

# The Economic Rewards of an Australian Creative Arts Degree

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## Abstract

The number of university places in creative arts degrees in Australia has risen at a much faster rate than for other degree programs. This represents a big increase in investment in creative arts education.

**Purpose** of this paper is to examine the careers of those having bachelor degrees in creative arts.

**Approach** mainly consists in estimating the monetary returns from these degrees using population data from the Australian Census under a range of assumptions.

**Results** show that for the average person, there are little or no monetary incentives to complete these degrees and the private rate of return compares unfavourably with alternative degrees or with returns to financial assets such as the rate of interest.

**Policy implications** are discussed such as those for university financing and increases in university places.

**Keywords** creative arts, career paths, rate of return, education policy

## Introduction

This paper seeks to shed light on the economic benefits to Australian individuals of pursuing a university degree in creative arts. An analysis of the career of an 'average', here taken to be the median, Australian university graduate in the creative arts is provided. Here the emphasis is on the labour market experience and economic returns to creative arts graduate with a view to comparing the value of a creative arts degree with other university alternative courses. The non-monetary benefits of a creative arts degree to individuals and society, which are usually assumed to be positive, are beyond the scope of this paper and not, therefore, included. However, we do think the results have implications for government policy and for university funding which will be discussed.

The analysis relies mainly on the data from the 2011 Census of Population and Housing because it provides unit records on every graduate living in Australia. Although we only consider a snapshot of all graduates in 2011, in later work it is hoped to examine whether there have been significant changes over time.

Two general approaches have been adopted. First, a profile of creative arts graduates is used to describe the labour market outcomes of creative arts graduates from age 21 years, usually the youngest age of a graduate, up to age 65 years, assumed to be the usual retirement age. Several labour market indicators such as employment status, income and occupation are used to compose the profile. The second approach is to calculate the private rate of return to a university degree. This is a technique well-known to labour economists but not, generally, familiar to non-economists.

Numerous international and country-specific studies have calculated the rate of return to individual's investment in education. The basic idea is that education not only provides

consumption benefits to students but it is also an investment which involves sacrificing income in the present to raise future income. According to the human capital framework time spent in education has the potential to raise future income by enhancing people's skills and raising their productivity. The return from a degree is compared to the return on non-human assets (usually the interest rate) and the return on other qualifications to assets the value of an investment in a particular course, in this case a creative arts degree.

An alternative view, that a degree acts as a screening device to employers rather than an increase in human capital, is also considered in the context of the creative arts.

The paper is structured as follows. The next section defines the group of people of interest and provides a profile of creative arts graduates. This is followed by a description of the rate of return method and the results obtained by applying the approach to creative arts graduates. The paper concludes with a discussion of the results and implications for policy.

### **Profile of creative arts graduates**

For the purpose of this paper a creative arts graduate is defined as someone holding a bachelor degree in the Australian Standard Classification of Education (ASCED) two-digit field of study 10 – Creative Arts (ABS 2001). Degrees in this field are:

#### **Performing arts**

Music

Drama and theatre studies

Dance

Performing arts, n.e.c.

#### **Visual arts and crafts**

Fine arts

Photography

Crafts

Jewellery making

Floristry

Visual arts and crafts, n.e.c.

#### **Graphic and design studies**

Graphic arts and design studies

Textile design

Fashion design

Graphic and design studies, n.e.c.

#### **Communication and media studies**

Audio visual studies

Journalism

Written communication

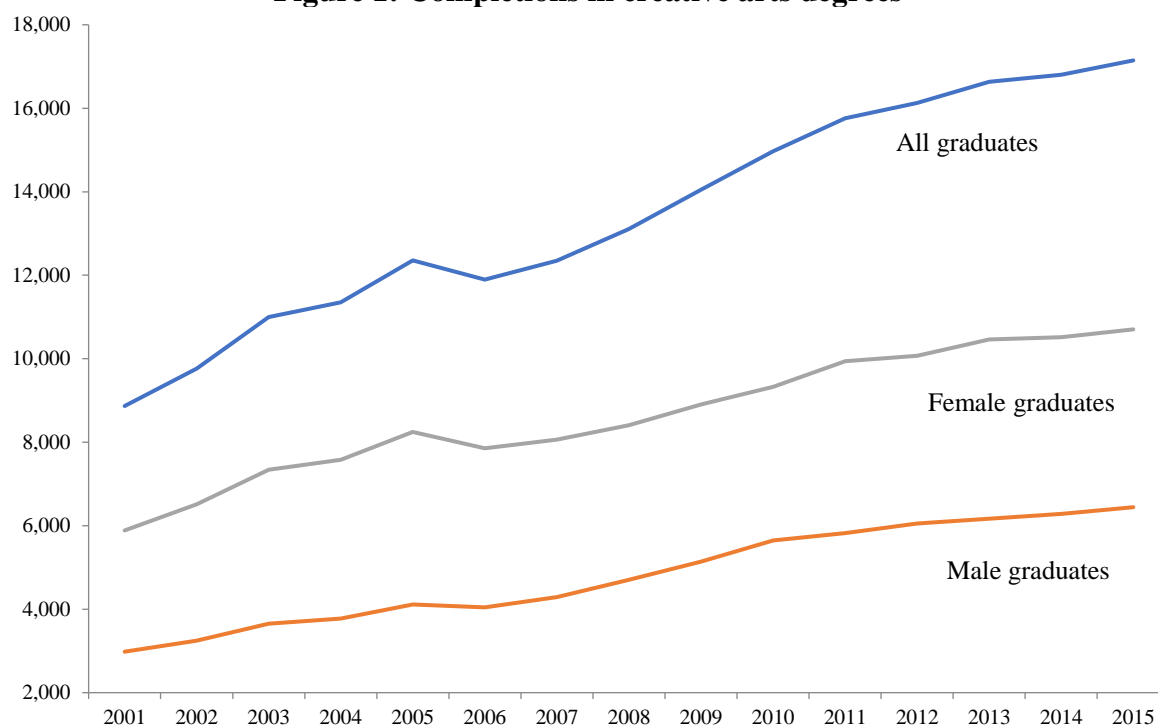
Verbal communication

Communication and media studies, n.e.c.

#### **Other creative arts**

Creative arts, n.e.c.

In 2015 there were 77,927 domestic students enrolled in and 17,146 students graduating with a creative arts degree. Of these 62.4 percent were female compared to 59.5 percent for all graduates (Department of Education and Training 2016). The demand for creative arts courses and, hence the number of completions has been growing over time at a rate greater than the number graduating in all degrees – 93 percent between 2001 and 2015 for creative arts compared to 50 percent for all graduates– the annual growth rate for males was 5.7 percent compared to 4.4 percent for females DET (2016).

**Figure 1: Completions in creative arts degrees**

Source: Department of Education and Training (2016), uCube, Higher Education Data.

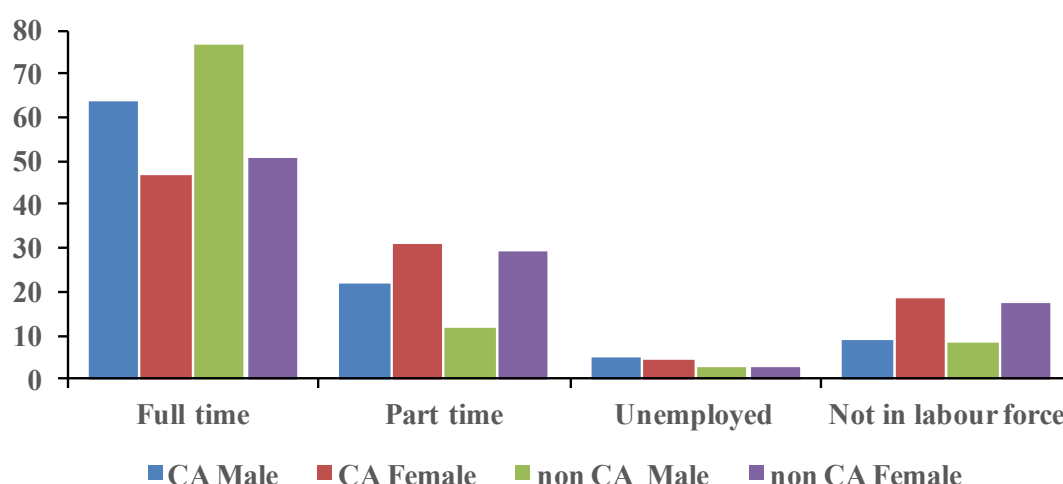
According to the 2011 Census, 149,266 people of working age (21 to 65 years) held a degree in the Creative Arts. Of those graduates, more than half (52.9 percent) were in full-time employment and 27.5 percent were in part-time employment. 4.7 percent were not engaged in either full-time or part-time employment, and 15 percent were not in the labour force. Female graduates had a lower rate of full-time employment compared to male graduates, while part-time employment was higher among females than males. 18.3 percent of female graduates were not in the labour force, which was double the percentage of male graduates.

**Table 1. Employment status of creative arts graduates**

Employment status		Number			Percent		
		Male	Female	Total	Male	Female	Total
Employed	full-time	35,177	43,778	78,955	63.7	46.5	52.9
	part-time	12,087	28,964	41,051	21.9	30.8	27.5
Unemployed		2,871	4,072	6,943	5.2	4.3	4.7
Not in the labour force		5,080	17,237	22,317	9.2	18.3	15.0
Total		55,215	94,051	149,266	100.0	100.0	100.0

Source: Census of Population and Housing, 2011, unpublished

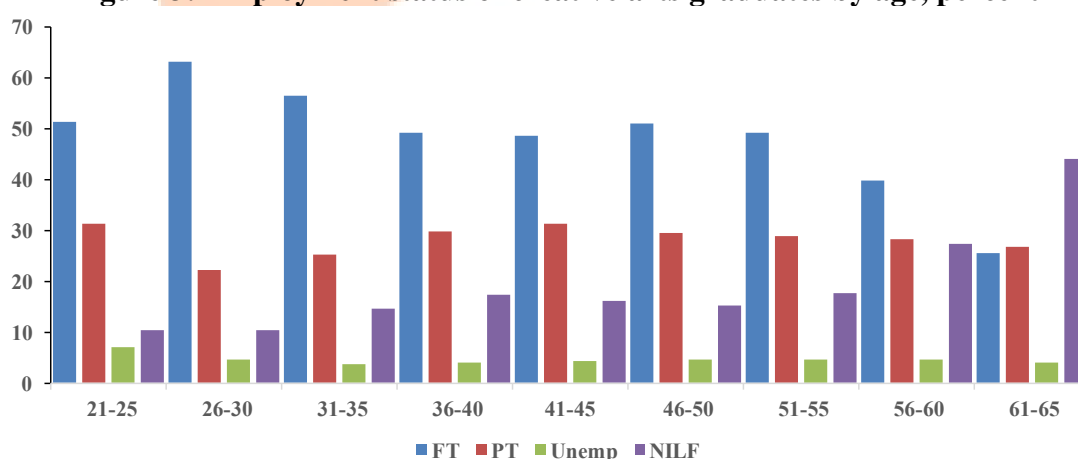
Figure 2 shows the labour force status of creative arts graduates by age group. As usual labour force status has three possible states – employed full-time (FT), employed part-time (PT), unemployed and not in the labour force (NILF).

**Figure 2: Employment status of creative artists and all other graduates, percent**

Source: Census of Population and Housing, 2011, unpublished.

Of creative arts graduates 64 percent of males and 47 percent of females are employed full-time compared to 77 percent and 51 percent, respectively, for other graduates. Therefore, a significantly smaller percentage of creative arts graduates are employed full-time than other graduates. While for females, the part-time employment rate is virtually the same for both groups of graduates, about 30 percent, the rate for males is almost twice, 22 percent, that of other graduates, 12 percent. The unemployment rate for creative arts graduates is slightly better than for the labour force as a whole, but for males it is 2.2 percentage points greater for other graduates and 1.5 percentage points for females. There is little difference between the two groups of graduates with respect to the percentage not in the labour force.

In summary, creative arts graduates do not appear to have greatly unfavourable labour market outcomes, in terms of unemployment or not in the labour force. However, the incidence of part-time work is more prevalent among male creative arts graduates than for other graduates. This supports the anecdotal view, supported by Throsby and Zednick (2010) for example, that, at least for males, creative arts graduates make use of part-time employment to support their artistic pursuits.

**Figure 3: Employment status of creative arts graduates by age, percent**

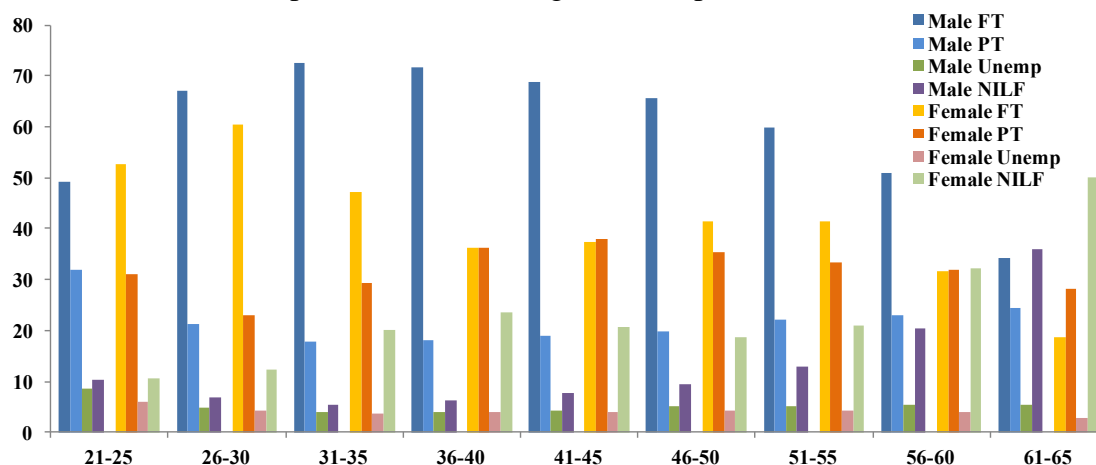
Source: Census of Population and Housing, 2011, unpublished

The overall distribution of labour market states masks somewhat (and reflects) labour force participation and employment are at their peak among those aged 26-30 years old after which full-time employment falls and part-time employment increases, a pattern observed among most graduates as women tend to devote more time to caring for children. After 45

years, full-time employment rises somewhat and over 55 full-time employment falls while part-time employment and retirements increase.

**Figure 4: Labour force status of creative arts graduates by age and gender**

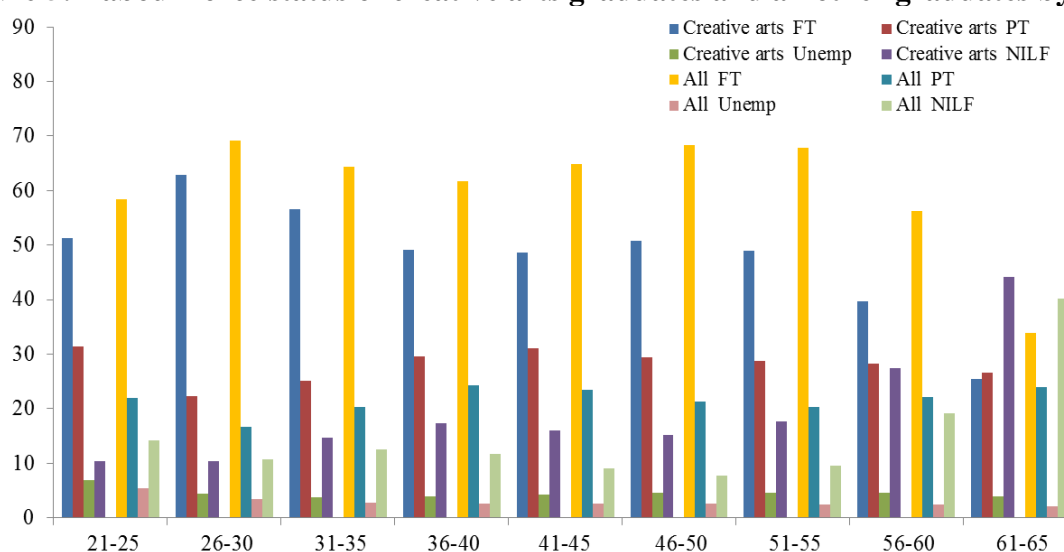
Source: Census of Population and Housing, 2011, unpublished.



Overall participation rates for males and females are somewhat lower than those for the labour force as a whole (Lewis 2015) for males or females. For males, the percentage in full-time employment reaches a peak at ages 31 to 35 years and falls consistently thereafter until by ages 56 to 60 years only about a half of all male arts graduates are in full-time employment. For males part-time employment declines as full-time employment increases up to age 31 to 35 but does not rise significantly as full-time employment decreases up to age 56 to 60. Much of the fall in full-time employment appears to be reflected in rising percentage of those not in the labour force.

For younger female creative arts graduates participation in full-time and part-time employment is similar to that of male graduates. Participation in full-time employment falls significantly for females aged 31 to 35. Some switch to part-time work is evident after that but remains fairly constant thereafter, even after ages when formerly dependent children would have expected to have become 'independent'. It is not clear whether these females working part-time are also undertaking "artistic" activities as well as paid work. Females tend to exit the labour force at a greater rate than males from age 56 to 60.

**Figure 5: Labour force status of creative arts graduates and all other graduates by age**



Source: Census of Population and Housing, 2011, unpublished.

We now examine how labour force status differ between creative arts graduates and all other graduates. Figure 5 shows very distinct differences between the two groups of graduates. Creative arts graduates have much lower rates of full-time and greater part-time rates of employment compared to other graduates. The differences in participation rates between the two groups becomes more pronounced with age. Unemployment rates are marginally higher for creative arts graduates at all ages. The percentages not in the labour force are higher for creative arts graduates aged over 31 to 35 years of age.

In summary, the distribution of labour force states is different to that of other graduates which may be because of differences in demand for the skills that creative arts graduates possess (partly through their degree programs) or supply decisions of those graduates who have somewhat different views of paid work and wish to devote time to less marketable arts-related activities. Whatever the reason, the labour market, generally, to the extent that time participating in the paid employment, provides less economic benefits to creative arts graduates than for other graduates.

Of full-time employed graduates, more than half (54.3 percent) are engaged in professional occupations, followed by management (15.5 percent) and clerical and administrative occupations (12.2 percent). A much higher rate of full-time employment in clerical and administrative occupations was observed among female graduates (16.1 percent) than male graduates (7.2 percent). It can be concluded that most creative graduates are employed in occupations that would be expected of university graduates.

**Table 2: Occupation of full-time employed creative arts and all graduates, percent**

Occupations	Other graduates			CA graduates		
	Male	Female	Total	Male	Female	Total
Professionals	56.3	63.2	59.3	56.6	52.4	54.3
Managers	22.8	14.8	19.3	14.6	16.3	15.5
Clerical & Administrative Workers	7.2	12.6	9.6	7.2	16.1	12.2
Technicians & Trades Workers	4.8	1.8	3.5	8.9	3.4	5.8
Sales Workers	2.8	4.2	3.4	4.9	6.0	5.5
Community & Personal Service Workers	2.9	2.3	2.6	3.6	4.5	4.1
Labourers	1.5	0.8	1.2	2.2	0.9	1.5
Machinery Operators & Drivers	1.7	0.3	1.0	2.0	0.4	1.1

Source: Census of Population and Housing, 2011, unpublished.

Interestingly, only 15 percent of creative arts graduates are employed in arts-related occupations and of these 34 percent are employed as journalists (39 percent for females and 29 percent for males). This, and the fact that most are employed in professional and managerial occupations, suggests that a creative arts degree equips graduate for many jobs not related to students' main areas of study.

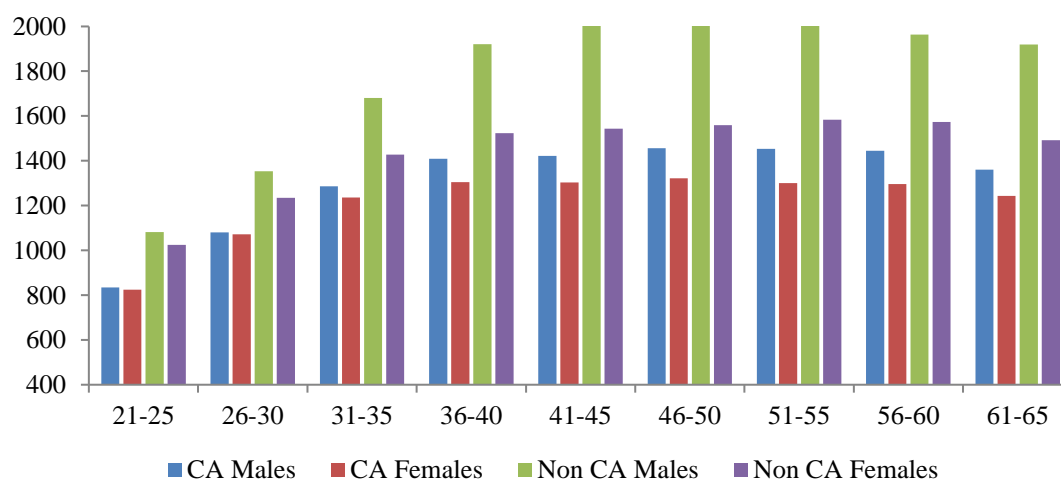
In summary, there are some differences in labour market states between creative arts and other graduates, but the differences are not great. The question then arises as to the wage outcomes of creative arts graduates. In particular, if the "struggling artist" anecdote is an



observable phenomenon then it is necessary to look beyond the labour force status of creative arts graduates and to examine their lifetime earnings.

Figure 6 shows that differences in income between those with creative arts degrees and other degree holders is very pronounced, particularly for males. For new graduates, those in the 21-25 age group both male and female creative arts graduates earn over 20 percent less than other graduates. The gap in percentage income does not narrow with age and for age when median incomes are highest, the 36-55 years of age male creative arts graduates have incomes of approaching 600 dollars per week less than other graduates.

**Figure 6: Median income per week, by gender and age, creative artists and other graduates, \$ per week (full-time)**



Source: Census of Population and Housing, 2011, unpublished

For both categories of graduates males have significantly higher incomes than females but the gender gap is far less for creative arts graduates. Male creative arts graduates earn less than female non-creative graduates at all ages.

### Rate of return to a creative arts degree

Here we use a familiar human capital approach to examine the economic benefits over a graduate's career, namely rate of return analysis. It is not intended here to explain in detail the method of rate of return analysis since this is readily accessible elsewhere (see, for instance, Daly et al 2015, Lewis et al 2004) but basically it treats investment in human capital (education) in the same way as an investment in physical capital. Whereas education provides consumption benefits to students, and it could be argued that this is particularly so in the creative arts, it is also an investment which involves sacrificing income and incurring other costs in the present to raise future income. These (actual and opportunity) costs of a university education are taken as the individual's investment in education and the returns to this investment are the additional income earned by the individual over their lifetime, over and above what the individual would earn if they only had schooling up to Year 12, typically the final year of schooling for entry to university. The rate of return is calculated in the same way as the return from an investment in a physical or financial asset such as the rate of interest.

According to the human capital framework (Becker 1964), time spent in education has the potential to raise future income by enhancing people's skills and raising their productivity. An alternative interpretation of the higher earnings of the more educated is derived from the screening hypothesis (Arrow 1973) which argues that formal education does not actually alter an individual's productivity but acts as a screening device used by employers to select workers. However, it has been argued that for many artists a university education is a particularly poor

screening measure (see, for instance, Benhamou 2011) since a university qualification matters less than artistic talent which can be better evaluated through other means.

It has proven difficult to distinguish between claims of these competing explanations of why the more educated earn more on average than the less educated. However, what is important is that on average people with higher levels of education earn more than those with lower levels of education. From an individual's point of view, the evidence strongly suggests that investing in education is worthwhile (see, for instance, Daly et al 2015 for the evidence for Australia).

The existence of consumption benefits, on the one hand and consumption costs on the other hand, such as stress and reduced leisure arising from participating in higher education, mean that assessing the value of investment in education to a private individual only tells part of the story about the total value of higher education. Other considerations in measuring the value of higher education to society are the positive (and negative) effects arising from education.

On the positive side, Weale (1993) summarises three benefits associated with what is known as endogenous growth. First, the higher productivity of the educated raises the productivity of the less educated. The second benefit relates to the effects of parents' education being linked to lower fertility and improved child development. The third benefit relates to the generally better health outcomes of the more educated. It has also been argued that a more highly educated workforce contributes to a more informed and tolerant society (Lewis et al 2010). It would be expected that in this last argument would be particularly strong for creative artists. Recent research in Australia (Kassenboehmer et al 2018) found that university education significantly increased agreeableness and extraversion in students from disadvantaged backgrounds and this was not related to specific degrees or teacher quality. They maintain that agreeability and extraversion are linked to marketability of graduates.

On the negative side, increased levels of education can lead to credentialism and, where there is an excess supply of graduates, the creation of a group with unsatisfied expectations about their position in the job market. In the case of creative artists credentialism may be particularly rife given that typically arts courses used to be the domain of colleges and drama schools which have now been brought into the university sector. It may be questionable as to whether being a creative artist really requires a university degree. On the other hand, as the occupational distributions above demonstrate, only about 15 percent of persons possessing a creative arts degree are employed in a related occupation. Therefore, a university degree which typically contains units in a wider range of subjects and skills attainment than suggested by the degree's major, may be appropriate for a world of work where demands are continually changing.

As most countries' governments subsidise higher education, it is also the case that there is an opportunity cost associated with the use of these public funds.

In estimating the returns to higher education, no account is taken of the effect of unmeasured characteristics such as natural ability, motivation and family background on outcomes. If people with higher ability are more likely to complete a university degree because the costs for them in terms of time, effort and money are lower than for people with low ability, education will look like a more profitable investment than it is. Alternatively, people may use educational credentials to compensate lower levels of ability. If average ability is assumed in the calculations and ability is correlated with completion of a degree, this will alter the estimated rate of return to education compared to its true value. In a summary of evidence for the USA Card (1999 and 2001) argued that ability biases to the estimates of the return to education are not large, and in the results presented here, there is no correction made for ability. The results presented here are based on cross sectional data from the 2011 Census and are, therefore, an estimate of the expected average rate of return to investment in a creative arts



bachelor's degree if the earnings differentials between high school and university graduates observed in 2011 were to continue over the course of a graduate's working life. The current incomes of graduates of different ages therefore are assumed to provide a useful guide to inform such a decision.

The following discussion outlines the assumptions made in this paper. The data used for the earnings calculations are from the 2011 Census of Population. The results presented here are based on cross sectional data from the 2011 Census and are therefore an estimate of the expected rate of return to investment by the median student in a creative arts bachelor degree if the earnings differentials between high school and university graduates observed in 2011 were to continue over the course of a graduate's working life. The current incomes of graduates of different ages, therefore, are assumed to provide a useful guide to inform such a decision.

In the first modelling exercise incomes are the medians for all people with a given qualification in an age category and all labour market states are included; full and part-time employed, unemployed and not in the labour force. They, therefore, reflect the different employment outcomes for university graduates compared with Year 12 completers and males compared with females as well as any income differences that exist within a labour force status. In a second exercise only those in full-time employment were considered. A simple regression relating median income to age and age squared was estimated to provide a smooth series for median incomes at each age. Net incomes were then calculated using the 2010/11 income taxation rates.

It is assumed that all students work part time during their studies. A survey by McInnes and Hartley (2000) found students work an average of 15 hours a week and earn \$18 an hour over a year. Adjusting this to 2011 prices yields an estimate of \$17699 per year before tax.

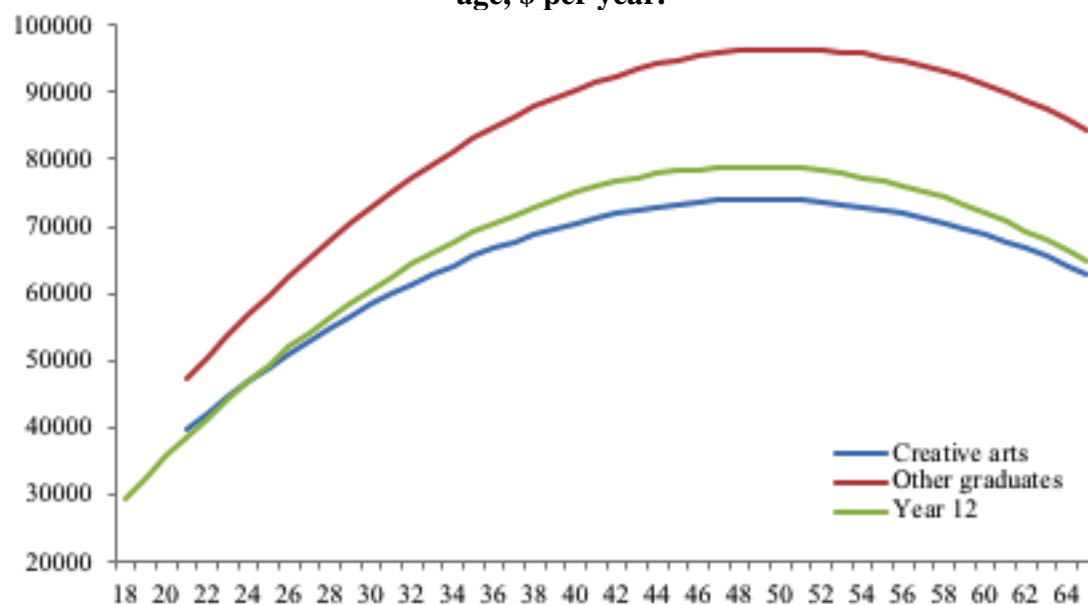
All students are assumed to choose to finance their university course fees through the HECS-HELP loan scheme, under which students have to repay part of the costs of a degree to the government either through direct repayment or by incurring additional taxation when their income rises above average earnings. It is assumed graduates repay debts according to the minimum payments Australian Tax Office schedule as they earn after completion of their study.

Students are assumed to bear \$1980 in costs for books, materials etc. This is based on a 2006 estimate by the then Australian Vice Chancellors Committee (AVCC 2017) adjusted to 2011 prices.

Figure 7 shows the distribution of median income over the potential working lifetime for all creative arts university graduates, Year 12 graduates and non-creative arts university graduates. These visual representations of median earnings at each age are known as age earnings profiles.

Figure 7 shows, in quite stark fashion, that for most people a creative arts degree is not a worthwhile financial proposition – it is basically a consumption good. Although creative arts graduates start with a slightly higher income than those with only Year 12 qualifications, they earn less overall than those with only Year 12 qualifications. Income disparity between creative arts graduates and other graduates grows wider as age increases. Clearly, the returns from other degrees are much larger than for creative arts graduates.

**Figure 7: Median annual income, creative arts, other degrees and Year 12 graduates by age, \$ per year.**

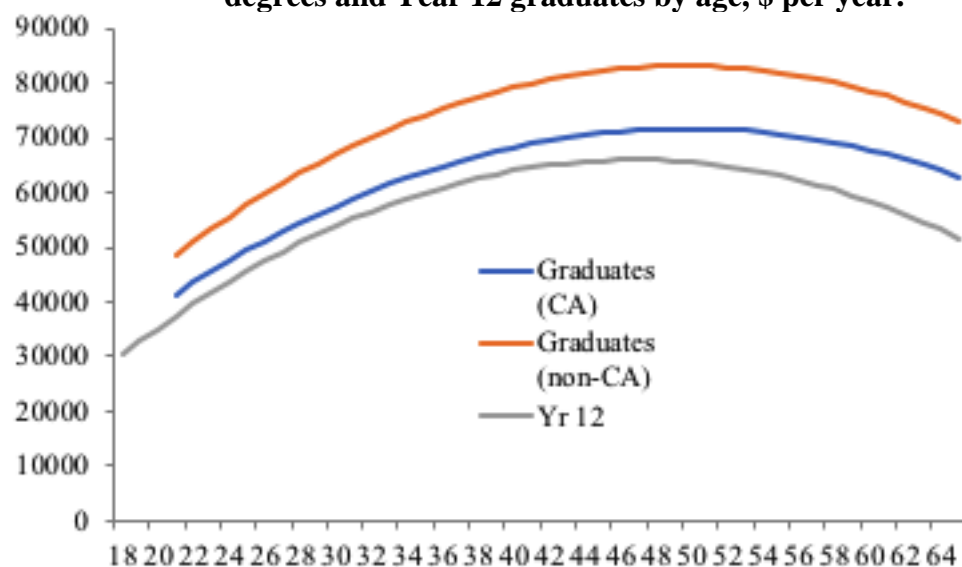


Source: Authors' estimates derived from Census of Population and Housing, 2011, unpublished.

On a positive note, at least from the student's perspective, for the students regarding a degree as mostly consumption, our calculations show that at least half of all creative arts graduates do not repay HECS-HELP because their earnings are not high enough for repayments to be paid to the Australian Tax Office. As would be expected from the data in Figure 6, the rate of return to a creative arts degree is found to be negative.

In the base case above, everyone is included in the rate of return estimates no matter how much they work or even if they do not work at all. Unemployment or a greater incidence of part-time work may significantly affect the returns to a degree. Also, many (perhaps most) women leave the labour force for periods of time to look after children. The profiles earlier in the paper illustrated that many women are working part-time or not in the labour force. For males, the incidence of part-time employment is much greater for creative arts graduates than for other university graduates. Therefore, it is interesting to control for this by selecting only those working full-time. In the second scenario considered here both the university graduates group and the comparator group (Year 12 graduates) only include those working full-time. Figure 8 shows the age earnings profiles as before but for only females working full-time. Because only those employed full-time are included the rates of return reflect only differences in salaries (return to human capital) rather than employment status. Clearly, the gap between creative arts graduates and other graduates, although still fairly wide, narrows considerably when only those working full-time are considered.

**Figure 8: Median annual income of females working full-time, creative arts, other degrees and Year 12 graduates by age, \$ per year.**

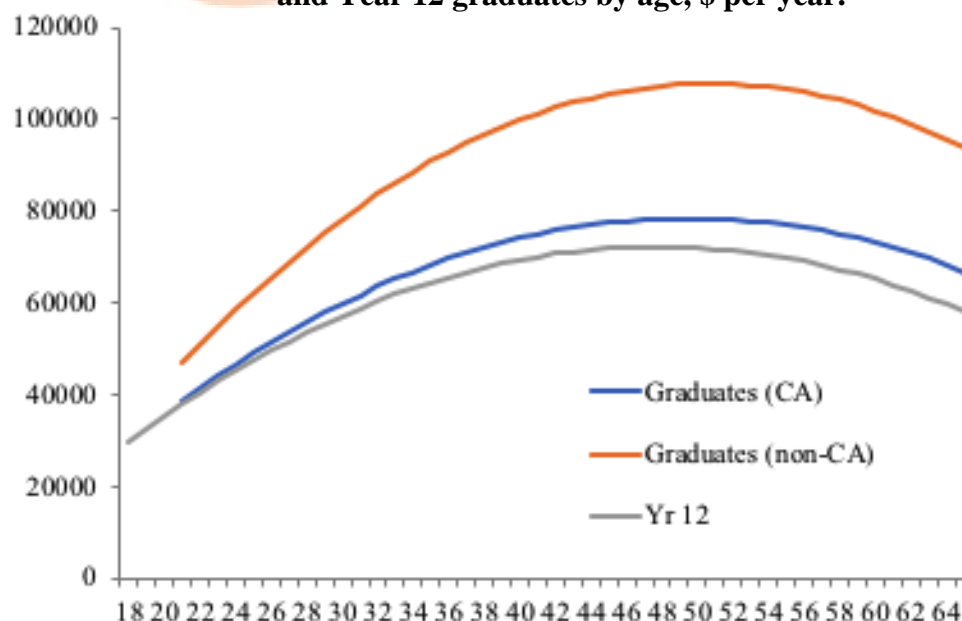


Source: Authors' estimates derived from Census of Population and Housing, 2011, unpublished.

The closing of the earnings gap is reflected in the rate of return. When only those working full-time are included in the calculations the rate of return for a creative arts degree is estimated to be 5 percent. We can confirm that a creative arts degree is a worthwhile investment when compared to the rate of interest but it is not as good an investment as a degree in most other disciplines which we calculate, on the basis of the same assumptions applying to creative arts, is 15 percent.

Figure 9 shows the age earnings profiles for males working full-time. The earnings gap between creative arts and other graduates is widened, but the earnings gap between creative arts and Year 12 graduates is also widened. The rate of return to a creative arts degree for males is estimated to be 3 percent, confirming that taking a creative arts degree is only a marginally investment compared to the rate of interest. However, the rate of return compares very unfavourably with other degrees which have an estimated rate of return of 18 percent.

**Figure 9: Median annual income of males working full-time, creative arts, other degrees and Year 12 graduates by age, \$ per year.**



Source: Authors' estimates derived from Census of Population and Housing, 2011, unpublished.

For both men and women including only those working full-time improves the rate of return (from negative to positive). It can be concluded that there is a dichotomy, in terms of profitability of investment in higher education, between those who obtain and stay in jobs compared with those for whom job tenure is less certain. That is, non-university graduates who maintain a secure career with high employment participation have relatively good lifetime earnings compared to university graduates who do not. However, from a financial perspective an arts degree is a relatively poor choice compared to other degrees.

Of interest is that the rate of return for women improves much more than for men when only those in full-time employment are included. This suggests that the financial benefits of a degree are improved much more for those women whom maintain their employment throughout their lifetime than is the case for men. It also suggests a high financial penalty for non-participation in the workforce through, say, child rearing.

## Conclusion

The rate of return to an Australian creative arts degree is negative which implies, for at least half of graduates a creative arts degree does not provide individuals with monetary benefits. The financial benefits of a degree are improved for those who maintain full-time employment. The results confirm the view (see, for example Throsby and Zednick 2010) that university education adds little to 'arts' human capital. It does, however, provide access to 'non-arts' jobs which allow individuals to pursue their arts interests. However, even if this were the case the results suggest that an arts degree does not provide much of a foundation for generating income to subsidise an artist's preferred arts activities.

Apart from not being a particularly good human capital investment, an arts degree is also not likely to be a very good screening device for artistic talent. Other mechanisms, such as auditions or portfolios of work, may be more appropriate.

The results suggest that for many people a creative arts degree represents a consumption good rather than an investment in human capital with over half of students funded totally by government. It is not the intention here to comment on the desirability of this, but creative arts degrees education could be thought of as a large subsidy to the arts and to arts graduates. The case for public funding of creative arts degrees relies on the argument that the arts have considerable external benefits to society as a whole but this is beyond the scope of this paper. Interestingly, increased university funding of arts education might make arts graduates worse off (a point argued by Towse, 2006). Increasing the supply of graduates entering low paying occupations would be expected to further reduce their pay and employment prospects.

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