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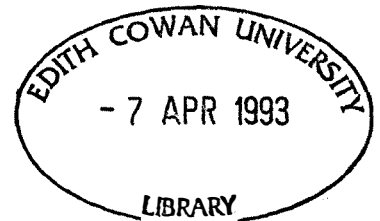
An Arts-Employment Analysis:

The Effect of Government Funding on Employment
at Deck Chair Theatre and Spare Parts Puppet Theatre

By

Lance Bennett, Bachelor of Business.

A Thesis Submitted in Partial Fulfilment of the

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Abstract

It is important for governments to recognise employment generation resulting from public expenditure. Funding alternatives that are a cost effective way of generating employment are key objectives in public finance. One funding alternative is the arts. The arts have to compete with other economic activities for a share of government funding. As a result of increased competition, the economic contribution of the arts has become an important issue in arts advocacy. Therefore, it is important that the measure of employment generated by arts funding is accurate and reliable. Arts employment data is generated by cultural organisations applying for public funding through the Australia Council. The problem is that the existing method of calculation, though reasonably detailed, ignores employment of contracting artists and inaccurately accounts for part-time employment. The purpose of this study is threefold: (1) To develop a more accurate measurement of employment in arts organisations than currently exists with the Australia Council via its employment data generation, by including in the measurement, the amount of part-time and contracted-artist employment. (2) To identify the amount of government funding that translates into equivalent full-time jobs. (3) To demonstrate and explain

the problems and distortions that arise by the use of employment multipliers.

These problems are addressed at a sample of two theatre companies: Deck Chair Theatre and Spare Parts Puppet Theatre. The measurement developed: *The Government Arts-Funding Employment Ratio* shows the amount of government funding that translates into equivalent full-time jobs. This is developed in two versions. One including the effects of an employment multiplier, the other ignoring these effects. The multiplier effect means that for every job within the theatres, 1.667 jobs are generated outside the theatres. The results, ignoring the multiplier effect, show that during 1989-1991, every $30,220 of government funding to Spare Parts Puppet Theatre, translated into one equivalent full-time job. At Deck Chair Theatre, over the same period, every $25,821 of government funding translated into one equivalent full-time job.

Declaration

"I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text."

Signature...............................

Date. 26·1·93

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1.0 Introduction

1.1 Background

1.1.1 Public Subsidies to the Arts: A History

A brief overview of the historical framework showing the rational for public patronage of the arts introduces the concept of public cultural policy. The problem of allocating public funds amongst a variety of competing purposes is a fundamental problem for policy decision-makers. The priority in deciding on these activities requires careful consideration of the costs and benefits that arise from each alternative (Patronage, Power and the Muse, 1986, p.28).

In respect to the public patronage of the arts, Cummings and Katz (1989, p.6) show that in recent centuries, there have been three types of environments which have generally directed the development of public cultural policy. These are: the *Absolutist State*, the *Mercantile State*, and the *Free-Market State*. In 17th century France, the court of Louis 14th was an example of an Absolutist State, where there was a strong tradition of funding to the arts by the monarchy. 17th Netherlands is representative of the Mercantile State, where the increasingly wealthy burgher class were an influential source of private commissions for the arts community. Finally, in the 19th century, the

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Free-Market State, was where public funding to the arts has been less favoured. Here, a philanthropic approach to the arts by private industry and by wealthy individuals was preferred. Current day Canada and the United States of America (USA) are good examples of the free-market environment.

In their 1987 study, *The Patron State: Government and the Arts in Europe, North America, and Japan,* Cummings and Katz (1989, p.8) identified four basic approaches to arts funding that arose out of these environments: government as *patron,* government as *manipulator,* government as *regulator,* and government as *impresario.* The government as patron refers to where the government is the primary financier and consumer of the arts. The manipulator approach is where the government influences the market for the arts through the use of such instruments as taxation and subsidies, but without the type of control that is typically required by the government as patron. The regulator approach is where public administrators directly make decisions concerning the financing of the arts. Finally, the government as impresario is where the government is primarily the organiser and presenter of public culture. Cummings and Katz (1989, p.8) show how the British Broadcasting Corporation (BBC) is a good example of the impresario approach. This is because through the BBC, the government is essentially producer and distributor of culture to the

wider community.

The Absolutist, Mercantile and Free-Market environments, and the four government approaches to arts funding, provide the historical framework in which the scope for public assistance to the arts came to be.

1.1.2 Subsidy to the Arts: The Australian Context

The approaches to arts funding identified by Cummings and Katz (1989, p.8), can be observed in the Australian context. The public funding of the arts appears to have developed from, a regulator approach to an impresario one, then to a manipulator approach. The establishment of the Commonwealth Literary Fund in 1908, and the Commonwealth Arts Advisory Board in 1912, enabled the government to have a reasonably direct control over the funding of arts. Parsons (1987) describes the scenario:

> Australia's traditional Philistinism had dictated
> that the pioneers of arts funding ... were able to
> induce governments to fund the arts only by
> presenting an impeccably 'sound' public image. (p.11)

This suggests that the public funding of the arts was not readily independent of the desires of the bureaucracy, and so represents an example of the regulator approach.

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The beginnings of an impresario approach occurred with the establishment of the Australian Broadcasting Commission (ABC) in 1932. Primarily through its orchestras, the ABC was fairly instrumental in the diffusion of public culture in Australia (Rowse, 1985, p.6). With the establishment of the Australian Council for the Arts in 1968, and its successor, the Australia Council in 1973, a transition from impresario to manipulator approach was made. In the early 1970s, the government of the day wanted an independent arts funding body that would distribute public funds to the arts, and act as an arts policy advisor to the government. The Prime Minister, Gough Whitlam (cited in Patronage, Power and the Muse, 1986) made the government's intention clear:

> A single council [the Australia Council] seemed to offer the prospect of a broad policy for the national development of the arts within a streamlined administration providing independence from political pressures and safeguards against centralised and authoritarian tendencies. (p.63)

This suggests that the Australia Council was to become, what Hillman-Chartrand & McCaughy (1989, p.43) call, at *arm's-length* with government. A peer evaluation mechanism of grant approvals was designed to restrict potential government interference with the allocation of public funds to the arts communities (Parsons, 1987, p.15).

Rowse (1985, p.6) identifies the development of commonwealth government patronage to the arts, and

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identified two phases: First, an era of voluntary cultural entrepreneurship followed by statutory commonwealth patronage. The first lasted until the late 1960s, and was characterised by government funded entrepreneurs who chose to pursue various cultural objectives. The ABC was an outstanding example of this. It established its own orchestras and ensembles, and so by doing, became an entrepreneur of classical music.

In 1932, when the ABC was established, commonwealth funding to the arts become substantial. The first phase of government funded voluntary entrepreneurship was replaced with statutory patronage with the establishment of the Australian Council for the Arts (ACFTA) in 1968 and the Australian Film Development Corporation (AFDC), established in 1970. From this point onwards, a system of direct government grants meant that ACFTA and AFDC had a statutory obligation to allocate government funding to various cultural activities that were not viable in the market place. This provided the means in which to debate the public interest, in respect to arts funding allocation. (Rowse, 1985, p.13)

In Australia, cultural activities are not only publicly funded at the Commonwealth level through the Australia Council, they are also funded at the state and local levels of government. In Western Australia the state cultural funding body is the Department for the Arts. The operating

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budget in 1989 was $8.7 million, representing less than 1 percent of state government expenditure. State government funds are also channelled through to the arts by statutory authority sponsorship, such as the *Healthways* program.

1.1.3 Economics: Advocacy for the Arts

Cummings and Katz (1989, p.6) believe that western societies have experienced a trend towards public involvement in the arts in the latter half of this century. Essentially, the reason for this has been a desire to broaden public access to the arts. The growth of publicly funded culture reached its zenith in the 1960s and early 1970s. In the late 1970s, however, calls for budget cutting, and greater public accountability has seen the growth of public funding to the arts generally slow down. Throsby and Wither's (1979, p.1) explanation of this phenomenon, is that because of inflation and recession in the 1970s, government allocation of funding, at all levels, has generally become subjected to a higher level of scrutiny. Public accounts committees are examples of this. It is of little surprise, therefore, that the economic arguments have become important in arts advocacy. In recent times the economic dimension of the arts has increasingly become more important, as Myerscough (1988) explains:

> Arguments [for public arts funding] based on their
> intrinsic merits and educational value were losing

their potency and freshness, and the economic dimension seemed to provide fresh justification for public spending on the arts. (p.2)

Myerscough's comments were in the context of Great Britain. In the Australian scenario, Brokensha and Tonks (1986) relate the experience:

The arts lobby has been forced to justify its demands in more rigorous terms. One way of doing this it to adopt a 'language' that is universal in 20th century policy-making i.e., economics. (p.37)

In past years, arts funding has primarily been justified on the basis of its aesthetic value (Brokensha & Tonks, 1986, p.37). It was now becoming necessary for arts advocates to take on more pragmatic arguments. Here, the economist enters into the arts arena. The role of economics in arts advocacy is now emerging as a more important one. This has not always been the case. In 1963, Galbraith (cited in Throsby & Withers, 1979) pointed out that:

Art has nothing to do with the sterner preoccupations of the economist. The artist's values— his splendid and often splenetic insistence on the supremacy of aesthetic goals— are subversive of the straightforward materialist concerns of the economist. (p.1)

Despite Galbraith's concerns, it is important to note that in some of his later writings, he considers artistic endeavour as an important factor in the economic development and cultural success of a society (Galbraith, 1983).

Cwi (1982) agrees with Galbraith, that the arts are important in economic development. He points out that there are subtle *induced effects* that occur due to the presence of the arts (Cwi, 1982, p.25). These effects are where a cluster of arts activities generates what is generally known as *cultural ambience*. This is a source of attraction that gives individuals reasons to frequent specific areas in search of entertainment. In Perth, Northbridge and Fremantle are good examples of districts that have a cultural ambience. Cwi (1980, p.312) says this is an important device in the revitalisation of inner city regions. This is the point that Myerscough (1988, p.145) alluded to when he surveyed business decision makers as to how the cultural ambience of a region would effect their relocation decisions.

The increasing importance of the cost effectiveness of public funds allocation, the justification of public decision making, and public accountability of government expenditure, has given rise to a body of literature on the economic contribution of the arts (Brokensha & Tonks, 1986; Cwi, 1981; Cwi & Lyall, 1977; Hamer, Siler, George & Associates, 1977; Metropolitan Arts Council, 1977; Myerscough, 1988; Sullivan & Wassall; 1977, Wall & Purdon, 1987), and the economic and non-economic arguments that underlie the justification of public subsidy to the arts (Austen-Smith, 1980; Mulcahy, 1982; Peacock, 1969/1976; Rowse, 1985; Throsby & Withers, 1983).

1.1.4 Deck Chair and Spare Parts Puppet Theatre

The subjects of this study are the Deck Chair and Spare Parts Puppet Theatres in Fremantle, Western Australia. Both theatres rely on government funding to continue operations, which is typical of arts organisations. From 1989 to 1991, Spare Parts Theatre received 73 percent of total income from government grants, whilst this figure was 70 percent for Deck Chair Theatre (see Appendix 16).

These theatres are typically run on half million budgets (see Appendices 7 and 8). During 1989-1991, Spare Parts Theatre spent 66 percent ($1,115,000) of its total expenditure on employment (see Appendix 7), whilst Deck Chair Theatre spent 63 percent ($859,722) on employment. This expenditure maintained between 10 and 14 equivalent full-time jobs over the 3 year period at Spare Parts Theatre, and between 10 and 12 jobs at Deck Chair Theatre (see Appendices 2 and 3).

1.2 Purpose of the Research

From a marketing perspective, it is important that individuals and organisations who receive funding from the government, present valid arguments that give reason to those who allocate, donate, or otherwise provide funds. Kotler & Andreasen (1991, p.281) call this group *Donor Markets*: individuals, foundations, corporations, government, and government funding agencies, who in this case provide funds to the arts. Corporations may be motivated by the desire to maintain good public relations, whereas individuals may be motivated by a variety reasons, including personal philanthropy. Where the government provides funds, a different kind of reasoning is required by public decision makers. In the Australian context, this reasoning is to maximise the benefit from those public funds to the wider community (Patronage, Power and the Muse, 1986, p.28).

Donations represent *complex transactions* where the exchange of value is not necessarily confined directly to the transacting parties, nor does it necessarily require direct reciprocation (Bagozzi, 1975, p.32). As an example, the public funding of an arts organisation is an exchange of public monies in return for the generation of employment, the production of art, and resulting community enjoyment and benefit from the aesthetic experience (Patronage, Power and the Muse, 1986, p.26). The recipients on the

other hand, compete with other causes for the allocation of these public funds. Justification of that claim becomes a very important factor. In this context, an arts organisation has a consumer market on the one hand -- an audience for example, and a donor market on the other -- the public decision makers.

In a consumer-centred philosophy of marketing it is necessary to consider the needs of the consumer as supreme. Public funding agencies, not unlike customers, require arguments that justify the allocation of funding. Economic arguments that strengthen the justification for that allocation, are important if the arts organisations are to present their case in the best possible way. In other words, they have to sell themselves to their donor markets, just as they sell themselves to their audience.

The purpose of this study is threefold:

(1)   To attempt to develop a more accurate measurement of employment in arts organisations than currently exists with the Australia Council via its employment data generation in the application for government assistance forms. This will be done by including in the measurement, the amount of part-time and contracted artist employment at a sample of theatres.

(2)   To identify the amount of government funding that
       translates into equivalent full-time jobs.

(3)   To   demonstrate and   explain the   problems and
       distortions that may arise by the use of employment
       multipliers.

An economic measurement will be developed, *The Government
Arts-Funding Employment Ratio*. This simply identifies the
government funding contribution to Deck Chair and Spare
Parts Puppet Theatre,   that translates into equivalent
full-time jobs.

The ratios produced in this study are not meant to be used
as a comparison between Deck Chair and Spare Parts Puppet
Theatre.   These theatres are very different,   and a
comparison would not be valid. The ratios, however, may be
used with caution to compare arts organisations that are
very similar. It is anticipated that these ratios will be
refined by further research, so that they can be applied to
other arts organisations, if not the wider arts community.

1.3 Justification

This research is important because it will provide information for both parties to the arts funding transaction, that should lead to more informed decision making. From a government's perspective, it can identify the most efficient way of employment generation. From the recipient's perspective, stronger economic arguments for public funding to the arts.

The aim of this study is to contribute to the economics of the arts by the development of a more accurate employment measurement, both in terms of positions and expenditure of public funds. This study is justified because accurate economic data is important when presenting arguments in regards to public patronage of the arts.

1.4 Statement of the Problem

The economic contribution of the arts to employment and income generation, is an important argument for the arts advocate. It is important, therefore, that it is accurately measured. The Australia Council collects economic statistics from recipients of public funding. From this, employment data is generated. The true amount of employment is understated because the amount of employment generated by individuals who contract their artistic services directly to theatrical performances and the production of art is *not* accounted for in the Australia Council statistics. Secondly, part-time employment is not accurately described because it is accounted for only in the number of positions, not the period of employment.

These omissions provide the scope for this research to supply the missing data on a sample of two theatre companies. This will provide an accurate insight into the generation of employment, and the amount of government funding that translates into full-time jobs.

1.5 Research Objectives

The objective of this study is to quantify the amount of government funding that translates into full-time jobs over a three year period, 1989-1991. This is done at a sample of two arts organisations: Deck Chair and Spare Parts Puppet Theatre. Both are located in Fremantle, Western Australia. The primary research questions are:

1)   What is the government funding contribution, in dollars, when accounting for direct and indirect employment, for both theatres, that translates into one equivalent full-time job over the research period 1989 1990, 1991, and 1989-1991 for each of the following employment categories?

        -    Artists and Support
        -    Administration and Marketing
        -    Contract Artistic Services
        -    Total employment

2)   What is the government funding contribution, in dollars, when accounting only for direct employment, for both theatres, that translates into one equivalent full-time job over the research period 1989, 1990, 1991, and 1989-1991, for each of the

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following employment categories?

- Artists and Support
- Administration and Marketing
- Contract Artistic Services
- Total employment

The subsidiary research questions that are required for computation are:

1)   What is the total employment expenditure for Deck Chair and Spare Parts Puppet Theatre over the research period: 1989-1991 for each of the following employment categories?

- Artists and Support
- Administration and Marketing
- Contract Artistic Services
- Total employment

2)   What is the total employment in: weeks, days, and hours for:

- Artists and Support
- Administration and Marketing
- Contract Artistic Services

employment categories at the Deck Chair and Spare Parts Puppet Theatre over the research period 1989-1991?

3)   What are representative rates of income for the
      following Contracted Artistic Services:
      -    Production Designers
      -    Music Composers
      -    Writers
      over the research period, 1989-1991?

4)   What are the appropriate union award rates of pay
      per hour for part-time and casual actors, and
      production and venue personnel, over the research
      period 1989-1991?

5)   What is the definition of a full-time job that is
      representative of the performing arts industry in;
      weeks per annum, days per week, and hours per day
      over the research period 1989-1991?

6)   What is the number of equivalent full-time jobs that
      represent:
      -    Artists and Support
      -    Administration and Marketing
      -    Contract Artistic Services
      -    Total employment
      over the research period, 1989-1991?

7)   What is an appropriate employment multiplier that is
      representative of the performing arts?

2.0 Literature Review

2.1 The Arts in Society

The notion of public support for the arts is not a new concept. In ancient Greece, the main drama festivals were publicly sponsored. Theatre was supported by the State so as to keep admission prices within the means of the general population. Broad access to the arts, or theatre at least, was something of which all could enjoy. (Cornwell, 1990, p.36)

In the Middle Ages the arts were more or less controlled by the church in western societies. Horne (1988, p.1) describes the types of culture that existed during that period: *Ruling Class Culture*, and *Folk Culture*. The emergence of what Cornwell (1990, p.35) calls the 'commercial economy' in the 17th century, meant that access and enjoyment of the arts was no longer a privilege of birthright. A move away from a feudal lifestyle to one based on enterprise of the individual, meant that private access to wealth gave rise to a diffusion of the arts in society. This was especially evident in 17th century Netherlands, where the wealthy merchant class were influential patrons of the arts. Cornwell (1990, p.36) refers to this as the *democratisation of the arts*.

By the 19th century, the arts were becoming more widely available. Horne (1988, p.1) describes three types of culture that developed from the dichotomy of ruling class and folk cultures: *High Culture, Mass Culture,* and *Popular Culture*. High Culture is the domain of the intellectual and elite, whereas in Mass Culture, the emphasis is placed on mass production and standardisation for the largest possible audience. Finally, Popular Culture is a mix of High and Mass Cultures. The arts have always been an important and integral part of civilisation (Creedy, 1970). A detailed discussion on the development of the arts in society cannot be justified in this review. The point is, however, that the development and nature of the arts, has laid a framework from which arguments for public subsidy to the arts is grounded.

2.2 The Arts and Society: The Role of Government

In Australia the role of government in the arts is
outlined in a Standing Committee report on Expenditure
to the Commonwealth Government titled: *Patronage, Power and
the Muse* (1986). The purpose of this document was to report
on government assistance to the arts. In concordance with
the doctrine of *Utilitarianism* (Shaw & Barry, 1989, p.55),
the objective of government is to maximise public benefit
from public expenditure, in this case subsidy to the arts.

In order to investigate the arguments that justified
public subsidy to the arts, it was necessary for the
Committee to define the arts, and identify the costs and
benefits that arise. The Committee adopted a classification
schema of the arts proposed by professor Donald Horne.
These were: *Heritage Art, New Art,* and *Innovative Art*.
Heritage Art is works of the past generally found in
museums and libraries. New Art is contemporary art, and
Innovative Art was essentially new interpretations of
culture. (Patronage, Power and the Muse, 1986, p.35)

The Committee believed that these different forms of art
conferred different benefits to society, in terms of
access and participation. The Committee concluded that the
government ought to assist the arts because it did confer
public benefits to society, and was subject to market
failure. Government objectives were to ensure the widest

possible access to the arts in the community. Because the arts are generally subsidised in many parts of the world, and Australia was not an isolated culture, it was decided there was a role for the government in arts funding. (Patronage, Power and the Muse, 1986, p.37)

2.3 Public Subsidy to the Arts

The question of why the arts are reliant on private philanthropy and public subsidy to survive financially, has given rise to a large body of literature. Economic and non-economic arguments explain why this is the case. Specifically, the arguments are: because the arts are *merit goods* (North, 1982; Pen, 1983; Throsby & Withers, 1979; Scitovsky, 1983), because the arts are subject to market failure (Austen-Smith, 1980; Baumol & Bowen, 1966/1976; Peacock, 1969/1976; Rowse, 1981; Throsby & Withers, 1979), because of the birth right of future generations to the arts of today (Baumol & Bowen, 1966/1976; North 1982), because the arts are a device for education and social order (Mulcahy, 1982; Rowse, 1981), and because the arts are important for the moral basis of society (Mulcahy, 1982).

On the otherhand, there are arguments against the public subsidy to the arts, because priorities exist which have higher claims to public funds, and because public funding of the arts may lead to government control of the arts (Baumol & Bowen, 1966/1976, p.44),and finally because the emphasis should be placed on consumer sovereignty, not the merit good argument (Gold, 1983).

2.3.1 The Merit Goods Argument

Cwi (cited in North, 1982, p.71) describes in general terms, a merit good as something that is essentially good, and thereby justifies public provision because of its goodness, and in cases where market forces fail to allocate it, public intervention is justified. Musgrave (1959) provides a more detailed definition of what he calls merit wants (merit goods). These are a type of individual preference (private wants) that:

> become public wants if considered so meritorious that their satisfaction is provided through the public budget, over and above what is provided for through the market and paid for by the private buyer. (p.13)

Where merit goods have characteristics of private goods, there may be no need for public provision, as this may be done efficiently through the market mechanism. However, if they have characteristics of public goods (social wants), the market mechanism tends to fail, and public provision becomes necessary. Therefore, providing public subsidies to the arts is done when these two conditions are met: because they are essentially meritorious, and because they are subject to market failure.

The public provision of merit goods essentially interferes with the private preferences of the individual. This is because a value judgement is made on behalf of society by public decision makers, as to what is in the best interest

for everybody, without reference to the forces of market supply and demand (Musgrave, 1959, p.9). Other examples of merit goods are; low cost public housing, and free education. Unlike public goods, merit goods are not strictly subject to the *exclusion principle*, and the notion of *nonrival consumption*. These concepts are discussed in section 3.1.

Merit goods are more like mixed goods, with characteristics of both public and private goods. Merit goods have claim to public subsidy by virtue of their inherent goodness (Musgrave, 1959, p.9). With respect to the meritorious nature of the arts, Scitovsky (cited in Throsby & Withers, 1979) argues:

> Works of art are durable sources of stimulus enjoyment which can last for years, or even centuries, and since the specialist's judgement is believed to be a better predictor than the general public's view of what prosperity's judgement is going to be, we attach to his judgement the weight of future generations, which outweighs, of course, that of the single present generation. (p.199)

Scitovsky's argument calls for the right of future generations to an artistic tradition. The basic value judgement in his argument, however, is that the arts are inherently worthy of preservation. This alludes to the fact that value judgements must be made by public decision makers on behalf of society, because the community does not always recognise the best long term interests. This notion is the basis of the merit goods argument.

Pen (1983) puts the notion of merit goods in very simple terms, "Bach is good for you even if you didn't know it." (p.17)

2.3.2 The Market Failure Argument

Rowse (1981, p.31) discusses the market failure argument as a situation where there exists two issues. Firstly, positive externalities occur where the benefits of production cannot successfully exclude those who do not pay. This phenomenon is known as the *free-rider* effect (Musgrave & Musgrave, 1984, p.54). This concept is explained in greater detail in section 3.1. Secondly, costs of production are not always reduced by market demand, which implies that the arts do not necessarily benefit from economies of scale. However, Throsby and Withers (1979, p.44) would disagree. Their view is that excessive costs that are inherent in the nature of the arts is the reason. This is because of the technological limits to standardisation and the high cost labour inputs.

Throsby and Withers (1979, p.180) expand on the externalities argument put forward by Rowse (1981, p.31). External benefits generated by the arts is where even those who do not attend, participate, or in anyway consume the arts, still benefit from the production of ideas, aesthetic standards, national identity, social

comment and criticism. Since the arts can only recover the cost of production from only a portion of those whom enjoy consumption benefits, costs will tend to exceed revenues. Financial assistance, therefore, will be required.

2.3.3 The Arts for Future Generations Argument

Cwi (cited in North, 1982, p.71) says that society has a responsibility to future generations to preserve an artistic culture, and provide an aesthetic standard. Scitovsky (cited in Throsby & Withers, 1979, p.199) agrees, and adds that a specialist's value judgements are a better predictor of what future generations will want.

Baumol and Bowen (1966/1976, p.54) argue that society needs an artistic basis from which individuals can learn to appreciate the concept of culture. This argument parallels the ideas of Mulcahy (1982, p.44) with respect to the educational argument for arts subsidies.

Peacock (1969/1976, p.77) believes that society has an obligation to individuals whose opinions have not yet been formed. This idea touches on the notion of *Personal Liberty* (Shaw & Barry, 1989, p.70). Mulcahy's view (1982, p.55) is that we do not have the right to restrict the choice of culture for future generations.

2.3.4 The Education Argument

Baumol and Bowen (1966/1976, p.55) argue that there
are non-priceable benefits of a liberal education conferred
upon society. The premise is that education in the
humanities leads to a more civilised society, and since the
arts are an integral part of the humanities, the arts must
confer these same benefits to society. If the arts are
subject to market failure, then this provides reason for
subsidising the arts. Along similar lines, Mulcahy (1982,
p.45) argues that the arts are important in education
because it complements structured learning, creativity and
logical thought. Acquisition of these skills confers
benefits to the wider community, which means the arts are
essential to the education and social refinement of a
society.

Horne (1988, p.4) says that subsidy to the arts is
essential because it acts as a means of social
criticism. This is important in a liberal democratic
society, because he considers an educated society has a
sense of choice and potential.

Scitovsky (1983, p.9) takes a very different perspective on
the issue of arts education and external effects. He points
out that informed consumer choice is important for the
efficient allocation of goods and services from producer to
consumer. He argues that consumers tend to ignore the

externalities that arise from their choice in the domain of
excitement, satisfaction and pleasure seeking. Essentially,
they cannot be trusted to make an informed choice,
accounting for all the costs and benefits that may arise.
His point is:

> Because so many of the sources of excitement
> accessible to the unskilled create high external
> costs and diseconomies, it is desirable for society
> to subsidize and otherwise promote general education
> in the skills of enjoying all those forms of stimulus
> excitement that involve no external costs. (p.13)

Here, Scitovsky refers to the arts as the source of
stimulus excitement (pleasure seeking). From an
educational perspective, it is desirable to subsidize the
activities where no external costs are present, and this
leads to a more refined and civilised society. Scitovsky
recognises a problem, however, "that it is not always
possible, of course, to subsidize the learning process
without also subsidizing the enjoyment of those who already
possess the skill of enjoying the arts." (p.13)

Finally, Scitovsky argues that subsiding the arts is
important because people are given the chance to learn to
appreciate them, and not think of them as something which
is to the exclusive pleasure of an elite in society.

2.3.5 The Moral Argument

In the literature reviewed there is only one argument for the subsidy of the arts on a moral premise. Cram (cited in Mulcahy, 1982) acknowledging the aesthetic and intellectual reasons, believes the arts should be subsidized because:

> Above all this it is the touchstones of life, the power of standards, the director of choice. Accepted, assimilated, it becomes one of the great builders of character, linked indissolubly with religion and philosophy toward the final goal of right feeling, right thinking, and right conduct." (p.46)

Cram's value judgement parallels the merit goods argument, asserting that the arts are inherently good and are in the public interest. The arts, therefore, should be publicly funded in cases of market failure.

2.3.6 The Arguments for Arts Subsidy: A Caveat

The theme of some papers warn arts advocates, that the arguments for the public subsidy to the arts may be individually insufficient justification (Austen-Smith, 1980; Peacock & Godfrey, 1973/1976; Schnieder & Pommerehne, 1983).

It is important to note that the merits goods argument, the arts for future generations argument, and the educational argument, all presuppose that the arts are essentially

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subject to market failure, and could not exist without public support.

In conclusion to the arguments for the subsidy of the arts, Baumol and Bowen (1966/1976, p.55) assert that if one were to agree that on the whole, the arts confer to society economic, educational, and social benefits. The arts become public goods if the costs of production exceed revenue raised due to market failure. Since the arts generate external benefits to society from which they are unable to charge for, public subsidy is justified. In summary they conclude:

> It is a long-standing tenet of economics that if the wishes and the interest of the public are to be followed in the allocation of the nation's resources, this is the ultimate ground on which governmental expenditures must find their justification. Government must provide funds only where the market has no way to charge for all the benefits offered by an activity. (p.55)

2.3.7 Arguments Against Public Arts Subsidy

Baumol and Bowen (1966/1976, p.43) also discuss the arguments against subsidies for the arts. They point out that other equally important activities and issues may have a greater claim to public funding such as public health, prevention of poverty, education, housing, law and order.

Secondly, although there is no evidence to support the claim, it is possible that public funding of the arts may lead to public control of the arts.

Scitovsky (1983, p.14) examines the argument that public subsidy to the arts is unjust as it is a redistribution of income in favour of the elite. However, Scitovsky together with Throsby and Withers (1984, p.26) disagree, as this argument assumes that, on the whole, consumers of the arts are elitist.

The theme of Gold's 1983 paper is that artists should understand the notion of consumer sovereignty. Producers of art should be wary of isolating themselves from consumers. They should be more aware of the needs of the market place, and hold the preferences of consumers in mind.

2.4 The Role of Economics in the Arts

The first major paper on the economic importance of the arts was by Baumol and Bowen in 1966 (North, 1982, p.70). Since then, the role of the economics in arts advocacy has become increasingly important. Large economic impact studies have been conducted to show for example, that the arts were not a *drain* on the economy (North, 1982, p.7), as some have argued. The majority of economic impact studies have been conducted in the USA, Canada, and Great Britain. Comprehensive studies that have been conducted are, by Cwi and Lyall (1977), who investigated the economic impact of all the cultural institutions in Baltimore, USA. Cwi (1981) conducted an economic impact study on the arts in six major metropolitan regions in the USA. Myerscough (1988) investigated the impact of the arts on Ipswich, Glasgow, and Mersyside in Great Britain. The Port Authority of New York and New Jersey (1983) examined the economic impact of the arts on the New York metropolitan area.

In Australia, the first economic impact research of the arts was by Throsby and O'Shea in 1980, who investigated the Mildura Arts Centre (North, 1982, p.15). To date, there have been two major economic impact studies on the arts in Australia. First, Brokensha and Tonks (1986) investigated the economic impact of the entire arts community on the

South Australian economy. Second, The Centre for South Australian Economic Studies (1990) investigated the economic impact of the 1990 Adelaide Festival.

North (1982) conducted a comprehensive literature review on economic impact studies of the arts, and discussed the implications in the Australian environment. While calling for research into the use of economic multipliers in the Australian arts, North (1982, p.3) together with the Canada Council (1982, p.1) warned that, despite the merit of economic impact studies, over reliance on the results as a means to justify subsidies to the arts may result in the aesthetic benefits being ignored. This issue is discussed in section 4.6.6.

2.5 Similar Research: The Cost of Arts Jobs

The Myerscough (1988) economic impact study assessed the issue of government subsidy to the arts, as part of the scope of the economic impact. Specifically assessed, is the gross cost of a job in the arts in terms of public expenditure. The aim was to point out, as far as the government was concerned, some publicly funded activities, such as the arts, could be compared with other activities to identify the most cost effective method of generating employment. In particular, the cost per publicly funded job was compared between the arts, health, and education. The calculation accounted for the multiplier effect on employment external to arts activities. Public expenditure on the relevant arts organisations was divided by the number of jobs at those organisations. The results were compared with another study by Davies and Metcalf (cited in Myerscough, 1988, p.107) to assess validity.

The cost per job in the Myerscough study ranged from £2,737 in Ipswich to £4,999 in Glasgow. The cost appears to be relatively low, but since it was not possible to identify the definitions used, and the method of calculation, the results cannot be questioned without the benefit of having examined the methodology. What is known, however, is that the method showed the net public sector borrowing requirement cost per person removed from the unemployment count, and the feedback of revenue (taxes) to government as

a result of the existence of jobs created in the first
instance. It was recognised that not all jobs created by
the arts provide employment for those presently unemployed,
as some are simply transfers from one job to another.

The relevance of the Myerscough study is that it parallels
the objectives of this research. It was the only economic
impact study reviewed, that examined the cost to
government of jobs in the arts. A major difference between
this research and the Myerscough study, is that this
work does not account for the revenue feedback to
government. In addition, Myerscough views public subsidy
as a public cost, where this study views public subsidy as
more a public investment in employment generation.

3.0 Theoretical Framework

3.1 Private and Public Goods

The theories of public expenditure rest on the concept of *private goods* and *public goods*. The distinction between public goods and private goods is grounded on the notions of *nonexcludability* and *nonrival consumption*. Private goods are those which are subject to the *exclusion principle* (Musgrave & Musgrave, 1984, p.49). This means that a good or service can be practically provided to a consumer willing to pay, to the exclusion of those who do not pay. Nonrival consumption is where an individual's consumption does not interfere with another's consumption of the same good. Public goods, sometimes referred to as *social goods* (Johnson, 1971, p.26) or *social wants* (Musgrave, 1959, p.9) are those goods which must satisfy the conditions of nonexcludability and nonrival consumption.

The nonexcludability of a public good, however, means that it cannot be provided exclusively to consumers willing to pay, without unintentionally providing it to those consumers who do not pay. This is known as the *free-rider* phenomenon (Johnson, 1971, p.117). Because of an inability to recover the costs of production from all those who enjoy the benefits of consumption, this invariably leads to costs

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exceeding revenues, which results in *market failure*. This phenomenon is cause by the generation of positive externalities, which is discussed in detail in section 3.3.

A hypothetical example follows, the activities of theatre companies in Perth contribute to the generation of a cultural ambience. This attracts individuals to certain entertainment districts. The direct consumption and benefit of the shows is excludable to those who pay for admission. The indirect benefits (positive externalities), in the form of a cultural ambience, however, are not excludable to only those who pay. These benefits (cultural ambience) are generated at cost by the theatres and other entertainment establishments. The notion of cultural activities generating external benefits to other activities within metropolitan districts is supported by Cwi (1982, p.25) and Myerscough (1988, p.145).

The notion of nonrival consumption means that those who enjoy the atmosphere in the district, at no charge, do not interfere with others consumption of the same. Nonexcludability means that the benefits cannot be efficiently charged for, so those (free-riders) who do not actually watch the shows, can still can enjoy some of the benefits without paying. Since the theatres cannot charge all those who consume the benefits of their efforts, the cost of production tends to exceed box office revenue. An additional source of funding may be required.

In reality, few goods strictly correspond to the conditions of public and private goods. This gives rise to *mixed goods*, that have some characteristics of each (Musgrave & Musgrave, 1984, p.71). Since the theatres can charge admission, but cannot charge all those who enjoy consumption benefits, these services display characteristics of mixed goods.

3.2 Market Efficiency

The notion of efficient allocation in markets rests on assumptions about the rational behaviour of individuals in ideal market environments. It endeavours to explain the means by which goods and services are produced according to consumer preferences. Producers seek to maximise profits, and therefore produce what consumers want to buy, on a least cost basis. The competition between producers ensures that a mix of goods and services satisfies the needs of consumers. This relationship between producers and consumers is refereed to as the *market mechanism*. (Musgrave & Musgrave, 1984. p.48)

Efficiency in this context, means best use of available resources to satisfy the preferences of consumers. The concept of efficiency in this context, is based on the notion of *Pareto Optimality*. Alt and Chrystal (1983) explain, "Pareto efficiency exists if no transaction is available which would at least make one person better off and no one else worse off." (p.183)

This means that the ideal notion of market efficiency rests on the decision that it is always efficient to allocate resources, whether it be by the method of production, the mix of goods supplied, or the activities of the public sector, in such a way that the benefit of person *A* is not to the detriment of persons *B* or *C*. If this cannot be

achieved, the existing situation is inefficient, and should be changed (Musgrave & Musgrave, 1984, p.55). In the context of the arts, it would be efficient to provide public funding if it did not result in detriment to anyone else. In reality Pareto Optimality does not exist. It is does, however, serve a purpose as a theoretical concept.

The notion of the market mechanism suggests that there should be no need to fund the arts out of the public budget. This is because the arts would reflect the preferences of consumers, and earn enough revenue from those willing to purchase. The presence of positive externalities, however, suggests that the market mechanism fails. The reason for this is discussed in section 3.3.

3.3 Public Goods and Market Failure

The notion of an efficient market is a theoretical ideal. In reality, there exists circumstances where the market mechanism functions inefficiently. For example, this may happen where consumers are without the benefit of being fully informed, barriers to entry exist, producer coercion gives rise to unbalanced competition, and the benefits or costs of production or consumption cannot be fully internalised, which gives rise to *externalities*.

The concept of externality is where the consumption or production of a good or service has an indirect effect on those who are not a party to the transaction. Externalities may be positive, in the form of benefits, or negative, in the form of costs (Laffont, 1989, p.113). In the case of positive externalities, producers are unable to recover their costs from all those who benefit from the transaction. They are not able to provide the goods exclusively to those who are paying consumers. This was evident in the example in section 3.1. Here, individuals benefited from the cultural ambience of an entertainment district at no cost. This meant that the theatres were providing consumption benefits at no charge.

Where negative externalities arise, producers are unable (or unwilling) to pass on all the costs of production to the consumer. Consumers themselves may also ignore the

negative effects on others as a result of their consumption (Tisdell, 1972, p.289). For example, this occurs when pollution is generated in a production process, but the costs of the pollution (to everyone) are not reflected in the price of the goods produced.

Market failure is a situation where the actions of the efficient market (market mechanism) fails to provide goods and services in the quantities and price that consumers want. Markets tend to work efficiently where the exclusion principle applies, and where the production or consumption of goods does not give rise to externalities (Musgrave & Musgrave, 1984, p.48). In section 3.1, the hypothetical example of theatres being unable to recover costs from all those who enjoyed consumption benefits, is an example of market failure due to the generation of positive externalities.

In the case of public goods, market failure can occur on two as counts as discussed: where consumption is nonrival, and where consumption is nonexcludable (Musgrave & Musgrave, 1984, p.49). Although the arts are not *pure* public goods, the notion of nonexcludability is central to many of the market failure arguments for subsidy to the arts. This is because these arguments are based on the premise that the arts cannot be provided exclusively to those who are willing to pay, without benefit to those who don't pay.

3.4 The Theory of Public Finance

Musgrave (1959, p.5) points out three fundamental functions of government budgetary policy: firstly, to ensure an efficient allocation of resources that provide a mix of private and public goods; secondly, to ensure a just distribution of income and wealth; thirdly, to secure a reasonable degree of price stability and employment. The discussion will be restricted to the stabilisation and allocation functions of government, as they are the most relevant issue to this study.

The stabilisation function of budget policy, in terms of employment, means that it is desirable to generate employment through public expenditures. Public subsidies to activities such as the arts, are justified if it contributes to the objective of full employment (Musgrave & Musgrave, 1984, p.13). It is important, however, not to overlook other reasons for public patronage of the arts, such as the aesthetic benefits that are generated (Patronage, Power, and the Muse, 1986, p. 26).

While the employment stabilisation is important, the allocation function of budgetary policy is of greater relevance to this study, and is discussed in more detail.

Private goods can be efficiently provided by way of the market mechanism, where consumers display their preferences

by bidding for the goods and services, which in turn motivates the profit conscious producers to compete for the preferences of the consumers. This relationship, in favour of the consumer is known as the principle of *consumer sovereignty* (Gold, 1983, p.208; Tisdell, 1972, p. 13). An example of this is the programming of commercial television stations. In Australia, programs are put to air on the basis of past knowledge of audience preferences. This is done by audience surveys, which indicate from past experience, those programs which are most likely to be accepted. The programming tends to reflect the preferences of the wider market.

Public goods are subject to market failure, where nonexclusive consumption is the case. In situations where benefits are freely available to all consumers, there is no motivation for individuals to contribute to the cost of providing the public good. An example of a pure public good is the police force. Benefits from the presence of the police, are not excludable only to those who may be willing to pay, because of this, consumers do not feel an obligation to pay as you use. This is where the market mechanism may fail. Governments find it necessary to intervene and provide the public goods through the budget.

The basic problem with the provision of public goods, is to decide first which are public goods, and then decide what quantity and quality of the public good is to be provided. The political process provides a solution. In a democratic environment, voting becomes a surrogate for the market mechanism in order to identify the preferences of the community. If the government is providing the right type , quantity, and quality of public goods, this will be affirmed by the voting preferences of the community. The success of this system is dependent on the fairness and efficiency of the voting process. (Musgrave & Musgrave, 1984, p.63)

3.5 Public Decision Making

Governments generally use *cost benefit analysis* to evaluate alternative applications of public funds (Musgrave & Musgrave, 1984, p.209). Cost benefit analysis consists of the summation of the costs and benefits that flow from an alternative, which result in either a net benefit or net cost. The decision rule is to adopt the alternative that maximises the public benefit. This normative decision rule is based on the *Utilitarian* doctrine of J. Bentham and J.S. Mill (Shaw & Barry, 1989, p.55). The decision rule in Utilitarianism is to adopt a course of action that results in a maximization of net benefit to the majority in society.

Costs and Benefits may be *real* or *pecuniary*. Real costs and benefits may be: direct, indirect, tangible, or intangible. Real costs and benefits are those that directly effect individuals. Pecuniary costs and benefits change market values of assets as a result of the alternative taken. *Tangible* costs and benefits are those to which a monetary value can be placed, while *intangible* costs and benefits are those that do not have monetary values. In the context of the arts, real costs would be government funding, while real benefits would be employment. Intangible benefits would be things like the aesthetic value, national prestige, and cultural ambience.

It is important for arts advocates to be aware of the methods from which economists use to evaluate public benefit from the allocation of government funds. Cost benefit analysis is a framework from which arguments for the public patronage of arts is made.

3.6 The Theory of Public Choice

The provision of public goods involves some form of value judgement. The framework from which these value judgements are based is philosophical. Liberalism is an appropriate philosophy to discuss in the context of Australian political economics. Horne (1988, p.4) describes Australia as a liberal democracy. The fundamental tenets in liberalism are: individualism, pluralism of values, the importance of rights, social contract theory, and equality of the citizen. These tenets provide the framework for the government's economic and political decisions. (Sugden, 1981, p.10) This is particularly relevant in respect to the value judgements taken in the decisions to provide public finance for merit goods, such as the arts.

Individualism, is where, what is good for the individual is good for society. *Pluralism of values* means that there is no absolute truth, we accept that those with different values to our own are neither ignorant or irrational. The *importance of rights* means that the individual has a right to be free from the interference of others. *Social contract theory* implies that the collective decisions of *majority rule* are right, only if it can be said that everybody had the choice to participate or not in the system of voting. *Equality* is where everyone's values and rights are treated equally. (Sugden, 1981, p.10)

Sugden describes two models of value judgements in public choice theory: The End State Model, and The Procedural Model (1981, p.11). The End State Model bases its justification of an argument on the resulting end state. For example, the objective of public funding for the arts (end state) may be more important than the democratic system of voting (procedure), which may result in no public arts funding. The following example will show the logic in simple notation:

Value judgement: x should do y and not z.

Fact: the existing state is a.

Implications: If x does y, this will lead to end state b, alternatively, if x does z, this will lead to end state c.

Premise: End state b is more desirable than end state c.

Conclusion: x should do y.

The Procedural Model bases its justification of an argument on the procedure by which the aim is achieved. An example is where the public funding of the arts is desirable. The process of a democratic voting process (procedure) may not result in the arts being publicly funded (end state). It is more important, however, to abide by the democratic process than it is to attain our objectives (end state). The following example will show the logic in simple notation:

Value Judgement: *x* should do *y* and not *z*.

Fact #1: The procedure for achieving *y* is *a*, and the outcome (end state) of *y* is *b*.

Fact #2: The procedure for achieving *z* is *f*, and the outcome (end state) is *g*.

Premise 1: *b* is an undesirable outcome, whilst *g* is a desirable outcome.

Conclusion: It is imperative to use procedure *a*, even though it results in an undesirable end state *b*. This is because it is more important that the desirable outcome *g*.

Both models have different approaches to the reasoning for value judgements. The End State Model essentially disregards the means of achieving an aim, whilst the Procedural Model subordinates the end state to the procedure by which the end state is achieved. Both approaches provide a framework in which decisions can be made. There are implications for the arts subsidy debate, as the following hypothetical examples illustrate:

End State Model: Arts funding is imperative since it results (end state) in net public benefits, irrespective of the fact that the majority of voters may think that the way (procedure) of allocating funds (public decision makers value judgements for arts subsidy on their behalf) is undesirable.

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Procedural Model: Arts funding is not justified because the system of voting shows that voters do not think it a public good, and vote for governments which do not fund the arts (democratic procedure). The democratic process may be held as more important than the net public benefits (end state) that may be generated by the arts.

3.7 Input-Output Analysis

The economist Wassily Leontief is primarily responsible for the recent development and application of Input-Output (I-O) analysis. In 1973, he was awarded the Nobel prize for his contribution to I-O analysis (Port Authority of New York and New Jersey and Cultural Assistance Centre Inc [PA of NYNJ & CAC], 1983, p. A1).

I-O analysis involves the compilation of I-O tables. These tables are basically a mathematical matrix showing the relationship between productive sectors of an economy. The tables are the basis for a calculus of coefficients. One of these coefficients is a *multiplier*. I-O tables show the economy disaggregated into economic sectors, and quantifies the transactional relationship between them. I-O tables are not unlike a balance sheet *snapshot* of the economy (Jensen & West, 1986, p.3). I-O tables are taken from the National Accounts, and show the relationships between different sectors of the economy, identifying patterns of sales and consumption.

I-O analysis can be used to identify the economic impact of an industry on different sectors in the economy. Jensen and West (1986) define an economic impact as "The effect of a change in an economic entity on the economy in question." (p.4)

North (1982, p.3) shows there are three main methods from which to quantify an economic impact.

1)   Keynesian Multiplier Analysis

2)   The Export Base Model

3)   Inter-Industry Analysis

The application of I-O analysis allows forecasting of the economic effect of a given change in the economy. This is the economic impact.

For example, I-O analysis can be used to estimate the effect that the establishment of new aircraft industry will have on input industries such as: aluminium, glass, paint, aircraft instruments, and the like. Another example is the estimation of the effects that a decrease in iron ore sales will have on the whole economy, or specific sectors such as, mining equipment and explosives sales.

I-O analysis is an important tool in regional economic planning and policy development. I-O analysis may become crucial if it is important to know what will be the effect from a change in one sector, on other sectors within the economy.

3.7.1 Input-Output Analysis: Assumptions

The following assumptions in I-O analysis are important to consider when multipliers are used on two counts. Firstly, some limitations of multipliers are observed when considering the homogeneity and linearity assumptions. Secondly, the type of multiplier used is dependent on the choice of an open or closed I-O model, with direct or indirect allocation of competing imports.

Some basic assumptions used in I-O analysis are *homogeneity* and *linearity* (Australian Bureau of Statistics [ABS], 1990, p.141). Since economic sectors have to be grouped together, an assumption is made about their common characteristics. Aggregated sectors are assumed to be homogenous. As aggregation is enlarged, homogeneity of the sectors is less likely to hold true. Conversely, the disaggregation of economic sectors would imply that homogeneity would be more likely to hold true. Disaggregation of the economy is desirable. A trade-off, however, must be made between the accuracy, time, and cost of compiling I-O tables.

For example, the aggregation of the Entertainment and Recreational Services sector in the economy includes 13 classes of activities, ranging from motion picture production to lotteries. One class is live theatre, orchestras and bands. Deck Chair and Spare Parts Puppet

Theatre would be best represented in this class. The homogeneity assumption holds that these activities are closely related, and therefore will be similar. This means that a $100 million increase in final demand, will have the same effect on each of these 13 classes of activities, without regard to individual differences between them. As a sector is disaggregated, the assumption would be more accurate, but become more expensive to compile. As the aggregation is enlarged, it would become less accurate, but a less expensive to compile.

The second assumption is that of linearity, or otherwise known as *proportionality*. This assumes that the transactional relationship between economic sectors holds constant over time. This means that a change in one sector's output will result in a proportionally identical change from other input sectors. The linearity assumption does not account for economies of scale, input substitution and mix, or technology changes. For example, if there is a 20% increase in locally produced vehicle sales, this will translate into a 20% increase in input industries to vehicle manufacture, such as: glass, plastics, tyres, cloth trim, and the like.

I-O analysis requires an assumption to be made as to whether the model (I-O tables) is *closed* or *open*. Coughlin and Mandelbaum (1991, p.21) say that the choice is arbitrary. A closed model treats household as an part of

the productive sector of the economy. This means that household re-spending contributes to the multiplier effect.

An open model treats household consumption as part of final demand, that is exogenous to the productive economy. This means that household re-spending is considered a leakage, and dos not contribute to the multiplier effect (Coughlin & Mandelbaum, 1991, p.21).

The treatment of imports is another important assumption in I-O analysis. There are two types of imports: *competing*, and *complimentary*. Competing imports exist where locally produced goods are a substitute for the imported good. Complimentary imports are where there is no locally produced goods that are a substitute for the imported product.

The treatment of imports requires the researcher to decide whether to use a *direct allocation of competing imports*, or an *indirect allocation of competing imports*. Direct allocation of imports is appropriate where the researcher has reason to believe that there are a lot of competing imports in the economic sector under investigation. Indirect allocation of imports is appropriate where the researcher has reason to believe that competing imports are negligible or do not exist in the sector being examined.

The calculations can be made proportionally, depending on the mix of competing and complementary imports. (ABS, 1990, p.138)

For example, Deck Chair and Spare Parts Puppet Theatre produce live theatre locally. If there is not a lot of competing imported products (live foreign theatre shows) that the theatres have to compete with, the appropriate multipliers would be taken from the I-O tables that account for an indirect allocation of competing imports. (I.Bobbin, personal communication, October, 1992).

3.7.2 Input-Output Tables: Multipliers

As part of this research study relies on the application of an economic multiplier, it is appropriate to discuss the concept. An income multiplier is a coefficient that shows the effect that an initial injection of income in a region has on total income for that region. The initial increase in income results in a multiplied increase in income. This is because the output of one sector is the input of another sector, as detailed in I-O tables. The re-spending of income results in an increase in income for others, and the effect is repeated. This is known as the *ripple* effect (Jensen & West, 1986, p.48). There are *direct*, *indirect*, and *induced effects*. These effects, known as *flow-ons*, are repeated until the change from the original increase in

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income becomes insignificant. The amount of this increase is expressed as a multiple (a coefficient) of the initial figure, hence it is called a *multiplier* (Cwi, 1981, p.15).

For example, an initial injection of income into the regional economy of Fremantle may be caused by a international arts festival. The injection may be $12 million. Local business such as hotels, theatres, and restaurants may directly benefit from the expenditure of tourists that visit the region to see the festival. These businesses would in turn increase their purchases of supplies to cope with the increased demand. The same increase in sales is experienced by the suppliers of the local business. And in both cases, increased employment may generated for employees.

This effect is continued throughout the regional economy until the effect is insignificant. This is because, in each successive case, the multiplier effect is diminished because some of the income is saved and some spent. This depends on individual's propensity to save and consume. The total effect of the original $12 million may have grown into $18 million expenditure in Fremantle. This would imply an income multiplier of 1.5 (18/12 = 1.5).

The main types of multiplier coefficients are: income, output, and employment. They are derived from the I-O tables in the National Accounts. Employment multipliers are

derived from the same. If the dollar value of the output of one sector can be related to its level of employment, then an initial change in one sector's employment can be translated into a change in employment in another sector (Coughlin & Mandelbaum, 1991, p.24).

A hypothetical example follows. If we know that for every $1 million of revenue in the performing arts, this results in 12.6 jobs generated in all other sectors of the economy, that are inputs to performing arts (scenery makers, writers, technicians and the like). One of these sectors, may be theatre lighting services. This accounts for 0.3 of the total 12.6 jobs per $1 million of sales. If revenue for the performing arts had increased by $5 million, this would translate into 63 (5 times 12.6) jobs in all inputs, and therefore 1.5 (5 times 0.3) jobs being generated in the theatre lighting services industry.

In the Australian National Accounts, the treatment of employment multipliers is to identify a series of effects from an initial change in income. These are: initial effects, first round effects, industrial support effects, production induced effects, and consumption induced effects. These effects are summed to yield the relationship between the total effect and the initial effect, which as described earlier, is a multiple of the initial change.

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There are four different types of multiplier coefficients, the choice from which is dependent upon certain assumptions. These are Types: *1A* and *1B*, *2A* and *2B*. Type 1 multipliers assume an *open model* of the economy, and therefore disregard the consumption induced effects (flow-on effects) from household consumption. Type 2 multipliers assume a *closed model* of the economy, and account for these flow-on effects. (ABS, 1991, p.10)

Type A multipliers account for the total effects: initial effects, first round effects, industrial support effects, and consumption induced effects. The type B accounts for all the effects in the type A, *less* the initial effect. (ABS, 1991, p.10)

For example, if the researcher is interested in the total effects of a $1 million increase in income in the live theatre sector, and wanted to know the total employment generated from this increase (including the live theatre sector itself), the appropriate multiplier would be the type A. If on the other hand, the researcher only wanted to know the effect on employment on all other industries *outside* of the live theatre sector (not including live theatre itself), the appropriate multiplier would be a type B. An example calculation explains. A $1,000 increase in output of the live theatre sector is directly responsible (in live theatre sector) for 0.018 jobs (initial effects). This change gives rise to, 0.005 jobs in the *first round*

effects, 0.003 jobs in the *industrial support effects.*

The sum of the first round and industrial support effects is the *production induced effects* (0.005 + 0.003 = 0.008). 0.007 jobs are generated by the *consumption induced effects.* The *total effect* is that the $1,000 change in income results in 0.033 jobs being generated (0.018 + 0.005 + 0.003 + 0.007). Figure 1 shows the effects in a diagram.

<u>Figure 1.</u> The Multiplier effect on employment.

Live Theatre	->	Scenery Builders	->	Suppliers to Scenery Builders	->	Households
0.018 Jobs	+	0.005 Jobs	+	0.003 Jobs	+	0.007 Jobs
Initial Effects		First Round Effects		Industrial Support Effects		Consumption Induced Effects

The multiplier effect (type 2A) is 1.833 (0.033/0.018). However, if we only want to know the multiplier effects *outside* the live theatre sector, use the type B multiplier and disregard the *initial effects* (0.018).

The Type B multiplier is 0.833 ([0.033-0.018]/0.018). For a more detailed example of the calculation for a type 2B employment multiplier (see Appendix 12).

4.0 Methodology

4.1 Research Design

This is a descriptive research design. A computation has been developed to quantify the amount of employment generation as a result of government funding to two local arts organisations: Deck Chair and Spare Parts Puppet Theatres.

4.2 Operational Definitions

A Full-Time Job

52 weeks of paid work within a 12 month period, consisting of: 5 days per week, 8 hours per day, 40 hours per week, 2,080 hours per annum.

Direct Employment

This includes persons on the theatre payroll (Artists & Support, Production & Venue), and those not on the payroll but who contract their artistic services that directly contribute to a production or an artistic performance. In this study, contracting artists include: Production Designers, Music Composers, Writers, and Choreographers.

Indirect Employment

Excepting those contracting artists specified in the definition of direct employment, indirect employment is:

those persons not on the theatre payroll, and who are employed outside of Deck Chair and Spare Parts Puppet Theatre, as a result of the multiplier effect. This includes all direct and indirect suppliers to the theatres. For example, scenery builders, suppliers to scenery builders, printers and printer suppliers, lighting hire services,and theatrical lighting manufacturers.

The following definitions are consistent with the Australia Council's 1993 Application for Government Assistance Schedules.

Artists and Support

(full-time, part-time, casual, short-term contract)

Performing Artists: Persons on the theatre payroll, directly involved in an artistic performance activities, including: musicians, actors, dancers, puppeteers.

Support Artists: Persons on the theatre payroll, not directly involved in an artistic performance, including: Dramaturgs, Music Composers, Directors, Choreographers, Production Designers.

Production and Venue: Persons on the theatre payroll involved in technical, production, backstage, box office, and support areas of theatre (including front of house).

Administration and Marketing

(full-time, part-time)

Administration and Marketing: Persons on the theatre payroll, engaged in administrative and marketing work.

Contract Artistic Services

Persons not on the theatre payroll, including: Production Designers, Music Composers, Writers, and Choreographers. Contracting Artistic Services is where payment is made to individuals for original work directly contributing to a production or an artistic performance (cited as: Fees, Scores and Scripts in the Australia Council Application for Government Assistance schedules) and that are not categorised as either: Artists and Support, Administration and Marketing.

Government Funding

Government funding refers to all levels of Australian government: Federal, State, and Local. This means grants from the Australia Council and Department for the arts. Funding from statutory authorities is ignored because it

represented an insignificant proportion of total government grants over the research period (see Appendix 17).

4.3 Data Collection

The definition of a *full-time job* was established through discussion with the theatre managements and the relevant union, The Media, Entertainment and Arts Alliance.

The employment multiplier was taken from the Australian Bureau of Statistics' (ABS) National Accounts Input—Output Tables for 1986—87 (ABS, 1991, p.6). The relevant coefficient is 1.667 (see Appendix 12).

The employment expenditure of Deck Chair and Spare Parts Puppet Theatres for: Artist and Support, Administration and Marketing, Contract Artistic Services, was taken from the financial schedules of the Australia Council Application for Government Assistance forms for the respective calendar years: 1989, 1990, 1991.

The employment data was aggregated directly from the pay sheets from each theatre. The methodology was as follows:

Step 1

Employment was segregated into:

- Artist and Support
- Administration and Marketing

The total amount of employment was calculated by summing the number of weeks, days, and hours. Weekly payments consisted of a seven day period. Care was taken so as not

to confuse fortnightly payments with weekly payments, and payments of less than a week with weekly payments, by reference to the dates and the periods between payments.

Step 2

In the case of casual and part-time work where the dollar amounts were known, but the period of employment or rate of pay per hour were unknown, a substitute rate per hour was used. This was a representative rate per hour taken from the relevant union award for the category of employment. Payments were divided by this surrogate rate to calculate an effective period of employment (see Appendix 1).

Step 3

The total employment for Artist and Support, Administration and Marketing in weeks, days, and hours was recalculated into total hours by multiplying weeks by 40 hours, and days by 8 hours. These were added to the balance of hours. This yielded total hours of employment generated for the research period: 1989, 1990, 1991 (see Appendices 2 and 3).

Step 4

The employment category of Contract Artistic Services was identified from individual employment contracts and the contract expenditures in the Australia Council Application for Assistance schedules, cited as: *fees/scores and scripts*. Groups were categorised on the basis of the type of work done. The following categories were used:

Production Designers, Music Composers, Choreographers, and Writers. The objective was to recalculate all the contracts back into weeks of employment generated.

In cases where a time period for the contract was specified, this was regarded as the term of employment. In cases where no time period was specified, however, a substitute weekly rate was established for each type of employment group; Writers (see Appendix 9), Production Designers and Composers (see Appendix 4). These contract payments were divided by this substitute rate in order to recalculate the contracts into weeks of work generated. The total employment for the Contract Artistic Services category was recalculated from weeks and days into total hours by multiplying weeks by 40, and days by 8 (see Appendices 2 and 3).

Step 5

The total hours of employment for each category:

- Artist and Support
- Administration and Marketing
- Contract Artistic Services

were summed to yield total hours of employment over the research period. This figure was divided by 2,080, the total hours for a full-time job over one year, to yield the total number of equivalent full-time jobs. (see Appendices 2 and 3).

4.4 Measuring Instrument

The measuring instrument is *The Government Arts Funding – Employment Ratio.* This computation calculates government funding to Deck Chair and Spare Parts Puppet Theatre that translates into equivalent full-time employment. The computation is presented in two versions for each theatre company.

The first version accounts for *direct* and *indirect* employment by the inclusion of an employment multiplier. The second version only accounts for direct employment, and does not include the multiplier. Both versions are presented in the employment categories: Artist and Support, Administration and Marketing, Contract Artistic Services, and total employment, as well as presented for each of the following periods: 1989, 1990, 1991, and 1989–1991. The following are the variables:

Variables

E_1 = Total employment expenditure on the Artists and Support employment category.

E_2 = Total employment expenditure on the Administration and Marketing employment category.

E_3 = Total employment expenditure on the Contract Artistic Services employment category.

E_4 = Total employment expenditure ($E_1 + E_2 + E_3$)

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$A_1=$ *Equivalent full-time jobs* in the Artist and Support employment category.

$A_2=$ *Equivalent full-time jobs* in the Administration and Marketing employment category.

$A_3=$ *Equivalent full-time jobs* in the Contract Artistic Services employment category.

$A_4=$ *Equivalent full-time jobs*, total employment.

$B=$ An adjusted ABS Type 2B employment multiplier (B = 1.667) for the *Entertainment* and *Recreational Services* Sector*. Australian Standard Industrial Classification [ASIC] code: division L, subdivision 91, classes: 9131-9144.

     * *See section 4.4.2.4 for explanation. See also appendix 12 for the method of adjustment.*

$Y_1=$

Government funding contribution per *equivalent full-time job*: Artist and Support.

$Y_2=$ Government funding contribution per *equivalent full-time job*: Administration and Marketing.

$Y_3=$ Government funding contribution per *equivalent full-time job*: Contract Artistic Services.

$Y_4=$ Government funding contribution per *equivalent full-time job*: total employment.

$X_{1m}=$ Total number of *equivalent full-time jobs* that represent direct and indirect employment in the Artist and Support employment category.

$X_{2m}=$ Total number of *equivalent full-time jobs* that represents direct and indirect employment in the Administration and Marketing employment category.

$X_{3m}=$ Total number of *equivalent full-time jobs* that represent direct and indirect employment in the Contract Artistic Services employment category.

$X_{4m}=$ Total number of *equivalent full-time jobs* that represent direct and indirect employment.

$X_1=$ Total number of *equivalent full-time jobs* that represent direct employment in the Artist and Support employment category.

$X_2=$ Total number of *equivalent full-time jobs* that represent direct employment in the Administration and Marketing employment category.

$X_3=$ Total number of *equivalent full-time jobs* that represent direct employment in the Contract Artistic Services employment category.

$X_4=$ Total number of *equivalent full-time jobs* that represent direct employment.

$X_{1e}=$ One *equivalent full-time job* in the Artist and Support employment category.

$X_{2e}=$ One *equivalent full-time job* in the Administration and Marketing employment category.

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$X_{3e}=$ One *equivalent full-time job* in the Contract Artistic Services employment category.

$X_{4e}=$ One *equivalent full-time job,* total employment.

Figure 2.

The Government Arts Funding-Employment Ratio.

Version 1: *(with multiplier)*

$$E_n/(A_n.B) = E_n/X_{nm} => Y_n:X_{ne}$$

Version 2: *(without multiplier)*

$$E_n/A_n = E_n/X_n => Y_n:X_{ne}$$

4.4.1 Reliability

The definition of a full-time job may change over time, in accordance with changes in the market for labour, this may effect the reliability of this instrument.

Coughlin and Mandelbaum (1991, p.26) warn the researcher that the reliability of multipliers may be suspect because they don't take account of longer-term economic restructuring. They are short term in nature. For example, changes in technology can cause, first, a change in productivity, and accordingly the amount of labour used in the process. Second, changes in productivity of one industry that may cause the amount of labour in another related industry to change. Each factor will mean that the employment multiplier will become dated over time.

In practice, however, the calculus for generating multipliers, I-O Tables, are an expensive and time consuming task to compile. It is not undertaken all that often. As a result, the latest multipliers are not always available (Coughlin & Mandelbaum, 1991, p.26). This study intentionally uses the 1986-87 ABS Entertainment and Recreational Services employment multiplier in the context of 1992, for the purpose of demonstrating the differences that will arise with its use. The reliability of a multiplier computed 7 years ago is used with appropriate caution.

4.4.2 Validity

4.4.2.1 Comparison with official data

The most practical way to validate the number of equivalent
full-time jobs that are derived from this study, is to
compare the results against the estimates given in the
schedules of the Australia Council Application for
Assistance schedules. This can be done only for the Artist
and Support, Administration and Marketing employment
categories, because the Contract Artistic Services category
is not accounted for in the schedules. This comparison is
made because in this study the jobs were calculated by
direct reference to pay sheet data, and not the Australia
Council schedules. Because this study accounts for the
amount of part-time employment, while the Australia Council
schedules account for the number of part-time positions
held, not the amount of employment, a small variation, +10
percent, was expected.

A comparison was made between the number of equivalent
full-time jobs as shown in the Australia Council schedules
and the results of this study, together with the percentage
deviation from the official estimates. Data sets from both
theatres were aggregated. Over the research period,
1989-1991, this study shows that 20.7 full-time jobs were
generated, against 18.9 jobs in the official estimates. The
deviations in the Administration and Marketing category are

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within reasonable limits, ranging from plus 5 to plus 13 percent (see Appendix 5).

The deviation of results in the Artist and Support category is unexpectedly large. The range is from minus 7 to minus 61 percent, which suggests that the official estimates overstate employment. In 1990 and during 1989-1991 the largest deviations occur, minus 61 and 38 percent respectively. Translated into numbers of jobs, this means 13 versus 33 in 1991 and 44 versus 72 in 1989-1991 (see Appendix 5). As a precaution, all raw data was double-checked for errors, and all spreadsheet formulae used to calculate the final results were re-checked. No calculation errors were found.

One way to put these differences in perspective, is to compare the cost per equivalent full-time job, ignoring the effects of the employment multiplier. A comparison of the cost per job, between the study and the official results is made. For 1989-1991, this study shows that the cost per job was $31,029, while official estimates show $19,062 (see Appendix 6). The study result is congruent with yearly incomes typical of those sighted in the pay sheets. This suggests that the study results represent a more realistic estimate, which supports the validity of the measurement used in this study.

4.4.2.2 Non-government funding ignored

The Government Arts Funding-Employment Ratio computation does not account for the proportion of non-government funding and box office revenue that contributes to employment generation. The assumption is made because government funding over the research period accounts for 71 percent of total revenue. It is reasonable to consider that in the absence of government funding, therefore, the organisations would in all probability cease operation.

4.4.2.3 The employment multiplier: assumptions

The employment multiplier used in version one of the computations is a *type 2B,* derived from the 1986-87 I-O tables (ABS, 1991, p.6). The choice of this multiplier is based upon certain assumptions as follows:

The use of a type 2 multiplier assumes a closed model of the economy (derived from the I-O tables). This assumption is supported by Jensen and West (1986, p.53), who believe that most I-O analysts prefer to make this assumption when using multipliers.

The use of the type B multiplier assumes that we want to know the employment generation effects *outside* the economic sector in question. This will show the increase in the

number of jobs in all other sectors of the economy, as a
result of an increase in one job in the Entertainment and
Recreational Services sector of the economy.

The employment multiplier used assumes an *indirect
allocation of competing imports*. This means that there are
no competing imports, that can directly substitute the
goods and services being examined. In this case, live
theatre performances.

4.4.2.4 Definition of direct employment

Archer (cited in Mitchell & Wall, 1989) points out that
there are alternative ways to define primary and secondary
impacts in an economic impact analysis. Mitchell and Wall
(1989, p.32) treat *direct* employment as jobs created within
the organisation in question, and *indirect* employment as
jobs created as a result of the existence of direct
suppliers to the cultural organisation, and those
(indirect) suppliers, who supply the direct suppliers.

If this view is taken, the employment category of
contracting artists would be considered as indirect
employment. However, this study adopts the view that
contracting artists should be represented in direct

employment. This is done because it is felt that contracting artists form an integral part of the employment structure at the two theatres under investigation.

This treatment of direct employment. means that the employment multiplier should be adjusted. The ABS type 2B Employment multiplier is calculated by summing: the *first round effects*, the *industrial support effects*, and the *consumption induced effects*. Using this method, contracting artists would be considered the first round effects. To avoid double counting of the multiplier effect, an adjustment must be made by subtracting the first round effects from the calculation (see Appendix 12).

This adjustment of the multiplier presupposes that contracting artists constitute the total effects in the first round. This is not true, as it ignores other inputs such as scenery suppliers, stationary supply, and other direct suppliers to the theatres. The view is taken that it is preferable to understate, rather than overstate the multiplier effect by double counting the effects from contracting artists, who in this case, represent a large part of the first round effects.

4.5 Data Analysis

4.5.1 Procedure for Computation

There are two versions of *The Government Arts Funding – Employment Ratio* for each theatre. Version one, accounts for direct and indirect employment. Version two, accounts only for direct employment. Note that version one includes the employment multiplier in the denominator. The procedure for computation is as follows:

Step 1 (variable E_n)

Total employment expenditure for each employment category: Artist and Support, Administration and Marketing, Contract Artistic Services, and total employment is taken from the income and expenditure statements of Deck Chair and Spare Parts Puppet Theatre (see Appendices 7 and 8).

Step 2 (variable A_n)

The employment for each category, as described in step 1, is calculated by dividing the aggregate of hours of work by 2,080 to yield the number of equivalent full-time jobs for each category (see Appendices 2 and 3). As noted 2,080 hours represents the duration of employment for an equivalent full-time job over a 12 month period.

<u>Step 3</u> (variable B)

This variable relates only to version 1. The number of equivalent full-time jobs for each employment category (variable A_n) is multiplied by 1.667. This is the adjusted ABS employment multiplier for the Entertainment and Recreational Services sector.

<u>Step 4</u> (variables: X_{nm}, X_n, E_n)

From the results in Step 3, X_{nm} is the number of equivalent full-time jobs that represents direct and indirect employment (for version 1). X_n is the number of equivalent full-time jobs that represents only direct employment (for version 2). E_n is divided by X_{nm} (version 1), and E_n by X_n (version 2) to yield the government funding contribution per equivalent full-time job in each employment category.

<u>Step 5</u> (variables: Y_n, X_{ne})

Y_n is the government funding contribution per equivalent full-time job. When Y_n and X_{ne} are both divided by X_{ne}, this yields a ratio of government funding (Y_n) that translates into one equivalent full-time job (X_{ne}).

4.6 Limitations

The Government Arts Funding-Employment Ratios rest upon certain assumptions. Some limitations are discussed.

4.6.1 Substitute Rates of Income

The employment category of Contract Artistic Services presented some difficulties as some contracts only specified payments, and made no reference to periods of employment. A survey of professions would identify a representative rate of income for work done in each field. This was not conducted because theatre management felt that it may be a sensitive issue, and such an enquiry would be met with a low response. It was agreed that a survey of incomes would not be done. In this case, a substitute rate of income had to be derived to calculate the effective term of employment, and applied across these professions.

Union awards do not apply to individuals who contract their services. The relevant guilds and associations, with exception of the Writer's Guild, did not have data on rates of income for their members. In the case of writers, the minimum rates per week for experienced *writers in residence* were used as an income substitute (see Appendix 9). The experienced rate was used because the theatres noted that all writers used were experienced. In the other employment

categories, Production Designers and Music Composers, ABS statistics showing the average weekly earnings were used as substitute rate where the term of employment was unknown (see Appendix 4). Of all the contracts within the research period, 50 percent were subject to substituted income estimates (see Appendix 13).

Both approaches have been used with caution. This is because the application of a substitute rate of income, to all members of a group, presupposes that the substitute would be considered a satisfactory and representative income by all members. The substitute rate does not account for the amount an individual can charge as a function of their expectations and professional reputation. This treatment is defended on the grounds that it is the most practical way to estimate the amount of employment, aside from a artist employment survey.

In addition, the substitute rates for Production Designers and Composers are subject to limitation because the ABS average weekly earnings used, are an aggregate of 5 to 6 similar types of occupations (see Appendix 14). This aggregation is not sensitive to the individual differences between professions.

The same issue arises when using a substitute rate of income to generalise across the population of casual and part-time employees in the Artist and Support,

Administration and Marketing employment categories. Where periods and rates of pay were unknown, union award rates were applied to the relevant types of employment (see Appendix 1). The substitute rate of income presupposes no deviation from the award rates of pay. Where individual negotiation may have taken place, the substitute rate would result in possible inaccuracies.

For Artist and Support employment, the category of actors presented no difficulties. This was not the case for the category of Production and Venue personnel. It was not possible to identify whether the payments were paid at the day or night rates. A mean of the two rates was taken as the substitute (see Appendix 1).

4.6.2 Contracting Artists: Measurement Problems

The Government Arts Funding-Employment Ratios shown in the Findings (section 5.0), produced some unexpected results. Some of the problems are discussed.

Some large year by year variations in the Contract Artistic Services category are essentially the result of methodological and accounting errors. To help explain this, a comparison has been made between:

Expenditure on Contracting Artists according to the income and expenditure statements.

The amounts of contract fees paid, together with the estimated weeks of employment generated.

Large variations occur because the ratio computations are based on data drawn from the income and expenditure statements, and individual contracts. Since these figures do not reconcile, some ratios are biased. This causes some large variations in the ratios tabled in the Findings (section 5.0). These problems are discussed.

There is an unexpectedly low ratio for Contracting Artists in 1989 at Spare Parts Puppet Theatre (see Appendix 10). The explanation for this is that the number of equivalent full-time jobs for Contracting Artists in 1989 was 2.9 (see Appendix 2). For the same period, the income and expenditure statement shows that only $28,000 was expended on contracting artists (see Appendix 7).

The reason why there were so many jobs generated by such a small amount is that in 1989, 9 out of 11 artist contracts was translated into periods of employment by referring to the period of contract (see Appendix 13). This treatment assumes that the period of contract means that the artist is be fully employed by the theatre. It ignores the fact that the contract may only constitute a portion of the artist's working time. It does not account for the fact

that the artist may be working on other projects at the same time. The true amount of employment may have been overstated, resulting in unrealistically low ratio for 1989 and accordingly the whole research period 1989-1991.

A high ratio for Contracting Artists in 1991 at Spare Parts Puppet Theatre (see Appendix 10) occurs because of the variation between the reported expenditure and contract fees paid (see Appendix 15). Here, $21,000 was reported in the expenditure statement, but only $9,174 and 4 weeks of a term contract were observed. This resulted in $21,000 being divided by 0.3 equivalent full-time jobs. This appears to be primarily an accounting error. A methodological error, however, may partly contribute because of the problems with using substitute rates of income.

For Deck Chair Theatre, there were accounting problems in 1989 and 1991. The Contract Artist ratios would have shown zero values. This is because, according to the income and expenditure statement, $0 was expended on Contract Artistic Services in 1989 and 1991 (see Appendix 8). The contract fees observed, show that in 1989 and 1991 $5600 and $29,041 was expended on artist contracts respectively (see Appendix 15). These values ($5600 and $29,041), though not the official expenditure data, were used to calculate the ratios in section 5.0 (Tables 3 and 4) and Appendix 11.

At Deck Chair Theatre, an unexpectedly high ratio of $65,520 for Contracting Artists in 1990 is noted (see Appendix 11). This has occurred because the number of equivalent full-time jobs have been calculated on the basis of $6800 sighted in individual contracts (see Appendix 13), however $12,600 is stated as Contract Artist expenditure in the income and expenditure statement (see Appendix 8). Because these figures do not match, the ratio is overstated.

Finally, variation in the Artist and Support, and Administration and Marketing ratios for Deck Chair Theatre is difficult to explain. This may be due to the application of substitute rates of income, and problems in translating pay sheet data from Deck Chair Theatre into periods of employment. The same ratios for Spare Parts Puppet Theatre were generally subject to less variation.

4.6.3 Definition of a Full-Time Job

The approach of converting casual and part-time employment into full-time equivalent employment is supported by Mitchell and Wall's 1989 study of employment generation at an arts festival in Ontario, Canada, and Cwi and Lyall's 1977 study on cultural institutions in Baltimore, USA.

A definition of a full-time job was made by consultation with both theatre managements. This was agreed to be: 52 weeks per annum, 5 days per week, 8 hours per day. The relevant union, The Media, Entertainment and Arts Alliance, agreed with this definition. This consultative approach is supported by Cwi and Lyall (1977, p.86).

Generalising an artificial definition across individuals, however, presupposes that all have the same view as to what constitutes full-time employment. It is recognised that artists may have different expectations from their work loads, and may not necessarily conform to artificial definitions of full-time hours of work. This approach is defended because, for practicality sake, some reference point must be established.

4.6.4 Problems with Multipliers

Coughlin and Mandelbaum (1991) point out some of the limitations in using I-O Analysis and the resulting regional multipliers. The practicality of this problem is explained well by Stevens & Lahr (cited in Coughlin & Mandelbaum, 1991, p. 26) who point out that since inter-industry coefficients are not always known, and it is an expensive practice to survey and identify them, it leads to researchers applying national multipliers to regional models, with adjustment. The practise is not criticised. It

is more a warning that skilful judgement must be used, and that bias may result.

In this study, an adjusted national employment multiplier is used in version one of *The Government Arts Funding Employment Ratio.* This adjustment is made because of the way direct employment is treated, not for regional variations.

The multiplier is used with the intention to demonstrate the difference between direct and indirect employment. The validity of applying this multiplier is questionable on two counts. First, applying a national multiplier to a regional situation does not account for regional differences in employment, productivity and technology (Coughlin & Mandelbaum, 1991, p.27).

Second, the multiplier used is a national aggregate of industries within the scope of *Entertainment and Recreational Services* (ASIC code: Division L, subdivision No. 91, classes 9131-9144). This is an aggregate of 15 related economic activities, ranging from motion picture production to sport and recreation. This level of aggregation cannot account for the specific characteristics of theatre companies.

As a result, using an employment multiplier for this aggregate of activities assumes homogeneity of the sectors involved. The ASIC code: Division L, class No. 9136 titled: *Live Theatre, Orchestra and Bands* would have been a more obvious choice. No multipliers from the Australian I-O tables, however, are available at this level of disaggregation. This leaves the researcher with little choice, except to use a multiplier that is derived from such a large aggregate. This is done with appropriate caution.

4.6.5 Leakages

The assumption is made that there are no leakages of employment outside of Australia. If employment has been generated offshore as a result of the operation of the two theatres during the research period, version 1 of the ratio computation will overstate the multiplier effect on indirect employment.

4.6.6 Qualitative Benefits Ignored

A Canada Council (1982, p.1) research note points out a limitation of what it describes as the *conventionalist*

approach to economic impact studies, that are essentially quantitative, opposed to qualitative studies. Luxton (n.d.) calls the latter "the social approach." (p.4)

The limitation is that emphasis on the economic value of the arts essentially ignores the aesthetic value of the arts in the community. Lee-Owen (1980, p.317), says that economic impact studies are necessary, but not sufficient argument, in defence of public subsidy to the arts. A potential limitation of this study may be, that it does not account for these qualitative issues related to the generation of employment.

4.6.7 Opportunity Cost of Employment

This study disregards the *opportunity cost* of arts organisation employment. The opportunity cost is the next best alternative that public funding to the arts could be used for, other than arts funding. In the context of employment, this means that in the *absence* of the arts, it is assumed that individuals would not necessarily find employment of an alternate kind. This is a common assumption made by most researchers when conducting economic impact on the arts (Canada Council, 1982). In defence, this is a reasonable assumption, apart from the purpose of comparison, because the opportunity costs would be subject to pure speculation.

4.6.8 Generalisation of Results

This study is designed to establish a methodology to identify the relationship between employment and government funding, using a sample of two different theatre companies in Fremantle. The ratios can be applied to other performing arts companies, but in each case, the ratios can only apply to the particular company. While the method can be applied to the other arts organisations, the ratios in this study obviously cannot.

5.0 Findings

5.1 Spare Parts Puppet Theatre

The results show the effectiveness of government funding as a means of generating employment. The following tables show shows the amount of government funding that translates into one full-time job.

Table 1 shows the results of version one of the *Government Arts Funding-Employment Ratio* for Spare Parts Puppet Theatre. Accounting for the multiplier effect, for the period 1989-1991, every $18,128 of government funding to Spare Parts Puppet Theatre generated one full-time job.

Table 1

Government Arts Funding-Employment Ratio (Version 1)

Spare Parts Puppet Theatre

	1989	1990	1991	1989-91
	$	$	$	$
Artist & Support	20,190	18,218	19,899	19,276
Admin & Marketing	18,186	19,422	17,936	18,509
Contract Artistic	5,893	14,727	36,496	10,367
Total employment	16,465	19,777	16,512	18,128

Table 2 shows the same relationship between government funding to Spare Parts Puppet Theatre and employment. For the period 1989-1991, every $30,220 of government funding to Spare Parts Puppet Theatre generated one full-time job. The ratios, however, are just over one and half times greater than those in Table 1. This is because Table 2 ignores the multiplier effect. The ratios in Table 1 are lower because when the multiplier effect is considered, the same amount of government funding effectively generates not 1 job, but 1.667 jobs.

Table 2

Government Arts Funding-Employment Ratio (Version 2)

Spare Parts Puppet Theatre

	1989 $	1990 $	1991 $	1989-91 $
Artist & Support	33,656	30,369	33,172	32,132
Admin & Marketing	30,315	32,377	29,900	30,855
Contract Artistic	9,824	24,549	60,840	17,281
Total employment	27,447	30,386	33,363	30,220

Tables 1 and 2 show the disaggregation of employment into individual categories. Ignoring the multiplier effect, over

the three year period, the least investment required to generate employment was for Contracting Artists, while the greatest investment was for Artists and Support. The ratios are $17,281 and $32,132 respectively. With the exception of Contracting Artists, all ratios are believed to be accurate estimates. The reason for the unexpectedly large variations in the Contracting Artist ratios is believed to be the combination of both accounting and methodological error. This problem is discussed in section 4.6.2.

5.2 Deck Chair Theatre

Table 3 shows the results of version one of the *Government Arts Funding—Employment Ratio* for Deck Chair Theatre. Accounting for the multiplier effect, for the period 1989—1991, every $15,490 of government funding to Deck Chair Theatre generated one full-time job.

Table 3

Government Arts Funding-Employment Ratio (Version 1)

Deck Chair Theatre

| | 1989 | 1990 | 1991 | 1989—91 |
	$	$	$	$
Artist & Support	15,027	20,854	17,925	17,778
Admin & Marketing	12,005	8,276	18,233	12,760
Contract Artistic	16,797	39,304	21,776	23,615
Total employment	13,764	16,420	16,575	15,490

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Table 4 shows the same relationship between government funding to Deck Chair Theatre and employment. For the period 1989-1991, every $25,821 of government funding to Deck Chair Theatre generated one full-time job. The amounts, however, are just over one and half times greater than those in Table 3. This is because Table 4 ignores the multiplier effect. The amounts in Table 3 are lower because, when the multiplier effect is considered, the same amount of government funding effectively generates not 1 job, but 1.667 jobs.

Table 4

Government Arts Funding-Employment Ratio (Version 2)

Deck Chair Theatre

| | 1989 | 1990 | 1991 | 1989-91 |
	$	$	$	$
Artist & Support	25,051	34,764	29,881	29,637
Admin & Marketing	20,012	13,796	30,394	21,272
Contract Artistic	28,000	65,520	36,301	39,367
Total employment	22,944	24,733	22,545	25,821

Tables 3 and 4 show the disaggregation of employment into individual categories. Ignoring the multiplier effect, over the three year period, the least investment required to generate employment was for Administration and Marketing, while the greatest investment was for Contract Artists. The ratios are $21,272 and $39,367 respectively.

Unlike Spare Parts Puppet Theatre, there is a large variation from year to year, in all the ratios for Deck Chair Theatre. This is the result of both accounting and methodological error. These problems are discussed in section 4.6.2.

6.0 Conclusion

As was the intention of this study, the results highlight the differences in employment generation that arise when the multiplier effect is considered. The ratios from version 1 of the *Government Arts Funding-Employment Ratio* (Tables 1 and 3) are just over half the value of the ratios in Tables 2 and 4. This is because the adjusted employment multiplier used in version 1 of the computation has a value of 1.667. It has been shown that if we consider the multiplier effect, the effective investment by government. for employment generation through arts funding, is effectively just over half, than is the case when the multiplier effect is ignored.

The choice between which ratios to adopt is dependent on whether the user considers the multiplier effect valid. It was the purpose of this study to highlight the problems that may be encountered when using multipliers. Because of the inherent methodological problems and assumptions made when using multipliers. version 1 ratios (Tables 1 and 3) should be used with appropriate caution. Version 2 ratios (Tables 2 and 4), however, are not subject to the same methodological problems.

This study has shown some major problems in identifying employment in the arts. The need for further research to address some of the problems faced, is evident. Some particular issues might be addressed:

1)   The amount of part-time employment might be calculated in the amount of time. in days and hours, not the number of positions held. This would accurately represent a proportion of full-time employment.

2)   Adherence to Australia Council employment definitions, and the disaggregation of pay sheet data according to these definitions. Payment rates might be noted on all pay sheets.

3)   The amount of employment generated for Contract Artistic Services may be more accurately identified by a survey of contracting professional artists, and relevant rates of income. Particular attention might be given to the way in which contracting artist expenditure is accounted for. These issues would make it possible for contracting artist's fees to be accurately translated into the amount of employment.

This study has uncovered some major problems in attempting

to quantify theatre employment. It is anticipated that this study has provided some groundwork for future work, so these problems can be solved.

7.0 Table of Appendices

Award Rates of Pay Per Hour[1]

		1989	1990	1991
		$	$	$
Actors[2]	:	24.00	28.14	26.63
Production & Venue[3]	:	11.19*	11.19*	11.19*

Method: Mean Substitute Rate of Income Per Hour for Production and Venue Personnel

Day Rate[3] : $ 9.05 per hour

Night rate[3]: $13.33 per hour

Mean* = (9.05 + 13.33)/2 = $11.19 per hour

[1]: *Source: Media, Entertainment and Arts Alliance*
[2]: *Note. From Actors (Theatrical) Award, 1981. Actors Equity of Australia.*
[3] *Persons involved in technical production, backstage, box office and support areas. Note. From Theatrical Employees (General Theatrical) Award No. A7 of 1984. West Australian Theatrical and Amusement Employees Association (Union of Employees).*

Spare Parts Puppet Theatre: Employment in Total Hours and
Equivalent Full-time Jobs 1989-1991

	ARTISTS & SUPPORT	ADMIN & MKTING	CONTRACT ARTISTIC	TOTAL EMPLOY
1989				
WKS	343.0	165.0	148.2	656.2
DAYS	0.0	15.5	0.0	148.2
HOURS	0.0	0.0	0.0	0.0
SUB TOT (HRS)	13720.0	6724.0	5928.2	26372.2
1990				
WKS	510.0	123.0	44.5	677.5
DAYS	0.0	0.0	0.0	0.0
HOURS	1037.5	476.5	0.0	1514.0
SUB TOT (HRS)	21437.5	5396.5	1779.3	28613.3
1991				
WKS	406.0	120.0	17.9	543.9
DAYS	0.0	0.0	0.0	0.0
HOURS	0.0	0.0	0.0	0.0
SUB TOT (HRS)	16240.0	4800.0	718.0	21758.0
TOT HRS 89-91	51397.5	16920.5	8425.5	76743.5
EFJ[1] 1989-91	24.7	8.1	4.1	36.9
EFJ 1989	6.6	3.2	2.9	12.7
EFJ 1990	10.3	2.6	0.9	13.8
EFJ 1991	7.8	2.3	0.3	10.5

[1]: *Equivalent full-time jobs (EFJ). Total employment category hours divided by 2,080 hours.*

Deck Chair Theatre: Employment in Total Hours and
Equivalent Full-time Jobs 1989-1991

	ARTISTS & SUPPORT	ADMIN & MKTING	CONTRACT ARTISTIC	TOTAL EMPLOY
1989				
WKS	348.4	140.0	8.2	496.6
DAYS	273.6	426.4	0.0	700.0
HOURS	0.0	0.0	0.0	0.0
SUB TOT (HRS)	16124.7	9011.2	329.4	25465.3
1990				
WKS	316.0	170.0	10.0	496.0
DAYS	158.9	237.4	0.0	396.3
HOURS	0.0	0.0	0.0	0.0
SUB TOT (HRS)	13910.8	8699.2	400.0	23010.0
1991				
WKS	204.0	180.0	42.7	426.7
DAYS	317.3	146.5	0.0	463.7
HOURS	0.0	0.0	0.0	0.0
SUB TOT (HRS)	10698.1	8371.8	1708.3	20778.2
TOT HRS 89-91	40733.6	26082.2	2437.7	69253.5
EFJ[1] 1989-91	19.6	12.5	1.2	33.3
EFJ 1989	7.8	4.3	0.2	12.2
EFJ 1990	6.7	4.2	0.2	11.1
EFJ 1991	5.1	4.0	0.8	10.0

[1]: *Equivalent full-time jobs (EFJ). Total employment
category hours divided by 2,080 hours.*

Substitute Rates of Income for Contracting Artists
Average Total Weekly Earnings: Production Designers
and Composers

Profession	1989 $	1990 $	1991 $
	per week[1]		
Production Designers[2] :	505.00	537.20	625.60
Music Composers[3] :	630.30	581.60	674.50

[1]: *Average total weekly earnings for adult persons. Note. From Distribution and Composition of Employees Earnings and Hours. 1989-1991. (Catalogue No. 6306.0) Canberra: Australian Bureau of Statistics.*
[2]: *Occupational group: Designers and Illustrators. Note. From Australian Standard Classification of Occupations [ASCO]. 1986. (Group No.2805). Canberra: Australian Government Publishing Services.*
[3]: *Occupational group: Musicians, Composers and Related Professionals. Note. From Australian Standard Classification of Occupations [ASCO]. 1986. (Group No.2815). Canberra: Australian Government Publishing Services.*

Official Data and Research Results: Number of EFJ[1]
Ignoring the Multiplier Effect

	1989		1990		1991		1989-91	
	AC[2]	STUDY[3]	AC	STUDY	AC	STUDY	AC	STUDY
A&S[4]:	15.4	14.3	23.2	17.0	33.5	13.0	72.1	44.3
A&M[5]:	6.7	7.6	6.2	6.8	6.0	6.3	18.9	20.7

Official Data and Research Results: Number of EFJ[1] as a
Percentage Deviation from Official Data

Ignoring the Multiplier Effect

	1989	1990	1991	1989-91
ARTIST & SUPP[4]:	-7.14%	-26.72%	-61.19%	-38.56%
ADMIN & MKT[5] :	+13.43%	+9.68%	+5.00%	+9.52%

[1]: *Equivalent full-time jobs (EFJ).*
[2]: *Official data from Australia Council (AC) schedules.*
   Note. From Application For Government Assistance by an Arts Organisation. 1989-1991. Sydney: Australia Council
[3]: *Results from this research.*
[4]: *Artist and Support employment category.*
[5]: *Administration and Marketing employment category.*

Official Data and Research Results: Government Funding
Contribution per EFJ[1]: Artist and Support

Ignoring the Multiplier Effect

	1989	1990	1991	1989-91
	$	$	$	$
AC[2] :	27,026	23,512	12,319	19,062
Study[3]:	29,007	32,099	31,865	31,029

[1]: *Equivalent full-time job (EFJ).*
[2]: *Official data from Australia Council (AC) schedules.*
      Note. From Application For Government Assistance by an
      Arts Organisation. 1989-1991. Sydney: Australia Council
[3]: *Results from this research.*

Spare Parts Puppet Theatre:
Income and Expenditure Statement 1989-1991

	1989 $	1990 $	1991 $	1989-91 $
GOVT FUNDS				
CWLTH	153,000	160,000	131,000	444,000
STATE	261,000	262,000	284,500	807,500
LOCAL	5,000	0	0	5,000
TOT GOVT[1]	419,000	422,000	415,500	1,256,500
NON-GOVT REV[2]	165,000	125,000	167,000	457,000
REVENUE	584,000	547,000	582,500	1,713,500
TOTAL EXP	547,000	628,500	509,500	1,685,000
EMPLOY EXP[3]	348,000	418,000	349,000	1,115,000
CONTRACT ART[4]	28,000	21,000	21,000	70,000
ART & SUPP[5]	222,000	313,000	259,000	794,000
ADMIN & MKT[6]	98,000	84,000	69,000	251,000

Note. From Application For Government Assistance by an Arts
Organisation. 1989-1991. Sydney: Australia Council.

[1]: *Total government revenue. Excludes funding from statutory authorities.*
[2]: *Box office and all non-government revenue.*
[3]: *Total employment expenditure: Artist & Support, Administration & Marketing, Contract Artistic Services.*
[4]: *Contract Artistic Services expenditure.*
[5]: *Artist and Support employment expenditure.*
[6]: *Administration and Marketing employment expenditure.*

Deck Chair Theatre:
Income and Expenditure Statement 1989-1991

	1989 $	1990 $	1991 $	1989-91 $
GOVT FUNDS				
CWLTH	56,700	119,079	98,350	274,129
STATE	225,400	195,025	208,900	629,325
LOCAL	0	0	0	0
TOT GOVT[1]	282,100	314,104	307,250	903,454
NON-GOVT REV[2]	145,300	152,782	132,595	430,677
REVENUE	427,400	466,886	439,845	1,334,131
TOTAL EXP	443,600	485,586	429,889	1,359,075
EMPLOY EXP[3]	280,900	302,800	276,022	859,722
CONTRACT ART[4]	0	12,600	0	12,600
ART & SUPP[5]	194,200	232,500	153,687	580,387
ADMIN & MKT[6]	86,700	57,700	122,335	266,735

Note. From Application For Government Assistance by an Arts
    Organisation. 1989-1991. Sydney: Australia Council.

[1]: Total government revenue. Excludes funding from
    statutory authorities.
[2]: Box office and all non-government revenue.
[3]: Total employment expenditure: Artist & Support,
    Administration & Marketing, Contract Artistic Services.
[4]: Contract Artistic Services expenditure.
[5]: Artist and Support employment expenditure.
[6]: Administration and Marketing employment expenditure.

APPENDIX 9

Substitute Rates of Income for Contracting Artists: Writers

Writers in Residence

	1989	1990	1991
per week[1]	$	$	$
Experienced :	680	680	680
Inexperienced:	430	430	430

Rate[2] = $680 per week

[1] *Suggested rates of income for writers in residence.*
   Note. From Alan Payne (personal communication, October,
   1992). Writer's Guild of Australia.
[2] *All contract writers were experienced.*

Spare Parts Puppet Theatre: Government Arts Funding
Employment Ratio (Version 1)

Including the Multiplier Effect

	1989	1990	1991	1989-91
	$	$	$	$
Artist & Support	20,190	18,218	19,899	19,276
Admin & Marketing	18,186	19,422	17,936	18,509
Contract Artistic	5,893	14,727	36,496	10,367
Total employment	16,465	19,777	16,512	18,128

Spare Parts Puppet Theatre: Government Arts Funding
Employment Ratio (Version 2)

Excluding the Multiplier Effect

	1989	1990	1991	1989-91
	$	$	$	$
Artist & Support	33,656	30,369	33,172	32,132
Admin & Marketing	30,315	32,377	29,900	30,855
Contract Artistic	9,824	24,549	60,840	17,281
Total employment	27,447	30,386	33,363	30,220

Deck Chair Theatre: Government Arts Funding
Employment Ratio (Version 1)

Including the Multiplier Effect

	1989	1990	1991	1989-91
	$	$	$	$
Artist & Support	15,027	20,854	17,925	17,778
Admin & Marketing	12,005	8,276	18,233	12,760
Contract Artistic	16,797	39,304	21,776	23,615
Total employment	13,764	16,420	16,575	15,490

Deck Chair Theatre: Government Arts Funding
Employment Ratio (Version 2)

Including the Multiplier Effect

	1989	1990	1991	1989-91
	$	$	$	$
Artist & Support	25,051	34,764	29,881	29,637
Admin & Marketing	20,012	13,796	30,394	21,272
Contract Artistic	28,000	65,520	36,301	39,367
Total employment	22,944	24,733	22,545	25,821

Type 2B Employment Multiplier: Method of Adjustment

Components of the Type 2 Multiplier

    A = Initial effects
    B = First round effects
    C = Industrial support effects
    D = Production induced effects   (B + C)
    E = Consumption induced effects
    F = Simple Multiplier   (A + D)
    G = Total Multiplier   (A + D + E)
    H = Type 2A multiplier   (G/A)
    I = Type 2B multiplier   (G − A/A)

Type 2B Multiplier

Unadjusted: I = G − A/A
Adjusted: I* = (G − A) − B/A

Example

Where, A = 0.015   H = (0.046/0.015) = 3.067

        B = 0.006   I = ([0.046−0.015]/0.015) = 2.066

        C = 0.006   I* = {([0.046−0.015] − 0.006)}/0.015)

        D = 0.012   = 1.667

        E = 0.019

        F = 0.027

        G = 0.046

Contracting Artists: Terms of Employment and Fees

Deck Chair Theatre[1]	1989	1990	1991
WRITERS	5600.00	6800.00	100.00
			9941.00
			10500.00
			8500.00

Spare Parts Theatre[1]	1989	1990	1991
PROD DESIGN	10 WEEKS	4000.00	4 WEEKS
	5 WEEKS	4000.00	3000.00
	24 WEEKS	1500.00	
	9 WEEKS		
	11 WEEKS		
CHOREOGRAPHY		7 WEEKS	
COMPOSERS	5.5 WEEKS	6408.00	2174.00
		4 WEEKS	4000.00
WRITERS	24 WEEKS	3250.00	
	24 WEEKS		
	10000.00		
	12 WEEKS		
	9 WEEKS		

[1]: *Contracts sighted in the financial records of both theatres.*

Production Designers and Composers: Aggregated
Occupational Groups

Designers and Illustrators[1]

Includes: 2805-11 Fashion Designers
             2805-13 Graphic Designers
             2805-15 Industrial Designers
             2805-17 Interior Designers
             2805-19 Illustrators

Musicians, Composers, and Related Professionals[2]

Includes: 2815-11 Music Directors
             2815-13 Concert and Opera Singers
             2815-15 Popular Singers
             2815-17 Instrumental Musicians
             2815-19 Composers

[1]:*Note*. From *Australian Standard Classification of
    Occupations [ASCO]. 1986*. *(Group No.2805)*. *Canberra:
    Australian Government Publishing Services.*

[2]:*Note*. From *Australian Standard Classification of
    Occupations [ASCO]. 1986*. *(Group No.2815)*. *Canberra:
    Australian Government Publishing Services.*

Artist Contracts: Comparison Between Income and Expenditure
Statements and Contract Fees Paid.

Spare Parts Puppet Theatre

	1989	1990	1991	1989-1991
	$	$	$	$
I+E[1]:	28,000	21,000	21,000	70,000
Fees[2]:	10,000	19,158	9,174	38,332
Weeks[3]:	133.5	11	4	148.5

Deck Chair Theatre

	1989	1990	1991	1989-1991
	$	$	$	$
I+E[1]:	0	12,600	0	12,600
Fees[2]:	5,600	6,800	29,041	41,441

[1]: *Contract artist expenditure in the income and
    expenditure (I+E) statements for both theatres.
    Note. From Application For Government Assistance by an
    Arts Organisation. 1989-1991. Sydney: Australia Council.*
[2]: *Artist contract fees: sighted from individual contract
    fees.*
[3]: *Estimated amount of employment: sighted from individual
    contract periods.*

Percentage Mix of Government Funding (Federal, State, and Local) and Mix of Government Funding versus Self-Funding 1989-1991

Spare Parts Puppet Theatre

	1989 %	1990 %	1991 %	1989-91 %
GOVT FUNDS				
CWLTH	36.5	37.9	31.5	35.3
STATE	62.3	62.1	68.5	64.3
LOCAL	1.2	0.0	0.0	0.4
GOVT FUNDS[1]	100.0	100.0	100.0	100.0
NON-GOVT REV[2]	28.3	22.9	28.7	26.7
GOVT FUNDS	71.7	77.1	71.3	73.3
TOT REVENUE	100.0	100.0	100.0	100.0

Deck Chair Theatre

	1989 %	1990 %	1991 %	1989-91 %
GOVT FUNDS				
CWLTH	20.1	37.9	32.0	30.3
STATE	79.9	62.1	68.0	69.7
LOCAL	0.0	0.0	0.0	0.0
GOVT FUNDS[1]	100.0	100.0	100.0	100.0
NON-GOVT REV[2]	34.0	32.7	30.1	32.3
GOVT FUNDS	66.0	67.3	69.9	67.7
TOT REVENUE	100.0	100.0	100.0	100.0

Note. From Application For Government Assistance by an Arts Organisation. 1989-1991. Sydney: Australia Council.

[1]: *Total government revenue. Excludes funding from statutory authorities.*
[2]: *Box office and all non-government revenue. (includes funding from statutory authorities)*

Statutory Authority Grants as a Percentage of Total Government Grants

Spare Parts Puppet Theatre

	1989 $	1990 $	1991 $	1989–1991 $
TOTAL GOVT GRANTS:[1]	419,000	422,000	415,500	1,256,500
STATUTORY AUTHORITY GRANTS:	7,000	10.000	0	17.000
% OF GOVT GRANTS:	1.7	2.7	0	1.3

Deck Chair Theatre

	1989 $	1990 $	1991 $	1989–1991 $
TOTAL GOVT GRANTS:[1]	282,100	314,104	307,250	903,454
STATUTORY AUTHORITY GRANTS:	0	0	●	0
% OF GOVT GRANTS:	●	0	●	0

Note. From *Application For Government Assistance by an Arts Organisation.* 1989–1991. *Sydney: Australia Council.*

[1]. *Federal, State, and Local Government Grants.*

8.0 Bibliography

Alt, J.E., & Chrystal, K.A. (1983). <u>Political Economics.</u> Brighton: Harvester Press.

Austen-Smith, D. (1980). On Justifying Subsidies to the Performing Arts. In W.S. Henderson, J.L. Shanahan, & A.J. McDonald (Eds.), <u>Economic Policy for the Arts</u> (pp. 24-32). Cambridge: Abt Books.

Australian Bureau of Statistics. (1990). <u>Australian National Accounts Concepts, Sources and Methods</u> (Catalogue No. 5216.0). Canberra: Commonwealth Government Printer.

Australian Bureau of Statistics. (1991). <u>1986-87 Australian National Accounts Input-Output Multipliers</u> (Catalogue No. 5237.0). Canberra: Commonwealth Government Printer.

Bagozzi, R.P. (1975). Marketing as Exchange. <u>Journal of Marketing, 39,</u> (October), 32-36.

Baumol, W.J., & Bowen, W.G. (1976). Arguments for Public Assistance to the Performing Arts. In M. Blaug (Ed.), <u>The Economics of the Arts.</u> London: Martin Robertson. (Reprinted from Performing Arts: The Economic Dilemma. <u>Twentieth Century Fund.</u> 1966, 370-386).

Brokensha, P., & Tonks, A. (1986). Culture and Community Expectations and Economics of the Arts in South Australia. Wentworth Falls: Social Science Press.

Canada Council. (1982). A "Short-Hand" Technique for Estimating the Economic Impact of the Performing Arts: A Research Note (2nd ed.). Ottawa: Author.

Centre for South Australian Economic Studies. (1990). The 1990 Adelaide Festival The Economic Impact Methodology and Results Details (Report No. TSA 90/2). Adelaide: Author.

Cornwell, T.L. (1990). Democracy and the Arts The Role of Participation. New York: Praeger.

Coughlin, C.,& Mandelbaum, T. (1991, January). A Consumer's Guide to Regional Economic Multipliers. The Federal Reserve Bank of St.Louis Review. 19-32.

Creedy, J. (Ed.). (1970). The Social Context of Art. London: Tavistock.

Cummings, M.C., Jr., & Katz, R. (1989). Relations Between Government and the Arts in Western Europe and North America. In M.C. Cummings Jr., & J.M.D. Schuster (Eds.), Who's to pay for the Arts? The International Search for Models of Support (pp. 5-14). New York: American Council for the Arts.

Cwi, D. (1980). Models of the Role of the Arts in Economic Development. In W.S. Henderson, J.L. Shanahan, & J.A. MacDonald (Eds.). Economic Policy for the Arts (pp.308-316). Cambridge: Abt Books.

Cwi, D. (1981). Economic Impact of Arts and Cultural Institutions. Case Studies in: Columbus, Minneapolis-St.Paul, St.Louis, Salt Lake City, San Antonio, Springfield (Research Report No. 15). New York: National Endowment for the Arts.

Cwi, D. (1982). The Focus and Impact of Arts Impact Studies. In C. Violette & R. Taqqu (Eds.). Issues in Supporting the Arts (pp.22-25). Ithica: Cornell University.

Cwi, D., & Lyall, K. (1977). Economic Impacts of Arts and Cultural Institutions. A Model for Assessment and a Case Study in Baltimore (Research Report No. 6). New York: National Endowment for the Arts.

Galbraith, J.K. (1983). Economics and the Arts. The W.E Williams Memorial Lecture. London: Arts Council of Great Britain.

Gold, S. (1983). Consumer Sovereignty and the Performing Arts. In W.S. Hendon & J.L. Shanahan (Eds.), Economics of Cultural Decisions (pp.207-218). Cambridge: Abt Books.

Hamer, Siler, George Associates. (1977). Economic Impact of Selected Arts Organisations in the Dallas Economy. Washington D.C.: Author.

Hillman-Chartrand, H., & McCaughey, C. (1989). The Arm's Length Principle and the Arts: An International Perspective Past, Present and Future. In M.C. Cummings Jr., & J.M.D. Schuster (Eds.), Who's to Pay for the Arts? The International Search for Models of Support (pp. 43-80). New York: American Council for the Arts.

Horne, D. (1988). Arts Funding and Public Culture (Occasional Paper No. 1). Nathan: Griffith University, Institute for Cultural Policy Studies.

Jensen, R.C., & West, G.R. (1986). Australian Regional Developments Input-Output for Practitioners: Theory and Applications. Canberra: Commonwealth Government Publishing Service.

Johnson, D. (Ed.). (1984). Public Expenditure. London: MacMillan.

Kotler, P., & Andreasen, A. (1991). Strategic Marketing for Nonprofit Organizations (4th ed.). Englewood Cliffs: Prentice-Hall.

Laffont, J.J. (1989). Externalities. In J. Eatwell, M. Millgate, & P. Newman (Eds.), Allocation, Information and Markets (2nd ed.). (pp.112-119). London: MacMillan.

Lee-Owen, V. (1980). Comment. [Response to David Cwi]. In W.S. Henderson, J.L. Shanahan, & J.A. MacDonald (Eds.), Economic Policy for the Arts (pp.308-316). Cambridge: Abt Books.

Luxton, J. (n.d.). [Government Support of the Arts in Australia]. Unpublished Manuscript, Edith Cowan University, Perth.

Metropolitan Arts Council. (1977). The Economic Impact of the Arts on Indianapolis. Indianapolis: Author.

Mitchell, C., & Wall, G. (1989). The Arts and Employment: A Case Study of the Stratford Festival. Growth and Change, 20, 31-40.

Mulcahy, K.V. (1982). The Rationale for Public Culture. In K.V. Mulcahy & R. Swaim (Eds.), Public Policy and the Arts (pp. 35-57). Boulder: Westview Press.

Musgrave, R.A. (1959). The Theory of Public Finance. New York: McGraw-Hill.

Musgrave, R. A., & Musgrave, P.B. (1984). Public Finance in Theory and Practice (4th ed.). New York: McGraw-Hill.

Myerscough, J. (1988). The Economic Importance of the Arts in Britain. London: Policy Studies Institute.

North, J. (1982). Economic Impact Studies of the Arts and their Implications for the Arts in Australia: A Digest and Literature Review. Sydney: Australia Council.

Parsons, P. (Ed.). (1987). Shooting the Pianist The Role of Government in the Arts. Kensington: University of New South Wales, The Australian Theatre Studies Centre.

Patronage, Power and the Muse. Inquiry into Commonwealth Assistance to the Arts. (1986). Report from the House of Representatives Standing Committee on Expenditure. Canberra: Australian Government Publishing Service.

Peacock, A.T. (1976). Welfare Economics and Public Subsidies to the Arts. In M. Blaug (Ed.), The Economics of the Arts. London: Martin Robertson. (Reprinted from Manchester School of Economics and Social Studies, 1969, (December), 323-335).

Peacock, A.T., & Godfrey, C. (1976). Cultural Accounting. In M. Blaug (Ed.), The Economics of the Arts. London: Martin Robertson. (Reprinted from Social Trends, 1973, (November), 61-65).

Pen J. (1983). A very Cultural Economist's Idea About the Locus of Decision Making. In W.S. Hendon & J.L. Shanahan (Eds.), Economics of Cultural Decisions (pp. 16-30). Cambridge: Abt Books.

The Port Authority of New York and New Jersey, and Cultural Assistance Centre. (1983). The Arts as an Industry: Their Economic Importance to the New York-New Jersey Metropolitan Region. New York: Author.

Rowse, T. (1981). Culture and Democracy: The Economists and the Performing Arts. In J. Allen (Ed.), <u>Media Interventions</u> (pp. 25-42). Sydney: Interventions Publications.

Rowse, T. (1985). <u>Arguing the Arts   The Funding of Arts in Australia.</u> Ringwood: Penguin Books.

Schnieder, F., & Pommerehne, W.W. (1983). Private Demand for   Public Subsidies to the Arts: A Study in Voting and Expenditure Theory. In W.S. Hendon & J.L. Shanahan (Eds.), <u>Economics   of Cultural Decisions</u> (pp. 192-206). Cambridge: Abt Books.

Scitovsky, T. (1983). Subsidies for the Arts: The Economic Argument. In W.S. Hendon & J.L. Shanahan (Eds.), <u>Economics of Cultural Decisions</u> (pp. 6-15). Cambridge: Abt Books.

Shaw, W., & Barry, V. (1989). <u>**Moral Issues in Business**</u> (4th ed.). Belmont: Wadsworth.

Sugden, R. (1981). <u>The Political Economy of Public Choice.</u> Southampton: Martin Robertson.

Sullivan, J., & Wassall, G. (1977). <u>The Impact of the Arts on Connecticut's Economy.</u> Hartford: Connecticut Commission on the Arts.

Throsby, C., & Withers, G. (1979). The Economics of the Performing Arts. Edward Arnold: Melbourne.

Throsby, C.D., & Withers, G.A. (1983). Measuring Demand for the Arts as a Public Good: Theory and Empirical Results. In W.S. Hendon & J.L. Shanahan (Eds.), Economics of Cultural Decisions (pp. 177-191). Cambridge: Abt Books.

Throsby, C., & Withers, G. (1984). What Price Culture? North Sydney: Australia Council.

Tisdell, D.A. (1972). Microeconomics The Theory of Economic Allocation. South Melbourne: John Wiley.

Wall, G., & Purdon, M. (1987). The Economic Impact of the Arts in Ontario. Toronto: Ontario Arts Council.