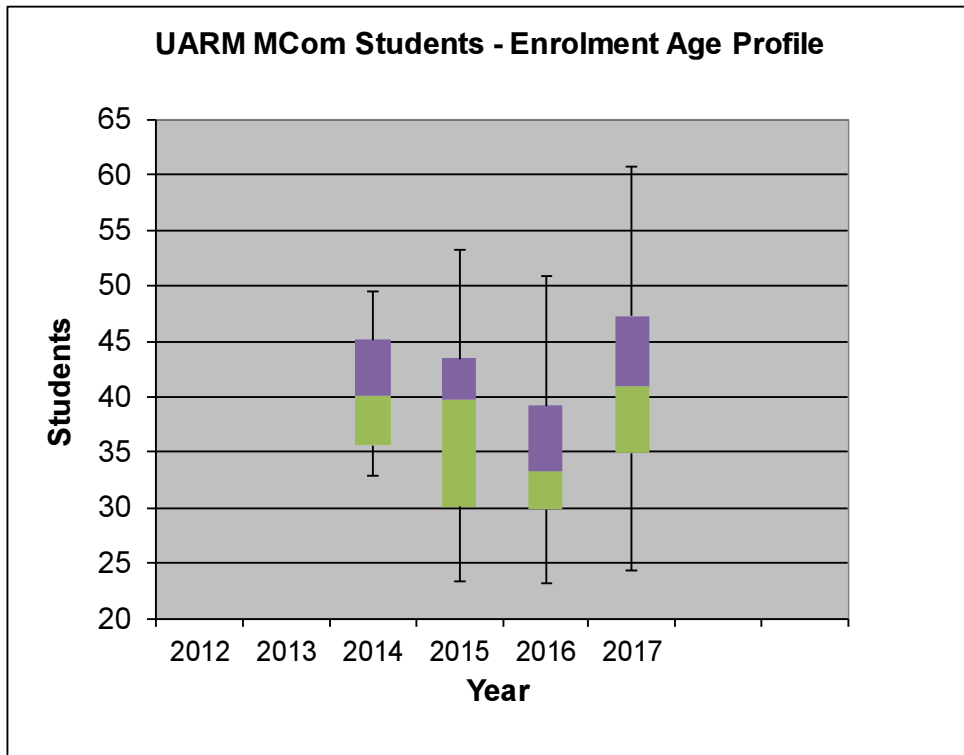
Figure 5.1

UARM MCom Students

Age of new intake at start of first year of enrolment

	2012	2013	2014	2015	2016	2017		
#Students:	0	0	12	8	9	9	0	0
Mean:	-	-	40.6	38.0	34.7	41.0	-	-
Minimum:	-	-	32.9	23.3	23.2	24.3	-	-
Q1:	-	-	35.7	30.1	29.9	34.9	-	-
Median:	-	-	40.1	39.7	33.2	41.0	-	-
Q3:	-	-	45.1	43.4	39.2	47.3	-	-
Maximum:	-	-	49.4	53.3	50.8	60.7	-	-

Figure 5.2 similarly uses a box and whiskers plot to show the enrolment age profile of the masters graduates up to and including 2017. This graph shows that 50% of our 19 master's graduates were between 34 and 42 years of age when they first enrolled, with a median age of 39.

UARM MCom Graduates - Enrolment Age Profile
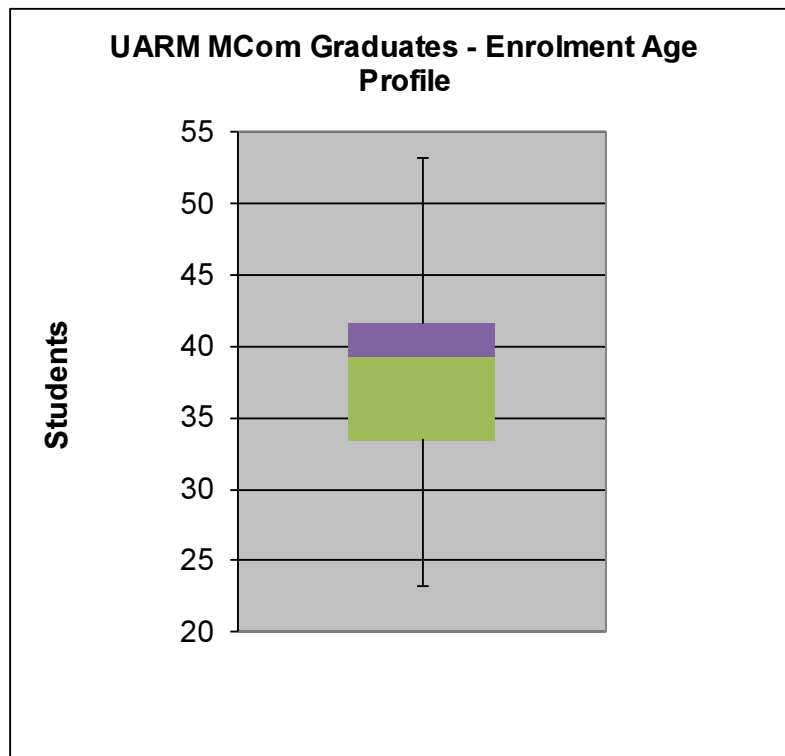
Figure 5.2

UARM MCom Students
Age of graduates at start of first year of enrolment

#Students:	19
Mean:	37.9
Minimum:	23.2
Q1:	33.5
Median:	39.2
Q3:	41.6
Maximum:	53.3

Figure 6.1 shows the number of master's graduates over time, Figure 6.2 the module marks profile for the 2017 master's graduates and Figure 6.3 the average marks for the modules over time.

The higher scores (in Figure 6.3) on the externally examined mini-dissertation (two independent examiners per dissertation) (873) against that of the modules reflects the preparation of the students to do a research project during the modules, plus the hard work of the students and UARM staff members with the students during the students' final research project.
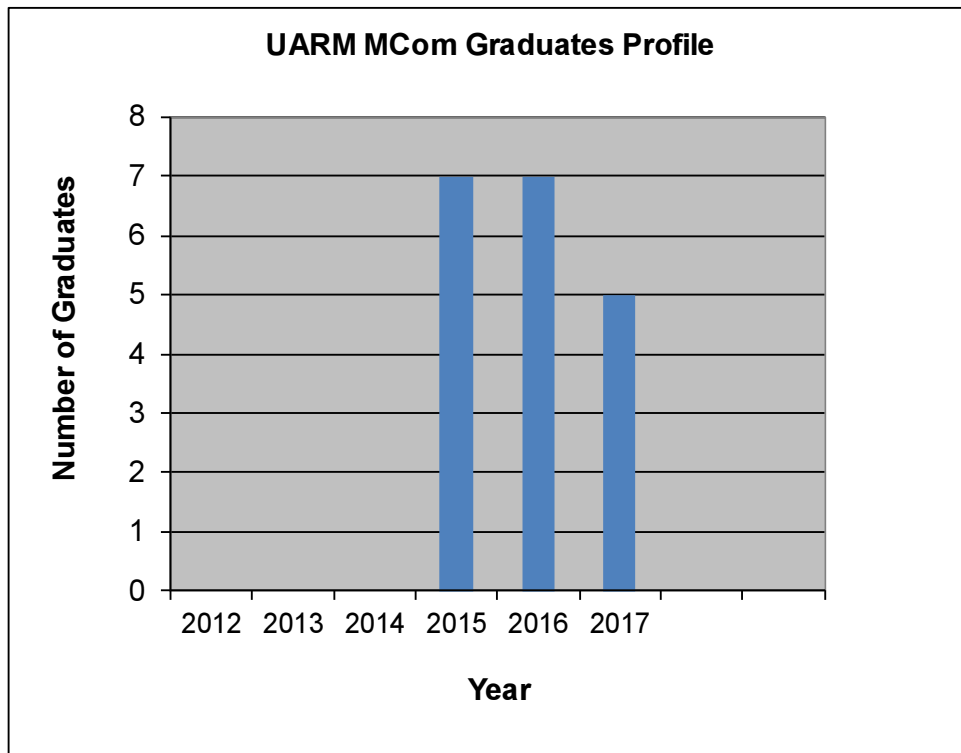
UARM MCom Graduates Profile

Figure 6.1

UARM MCom Graduates

	2012	2013	2014	2015	2016	2017		
# MCom Grads	0	0	0	7	7	5	0	0

2017 UARM MCom Graduates - Marks Profile
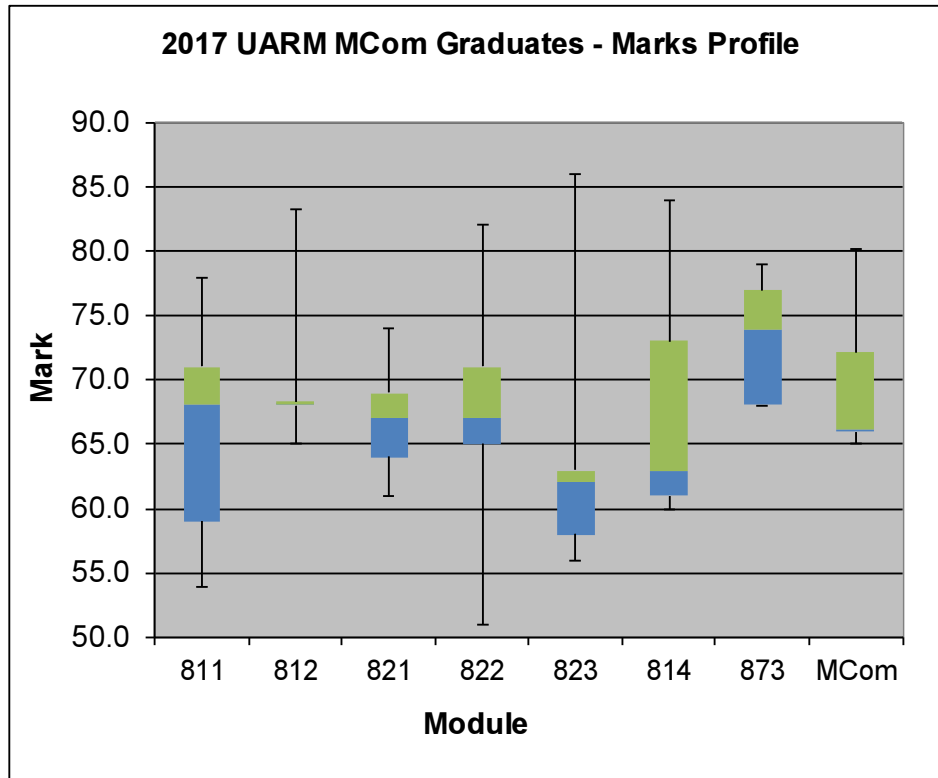
Figure 6.2

2017 UARM MCom Graduates - Marks Profile

Module number - UARM:

	811	812	821	822	823	814	873	MCom
#Students	5	5	5	5	5	5	5	5
#Distinctions:	1	1	0	1	1	1	2	1
Mean:	66.0	70.4	67.0	67.2	65.0	68.2	73.2	69.8
Minimum:	54.0	65.0	61.0	51.0	56.0	60.0	68.0	65.0
Q1:	59.0	68.0	64.0	65.0	58.0	61.0	68.0	66.0
Median:	68.0	68.0	67.0	67.0	62.0	63.0	74.0	66.0
Q3:	71.0	68.0	69.0	71.0	63.0	73.0	77.0	72.0
Maximum:	78.0	83.0	74.0	82.0	86.0	84.0	79.0	80.0
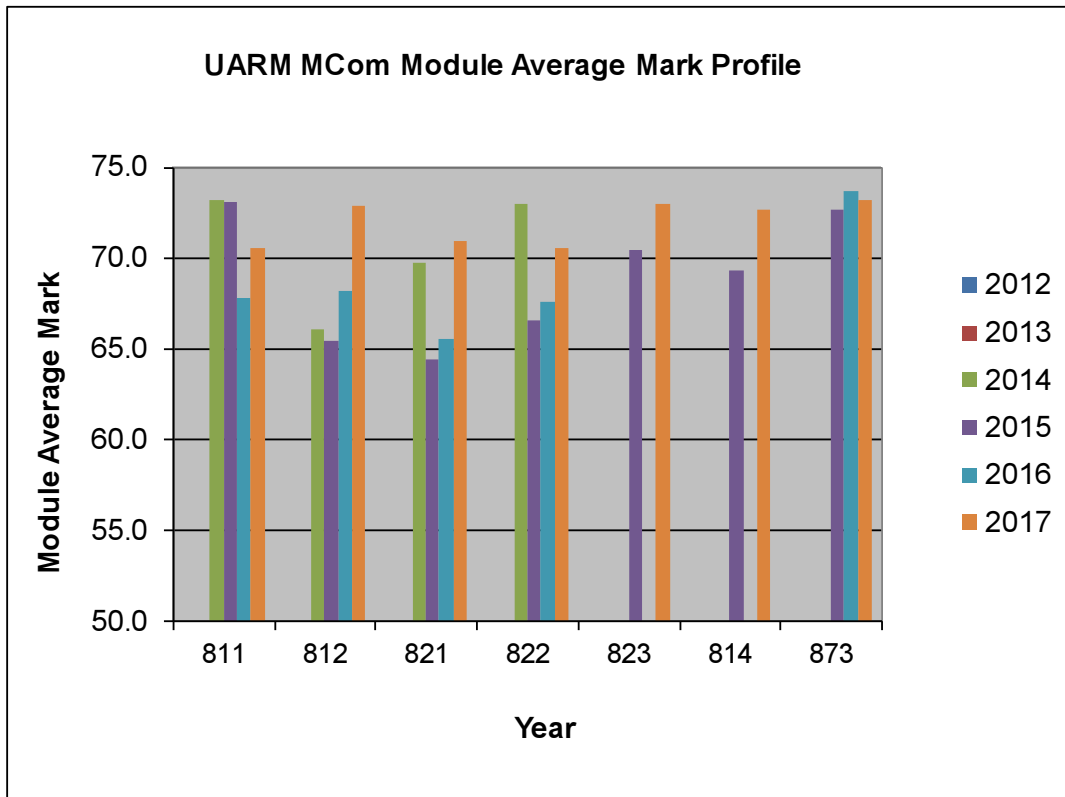
Figure 6.3

UARM MCom Average Marks per Module

	2012	2013	2014	2015	2016	2017		
811			73.2	73.1	67.8	70.5		
812			66.1	65.4	68.3	72.9		
821			69.7	64.4	65.6	71.0		
822			73.0	66.6	67.6	70.6		
823				70.4		73.0		
814				69.3		72.7		
873				72.7	73.7	73.2		

Note that for this report, the 2016 marks for the 823 and 814 modules are shown as 2017 marks, as a result of the transition arrangement from the MCom Finance and Risk Management to the MCom in Applied Risk Management.

4. Training Profile (Dissertations)

All five masters students who were registered for 873, completed their mini-dissertations and fulfilled all the requirements for the MCom degree in Applied Risk Management, as per Table 2 below.

Table 2: Completed Mini-Dissertations

Document Nr	Title	Class.	Student, Supervisor(s)
UARM17a0015	Risk culture: risk reporting versus risk management	None	Albanis, E (Eleni); Gilliland, S (Sonja); Zaaiman, H (Hermien)
UARM17a0016	Regulatory risk culture in the financial sector	Conf	Carries, RE (Roland); Zaaiman, H (Hermien)
UARM17a0017	Risk culture assessment of a small provident fund institution https://repository.nwu.ac.za/handle/10394/28479	None	Modimakwane, RE (Dinah); Goede, F (Fred)
UARM17a0018	The risk culture of a public sector regulatory entity	Conf	Monareng, RE (Bongani); Mulambaya, E (Emmanuel)
UARM17a0019	Staring down the lion: uncertainty avoidance and operational risk culture in a tourism organization https://repository.nwu.ac.za/handle/10394/27601	None	Zeller, RE (Malora); Goede, F (Fred); Zaaiman, H (Hermien)

The structured format of the document number UARMyyxnnnn is as follows:

yy = year of publication / complying with the requirements for the degree (15, 16, …)

x = series code

a = mini-dissertations;

b = PhD theses;

c = internal UARM research reports;

d = Management reports;

e = Consultation reports

nnnn = sequence number, unique per series code (i.e. it does not reset per year)

0000-0999 = unclassified documents

9000-9999 = classified documents

5. Research Profile

We focus on topics related to risk culture in our research. More detail on the rationale underlying this research focus is provided in Appendix A.

In 2017, the master's mini-dissertations were all chosen to focus on assessing aspects related to the risk culture within the candidate's organisation.

The mini-dissertations were delivered in article format. Experience has shown that the dissertations have to be reworked for submission for publication in accredited journals. This has resulted in a decision to focus on only the best master's articles to be reworked and submitted for publication in future. Due to high staff workload, the ex-students have to drive this process, which means that the probability of publishing this work is low.

Table 3 provides a summary of the 2017 staff research and management projects as well as conference papers in the Centre. Number 10240 was published in "The Conversation" (https://theconversation.com/universities-can-do-much-more-to-recognise-and-plan-forrisks-73488) whilst numbers 10320 and 10330 have resulted in published internal reports. Number 10390 was presented at the Cambridge Risk and Uncertainty Conference in June 2017 (https://drive.google.com/open?id=0B8RYGvrmoygbT09LWFBtajRuVkk).

Table 3: UARM Projects in 2017

SeqNr	DocNr/Author	Category	Title/ Description	Collaborators
10012		Research	Higher Education Risk Culture	Zaaiman, H (Hermien)
10042		Research	Strategic Change Risk – Human factors affecting implementation of business change processes	Gilliland, S (Sonja)
10240	Zaaiman, H	Article	Universities can do much more to recognise and plan for risk	Zaaiman, H (Hermien)
10320	UARM17c0003	Research	Proceedings of the UARM 2016 Masters Graduate Student Symposium	2016 Masters Graduate Students
10330	UARM17d0002	Mgmt	Centre for Applied Risk Management Annual Report 2016	Erasmus, CM (Neels); Zaaiman, H (Hermien)
10390	Zaaiman, H	ConfPaper	Post-truth news and risk decision making	Zaaiman, H (Hermien)

6. International Profile

Two of the academic staff members are studying towards their PhDs, one at UARM and one at Wageningen University in the Netherlands.

Staff studying internationally, as well as appointment of International academics as extraordinary professors in the programme[2], supports internationalisation as propagated by the DRAFT POLICY FRAMEWORK FOR THE INTERNATIONALISATION OF HIGHER EDUCATION IN SOUTH AFRICA (2017)

Other notable international contacts that UARM has established are:

- Prof Jochen Runde (Judge Business School, University of Cambridge), acting as examiner;
- Prof Gert Jan Hofstede from The Wageningen Univ and Research (via Fred Goede PhD);
- Prof Marise Born (Erasmus Univ Rotterdam), who will be cooperating in the UARM research programme;
- Prof Henk van der Flier (Vrije Univ Amsterdam), external examiner who has also agreed to cooperate in the UARM research programme;
- Wijnand Nuijts (Head of the Expert Centre for Governance, Behaviour and Culture at De Nederlandsche Bank), for possible cooperation in the further development and testing of the UARM Risk Culture Scale;
- Cardano Strategic Thinking Workshop presented by Karin Pasha and Manon ten Voorde. (The Cardano Group is a Netherlands-based organisation providing strategic risk management solutions for pension schemes).

7. Income

Figure 7 below shows the income generated by the Centre for masters and PhD students, broken down into registration fees, study fees, input subsidy and output subsidy. The total for 2017 amounted to R1.8m, with the cumulative amount since inception equal to R4.5m. Note that the input and output subsidies apply with a two year lag, i.e. we will receive the input subsidies for the 2015 intake in 2017.

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[2] Prof Theo Kocken from the Vrije Universiteit in the Netherlands is our current extra-ordinary professor and teaches in the UARM Behavioural Risk module (he has had a long-standing relationship with UARM)
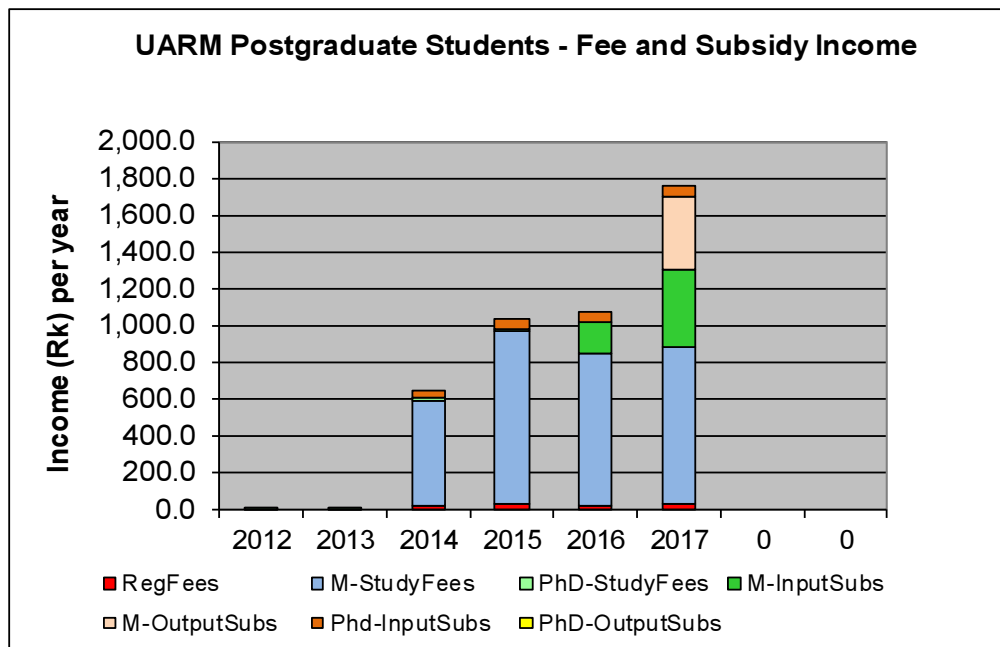
Figure 7

UARM Postgraduate Students Income (Rk)

	Reg Fees	MCom Study Fees	PhD Study Fees	MCom Input Subs	MCom Output Subs	PhD Input Subs	PhD Output Subs	Total
2012	1.1	0.0	9.6	0.0	0.0	0.0	0.0	**10.7**
2013	1.2	0.0	11.6	0.0	0.0	0.0	0.0	**12.8**
2014	17.7	575.0	12.8	0.0	0.0	38.3	0.0	**643.8**
2015	28.3	941.8	14.0	0.0	0.0	50.3	0.0	**1,034.3**
2016	25.3	819.3	0.0	175.2	0.0	51.3	0.0	**1,071.1**
2017	27.3	862.1	0.0	414.4	395.7	61.3	0.0	**1,760.8**
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Total:	**100.9**	**3,198.2**	**47.9**	**589.5**	**395.7**	**201.1**	**0.0**	**4,533.5**

Notes: 1) Input subsidy is only received 2 years after the year of enrolment
2) Output subsidy is only received 2 years after the year of graduation
3) Output subsidy consists of Teaching and Research - the total is reported above

Table 4 shows the registration and study fees applicable to the masters and PhD programme since inception. Note that the MCom total column is calculated as the total paid for the qualification by a student who completed the degree in that year[3].

Table 4: Student Registration and Study Fees

	MCom				PhD	PhD	
	Reg Fees	Study Fees M1	Study Fees M2	MCom Total	Reg Fees	Study Fees	PhD Total
2012					1,100	9,555	10,655
2013					1,230	11,590	12,820
2014	1,360	50,000	50,000	n/a	1,360	12,805	14,165
2015	1,490	54,620	54,625	107,475	1,490	13,990	15,480
2016	1,490	54,620	54,625	112,225	1,490	13,990	15,480
2017	1,610	55,530	48,585	106,305	1,610	15,110	16,720

Finally, Table 5 shows the total income generated by the Centre since 2012[4]. The teaching income is the same as in Table 4, and the consultation income has been subjected to the standard NWU profit-sharing model, where 20% of the invoiced amount is allocated to the university.

Table 5: UARM Total Income (R'000)

	2012	2013	2014	2015	2016	2017
INCOME						
- Teaching	10.7	12.8	643.8	1,034.3	1,071.1	1,760.8
- Research (DST)	0.0	0.0	0.0	0.0	0.0	70.0
- Consultation	25.7	32.4	7.6	7.0	77.6	26.9
Total Income	**36.3**	**45.2**	**651.4**	**1,041.3**	**1,148.7**	**1,857.6**

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[3] For example, the total study fee for a student who registered for the first time in 2014 and graduated in 2015 was R107,475 calculated as 2014 Reg Fees + 2014 M1 Study Fees + 2015 Reg Fees + 2015 M2 Study Fees.
[4] Note that this is not a true Income Statement in the sense that capital expenditure is excluded, consultation income excludes interest, and it is accounted for in the year that it occurred.

8. Highlights

During 2017, the Centre achieved the following notable highlights:

- Class of 2016: All five students passed their mini-dissertations, with one distinction.
- The UARM Risk Culture Scale (RCS) has continued to generate interest in the organisations that our students work for. The questionnaire and related interventions offer commercialising/income generating opportunities.
- Hermien Zaaiman presented a paper on post-truth news and risk decision making at the Cambridge Risk and Uncertainty Conference in June 2017, which resulted in a significant increase and strengthening of UARM's international academic network.
- Following the Cambridge conference, a positive contact was established with the Netherlands Central Bank (DNB -De Nederlandse Bank), who has done a lot of work internally on risk culture. There is a strong possibility that we may partner with them in the further development of the RCS.
- In August 2017, Hermien Zaaiman gave a talk on risk culture at the annual Provincial Risk Management Forum (See Appendix C for a letter of appreciation), which served as an excellent marketing platform for the programme.

9. Challenges

The achievements mentioned in the previous section were counterbalanced by the following challenges:

- UARM team work overload: Little time for UARM team members to do own research leading to concerns about own academic career development;
- The risk culture research focus has proved to be an exciting and potentially business value-adding focus, but capacity to meet expectations is a problem.

10. The Road Ahead

The following are the main objectives of the Centre for 2018:

- Building the UARM Risk Culture research programme, including publishing papers from research projects;
- Nurturing potential PhD candidates (however, having ony one permanent staff member with a PhD on the UARM team, who also manages the programme, severely limits our capacity to supervise PhD studies) ;
- Appoint suitable contract and (if possible) full-time staff members to strengthen the team.

APPENDICES

A: UARM Behavioural Risk Management Research Focus

The aim of the UARM behavioural risk research programme is to develop tools to assess and improve the integration of formal risk management principles into organisational management. The aim of the UARM risk culture research project is to develop tools that can be used to assess the risk management culture ('risk culture') in organisations and to identify risk culture related areas for improvement.

We based our development of the UARM RCQ on the Hofstede cultural onion approach to culture. Hofstede, Hofstede, and Minkov (2010, p. 516) define culture as the trained unwritten rules of the social game or the 'collective programming of the mind that distinguishes the members of one group or category of people from another'. An organisation can be seen as a cultural group that consists of subgroups, each with their own subculture. We use the term organisational risk culture to refer to ways in which groups of people use risk management principles when making decisions on uncertain future events that could have a negative impact on reaching the organisation's objectives.

The UARM Risk Culture Questionnaire (UARM RCQ) is being developed and tested in the student research and organisation specific projects. In the questionnaire, we distinguish between risk management as a function in the organisation and the use of risk management principles during decision making in the organisation. For purposes of this questionnaire, we expect that participating organisations will have a formal risk management function intended to facilitate and oversee the use of risk management principles at the organisation's strategic and operational management levels.

Other risk culture related research projects include related topics such as risk attitude and understanding of risk, risk management and risk stakeholders in organisations.

Reference

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). Cultures and Organizations, Software of the mind, Intercultural Cooperation and its importance for survival (Third ed.). USA: McGraw Hill.

B: External Collaborative Networks

Because of the discipline-independent nature of the UARM training and research we have had students with different academic backgrounds but with an established interest and experience in risk management attracted to the programme. The profile of guest lecturers is similarly varied.

Table B1 below gives a breakdown of the MARM graduates and guest lecturers per economic sector. This is followed by Tables B2 depicting the role profiles of the graduates and similarly for the guest lecturers in Table B3.

Table B1: MARM Graduates and Guest Lecturers per Economic Sector

	MARM Graduate	MARM Guest Lecturer	Grand Total
Communications	2	2	4
Education		1	1
Energy	1	1	2
Fin and Bus Services	9	10	19
Logistics	1	1	2
Other		1	1
Public Sector	5	1	6
Tourism	1		1
Grand Total	**19**	**17**	**36**

Table B2: MARM Graduates Organisational Roles

	MARM Graduate
Assistant Mgr: Group Risk & Regulatory	1
Business Owner & Managing Director	1
Compliance and Risk Manager	1
Director: Risk Management	3
General Manager: ERM	1
Managing Executive: Corporate and Security Mgmt	1
Principal Specialist: Governance	1
Risk Coordinator: ERM	1
Risk Integration Manager	1
Risk Manager	3
Senior Manager: Operational Risk	2
Senior Operational Risk Manager	1
Senior Specialist: ERM	1
Specialist Manager: Credit Risk	1
Grand Total	**19**

Table B3: MARM Guest Lecturer Organisational Roles

CEO: Compliance Institute Southern Africa
Change Management Specialist: Fiona McDonald & Associates
Chief Risk Avisor: IRMSA
Chief Risk Officer: Vodacom
Consultant: IQ Business
Consultant: Project Risk Analysis and Planning
CRO: Marsh Africa
CRO: MMI Holdings
Director: Risk Management, National Treasury
Enterprise Risk Manager: Sasol
General Manager: ERM, Transnet
Head of IA: Models, Credit & FCC, FirstRand Group
Head: Model Risk Management, Retail Credit, FirstRand Group
Independent Director of Companies
IRMSA President and GM: Nedbank Enterprise Risk Management
Managing Executive: Corporate and Security Mgmt, Vodacom
Professor: Erasmus University

C: Previous Student Comments

Bongani Monareng, Risk Coordinator: ERM, National Home Builders Registration Council (Class of 2017):

> *'Firstly, I would like to say 'THANK YOU' to Prof Hermien, the NWU UARM and Kerlick Teams for all the support and guidance provided throughout the programme. May God bless you all. Secondly, I would like to CONGRATULATE all my 2017 classmates , most importantly Malora on her big achievement. Well done!!! Indeed, hard work does pay off eventually.'*

Roland Carries, Risk Manager, FirstRand (Class of 2017):

> *'Thank you Prof , Emmanuel, Fred, Helei, Neels, Sonja for the guidance and making this journey memorable and rewarding. Grateful also for the assistance from the two smiling, pencil carrying editorial assassins aka the Kerlick team. Please pass my deep gratitude to them.'*

Wilna Meiring, Managing Executive: Corporate Risk and Security Management, Vodacom
(Class of 2016):

> *'I am still astounded at how much I grew and learned during the past two years. The masters gave me so much more than I thought it could. Unbelievable at how positive it assists in my work. We have changed our whole approach to ERM in business and this makes me so excited.'*

Eddie Lindeque, Class of 2016 graduate and General Manager: Enterprise Risk Management, Transnet:

> *'Dear Hermien*
> *I just want to thank you for opening up a new world of behavioural risk management to me this year. It was a good learning experience and I have grown, even as a mature ERM specialist, in knowledge and what academia has contributed to the science of risk management. All the knowledge sharing and differences of opinion added the necessary spice to the learning experience.'*

Other student responses received to the question: "What did you like about the course?"

- *"I liked the course because it is applied and research based. It allows me to conduct research on current issues and that I am to apply those in my working environment"*

- *"The content The invited speakers on specialised areas The environmental scanning project was extremely useful"*

- *"Case studies that are dealt with during the lectures, gives us an opportunity to have meaningful discussions of real life examples"*

- *"I enjoyed the course content, for most parts it was practical and refreshing and not just text book styled and theoretical. The international angle with the colleagues from Holland was the stand out learning points to date"*

- *"The practical nature of it. I had to opportunity to perform various exercises that I would never have been able to do at work. I also like that the presenters also have "practical work" experience*

and that they are not pure academics. There is a big difference between theory and practice. I also like the small class and the very personal feedback after each assignment"

- *"The networking and sharing of information. Especially where we can see and experience how other people implemented the theory.   That I could make the case studies practical and add value to my current work"*

C: Other Stakeholder Comments

Bafana Mabale, Manager: Enterprise Risk Management, Noth-West Development Corporation (following a workshop on risk culture conducted with them in January 2017):

> *'Dear Prof Zaaiman*
>
> *On behalf of the CEO, Management and the staff in general, the NWDC hereby wishes to send our thanks and gratitude for a captivating interactive workshop on risk management that you presented on 25 January 2017. The knowledge and the information that you imparted is certainly going to be a helpful tool in the day to day business activities of the NWDC.*
>
> *We feel truly honoured to have associated with you in this venture and we hope you will accede to similar requests in future should we need to be invigorated again'*

National Treasury, following a workshop on risk culture conducted with them in August 2017:

national treasury

Department:
National Treasury
REPUBLIC OF SOUTH AFRICA

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Faculty of Economic and Management Sciences
North West University
Vaal Triangle Campus
South Africa

APPRECIATION OF YOUR PARTICIPATION AT THE RISK MANAGEMENT FORUMS

The Office of the Accountant General would like to thank you for your insightful presentations on *"Risk Management Professionalisation"* and *"The Components of Risk Culture to be considered when assessing a Risk Culture"* at the Risk Management Forum for Departments and Non-Delegated Municipalities and the Risk Management Forum for Public Entities, held on 31 August and 07 September 2017 respectively.

The presentation made a valuable contribution in strengthening the delegates' understanding of the risk management culture challenges faced in their institutions, as well as the great interest shown by risk officers in professionalising risk management. This is substantiated by the responses from the delegates' evaluation of the forums, which exhibits an overwhelming level of appreciation on the knowledge imparted by you.

A total of one hundred and seventeen (117) delegates attended the two forums. Our general expectation is that the knowledge gained in such forums will be outspread to a much wider audience in their respective areas of work.

Your availability to participate in our future initiatives will be much appreciated.

Thank you and regards

Mr Bheki Gutshwa
Risk Management Support
**Office of the Accountant-General**
Date: 14 September 2017

- **2018 May 9:** UARM Graduation - Class of 2017, comprising of five graduates.

Front: Prof. Wynand Grobler, Prof. Hermien Zaaiman, Prof. Herman van der Merwe, Prof. Babs Surujlal, Dr. Sonja Gilliland

Back: Roland Carries (Graduate), Dr. Elisabeth Lickindorf, Dr. Graham Baker, Emmanuel Mulambya, Prof. Neels Erasmus, Fred Goede, Hedré Pretorius, Eleni Albanis (Graduate), Malora Zeller (Top Graduate), Dinah Modimakwane (Graduate), Bongani Monareng (Graduate)

- **2018 Mar 20:** Faculty of Economic and Management Sciences Student Excellence Awards - Malora Zeller receives the prize as top student. with her.
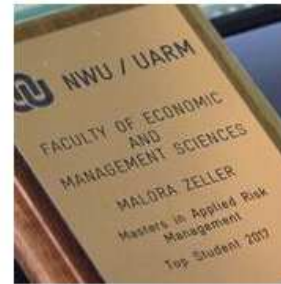
- **2018 Jan 25:** UARM facilitates a workshop on risk culture with the North-West Development Coorporation - read more here.

- **2017 Nov 9:** Cardano Strategic Thinking Workshop

The workshop facilitators - Karin Pasha and Manon ten Voorde