ECONOMIC LIVES OF ARTISTS

STUDIES INTO CAREERS AND THE LABOUR MARKET IN THE CULTURAL SECTOR

DE ECONOMIE VAN HET KUNSTENAARSCHAP

EEN STUDIE NAAR CARRIÈRES EN DE ARBEIDSMARKT IN DE CULTURELE SECTOR

(MET EEN SAMENVATTING IN HET NEDERLANDS)

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"We rightly admire the celebrated artists of the past who created great work, knowing their prize would be a happy life and a generous reward. How much more, then, should we praise and exalt those rare men of genius who create priceless work and who live not merely unrewarded but in circumstances of wretched poverty! It is undeniably true that if the artists of our own time were justly rewarded they would produce even greater works of art, far superior to those of the ancient world. Instead, the artist today struggles to ward off famine rather than to win fame, and this crushes and buries his talent and obscures his name."

(Giorgio Vasari, Lives of the Artists, 1568)

"Who am I?
I am a poet.
What do I do here? I Write.
And how do I live? I live
in my contented poverty,
as if a grand lord, I squander
odes and hymns of love.
In my dreams and reveries,
I build castles in the air,
where in spirit I am a millionaire."

(Giacomo Puccini, La Bohème, 1895)

Contents

1 The Economic Lives of Artists: Past and Current Issues

This chapter presents the central questions of this thesis and introduces the two main theories: 'work-preference' and 'winner-take-all'. The theories are placed in a historical context, being traced back to the ideas of the founding fathers of economics. The research questions that are central to the thesis are introduced, the chapters of the thesis are summarised and the relation between the theories and the chapters is explained. The data sources used in the chapters are introduced and described.

1.1 Introduction

Time and again, artists have tried to make artistic sense of economics and economic reasoning. Likewise, economists and other social scientists have tried to make economic sense of artists and artists' behaviour. Given the scope and methods of the social sciences, and of economics in particular, it is no surprise that social scientists have paid particular attention to quantifiable aspects of artists' careers: aspects such as monetary income, time-allocation, years of schooling, number of exhibitions, size of the works or number of spectators. These quantitative studies sketch the following picture of artists and their careers:

> *"Artists as an occupational group are on average younger than the general work force, are better educated, tend to be more concentrated in a few metropolitan areas, show higher rates of self-employment, higher rates of unemployment and of several forms of constrained underemployment (non-voluntary part-time work, intermittent work, fewer hours of work), and are more often multiple job-holders. They earn less than workers in their reference occupational category, that of professional, technical and kindred workers, whose members have comparable human capital characteristics (education, training, and age), and they experience larger income inequality and variability."(Menger, 2001, p. 241-242)* [1]

This harsh picture of the profession presents a number of interesting puzzles to the social scientist. Why do so many aspiring artists pursue a career in a profession where the economic conditions are so unfavourable? Why do artists invest heavily in educational credentials when returns to investments in artistic education are unpredictable and on average low? Why do artists hold multiple jobs? And why are some artists among the world's top-earners, while the majority of artists receive below-average income levels?

This thesis focuses on these and other puzzles of the artists' labour market. As will become clear from the brief exploration of the history of economic thought that takes place in section 1.2, these questions have long confronted social scientists. Indeed, many of the questions

described above were adopted by two of the founding fathers of economics: Adam Smith and Alfred Marshall. Their work provides the theoretical foundations of this thesis, albeit with one major difference. The 'classical' economists were primarily interested in explaining differences between artists and other workers, while this thesis focuses on differences among artists.

Central to this thesis is the question of how to explain career differences among artists. This broad question is examined in five chapters; each of which is built around a specific topic.

Two theories provide leitmotivs for the interpretation of career differences between artists:

1) The theory of artists' work-preference, which is formulated on the assumption that artists have a dominant preference for work in their primary artistic occupation. The theory was formalised by Throsby (1994a).

2) The theory of winner-take-all markets, which attempts to explain skewed distributions of rewards in art (and other) markets and the mechanisms that lead to this distribution. The term is borrowed from Frank and Cook (1995).

For work-preference theory to hold, we need to assume that artists have particular utility functions. According to the theory, artists gain utility by working in their primary artistic occupation. Artists thus differ from regular workers, who are assumed to only derive utility from their income and/or their consumption of goods and services. Since wages are generally low for the work in the primary artistic occupation, artists are continually confronted with the challenge of maximising time spent at coveted arts work, while meeting basic budgetary requirements by working in unwelcome non-arts work. By spreading their activities over multiple occupations, artists subsidise their own profession and in the meantime minimise the risks associated with working as an artist. Work-preference theory suggests a number of hypotheses on career differences between artists. For example, a corollary of work-preference theory is that artists' careers are strongly affected by influences from outside the arts profession.

The core of winner-take-all (or 'superstar') theory is the assumption that in particular labour and product markets, such as sports and arts markets, people are rewarded on the basis of how good they are relative to others. This implies that the rents to intrinsic qualities and abilities as well as the returns to investments in education are not proportional to these qualities/investments, as is assumed in standard human capital theory. Instead, these markets show a tendency to produce disproportionally large returns for those at the top, and disproportionally low returns for the rest. From this theory a number of hypotheses can be derived concerning the career development of artists, in particular relating to role of earlier career achievements in explaining current inequalities in the labour market position of artists.[2]

In this thesis, both theories are critically evaluated from an empirical point of view. The analysis considers both the static and longitudinal implications of the two approaches. The longitudinal analysis adds to our current understanding of artists' labour markets, since virtually all empirical studies so far have focussed on the static implications of the two theoretical approaches. Along the way, the analyses reveal new statistics on the Dutch cultural sector, and new insights into the implications of government arts labour market policies.

The remainder of this chapter has the following structure. First, the roots of work-preference and winner-take-all theory are traced back to the ideas of the founding fathers of economics. Adam Smith's theory of wage differences is introduced as a starting point for the analysis of the low average earnings, multiple job-holding and work-preference among artists. Then, Alfred Marshall's treatment of training and the role of ability in explaining inequalities among artists and other workers is presented. The historical account provides a useful context for contemporary studies of the artist's labour market. Winner-take-all theory and work-preference models are introduced. The relationship between the theories is explained, and this provides the rationale for the subsequent structure of the thesis. Finally, the research questions are posed and the structure of the chapters of this thesis is described. The appendix to this chapter contains a detailed description of the data used in the chapters.

1.2 Theoretical Background: the Early Days

References to artists and their work can be found in the work of the earliest practitioners of the social sciences. These references serve two distinct purposes. Some early political economists use examples from the world of arts and culture to show that their theories are powerful enough to explain extreme cases like the dazzling earnings of opera-singers and actors. Others look at the arts as an exceptional case: as a field where standard theories fall short and where auxiliary assumptions are necessary for a proper understanding. This is particularly common when early theorists consider the price of artworks. Classical social science inquiry into the arts and artists is thus typically haphazard. Rather than moving toward the development of a comprehensive arts analytical framework, examples from the artists' profession are usually offered as anecdotal evidence for or against some broader theory, as a passing reference, an exception or an oddity.

This can already be seen in the work of Adam Smith, the father of economics, who inquires the arts incidentally. Mossetto remarks the following on the involvement of Smith: "Adam Smith seems probably the best example of an economist who did not specifically care about the arts, but whose interest in the economic aspects of reality was so keen as to allow him to realise the economic importance of artistic goods and artists themselves as general case studies for economic theory" (Mossetto, 1993, p. 32). Thus, in his broad expose on differences in wages and profits in the 'Wealth of Nations', Adam Smith notes:

> *"There are some very agreeable and beautiful talents of which the possession commands a certain sort of admiration; but of which the exercise for the sake of gain is considered, whether from reason or prejudice, as a sort of public prostitution. The pecuniary recompense, therefore, of those who exercise them in this manner must be sufficient, not only to pay for the time, labour, and expense of acquiring the talents, but for the discredit which attends the employment of them as the means of subsistence. The exorbitant rewards of players, opera-singers, opera-dancers, etc., are founded upon those two principles; the rarity and beauty of the talents, and the discredit of employing them in this manner. It seems absurd at first sight that we should despise their persons and yet reward their talents with the most profuse liberality. While we do the one, however, we must of necessity do the other. Should the public opinion or prejudice ever alter with regard to such occupations, their pecuniary recompense would quickly diminish" (p. 95).*

Smith provides two reasons for the "exorbitant rewards" of artists: the scarcity of talents and the contempt of the public opinion. Smith's sentiments are echoed in Towse (1993, p. 2), who argues that the singing profession long suffered from public disdain; singing was "like love, highly desirable if freely given but contemptible if sold". Nowadays, the "agreeable and beautiful talents" of artists are still admired, but professional artistic practice is rarely looked down upon as a form of public prostitution.

According to Smith' quote the other determinant of the "pecuniary recompense" of artists is the rarity and beauty of their talents, though in his view this factor is of minor importance. As Smith continues: "such talents, though far from being common, are by no means so rare as imagined". The large inequalities among practitioners of artistic professions that may result from the rarity of artistic talents are thus less an issue to Smith, who is primarily interested in the macro differences between wage-levels across professions and countries.

Others writing around the time were, however, more concerned about issues of talent and inequality. In 1803, for example, French journalist and economist Jean-Baptiste Say wrote:

> *"When, besides expensive training, peculiar natural talent is required for a particular branch of industry, the supply is still more limited in proportion to the demand, and must consequently be better paid. A great nation will probably contain but two or three artists capable of painting a superior picture, or modelling a beautiful statue; if such objects, then, be much in demand, those few can charge almost what they please; and, though much of the profit is but the return with interest of capital advanced in the acquisition of their art, yet the profit it brings leaves a very large surplus" (book 2, chapter 7).*

Alfred Marshall explored Say's ideas later in the 19th century. Although far from exhaustive, Marshall's treatment of artistic talents and their impact on the distribution of income among artists stands out as a reasonable attempt to include artistic matters into economic analysis.[4] Marshall's interest in the topic is underlined by the numerous examples that he draws from the world of arts and culture throughout his 1890 classic "Principles of Economics" .

The classical theorists therefore laid the foundations for the present day analysis of the labour market of artists in two ways. First, in their direct references to and analyses of arts issues. Second, and more importantly, by sketching a general analytical framework that can be applied to any labour or product market. It would thus be a mistake to disregard the work of early theorists for its quaint historical peculiarity. The early theorists identify issues and challenges in the analysis of art and artists that are surprisingly relevant today. Contemporary analysis is usefully illuminated by historical context, and this is particularly so for the topic of this thesis. It is worthwhile revisiting here two classical enquiries: Adam Smith's theory of equalising differences and Alfred Marshall's ideas on talents and inequalities.

Work-preference and Multiple Job-holding: Adam Smith

Like virtually all sub-domains of economics, the analysis of cultural labour markets and the careers of artists owes a great debt to Adam Smith. Among so many competing problems, Smith was interested in why wages and profits differed between various "employments" or professions. He began his analysis of the 'problem' with the prophecy that, in a competitive economy, only 'small' differences should emerge between the wage levels of various professions. He explained any additional wage differences as resulting from five factors:

> *"First, the agreeableness or disagreeableness of the employments themselves; secondly, the easiness and cheapness, or the difficulty and expense of learning them; thirdly, the constancy or inconstancy of employment in them; fourthly, the small or great trust which must be reposed in those who exercise them; and fifthly, the probability or improbability of success in them (p. 89)."*

Anecdotal evidence would suggest that all but the fourth factor (from which Smith explains the high earnings of physicians, attorneys and other people in responsible professions) are relevant to working artists today. Each of the relevant factors will thus be addressed in turn here and tested against contemporary evidence.

Smith argues that the most pleasant and agreeable professions receive the lowest payments:

> *"The natural taste for those employments makes more people follow them than can live comfortably by them, and the produce of their labour, in proportion to its quantity, comes always too cheap to market to afford any thing but the most scanty subsistence to the labourers. (p. 90)"*

Smith uses the example of hunters – a popular but poorly paid profession in his era. If Smith had undertaken his analysis in our day, however, he might well have used artists as his exemplar. Today, artists' average earnings are below the earnings of equally educated workers, yet arts labour supply shows no signs of contracting and indeed continues to grow in many countries despite static or dwindling financial returns.[5] The data might be interpreted as

suggesting that the cultural professions are agreeable and that the "natural taste" for the professions leads to 'oversupply' in the arts labour market.

Smith's second explanation for the existence of wage differences is the difficulty and expense of the education required for entrance into a professional group. With regard to artists and members of the "liberal professions", Smith argues that:

> *"Education in the ingenious arts and in the liberal professions, is still more tedious and expensive. The pecuniary recompense, therefore, of painters and sculptors, of lawyers and physicians, ought to be much more liberal: and it is so accordingly. (p. 91)"*

Smith provides an early and yet surprisingly accurate description of human capital theory by relating the earnings of members of a profession directly to their investments in schooling. Acquiring the skills necessary to work as an ingenious artist was – and still is today – costly and difficult, but it is questionable whether investments in human capital can explain much of the current labour market situation of artists (Towse, 2000). If anything, today's artists are overqualified from a human capital point of view. Across the board artists have extended schooling careers, but for the majority of artists these large investments in education do not translate into higher earnings.

A similar difference between Smith's predictions and the current situation comes to light when considering his third factor. According to Smith, regular employment results in lower hourly wages than irregular employment. The insecurity and randomness of irregular work must – in his view – be compensated through a higher level of payment. If this argument is taken literally, artists should receive among the highest hourly rewards, since their working life is often characterised by the inconsistency of their employment relations.

Current studies often suggest the opposite to Smith: most artists receive little money for irregular work (see for instance IJdens, 2000). The counter-evidence is most evident for professional artists. The more consistent the labour relation between an artist and an employer or commissioner, the higher the payment.[6]

As the fifth factor, Smith argues that the probability of success is an important determinant in explaining wage differences, as well as in understanding career choices:

> *"To excel in any profession, in which but few arrive at mediocrity, is the most decisive mark of what is called genius or superior talents. The public admiration which attends upon such distinguished abilities, makes always a part of their reward; a greater or smaller in proportion as it is higher or lower in degree. It makes a considerable part of that reward in the profession of physic; a still greater perhaps in that of law; in poetry and philosophy it makes almost the whole." (p. 95)*

Here, Smith describes artists as gamblers who evaluate public admiration as part of the rewards provided by their profession. These two arguments can be found in many studies on the artistic professions since. Aspiring artists are often depicted as risk-loving individuals (see for instance Towse, 2000; Wassall and Alper 1992) or as people who enjoy participating in the lottery for artistic prizes, commissions and positions (Abbing, 2002). This assumption is usually followed by the prediction that older, unsuccessful artists drop out of their profession as soon as they find out that their bid for fame is going to fail.

Smith's argument that the public admiration for poets and philosophers constitutes a major part of their total rewards mirrors his explanation for the high earnings of dancers and players, albeit in the opposite direction. Poets are poor because they are widely admired; dancers and players are rich because they are looked down upon. A contemporary application of this argument can be found in the work of the French sociologist Pierre Bourdieu, who claims that in the short run there is an inverse relation between the amount of (artistic) admiration or reputation that an artist receives and his or her commercial success (Bourdieu, 1993; see also Abbing, 2002).

Smith contends that a number of conditions must be met for his theory to hold. Only if the "invisible hand" is allowed to direct the economy to its "natural state" will the levels of payment of professions reflect the five equalising differences. The "invisible hand" remains the cornerstone of much of the economic enquiry into the labour market of artists, especially human capital theory. That said, the market mechanisms of the invisible hand have increasingly come under fire from alternative approaches (such as institutional and neo-institutional approaches as well as 'sociological' approaches as winner-take-all theory). Contemporary evidence suggests that there is more at work in the labour market than Smith's invisible hand.

Another condition mentioned by Smith relates to the disturbance that occurs when people work in a number of jobs simultaneously. If people hold multiple jobs, wage differences may not reflect the true price- or wage levels of a profession:

> *"When a person derives his subsistence from one employment, which does not occupy the greater part of his time; in the intervals of his leisure he is often willing to work at another for less wages than would otherwise suit the nature of the employment." (p. 105)*

Smith again touches on a building stone of today's interpretation of the working behaviour of artists. Studies show that artists have a higher rate of multiple job-holding than other workers (Menger, 1999; Wassall & Alper, 1992).

Evidence suggests that multiple job holding has indeed, as Smith would predict, altered the 'natural balance' of pecuniary recompense in the arts professions. Artists employed in arts

and non-arts work have been found to accept 'inappropriate' returns for their artistic employment (Throsby, 1994). Arts workers thus appear to carry out their own form of 'transfer pricing', often referred to, perhaps too emotively, as a 'cross-subsidisation' of the arts (Withers, 1985). This may be rationalised by suggesting that working as an artist has an element of consumption in it that compensates for the lower earnings. Smith fully anticipated this argument in his theory of compensating differentials.

The work-preference model of the arts labour market can be seen as a combination of the equalising differences and multiple job-holding identified by Adam Smith. It should be noted, however, that current applications of the work-preference model differ from Smith's foundations by focussing on explaining differences between artists, not explaining differences between artists and other workers.

Evaluating Smith's arguments for their currency, the following can be summarised: Smith's notion of equalising differences is relevant to the contemporary analysis of artistic labour markets. The idea that somehow the characteristics of working as an artist explain the differences in recompense and working behaviour still is the basis of our current analysis of the sector. But not only his approach is still in use; most of the equalising differences that Smith has pointed to have been reproduced in many recent studies of the artists' profession since. This is for instance the case for the suggestion that artists have an unusually agreeable as well as risky profession in which the admiration of the public plays an important role. Two other equalising differences (i.e. the returns to the education of artists, as well as the inconsistency of their work) have been aptly studied in the arts, although the results of those studies suggest the opposite of what Smith observed in 1776.

This brings us halfway to tracing the origins of the two main theories under scrutiny here. Smith offers little on the skewed rewards in artists' labour markets. To trace the classical roots of this contemporary phenomenon, we must turn to Alfred Marshall.

Winner-take-all: Alfred Marshall

Alfred Marshall's "Principles of Economics" was first published in 1890. The "Principles" still is a timeless reference for anyone interested in the foundations of economic science, if only because many of the terms and diagrams of modern economics find their origin in Marshall's textbook. In the fourth part of the "Principles" Marshall treats the agents of production in the economy: land, labour, capital and organisation. His chapters on industrial training and industrial organisation (6, 8 and 12 of book 4) are particularly relevant for this thesis.

Unlike Smith, Marshall was concerned with inequality among individuals in particular professions. One of the main advances of Marshall's treatment is his distinction between

general abilities, which can be applied in a variety of contexts, and special abilities, which are useful in specific contexts only.[7] Marshall employs the arts to illustrate his point. He suggests that an "artistic career" requires special abilities or talents that are different from "general" talents:

> *"The natural vigour that enables a man to attain great success in any one pursuit would generally have served him in good stead in almost any other. But there are exceptions. Some people, for instance, seem to be fitted from birth for an artistic career, and for no other; and occasionally a man of great practical genius is found to be almost devoid of artistic sensibility." (p. 170)*

According to Marshall the artistic abilities necessary for achieving success as an artist are unevenly distributed among the population, contrary to general abilities. In this respect Marshall differs from Smith, who sees artistic human capital as acquirable, and market signals as relevant to artistic careers as to other careers.[8] From Marshall's account of the distribution of talents, it can be deduced that the distribution of rewards (such as wages or earnings) in the artistic sector will reflect the distribution of talents. Since artistic talent is specific, not general, inequalities in the cultural sector are likely to be much larger than in the general workforce and in professions requiring only general talents.

Marshall adds that the inequalities may be amplified if high rewards of top artists attract more young and ambitious contestants than the market can endure:

> *"The greater part of incomes earned by exceptionally successful barristers, and writers, and painters, and singers, and jockeys may be classed as the rent of rare natural abilities - so long at least as we regard them as individuals, and are not considering the dependence of the normal supply of labour in their several occupations on the prospects of brilliant success which they hold out to aspiring youth." (page 518)*

Marshall's concern with the arts goes beyond the production of art. The consumption of art also struck him as a special case. According to Marshall, art consumption differs from the consumption of regular goods. For example, Marshall considered listening to music as an addictive form of consumption in the sense that – over time – the very act of consumption may alter "the character or tastes of the man himself". Therefore:

> *"it is (..) no exception to the law [of diminishing marginal utility] that the more good music a man hears, the stronger is his taste for it likely to become." (page 79).*

The formation of (artistic) taste has become one of the central themes of 'cultural economics', at least since Stigler and Becker (1977) and later McCain (1995), which present formalised models of learning-by-consuming.[9]

Marshall explains differences in earnings with more than just differences in talents. Further on in the "Principles", he introduces additional factors to account for the skewed rewards of the

practitioners of certain professions, including the artists' profession. First he stresses that for certain goods and services, consumers are not so much concerned with the trade-off between price and quality; sometimes consumers care only about quality:[10]

> *"A rich client whose reputation, or fortune, or both, are at stake will scarcely count any price too high to secure the services of the best man he can get: and it is this again that enables jockeys and painters and musicians of exceptional ability to get very high prices. In all these occupations the highest incomes earned in our own generation are the highest that the world has yet seen." (page 570-571)*

In Marshall's view the world was becoming more and more characterised by extreme rewards to outstanding talents. Today, his claim is as much true as it was at the end on the 19th century. This can be seen from the ongoing debate on growing inequality and the runaway incomes of top artists, sportsmen and entrepreneurs. Frank and Cook (1995) argue that the mechanism has become even more apparent in today's (American) economy. They highlight the striking familiarity of the following quote from Marshall:

> *"The relative fall in the incomes to be earned by moderate ability, however carefully trained, is accentuated by the rise in those that are obtained by many men of extraordinary ability. There never was a time at which moderately good oil paintings sold more cheaply than now, and there never was a time at which first-rate paintings sold so dearly. A business man of average ability and average good fortune gets now a lower rate of profits on his capital than at any previous time; while yet the operations, in which a man exceptionally favoured by genius and good luck can take part, are so extensive as to enable him to amass a huge fortune with a rapidity hitherto unknown." (Marshall quoted in Frank and Cook, 1995, p. 7)*

Marshall adds a further explanation for the existence of skewed rewards in art and culture. He argues that the fact that numerous people can consume artistic products at the same time – without lowering its quality - magnifies the differences in returns to the special talents of the artists.[11]

> *"[One of the causes of skewed rewards is] the development of new facilities for communication, by which men, who have once attained a commanding position, are enabled to apply their constructive or speculative genius to undertakings vaster, and extending over a wider area, than ever before." (page 150)*

Marshall further claims that "so long as the number of persons who can be reached by a human voice is strictly limited, it is not very likely that any singer will make an advance on the £10,000, said to have been earned in a season by Mrs Billington at the beginning of last century, nearly as great as that which the business leaders of the present generation have made on those of the last" (page 151). Marshall's hypothesis has obvious parallels today. Technological progress has made it possible for a voice, book, movie or other cultural product to have a worldwide audience. The £10,000 earned by Mrs Billington in the 18th century – which still is a considerable fee for many artists even without accounting for three centuries

of inflation - is today a small amount compared to the multi-million dollar fees earned by today's pop-stars, actors and other top artists.[12]

In summary, Alfred Marshall's treatment of artistic abilities and inequalities in rewards is still relevant to understanding labour markets today – perhaps even more relevant. Marshall identified a number of mechanisms that contribute to our understanding of inequalities in artists' earnings. First, specific artistic abilities are unevenly distributed across the population. Second, relative differences between artists are crucial as much as absolute differences. Third, inequalities between artists grow over time. These ideas have shaped our understanding of inequality in general terms and have given ground to a number of specific hypotheses about artists' labour markets.

From Marshall's analysis it is easy to see the foundations of 'winner-take-all theory', a term coined by Frank and Cook (1995). The authors readily admit that their title is popularised and that the theory of 'those-near-the-top-get-a-disproportionate-share' would be a more accurate but less catchy name. Frank and Cook follow up on Marshall and add a number of cautious normative remarks to the apparent growth of winner-take-all markets. Their normative concerns are revealed in the sub-title of the book: "How More and More Americans Compete for Ever Fewer and Bigger Prizes, Encouraging Economic Waste, Income Inequality, and an Impoverished Cultural Life".

This thesis pursues a specific aspect of the 'winner-take-all' approach. The focus is on the consequences of the uneven distribution of rewards for individual artists, and the mechanisms that enhance or strengthen existing skewed distributions of rewards. Macro factors leading to the uneven distribution, such as changes in technology, fall outside the scope of this thesis; as does the normative question of whether current or past distributions within the arts are right or justifiable.

1.3 Theoretical Background: Recent Developments

Since its purported beginning in 1966 with the publication of Baumol and Bowen's "Performing arts – the Economic Dilemma" the field of Cultural Economics has developed over the decades into a unassuming but vibrant sub-discipline of economics. The study of artists' labour markets has been among the central themes of the subject's research agenda.

Work-preference

In an overview of the state of the art in cultural economics, Blaug (2001) concludes that the study of artists' labour markets: "shows clear evidence of both empirical and theoretical progress in a relatively short period of time" (Blaug, 2001, p. 130). This progress is evident in the development of the work-preference model, the subject's very own innovation to labour

market theory. Modern interest in artists' work-preference was triggered by an article by Filer (1986), in which the author challenged the romantic image of the Bohemian artist. Popular belief saw artists as Vincent van Goghs: poor, anti-social workers with exotic working habits. Filer looked at American Census data and showed that artists hardly differed from equally educated workers if their entire income and time-budget was taken into account.

Filer's conclusions, which were provocative because they went entirely against popular belief and casual observation, lead to a number of similar empirical and theoretical studies. From these studies it became clear that artists usually work on different labour markets and that their earnings vary strongly between these markets. Wassall and Alper (1992), Throsby (1996) and Towse (2000) show convincingly that total earnings of artists are more reasonable than previously thought, but that wages and rewards from arts work are low on average. Later theoretical contributions have interpreted the activities in various labour markets as work-preference (Throsby, 1994a) and as spreading income risks (Menger, 1999).

The work-preference model of Throsby - of which a formal specification and a graphical representation can be found in the second chapter of this thesis - combines the empirical observations and theoretical suggestions into one comprehensive framework. Work-preference relates to the (hypothesised) overriding preference for artists to work in their primary artistic occupation. This overriding desire for arts work might have been rationalised in terms of Adam Smith's notion of equalising differences: the agreeableness of the artistic profession compensates for the lower earnings.

The work-preference model extends this preference structure by assuming that artists are not able to meet a minimum income constraint by working in the arts only. For this, they rely on other sources of income, like arts-related work (such as teaching) and work outside the artists' profession. Because artists derive utility from their artistic work (and not from leisure, like in the standard model), they work outside the arts until they meet their budgetary requirements. The rest of the working week is spent in their artistic occupation. In a later paper, Throsby also studied the mechanisms that lead to a certain distribution of activities over the different labour markets. He finds that educational investments do not matter for the wage inside the primary artistic occupation. Education, however, influences wages and possibilities in the non-arts labour markets, and hence indirectly the number of hours worked as an artist (Throsby, 1996 a, b).

Recent studies into the labour market situation of artists have followed Throsby's subdivision of activities and have interpreted the outcomes of the empirical work in terms of work-preference. In these studies, the work-preference model serves as a point of reference for the categorisation or interpretation of labour market data from the cultural sector, but is not subjected to critical examination itself.

This lack of critical theoretical examination is unfortunate, for although the work-preference model dovetails neatly with evidence of low average earnings among artists, the model fails to tell the whole story. It makes starkly simplified assumptions about the labour market behaviour of artists and entertainers who are able to live comfortably or even luxuriously from their artistic work. The work-preference model predicts that these 'high-paid' artists will work only in arts work and are oblivious to financial incentives in other sectors. This prediction does not match with anecdotal evidence: in reality many superstars work in labour markets outside the arts, including advertising, television, teaching and commerce.

Moreover, the work-preference model says little about the highly skewed income distribution of artists and cultural workers. Judging from the well-known examples from the world of arts and culture, the inequalities in the sector are by any means spectacular. This can be read from the extremes of artists' earnings distributions. Filmmaker George Lucas for instance earned a quarter of a billion dollars in 2001 alone. Movie star Bruce Willis made a respectable 70 million dollars, and star-author Stephen King took a good $44 million home in 2001 – to name just three examples of the (predominantly American) top-actors, performers, musicians and writers with exorbitant earnings.[13]

Winner-take-all

The work-preference model is constrained by the very assumptions that make it such a powerful analytical tool for the majority of artists, for it sheds little or no light on the forces that guide and shape the labour activities of these 'well paid' artists. Clearly, other theoretical frameworks are required to gain a full picture of the artists' labour markets. As was shown in the previous section, the skewed rewards to top performers have puzzled social scientists for more than 200 years. The current interest in the topic is to a large extent due to Robert Frank and Philip Cook's book "the-Winner-Take-All Society" from 1995. In this book Frank and Cook describe, analyse and criticise the prevalence of winner-take-all phenomena in a number of markets in today's American economy. Frank and Cook name a number of reasons why winner-take-all markets exist, including product cloning, network economies, lock-ins (like the 'Matthew-effect': the idea that success breeds success), decision leverage, cognitive limitations among buyers and habit formation.[14]

In this thesis, the ideas of Frank and Cook are applied to a number of topics in the labour market for artists. The common focus is on modelling competition among artists based on relative differences. According to Frank and Cook: "reward by relative position is the single most important characteristic of winner-take-all markets" (p. 24). Orthodox economic theory holds that in typical markets, price or wage differences are proportional to differences in quality. In a model of relative competition, however, differences in quality between workers (like intrinsic talents or investments in human capital) or artistic products (like beauty or originality) are not proportionally reflected in wage or price differences. As Frank and Cook

argue, in winner-take-all markets, "small differences in talent or effort often [give] rise to enormous differences in incomes" (p. 24).

According to the model of relative competition, the career of an artist develops in a series of stages. These career dynamics are for instance important when no objective information is available on the quality of artworks or artists. Then, consumers and employers alike focus on the earlier track record of the artist. In each round, the relative results of the contestant matter for determining his or her future possibilities. Early success is thought to breed more success, since audiences and employers see it as an indicator of quality. Tournament models (Rosenbaum, 1984) - as this set of models is often called - are other well-known examples of the idea of relative competition, central to winner-take-all theory.[15]

1.4 Research Questions and Outline of the Thesis

This thesis studies the economic lives of artists by using both work-preference and winner-take-all approaches. The two approaches are applied to old and new datasets, and their static and longitudinal predictions tested and compared. Each of the chapters of this thesis can be read independently. In each chapter, work-preference and winner-take-all theories are applied to specific questions about artists' labour markets. Rather than reinforcing existing findings, this thesis focuses on applying new angles and broadening the application of economic theory.

This is done by studying a wide range of aspects of artists' careers, ranging from general labour market indicators to specific statistics on artistic success. Along the way, the thesis challenges the romanticised picture of the Bohemian artist that has been reinforced in current and previous analyses. In accordance with common specifications of work-preference and winner-take-all theory, career progress is explained throughout this thesis by an extended set of (human) capital variables as well as a number of demographic variables. The most important right hand side variables that recur in all chapters are the experience of the artist, received government grants, arts education, gender and place of residence.

Three of the five chapters have so far been published as articles in academic journals. Chapter two, written with Christopher Madden, was published in 2000 in the Australian Bulletin of Labour. Chapter four, written with Erik Plug and chapter six, written with Olav Velthuis, were published in 2001 and 2002 respectively in the Journal of Cultural Economics. These articles appear virtually unchanged as chapters in this thesis. The remaining two chapters have been published in Dutch, albeit in a different form, and are currently under review in the form in which they appear in this thesis.[16]

The thesis finishes with a concluding chapter, which reflects on five issues. The main findings of the independent chapters are briefly summarised. The economic lives of artists are

described and explanations that are offered by the previously mentioned explanatory variables are reviewed. The relative merits of work-preference and winner-take-all theory for understanding and modelling the careers of artists are considered. Finally, the concluding chapter discusses implications for further research and cultural policy.

The Chapters in Detail

Chapter 2, *Living Art: Artists between Making Art and Making a Living*, presents a test of the work-preference model. In the chapter the predictions of the model for the number of hours that (Australian) artists supply to cultural and non-cultural labour markets are tested.

If budget constraints force artists to hold multiple jobs, and if they compulsively prefer work in their primary artistic occupation, then shifts in the compensation for their labour will inevitably have consequences for their time-allocation between jobs. The model predicts that artists with higher earnings outside the arts will – counter to an orthodox view of financial incentives - supply more hours to the arts labour market. Throsby's model further predicts that artists who work full time in the arts are insensitive to changes in the arts wage. These hypotheses are tested by estimating labour supply models for a sample of artists in Australia. The data come from Throsby and Thompson (1994) and have not been used previously for such an empirical test.[17] The appendix to this chapter contains more detailed information on the data and samples used in the chapters.

Chapter 3, *The Careers of Graduate Artists in the Netherlands: Do Relative Differences Matter?*, tests the career predictions of the winner-take-all model. This chapter answers the question of which model (the human capital model, or the winner-take-all model) better explains the gross wage differences and artistic achievements of graduate artists in the Netherlands. This chapter studies the data on graduates from arts education that are collected annually in the Netherlands. These data are matched with data collected by Rengers later on in the careers of the artists. See De Vries and Ramaekers (2002) for more details on both sets of data.

The approach follows up on Frank (1988). In this paper, Frank focuses on the labour market entrance of a cohort of Cornell University graduates, and interprets sex-differences in career progress in terms of winner-take-all theory. Frank shows that there are small differences between male and female graduates in terms of their labour market entrance, and he predicts growing inequality over time as the graduates pass through career stages. Chapter 3 differs from Frank's study in two ways. First, the focus is on graduates specifically from art colleges, not on university graduates in general. Second, the cohort of graduates is monitored twice - at 1.5 years and 6 years after graduation, where Frank monitored one wave only.

Chapter 4, *Private or Public? How Dutch Visual Artists Choose Between Working for the Market and the Government*, studies the influence of government policies on the earnings of Dutch visual artists across both private and public markets for the arts. Artists in the Netherlands can decide between public and private funding. The chapter derives a simultaneous model of this choice-situation and the earnings resulting from choice. This model is based largely on the work-preference model, although it also studies potential winner-take-all tendencies by focussing on the effects of career variables on (joint) success in both markets. The chapter uses data on the earnings of visual artists that are collected for the purpose of policy evaluation. See for instance Meulenbeek *et al* (1998).

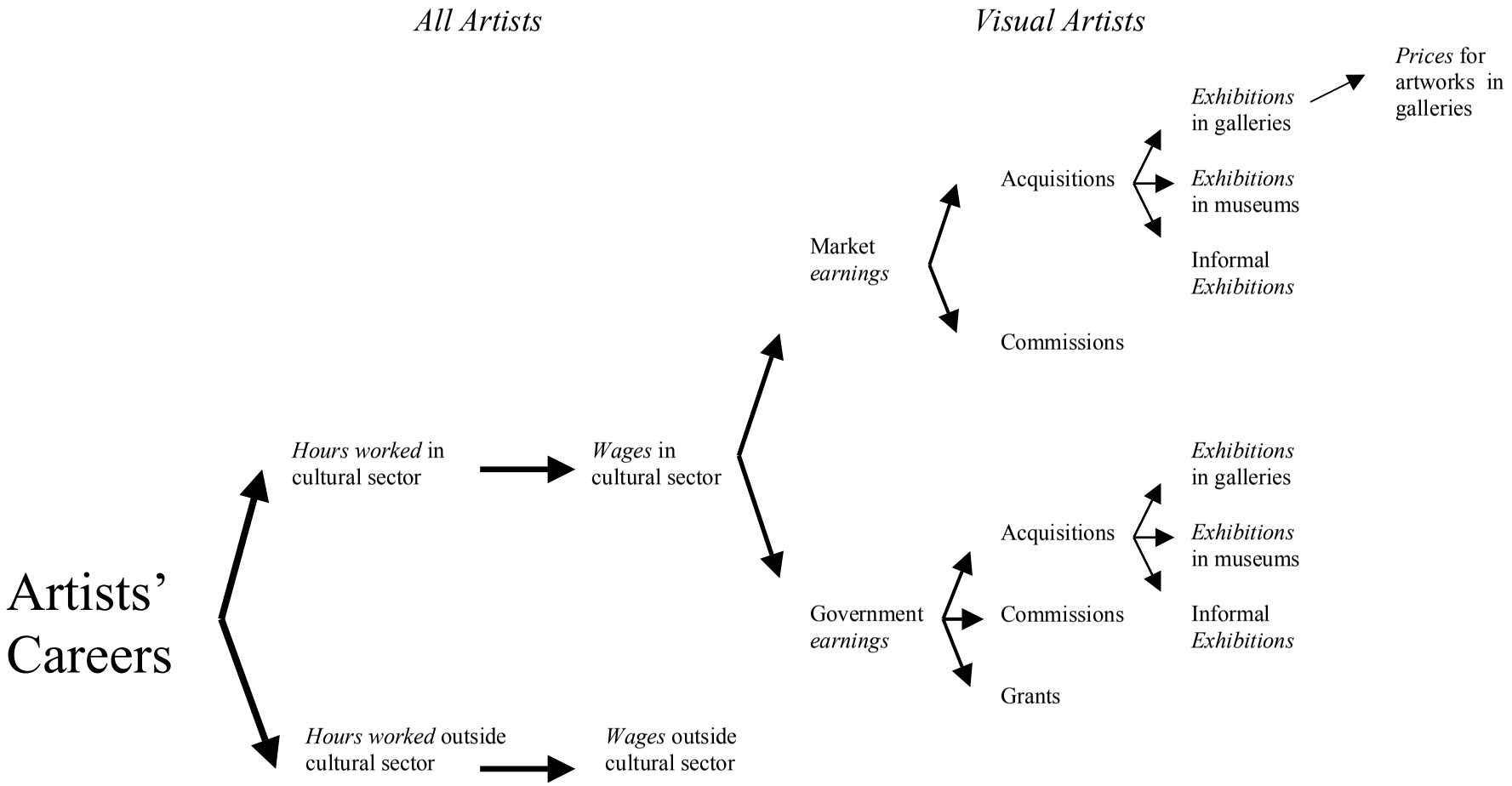
In chapter 5, *Decent Exposure: Exhibition Careers of Dutch Visual Artists*, the exhibitions of a sample of visual artists over a 12-year period (1980-1991) are studied. The artists' careers are broken down into exhibitions in four circuits (private, public, informal and foreign) and described in terms of their distribution and relation to artistic experience. Models explaining the probability of exhibiting are estimated. Aim of is this chapter is to describe and analyse the exhibitions held by the artists in terms of their relation with human capital of the artists, as well as their relation to earlier exhibitions.

The data on the exhibitions of the visual artists are derived from data collected for the evaluation of the most important institution in the Netherlands that provides grants to visual artists (De Nooy and IJdens, 1994).

Chapter 6, *Determinants of Prices for Contemporary Art in Dutch Galleries, 1992-1998*, lives up to its title and presents a detailed statistical analysis of the determinants of prices for works of contemporary art in Dutch galleries. This chapter uses the only extensive database of prices for works of art in art galleries available in the Netherlands. These unique data have been derived from various government registrations in the Netherlands and are studied for the first time for the purpose of this thesis as well as the thesis of Velthuis (2002).

The existing literature on the determinants of prices for artworks is based on data from the secondary arts market, specifically from arts auctions. Studies of auction data have revealed that winner-take-all phenomena are important for understanding auction-prices, if only because at auctions relative differences in bids determine who wins. However, little is known about the underlying mechanisms in the primary market.[18] The study of price determination provides a link between winner-take-all theory and work-preference theory for two reasons. First, selling of works of art is one of the income-generating activities of visual artists and is therefore important for understanding their labour market behaviour (i.e. arts labour is partly a 'derived demand' from the demand for art works). Second, the study of the influence of earlier labour market activities on the current price level of visual artists adds to our understanding of the dynamic processes that shape artists' careers.

Figure 1.1 Organisation of the Chapters and Dependent Variables



Relationships between the Chapters

This thesis applies a number of measurements of artistic career progress. These measurements – the main dependent variables of the chapters – range from the general to the specific. The chapters of this thesis are arranged from the more general variables (chapter 2) to the more specific variables (chapter 6). Figure 1.1 gives an overview.

The career of an artist is in first place characterised by the number of hours supplied to the cultural and the non-cultural labour markets (chapter 2). The gross wages that artists earn inside (and outside) the cultural sector, which are studied in chapter 3, are a more specific measurement, since wages express the market valuation of the (hourly) labour of the artists.

In the same time, the focus on wages excludes a number of artists from the analysis - those supplying hours, but not earning a wage. This illustrates the trade-off between the precision of the dependent variable and the number of artists included in the analysis. Chapter 2 and 3 study a broad population of artists both in the visual and the performing arts. The following chapters are more specific for two reasons. First, the focus is on visual artists only. Second, the activities of artists outside the arts are not considered. In chapter 4 the wages or earnings of the visual artists in the cultural sector are broken down under a number of headings. The organising principle is the source of earnings: do earnings come from the government or from the private sector (i.e. individuals and companies)? This breakdown allows a more accurate picture of career progress among visual artists than overall wages.

Chapter 5 looks at a particular aspect of the private market in even more detail. Schematically, artists can earn an income on the private market in two ways: by receiving commissions and by selling works of art to the public. These sales usually follow an exhibition of the artist: either the work is sold at the exhibition itself, or the contact between artist and (potential) buyer is established. Chapter 5 studies this crucial aspect of the careers of visual artists in the Netherlands by focussing on the exhibitions that artists hold. Chapter 6 focuses on a very specific measure of artistic success – the price paid in galleries for individual works of art.

To conclude, Table 1.1 summarises the titles, dependent variables and central questions of the chapters.

Table 1.1 Titles, Dependent Variables and Central Questions of the Chapters

Chapter	Title and central question (dependent variables are in bold)
Two	
Title	Living Art: Artists between Making Art and Making a Living
Central question	Does work-preference correctly predict the **number of hours** that artists supply to cultural and general labour markets?
Three	
Title	The Careers of Graduate Artists in the Netherlands: Do Relative Differences Matter?
Central question	Which model (the human capital model, or the winner-take-all model) better explains the **gross wages** and artistic achievements of graduate artists in the Netherlands?
Four	
Title	Private or Public? How Dutch Visual Artists Choose Between Working for the Market and the Government
Central question	How do policies of the Dutch government influence the **earnings** of visual artists on private and public markets for visual arts?
Five	
Title	Decent Exposure: Exhibition Careers of Dutch visual Artists
Central question	Can the human capital model (indicated by arts education, professional experience, subsidy history) explain artists' **exhibitions**?
Six	
Title	Determinants of Prices for Contemporary Art in Dutch Galleries, 1992-1998
Central question	What are the determinants of **prices for works of contemporary art** in Dutch galleries?

Appendix

In this appendix, the data used in chapters two to six are summarised with respect to the type and year(s) of data collection, the artists included, the definition of the artists, the crucial dependent and independent variables, the number of artists, (initial) commissioner of the data collection, relevant references to the data and how to obtain the data.[19]

In this section, the data that are used in the various chapters are introduced schematically.

Chapter two	
Type of artists	Writers, crafts and community artists, visual artists, composers, actors & dancers, musicians – all working in Australia
Definition of artists	According to UNESCO definition: combination of professional achievement; artistic output and/or training as an artist
Dependent variables	Earnings from different sources; hours worked in different occupations
Independent variables	Extensive demographics; educational careers; subsidy history; professional costs made
Main dependent variable studied in the chapter	Hours worked inside and outside the cultural sector
Peculiarities	-
Type of data collection	Cross-section
Year(s) for which the data have been collected	1993
Number of artists in the analysis	711
Originally collected on behalf of	Australia Council for the Arts
References	Throsby, D. & Thompson, B. (1994*), But What Do You Do For a Living? A New Economic Study of Australian Artists*, Australia Council for the Arts, Sydney
How to obtain the data?	Through David Throsby, Macquarie University, Sydney

Chapter three	
Type of artists	Visual artists; design artists; dancers; actors; musicians; art teachers
Definition of artists	Artist with a completed degree from an arts college
Dependent variables	Labour market entrance (type of jobs, earnings, contract, hours worked, duration of search)
Independent variables	Demographics, schooling career
Main dependent variables studied in the chapter	Gross hourly wage, media attention, perceived own reputation
Peculiarities	Extension of the regular graduate artists monitor
Type of data collection	A (yearly) survey – used as first wave Second wave among a sub-sample of graduate artists
Year(s) for which the data have been collected	1994-1996 (first wave) 2000 (second wave)
Number of artists in the analysis	First wave: 2690 Second wave: 565
Originally collected on behalf of	HBO-raad Researchcentrum voor onderwijs en arbeidsmarkt (ROA), University of Maastricht
References	Rengers, M. (2000) *Kunstenmonitor 1998: de arbeidsmarktpositie van afgestudeerden van het kunstonderwijs*, Researchcentrum voor onderwijs en arbeidsmarkt, DESAN marktonderzoek, HBO-raad or De Vries and Ramaekers (2002)
How to obtain the data?	Through the Research Centre for Education and the Labour Market (ROA) of the University of Maastricht or through the Steinmetz Archive

Chapter four	
Type of artists	Visual artists
Definition of artists	Visual artists who have applied at least once for one of the arts policy instruments of the Dutch government
Dependent variables	Earnings from different sources; hours worked in different occupations; detailed information of the type and location of activities and earnings (market vs. government)
Independent variables	Extensive demographics; educational careers; subsidy history; professional costs
Main dependent variable studied in the chapter	Yearly earnings through private and public market
Peculiarities	-
Type of data collection	Panel (annual waves)
Year(s) for which the data have been collected	1993-1996 (sample used in this chapter)
Number of artists in the analysis	Per wave: around 500 in the subset used for the analysis: 847
Originally collected on behalf of	Dutch Ministry of Education, Culture and Sciences
References	Meulenbeek, H., Poot, T. and Rengers, M. (1998), *De Financiële Positie van Beeldende Kunstenaars 1993-1996*, Research Report, Foundation for Economic Research of the University of Amsterdam
How to obtain the data?	Through de Foundation for Economic Research of the University of Amsterdam

Chapter five	
Type of artists	Visual Artists
Definition of artists	Subsidy receivers; subsidy applicants; non-applicants
Dependent variables	Location and type of exhibitions over a 12-year period
Independent variables	Demographics; education; experience
Main dependent variable studied in the chapter	Exhibitions on the private market, with the government and through in the informal market in the Netherlands and abroad
Peculiarities	-
Type of data collection	Various sources and registrations; archives; newspapers
Year(s) for which the data have been collected	1980-1991
Number of artists in the analysis	576
Originally collected on behalf of	Fonds voor Beeldende Kunsten, Vormgeving en Bouwkunst
References	De Nooy, W and IJdens, T. (1994) *Evaluatie-onderzoek Fonds voor beeldende kunsten, vormgeving en bouwkunst: wetenschappelijk rapport*, Erasmus centrum voor kunst- en cultuurwetenschappen . Rotterdam
How to obtain the data?	Through the Erasmus Research Centre for Culture and the Arts (ECKCW) of the Faculty of History and Arts of the Erasmus University Rotterdam

Chapter six	
Type of artists	Visual artists
Definition of artists	Artists who have sold at least one work of art in a pre-selected group of Dutch galleries through the stimulation measure for the acquisition of contemporary art ('rente-subsidie regeling' or 'kunstkoopregeling')
Dependent variables	Actual selling price of the work of art Price level of artists Price level of galleries
Independent variables	Art-work characteristics (size, material) Artists characteristics (age, gender, place of residence, subsidy history) Gallery characteristics (location, affiliation, age)
Main dependent variable studied in the chapter	Price of works of art Price per artist Price per gallery
Peculiarities	Combination of different data sources
Type of data collection	Government registration
Year(s) for which the data have been collected	1992-1998
Number of artists in the analysis	2,089 artists 11,869 works of art 203 galleries
Originally collected on behalf of	Dutch Ministry of Education, Culture and Sciences and the Mondriaan Foundation
References	information on measure: jaarverslagen Mondriaanstichting www.mondriaanstichting.nl information on the artists: Vinken, H. and Wiekeraad, M. (1999), *Beeldende kunstbeleid OCenW : subsidies, opdrachten en aankopen 1996 en 1989-1996, IVA* , Instituut voor sociaal-wetenschappelijk onderzoek en advies
How to obtain the data?	Through the ICS Data Archive

Notes

[1] Other overviews are Throsby (1994) and Blaug (2001). Menger (1999; 2001) and Towse (2000) are good sources of references for the growing body of literature on this topic.

[2] This thesis uses the notion 'winner-take-all' theory. In many respects, this theory mirrors superstar-theory, as explored by Rosen (1981), Adler (1985) and MacDonald (1988).

[3] Say (1767-1832) is for instance remembered for his law of markets: the theory that "supply creates its own demand".

[4] Mossetto (1993) has a section on what he calls Marshall's "half-commitment" with regard to the economic treatment of artistic matters (pp. 46-49).

[5] Evidence for the existence of a pay-gap can be found in virtually all studies among both creative and performing artists, in the Netherlands as well as other countries. See for instance Throsby and Thompson (1994) for Australian data, Towse (2000) or O'Brien and Feist (1997) for evidence from Great Brittain, Alper *et al* (1996) or Jeffri (1989) for American data and Benhamou (2000) for French findings. Dutch figures have been reported for instance in a number of reports published by the Foundation for Economic Research (SEO: De markt voor beeldende kunst 1994-200), the Arts-Monitor of the Research Centre for Education and Labour Market (ROA: Kunstenmonitor, 1995-2000) and the thesis of IJdens (2000).

[6] Examples of arts labour relationships in various arts domains are: famous visual artists usually have long lasting relations with a gallery; good actors and dancers have steady contracts with theatre- or dance-groups; acclaimed pop-artists or bands usually agree to make a number of records over a longer period for one record company. See also IJdens (2000), who focuses on employment relations in the cultural sector.

[7] The distinction is explored further in Becker (1964), a 'modern classic' of human capital theory.

[8] Smith argues the following on artistic talents: "Many people posses them in great perfection (…); and many more are capable of acquiring them, if anything could be made honourably by them" (p. 95).

[9] The supposed addictive nature of artistic consumption has parallels with current theories on working as an artist, which is sometimes treated as an addictive or even obsessive activity. The work-preference model for instance centres around the assumption that artistic work is rewarding in itself, rather than only a means of providing income.

[10] The view has much in common with Veblen's view of the conspicuous consumer as discussed in "The theory of the Leisure Class" (Veblen, 1996).

[11] This specific feature of arts professions can be traced back to the ideas of earlier (political) economists. An elegant description of this phenomenon can already be found in the work of the French economist and legislator Frédéric Bastiat (1801-1850). In his "Economic Harmonies" from 1850, he explains: "However large may be the auditorium, provided Rachel's voice can fill it, every spectator there receives the full impact of her inimitable rendition. This, we can see, forms the basis of a new arrangement. Three or four thousand persons sharing the same desire can settle upon a certain amount to be contributed by each one; and the sum total of their combined services represented by this contribution, which is offered as a tribute to the great tragic actress, exactly balances the unique services that she renders simultaneously to all her listeners" (chapter 5, paragraph 5,95).

[12] The present value of this sum is around a million pound.

[13] *Forbes* lists the earnings of today's top artists in their yearly ranking of the world's 100 "most famous" people. See http://www.forbes.com/people or Abbing (2002).

[14] For al full account of the sources of winner-take-all markets, see pages 32 to 44 in "the Winner-take-all society". Competing explanations can be found in Towse (2001) and Menger (1999) who focus on the way artists cope with risk.

[15] There is one crucial difference between tournament models and winner-take-all models. Tournament models are usually seen as effective rewarding systems that enhance efficiency and performance in organisations (Lazear, 1995; Rosen, 1996; Lazear & Rosen, 1981). Advocates of winner-take-all models, however, stress the inefficiency of relative competition on a societal level. In their view, relative competition leads to sub-optimality.

[16] For drafts of these Dutch papers, see Rengers (1999; 2000; 2002).

[17] The report by Throsby and Thompson (1994) contains only descriptive analyses. Throsby (1996a, b) uses these data for the estimation of earning-functions, rather than labour supply models.

[18] As Galenson and Jensen remark with respect to the prices of the works of top visual artist: "Curiously, economists have shown little interest in the extraordinary productivity of these workers: economists have devoted little attention to the determination of the market value of works of art, and even less to the process by which artists produce this value." (Galenson & Jensen, 2001, p. 3).

[19] The Princeton University Center for Arts and Cultural Policy Studies lists an extensive number of data sources on artists in a similar way. See http://www.princeton.edu/~artspol/arttoc.html.

2 Living Art: Artists between Making Art and Making a Living [*]

This chapter builds on the work-preference model of artists' labour supply. The model is summarised, theories of multiple job-holding are investigated and an alternative graphical representation is introduced. After some simple alterations, the model is applied to data on Australian artists. Artists are found to respond to wage rates in both the arts and non-arts labour markets. Further refinements to the model and research methodologies are discussed.

> *"Even that most rational of all birds - the economist - is occasionally spotted making job changes that cannot be explained by simple money income maximisation."*
> *(Lester C. Thurow, 1981)*

2.1 Introduction

Artists are often considered 'different', partly because they proclaim themselves to be different. They have a point. The employment and career choices of artists can appear, to an economist at least, unusual. But what makes little sense to an economist probably makes perfect sense to an artist, and it is the interminable challenge of the arts economist to make economic sense of artistic behaviour - although, as Thurow points out, not even knowledge of economic theory guarantees economically rational labour market behaviour.[1]

There is now a large body of research confirming that the working habits of artists and cultural workers are interesting in economic terms (see Menger 1999, for a survey of research on various aspects of artists' labour). Artistic and cultural labour markets are, for example, characterised by high levels of voluntary work and high rates of multiple job-holding. Probably most intriguing, however, is the sustained growth in arts employment around the world despite persistently low and in some cases declining rates of compensation. A variety of explanations have been put forward to explain this. It has been suggested that artists are risk-takers, attracted by the superstar earnings of a small group of artists; that artists are not able to correctly estimate their odds of a successful career; and that increasing wealth allows people the luxury to seek out more 'enjoyable' work at the expense of higher earnings (for a discussion, see Rengers 1999). Menger (1999) also suggests that a persistent 'oversupply' of

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[*] This chapter was written during a visiting scholarship in cultural economics at Macquarie University in Sydney, Australia (hosting professor David Throsby). Co-author of this chapter is Christopher Madden from IFACCA, the International Federation of Arts Councils and Culture Agencies. The paper was published in 2000 in the Australian Bulletin of Labour, **26 (4)**, pp. 325-354.

artists is caused by a high degree of organisational flexibility, a lack of supply constraints in the arts and a variety of institutional arrangements common to arts and arts-related industries.

As Withers (1985) points out, however, it is difficult to empirically substantiate the existence of oversupply in occupations for which non-pecuniary considerations significantly influence the supply decision. Foregone income may be partly - or even largely - attributable to what Withers terms a 'taste for the artistic life', and the foregone income of artists may therefore be 'nothing more than the compensating differential for the net advantages of an occupation freely chosen' (Withers 1985, p. 294).

Compensating Differentials and Psychic Income

The notion of compensating differentials goes at least as far back as Adam Smith (1776), who introduced the term to explain persistent differences in wage levels across professions. Smith explained the differences by recognising that there are aspects of work apart from earnings that are valued by employees and coined the term 'compensating differentials' to account for the phenomenon.[2]

More recently, the non-monetary rewards of work that underlie compensating differentials have been expanded into the notion of 'psychic income', a term used to characterise all manner of non-monetary costs and benefits derived from work, such as fame, power, companionship, discomfort and risk to life (Thurow 1978). However, after arousing some theoretical interest in the 1980s (see, for example, Katz and Syquin 1982, and Thurow's reply), psychic income has lately received scant attention from economists. This is probably because - issues of market failure aside - the concept does little to alter the neoclassical theory of labour markets, particularly if all work involves some degree of psychic income.

Nevertheless, the concept of psychic income has proved *empirically* useful where such income is not distributed uniformly across sectors of the labour market. For example, the notion has been used to explain differences in employment patterns between ethnic groups (Kimenyi 1991). Psychic income should, therefore, also be relevant to arts employment, as there is good reason to believe that artists receive unusually high levels of 'psychic income' from their arts work. For example, the concept of 'flow' - a state of heightened creativity arising from intense concentration - is particularly prevalent in artistic work (Czikszentmihalyi 1997). But theory suggests that the psychic benefits of arts work go beyond mere enjoyment. Art production is claimed to be therapeutic (Burleigh and Butler 1996), and even 'a means of coping with internal and external reality, of resolving conflict, or of dealing with early life trauma' (Bonetti and Madden 1996). Furthermore, there is a possibility that, for artistically creative people at least, not engaging in artistic activity may court personality dysfunction. This is a form of psychic income similar to that accruing to the addict; a phenomenon not lost on economists interested in artistic behaviour (Stigler and Becker 1977;

McCain 1995).[3] Indeed, the prospect of artistic 'addiction' was noted as far back as 1923, when Alfred Marshall acknowledged that 'the more good music a man hears, the stronger is his taste for it likely to become' (Marshall 1923, p. 94). Addictive artistic consumption is likely to be mirrored in addictive artistic production.

Whether art production is a compulsion, an addiction, a therapeutic tool, or simply more intrinsically enjoyable than other work, there is much to suggest that psychic income is greater in arts work than in other work.[4] Through arts work, artists gain the generic psychic benefits of work *and* the specific psychic benefits of art.

The Contribution of Economics

As a positive science, economics need not be preoccupied with the reasons behind artists' work-preferences, merely identify any biases and model their implications. That said, psychic income does offer a simple interpretation of enduring arts employment patterns that is also consistent with romanticised characterisations of artist behaviour. If artists gain higher levels of utility from time spent at their arts work than workers in other occupations, they may be prepared to forego more profitable employment choices, apparent 'oversupply' will persist, arts wages will remain persistently low and artists will find it necessary to supplement artistic income with non-arts work. The existence of unusually high levels of psychic income, then, at least provides a rationale behind the artist labour models that might otherwise appear to be based on an overly romantic view of the 'driven' or compulsive artist.

This rationale is particularly relevant to the 'work-preference' model, which is the subject of this chapter. Economists have typically modelled the unusual behaviour of artists by making marginal alterations to the standard labour market theories. The initial point of departure has been to assume that artists maximise their time working at their *artistic* profession. This systematic bias in artists' work-preferences lends the model its name: the 'work-preference' model. The model is based on an assumed violation of the usual trade-offs between the disutility of work and the utility derived from leisure and income. (Throsby 1994a). The notion of psychic income provides a rationale for such a violation.

The two most significant implications of the work-preference model are that artists will on average be seen to work longer than expected hours in relatively low-paid artistic work, and, if necessary, cross-subsidise from work outside the arts to fund their minimum budgetary requirements. A corollary of this is that their preference for artistic work causes a persistent 'oversupply' - of hours worked and of the number of artists - which both keeps wages low and impedes adjustment to more 'realistic' wages. This coincides neatly with both popular perceptions of the impoverished 'driven' artist, and with empirical evidence on the working lives of artists. Artists' earnings from their Principal Artistic Occupation (PAO) are not just low relative to non-arts wages, but are often insufficient to provide income above an

acceptable subsistence level. As a result, many artists spend time working outside the arts in order to meet a minimum set of financial demands (such as housing and food) and to cover professional artistic costs (such as training and studio-rental). They may also allocate funds from other sources, such as family endowments or spouse's earnings, to meet their costs (see for instance Towse 1996a).

That artists use income from outside their arts work to fund investment in their own artistic development or to cover professional costs is interesting in itself. It implies that non-arts earnings are, in themselves, an arts subsidy (Withers 1985). Indeed, non-arts earnings - and, at the margin, the earnings foregone by artists working in their PAO - may well be the largest single subsidy to the arts, outweighing transfers from central governments, arts councils and private foundations (Rengers 1999).

More generally, artist employment patterns represent an interesting challenge for labour economists and a valuable testing ground for modelling pathologies that may be evident, but less common, in other labour markets. Furthermore, work patterns long evident in the arts are becoming more prevalent in other occupations.[5] The arts represent an opportunity for economists to enrich their understanding of the role of work in society and to broaden the application of labour economics.

With this in mind, this chapter investigates the labour supply of Australian artists. The main objective is to test the validity of the work-preference model. The methodology adopted is an extension of Throsby's (1994a) empirical work, and uses a comparable database.

The next section of this chapter outlines and extends the work-preference model. The chapter then introduces a new empirical formulation, outlines the data and variables used to test the model and analyses the results of the empirical test. The chapter finishes with a discussion of the theoretical and research implications of the analysis.

2.2 The Theoretical Model

To non-economists it may seem 'unnatural' to study art production within an economics framework. Artists so often seem motivated by more weighty considerations than money. Indeed, the majority of research into artists' behaviour and the production of art are conducted by non-economists. Yet economic theories of the labour market are useful for several reasons. The theories are useful for economic reasons: first, because the arts are labour intensive, the labour market for artists represents the bulk of the supply-side of the arts; and second, using economic models allows the comparison of artists' production with production in other sectors. The theories also add an important dimension to any multi-disciplinary analyses of the arts: first, because labour market theory (as most economic theory) focuses on the rational elements of human behaviour, and, despite a celebrated unpredictability in artistic behaviour,

rationality has proved to be a useful paradigm for intellectual inquiry and policy formulation; and second, labour supply models and Mincerian equations are sophisticated and well-established analytical tools - *not* applying them in the case of artists would be akin to negligence.

The standard economic models do, however, require some adjustment to account for the peculiarities of artists' labour markets. In particular, multiple job-holding and the motivations that govern the 'switching' between multiple jobs (i.e. 'work-preference') should be a minimum feature of any model.

Multiple Job-holding

The standard economic treatment of multiple job-holding assumes that work in a second job is the result of restrictions on working hours in primary employment (for example Allen 1998; McConnell and Brue 1995; Schwarze 1991; Shishko and Rostker 1976), even when multiple job-holding is seen to be undertaken as a result of liquidity constraints (Abdukadir 1992). The situation of many professional artists is not fully consistent with these treatments. Artists have low average earnings in their chosen vocation compared to equally educated workers: this finding is robust over several countries and holds for almost all art disciplines.[6]

Indeed, artists' earnings from their primary vocation are often so low that their secondary job is actually their primary source of income, a situation that causes interminable data problems by 'hiding' artists in labour force surveys and population censuses (recording them instead as retail service workers, teachers and so on). The standard treatments, then, fail to capture the market conditions faced by artists. Sharir (1976) presents a general formulation of multiple job-holding that, although not specifically aimed at modelling artist behaviour, is easily adapted to the situation faced by artists. Sharir's generalisation is preferable to that proposed by Throsby (1994a) in that it uses the standard indifference maps of labour theory. The model is easily adaptable to the specific instances of the 'driven' or 'obsessed' artist, as well as the artist who also has some preference for non-arts work.[7] In order to build on earlier research - particularly in the field of cultural economics - this chapter adheres to the notion of the obsessed artist.

Multiple job-holding is clearly a complex issue, for both the artist and the analyst. The idea of the starving, monetarily disinterested artist still is an *idée fixe*: a popular exaggeration, or even an underestimation of the ingenuity of artists. Artists are eminently resourceful, and their tendency toward 'multiple job-holding' can be more courteously recognised as a clever exercise in spreading income risk than a repulsive material necessity or lifestyle choice (Menger 1999).

Multiple job-holding adds layers of complexity to labour market modelling. To a certain degree, modelling artist multiple job-holding is made simpler by making the 'work-preference' assumption that the 'driven' artist completely prefers arts work. This is a special case of the general models outlined above that allows greater predictability regarding responses to structural changes, such as movements in relative wages. Yet complexity is also compounded in the arts by the tendency for artists to hold not two, but three jobs. Arts economists and arts analysts have found it useful to analyse artists' employment across three categories: 'arts work', 'arts-related work', and 'non-arts work' (Throsby 1994a, 1996a,b). Disaggregating multiple job-holding into these categories improves the efficiency of the model and allows for the identification of three interesting phenomena. First, the income distribution of both arts-related and non-arts earnings tend to be less skewed toward lower incomes than the distribution of arts work. Second, on average, investments in artistic human capital yield lower returns than investments in non-artistic human capital (indeed, Towse (1996b) reports zero or negative individual returns).[8] Third, it shows that arts-related and non-arts earnings can be predicted more accurately than arts earnings.

It is clearly difficult to model labour supply across three employment categories. Further problems arise from the empirically vague distinction between categories, particularly between arts and arts-related work (Van Der Linden and Rengers 1999). There are also theoretical caveats. For example, it makes sense to impose on the 'obsessed' artists a preference for arts work over non-arts work, which tends to be low-paid, low-status work. However, it makes less sense to impose the same preference in the case of arts-related work, such as teaching or advising; artists may perceive this arts-related work as an inseparable part of their artistic work. As a matter of fact even wealthy and highly respected artists often hold arts-related jobs.[9] Confronted with issues of complexity such as these, Throsby combines the categories 'arts' and 'arts-related' work into one in his work-preference model.

Work-preference Model

Throsby's 'work-preference' model breaks artists' labour supply into two categories, arts work and non-arts work, and assumes that artists have a strong preference for arts work. Non-arts work is used to meet an income constraint and to spread the risk associated with working in the arts. In the model, artists are assumed to have a utility function U that only depends on hours worked in the arts (L^a) and a vector of commodities (x):

$$U = U(L^a, x) \tag{2.1}$$

Artists' total earnings are PAO-earnings plus earnings on the non-arts labour market. By definition, artists spend all available time working either inside the arts or outside the arts, so that non-arts labour supply can be defined as ($1- L^a$). Artists spend their entire income on the purchase of commodities. The budget-constraint is therefore:

$$w^a L^a + w^n (1 - L^a) - p^x x = 0 \qquad (2.2)$$

with:

L^a	=	labour supply in the arts
x	=	bundle of consumption goods
p^x	=	price of bundle of consumption goods
w^a	=	arts wage rate
w^n	=	non-arts wage rate

The optimal labour supply of those artists who work in two labour markets (i.e. who have $L^a < 1$) is:

$$L^a = (w^n - p^x x^*)/(w^n - w^a) \qquad (2.3)$$

This equation has the following partials, which show the responsiveness of PAO labour supply to changes in commodity prices, arts wages and non-arts wages respectively:

$$\frac{\delta L^a}{\delta p^x} = \frac{-x^*}{w^n - w^a} < 0$$

$$\frac{\delta L^a}{\delta w^a} = \frac{w^n - p^x x^*}{(w^n - w^a)^2} > 0$$

$$\frac{\delta L^a}{\delta w^n} = \frac{p^x x^* - w^a}{(w^n - w^a)^2} > 0 \qquad (2.4)$$

The model depicts artists as workaholics. They are willing to supply extra hours against very low wage rates. Furthermore, the responses to changes in prices at equilibrium are consistent with artists' 'exotic behaviour' more generally. First, the more severe the budget-constraint, the fewer hours artists work in their PAO (1). Second, the higher the arts wage, the more hours artists work in their PAO (2). The true elegance in the model is, however, in the third derivative: the higher the non-arts wage, the more hours artists work in their PAO (3). The pattern in the derivatives reflects a tendency to subsidise arts work with non-arts labour.

The model is less spectacular for those artists working in their PAO only. If artists have sufficient earnings from the arts (and therefore work as full-time artists), all the inequalities in (2.4) turn to zero, which implies that artists are irresponsive to changes in prices (Throsby, 1994a). As long as their PAO-earnings exceed $p^x x^*$, artists will keep their labour supply in the arts at $L^a = 1$.

Throsby represents the theory using utility and earnings functions for individual artists (see Figure 6.2 in Throsby, 1994). The theory can also be represented graphically for the artist profession as a whole, with supply and demand curves, which are set out in Figure 2.1.[10]

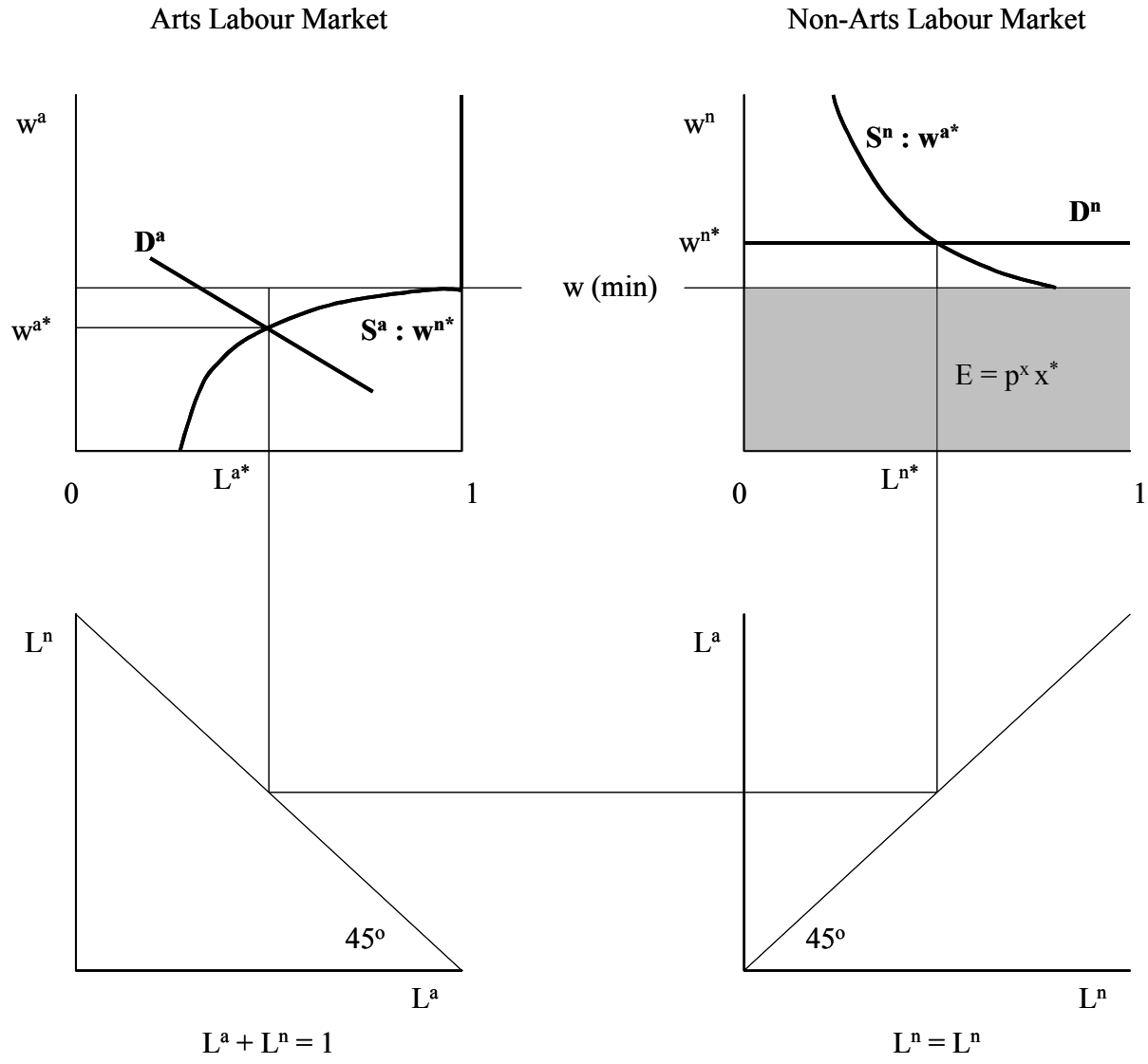
The supply curves show the willingness of the artist to supply hours of work at that market given the wage rate in that and the alternative market. Demand is assumed to be perfectly elastic in the non-arts market and downward sloping in arts market. As a consequence of the work-preference of artists, aggregate supply is downward sloping in the non-art labour market. The higher the non-arts wage, the fewer hours artists supply (derivative 3). The supply curve for art-work is upward sloping, and becomes complete inelastic as soon as the wage rate in the arts exceeds the minimum wage rate required to meet the budget constraint $p^x x^*$.

The shape of the curves is due to differences in the ability to substitute between supply in either market given the need to achieve the minimum earnings target $p^x x^*$. All axes are to scale, and the hours worked remain proportional (as in Throsby's original formulation). The lower quadrants are transformational. The markets in Figure 2.1 are shown to be in equilibrium, with $w^{a*}L^{a*} + W^{n*}L^{n*} = p^x x^*$. The curves are consistent with Throsby's initial formulation, with the arts wage lower than the non-arts wage and too low to allow the artist to meet the minimum budget constraint. A change in the wage rate in one market causes the supply curve in the other market to shift. This means that using the curves to demonstrate structural shifts may require iterations, which are not represented here.

Creators and Performers

The distinction between arts, arts-related and non-arts work represents a major advance in the theoretical and empirical understanding of artists' labour markets. Further breakdowns of the type of arts work can improve the model. Two typologies might be considered. First, a distinction could be made between government-related and 'private' PAO work. This is especially relevant in mainland Europe, where governments and arts councils have a large impact on art production.[11] Second, a distinction could be made based on the nature of arts work itself. The type of work undertaken by painters and writers is often different to the type of work undertaken by actors and performers: the former more often create an original work of art, the latter more often reinterpret (or 'deliver') a work of art that is already created.[12] In practice the distinction is often blurred, although apparently this does not detract from its benefits as an organising taxonomy for arts and cultural research.[13]

Figure 2.1 An Alternative Graphical Representation of the Work-preference Model



The distinction between 'creative' artists and 'performing' artists is chosen here. Throsby also adopts the distinction, albeit with more accurate terms. In the context of multiple job-holding, performers are anecdotally more likely to conform to the situation of other moonlighters, with restrictions on work in the primary vocation the major impetus to holding more than one job. Romantically conceived, performers are more likely to be contract workers, auditioning for stage seasons. Their hourly arts wage is likely to be respectable when in work, although work opportunities are lumpy and/or unpredictable. Creative artists, who might be assumed to be predominantly self-employed, are less restricted by outside considerations and more by purely monetary and utility considerations.

Most of these somewhat stereotypical ideas about labour market differences between creative artists and performers are in fact observed in the data, which is another - empirical - argument for the separate treatment of the two groups.[14] Figure 2.2 summarises a variety of differences that might exist between the two artist populations. There are, of course, large differences within each of the 'performing' and 'creative' arts, but the similarities are assumed here to outweigh the differences.

Figure 2.2 Stylised Facts on Production in Creative and Performing Arts

Creative arts	Performing arts
Self-employed	Contract (short/long term)
Works individually	Works with others
Creativity, innovation, topicality	Craftsmanship, technical skills
Restricted by income-constraint	Restricted by availability of work & physical boundaries
'Piecemeal' reimbursement	Per hour reimbursement
High production costs	Low production costs
Non-unionised	Unionised

2.3 The Empirical Model

The theoretical model has straightforward empirical implications. This section sets out the empirical specification used to test the predictions of the theoretical model. The model is translated into common earnings and labour supply functions and then extended to artists working solely in their PAO.[15] Throsby's theoretical model is defined in terms of the shares of total labour supply made up by PAO and non-PAO work. Empirically, however, it is more attractive to deal with the actual number of hours worked, and this is the measure adopted here.[16]

From the derivatives in (2.4), artists working in two labour markets will respond to an increase in either the PAO wage or the non-PAO wage by increasing the number of hours worked at their PAO. The reverse holds for wage decreases.

The original formulation of the model says little about artists who work only in their PAO, beyond assuming that these artists will not alter their labour supply in response to wage and price changes. Under the new formulation adopted here, this is a testable assumption.

The first stage of the estimation is to regress earnings against hours worked, human capital and a variety of demographic variables. This gives preliminary insight into the relationship between earnings and hours worked, and it allows a correction for labour supply/earnings simultaneity.

Earnings functions for PAO-work and non-PAO work are estimated separately. PAO-earnings are estimated for six different art disciplines: four creative arts disciplines (writers, crafts and community artists, visual artists and composers); and two performing arts disciplines (actors/dancers and musicians). Non-PAO earnings are estimated across all disciplines. This is done for two reasons. First, it is reasonable to assume that the outside labour market is similar for all artists; there is no theoretical reason to assume that a writer waiting tables would earn more than a visual artist waiting tables. Second, the number of artists with non-PAO jobs is too small to allow a breakdown into disciplines.

The earnings functions are straightforward Mincerian, and are specified as follows:

$$\text{PAO-Income} = f(\text{hours worked in PAO, arts education, experience, experience}^2\text{, demographics, professional costs}) \quad (2.5)$$

$$\text{Other Income} = f(\text{hours worked outside PAO, general education, experience, experience}^2\text{, demographics}) \quad (2.6)$$

Arts education is included as a predictor for earnings in the arts, and general education as a predictor for income outside the arts. The experience variables are the same in the two equations, but there are some differences in the demographic variables.[17]

The second stage of the estimation is to use the earnings functions to predict earnings inside and outside the arts. Wage rates, which enter as logarithms in the respective labour supply functions, are derived from predicted earnings. This technique is similar to a two-stage least squares estimation.

Labour supply can now be modelled. Labour supply (measured as the number of hours worked per year in each labour market) depends on the associated (log) wage rates, demographic and labour market characteristics as follows:[18]

$$\text{Hours in PAO} = f(\text{PAO-wage, outside wage, demographics}) \quad (2.7)$$

$$\text{Hours outside PAO} = f(\text{outside wage, PAO-wage, demographics}) \quad (2.8)$$

The labour supply models are estimated separately for performers and creators. A further distinction is made between artists who work in the arts only and artists who work in both arts and non-arts labour markets. Estimates are therefore made for four groups of artists:

1. Creators working in PAO only.
2. Performers working in PAO only.
3. Creators in both PAO and non-PAO work.
4. Performers in both PAO and non-PAO work.

2.4 The Data

The data come from Throsby and Thompson's (1994) study on artists living and working in Australia. The sample covers 950 artists from 'traditional' art disciplines. Artists working in wider arts activities or cultural industries, such as filmmaking and design, are not included. For further details see the original report and subsequent papers by Throsby (1996a,b).

Descriptive statistics for creative and performing artists appear in Tables 2.1(a) and 2.1(b). The tables highlight a number of differences between performing and creative artists. Table 2.1 (a) shows that: there are more women in the creative arts than in the performing arts (55 per cent compared to 41 per cent); creative artists have on average higher levels of formal education, both inside and outside the arts; more than 50 per cent of performing artists receive early training in the arts, compared to less than 25 per cent of creative artists; performing artists are more likely to be unemployed at some stage in their career; and creative artists are more than three times as likely to have received a grant or some other form of arts assistance.

Table 2.1(b) shows that: creative and performing artists have approximately the same total income; creative artists tend to spend longer hours in their PAO than performing artists; creative artists receive lower and more variable wage rates; creative artists have higher earnings through art-related jobs and are more often employed within the cultural sector than performing artists; and the total of arts-related expenses for performing artists is about half that of creative artists (as a consequence, the net hourly rate of pay for creative artists is much lower than for performers and in some cases is even negative).

Table 2.1 (a) Demographics for Artists Living and Working in Australia in 1993: Variables, Descriptions and Means

Description	Creators	Performers
Demographics		
Female	0.55	0.41
Single/divorced/widow	0.39	0.45
Dependent kids	0.40	0.36
Born in Australia	0.71	0.72
Has been unemployed during the past 5 years	0.23	0.35
Education		
Training as an artist before 18	0.23	0.51
Highest education primary education	0.05	0.14
Highest education secondary education	0.19	0.32
Highest education diploma	0.32	0.24
Highest education degree	0.25	0.22
Highest education postgraduate degree	0.19	0.08
Basic art-qualifications obtained	0.34	0.36
High art-qualifications obtained	0.37	0.27
Granting		
Received grant/assistance from Arts Council	0.23	0.07
Principal Artists Occupation		
Writer	0.24	
Crafts	0.19	
Visual artist	0.40	
Composer/arranger	0.10	
Community artist	0.06	
Actor		0.35
Dancer		0.06
Musician/singer		0.58
Number of cases	555	298

2.5 Analysis

The empirical model of the third section can now be applied to the data. First, earnings functions for PAO and non-PAO work are calculated. These results are then used to model labour supply across the different groups of artists (i.e. across categories i-iv).

Earnings Functions

Table 2.2 shows the results for PAO-earnings across six artistic professions (creators in Table 2.2(a), performers in Table 2.2(b)). Table 2.2(c) presents estimates for earnings in the non-arts labour market. The earnings functions show the likely returns to an extra hour's work for artists in each discipline. For example, writers get an extra $13 at the margin, whereas composers only receive an extra $5.

Table 2.1 (b) Earnings, Wages and Costs for Artists Living and Working in Australia in 1992-1993: Variables, Descriptions and Means

Description	Creators		Performers	
Hours worked in arts profession (per week)	31.93	*17.93*	25.81	*18.41*
Hours worked in non-arts profession (per week)	7.85	*14.00*	11.43	*16.59*
Hours worked in arts-related profession (per week)	9.59	*14.21*	7.83	*13.27*
Hours worked total (per week)	48.65	*16.50*	44.37	*17.40*
Income through art (yearly)	11881.97	*21796.91*	12137.76	*17038.9*
Income through art-related work (yearly)	8150.99	*15695.44*	5867.19	*12378.47*
Income through non-art (yearly)	6497.52	*14386.13*	6307.57	*11870.44*
Total income	26767.07	*26867.23*	24584.59	*20710.52*
Wage rate in the arts per hour	8.08	*18.14*	11.22	*15.58*
Wage rate outside the arts per hour	15.82	*27.40*	12.51	*19.99*
Wage rate art-related work per hour	16.82	*35.19*	14.83	*30.79*
Income through art & art-related work (yearly)	20018.28	*25796.67*	17985.26	*21146.64*
Hours worked in art & art-related work (per year)	2159.22	*996.57*	1749.53	*1084.6*
Hours worked in art & art-related work (per week)	41.52	*19.16*	33.64	*20.86*
Wage rate art and art & art-related work per hour	8.64	*10.78*	12.20	*15.95*
Total art & art-related expenses	11285.08	*41512.84*	5576.66	*12999.79*
Cost per hour PAO only	9.46	*31.07*	7.73	*22.06*
Cost per hour art & art-related work	5.13	*14.88*	4.67	*10.47*
Net hourly wage PAO only	-1.35	*23.74*	3.65	*23.91*
Net hourly wage art & art-related work	3.49	*15.42*	7.69	*13.74*
% Artists working PAO only	24.7		20.8	
% Artists working PAO & art-related jobs	39.1		34.6	
% Artists working PAO, art-related & non-art jobs	13.3		12.8	
% Artists working PAO & non-art jobs	22.9		31.9	
Number of cases	555		298	

Standard deviations in italics

Table 2.2 (a) Earnings Functions Explaining PAO Earnings for Creative Artists

Variables entered in the equation	Writers		Crafts- and community artists	
Number of hours worked in PAO	13.69	*2.42* **	6.50	*1.54* **
Experience	2190.83	*1493.13*	180.68	*1261.01*
Experience squared	-19.42	*13.09*	-0.02	*10.31*
Received early training in PAO	-18.59	*9182.35*	-3336.31	*3760.24*
Completed basic and/or higher arts education	-1641.61	*4584.94*	-943.06	*3310.58*
Female dummy	-14974.95	*4806.32* **	-11177.78	*3094.55* **
Born in Australia	4837.57	*5212.36*	587.55	*3187.36*
Received at least one grant during the past 5 years	-1932.00	*5428.47*	9117.55	*4035.24* *
Professional costs	0.02	*0.01* ~	0.00	*0.01*
Lives in Sydney or Melbourne	7588.64	*4532.83* ~	4010.74	*3022.54*
Constant	-65427.83	*41508.80*	-2273.98	*37991.18*
Number of cases	132		144	
R squared	0.31		0.34	

Standard errors in italics; ~ significant at 10% level; * significant at 5% level; ** significant at 1% level

Table 2.2 (a) Continued

Variables entered in the equation	Visual Artists		Composers	
Number of hours worked in PAO	8.77	*1.45* **	5.38	*3.17* ~
Experience	1328.78	*1348.92*	14264.93	*7317.34* ~
Experience squared	-10.13	*10.79*	-108.19	*54.99* ~
Received early training in PAO	1293.50	*2920.20*	6981.21	*6658.79*
Completed basic and/or higher arts education	2993.92	*3208.56*	-6254.40	*6582.80*
Female dummy	-3187.02	*2769.06*	-16194.22	*8672.70* ~
Born in Australia	-1135.81	*2942.69*	3051.82	*6790.76*
Received at least one grant during the past 5 years	2972.27	*3430.04*	18731.48	*6079.03* **
Professional costs	0.01	*0.01*	1.32	*0.14* **
Lives in Sydney or Melbourne	1658.45	*2723.69*	-8214.68	*5845.88*
Constant	-45316.33	*41355.18*	-459182.90	*239444.20* ~
Number of cases	220		55	
R squared	0.21		0.78	

Standard errors in italics; ~ significant at 10% level; * significant at 5% level; ** significant at 1% level

Table 2.2 (b) Earnings Functions Explaining PAO Earnings for Performing Artists

Variables entered in the equation	Actors & Dancers		Musicians	
Number of hours worked in PAO	7.50	*1.64* **	10.56	*1.40* **
Experience	822.66	*1247.51*	-3034.62	*3989.77*
Experience squared	-3.58	*10.06*	21.49	*28.31*
Received early training in PAO	-6584.29	*4490.20*	-1764.28	*3397.10*
Completed basic and/or higher arts education	-2442.04	*3651.60*	4034.62	*3167.66*
Female dummy	-6253.91	*3670.04* ~	-1811.12	*3217.53*
Born in Australia	2764.16	*3913.30*	4402.44	*3268.18*
Received at least one grant during the past five years	1797.54	*6766.43*	-9488.24	*5883.13*
Professional costs	-0.01	*0.01*	-0.02	*0.01* ~
Lives in Sydney or Melbourne	6192.06	*3430.21* ~	-1907.94	*2953.60*
Constant	-35967.54	*38288.29*	105617.40	*139674.10*
Number of cases	122		174	
R squared	0.25		0.29	

Standard errors in italics; ~ significant at 10% level; * significant at 5% level; ** significant at 1% level

From the results in Tables 2.2 (a) and 2.2 (b), it can be calculated that there is little difference in the returns from working extra hours between PAO and non-arts work. This could be seen to violate the requirements of the work-preference model, because the model rests on the assumption that $w^a<w^n$.[19]

The finding that arts wages and non-arts wages are broadly similar does not, however, preclude the use of the work-preference model. Artists may be forced to supply labour on the

outside labour market - even when wages are comparable - because there is not enough work available within the PAO. Supplying labour on the non-PAO market may also be rational for artists receiving sufficient earnings through their PAO. For example because it may be difficult to get bank loans, affordable health insurance or pension plans working in the arts only.

Table 2.2 (c) Earnings Function Explaining Earnings of All Artists on the Outside Labour Market

Variables entered in the equation		
Number of hours worked	8.72	*0 .88* **
Experience	-551.20	*595.94*
Experience squared	2.94	*4.88*
Female dummy	-5501.79	*1618.31* **
Born in Australia	-1007.84	*1706.67*
Has been unemployed	-8417.21	*1721.24* **
Lives in Sydney or Melbourne	-2267.49	*1583.26* ~
Completed secondary school	3750.97	*3049.90*
Completed a diploma	6703.77	*3049.65* *
Completed a degree	10348.45	*3024.25* **
Completed a post-graduate degree	7320.27	*3205.55* *
Constant	31679.72	*17654.06* ~
Number of cases	340	
R squared	0.34	

Standard errors in italics; ~ significant at 10% level; * significant at 5% level; ** significant at 1% level

In accordance with human capital theory, general education influences non-arts earnings. Arts education, however, does not affect PAO-earnings. There are a number of explanations. There may be differences in the markets for artistic and non-artistic human capital: artistic capital may be less marketable or arts degrees may have a lower signalling value. There may also be differences in supply conditions: art schools may be less effective at adding value to students' human capital. Finally, there may be *inherent* differences between artistic and non-artistic human capital: artistic human capital may be correlated with unmarketable traits (such as insanity and antisocial behaviour), and talent may play a more important role in reimbursement for artistic human capital. This last point seems particularly plausible. It is also easily testable by comparing 'educated' artists with artists who do not hold an arts degree.[20]

Finally, it should be noted that the data show a persistent earnings gap between male and female artists consistent with findings for the broader Australian labour market, in which women's full-time incomes are around ten per cent less than men's (Hughes 1997). A more detailed analysis, particularly accounting for career differences between male and female artists, is beyond the scope of this chapter. Throsby and Thomson (1994), which draws on the

same data as the current chapter, devotes a chapter to the issue. Extensive European data should be forthcoming from the European Union's 'Women in Arts and Media Professions'.[21]

Labour Supply

Table 2.3 presents the estimated labour supply models for the four groups of artists.

For the first two groups, the wage outside the arts affects arts labour supply positively and non-arts labour supply negatively, as predicted by the work-preference model. This provides support for the hypothesis that artists subsidise their own profession by working outside the arts. Moreover, the *higher* the wage they receive on the outside labour market, the *more* they subsidise. The effects are of similar magnitude for both creators and performers. A doubling of the non-arts wage increases the number of hours worked inside the arts by 2.6 hours per week for creators and 3.1 hours per week for performers.[22] In accordance with this finding, a wages increase reduces non-arts labour supply. A doubling of the non-PAO wage leads to a decrease in hours worked (9.4 per week for creators and 7.8 per week for performers).

A more surprising result is the effect of the PAO-wage on labour supply. PAO-wages have a *negative* impact on labour supply within the arts. The effect is similar for creators and performers. In other words, a doubling of the PAO-wage rate leads to decrease in hours worked (6.0 per week for creators and 6.4 per week for performers). PAO-wages do not, however, influence labour supply decisions on the *outside* labour market. This asymmetry is surprising, since the work-preference model predicts the opposite.

Table 2.3 (a) Labour Supply of Creators Working Inside and Outside the Arts

Variables entered in the equation	Labour Supply in the Arts		Labour Supply outside the Arts	
Ln Wage in PAO	-451.18	*97.40* **	103.44	*75.31*
Ln Wage outside PAO	194.31	*79.58* *	-705.28	*61.54* **
Female dummy	142.96	*118.98*	-358.88	*91.99* **
Born in Australia	-4.06	*130.82*	-124.76	*101.15*
Grant-receiver	94.72	*200.78*	151.65	*155.24*
Single	212.32	*130.00*	-105.73	*100.52*
Kids	-75.19	*128.81*	98.98	*99.60*
City	-11.02	*117.57*	-35.41	*90.91*
Arts education	118.60	*123.68*	-2.77	*95.63*
Writer	-309.66	*158.40* ~	366.42	*122.48* **
Visual artist	-29.26	*143.58*	-24.72	*111.02*
Composer	334.41	*270.32*	67.25	*209.02*
Constant	2012.56	*417.77* **	3163.02	*323.03* **
Number of cases	188		188	
R-squared	0.27		0.50	

Standard errors in italics; ~ significant at 10% level; * significant at 5% level; ** significant at 1% level

The negative effect of the PAO-wage is also apparent in the labour supply of artists working in the arts only. These full-timers reduce their labour supply in response to a doubling of the PAO-wage rate: 8.7 per week for creators and 12.8 per week for performers.

Table 2.3 (b) Labour Supply of Performers Working Inside and Outside the Arts

Variables entered in the equation	Labour Supply in the Arts		Labour Supply outside the Arts	
Ln Wage in PAO	-478.11	*82.94* **	69.12	*85.52*
Ln Wage outside PAO	230.11	*96.78* *	-582.20	*99.79* **
Female dummy	-1.43	*149.59*	-151.74	*154.24*
Born in Australia	47.28	*152.96*	6.24	*157.72*
Grant-receiver	454.83	*343.88*	260.11	*354.57*
Single	84.09	*141.35*	-385.16	*145.74* **
Kids	-281.80	*157.81* ~	-151.12	*162.72*
City	157.67	*132.15*	-203.39	*136.26*
Arts education	113.79	*139.82*	3.90	*144.17*
Musician	-117.25	*140.01*	225.21	*144.36*
Constant	1693.02	*411.60* **	2924.61	*424.40* **
Number of cases	125		125	
R-squared	0.31		0.27	

Standard errors in italics; ~ significant at 10% level; * significant at 5% level; ** significant at 1% level

Without over stressing magnitudes, the estimates clearly suggest that artists reduce the hours they work in their PAO when faced with a higher arts wage.[23] Established artists apparently work fewer hours for better money than their struggling colleagues. This finding is inconsistent with the work-preference model. If artists indeed love their work, they should increase the number of arts hours worked when they face a pay-increase, *especially* those artists who have more than one job. However, the data show that there is a large group of artists who work long hours against very low wages, which is consistent with the work-preference model. The model is 'wrong' in the sense that it does not accurately account for those artists whose PAO-work can be regarded as a 'regular' job. These 'regular' workers have a normal working week and receive a competitive level of pay. To include the two groups in one analysis may suggest wage relationships in the total population that do not hold within sub-groups.

Cultural economists, policy makers and other analysts often neglect those regularly employed in the arts sector. To many, the quintessential artist is the struggling *visual* artist. Consequently, many models are based on the image of the poor artist, or more specifically, the bohemian painter.[24] This is not to say that bohemian artists are a myth, but to focus solely on them unnecessarily narrows the analysis. The work-preference model is sensitive to this type of definitional specification. Indeed, bringing a broader range of artists (such as graphic

designers and film-makers) into the database used here would likely strengthen the observed wage effect.

Table 2.3 (c) Labour Supply of Creators Working in PAO Only

Variables entered in equation	Labour Supply in the Arts	
Ln Wage in PAO	-654.76	*122.16* **
Female dummy	-270.77	*93.131* **
Born in Australia	118.14	*99.20*
Received at least one grant during past 5 years	-3.78	*117.03*
Single	218.35	*100.12* *
Kids	58.08	*97.80*
City	-13.36	*92.30*
Arts education	186.95	*104.68* ~
Writer	-66.50	*131.736*
Visual artist	-61.10	*110.75*
Composer	3.18	*159.43*
Constant	3966.10	*347.93* **
Number of cases	350	
R-squared	0.15	

Standard errors in italics; ~ significant at 10% level; * significant at 5% level; ** significant at 1% level

Table 2.3 (d) Labour Supply of Performers Working in PAO Only

Variables entered in equation	Labour Supply in the Arts	
Ln Wage in PAO	-959.56	*286.35* **
Female dummy	-133.80	*147.99*
Born in Australia	-60.08	*170.81*
Received at least one grant during past 5 years	-134.27	*289.66*
Single	-297.15	*153.66* ~
Kids	107.42	*152.67*
City	101.02	*147.56*
Arts education	97.26	*148.69*
Musician	-132.11	*150.37*
Constant	4790.20	*714.11* **
Number of cases	164	
R-squared	0.16	

Standard errors in italics; ~ significant at 10% level; * significant at 5% level; ** significant at 1% level

2.6 Theoretical and Research Implications

The previous section highlights a number of limitations in the work-preference model. To reject the model entirely, however, would be throwing out the baby with the bath water. The

model still has many attractive features. It allows us to identify that artists reallocate funds from the non-arts to the arts, and that artists with higher non-arts wages work more hours in their PAO. The work-preference model also offers an elegant and plausible explanation for the existence of a large group of artists who are working long hours for little money.

The findings do, however, present important implications for future empirical and theoretical research. On the theoretical level at least four directions are immediately evident. First, as highlighted earlier, the differences in labour market behaviour between established artists with regular job-patterns and long-hour-low-wage artists should be further explored, both empirically and theoretically.[25] Second, labour demand could be introduced, given that the analysis suggests that the availability of work is an important determinant of the labour market behaviour of artists. Third, differences across art disciplines could be explored further. Fourth, the relationship between arts and non-arts labour supply and non-labour income must be examined. The influence of non-labour income is well established in general labour market theory, but has been conspicuously absent from the study of the labour market for artists. There seems little reason to ignore its influence in the case of the arts.

The analysis also has implications for the conduct of future surveys. First, surveys should attempt to measure arts wages more accurately. Besides the 'standard' method of dividing total earnings by total hours worked, questions regarding the *hourly* rewards could be included. Second, to accurately test the work-preference model, surveys could include questions on the preferred length of the working week (at different levels of pay). Third, as highlighted above, surveys would do well to account for non-labour income and spouse or household earnings.

The focus in arts economics on artists as detached from the larger labour force has been constructive, both in advancing our understanding of this peculiar labour market and in helping to establish the 'Economics of the Arts' as a valid sub-discipline. The peculiarities of the arts should not, however, be over-stressed. Now that cultural economics has developed an empirical and theoretical critical mass, and has its own *Journal of Economic Literature* classification code (albeit at the very extremity of the taxonomy), its proponents should be more conscious than ever of the need to connect with mainstream economic analysis.

In light of this, then, the imperative follow-up to this chapter is to describe artists' work-preference with the continuous or substitution models of standard labour theory, such as in Sharir (1976), and apply these models to the specialist databases gathered by arts economists. This would afford general labour economists greater insight into the rising phenomenon of multiple job-holding. And it would allow arts economists to verify whether artists are indeed different, or whether difference is merely artistic self-proclamation.

Notes

[1] For the purposes of this chapter, the definition of 'artist' is confined by the definition adopted by Throsby and Thompson (1994), whose data form the basis of the empirical analysis. The exact definition and its implications are discussed later in the chapter.

[2] Numerous other accounts for the existence of differences in wage levels between industries have been put forward. For instance, tests of theories of efficiency wages (Shapiro and Stiglitz 1984: Raff and Summers 1987) use cross-industry wage levels to 'prove' the existence of phenomena related to efficiency wages (Krueger & Summers 1988).

[3] Stigler and Becker (1977) attempt to distinguish between beneficial and harmful addictions, despite the unavoidable reduction to judgement that such a distinction invites. It is not necessary to make distinction here, as both 'good' and 'bad' addictions are manifest uniformly in terms of compensating differentials.

[4] Two points should be made. First, arts work may involve psychic costs over and above those simply brought on by the social and financial privation common to arts work (see McLaren 1999). Second, some types of psychic income that are prevalent in other work may not accrue from arts work, such as companionship or social interaction. It is not possible here to develop a full taxonomy of psychic income, identify what type of psychic income applies to what types of work, calculate the net psychic income for each type of work and the relative size of net psychic income across types of work, although these factors are likely to influence the empirical results. This will be discussed later in the chapter.

[5] Multiple job holding is, for example, on the rise in the total workforce (Kimmel and Powell 1999, Sussman 1998, McConnell and Brue 1995).

[6] Towse (1993), Jeffri (1989), Throsby and Mills (1989) and Elstad (1997).

[7] Sharir's model requires that the worker faces diminishing marginal monetary rewards, which is clearly an unrealistic assumption for both salaried and waged workers (particularly waged workers, who are regularly tempted with increasing returns in the form of higher overtime wages). This assumption may, however, be easily redefined by assuming that workers experience growing disutility as hours worked increase, which seems particularly relevant for artists working in non-arts work. Such a respecification would be strengthened by the notion of psychic income, which presumably diminishes rapidly as hours worked increases. This will not be pursued here.

[8] Artists do build up some human capital on-the-job, but this may be due to unsuccessful artists switching out of the profession. Alper and Wassall (1998) recommend a longitudinal study to distinguish this selection effect from a 'learning-on-the-job effect'.

[9] Elstad (1997) even claims that the prestige and income through these jobs exactly resembles the hierarchy of earnings and prestige from artists' principle artistic occupation. Observing prestigious artists in prestigious teaching positions, on arts council committees and in arts advisory positions gives anecdotal support for this.

[10] The curves are presented to offer an alternative graphical representation that is closer to the more familiar market curves.

[11] Rengers (1998) and Elstad (1997).

[12] Such a distinction is common among cultural theorists and sociologists. Creative artists usually produce the ideas and concepts ('encode'). The audience 'decodes' the ideas and concepts (O'Sullivan et al, 1994). Performers are part of the 'downstream' communication chain, although 'encoding' is still possible through reinterpretation and editing (Statistics New Zealand and Ministry of Cultural Affairs, 1995).

[13] For example, the distinction has been an integral part of the cultural statistical frameworks of government statistical agencies in Australia, Canada and New Zealand.

[14] As a consequence, tests of these differences are not presented here. A quick inspection of the descriptive variables in Tables 2.1a and 2.1b however reveals clear differences, particularly with respect to the labour market situation of the two groups.

[15] Some general caveats should be noted. First, the assumption that workers can actually choose the number of hours they want to work does not hold for the majority of artists. Only the very rich and very famous enjoy the luxury of choice. While famous artists can actually negotiate hours and payment, the typical artist faces a 'take-it-or-leave-it' decision. Second, a large group of artists are self-employed. The self-employed are notorious for misquoting their labour supply (Berndt, 1993), and are typically contracted to supply a particular product, rather than a specific number of hours. Measuring their labour supply in terms of hours worked is a simplification (although unavoidable).

[16] It is easy to translate the hypotheses from shares to actual: if the total number of hours worked is held constant, an increase in hours worked in one labour market automatically leads to an increase in its share in total labour supply. As a result, predictions for labour supply will correspond to predictions for hours worked.

[17] The variables used are in Tables 2.2a, 2.2b and 2.2c.

[18] Income from other sources is conspicuously absent due to a lack of data.

[19] The result also differs from Throsby, who uses *industry averages* to back this crucial assumption. The comparison adopted by Throsby is, however, incorrect. Artists typically face lower than average wages in the non-arts labour market.

[20] This type of approach would differ from a human capital approach by focussing on differences in the distribution of talent. These normally form part of the residual of the earnings function. The analysis would be particularly interesting in the case of artists.

[21] For a summary of ongoing research and a list of publications, see http://www.ericarts.org/women.

[22] This is calculated by multiplying the observed wage effect (from Table 2.2a) by *ln*2 (wages enter the hours worked equation as natural logarithms). The number of hours per week equals the annual figure divided by 52.

[23] It should be noted that this differs from the usual negative wage effect found in standard labour analysis. In the standard analysis the labour supply curve slopes backward at higher wages (i.e. the wage effect is negative) as greater wealth is traded for leisure. Leisure is not measured in the work preference model as formulated here: a negative wage effect in arts work can only be taken to reflect more time spent at non-arts work at higher arts wages.

[24] Vincent van Gogh is the archetype.

[25] Perhaps a critical wage level can be identified in data in order to distinguish between the two groups.

3 The Careers of Graduate Artists in the Netherlands. Do Relative Differences Matter? *

This chapter investigates the labour market entry of graduate artists in the Netherlands. The chapter tests predictions based on theories that relate individual careers to individual qualities (such as human capital theory) against predictions from models that explain career development from relative differences between individuals (such as winner-take-all and tournament models). Two sets of career indicators are used to evaluate the predictions: 1) labour market characteristics and 2) measures of artistic success. The relation between labour market success and artistic achievements is also discussed. The chapter finds that indicators of 'economic' or financial success are best predicted by the human capital model and indicators of 'artistic' success with the winner-take-all model.

3.1 Introduction

Statistics indicate strong growth in the number of people employed in the cultural sector over the past 30 years. The sector, which is also described as the 'creative industries' or the 'cultural industries', now accounts for around 5% of GDP in most developed countries, depending on the definitions that are applied.[1]

In this light it is perhaps surprising that the arts and culture sector is commonly treated as a special case, rarely integrated into nation-wide analyses and forecasts of economic performance. Adding to the status of the cultural sector as an 'oddity', most available studies on workers in the cultural sector concentrate on explaining differences between cultural workers and the rest of the labour force. This particularly holds for artists, the archetypal workers of the cultural sector, who are typically seen as 'exotic' workers with equally exotic working behaviours. The focus on differences rather than similarities is partly explained by the overriding desire to highlight artists as a 'special case' for the purpose of advocacy; difference being one path to special treatment by governments.

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* This chapter follows up reports published by the 'HBO-Raad', the overarching organisation of institutions in higher vocational education in the Netherlands. De Vries and Ramaekers (2002) contains a Dutch version of the chapter written for a broader audience. Earlier versions were presented in 2000 at the 'Long Run' conference of the Department of Art and Culture Studies at the Erasmus University of Rotterdam and at the Twelfth Conference of the Association of Cultural Economics International in Minneapolis. The author gratefully acknowledges assistance with data collection from the Research Centre for Education and the Labour Market (ROA) of the University of Maastricht and DESAN Market Research in Amsterdam.

Another reason for the special treatment of the cultural sector is the difficulty of reliable statistical analysis of the sector. This is augmented by the fact that cultural workers and artists in particular do not show up reliably in usual survey platforms such as the Census and labour force surveys. Separate survey mechanisms need to be developed and run for artists and this is usually costly, lengthy and tedious. The many interesting phenomena of the cultural sector are therefore more frequently covered in a theoretical setting than in an empirical setting.[2]

This chapter takes a different stance. Two theoretical approaches toward the analysis of careers are applied to empirical data on graduates of arts and culture.[3] The first theoretical approach explains career progress from the (intrinsic or learned) individual qualities of workers; it assumes a direct geometric relation between the qualities of individuals and their careers. By and large, 'mainstream' human capital theory is an example of such an approach. The second approach - 'winner-take-all' and a raft of 'alternative approaches' - assumes that relative differences between individuals are most important in understanding career development and career choices.[4]

Applying the two approaches to the labour market and careers of graduate artists is theoretically relevant. Standard theory has been found to miss important characteristics of arts labour (Towse, 2001; Throsby, 1996a). In the same time, a number of (cultural) economists have claimed that relative competition among individuals is particularly discernible in the arts (Frank & Cook, 1995). Arts markets are prone to depict 'winner-take-all' phenomena for various reasons. These include the possibility of cloning of cultural products at low costs, habit formation and acquired tastes in cultural consuming, the interpersonal dependency of art-consumption and the limited size of peoples agenda for cultural products (see Frank and Cook, 1995).

Empirically this study is relevant because of its longitudinal approach. The labour market entry of graduate artists has never been studied in such a setting. Describing the entrance on the labour market of this group of workers therefore reveals information that is new by definition, and that is useful to scholars, educational institutes and policy makers with an interest in this particular labour market.[5]

To obtain a detailed picture of the labour market entrance of graduates in the cultural field, two sets of indicators of career progress will be used. The focus is on a) labour market characteristics, such as wages, hours worked and the decision to enter the labour market and b) measures of artistic success, in particular media coverage and artists' own evaluation of their reputation in the cultural field.

In brief, the chapter answers the following three questions:

1. How do economic and artistic success evolve in the first six years of the professional careers of graduate artists?
2. Which model (the human capital, or the specific winner-take-all model) better explains the career progress in terms of both economic and artistic indicators?
3. Are the same models applicable to artistic and economic success in the first six years of the career of a graduate artist? Or do we need different models for the explanation of these two indicators of success?

These questions are studied using data on 542 graduate artists in the Netherlands, who have responded to two waves of a specific labour market questionnaire for graduates of arts education. Data were collected 1.5 years after graduation (first wave) and around 6 years after graduation (second wave).

The chapter is in six parts. In the first section the concepts and definitions used in this research are briefly discussed. The two models of labour market entry are introduced in section 3.2. Conflicting predictions based on the models are derived in section 3.3. The fourth section elaborates on the data collection and describes the variables that are used in the analysis. In section 3.5 the statistical aspects of the study are briefly discussed and the labour market entry of artists is analysed. The chapter concludes with an interpretation of the results in light of the hypothesised outcomes and discusses the applicability of the two career models.

Concepts and Definitions

The exact size and impact of the cultural sector is often debated, differences usually being attributable to differences in definition. The consequences of applying various definitions of artist – the most important sub-group of cultural workers - have been studied in some detail. Frey & Pommerhene (1989, p. 47) for instance list eight possible definitions of an artist, ranging from 'hard' market criteria such as income and time-spent on artistic work to 'soft' criteria like self-evaluation. Wassall & Alper (1992) and Mitchell & Karttunen (1985) have shown convincingly that different definition lead to significantly different empirical observations (see also Towse, 2001).

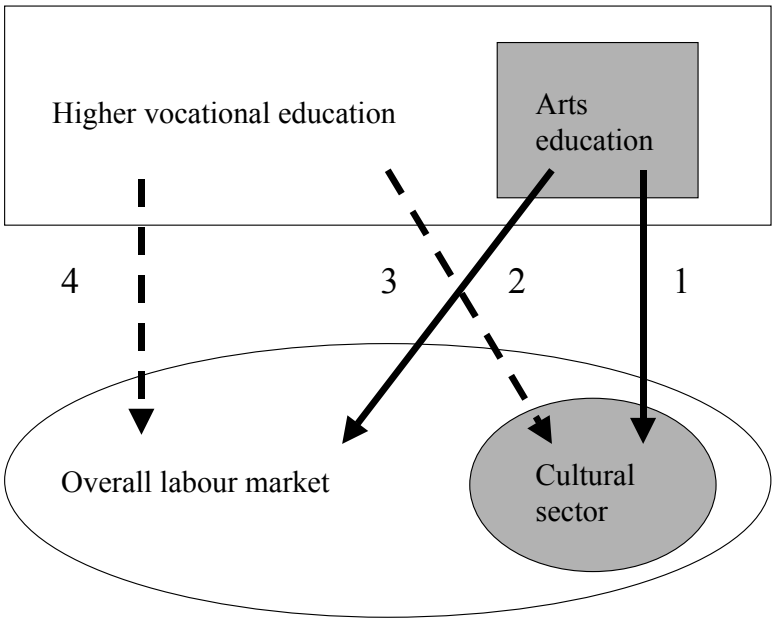
This study defines the cultural sector from two perspectives: first by the courses or studies in the educational system and second by the professions that graduates hold. For the purpose of this study the system of higher vocational education (Hoger Beroeps Onderwijs, or HBO) in the Netherlands is divided into arts education and the rest of higher vocational education. All graduate artists or cultural workers included in this study have completed a degree in an arts college.[6] The study therefore covers visual artists, graphic designers, audiovisual designers,

visual art teachers, musicians, music teachers, actors, dancers, and performing art teachers as defined under the HBO classification of courses.

The labour market is divided in a similar way as the educational system: the cultural professions are separated from the general labour market. The definition of a cultural profession is derived from the list of professions that graduate artists hold in the first six years of their professional career. These professions have been recoded into the broad categories 'cultural profession' and 'general labour market'.[7] The focus on cultural professions, rather than on cultural employers or institutions, implies that graduates who work as artists in a company outside the cultural sector are counted as working in a 'cultural profession'. Graduates who are employed by a cultural institution for a job that is unrelated to their arts education (such as cleaning) are considered to be employed in the general or non-cultural labour market. See for the complete list of cultural professions Rengers (2000).

The following figure sketches the relevant relations between educational system and labour market.

Figure 3.1 Defining the Population: Entry from Education System into the Labour market



The solid arrows that connect the educational system and the labour market indicate the relationships that are covered in this chapter. As will be shown later, most graduates from art colleges enter a cultural profession (arrow 1), but not all graduates do so. Arts graduates also enter the labour market outside the cultural sector (arrow 2). Arts graduates also work both inside and outside the cultural professions. The study covers all of these permutations. Not

included, however, are graduates who enter a cultural profession with a non-arts degree (arrow 3), nor, for obvious reasons, non-arts graduates who do not enter a cultural profession at all (arrow 4). This last group is, however, used as a reference group.

3.2 How to Explain Careers in the Cultural Field?

This section outlines two common approaches to modelling (arts) graduate labour markets and (artistic) careers. It then describes the approaches adopted in this study. The section concludes with a brief exploration of potential differences between indicators of financial success and indicators of artistic success.

Human Capital Theory and Career Progress

Most studies into careers and the labour market are based on human capital theory. In its basic form, human capital theory assumes that people undertake education in order to increase their productivity - or, more accurately, their marginal product - and, consequently, their monetary returns in the labour market.[8] Investment costs include time, foregone earnings and education fees. The purported benefits of investing in human capital are higher wages and more attractive jobs. According to human capital theory, the returns to education should be broadly comparable to the returns to other forms of capital, including physical capital and stocks. In equilibrium, individuals are indifferent with regard to where to invest, since the marginal benefits equate across markets.

Human capital theory is atomistic. *Individual* qualities, investments and other features are *individually* rewarded on the labour market. If worker A has more desirable human capital than worker B, the prediction is that *ceteris paribus* worker A will have more favourable labour market returns in the form of higher earnings and better promotion opportunities than B. The theory thus assumes a direct (linear or polynomial) positive relation between an individual's human capital investments and their career, regardless of the qualities and investments of others.[9] The theory predicts *ex-ante* that two workers with similar human capital will have similar career experiences. *Ex-post*, the theory attributes career differences between otherwise similar workers to unobservable characteristics and abilities, accounted for in an error term of the 'career equation'.[10]

Human capital theory is essentially a static theory: career differences over time that cannot be explained by individual variation in education and experience (and gender) fall outside the scope of the theory. Human capital theory has thus been caricatured as merely a calculation of differences in wages or earnings between individuals. According to Frank, "a worker with twice as much human capital as another will earn twice the wage, just as someone with $10,000 in the bank will earn twice as much interest as someone with only $5,000" (Frank,

1998, p. 213). This may be an oversimplification of human capital theory, but it is insightful enough to serve as a warning to often intractable economists.

Despite its limitations, human capital theory has been the theoretical foundation for most (cultural) economists with an interest in the artists' labour market. A number of studies of artists' earnings have utilised the human capital model. These studies have shown that the returns to education and on-the-job training are in general lower than for other professions (Filer, 1986; Wasall & Alper, 1992; Towse, 1993). These applications of human capital theory have been augmented to accommodate secular patterns of the arts labour market. For example, Throsby (1996a,b) distinguishes between three 'types of work' in which artists regularly engage i) work within the artistic profession; (ii) work in art-related positions such as teaching and advising; and (iii) work in the non-arts labour market. Further refinements to this framework have been suggested. Rengers & Madden (2000) separate creative work from performing work; while Rengers & Plug (2001) distinguish between work in the public market and work in the private market.

Another application of human capital theory can be found in studies into the supply of works of art and ideas by artists, which seem to be poorly indicated by the number of hours that artists supply to 'cultural' or 'artistic' labour markets (Throsby, 1994a). In an effort to interpret artists' unusual working habits and unpredictable output, economists have adopted the 'work preference' model of the arts labour market. The work-preference model assumes that artists maximise time working in their artistic profession, and thereby 'violate' the usual trade-offs between the disutility of work and the utility derived from leisure and income (Throsby 1994a). More recently, the focus has shifted somewhat towards understanding the broader incentive structure that influences artists and cultural workers. Frey (1997), Towse (2001) and Throsby (2001), for example, present models that incorporate both internal and external returns to creativity, instead of focussing solely on the internal returns.

Models of Relative Competition

A raft of 'alternative' approaches to careers and the labour market challenges human capital theory.[11] These alternative approaches share one important feature: the idea that on top of intrinsic variations between individuals, relative difference is an *explanans* of career progress.

Winner-take-all theory (Frank and Cook, 1995) is one such alternative approach. Underlying the theory is the idea that "reward by relative position is the single most important characteristic of winner-take-all markets" (p. 24). The winner-take-all approach to careers is essentially dynamic: instead of focusing on how the initial ranking of individuals arises, the theory focuses on how careers diverge over time. The main claim of the theory is that career progress varies disproportionately with quality or 'human capital'. Individuals who obtain success early go on to have favourable careers not because they are proportionally more

gifted, but because the outside world views their successful start as itself an indicator of quality. The same holds for unsuccessful individuals. Success breeds success, failure breeds failure.

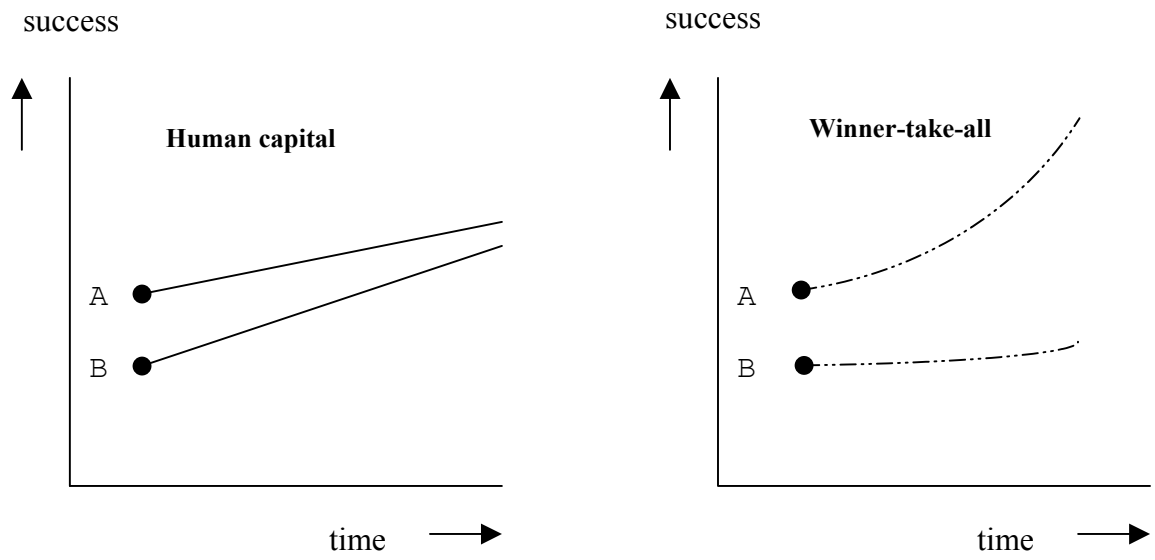
This approach towards careers provides a rationale for the skewed rewards systems that are apparent in art markets.[12] The theory predicts negligible returns for individuals at the bottom of the distribution of abilities and/or human capital investments and runaway rewards for those at the far right end of the distribution; the distribution of rewards distribution being disproportionately more variable than the distribution of abilities. There are a number of reasons why reward by relative position is a feature of the arts sector: there is incomplete information about the productivity and quality of artists; quality judgements in the arts are interdependent and formal qualifications are not required to work as an artist.

Winner-take-all theory has been previously applied to the careers of artists. In a study among Hollywood filmmakers, Faulkner and Anderson for instance conclude that: 'Competitive advantage lies with entrepreneurs and artists who accumulate performance records of success and financial return' (1989, p. 907). In the next round of contracting, the 'track-record' of the artists affects the odds of being part of a new project, in the sense that more successful artists have better career prospects.[13] Similarly, it has been argued that relative position is important at arts education. Arts education can be seen as a screening device for young artists, rather than as an individual investment in human capital (Towse, 1994).

Similar accounts have been brought forward in the criticism of subsidy schemes in the arts. It has been argued that grants and subsidies in the cultural sector end up among a group of privileged artists. These artists are rewarded because they have build up a 'subsidy-history' that gives them a relative advantage over new applicants. It has been shown that committees deciding on the allocation of government funding rank the quality of artists by past decisions of their own committee or other allocation-committees (De Nooy, 1996). This interdependent ranking has been coined the 'Matthew-effect' ('For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath'. Matthew: XXV, 29).[14]

The difference between human capital and winner-take-all approaches can also be shown graphically. In Figure 3.2, the least and most successful individuals of a group of equally educated graduates under two career models are depicted. In human capital theory, little variation between the individuals is observed over time. However, winner take all theory predicts that the gap between successful and unsuccessful graduates increases over time.

Figure 3.2 Career Development Over Time for Most Successful (A) and Least Successful (B) Individuals



The Relation between Financial and Artistic Success

In economics career progress is measured in variables such as (un)employment, earnings, hours worked or promotions. One of the attractive features of studying arts graduates is that these 'hard' measures can be augmented with another measure of career progress: 'artistic' achievement. But are the two types of measures different? And more importantly for this study, given that the two models outlined above are primarily aimed at explaining economic career indicators, in particular wage levels, are the models also relevant to the explanation and modelling of artistic success?

Sociologists and economists have generally disagreed about the relationship between economic and artistic success. Economists see very little difference between financial and artistic success. Frey and Pommerehne's (1989), for example, claim that aesthetic judgements and economic value coincide for visual artists; "[P]ainters and sculptors with the highest prices are, on the whole, those with the highest artistic achievement." (Frey and Pommerehne, 1989). Sociologists take a different approach, emphasising that artistic and financial success are independently determined and may even be opposite. Sociologists claim that artistic success – unlike market recognition – is the outcome of a social process (see Becker 1982, Crane 1987, Moulin 1988, 1992, 1994). The strongest of these claims comes from Pierre Bourdieu, who argues that the actual production process in art is not the production of an artwork, but the 'consecration' of the artist (Bourdieu 1993, p 76).

3.3 Hypotheses

From a theoretical point of view, the difference between the human capital and winter-take all theories is clear. In many studies, however, traces of both approaches can be found, which complicates conclusions about the applicability of either of the two the models to labour market behaviour and career progress. This section highlights conflicting predictions of the two models. Career progress is measured in two ways: first by the labour market activities indicated by traditional 'economic' variables as wages, earnings and time-allocation; second by artistic success of graduate artists indicated by the perceived reputation of the artists and media coverage.

The models are tested for their predictions across five topics: 1) inequality among graduates; 2) the careers of graduates who drop out of a cultural profession; 3) the relation between social background and career progress; 4) the effects of career characteristics such as receiving grants or working abroad; and 5) the effects of school and study characteristics on the careers of individuals.

Inequality

Models of relative competition, such as the winner-take-all model, predict a rapidly increasing dispersion of career achievements in the years following graduation, as can be seen from Figure 3.2. In human capital theory however, the career development of equally educated (cultural) workers is postulated to be similar. Only those artists who invest in education after the completion of art college will receive higher lifetime earnings than the artists who do not do so, but these effects are likely to be small, particularly in the early years of the career. Human capital theory allows for the possibility of a decrease in inequality as frictions that are present at the beginning of a career become less influential over time.[15]

Dropout Earning Penalty

In winner-take-all markets, individuals - in pursuit of runaway success – make investment and schooling decisions that can be harmful if they fail to succeed. These decisions can be viewed *ex-post* as 'wasteful investments'. A good example can be found among young sportspeople, who neglect school and over-invest in their sports-capacities. Being a good basketball player without a degree is of little use in the non-sports labour market. The people who fail to make it ('drop-outs') in a winner-take-all market such as the arts may face bleak career prospects in other labour markets. In financial terms, these artists suffer an 'earning penalty' (Filer, 1986).

In the human capital model, there is less reason to expect high levels of 'wasteful investment'. If individual productivity is decisive in determining wages and career prospects, workers who switch jobs are not necessarily worse off than the colleagues who stay in a profession. If art

graduates show rational labour market behaviour, wages should be roughly comparable for art graduates working in a cultural profession and art graduates who have dropped out and are working in the general labour market. This competing away of differentials can be easily deduced. Suppose that potential earnings for graduate artists were much higher outside the cultural sector. This would provide a strong incentive for artists to work outside their own sector. As more and more artists move away from cultural professions, the scarcity of artists increases, which places an upward pressure on wages in the sector.[16]

To test these predictions, we should compare the careers of artists working in the arts to artists working outside the arts. This is preferable to comparing artists with workers in the general labour market, since it allows for a distinction between an earning penalty for all arts graduates and the earning penalty for 'drop-out artists'.

Social Background

According to Robert Frank, the differences between graduates in their entry-level jobs are small (1998, p. 217-218). Neither individual talent nor other indicators of productivity are clearly observable for employers in the first rounds, and the formal qualifications of graduates do not vary much.[17] Yet even these small differences between individuals can snowball into a large dispersion of achievements later in a career. Winner-take-all theory is flexible with regard to what constitutes the small differences between individuals. Family background and social support are resources that potentially lead to diverging careers in the field of arts and culture. Artists with a background in the cultural sector are likely to have more resources, a better network or potentially more favourable artists' genes than artists without such a background. In a model of relative competition it can therefore be expected that artists with a favourable family background have a more favourable career.

In the human capital model, factors unrelated to measures of individual quality are treated as exogenous. Productivity is an intrinsic quality that can be used in the production process, like physical capital. There is *a priori* little reason to assume that one individual is more productive than another outside the differences in career investments. Human capital theory thus takes a different stance towards the potential influence of social background. Children of privileged parents will more often be found in privileged schools (including art colleges), because they are able to pay more for their education. However, after the completion of education, human capital theory predicts comparable careers for graduates with and without favourable social characteristics.

Career Characteristics

If the winners in the cultural sector are sorted out in rounds, as in a tournament, strong effects of career characteristics – in particular government subsidies and working abroad as an artist -

can be expected. Governments in Western Europe intervene extensively in the arts market. In the Netherlands, an extensive system of grants, prizes, commissions and subsidies for individual artists exists.[18] These interventions can impact on perceptions of an artist's quality and, in turn, on their career development. The Dutch government, for example, cites artistic quality as the primary criterion for awarding grants to individual artists. Panels of 'experts' from the cultural sector take the decisions whether or not to provide an artist with a grant. As a result, receiving grants from the government is itself an important signal of quality to the art-world. Working abroad as an artist is another important quality-signal. These two factors can be seen as part of the sorting system that produces winners.

If, on the other hand, the model of human capital and full information of individual artists holds, there is no reason to assume that the individually granted artists or artists who have worked abroad perform differently in terms of wages or earnings. The government schemes provide a visible way of getting ahead, but are not the only route to fame. Other ways to a prosperous career exist in the arts, for instance by focussing on the private market rather than the government schemes.

School and Study Characteristics

The school and study characteristics of graduates may also influence their careers. School characteristics (the topic of study as well as the location, prestige and curriculum of the educational institute) relate to the school that the graduate has attended. Study characteristics (the length of the study programme, whether a student was full-time or part-time, and the extent and nature of extra-curricular activities) relate to the individual schooling career of the graduate.

In a human capital setting, there is little reason to assume that school characteristics are important factors in explaining career success. Human capital theory predicts that a large number of privileged students will be found in favourable schools, because these students can invest more in their education. However, after the completion of the studies, human capital theory has little to say about career differences. The *ex ante* prediction is that graduates with similar amounts and types of human capital will have similar careers. Human capital theory does, on the other hand, predict career dispersion between graduates who have had different study careers: students who have acquired more human capital at school are likely to have more successful careers.[19]

Models of relative competition predict the opposite: small or no effects of study characteristics and strong effects of school-related variables. In a world of relative competition, it is neither the content nor the length of the education that matters, but rather the signal that education provides towards employers and the market. Therefore, the prestige of the school that a graduate has attended (a *school* characteristic) is likely to be much more

important for his career than his study characteristics. In arts education, there are strong differences in the prestige of the schools. This can for instance be seen from the number of applications that the schools receive, or from the background and side-jobs that are hold by the staff-members of the institutions.[20]

In summary, if the winner-take-all mechanism best describes the labour market entrance of arts graduates, the following will be observed in data:

1. Increased inequality over time.
2. A strong earnings-penalty for those dropping out of the profession.
3. Positive effects of factors like social environment on achievements over time.
4. Positive effects of received grants and labour market activities abroad on individual careers.
5. No or small effects of study characteristics; strong effects of school characteristics.

If, however, the human capital model of labour market entrance best describes the labour market entrance of the graduate artists, the following should hold:

1. Little change (or a small drop) in inequality over time.
2. No earnings-penalty for those who shift to jobs outside the cultural sphere.
3. No effects of social background on achievements, rewards or wages.
4. Comparable careers for granted and not-granted artists and for artists working in the Netherlands and abroad.
5. Strong effects of study characteristics; no or small effects of school characteristics.

How these Hypotheses are Tested

The hypothesis regarding increased (in)equality is tested by comparing inequality indices for wages and earnings at both waves of the panel. For reasons of completeness, the inequalities in the number of hours that artists work are also included. Throughout the chapter, gross wages and earnings are studied. These are not distorted by the tax system ant thus directly represent how the market values the labour of the graduates.

To test for the occurrence of an earnings-, or success-penalty for those leaving (or not entering) the profession, dummies for the sector in which the artist is employed (outside the arts, or both inside and outside the arts) are included in both wage and artistic success equations. To test for possible effects of social background, dummy-variables relating to whether the parents of the graduate work in the cultural sector and to earlier education are used. School and study effects are studied in a similar way – by including a number of relevant characteristics. The effects of government intervention are studied by including

dummies indicating whether the graduate artists have received a grant from the government. Similarly, dummies for having worked abroad are used to test the overseas reputation effect.

The question of whether the same models are applicable to both artistic and economic success will be answered by comparing the results of identical regression models with respectively wages and artistic success as dependent variable. If these regression models show similar results in terms of significant predictors of success, the idea that the two concepts can be understood with one theory is supported. If however the concepts are explained by different variables in each of the empirical models, there is reason to look for different theories in the explanation of the two concepts.

3.4 Data and Description

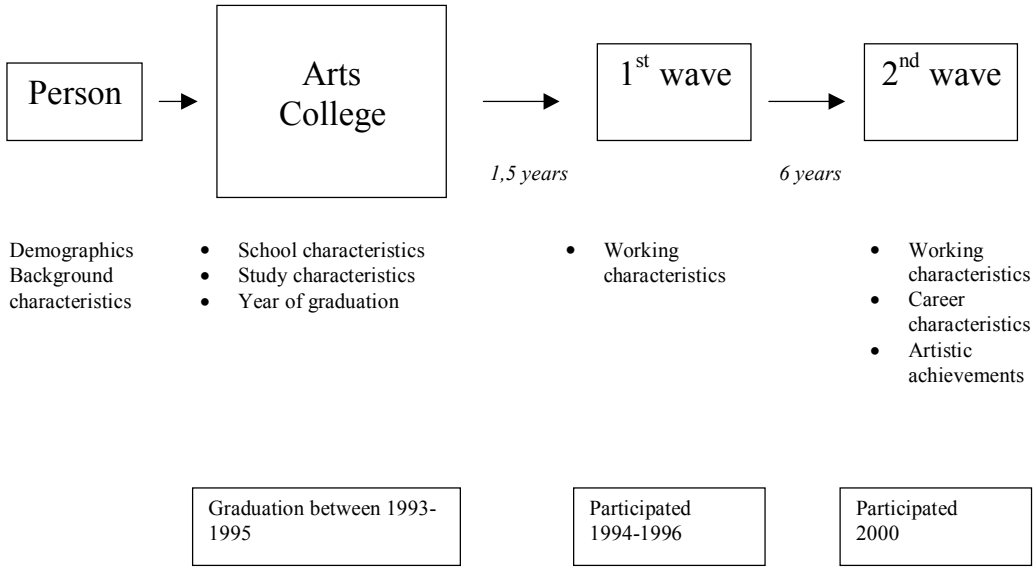
The data used for the analysis come from two sources. The first is the national school leavers survey that is carried out annually by the Research Centre for Education and the Labour Market (ROA) of the University of Maastricht (Allen & Ramaekers, 1999). This national survey, of which the arts-graduates survey is a specific part (see for instance Rengers, 2000), measures the labour market situation of graduates 1.5 years after graduation. The second data source is a survey of a sub-sample of arts graduates who earlier participated in the national survey (on average 6 years after graduation).

Since 1995, ROA has monitored the labour market status of arts and culture graduates separately from other higher vocational education graduates. Previously, arts graduates were monitored together with all other graduates. After complaints from the cultural field and from art colleges that the ROA questionnaire failed to capture the full picture of the labour market situation of graduate artists, ROA developed a questionnaire specifically for arts graduates. There also was a political component in the plea to monitor the arts separately. The direct comparison of art graduates with graduates from other institutes of higher vocational education revealed a bleak picture of the labour market for graduate artists. This in turn placed political pressure on art colleges, since the government seriously considered restraining the number of graduates as a response to the troublesome labour market situation.

This chapter focuses on the cohorts of arts graduates who entered the labour market in the years 1993, 1994 and 1995. Combining the surveys results in a database of 3,255 respondents.[21] The addresses of 1,910 of these graduates were available for the second wave, but a large group of graduates could not be contacted because the information was no longer accurate. Of the 798 graduates who were contacted personally, 542 (68%) participated. Based on the responses at the first wave, one significant difference between the respondents could be detected: the respondents at both waves are on average 1,5 years older than the respondents for the first wave only. However, the groups do not differ in terms of gender, art type, year of graduation and most importantly labour market situation at T1.

Figure 3.3 summarises the data, the model and the clusters of variables relevant to the analysis.

Figure 3.3 Labour Market Entrance of Graduates



Data on artistic achievements and certain career characteristics are only available at the second wave. Working characteristics are available for both waves. Data on individuals and schools were initially obtained during the first wave, but checked and updated with family characteristics during the second wave.

Description of the Data

Table 3.1 describes the independent variables used in the analysis, grouped under the relevant headings.

The table shows that nearly 60 percent of arts graduates in the study are women. The artists in the sample graduate on average at the age of 28.5, which is 1.5 years older than graduates in other fields of higher vocational education (Rengers, 2000). This finding is interesting in itself. Artists are, contrary to popular belief, usually highly trained professionals, who have completed a longer and often more expensive schooling career than other graduates in higher education. The length and demands of their educational career is hardly compatible with the idea of artists as gamblers who try their luck in the arts, especially taking into account that most professional artists in the Netherlands have completed arts education.[22]

Table 3.1 Description of Independent Variables

Variables	Mean	*Standard error*
Demographics		
Female	0.59	
Age at T1	30.08	*6.41*
Log of age at T1	3.39	*0.19*
Foreigner	0.02	
Has a partner at T1	0.47	
Has children at T1	0.16	
Has a partner at T2	0.59	
Has children at T2	0.32	
School characteristics *		
Visual art graduate	0.66	
Studied in region A	0.06	
Studied in region B	0.28	
Studied in region C	0.18	
Studied elsewhere in the Netherlands	0.48	
Study Characteristics		
Duration of studies (months)	55.63	*14.88*
Log of duration of studies (months)	3.97	*0.34*
Parttime student	0.19	
Extra-curricular activities	0.22	
Relevant working experience while at school	0.49	
Background characteristics		
Higher education previous to art college	0.45	
Father worked in the cultural sector	0.09	
Mother worked in the cultural sector	0.06	
Year of graduation		
1994	0.14	
1995	0.39	
1996	0.47	
Career characteristics at T2		
Received government subsidy	0.16	
Worked abroad	0.22	
N (for all variables)	542	

* Due to privacy arrangements between the schools and the ROA, it is not allowed to depict the cities or schools where the artists graduated

Table 3.1 also shows selected school and study characteristics. The school characteristics relate to the topic of study (visual arts versus performing arts) and to the location of the school. Two-thirds of the respondents have studied visual arts. Almost half of the respondents completed their degree outside the four large cities in the Netherlands. Turning to the study characteristics, it appears that artists spend on average over 4.5 years at arts education before receiving their degree. Almost half of the graduates have relevant work experience while at school. Around four-fifths (81%) were full-time students, and nearly a quarter (22%) participated in extra-curricular activities such as managing a student union.

Previous education and parents' profession are included as background characteristic of the graduate artists. Almost half of arts graduates had followed 'higher education' before going to

arts education. The degrees that give access to university are coded as 'higher education'; all other vocational degrees serve as the reference category.[23] Table 3.1 also shows that 9% of graduates' fathers and 6% of graduates' mothers are or were employed in the cultural sector. Finally, Table 3.1 shows that most graduates in the sample received their degree in 1996, that 16% received government subsidy at least once, and that 22% of the graduates had worked abroad.

Table 3.2 Description of Work Characteristics

Variables	Mean	*Standard error*	N
T1:			
Not employed	0.30		542
Works in the Cultural Sector	0.50		542
Works outside the Cultural Sector	0.12		542
Works in and outside the Cultural Sector	0.08		542
Hours worked	32.14	*16.26*	405
Log of hours worked	3.33	*0.65*	398
Wage-level	16.35	*12.89*	360
Log of wage level	2.63	*0.78*	337
Gross earnings	2192.10	*1669.96*	371
Log of gross earnings	7.47	*0.90*	344
T2:			
Not employed	0.11		542
Works in the Cultural Sector	0.63		542
Works outside the Cultural Sector	0.13		542
Works in and outside the Cultural Sector	0.13		542
Hours worked	34.24	*15.50*	476
Log of hours worked	3.41	*0.55*	476
Wage-level	25.66	*13.15*	403
Log of wage level	3.11	*0.55*	403
Gross earnings	3746.57	*2201.09*	407
Log of gross earnings	8.05	*0.67*	407
Artistic success at T2			
Media attention in 12 months prior to T2	0.47		542
(Perceived) judgement of own reputation among institutions and individuals in the art world at T2	3.69	*0.34*	542

Work Characteristics

Table 3.2 depicts working characteristics of graduate artists at the first and the second wave, as well as two measures of artistic success (for the second wave only).[24] Work characteristics are separated into hours worked, wages and gross earnings. The table also depicts whether and where graduates are employed.

The table shows that at the first wave, 30% of the graduates is not employed. These artists are in school, unemployed, work without receiving payment for their work, or do not participate in the labour market for other reasons (such as health problems, pregnancy and occupied as

houseworker). Half of the graduates works in a cultural profession; 12% combines a cultural profession with work in the outside labour market and 8% works entirely outside the cultural sector. The average gross monthly earnings of graduates who are employed is close to 2,200 Dutch guilders; a gross hourly wage of 16.35. The average working week for these employed graduates is slightly over 32 hours. Gross wage levels are analysed because these reflect the market valuation of the productivity of the graduates. A larger proportion of graduates (90%) is employed at the second wave. These second wave employed graduates have longer working weeks (over 2 hours more on average) and have significantly higher hourly wages and gross monthly earnings.

Table 3.2 includes two measures of artistic success at the second wave. Close to half (47%) of all respondents was mentioned in the media in the 12 months prior to interview. Artists' perception of their own reputation was measured on a scale from 1 to 5 ranging from 'well esteemed' among institutions and individuals in the art world to 'completely unknown'. On average, artists perceived their reputation to be slightly above 'neutral'.

The most interesting implication of the data in Table 3.2 is that inequality among graduates decreases between T1 and T2. This can be seen from comparing the standard errors of the logs of earnings, wages and hours worked at both waves. Further evidence for this can be found in Table 3.3, in which two other inequality indices – the Gini-coefficient and the Theil entropy measure - are presented for both waves. All three inequality measures indicate a decrease in the inequality of artists' wages, earnings and hours worked.[25] Another statistic that supports this is the increased labour force participation of graduate artists. The labour market experience of artists can thus be characterised as converging rather than diverging over time, which is consistent with the human capital approach.

Table 3.3 Gini-Coefficients and Theil Enthropy Measures at T1 and T2

	Variables	Gini	Theil
T1:	Hours Worked	0.2703	0.1243
	Wage-level	0.3228	0.2005
	Gross Earnings	0.3679	0.2277
T2:	Hours Worked	0.2452	0.1042
	Wage-level	0.2627	0.1197
	Gross Earnings	0.3010	0.1573

3.5 Results

This section presents the statistical analysis of wages and artistic success of graduates. The model for the statistical analysis of the data is introduced. An analysis is undertaken of the work decisions of graduate artists, and the results are analysed in terms of wages and artistic success. The section concludes with an interpretation of the results in terms of the hypothesised outcomes.

Statistical Model

After graduating, most artists in the sample enter the labour market. If they do not enter the market, they may decide to work voluntarily, to pursue further education or simply eschew formalised labour (for example, to become a housewife or househusband). To account for the relation between the decision to enter the labour market and observed wages, a two-step model, related to Heckman's selection model is estimated (see Maddala, 1983). First, the decision of an individual to enter the labour market is modelled in a probit model. From this equation, a selection variable (the 'inverse Mills ratio') is derived. The inverse Mills ratio is computed by taking the residual of the (probit) selection model. This residual contains the effect of all unobserved variables on the decision to enter the labour market. This residual or selection variable is used in the wage equation at the second stage of the analysis. The technique corrects for selectivity that arises from individuals who enter the labour market after schooling to earn a higher wage. The two-stage procedure is applied twice – to T1 and to T2.

Labour Market Entrance

The analysis of labour market entrance, from which the selectivity correction term is derived, is set out in Table 3.4. The same variables are used at both waves to make the analysis comparable. The only variables that differ between waves are the partner and children variables.

The probit analysis shows similar results for both waves. The decision to enter the labour market is negatively influenced by the age of the graduate and (at T1) by having children. Graduate artists with a partner are more likely to pursue and find employment. All together, school characteristics display little influence on the decision to enter the labour market. The duration of the studies (a *study characteristic*) is negatively correlated with the probability of working: graduates with a longer study career are less likely to be employed. Background characteristics have little or no influence. The year of graduation significantly affects the labour market entry at T1, but has no effect at T2.

Table 3.4 Probit Estimates of Labour Market Entrance at Both Waves: Are the Graduated Artists Employed at T1 and T2?

Variables	First wave (T1)		Second wave (T2)	
Constant	5.880	*1.768***	9.510	*2.227***
Demographics				
Female	-0.188	*0.127*	-0.298	*0.173~*
Log of age at graduation	-0.772	*0.443~*	-1.601	*0.520***
Foreigner	-0.326	*0.459*	0.087	*0.664*
Has a partner	0.762	*0.138***	0.659	*0.190***
Has children	-0.613	*0.191***	-0.218	*0.211*
School characteristics				
Visual art graduate	-0.210	*0.150*	-0.577	*0.227**
Studied in Region A	0.306	*0.289*	0[a]	
Studied in Region B	0.070	*0.155*	-0.060	*0.191*
Studied in Region C	0.329	*0.189~*	0.301	*0.265*
Studied elsewhere in the Netherlands	0		0	
Study Characteristics				
Log of duration of studies	-0.814	*0.230***	-0.557	*0.314~*
Parttime student	0.129	*0.213*	0.186	*0.257*
Extra-curricular activities	0.103	*0.153*	-0.112	*0.194*
Relevant working experience while at school	0.314	*0.129**	0.133	*0.171*
Background characteristics				
Higher education previous to art college	-0.141	*0.129*	-0.096	*0.169*
Father worked in the cultural sector	-0.112	*0.213*	-0.446	*0.263~*
Mother worked in the cultural sector	-0.217	*0.252*	0.307	*0.445*
Year of graduation				
1994	0		0	
1995	0.397	*0.199**	-0.177	*0.291*
1996	0.460	*0.192**	-0.331	*0.272*
Other Statistics				
N	542		542	
-2 log likelihood	-287.373		-152.361	

Standard errors in italics; ~ significant at 10%; * significant at 5%; ** significant at 1%
[a] All 33 graduates from region A were employed at T2

Wage at the first wave

Table 3.5 displays the results of a regression of the log of gross wage at T1 against a number of variables and the inverse Mills ratios.

The table indicates that arts graduates working both inside and outside the cultural sector earn a lower wage (about 25% lower) than graduates working inside the sector only. Graduates working outside the sector do not differ in their wage level from graduates who work inside the sector.

Table 3.5 Regression Analysis of the Log of Gross Wage at T1 with Selectivity Correction

Variables	Effects	
Constant	6.823	*1.217***
Working Characteristics at T1		
Works in the Cultural Sector	0	
Works outside the Cultural Sector	0.184	*0.135*
Works in and outside the Cultural Sector	-0.256	*0.112**
Demographics		
Female	-0.014	*0.084*
Log of age at graduation	-0.876	*0.301***
Foreigner	0.364	*0.433*
School characteristics		
Visual art graduate	-0.446	*0.097***
Studied in region A	0.544	*0.173***
Studied in region B	0.182	*0.106~*
Studied in region C	0.226	*0.117~*
Studied Elsewhere in the Netherlands	0	
Study Characteristics		
Log of duration of studies (months)	-0.281	*0.116**
Part-time student	0.457	*0.146***
Extra-curricular activities	0.047	*0.099*
Relevant working experience while at school	0.040	*0.085*
Background characteristics		
Higher education prior to art college	0.013	*0.087*
Father worked in the cultural sector	0.270	*0.147~*
Mother worked in the cultural sector	-0.066	*0.178*
Year of graduation		
1994	0	
1995	-0.103	*0.150*
1996	-0.197	*0.146*
Selection Term		
Inverse mills ratio (T1)	0.282	*0.139**
Observations	337	
R-squared	0.170	

Standard errors in italics; ~ significant at 10%; * significant at 5%; ** significant at 1%

Visual artists earn less per hour. Graduates from schools in large cities earn higher wages at the first wave. Particular study characteristics also display a correlation with wage level: part-time students earn higher wages and students who took more time to complete arts college earn a lower wage. Little or no effects are found for background characteristics, nor for the year of graduation. Finally, the inverse mills ratio correlates positively with the wage. This implies that artists, who are likely to earn a high wage, are also more likely to enter the labour market at T1.

Wage at the Second Wave

Table 3.6 displays the results of a regression of the log of gross wage at the second wave. Two specifications of the model are presented: first, a specification in which the same variables are used as for the analysis of the wage-level at T1; second, a number of career

variables are included, such as subsidy history, overseas work, and incidence of employment at T1.

One conclusion that can be drawn from Table 3.6 is that – as already suggested in the descriptive analysis of the labour market entry earlier – inequality between graduates decreases between T1 and T2. This finding is reinforced by the observation that fewer variables influence the wage level, and that the selectivity term no longer significantly influences the observed wage level at T2.[26]

Some of the same variables explain wage differences in this regression as well as the earlier regression. Graduates working both inside and outside the cultural sector earn a lower wage (nearly 20% less than graduates working only in the sector) at the time of the second wave. Some school characteristics are also important at T2. Again, visual artists are found to earn less than performing artists, although the difference has reduced. Region A and possibly region C graduates earn a better wage at T2. Artists who received a subsidy or who have worked abroad are not different with respect to their hourly earnings. Finally, those artists who were already employed at T1 earn around 25% more at T2 than graduates without employment at the first wave.

The analyses of wage rates reveal no differences between males and females, which are broadly documented in other surveys of artists. However, if monthly earnings are studied, women's total income is about 20 per cent lower than men's.

Artistic Achievements

In tables 3.7 and 3.8, two measures of artistic success at T2 are analysed with the same set of variables as the wage at T2 in order to determine whether similar models can explain the two measures. Table 3.7 is a regression analysis with the perceived reputation of the graduate as the dependent variable. Table 3.8 presents a probit analysis with the appearance of the artists in the media in the year previous to T2 as the dependent variable. To ensure comparability, the models are based on the same sample of 484 graduate artists who were employed at T2. [27]

It is clear from tables 3.7 and 3.8 that most of the independent variables have little influence on the artistic success of graduates. Apparently, the mechanisms that effect artistic success differ from those that effect economic or financial success. With regard to the few factors that appear to be of some influence, it seems that: 1) graduates who work inside the cultural sector have more artistic success than those working outside the sector, and more artistic success than graduates who combine work both inside and outside the sector; 2) performing artists are slightly more likely to be artistically successful; and 3) most interestingly, career variables are significant in understanding artistic success. Specifically, subsidised artists and artists who were employed abroad score higher on the artistic career ladder.

Table 3.6 Regression Analysis of the Log of Gross Wage at T2 with Selectivity Correction

Variables	Model 1		Model 2	
Constant	3.662	*0.975***	3.726	*0.965***
Working Characteristics at T2				
Works in the Cultural Sector	0		0	
Works outside the Cultural Sector	0.047	*0.080*	0.049	*0.079*
Works in and outside the Cultural Sector	-0.196	*0.077**	-0.188	*0.077**
Demographics				
Female	0.016	*0.060*	0.010	*0.061*
Log of age at graduation	-0.031	*0.230*	-0.111	*0.229*
Foreigner	-0.258	*0.191*	-0.252	*0.189*
School characteristics				
Visual art graduate	-0.175	*0.073**	-0.182	*0.073**
Studied in region A	0.267	*0.114**	0.273	*0.112**
Studied in region B	0.098	*0.069*	0.100	*0.068*
Studied in region C	0.138	*0.085*	0.143	*0.084~*
Studied Elsewhere in the Netherlands	0		0	
Study Characteristics				
Log of duration of studies (months)	-0.087	*0.089*	-0.068	*0.087*
Parttime student	0.117	*0.094*	0.116	*0.092*
Extra-curricular activities	0.111	*0.068*	0.084	*0.068*
Relevant working experience while at school	0.131	*0.058**	0.112	*0.057~*
Background characteristics				
Higher education prior to art college	-0.044	*0.058*	-0.030	*0.057*
Father worked in the cultural sector	0.171	*0.106*	0.147	*0.105*
Mother worked in the cultural sector	0.015	*0.110*	0.056	*0.109*
Year of graduation				
1994	0		0	
1995	-0.129	*0.091*	-0.194	*0.092**
1996	-0.073	*0.095*	-0.153	*0.096*
Selection term				
Inverse mills ratio (T2)	-0.702	*0.498*	-0.460	*0.494*
Career variables				
Received government subsidy			-0.038	*0.075*
Worked abroad			0.017	*0.066*
Was employed at T1			0.249	*0.063***
Observations	403		403	
R-squared	0.14		0.18	

Standard errors in italics; ~ significant at 10%; * significant at 5%; ** significant at 1%

The Hypotheses

What do these results say about the hypotheses that were formulated in section 3.3? First and foremost, the finding that inequality in graduates' wages and earnings decreases between T1 and T2 strongly supports the human capital approach to career progress. At an aggregate level, arts graduates' labour market situation appears to converge. At the level of the individual artist, most findings also support the predictions of the human capital approach. There is for instance no support for the existence of an earnings penalty among graduates who find employment outside the cultural sector. Graduate artists who work *both* inside and

outside the cultural sector, however, do earn a lower wage rate. Furthermore, there is no evidence that background characteristics are important for explaining artist wage-levels at either T1 or T2. The same holds for government intervention - the wages or earnings of subsidised artists do not differ in significantly from artists who did not receive government support.

Table 3.7 Regression Analysis of the (Perceived) Judgement of Own Reputation Among Institutions and Individuals in the Art World at T2

Variables	Effects	
Constant	3.747	*8.25***
Working Characteristics at T2		
Works in the Cultural Sector	0	
Works outside the Cultural Sector	-0.121	*2.73***
Works in and outside the Cultural Sector	-0.115	*2.61***
Demographics		
Female	0.005	*0.14*
Log of age at graduation	0.061	*0.55*
Foreigner	0.330	*2.79***
Study characteristics		
Visual art graduate	-0.015	*0.41*
Studied in Region A	-0.007	*0.11*
Studied in Region B	-0.020	*0.50*
Studied in Region C	0.050	*1.14*
Studied elsewhere in the Netherlands	0	
School Characteristics		
Log of duration of studies (months)	-0.065	*1.43*
Part-time student	0.009	*0.17*
Extra-curricular activities	0.007	*0.18*
Relevant working experience while at school	-0.031	*0.97*
Background characteristics		
Higher education prior to art college	-0.027	*0.84*
Father worked in the cultural sector	0.063	*1.11*
Mother worked in the cultural sector	0.022	*0.35*
Year of graduation		
1994	0	
1995	-0.064	*1.26*
1996	-0.015	*0.29*
Career variables		
Received government subsidy	0.087	*2.03**
Worked abroad	0.131	*3.41***
Was employed at T1	0.063	*1.78~*
Observations	484	
R-squared	0.11	

Standard errors in italics; ~ significant at 10%; * significant at 5%; ** significant at 1%

Table 3.8 Probit Analysis of the Media Attention in the 12 Months Prior to T2

Variables	Effects	
Constant	0.465	*0.26*
Working Characteristics at T2		
Works in the Cultural Sector	0	
Works outside the Cultural Sector	-0.571	*3.07***
Works in and outside the Cultural Sector	-0.198	*1.11*
Demographics		
Female	-0.010	*0.08*
Log of age at graduation	-0.087	*0.20*
Foreigner	-0.374	*0.78*
School characteristics		
Visual art graduate	-0.342	*2.41**
Studied in Region A	-0.076	*0.29*
Studied in Region B	-0.239	*1.50*
Studied in Region C	-0.191	*1.07*
Studied elsewhere in the Netherlands	0	
Study characteristics		
Log of duration of studies (months)	-0.052	*0.28*
Part-time student	0.026	*0.12*
Extra-curricular activities	0.188	*1.22*
Relevant working experience while at school	0.038	*0.30*
Background characteristics		
Higher education prior to art college	-0.126	*0.97*
Father worked in the cultural sector	0.373	*1.60*
Mother worked in the cultural sector	0.024	*0.10*
Year of graduation		
1994	0	
1995	0.333	*1.62*
1996	0.118	*0.58*
Career variables		
Received government subsidy	0.395	*2.26**
Worked abroad	0.629	*4.03***
Was employed at T1	-0.006	*0.04*
Observations	484	
-2 log likelihood	-299.911	

Standard errors italics; ~ significant at 10%; * significant at 5%; ** significant at 1%

The findings with regard to study characteristics are less clear. In common with human capital theory, it appears that graduate artists who build up relevant work experience at school earn a higher wage at T2. Perhaps counter intuitively, the length of study correlates *negatively* with wage at the first wave. No effect of extra-curricular activities on the gross wage level is found. In contrast to the predictions of human capital theory, school characteristics are found to relate to the wage levels of the graduate artists, particularly at the first wave. Arts graduates from regions A and C, with two of the more prestigious art colleges in the Netherlands, appear to earn a higher wage than their colleagues (or competitors). Finally, it appears that visual artists earn less per hour than performing artists. The impact of these school effects is not predicted by the human capital approach to careers. Such school effects point to a winner-take-all market structure.

A different picture arises from the analysis of artistic success. This study reveals that most of the variables chosen are not relevant for explaining the media attention or reputation of artists. There are, however, certain exceptions. Not surprisingly, graduate artists working outside the sector and graduate artists combining work inside and outside the sector are less successful artistically. Furthermore, it appears that subsided artists and artists who worked abroad are more likely to be successful. The effects of these career variables – as well as the finding that none of the human capital variables has any influence – suggest that the winner-take-all approach may be a more accurate predictor of artistic achievements than for economic success.

3.6 Discussion

This analysis of the first six years of the careers of Dutch graduate artists has revealed two trends. First, with respect to economic indicators, it appears that the careers of graduate artists converge rather than diverge. Six years after graduation – at the 'second wave' of this study - inequalities in wages, earnings and working hours are smaller than 1.5 years after graduating (at the 'first wave). The second trend is that artistic achievements develop differently; the analysis suggests that these achievements diverge in the first years of a career.

The research has interesting theoretical implications. It finds that the two main theoretical approaches to modelling labour markets are more efficient for different indicators of success: indicators of 'economic' or financial success are best predicted by the human capital model; indicators of 'artistic' success with the winner-take-all model.

This fundamental finding has critical implications for arts economics and arts policy research. The theoretical models are specialised: they work efficiently within certain domains; they do not work well outside these domains. There is little evidence to suggest that applying the models simultaneously would be a fruitful way of undertaking a fully comprehensive analysis of arts labour markets. Instead, the study suggests that each should be applied to the indicators and variables to which they are best suited. Human capital theory remains the best means for understanding 'economic' success, while a winner-take-all model is a better means for understanding and interpreting artistic success. Further, to gain a fully comprehensive understanding of artists' labour market participation, the results here imply that *both* models should be applied, not one.

Notes

[1] Definitional issues are treated further on in the text. A useful overview of these issues can be found in Towse (2000) and Caves (2000). For an excellent critique on measuring the size and impact of the cultural sector, see Madden (2001). Benhamou (2001) discusses the growth of both the number of jobs and the number of workers in the sector in both Great Britain and France.

[2] The lack of empirical data partly explains why so many (contradictory) theories coexist. Judith Blau, for instance, stated in 1989 that the sociology of the arts - in spite of its theoretical relevance – 'has lagged behind other fields in sociology in adopting state-of-the-art techniques of data-collection and quantitative analysis' (Blau, 1989, p. 286). David Throsby, a leading scholar in the economics of art and culture, has made similar claims. In his review of cultural economics for the Journal of Economic Literature, Throsby suggests that: 'Cultural economists will need to pay greater attention to the collection of new data in future if they wish their work to be taken seriously by other researchers or to be useful to policy makers, organisations or individuals working in the field' (Throsby, 1994, p. 26).

[3] In this chapter the terms artist, cultural worker and graduate from art college coincide.

[4] Other examples are tournament models, as well as screening or signalling models and labour queue theory.
[5] This is far from trivial. Indeed, policies with regard to the arts and arts graduates often appear to be based on a stereotypical image of artists' careers. Many policy-makers and even educational institutions treat the entire group of artists as having very bleak labour market prospects. This is to some extent true for visual artists who commonly supply the market directly, but it fails to describe the more favourable labour market entry of most other graduates, such as design artists, musicians and actors.

[6] Having a professional degree in the arts is the seventh possible criterion for defining artists as listed by Frey and Pommerhene (1989).

[7] This rough categorisation is broader than Throsby's (1996 a, b) distinction between 'art-work', 'art-related work' and 'non-arts work'. There are at least two reasons to combine Throsby's first two categories under the category 'cultural professions'. Empirically, the distinction between the first two categories is sometimes vague. Theoretically, problems can occur, since arts colleges provide numerous degrees that are aimed at 'art-related' professions in Throsby's terms, but that belong to the preferred 'cultural' working field from the perspective of schools, graduates and policymakers. Clear examples are degrees for art teachers and art managers.

[8] These exist of (generic or specific) abilities, schooling investments, work experiences, and all other intrinsic traits that have market value to employers.

[9] Obviously, on the macro-level, the returns to human capital are influenced by aggregate supply of and demand for individuals with various amounts and types of human capital. In labour economics, human capital is nevertheless treated as a purely individual trait.

[10] This equation usually takes the form of a regression-like analysis with, on the left-hand side wages, earnings, unemployment, or promotions and, on the right hand side factors such as years of schooling, sex, on-the-job training and age.

[11] This chapter focuses on winner-take-all theory (Frank and Cook, 1995) and tournaments models (Rosenbaum, 1984, Lazear, 1995 & 1998). In many respects however, models of screening (Layard and Psacharapoulos, 1973), signalling (Spence, 1973) as well as job-competition and labour queues (Thurow, 1975) also consider the relative position of graduates for understanding career progress.

[12] Artistic super-stardom – where small numbers of artists dominate a field of artistic production – has been topic of a number of theoretical studies in economics. See for instance Adler (1981), Rosen (1985) or MacDonald (1988).

[13] Richard Peterson and Howard White found a similar structure in the careers of Nashville studio musicians (1989, p. 243). They use the term 'simplex' to describe a number of mechanisms among a small group of privileged artists – including restricted competition, ranking, favours and the participation in social activities - that 'collectively serve to stabilise the job lives of workers exposed to conditions of near-perfect competition' (1989, p. 254).

[14] The application of this metaphor to the social sciences can be traced back to Merton (1968).

[15] These frictions are likely to be of relevance for beginning artists.

[16] The influx of artists would also lead to a small downward pressure on wages in the other sectors of the economy. Given the size of the cultural sector, however, the effect is likely to be inconsequential.

[17] In this chapter, the formal qualifications of graduates do not differ by definition, since the sample was drawn from an equally educated population.

[18] In its focus on proven quality, the government has been criticized for having institutionalised a 'winner-take-all' reward system that is incompatible with the equity and equal access arguments the government itself promotes. The fact that almost most famous Dutch artists are rewarded extensively under the government scheme gives anecdotal evidence for this assumption.

[19] An effort to test similar predictions for Dutch data is for instance Groot and Oosterbeek (1994).

[20] In the Dutch educational system, these differences in prestige are not related to educational fees. All schools are financed by the government and cost the same. Direct competition between schools for (potential) students is forbidden by law.

[21] There is no information available on how selective the group of respondents at T1 is.

[22] Estimates of the percentage of professional artists without a completed degree in the Netherlands differ between studies, but on average 90% of the artists in the visual and performing arts have completed arts education. Of the remaining 10%, half have been to an arts college but drop out before graduation, and the others are self-trained or received their training outside the regular system of higher education.

[23] In the Dutch educational system there is a division between university and higher vocational education (HBO). Certain degrees (HAVO and MBO) only give access to higher vocational education, whereas other degrees (VWO and HBO) give access to both university and higher vocational education. This division is also applied in this chapter.

[24] See for instance De Nooy & IJdens (1994) or Crane (1998) for other empirical measures of artistic success.

[25] For an elaborate treatment of various inequality measures, see Cowell (1995).

[26] The group of employed artists at T2 is less selective in terms of their (potential) wage, which also indicates a decrease in inequality.

[27] Applying other selections of graduates doesn't alter the results substantially.

4 Private or Public? How Dutch Visual Artists Choose between Working for the Market and the Government [*]

This chapter concerns the consequences of subsidising art production. Once a government offers grants and subsidies, artists can decide between public and private funding. A joint model of this choice-situation and the related earnings is derived. The model is tested for the case of visual artists in the Netherlands. The analyses show that subsidising artists enhances a winner-take-all tendency for the market at large. Financial success on both the private and the public market appears to be not particularly related to human capital, but to personal characteristics, government recognition and (unobserved) talents.

4.1 Introduction

Strong government influence in the affairs of art sectors is a widespread custom of late twentieth-century western democracies. Although the magnitude of state support differs significantly between countries and art-disciplines (Throsby, 1994b; Zimmler and Toepler, 1996; Schuster, 1985; Hofecker, 1995), there are in general two strategies that governments use to finance and promote the creative arts. On the consumption side, access to the arts is encouraged by subsidising prices of cultural goods, events and activities. Commissioning cultural productions, buying works of art and subsidising and giving grants to individual artists stimulates the production of the arts.

Academics and policy-makers alike have shown a keen interest in understanding and evaluating these art-related government policies and reforms.[1] The main problem however is the availability of appropriate data. More often than not, the data are lacking or far from perfect. This frustrates the evaluation of the policies, since the assessment of the outcome of the policies ultimately requires some form of measurement. Consequently, the debate on policy implementation is largely dominated by ideological arguments. "Subsidising the Muse" is seen as either "good and necessary" or as "bad and destructive" on the grounds of ideology, conjecture or preconception.

This chapter presents new data on arts production. These data enable the study of the impact of several public policies on the supply of creative arts and artistic services more carefully than was previously possible, both in theoretical and in empirical terms. The question under

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[*] This chapter was written with Erik Plug of the Department of Economics, NWO "Scholar", University of Amsterdam and appeared in 2001 in the Journal of Cultural Economics **25 (1)**, pp. 1–20, 2001.

study is how policies of the Dutch government for visual artists influence the labour market situation and allocation decisions of the visual artists. The analysis centres around the theory of artists' labour markets, building on a distinguished tradition within the economics of the arts.[2] The theory is applied to the specific situation of visual artists in the Netherlands and is extended with a model of choice. This approach allows for a breakdown of the question into two levels. The chapter will draw conclusions on the behaviour of individual visual artists, and on the visual arts market at large.

The Dutch situation is relevant for various reasons. First, the Dutch government plays an active role in the market for visual art with special "art-focused" policy instruments. These can be beneficially compared with alternative instruments. Secondly, the policies of the government and their impact on the private market are closely monitored. This is helpful for identifying the part of the market for visual art that is directed by the government, as opposed to the part of the market that is driven privately. Ultimately, this monitoring provides measures of the *impact* of government intervention. These measures are hard to obtain in countries such as the U.K. or the U.S.A., where the role of the government on markets for the arts is smaller and less well documented. The Dutch situation can therefore reveal useful information on government intervention in the arts that is not discernible in other settings or countries.

Two segments of the market for visual arts in the Netherlands will be distinguished: the "private" and the "public". The "private market" is represented by the total demand of all individuals, firms, commercial galleries and non-governmental institutions involved in the arts sector. The "public market" for art production consists of all government measures, aimed at promoting art production and providing earnings to artists, including commissions, acquisitions, grants, subsidies and the public program of art lending. In general, these public measures are not exclusive. Apart from a few prestigious subsidies only available to "top artists", the measures are targeted non-specifically at the entire population of visual artists. In total, government funding makes up about 43 per cent of the total income earned by all artists in the visual arts. The remaining 57 per cent are earned on the private market.

The chapter has the following structure. After an introduction of the Dutch market and the policies applied by the Dutch government (Section 4.2), artists' labour supply is decomposed into time spent on publicly funded arts production and time spent at privately funded arts production (in Section 4.3). Then, disaggregated earnings functions are estimated, following Throsby (1996a, 1996b). The estimation procedure and the specification of the model are specified in Section 4.4. Artists are depicted as earnings maximisers and the earnings estimates are used to model artists' choice between each of the two markets, public and private. The data are described in Section 4.5 (from a recent Dutch survey of visual artists for the period 1993–1996). Section 4.6 examines the results of the analysis. Finally, Section 4.7 discusses policy implications and draws conclusions for the arts market at large.

4.2 The Dutch Market for Visual Art and the Impact of the Government

This section looks at the involvement of the Dutch central government in the working lives of visual artists. After describing Dutch visual arts policies, estimates of the size of market for visual art and of the share of the government in this market are presented and discussed.

Visual Art Policy

The Dutch government has a long tradition of involvement in the visual arts. In earlier days, the government purchased and commissioned works of art to show its splendour and power to the people. Patronising the arts was seen as a status increasing activity for the Dutch government, as was the case in surrounding countries. However, the Dutch government slowly changed its role to one of a "guardian" for artists. Government policies with a social character started to replace the old, status-driven approach. These policies were aimed at alleviating financial deprivation among artists.

After World War II, the *Beeldende Kunstenaars-Regeling* (BKR), or "Measure for Visual Artists" was introduced. The BKR meant to provide the participating visual artists with a secure income that would enable them to work as visual artists without having to suffer from the vulgarities of the market. In return, BKR participants were required to provide works of art to the government. Some BKR works were used for decoration and furnishing of government buildings, while the remaining works were stored and kept away from the market place. The private visual arts market was left relatively free.

This situation of a "normal" private market and a special income measure from the government existed until the 1980s, when the policy came under fire. The number of artists making use of the BKR had increased dramatically during the 1970s, as did the stockpile of art-works produced under the program. The rise in the number of artists using the measure was due to lax qualification criteria and a growth in the number of art students during the 1970s, when the idea that "everybody is an artist" gained popularity. The government had, furthermore, begun to doubt its own (if not anyone's) authority to judge between "good" and "bad" works of art, and failed to halt the rise in artist demand for the BKR by tightening the criteria. This resulted in a large inflow of new "artists" in the scheme and an increasing swell of opposition to the policy. Abroad, the BKR was derided as an example of leftist political correctness in artist policy (Hughes, 1993, p. 200-201).

From 1983 onwards, the BKR was broken down by the liberal-conservative administration that had little sympathy with the social artist measure. Instead, a raft of alternative policy instruments was implemented. The two main grants in the new system are professional costs subsidies and individually granted subsidies. Professional costs subsidies are low-profile subsidies meant to partly cover costs associated with artistic production such as materials and

studio rental. Individually granted subsidies are more prestigious. These are meant for special art projects, travelling and exchanges. The selection procedure is similar to, but significantly more strict than, the procedure for professional costs subsidies. Furthermore, individually granted subsides generally involve more money.

Apart from these new subsidies, an extensive system of commissions and government acquisitions developed over the 1980s. In accordance with the new policy aims, the policies no longer provide assistance regardless of artistic quality. Instead, quality is the decisive criterion: the policy has switched from an *artist policy* to an *art policy*. Artists compete for government funding, rather than being part of a bureaucratic scheme with regular financial transfers. The decisions concerning government funding are decentralised to autonomous foundations that are financed by the state. In the application procedure, artists send in a curriculum and examples of their work and a group of experts then decides on subsidisation. These experts come from inside the artist community: mainly artists, but also critics, gallery owners and art historians. Their decision is based on artistic criteria, such as artistic value, innovative quality and topicality, although there is a great deal of flexibility in the interpretation of these criteria.[3]

The role of the government in the Dutch visual arts sector has thus changed entirely. The BKR was a lump-sum measure with relatively few drawbacks on the rest of the visual arts market, since the works were stockpiled and did not compete with "market-art".[4] The new policies do, however, influence the private market. An artist, who is working on a government assignment, cannot produce for the market. Artists now compete for subsidies, and the requirements for receiving these may very well be different from the criteria for receiving market recognition.

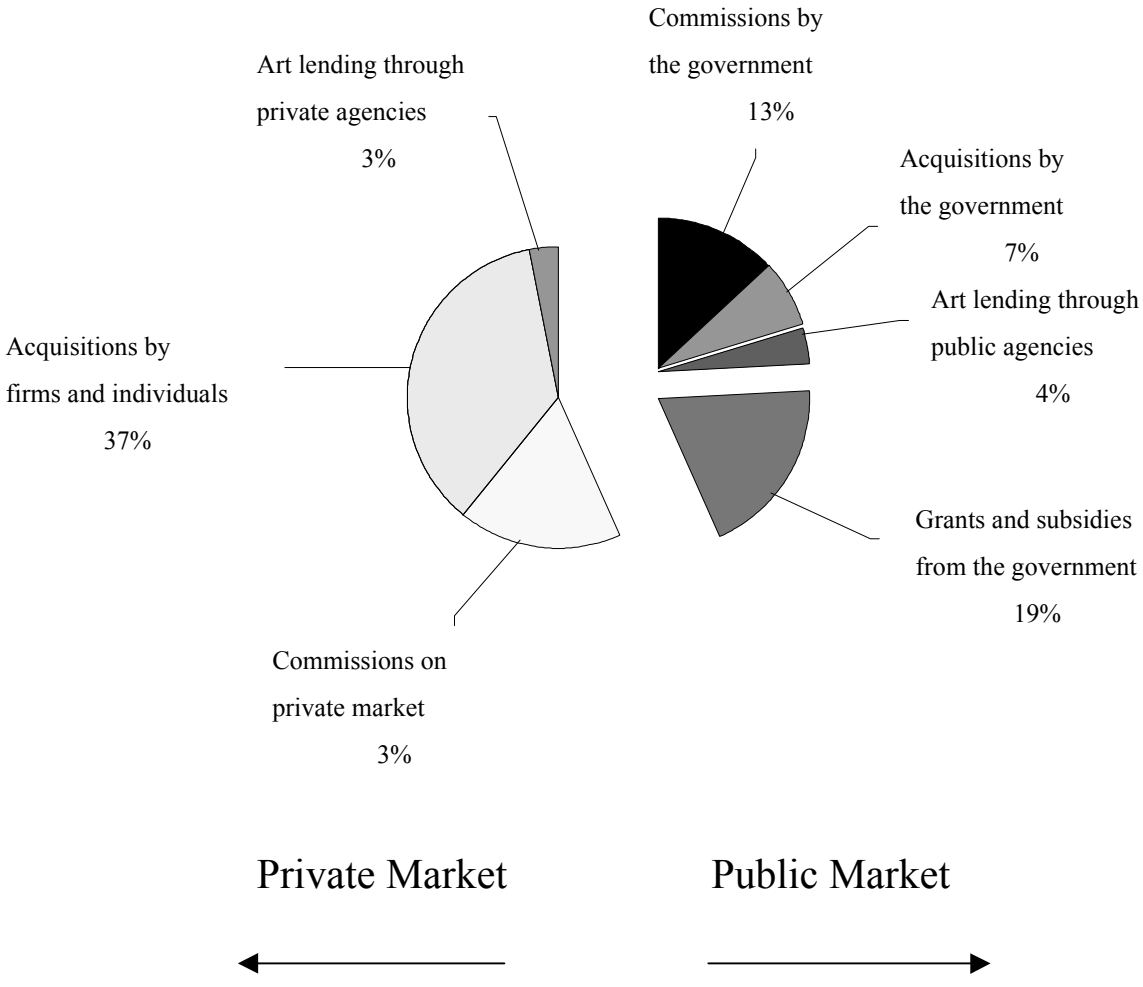
Size and Structure of the Market

Before turning to the analysis, it is important to get some basic insight into today's market for visual arts in the Netherlands: which artists are participating on the market, and how much money is involved? Visual artists in this chapter are defined as actively working Dutch visual artists who sought government recognition at least once during their career.[5] The total value of sales of art products and services by visual artists in the Netherlands in 1995 – the year for which we have earning figures – was about 190 million Dutch guilders. This market – on which visual artists rely for their income – breaks down into two broad categories: the "private market" and the "public market".[6]

The private market for visual art functions as any unregulated market: the visual artists produce works of art and try to sell these to the public and to companies. They also lobby for commissions. Visual artists do so individually, or use intermediaries (galleries, collectors) to match their supply with the demand on the market. The sum (in money terms) of all the

commissions and works sold through the private market can be thought to represent the total value of works and services by private parties at the intersect of supply and demand on the market.

Figure 4.1 The Market for Visual Art in the Netherlands in 1995: Public and Private Sources (see also Rengers (1998) or Rengers and Meulenbeek (1997)).



Apart from working for the private market, artists can also target their effort to the government. They may be able to sell to the state, to receive grants or subsidies, or to get a commission from the government. The sum of all the government activities can be interpreted as total government demand for the services and works of the visual artists.[7] Since the government yearly spends its entire budget for the visual arts, this amount is – at the same time – the monetary value of total supply of services and works of art to the government.
Figure 4.1 presents a breakdown of the total value of these activities on the market into several broad categories, under the heading of either private market or government. The

dividing principle is the kind of product or service that is provided. The figure for instance shows the total (percentage) value of commissions on the private market and the total (percentage) value of commissions on the public market.

As can be seen from Figure 4.1, the government is responsible for 43 per cent of total market value on the market for visual arts in the Netherlands in 1995. In terms of total value, the largest part of the market (37 per cent in 1995) consists of acquisitions by individuals and firms, through galleries, intermediaries and directly from the artists' studio. The second largest income source for visual artists (19 per cent) consists of the subsidies of the government, which account for the largest part of government expenditures. Commissions on the private market and from the government are the third major source of income. Art lending, both by private institutions and by subsidised agencies, makes up for only a small part of the market.

4.3 Decomposition of the Artists' Earnings

In this section the benefits of a focus on the economic theory of artists' labour markets to explain the policy issues discussed are outlined. Models of multiple jobholding of artists are particularly suitable when studying earnings of visual artists on the private and the public part of the market. These models can also provide insight into market structures and the behavioural consequences of art-related interventions.

The theory of the labour market is the most suitable candidate to study the impact of government intervention for at least three reasons. First, in economic terms the artists' labour market *is* the supply-side of the visual arts market. Second, labour supply models and Mincerian equations are among the most often used tools in labour economics and, therefore, may be viewed as a point of reference. Hence, the use of data on artists' earnings and labour supply will provide insights in differences between artists and other professionals. The final argument is that models of labour supply and earnings among artists have an intrinsic value and are therefore able to provide insights in the mechanisms of art markets.

The existing formulations of labour market theories in cultural economics do, however, need some rephrasing in order to fit the problem under study in this chapter. This section starts off with the theories on multiple job holding, which are applied to the choice situation between working for the government and working for the private market. The section concludes with some remarks on the consequences of artists' behaviour for the arts market at large.

Multiple Job-holding

Most researchers agree that professional artists have low average earnings in comparison with equally educated workers. This finding is robust over several countries and holds for almost

all art disciplines (Towse, 1993; Jeffri, 1989; Throsby and Mills, 1989; Elstadt, 1997). Nevertheless, the idea of the starving artist appears to be nothing more than an *idée fixe.* Although artists' earnings may in general be lower than for equally educated workers and more unequally distributed (Wassall and Alper, 1992), artists are known to have various sources of income. By holding several jobs, artists spread the risk of income uncertainty and meet a minimal income constraint. This "multiple job-holding" by artists is typically broken down into the job categories "art-work", "art-related work" and "non-art-work" (Throsby, 1994a, 1996a,b).[8] The income distributions of both art-related and non-art earnings are less skewed than that of direct earnings through artistic activities. Artists may not be starving, but they do face low earnings in the labour market for their artistic work.

A similar picture is evident in a human capital setting. Estimates of earnings functions show that returns to education are in general much lower for the arts than for other professions. Towse (1996b) reports on zero or negative individual returns to schooling. Artists do, however, build up some human capital on-the-job.[9] Another typical finding is that standard earning-functions have a low predictive value in the arts. Traditional human-capital models in artists' labour markets cover the actual process of income gathering less adequately than in other, "regular", labour markets.

Disaggregation of artists' earnings (Throsby, 1994a, 1996a,b) decomposes these effects for the three relevant labour markets. This shows for instance that the effect of schooling is larger for art-related work and non-art work than for art-work. The same holds for the effect of (on-the-job) training and experience.

Earnings from Private versus Public Sources

This disaggregation appears to be a useful step in analysing the labour market situation for artists. Not only does it take the peculiarities of the working life of artists into account, it also shows the underlying mechanisms that lead to a specific combination of jobs and time spent at these jobs. Artists for instance appear to vary their labour supply on the three markets in response to differences in wage-rates, minimum income-constraints, risk attitudes or preferences for different types of work (Throsby, 1994; 1996a,b; Wassall and Alper, 1992). With this in mind, the method of disaggregating activities appears to be a good candidate for studying the (similar) decision of visual artists on how to distribute time and effort across the public and the private market. Therefore, this chapter will proceed by applying the model of how artists' switch between labour markets to the allocation decision between private and public art markets.[10]

In order to do so, one extra assumption is introduced, being that *the distribution* between work on the public and the private market is independent of the hours worked on the non-arts and the arts-related labour market.[11] There are two arguments in favour of this assumption.

First, the preferences of artists are clear in that artists prefer to allocate their time to the artistic labour market (*ceteris paribus)*. Second, Dutch government policies are aimed at art production and do not take other labour market activities into consideration.[12] If we are interested in the effects of these policies on art production, the impact is best observed in the upper part of the artists' set of job holdings (that is, in art-work).

With respect to the policies on art production, one may raise the question of whether the artists really choose to participate in the public market. In many countries only a small group of (successful) artists qualifies for government funding.[13] However, in the Netherlands this is a justifiable approach; almost all policies are open for the entire population of artists. Consequently, the overwhelming majority of artists use the governmental measures. It is therefore not the question whether artists use the measures, but rather how much or how often they use them, and how this affects the activities on the private market.

Applying the Model

This question can be rephrased using economic parlance. Activities on the two markets can be seen as either substitutes or complements. If working on one market leads to a decrease in the activities on the other market, the artist apparently substitutes one type of work for the other. If, on the other hand, working for the private market enhances activities on the public market (or vice versa) these activities can be seen as complements. A third possibility is that working on one market contains no information on the efforts on the other.

These individual outcomes translate into structures for the market at large. Three outcomes at the level of the entire market can be hypothesised. Artists' behaviour can be viewed as the outcome of either specialisation (substitution dominates), a winner-take-all principle (complementarity dominates), or the outcome of a fully independent market structure (a balance between the two). These (hypothesised) processes are briefly introduced below.

(1) A specialised market: If this were the case, visual artists would have a comparative advantage in one of the two markets (private or public) and specialise in producing for that market accordingly. The comparative advantage may result from differences in information and technology. Both getting information and getting acquainted with certain techniques require investments and search costs. These costs decrease over time, and thereby may create or strengthen initial comparative advantages. Specialisation could result in persistent differences in individual wage rates between the two markets, thereby reinforcing initial conditions that caused disparity. As such, the market will function in an exclusive way; artists will be found to gravitate toward just one of the two markets.

(2) Winner-take-all: The second possibility is that government policies reinforce the preferences of the private market. That is, rewards on both the private market and the

government market flow to the same artists. If this were the case, a "winner-take-all" structure would dominate the aggregate arts market, with certain artists – "winners" – being successful in both markets.[14]14 The wage-rates in each market would, however, differ sharply between artists who are considered "winners" and artists who are considered "losers".

(3) Independent market structure: If the market has an independent structure, financial success in the private market is not related to success in the public market. Both markets follow their own logic. This possibility does not, contrary to the first two, predict exclusiveness. Because earnings in each market prove not to be substitutes or complements, the artists choose private art production if that is more profitable, and public funding if that pays better. In an independent market structure, we are likely to find little association between earnings in each market; success (or failure) on the one market contains little information on performance on the other market.

The analysis in Section 4.6 eventually shows which of the three likely outcomes is in fact observed in the data, by looking at correlation between earnings and differences and similarities in earning determinants for both markets.

4.4 The Model

In this section the model and its relation to the problem under study is introduced. The choice by the artist between the two markets is explained and, given this choice, the associated earnings are modelled. The model and the estimation procedure, which is related to Heckman's selection models (see Maddala, 1983), are briefly introduced.

Like in most economic exercises, the assumption is that choice has hedonic motivations: individuals choose a particular path to gain utility. In this chapter utility is indicated by (potential) earnings. If the artist chooses the public sector, his or her annual public earnings (y_p) are explained by a vector of personal characteristics (x) and unobservables, represented by the error term (ε_1):

$$\ln y_p = \beta_1 x + \varepsilon_1 \tag{4.1}$$

If artists have earnings from the private market only, the annual market earnings (y_m) read as:

$$\ln y_m = \beta_2 x + \varepsilon_2 \tag{4.2}$$

If earnings depend on both private and public funding, yearly earnings on both markets are defined as:

$$\ln y_p = \beta_1 x + \varepsilon_1, \ln y_m = \beta_2 x + \varepsilon_2 \tag{4.3}$$

Being a utility (earnings) maximiser, the artist will choose to work in the private market if y_m exceeds y_p. If y_p exceeds y_m the artist will be found in the public sector. If there is no clear distinction between the earnings in either of the two markets, he or she opts for both.[15] Neither public nor private earnings are constrained in the model, for two reasons. First: the constraints are not a correct assumption from an empirical point of view.[16] Second: artists face uncertainty in both markets and do not know their chances of being successful in either the public or the private track on beforehand.

Together with earnings, the decision variable is considered an endogenous variable, which will be estimated simultaneously. The choice the artist faces can be represented by a linear decision function. The ratio between the earnings of the two alternatives can be defined in terms of a latent decision parameter I*:

$$I^* = \alpha_o + \alpha_1 [\ln y_m - \ln y_p] + \alpha_3 z + \eta \qquad (4.4)$$

A constant α_o, a vector *z* and error η are added to the right hand side of the decision equation to allow for further observed and unobserved heterogeneity among artists. A negative value of I* indicates specialisation towards the public market and a positive value of I* implies specialisation towards the private market. Because alternative earnings for those who have chosen for one particular market are not defined, the decision function expresses earnings in terms of expectations.

$$I^* = \alpha_o + \alpha_1 E [\ln y_m - \ln y_p] + \alpha_3 z + \eta \qquad (4.5)$$

The variable I* determines to which of the three categories (public only, private only, or a mixture) the artist belongs[17]. An ordered probit technique is applied where an artist falls in one of these categories, depending on his or her score on the decision parameter and two critical values Θ_1 and Θ_2. This reads as:

y_p observed,	y_m not observed,	if	$I^* \leq \Theta_1$	
y_p observed,	y_m observed,	if	$\Theta_1 < I^* \leq \Theta_2$	
y_p not observed,	y_m observed,	if	$I^* > \Theta_2$	(4.6)[18]

The model is estimates in two stages. First, a reduced-form model is presented, in which the two earnings functions and the decision function are estimated jointly; the decision function is defined in *x* and *z* variables only. This is estimated using a maximum-likelihood function, in which the possible correlation between earnings and the decision function and between y_p and y_m is considered.[19] This correlation provides insight into which of the hypothesised outcomes at the level of the entire market is most likely to occur. The second stage is the estimation of the structural model where we add the differences between explained earnings to the right

hand side of the decision variable equation and test whether (potential) earnings influence the allocation decision directly.

The covariance matrix of the error distribution indicates which of the three structural relationships between the public and private markets might dominate: positively correlated earnings indicate a winner-take-all structure; a negative correlation (and opposite earning functions) suggest specialisation. Little or no correlation and unrelated earning functions would suggest unrelated markets and a generalised strategy among artists.

4.5 Data and Description

The data that are used in this chapter are gathered by the Foundation for Economic Research of the University of Amsterdam on behalf of the Dutch Ministry of Education, Culture and Sciences. The aim of this data collection is twofold. First, to obtain a clear picture of the size and composition of the market for modern visual art in the Netherlands. Second, to gain insight into the development of individual earnings. This is achieved by following a group of visual artists over time. The research project, which started in 1993, has a panel design. In a yearly questionnaire, visual artists are asked to provide information on their different sources of income, their professional costs and their main achievements. The analysis here uses data from the collection for the years 1993 to 1996.

The visual artists in the panel are a sample of the whole population of visual artists in the Netherlands.[20] After an indicative questionnaire, about 700 artists were asked to participate at the first wave in 1993, of which 481 replied. Applicants for government subsidies were slightly over-represented among these respondents. In the following years, some artists did not respond again. Additional artists were invited to participate with the aim of maintaining the number of respondents at around 500. Descriptive statistics for the artists in 1996 appear in Table 4.1.

The table shows some clear differences in average income between artists. The government seems to be the most lucrative employer for artists. The earnings on the public market are less equally divided. Taking the standard deviation of log earnings as an indicator for earnings inequality, it appears that there is greater inequality of earnings in the public market than in the private market. The figures also show that the public market is more restrictive than the private market: 129 artists received earnings from the public market only, while 209 artists received earnings exclusively from the private market.

We take 1996 as the relevant year for our model; for those artists who did not report for this year, we took the most recent year in which they had previously filled out the questionnaire (1993, 1994 or 1995). That said, 1996 data was available for more than 50 per cent of artists.

Table 4.1 Descriptive Statistics for Visual Artists in the Netherlands

	public income		market income		both incomes	
monetary variables						
market income divided by 1000			14.712	*28.923*	14.139	*27.480*
public income divided by 1000	16.287	*16.078*			17.023	*22.266*
log market income			8.479	*1.573*	8.632	*1.422*
log public income	8.822	*1.708*			8.936	*1.501*
estimated log market income	8.657	*0.362*	8.594	*0.381*	8.675	*0.386*
estimated log public income	9.099	*0.644*	8.610	*0.607*	8.967	*0.646*
estimated earnings differential	-0.441	*0.742*	-0.015	*0.660*	-0.291	*0.752*
human capital variables						
effective years of schooling	15.856	*1.500*	15.514	*2.005*	15.658	*1.917*
experience	12.751	*9.705*	12.997	*8.773*	13.907	*9.046*
time spent in promotional activities	0.107	*0.079*	0.100	*0.070*	0.101	*0.078*
no education related to arts	0.031		0.095		0.074	
household characteristics						
female	0.434		0.478		0.412	
single person household	0.581		0.382		0.455	
children	0.217		0.315		0.310	
institutional variables						
BKR	0.240		0.191		0.269	
subsidies for professional costs	0.635		0.263		0.520	
Individually granted subsidies	0.472		0.191		0.426	
artists						
painter	0.325		0.382		0.451	
sculptor	0.186		0.138		0.149	
other	0.488		0.478		0.398	
year of observation						
1993	0.155		0.114		0.133	
1994	0.116		0.129		0.113	
1995	0.162		0.210		0.163	
1996	0.565		0.545		0.589	
number of observations	129		209		509	

Standard deviations in italics; data come from the Foundation for Economic Research of the University of Amsterdam (Meulenbeek *et al*, 1998)

Turning to the human capital variables, little variation is found. Two findings deserve some attention. First, a relatively large proportion of artists with no education related to the arts have only market income, which implies that art schools form part of the "official", government-oriented art world. Second, artists with earnings on both markets have (statistically not significant) on average one more year of experience than artists with earnings from only one of the two markets. Here it should be noted that experience, rather than age is used as a human capital variable. Underlying assumption is that artists with the same level of experience have more in common then artists of similar age. In artists' professions, this is a useful assumption, because the variance in the age at which people enter the profession is large.[21]

With respect to the institutional variables, we find that artists who have chosen the public track are more likely to have a history of subsidised creation. This holds for all three subsidy types: the BKR, professional cost subsidies and "individually granted" subsidies. The

difference in prestige between latter two subsidy types is reflected in differences in frequencies, with fewer people receiving individually provided subsidies.

4.6 Results

Our analysis of different creative careers derives from Table 4.2. The first two columns present the results of applying an ordered probit technique to the reduced form choice Equation (4.5). Negative values of the parameters indicate a higher likelihood of an artist focusing effort on the public market, a positive value indicating a higher chance of an artist focusing effort on the private market. The other parameters produced in the table, are the correlation between public income and market income (ρ), the correlation between the reduced form decision function and both public income (ρ_1) and market income (ρ_2), and the variance of public earnings (σ_1) and market earnings (σ_2).

The observed effects for the reduced form decision function reflect the differences described in Table 4.1. The human capital variables have no significant effects on the career-track chosen by artists. However, a successful previous encounter with the government increases the probability that an artist chooses the public track later in their career.[22] This is the case for all three subsidy types. Furthermore, artists who live alone are more likely to opt for public earnings. This may be explained by the fact that single artists face a smaller minimum income constraint and are therefore more likely to forgo pure economic motives.

Two earnings functions are simultaneously estimated with the ordered probit. It turns out that most of the traditional human capital variables have little effect on earnings in either the private or the public market. The only exception is the experience variable in the private market earnings function. The government does not use experience as a criterion for funding, whereas income on the private market partly depends on experience. The gender effect is quite strong; in this sample women's artistic earnings are close to 30 per cent lower than men's.

The impact of (formerly obtained) grant variables is strongest in the public sector. Artists who received BKR subsidies perform financially worse on the public market than other artists. The reputation of this "social" measure is apparently a disadvantage for artists who have at some time received a BKR subsidy. For professional cost and individually granted subsidies, however, this "reputation" effect is positive in the public market. Artists who received either of these subsidy types have higher earnings on the public market.

Table 4.2 Reduced and Structural Form Model of Decision to Specialise and Earnings: Maximum Likelihood Estimates

	reduced form decision function		public income		market income		**structural form** decision function	
intercept 1	-2.107	*0.565***	9.259	*0.792***	7.691	*0.645***	-2.070	*0.506***
intercept 2	-0.269	*0.560*					-0.235	*0.503*
human capital variables								
years of schooling	-0.032	*0.030*	-0.046	*0.044*	-0.019	*0.036*	-0.030	*0.027*
no education related to the arts	0.072	*0.222*	-0.246	*0.282*	0.065	*0.242*	0.098	*0.205*
experience	0.015	*0.017*	0.014	*0.027*	0.054	*0.022***	0.011	*0.017*
experience squared	-0.052	*0.035~*	-0.004	*0.062*	-0.051	*0.046*	-0.045	*0.034~*
effort	0.610	*0.587*	-0.036	*0.882*	-0.440	*0.951*	0.619	*0.564*
personal characteristics								
female	0.098	*0.084*	-0.313	*0.125***	-0.264	*0.118**	0.102	*0.082~*
single person household	-0.323	*0.099***	0.144	*0.130*	0.300	*0.123***	-0.269	*0.086***
children	-0.003	*0.102*					0.049	*0.096*
institutional variables								
BKR	-0.211	*0.133~*	-0.310	*0.187**	0.065	*0.163*	-0.188	*0.133~*
subsidies for professional costs	-0.556	*0.176***	0.880	*0.245***	-0.240	*0.251*	-0.539	*0.215***
individually granted subsidies	-0.384	*0.189**	0.950	*0.234***	0.410	*0.237**	-0.381	*0.193**
subsidies for professional costs x experience	0.007	*0.012*	-0.028	*0.014**	0.003	*0.016*	0.007	*0.012*
individual subsidies x experience	0.003	*0.013*	-0.008	*0.013*	-0.017	*0.014*	0.004	*0.012*
art types								
painter	0						0	
sculptor	-0.072	*0.124*					-0.071	*0.123*
other	-0.003	*0.092*					-0.000	*0.089*
year of observation								
1993	-0.146	*0.161*	-0.417	*0.211**	0.453	0.202**		
1994	0.145	*0.135*	-0.698	*0.233***	0.117	0.185		
1995	0.031	*0.112*	-0.450	*0.157***	-0.030	0.148		
1996	0		0		0			
expected income								
E ln w_p - E ln w_m							0.024	*0.130*
other parameters								
Variance of public earnings σ_1	1.396	*0.042***						
Variance of private earnings σ_2	1.411	*0.036***						
Correlation public earnings/I* ρ_1	0.097	*0.068~*						
Correlation public earnings/I*ρ_2	-0.075	*0.057~*						
Correlation public/private earnings ρ	0.126	*0.052***						
Mean loglikelihood	-3.687						-0.884	
N	847						847	

Standard errors in italics; ~ significant at 10%; * significant at 5%; ** significant at 1%

This implies that getting government recognition leads to positive feed back effects on the public market. An earlier grant or purchase by a public committee generates a positive signal towards experts and commissions today and tomorrow. Moreover, it appears that artists who received individually granted subsidies also have higher earnings on the private market (contrary to artists who received the other types of subsidies). This suggests that these public instruments also have a positive signalling effect in the private market. Apparently, these subsidies end up among the more successful artists. Therefore, subsidising artists can partly explain the winner-take-all tendencies on the market at large.

The residuals of the earnings and the decision function are positively correlated (ρ=0.126). In both the publicly and the privately funded art market, unobserved talents and other noise in the earnings functions produce a small but positive income effect. With respect to the total visual arts market, this result points to a winner-take-all structure. Correlation between earnings and the decision function is small and only significantly different from zero at a 10 per cent level of significance.

The final step in the analysis is the estimation of the structural decision function in Table 4.2. This specification is presented in the final two columns. The year dummies have been excluded to obtain an identified structural model. These identifying variables were chosen because they were insignificant in the first stage. The first observation is that the empirical findings appear robust; there is no significant difference between the structural equation and the reduced form equation. With respect to the anticipated earnings gains, the relevant earnings differential variable shows up insignificantly in the decision function. This suggests that artists do not behave rationally in a strict economic sense: they do not anticipate financial gains in their decision to allocate effort on the two markets, or they fail to correctly anticipate their financial opportunities.[23]

Furthermore, human capital variables do not show up significantly in the structural form decision equation. The important determinants of specialisation are, therefore, certain individual characteristics (particularly living as a single person household) and grants and subsides received earlier in an artistic career.

Finally, with respect to potential market structures, the findings suggest a winner-take-all structure for two reasons. First, there is no significant impact of the financial success variables in the decision variable. If artists are successful in either market no structural income difference exists and a winner-take-all structure applies. Second, the observed correlation between earnings on the two markets, and the fact that most of the observed variables in the earning functions point in the same direction, also suggests a small but significant "winner-take-all" tendency. On the other hand, the effects of subsidies earlier in the career may point to some specialisation, or signalling-effect: those artists who have been rewarded earlier in their career are more likely to obtain government funding in the years afterwards. Unobserved

ability in the public earnings function and the positive signal of earlier government recognition explain this tendency. However, the specialisation is not exclusive: the "specialists" also work for the private market, where they are often among the "winners" as well.

4.7 Conclusion

This chapter has discussed some of the consequences of subsidising the arts by looking at the determinants of the allocation of time and effort on public and private markets for the arts. The earnings on these two markets were analysed using a joint model of choice and earnings. This model produces valuable insights into a number of observed characteristics of artists' labour markets. The extension of the disaggregated earning-functions with a model of choice furthermore enables the simultaneous study of choices and outcomes.

Three possible types of dual-market structures were posited: specialised, winner-take-all and independent. The winner-take-all hypothesis received the strongest support. Success was found to "spill over" from the private to the public market and vice versa. Artistic financial success is not well explained by human capital characteristics. Schooling has no effect at all, whereas experience only has a small effect on earnings through the private market. When looking at the determinants of winners and losers, it appears that single men are more often winners. Prestigious subsidies can trigger success on both the public and the private market.

The decision artists take to allocate time and effort in either of the two markets is only a very weak determinant of their financial success. This may be because there are little, if any, financial or intrinsic differences between the markets. But, more likely, it indicates either that artists are not influenced by discernible differences in potential earnings, or that they fail to accurately estimate the financial opportunities available from the two markets. It should be stressed, however, that in the economic model of choice a restrictive utility measure is used. Equating utility with earnings implies that investment motives outweigh motives based on other considerations, such as consumption motives and idealism. Consumption factors and idealism are, however, likely to be other important considerations for an artist throughout their career.

Even though individual artists are not entirely lead by financial incentives, the Dutch way of subsidising the production of visual art has clear consequences for the allocation of time and effort of visual artists. To a small extent, the government reinforces the outcomes of the private market, thereby crowding out a part of private initiative. Also, the government enforces specialisation: some artists have persistent higher earnings through the public market than others. On the other hand, the largest part of government funding does not interfere with private activities, and allows visual artists to provide artworks and artistic services that would otherwise not appear. This is in fact underlined by the fact that artists do not seem to

anticipate financial benefits in producing either for the government or for the private market. It is a political question, rather than an economic one, which impact of subsidies is desirable. The Dutch way, however, seems reasonable, also from the point of view of an economist.

Appendix to Chapter 4: The Likelihood

Before the likelihood function is defined, the error structure should be determined first. The errors ε_1, ε_2, associated with the earning functions ln w_p and ln w_m are correlated with η, the error term of the decision equation I*, because of omitted variables. Of course, for those who earn both w_1 and w_2 the correlation (ρ) is considered also. The correlation between the reduced form decision function and public income is represented by ρ_1; ρ_2 stands for the correlation between the decision function and market income. The other relevant statistics are the variance of public earnings (σ_1) and the variance of market earnings (σ_2).

The errors ε_1, ε_2, η follow a trivariate normal distribution with expectations of 0 and a covariance equal to:

$$\Sigma = \begin{pmatrix} \sigma_1^2 & \sigma_{12} & \rho_1\sigma_1 \\ \sigma_{12} & \sigma_2^2 & \rho_2\sigma_2 \\ \rho_1\sigma_1 & \rho_2\sigma_2 & 1 \end{pmatrix}$$

This system of equations can be estimated through a maximum likelihood procedure, where the likelihood L reads:

$$L = \left[\int_{-\infty}^{\alpha_1} f(\varepsilon_1, \eta) d\eta \right]^{l_1} \left[\int_{\alpha_2}^{\infty} f(\varepsilon_2, \eta) d\eta \right]^{l_2} \left[\int_{\alpha_1}^{\alpha_2} f(\varepsilon_1, \varepsilon_2, \eta) d\eta \right]^{l_3}$$

See also Rengers (1998).

Notes

[1] For introductions to the economic approach to the arts, see the classic book by Netzer (1978) or, more recently, Heilbrun and Grey (1993) and Peacock and Rizzo (1994).

[2] For example: Throsby (1994a, 1996a,b); Wassall and Alper (1992); Towse (1992, 1996a,b); Singer (1981); Waits and McNertney (1984).

[3] The foundations and committees that decide on the allocation of government funding have a large degree of autonomy over their own budget. For instance, they vary the number of grants and commissions from year to year in order to match the quality of the applicants. The government therefore has no exact control over the amount of public money spent yearly. Instead, the control focuses on a longer time-period. This said, the *criteria* for being successful on either the public or the private market may very well differ. It is for instance likely that the government prefers a different kind of art. Because of the focus on earnings, rather than aesthetic choices and actual works of art, this question remains unanswered in this chapter. Interesting as it is, it would require a different study.

[4] When, after the breakdown of the BKR, the government decided to sell the preserved BKR works of art on the private market, there was upheaval among artists and their pressure groups. It was claimed that the sell-off would cause a dramatic fall in visual art prices, destroying the market (by, presumably, unnaturally distorting the price mechanism) and leaving many "genuine" contemporary artists suffering. As a result, the government has adopted other means of disposing of the excess art, such as returning works to the originating artist and donating works to art-lending institutions.

[5] This definition follows from the data that are introduced in Section 4.5. In order to contact the visual artists, government registrations were used. This definition is hardly restrictive in the Dutch situation. Almost every artist turns to the government at some stage in his career. Therefore, the sample may have a small bias towards older artists. Due to the structure of the data, this potential bias cannot be modeled.

[6] The focus is on Dutch artists and the Dutch market, which implies that foreign artists selling to Dutch buyers and Dutch artists with earnings from abroad are excluded from the market-definition used here. Resale of works is excluded. The few "superstars" among Dutch visual artists are not represented in the study. Modeling the market mechanism for these superstars would, anyhow, require a different type of approach. See also Rengers and Meulenbeek (1997).

[7] Sales and commissions lead to the transfer of a work of art from the artist to the new owner; subsidies and grants don't. However, in a labor market setting, subsidies and grants can be thought to represent the transfer of a certain amount of artistic effort or hours worked from the artist to the government.

[8] Art-work concerns time spent on activities that are directly related to the artistic profession, such as sales, commissions and subsidies for visual artists. Art-related work concerns activities such as teaching and giving advice on artistic matters. Non-art work relates to all labor market-activities outside the sector of the arts (Throsby, 1996a,b).

[9] This finding may partly be due to a higher attrition rate in artistic professions, with more artists changing professions after only a couple of years compared to other tertiary educated professions. Distinguishing this selection effect from a "learning-on-the-job effect" would require a longitudinal study (Alper and Wasall, 1998).

[10] See Section 4.4 for a formal representation of the model.

[11] Off course, the *number of hours worked* as a visual artist remains dependent on the other labor market activities.

[12] This only holds for art policy. Many general policies in the Netherlands, as well as in other welfare states – such as welfare and pensions – include transfers to artists. These fall outside the topic of this chapter.

[13] Think for instance of the large subsidies that are given to a privileged group of established artists in most Scandinavian countries (Elstad, 1997).

[14] An overall discussion of the winner-take-all phenomena can be found in Frank and Cook (1995). Possible underlying mechanisms are for example introduced by Adler (1985), Rosen (1981) and McDonald (1988).

[15] When the (potential) earnings, associated with the various career tracks are comparable, there is little to gains from specialisation due to uncertainty in pay-off and the risks associated with specialising.

[16] The public earnings are empirically not constrained. Some of the measures on the public market are open-ended (like art lending). The amount spent on other schemes yearly varies in response to the quality of the applicants and new policy-aims.

[17] As per definition, I* does not depend on non-arts earnings, art-related earnings or spouse's earnings, because it is defined as the decision between market and public earnings in the upper part of job holdings. These other earnings influence total earnings in the arts (and thereby the actual amounts earned), but they do not influence *the choice* between public and private.

[18] Observed/not observed coincides with zero/non-zero yearly earnings in the observed data.

[19] The likelihood function appears in the Appendix.

[20] The source for names and addresses is administered on behalf of the Ministry of Education, Culture and Sciences. It keeps track of the use of all government grants in the visual arts. As a result this source contains almost all suppliers in the visual arts market. The underlying assumption (which proves to be realistic) is that all artists apply at least once for one of the grants. For a more detailed description of the data see Meulenbeek *et al* (1998).

[21] The original formulation of human capital theory also uses experience, rather than age.

[22] Cross-products between government transfers and experience were introduced to see whether learning effects were apparent. That is, are people more likely to opt for public income when they have been granted at *a certain moment* in their career? The data does not support the existence of a learning effect.

[23] Of course, if there were no structural earnings differential no effect would be observed as well. Table 4.1 indicates that the estimated earnings differential is on average zero. The standard deviation of this earnings differential is large, which suggests that the fact that the earnings differential shows up insignificantly is better explained by the argument outlined in the body of the text.

5 Decent Exposure; Exhibition Careers of Dutch Visual Artists*

In this chapter the exhibition careers of a sample of Dutch visual artists are studied empirically. The artists' careers are broken down into exhibitions in four circuits (private, public, informal and foreign) and described in terms of their distribution and relation to artistic experience. Models explaining the probability of exhibiting are estimated. The chapter finds that success breeds success, both within and between exhibition circuits. Furthermore, exhibiting is positively influenced by the experience of the artist and his/her subsidy history.

5.1 Introduction

Artists and their work are studied in a number of academic disciplines. Art historians, sociologists, (cultural) economists and educational scientists alike show a keen interest in various aspects of their careers. Perhaps surprisingly, the exchange of findings between the disciplines is minimal: cultural economists address their studies to other economists, sociologists to sociologists, and so on. The academic division of labour is mirrored in a strict separation of methodological and theoretical approaches. Stereotypically, art historians strive after completeness and precision by studying small numbers of (famous) artists in great detail. Sociologists and economists on the other hand focus on abstractions and general applications of economic or sociological theory. On an empirical level, this translates into studying larger groups of (anonymous) artists, usually in a statistical setting.

A similar difference can be found in the variables that are examined by the various scholars. Art historians focus on individual works of art, exhibitions, commissions or oeuvres, where economists are primarily interested in indicators of (monetary) valuation and choices made by the artists. Examples of 'economic' variables are wages, prices of works of art, educational investments of artists and their labour supply. There is however no sound reason why art historians could not study 'economic' variables, nor is there any ground why economists should not examine art-related phenomena.[1] Combining approaches from one discipline with variables usually studied in other fields can provide fresh insights, as well as allow the combining of the better elements of different approaches.

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* See Rengers (1999) for an earlier version in Dutch of this chapter.

This approach is adopted here. The methods and hypotheses from the economic study of artists' careers are applied to specific data from outside the realm of traditional (labour) economics. The paper studies exhibition careers or portfolios of a sample of Dutch visual artists. These portfolios consist of all exhibitions held by the visual artists in the period between 1980 and 1991. The portfolios are decomposed into displays in four distinct exhibition 'circuits': public, private, informal and foreign. The relation between the four circuits is also analysed.

The focus on exhibitions is an attractive one. Exhibitions are the main form for artists to display their work and to come into contact with an audience of buyers, peers, critics and government officials (White 1993, Becker 1980). In line with the importance of exhibiting for the visual artist, the decisions made by representatives of the exhibition locations can be crucial for artists' careers. Gallery-holders, museum directors and curators are therefore depicted as 'gatekeepers' on the market for visual arts. By allowing certain artists into their institutions and rejecting others, they play a pivotal role in the selection chain in the visual arts.[2]

The focus on exhibitions also has empirical advantages. In the first place it facilitates data collection. The study of exhibitions, rather than earnings or hours supplied, makes it possible to collect data by means other than an survey of artists, which is expensive and prone to low and potentially selective responses. To reconstruct of the exhibitions careers of Dutch visual artists, this study uses both histories provided by the artists themselves and secondary sources such as catalogues, library entries, and governmental registrations. As a consequence, most of the exhibition locations are known in detail. This detailed and 'objective' knowledge allows for a breakdown of the exhibition market into different segments. This decomposition is beneficial in a number of ways. For example, it reveals winner-take-all phenomena in the different segments that are less discernible at the level of the entire market.

Second, the emphasis on exhibitions allows for the study of strictly longitudinal data. 'Hard' economic data on earnings and time-allocation are usually collected in cross-sectional studies, or occasionally in a panel setting with a limited number of waves. Consequently, the longitudinal implications of the economic theories of arts labour markets have not been studied in great detail (Alper & Wasall 1998). This leaves important issues unaccounted for. In a cross-sectional study among artists it is, for example, impossible to distinguish between self-selection and the effects of experience or on-the-job training. Both explanations predict that young, beginning artists are less successful than their older, established colleagues.

The chapter will deal with the following questions:

- What do the careers of visual artists look like in terms of exhibitions?
- Can the human capital model (indicated by arts education, professional experience and subsidy history) explain artists' exhibition careers?
- How does success in one segment of the market affect the amount and composition of artistic performance in the other segments?

The chapter has the following structure: section 5.2 discusses the relevant literature and the structure of the analysis. Section 5.3 discusses the data used. The results are presented in 5.4. The chapter concludes with an interpretation and a discussion of the findings.

5.2 Theoretical Background

This chapter focuses on the application of economic theories and models to the exhibition careers of visual artists. Two theories provide the theoretical and methodological background: winner-take-all theory (Frank & Cook, 1995) and the theory of work-preference (Throsby, 1994a). This section briefly introduces these two theories and explains their relation to the topic under study. Then, career predictions from the theories are summarised and the breakdown of exhibition locations into different segments is discussed.

Winner-take-all and Work-preference

Work-preference theory assumes that artists have particular utility functions. According to the theory, artists gain utility by working in their primary artistic occupation. Artists thus differ from regular workers, who are assumed to only derive utility from their income and/or their consumption of goods and services. Since wages are generally low for the work in the primary artistic occupation, artists are continually confronted with the challenge of maximising time spent at coveted arts work, while meeting basic budgetary requirements by working in unwelcome non-arts work (Throsby, 1994a). By spreading their activities over numerous occupations, artists subsidise their own profession and in the meantime minimise the risks associated with working as an artist.

The disaggregation of activities is a useful step for the analysis of other labour market situations among artists. Not only does it take the peculiarities of the working life of artists into account, it also shows the underlying mechanisms that lead to a specific combination of jobs and time spent at these jobs. Throsby himself presents 'disaggregated' earnings functions and decomposes artists' earnings into earnings from work as an artist, work from arts related work and work on the general labour market (see also Throsby, 1996a, b). Rengers and Plug (2001) use a disaggregation approach to study the careers of visual artists on the public market and on the private market in the Netherlands.[3] In a similar manner, this chapter

decomposes the exhibition careers of Dutch visual artists into separate careers in various market segments, both in the Netherlands and abroad.

Disaggregation allows the distribution of success across different markets segments to be analysed, which is the primary focus of winner-take-all theory. This theory investigates how wages and other earnings are distributed across various populations. The core of winner-take-all theory is the assumption that in particular labour and product markets, such as sports and arts markets, people are rewarded on the basis of how good they are *relative to others*. This implies that the rents to intrinsic qualities and abilities as well as the returns to investments in education are not proportional to these qualities/investments, as is assumed in standard human capital theory. Instead, these markets show a tendency to produce disproportionally large returns for those at the top, and disproportionally low returns for the rest.

From this theory a number of hypotheses can be derived concerning the career development of artists, in particular relating to the role of earlier career achievements in explaining current inequalities in the labour market position of artists.

Career Predictions

The study of artists' careers in terms of economic variables has revealed a number of regularities relating to: the economic position of female artists; the role of experience in explaining career progress; the impact of arts education; and the consequences of government grants for the careers of artists. In this chapter these regularities are examined for the case of exhibitions.

Some common findings on career differences in wages and earnings are that:

- Females are found to earn less than their male colleagues (Throsby and Thompson, 1994; Janssen, 2001)
- The professional experience of the artist appears to be positively related to his or her career development. More experienced artists generally fare better than beginning artists. (Rengers and Plug, 2001; Filer, 1986).
- Arts education is found to have little, if any, influence on the average earnings of artists during their career (Towse, 2001; 1996b).
- Artists who receive government grants generally fare better during their career, in particular when arts-specific indicators of career progress are studied (Rengers and Plug, 2001; Rengers and Velthuis, 2002).[4]

If exhibition careers are similar to careers measured in terms of earnings and/or wages, it might be expected that females will hold fewer exhibitions, or that they will display their work in less prestigious locales. The same holds for experience: it might be expected that

experience correlates positively with success in the exhibition market. Furthermore, it might be expected that more prestigious exhibition locations show a stronger correlation with experience than relatively 'easy' and accessible locations.

In terms of arts education, it can be hypothesised that little variation exists between artists with or without an arts degree as well as between artists with different kinds of arts education. Finally, the effects of government subsidies for exhibition careers are likely to be large.

Besides the variables mentioned above, the explanatory model used here contains the following additional variables: 1) calendar time, a continuous variable that runs from 1980 to 1991, 2) a dummy indicating whether the artist lives in a big city in the Netherlands and 3) a distinction of various types of visual artists (painters, sculptors and graphical artists).

Segments

The next step is to identify market segments that are relevant for the exhibition careers of the artists in the sample. The following figure shows the four different segments that are studied in this chapter.

Figure 5.1 Identified Market Segments in the Netherlands and Abroad

Circuit	Locations
Informal circuit	own initiatives, group exhibitions
Public exhibitions	museums, cultural centres, public buildings
Private exhibitions	galleries, shops, bars
Foreign exhibitions	all foreign locations[5]

Four circuits are distinguished: the exhibitions for an informal circle of peers, exhibitions in publicly owned locations, displays in privately owned locations and finally exhibitions abroad. This fourfold division is more elaborate than the obvious split between public and private exhibition spaces. Peer circles and foreign exhibitions are included in the analysis for two reasons. First, on an empirical level, it appears that artist name these as an important part of their curriculum. Second, it is also theoretically relevant to distinguish both circuits. The artists' own circle is often seen as a breeding ground for new ideas and concepts, where (future) career possibilities of the artists are shaped (White, 1993). The informal market thus functions as an escape from the restricted institutional and private markets, or by contrast as a

screening device for these markets. The foreign market in turn is obviously important; exhibiting abroad is often seen as the ultimate prove of recognition.

5.3 Data and description

This section discusses the data that are used in this chapter. The exhibition careers of the artists are described, both for the entire period and for each year.

Data

The data used consist of personal characteristics and indicators of the artistic achievements of a stratified sample of 576 visual artists in the Netherlands. The period under study covers 12 consecutive years between 1980 and 1991. The data have been gathered by the 'Erasmus Centrum voor Kunst- en Cultuurwetenschappen' for an evaluation of the 'Fonds voor Beeldende Kunst, Vormgeving en Bouwkunst', the main subsidising agency for the visual arts in the Netherlands (De Nooy & IJdens, 1994).[6]

The sample of artists consists of four stratified sub samples of the same size:

1. Artists who never applied for a subsidy
2. Artists who applied but got rejected
3. Artists who received a BKV (Beroepskostenvergoeding, a small grant of the Dutch government)
4. Artists who received an individual subsidy (a larger, more prestigious grant)

Further descriptive statistics for the artists appear in Table 5.1.

The artists are spread more or less equally over place of living (49% lives in a major city), gender (49% females), education and art types. Approximately one-third of the artists can be classified as painter, one-third as sculptor or plastic artist, and one-third as working with alternative media such as video, photos, computers and/or other (new) graphical techniques. Because of the stratification of the sample and the equal division of artists over independent variables, the estimates presented in the following section are not representative of the entire population of visual artists in the Netherlands. They do, however, give a good insight into the mechanisms apparent during the exhibition career of an artist.

The average artist in the sample was 31 years old in 1980 (the first year under study) and 43 in 1991. On average, artists start their career around the age of 30, which is late in comparison with people working in other professions. This late entrance into the market is explained by the fact that visual artists are relatively old when they enter arts education; that they typically

follow a lengthy education; and finally that there is a group of artists who turn 'professional' at a later stage in life – after or during their career in a different field of employment.

Table 5.1 Descriptive Statistics of Independent Variables

Characteristics	Mean	*Standard deviation*
Year of birth	48.91	*12.03*
Artist since	79.05	*14.05*
Experience in years	14	*10.95*
Living in major city	.49	
No education related to the arts	.05	
Education: academy of visual arts	.31	
Education: workplace	.31	
Painter	.35	
Sculptor	.34	
Other (photo, video, installations)	.31	
Female	.49	
Did not apply	.25	
Applied but rejected	.25	
Received BKV-subsidy	.25	
Received IS-subsidy	.25	
Number of cases	576	

Table 5.2 Exhibitions Between 1980-1991: Average, Maximum, and Standard Deviations*

Location	Maximum**	Mean	*Standard deviation*
Private			
Gallery	25	2.45	*3.21*
Shops, bars	15	0.62	*1.26*
Public			
Museums	20	1.16	*2.04*
Cultural centre	13	1.03	*1.62*
Public buildings	11	1.16	*1.72*
Schools	6	0.34	*0.82*
Informal			
festivals/group exhibitions	28	0.85	*1.81*
Artists communities	9	0.45	*0.99*
Foreign			
Gallery	14	0.55	*1.58*
Museums	12	0.33	*1.19*
Festivals/group exhibitions	27	0.39	*1.58*
Other	10	0.36	*1.24*

* Over the entire 12 year period and based on all artists, including those who started their career in the middle of the period.
** The minimum for all activities is 0

In spite of the popular image of the 'autodidact' (the brilliant artist without education in the field), only a small minority of artists has not followed any arts education. Among younger generations of artists, virtually all artists have spent time at arts-college, and most artists hold a degree in the visual arts. This points to a professionalising and institutionalisation of the artists' profession.

Table 5.2 shows descriptive findings for the exhibitions held by artists in the sample, subdivided under the four circuits.[7] The two main exhibition venues, both in the Netherlands and abroad, are galleries and museums. In the entire 12-year period under study, the artists under study had close to 2.5 exhibitions in private galleries, and a little more than one exhibition in museums. On average, artists have 0.8 exhibitions each year.

Description of Circuits over the Entire Period

The following figure gives an overview of the distribution of exhibitions in the four identified market segments. The figure depicts the fraction of artists by the number of exhibitions held over the entire period 1980-1991. The total number of exhibitions is truncated at 20.

Figure 5.2 Total Number of Exhibitions Between 1980-1991 in Four Market Segments by Fraction of Artists

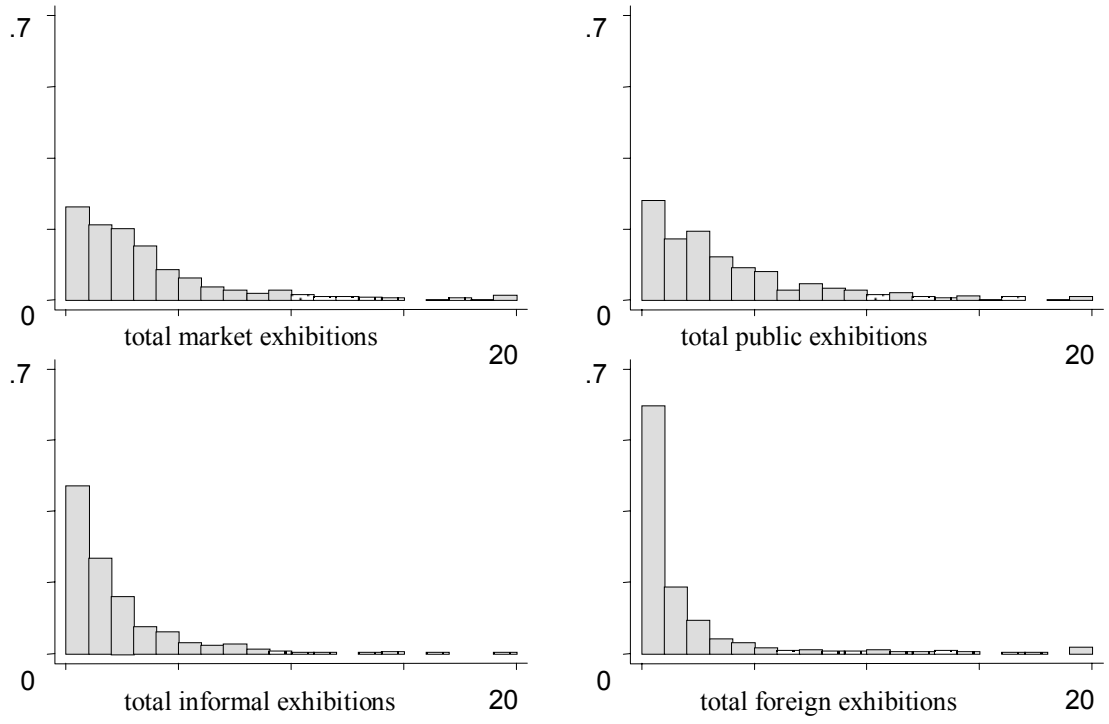


Figure 5.2 shows that each exhibition circuit clearly portrays a skewed distribution. The private and public circuit in the Netherlands are relatively open: around 75% of the visual artists have held at least one exhibition in a private and/or public space. Fewer visual artists (one out of two) exhibit in the informal circuit. The foreign circuit is the most exclusive for two reasons. First: only around one third of the visual artists has held an exhibition abroad. Second: the distribution of the number of exhibitions held is more skewed to the right than for the other three circuits.[8]

The next question is how the four circuits are related. Table 5.3 presents the correlation matrix for the overall period.

Table 5.3 Correlation-matrix for Total Number of Exhibitions Between 1980-1991

	Market	Public	Informal	Foreign
Market	1.0000			
Public	0.5535	1.0000		
Informal	0.3341	0.4949	1.0000	
Foreign	0.3027	0.4204	0.3888	1.0000

The correlation between the total number of exhibitions in the various circuits is substantial. The highest correlation (.55) appears between exhibitions in the public and private circuit, the lowest (.30) is observed between foreign and private market exhibitions. This points at a 'winner-take-all' structure of the exhibition market at large. Artists with exhibitions in one segment are more likely to also exhibit elsewhere. The correlation structure indicates snowballing mechanisms in artists' careers. These have also been found relevant for other indicators of artists' careers, in particular when artistic achievements are examined (see for instance Rengers & Plug, 2001).

Description of Circuits Year by Year

The descriptions and analyses of the yearly activities differ from the previous section. The total number of exhibitions is altered into a variable indicating whether an artist has held an exhibition in one of the four circuits in one year. In order to create such a person-period variable, the years in which an artist had more than one exhibition in one of the circuits are recoded into a binary variable. This approach is justified because the number of artists with two or more yearly exhibitions is infinitesimal compared to the group of artists with one yearly exhibition.[9]

In order to study the sequence of the exhibition careers, the following table examines the relation between exhibiting in the various circuits in year t and the fraction of exhibiting artists in the next year t+1.

Table 5.4 Fraction of Artists Exhibiting by Exhibitions in Previous Year

Next year t+1 → *Current Year t* ↓	**Market**	**Public**	**Informal**	**Foreign**
Market				
No	0.177	0.205	0.099	0.077
Yes	0.298	0.285	0.149	0.138
Public				
No	0.182	0.191	0.097	0.075
Yes	0.273	0.327	0.152	0.141
Informal				
No	0.191	0.211	0.097	0.082
Yes	0.289	0.308	0.208	0.147
Foreign				
No	0.198	0.214	0.101	0.070
Yes	0.291	0.319	0.206	0.287
Total	0.202	0.222	0.109	0.089

Table 5.4 reveals a number of interesting mechanisms. In the first place the table resembles the correlation structure of the data. Artists who exhibit in year t have more chance of exhibiting in year t+1. Second, the table shows that for public, private and foreign exhibitions, the (positive) impact of exhibiting on the chance of exhibiting in the next year is strongest within the same circuit. Around 30% of the visual artists who exhibit in year t in one circuit, also hold exhibitions in that circuit in the next year t+1.

This spillover effect is particularly strong for the foreign market, as can be seen from comparing the effect of a foreign exhibition in year t on a foreign exhibition in t+1 (0.287) with the overall fraction of artists exhibiting abroad (0.09). The foreign market thus displays a distinct pattern. Third, the table shows the "neutral" effects of exhibiting in the informal market. Exhibiting in this circuit increases the probabilities for exhibiting elsewhere unspecifically: the odds of exhibiting in t+1 increase equally for all circuits.

The next question is how the exhibitions relate to the years of experience of the visual artist. Figure 5.3 relates the fraction of artists that exhibit in the various market segments to their professional experience. The artists' careers are truncated at 35 years of experience, as the number of artists with more experience-years is too small for analysis.

Figure 5.3 The Relation Between Professional Experience and the Fraction of Artists Exhibiting in the Four Segments

The figure shows that the differences between artists in their exhibition careers grow when artists pass through different career stages. The fraction of artists with either market or public exhibitions multiplies by two in the first 15 years of artists' careers from around 0.12 to around 0.25. Among more experienced artists, the fraction with market exhibitions drops somewhat and stabilises around 0.20. The fraction of experienced visual artists holding public exhibitions fluctuates around 0.25.

Informal and foreign exhibitions show less development over careers. Nevertheless, two trends are discernible. First: informal exhibitions seem to be particularly relevant in the early years of artists' careers. The fraction of artists with informal exhibitions expands in the first five years of a career to 0.15. After this initial period the fraction of exhibiting artists falls back and fluctuates around 0.1. Second: foreign exhibitions show little relation with experience in the early career but show a clear peak later on in the careers of artists.

5.4 Analysis of Exhibition Careers

The analysis that takes place in this section centres around random effects probit models (see for instance Guilky & Murphy, 1993). In these so-called cross-sectional panel models, the odds of person i of having a certain type of exhibitions in year t is the dependent variable. On the right hand side five groups of independent variables are included:

1) Artists' characteristics such as gender and education - constant over the period under study.
2) Calendar time – constant over artists.
3) Professional experience of the artist in years – time dependent covariate.
4) Career variables (received subsidies over the career) - time dependent covariates.
5) Exhibitions in the previous period (lagged variables) – time dependent covariates.

Two models are estimated for the chance of exhibiting in each of the four market segments. The first model looks exclusively at the exhibitions in one segment and explains the probabilities from the variables 1-4 above. The second model includes lagged exhibition variables for all identified segments (i.e. variable 5), in order to get a fuller understanding of how having an exhibition in a certain location impacts on the probabilities of exhibiting in other segments. Reference categories for the dummy coded variables with more categories are indicated in the table with zeros. No reference categories are shown for the dummy-coded variables with only two categories.[10]

Results

The results of the longitudinal analysis of the exhibition careers appear in Table 5.5. The table first shows the results of the random-effects probit models for exhibitions on the Dutch private market, then for the public market, the informal market and finally for the foreign circuit.

The following can be concluded from the table.

In terms of the overall significance of the models and the effects of the independent variables the models perform well for private and public career tracks, reasonable for the case of exhibitions in the informal circuit and unsatisfactory for foreign exhibitions. For this last circuit model 1 is not significant overall and model 2 is only significant at the 10% level. Table 5.5 furthermore reports the (log) variances of the models in terms of the dependent variable and its standard deviations. From these the part of (total) variance in exhibitions that is apparent on the level of the panel - indicated by ρ - derives. This statistic can take values in the range from 0 (indicating no panel structure) to 1 (implying no cross sectional variance). The table shows that between 20% and 25% of the remaining variance in exhibitions in the Netherlands occurs at the level of the panel. The remaining 75% to 80% is apparent at the level of the individual artists. For foreign exhibitions, the unexplained variance at the panel level is much higher (44%), which again indicates the distinct structure of the foreign exhibition data.

Table 5.5 Random Effect Probit Models: Exhibiting in the Four Circuits

	Market Circuit				Public Circuit			
	Model 1		Model 2		Model 1		Model 2	
Constant	0.993	*0.605*	0.375	*0.701*	1.365	*0.588* *	1.239	*0.666* ~
Artists' variables								
Female	-0.039	*0.066*	-0.063	*0.071*	0.122	*0.065* ~	0.122	*0.064* ~
Sculptor	0.294	*0.083* **	0.342	*0.089* **	-0.050	*0.080*	-0.075	*0.080*
Painter	0.199	*0.084* *	0.234	*0.090* **	-0.154	*0.081* ~	-0.167	*0.081* *
Foto/video artist	0		0		0		0	
No arts education	0.088	*0.146*	0.084	*0.156*	0.023	*0.143*	0.055	*0.142*
Arts Academy educated	-0.061	*0.073*	-0.063	*0.078*	0.027	*0.071*	0.027	*0.071*
Other arts education	0		0		0		0	
Lives in large city	0.174	*0.066* **	0.180	*0.071* *	-0.055	*0.064*	-0.056	*0.064*
Time								
Year	-0.028	*0.007* **	-0.021	*0.008* **	-0.030	*0.007* **	-0.028	*0.008* **
Professional experience								
Experience	0.030	*0.008* **	0.028	*0.009* **	0.035	*0.007* **	0.031	*0.008* **
Experience squared	-0.001	*0.000* **	-0.001	*0.000* **	-0.001	*0.000* **	0.000	*0.000* **
Career variables								
Got individual subsidy	0.372	*0.113* **	0.404	*0.116* **	0.143	*0.114*	0.184	*0.116*
Got prof. cost subsidy	0.148	*0.084* ~	0.130	*0.086*	0.140	*0.082* ~	0.130	*0.082*
Did not receive subsidy	0		0		0		0	
Exhibitions previous year								
Market			-0.133	*0.065* *			0.037	*0.058*
Govenment			0.102	*0.058* ~			0.049	*0.059*
Informal			0.120	*0.074*			0.092	*0.072*
Foreign			0.091	*0.086*			0.071	*0.082*
No exhibition			0				0	
Other statistics								
Log variance - $\ln(\sigma_v^2)$	-1.215	*0.130*	-1.116	*0.154*	-1.271	*0.132*	-1.398	*0.171*
Standard deviation - σ_v	0.545	*0.035*	0.572	*0.044*	0.530	*0.035*	0.497	*0.043*
Part of total variance on panel level – ρ	0.229	*0.023* **	0.247	*0.029* **	0.219	*0.023* **	0.198	*0.027* **
N	5153		4577		5153		4577	
n	576		565		576		565	
Log likelihood	-2421.002 **		-2149.567 **		-2556.393 **		-2298.935 **	

Standard errors in italics; ~ significant at 10%; * significant at 5%; ** significant at 1%; Continued on next page

With respect to the artists' characteristics, little difference is found between male and female artists. This is surprising, since in the (visual) arts females are known to earn and work less then their male colleagues (Throsby & Thompson 1994). Compared to photographers and video-artists, the artists that use more 'classical' techniques (i.e. painters and sculptors) are more visible on the Dutch private market. There is little effect of arts education on the exhibition careers of the artists in public or private market. Artists without formal education however appear less frequently in the informal market. Visual artists educated at arts academy exhibit more than the reference group of artists with other types of arts education. These findings can be explained if artists' circles are formed during the time spent at arts education.

Table 5.5 Continued

	Informal Circuit				Foreign Circuit			
	Model 1		Model 2		Model 1		Model 2	
Constant	-0.572	*0.720*	-1.032	*0.831*	-0.782	*0.887*	-0.733	*0.992*
Artists' variables								
Female	0.120	*0.073*	0.101	*0.076*	-0.064	*0.113*	-0.044	*0.114*
Sculptor	0.127	*0.090*	0.142	*0.094*	-0.174	*0.137*	-0.154	*0.143*
Painter	-0.156	*0.093* ~	-0.118	*0.097*	-0.221	*0.144*	-0.183	*0.142*
Foto/video artist	0		0		0		0	
No arts education	-0.423	*0.192* *	-0.412	*0.199* *	-0.300	*0.314*	-0.204	*0.285*
Arts Academy educated	0.143	*0.079* ~	0.141	*0.082* ~	0.170	*0.120*	0.201	*0.124*
Other arts education	0		0		0		0	
Lives in large city	0.051	*0.073*	0.083	*0.076*	0.078	*0.114*	0.075	*0.114*
Time								
Year	-0.011	*0.008*	-0.006	*0.010*	-0.014	*0.011*	-0.016	*0.012*
Professional experience								
Experience	0.003	*0.009*	0.000	*0.010*	0.021	*0.012* *	0.023	*0.013* *
Experience squared	0.000	*0.000*	0.000	*0.000*	0.000	*0.000*	0.000	*0.000*
Career variables								
Got individual subsidy	0.191	*0.132*	0.176	*0.136*	0.173	*0.152*	0.225	*0.157*
Got prof. cost subsidy	0.250	*0.093* **	0.251	*0.094* **	-0.059	*0.121*	-0.079	*0.123*
Did not receive subsidy	0		0					
Exhibitions previous year								
Market			0.013	*0.071*			0.107	*0.081*
Govenment			0.080	*0.068*			0.179	*0.077* *
Informal			-0.017	*0.087*			0.055	*0.098*
Foreign			0.312	*0.092* **			0.009	*0.104*
No exhibition			0				0	
Other statistics								
Log variance - $\ln(\sigma_v^2)$	-1.173	*0.154*	-1.204	*0.197*	-0.204	*0.142*	-0.230	*0.174*
Standard deviation - σ_v	0.556	*0.043*	0.548	*0.054*	0.903	*0.064*	0.892	*0.078*
Part of total variance on panel level – ρ	0.236	*0.028* **	0.231	*0.035* **	0.449	*0.035* **	0.443	*0.043* **
N	5153		4577		5153		4577	
n	576		565		576		565	
Log likelihood	-1675.241 **		-1477.340 **		-1317.956		-1178.750 ~	

Standard errors in italics; ~ significant at 10%; * significant at 5%; ** significant at 1%

The fact that there is little difference between educated artists and outsiders resembles the common finding that education is of little significance in the arts (Filer 1986, Alper & Wasall 1998, Rengers & Madden 2000) when looking at the relation between performance and schooling *in that survey of artists*. The main objection against this conclusion is that education may have an effect on the odds of being part of the sample, in the sense that educated artists have better chances of making it into the profession. Once there, the differences between them and other people with the same professional status disappear.

The effect of living in one of the major cities is apparent when looking at exhibitions in the market circuit. There is a small negative effect for calendar time on the probability of exhibiting on the Dutch and foreign public markets and the Dutch private market. This implies that, holding all artist' characteristics constant, there were fewer possibilities for artists to exhibit towards the end of the time-period under study. This decline coincides with a dip in the arts market at the late '80s/early'90s.

There are clear effects (both linear and quadratic) of experience on the odds of exhibiting on public and private markets for the arts. The number of exhibitions on the informal market is not related to experience. The informal market seems to be open to both beginning and experienced artists. Foreign exhibitions are also related to experience. In fact, experience it the only variable that shows up significantly in the foreign market model. More experienced artists are thus more likely to exhibit in a foreign country. Figure 5.3 suggests that this effect is mainly due to a peak in the foreign circuit career-line late in the careers of visual artists. The effects of experience on the odds of exhibiting are in common with findings on earnings and time allocation. More experienced artists usually earn more and allocate more time to their artistic work than their beginning colleagues.

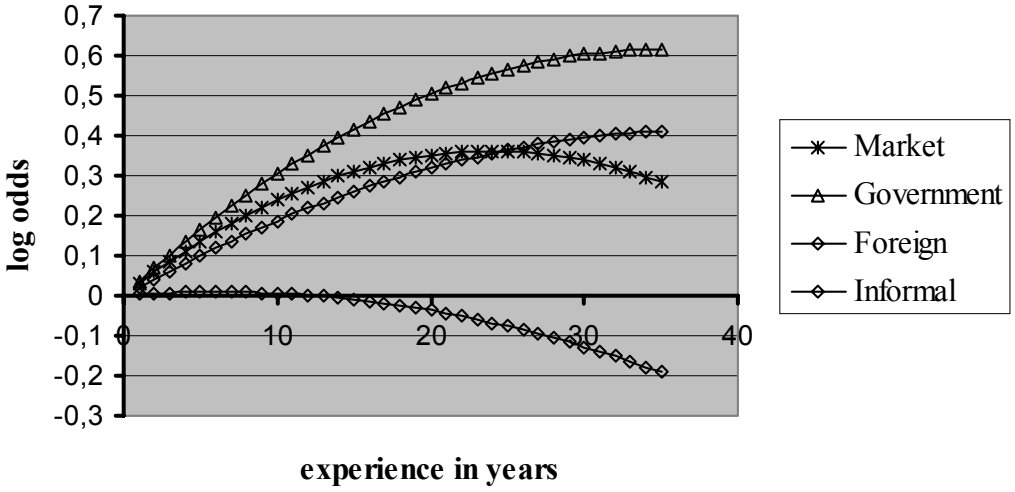
Because of the disaggregation of the activities, it is possible to compare the experience effects across the different markets. If we plot all experience-effects, picture 5.4 arises.

The picture shows that experience effects are strongest on the government market. The odds of exhibiting on the private market initially rise as fast as the odds for public exhibitions, but even out later on in the career. Exhibiting in the informal market has no relation to experience. The exhibitions in the foreign market foremost occur later on in the career. Figure 5.4 at the same time suggests a sequence in exhibiting. Generally artists begin in the both the public and the private market. Later on in the career the relative importance of exhibiting in the private market declines somewhat in favour of exhibiting abroad.

The career variables (earlier grants) in the model show up significantly for different exhibition locations. Individual subsidies particularly affect market exhibitions; the less prestigious professional costs subsidies correlate positively with exhibitions in the informal circuit.

Finally, we look at the effects of earlier exhibitions in model 2. The results are largely inconclusive. Market exhibitions are negatively affected by the lagged market variable and positively by previous public exhibitions. Public exhibitions do not show significant correlation with any of the lagged variables; informal exhibitions correlate with lagged foreign exhibitions and foreign exhibitions in turn correlate with public exhibitions in the previous year.

Figure 5.4 The Estimated Relation Between Professional Experience and the Log Odds of Exhibiting



5.5 Conclusion, Discussion

In this chapter exhibition careers of Dutch visual artists were described and analysed with the methods and theories that are usually used to study artists' earnings. The following can be concluded.

- What do the careers of visual artists look like in terms of exhibitions?

Figures 5.3 and 5.4 graph the development of exhibition careers. Visual artists most often exhibit their work in private and public exhibition circuits, followed by informal and foreign circuits. There is considerable correlation (ranging from 0.30 to 0.55) between the total numbers of exhibitions in the circuits. This points at an overarching winner-take-all structure.

- Can the human capital model (indicated by arts education, professional experience and subsidy history) explain exhibition careers?

Some aspects of the human capital model – applied to arts labour markets – are confirmed by the exhibition data studied in this chapter; others do not portray a significant relation with exhibition careers. In common with earlier findings on arts education (but, in fact, contrary to the *general* human capital model) arts education does not influence the exhibition careers of the visual artist in the sample.

Professional experience however strongly influences exhibition careers. Private and public exhibitions are most clearly related to the professional experience of the artists. The odds of

exhibiting in the public circuit increase with experience over the entire career range studied in this chapter. Initially, the odds of exhibiting in the private market rise almost as fast. Later on in the career the relative importance of exhibiting in the private market declines somewhat in favour of exhibiting abroad. Foreign exhibitions display a peek late in the career of the visual artist. Finally, the informal circuit fluctuates little with experience. A constant fraction of artists exhibits in this circuit.

Furthermore, the subsidy history of the visual artists influences their exhibition careers, in particular in the private market.

- How does success in one segment of the market affect the amount and composition of artistic performance in the other segments?

Finally, this study provides some insight into successful career-strategies for visual artists. The analysis suggests that in the long run getting ahead is a matter of investing in as many career tracks as possible, rather than focussing on just one or two tracks. This can be seen from the fact that artists who exhibit in one year also hold more exhibitions in the next year. Moreover, exhibitions correlate between the circuits.

Notes

[1] Galenson (2001) contains an excellent application of economic models to art historical phenomena.

[2] See for instance Crane (1989), Bystryn (1989), or Bourdieu (1989).

[3] This paper appears in this thesis as chapter 4.

[4] The paper by Rengers and Velthuis (2002) appears as chapter 6 in this thesis.

[5] The foreign market also consists of various segments. For the purpose of this chapter the foreign market is however treated as one entity. Breaking down the foreign exhibitions would lead to too few observations in the sub groups.

[6] The larger part of the data-collection was the construction of the dependent variables that were aimed at measuring the reputation and professional achievements of the artists in the sample.

[7] The main difference with the initial report is that the exhibition locations have been recoded under the headings of private, public, informal and foreign circuits. This recoding is based on the names of the location where the exhibition were held.

[8] After controlling for the group of artists without exhibitions, the inequalities in the number of exhibitions held are roughly equal for the public, private and informal circuit. The inequality in the number of foreign exhibitions is clearly larger.

[9] In statistical terms: modelling the actual number of yearly exhibitions “costs” too much in terms of strong model assumptions, compared to the model assumptions of the longitudinal probit structure that is chosen now.

[10] The reference category for the variable “female” is male; the reference category for living in a large city (Amsterdam, Rotterdam, Utrecht or the Hague) is “ living elsewhere in the Netherlands”.

6. Determinants of Prices for Contemporary Art in Dutch Galleries, 1992-1998 *

In this chapter, we analyse determinants of prices for contemporary art with the help of quantitative data. The focus is on gallery rather than auction prices in the Netherlands. We model the determinants of prices on three different levels: the work of art (size, material), the artist (age, sex, place of residence, institutional recognition), and the gallery (location, institutional affiliation, age). Our main findings are that the size and material of works of art, and the age and place of residence of the artist are strong predictors of price; that differences in size and materials partly 'mask' price differences between artists; and that the variance in prices across galleries is largely explained by characteristics of the artists they represent.

6.1 Introduction

What are the determinants of prices for contemporary works of art? In this chapter we address this question empirically with the help of quantitative data. Previous studies on prices for art have focused on the rate of return of investment in art objects and have compared these rates to the rate of return to other (traditional) financial portfolios. These studies construct annual or semi-annual price indexes for paintings and prints, over a period ranging from 15 (Pesando, 1993) to 200 (Buelens and Ginsburgh, 1993), or even 300 years (Baumol, 1986). The findings are that the rate of return on traditional investment portfolios exceeds the rate of return on paintings in the long run, but no consensus exists on the exact magnitude of the difference (for an overview, see Frey and Eichenberger, 1995). Implicitly these studies test the efficiency of the art market: the fact that returns on paintings are lower than on other investments, can either be interpreted as a prove of inefficiency (Pesando, 1993) or as a measure of the aesthetic utility that paintings yield on top of their monetary returns (Fase and Tol, 1994; Fase, 1996).

Our study differs from previous ones in three respects: in the first place, it focuses on the *primary* rather than the *secondary* market for art. In other words, we look at gallery prices instead of auction prices. Secondly, we analyse *determinants* of prices rather than the *rate of*

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* This chapter was written together with Olav Velthuis of the Department of Art and Culture Studies, Erasmus University Rotterdam. It was previously presented at the 11th International Conference of the Association of Cultural Economics International in Minneapolis in 2000, where it was awarded with the "Presidents' Prize" for young researchers. It consequently appeared in 2002 in The Journal of Cultural Economics **26 (1)**: pages 1-28 as a "Presidents' Prize Paper". The analyses here are also documented in Velthuis (2002).

return on art as an investment. The third difference concerns methodology: all empirical studies so far are based on ordinary regression analysis to estimate determinants of prices. This technique implicitly assumes that no hierarchy exists in the data. However, hierarchical clusters of factors determine prices: factors related to the work of art, the artist, and the gallery.[1] In order to do justice to this hierarchy of determinants, we use *multilevel* rather than *ordinary regression* analysis.

It has been established that the price mechanism for auctions differs considerably from the price mechanism in contemporary art galleries. At auction, supply and demand interact directly to determine prices; unless a reserve price is set which is not reached in the bidding process, the secondary market is cleared (Ashenfelter, 1989). By contrast, on the primary market, contemporary art galleries sell art by means of posted prices. These prices respond to demand and supply only indirectly, and often fail to clear the market. Therefore it is important to distinguish the primary and the secondary market when analysing determinants of prices for contemporary works of art (Rouget et al., 1991). Moreover, the primary market deserves special attention because the vast majority of the works sold will never appear on the secondary market.[2]

Due to limited availability of data and the lack of transparency of the primary market, this segment has so far been largely ignored in cultural economics. Our analyses rely on the first, and to date only, extensive data set on gallery prices and a large number of their potential determinants. The data are derived from a Dutch subsidy arrangement designed to stimulate sales on the primary art market in the Netherlands. The richness of the material (covering over 16,000 works of art sold over a period of six years by more than 2,400 artists in over 200 galleries) allows us to focus on a wide range of variables and existing explanations of price levels on the contemporary art market. Rather than starting from a rigid theoretical angle, our study explores different levels of factors influencing supply, demand and (hence) price-levels on this market.

The question we try to answer is not only relevant for the way markets work; it is also directly related to the earnings of artists and their supply of art. In other words, we deal with two different markets simultaneously. First the art market, where products (works of art) are traded and where supply and demand are the driving forces; secondly the labour market on which artists rely for their income. The functioning of these two markets does not necessarily lead to similar outcomes: works of art that are very labour intensive may sell for little, whereas quick drawings may be worth more than a reasonable hourly wage.

In the following section of the chapter, we briefly discuss earlier research on price formation of works of art. In the third section we describe the works of art, artists and galleries in the data set. In section 6.4 a number of hypotheses on supply and demand and their potential influence on the price level is derived. Since we do not model supply and demand separately,

but instead estimate a hedonic price function, this section is exploratory. In section 6.5 the methods used in this chapter are introduced. Section 6.6 presents the explanatory analysis of prices. The most striking results are that a large part of the variance in prices is explained by determinants on the level of works of art rather than artists. Furthermore, it turns out that galleries derive their price level not from their own characteristics, but from characteristics of the artists they represent. We draw a number of tentative conclusions in the last section, and suggest avenues for further research.

6.2 Earlier Studies

The few existing quantitative empirical studies of determinants of prices for works of art are based on auction data. In other words, these studies analyse the secondary rather than the primary market. Nevertheless, they provide a good starting point for our analysis. The studies do not start from a pre-existing economic theory like marginal cost pricing or full cost pricing, but instead estimate a hedonic price function. Bruno Frey and Werner Pommerehne's study 'Why is a Rauschenberg so expensive?', for instance, uses auction data on both demand and supply factors for 100 international contemporary artists, collected by the late German journalist Willi Bongard. Frey and Pommerehne find that aesthetic judgements of experts are a main determinant of economic value: "[t]he often stated claim that the prices of works of modern art are completely unrelated to their artistic value is thus not borne out by our research. If anything, the contrary tends to be true: the painters and sculptors with the highest prices are, on the whole, those with the highest artistic achievement." (Frey and Pommerehne, 1989, p. 93).[3]

Apart from aesthetic (expert) evaluation of his work, the artist's nationality and possibly years since his or her death, the size, style and medium of the work of art, advertising activities of the gallery, per capita income and the rate of return on traditional investment portfolios, are determinants of the *auction* price (Frey and Pommerehne, 1989, p. 98-99). With these variables, Frey and Pommerehne manage to account for 61 percent of the variance in prices. The major flaw of the research is, however, that past prices of the same artist are an important determinant. This finding underscores the path dependent nature of pricing art, but at the same time it is unsatisfactory because it merely raises the question of how these past prices have been determined (Plattner, 1996, p. 16). Likewise, Rouget et al. (1991) find for sales of modern French artists at the Parisian auction house Hôtel Drouot that the size, technique and 'provenance' of the work as well as the age of the artist determine the price of the work; the variance in prices they manage to explain with a hedonic function is 20 percent of the total (Rouget et al., 1991, p. 149; for similar results see Anderson, 1974; Singer, 1978).

Apart from the fact that all studies on determinants of prices use auction rather than gallery data, they contain a serious methodological problem: by including all variables in a least square regression analysis these studies implicitly assume that there are as many data on

artists and galleries as there are on works of art. In fact, however, the total number of works of art in their data set has been produced by a smaller number of artists and has been sold at an even smaller number of galleries. Therefore, the analysis of Frey and Pommerehne and Rouget et al. is based on an incorrect number of cases of artists and/or galleries.[4]

The disaggregation of data on a lower level (work of art) to a higher level (artist or gallery) leads to an unjustified increase in the significance of the statistical relations, as well as to ecological errors and to misguided interpretations. This can be illustrated with a hypothetical example. Suppose we have data on the prices of 1,000 works of art, made by five male and five female artists. Statements about the relation between the prices of those works of art and the gender of the artists should be based on 10 cases (*n* artists) rather than on 1,000 cases (*n* works of art). However, in an ordinary least square analysis gender would be implicitly treated as a characteristic of an artwork. As a result, the number of cases is inflated. One of the advantages of multilevel analysis is that it uses the correct number of cases on all levels of analysis.

6.3 Description of the Data

The data are derived from a policy of the Dutch government aimed at stimulating private collecting and buying of contemporary art. The government provides private buyers of contemporary art at a large selection of galleries with an interest-free loan. The purchase of the work is financed by the government, after which the buyer pays monthly instalments. Therefore, the government does not intervene on the art market directly. The selection is based on the professionalism of the gallery and the quality of the work of the artists it represents. For living artists and private buyers no restrictions exist for participating. There is a lower limit of 500 guilders and an upper limit of 12,500 guilders on the interest free loan, but no upper limit exists for the price of the works of art that can be bought via the arrangement (see Gubbels, 1995 for details of the arrangement). The government arrangement does not affect the price level on the market: comparable works of art are sold for identical prices, regardless of whether or not collectors make use of the arrangement.

The original data set contains prices and characteristics of over 16,000 works of art, sold between 1992 and 1998 for a total amount of over €34 million (almost €5 million on an annual basis). These works have been produced by more than 2,400 artists and were sold in over 230 Dutch galleries. Not all these data are used in the analysis: the cases for which both size and medium were missing are excluded. Missing values on demographic variables of artists and galleries have been substituted. In the analysis, we control for this substitution and show that it has no significant impact on the results. The following description of the works sold through the arrangement, as well as the description of the artists and the galleries, is therefore based on the valid numbers of observations in the data, not on all the data.

The prices in the analysis are actual selling prices, not listed prices. The data set does not contain information on buyers, nor on the rest of (unsold) supply by the visual artists. The works sold via the government arrangement make up for approximately 10 percent of total gallery sales. Transactions at the lower and upper end of the market are under-represented in the data set. Collectors who are rich enough to purchase expensive works of art are less likely to obtain the interest free loan. Transactions in 'low brow' galleries are also under-represented in the data, since these galleries are usually not admitted to the government arrangement. Leaving those segments aside, the data set provides an accurate representation of the 'middle segment' of the total Dutch market.

Works of Art

The number of works of art used in the analysis is almost 12,000 (see Table 6.1).[5] Mean price of these works is 2,227 EURO. The average surface of the two dimensional works is 8,161 square centimetres, so that one square centimetre of artwork costs about 28 EURO-cents on the Dutch market. The factor height is included for three-dimensional works of art, such as sculptures and (glass) objects. The average height of those works is 55 centimetres; every centimetre of a sculpture or other three-dimensional object costs about €40.

Table 6.1 Features of Works

	Mean	*Standard deviation*
Price*		
Selling price	2,227.69	*1,613.81*
Size		
Surface (in squared cm)	8,161.15	*8,069.27*
Height (in cm)	55.47	*38.96*
Relation Price - Size		
Price per squared cm	0.28	
Price per cm/height	40.00	
Year		
1992	0.06	
1993	0.20	
1994	0.13	
1995	0.14	
1996	0.09	
1997	0.18	
1998	0.20	
Material		
Painting	0.50	
Print	0.07	
Sculpture	0.21	
Drawing	0.04	
Watercolour	0.06	
Glass, ceramic	0.09	
Other	0.03	
N	11,869	

* All prices are in EURO

The number of works sold and the average price per year vary considerably. The changes in quantities sold reflect trends in the worldwide art market, which suffered from a slump in the first half of the nineties. In 1996 the bottom of the market was reached; in the second half of the nineties both the number of works sold and the average selling price started rising again. In our analysis of determinants, dummy variables for each year control for this and other year-related influences on the price level such as inflation. The works of art have been categorised across seven different media. Paintings constitute both the largest and most expensive category of works of art sold on the Dutch market. As the analysis will reveal, prints (7% of all the works sold) are relatively cheap because they are not unique but instead sold in edition, ranging from 5 to over 250. Sculptures and glass or ceramic objects are also frequently sold via the arrangement.

Artists

The data set contains relevant information on 2,089 artists who sold work through the arrangement in the period under study. Table 6.2 gives a summary of the characteristics of the artists in the sample.

Table 6.2 Features of Artists

	Mean	*Standard deviation*
Price*		
Mean price per artist	1,959.79	*1,278.10*
Total sales per artist	12,657	*30,351*
Sale characteristics (1992-1998)		
Number of works sold	5.68	*11.70*
Number of different galleries	1.44	*1.09*
Number of different media	1.36	*0.70*
Demographics		
Age	50.03	*11.92*
Female	0.25	
Foreign nationality	0.20	
Place of residence		
Amsterdam	0.21	
Rotterdam	0.04	
Abroad	0.22	
Other	0.53	
Career characteristics		
Participated in the BKR	0.19	
Received small grant (BKV)	0.18	
Received large grant (IS)	0.23	
Received commissions from the government	0.17	
Sold to a museum	0.19	
Average price of work sold to a museum	3,303.05	*3,937.47*
N	2,089	

* All prices are in EURO

Although the overall mean price of works sold via the arrangement is €2,227, the mean price per artist was €1,960. This implies that - on average - 'expensive artists' sell more works than 'cheap artists'. In other words, the distribution of success is skewed. The 'best-seller' sold for nearly €700,000. The average artist earned approximately €12,500 over the period 1992-1998; the average revenue per artist per year is therefore only €1,800. This confirms findings of previous research that only a small percentage of artists can make a living from selling their work on the commercial market (see for instance Rengers & Plug, 2001).

The first interesting characteristic is the high average age of the artists in the arrangement. Apparently, it takes a long time before an artist starts selling on the private market.[6] Furthermore, male artists represent approximately 75 percent of the artists selling through the arrangement. Men in other words dominate the primary market for contemporary art, which is striking since almost half of the total population of visual artists in the Netherlands is female (Brouwer & Meulenbeek, 2000). The unequal gender distribution is partially explained by the high (average) age at which artists start selling work on the private market.[7]

The average number of works sold by any artist between 1992 and 1998 is 5.68. Remarkable is the fact that in the raw data selling prices for women are 20 percent lower than for their male colleagues. Not only do fewer female artists sell via the arrangement, they also sell for lower prices. In terms of average total sales, the difference between men and women evaporates. Many artists work in more than one medium (on average 1.36); their work is usually represented by more than one gallery (average 1.44). The majority of Dutch artists lives in Amsterdam, which is the cultural centre of the Netherlands.

Institutional recognition of artists can be measured by looking at the government arrangements in which the artist has been involved. As Rengers and Plug (2001) show, the institutional recognition of the artists in an important characteristic of the careers of Dutch visual artists. To obtain these data we have added data from a central government registration in which all forms of involvement between an artist and the Dutch government between 1984 and 1998 are listed. In Table 6.2 these arrangements have been organised under the heading of 'career characteristics'.

Of all artists in the sample, 56 percent did not participate in any of the schemes - apart off course from the interest free loan arrangement from which our data have been derived. These artists did not receive any individual subsidy, grant or commission, and did not sell to a museum via a government arrangement. Close to 20 percent of the artists sold work to public museums in the Netherlands. The prices of these works are considerably higher than on the market for private collectors: the average price per artist is €3,303 as opposed to the average price per artists of €1,959 on the private market.

Galleries

It is expected that prices of art are not only determined by characteristics of the works of art and the artists, but also by the gallery where the works are sold. Table 6.3 presents a description of the gallery characteristics that will be used in the analysis.

Table 6.3 Features of Galleries

	Mean	*Standard deviation*
Price*		
Mean price per gallery	1,968.20	*725.51*
Total sales per gallery	130,248	*217,389*
Sale characteristics (1992-1998)		
Number of works	58.47	*80.18*
Number of artists	15.33	*13.69*
Fraction of artists also selling to museums	0.26	*0.25*
Location		
Amsterdam	0.32	
Rotterdam	0.06	
The Hague	0.08	
Other	0.54	
Demographics		
Age of the gallery	14.95	*9.69*
Affiliation		
Traditional/easily accessible	0.35	
Avant-garde/experimental	0.33	
No clearly distinguishable affiliation	0.32	
N	203	

* All prices are in EURO

A large number of galleries (about one third in our sample) are situated in Amsterdam. For more than half of the galleries we know the year the gallery was founded. The oldest gallery in our analysis was founded in 1941, the 'youngest' in 1995. The galleries in our sample have been established for 15 years on average. Between 1992 and 1998 the average gallery sold €130,248 worth of art via the arrangement; the average number of works sold was approximately 58. Again, the distribution is skewed; one gallery sold just over €18 million via the arrangement, while another gallery only sold art worth €794. We introduce two dummy variables for the institutional affiliation of the gallery (experimental or avant-garde versus traditional or easily accessible art) on the basis of membership of the two main gallery associations in the Netherlands, and participation in two large Dutch art fairs (Gubbels, 1995).

6.4 Supply And Demand On The Primary Market For Visual Art

One of the advances of this study is that we model determinants of prices that are related to supply and demand across three (hierarchical) levels: works of art, artists and galleries. Many of those determinants are likely to be relevant to both supply and demand. Like other studies that explain observed market prices, we solve this identification problem empirically by estimating 'hedonic' price functions. Thus we do not model demand and supply separately, but relate prices simultaneously to the wide variety of potential determinants the data set contains.[8] In the following exploratory section we will nevertheless try to identify supply and demand factors on the three (hierarchical) 'levels', and relate them to the variables in our data set.

Works of Art

The main supply-side factors that play a role in the price level for works of art are related to the material aspects of the work, such as size, materials used and style. The first basic hypothesis is that within the body of work of each artist the price increases with size. On average, larger works of art cost more in terms of materials and require more labour time (Sagot-Duvauroux et al., 1992, p. 93). Abbing (1989) argues that this is not necessarily the case, and suggests that this effect can also be due to the institutionalised rule of pricing according to size that many galleries have adopted. In our analysis we look further than the relation between size and price for all artists. We also study the relation between the average price-level of an artist and his or her marginal price for extra centimetres. Our expectation is that artists who start with a high initial price (i.e. regardless of size) charge more for every additional square centimetre than colleagues who start with a lower initial price.

Another factor that influences the price is the materials and techniques used in the work of art. For instance: oil paint is more expensive and labour intensive than water colour, and canvas more costly than chapter. It can therefore be expected that paintings constitute the most expensive type of a two-dimensional work of art. Furthermore, works that are produced in edition such as silkscreen prints or lithographs are per piece less costly to produce than unique works. Therefore they are likely to be sold for a lower price.

From the point of view of the buyers, other reasons exist to expect price differences between works of art. With regard to size, the demand for works of art of extreme sizes (both small and big) is likely to be lower than for works of 'regular' size. Odd formats are difficult to display in either private houses or company buildings (Frey and Pommerehne, 1989, p. 88). In empirical terms, this may translate in a loglinear or polynomial relation between price and size. Given the value of authenticity in the art world, buyers tend to value works of art according to the 'proximity' to their creator. Therefore, demand for paintings (as well as the

price of paintings) is likely to be higher than for works made in edition (Zolberg, 1990, p. 87; Sagot-Duvauroux et al., 1992, p. 94).

Artists

An important group of (artists') characteristics that may be of influence relates to the earlier career of the artist. On the supply side, age, which we interpret as an indicator of experience, influences the supply of art. On the basis of human capital theory we expect that older artists are more productive than their starting colleagues in terms of producing valuable art, because of their experience and 'on-the-job training.'[9] On the demand side, there seems little reason why buyers would prefer works of art of older artists to those of young artists for other reasons than differences in quality. However, older artists have had more time to establish a network among critics, curators and other cultural experts, which enhances their visibility, reputation, demand and therefore the price-level of their output (Sagot-Duvauroux et al., 1992, p. 91-92; Bowness, 1990). As Holger Bonus and Dieter Ronte argue regarding the relationship between credibility and economic value: "Networks (…) are especially useful for the exchange of commodities whose value is not easily measured" (Bonus and Ronte, 1997, p. 112).[10]

Likewise, we expect that institutional recognition of the artist, measured by the amount of government involvement in his or her career, has a positive effect on the selling price. Government rewards enhance the reputation of the artist and function as a 'proof' of quality. The importance of the quality signal that every grant, subsidy or government commission sends out depends mainly on the exclusiveness (and the amount of money involved) of that particular arrangement. Small grants with a mild selection process are likely to have small reputation effects, whereas larger grants are expected to have strong effects on reputations and hence the price level of the artist. Apart from the exclusiveness of the arrangement, the (related) visibility of the arrangement matters. Small grants and commissions are usually handed out in an anonymous manner: the artists apply and receive (or do not receive) funding. Other forms of support such as museum sales are more visible in the art world, as is shown in Pommerehne and Feld (1997).

Furthermore, we develop a number of hypotheses with respect to the residence of the artist. It is likely that artists who are living abroad - no matter what nationality they are - charge higher prices: galleries often have to make considerable (transaction) costs in order to display works from outside the Netherlands. These costs relate to shipping, insurance and to the need for Dutch galleries to pay a percentage of the selling price to foreign galleries who are usually the main representative of the artist. At the same time, demand for artists living abroad may be higher because potential buyers interpret the fact that the artists live and work abroad as a signal of quality, and galleries market these artists accordingly. In sum, we expect artists living abroad to sell for higher prices than artists living in the Netherlands.

The Dutch art market, like many foreign art markets, is structured in terms of a centre and a periphery (see Plattner, 1996, p. 76-77). The centre is where demand is concentrated, reputations are built, and the density of social networks is highest. By any of those standards, Amsterdam is the centre of the Dutch art world. Moreover, living in Amsterdam is more costly than in the rest of the Netherlands. We therefore expect artists living in Amsterdam to sell for higher prices than elsewhere in the country. Finally, we test if the widespread finding that women are discriminated against in terms of wages and earnings is replicated in our data set.[11]

Galleries

As with artists, we expect that galleries in Amsterdam sell for higher prices, not only because rents are higher in Amsterdam (supply side) but also because demand is concentrated and reputations are established in the centre of the market (demand side). We expect that galleries with an 'avant-garde' or institutional affiliation and with many artists selling works to museums, are eager to maximise price, since they see price as a signal of quality. Traditional galleries are hypothesised to be more concerned with turnover or profit and can therefore be expected to sell more works of art for lower prices than avant-garde galleries.

Moreover, galleries that concentrate their sales efforts on a small number of artists will sell works for a higher price level than galleries that divide their energy over a larger group. Just like artists, older galleries have been able to devote more time to establishing their reputation among experts and to enhancing their visibility in the art world, which will have a positive effect on the average price level. Before testing these exploratory hypotheses, however, we elaborate in the next section on the methodology we use.

6.5 The Advantages of Multilevel Analysis

One of the central arguments of this chapter is that prices on the market for visual art are determined by characteristics on different levels. In order to reproduce this approach in our statistical model, we apply so-called multilevel models that allow for a breakdown of variance components into the different levels of the analysis (works of art, artists, galleries).[12] Therefore, the models give correct estimates of the price-effects of variables that appear at the lowest level (i.e. explaining price differences between works of art out of differences in size or technique), but also at higher levels (i.e. if price differences are caused by the gender of the artist or by the reputation of the gallery where the work is sold).

One of the important differences with regression analysis is that in a multilevel model the correct number of cases is used at each identified level. In other words, the standard errors of the effects are correctly estimated. Another advantage of applying multilevel models is that they provide information on the variance on one level relative to the total variance. In our

case, this approach allows us to see how much of the observed price difference is related to characteristics of works of art, how much can be attributed to the artists, and which part is due to gallery characteristics. A third advantage is that multilevel modelling allows effects to differ across levels. In our model, for instance, we study the relation between the average price level and the price of extra centimetres for each individual artist. The following example, based on the assumed relation between the size of an artwork and its price, is included in order to illuminate the technique.

Figure 6.1 The Relation Between Price and Size of a Work for One Artist

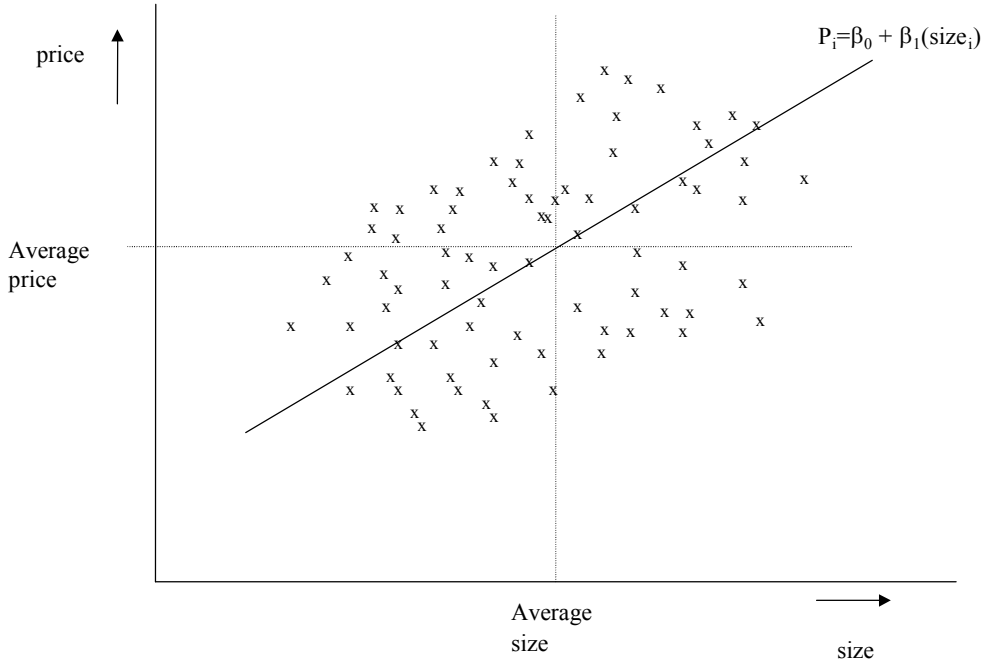
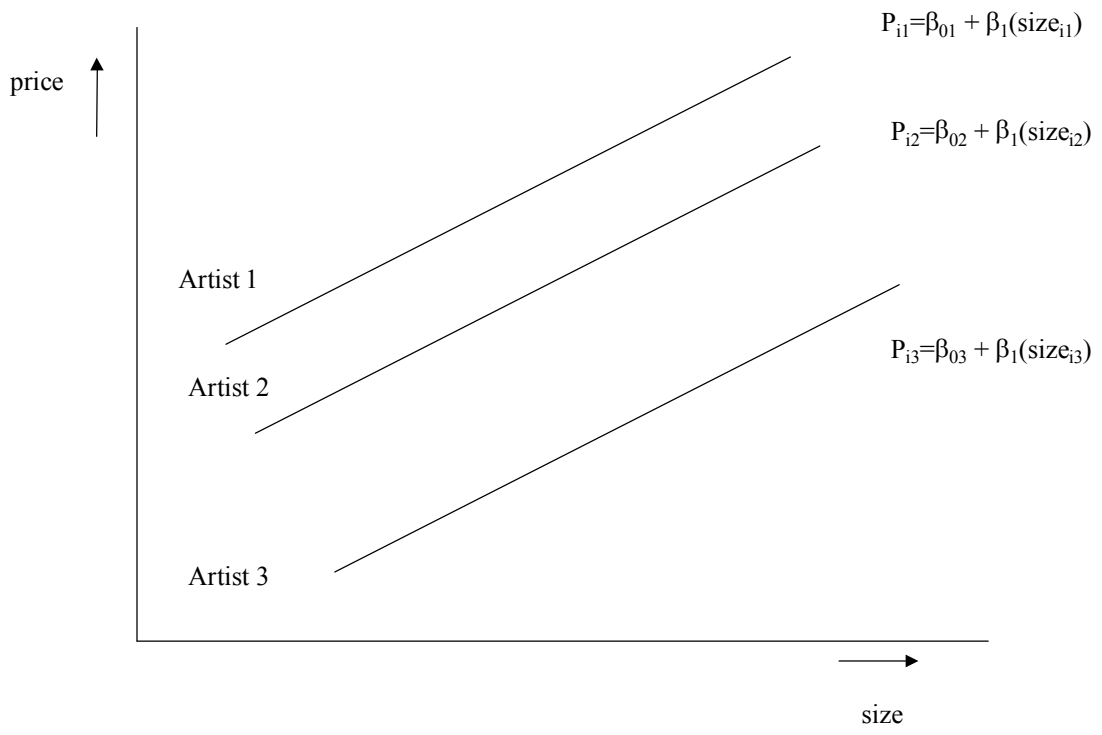


Figure 6.1 illustrates the example of the relation between selling price and size within the body of work of one artist (*ceteris paribus*). In this case, variance only exists on the level of works of art. There is however little reason to assume that all artists charge the same amount for every square centimetre of their work. A square centimetre painted by Picasso is more expensive than a square centimetre painted by an artist who just graduated from an art academy. Figure 6.2 represents differences in the relation between size and price for different artists.

In this representation, artists do not differ in the marginal price of extra centimetres, but they do so in their average price level or the initial price when size is not taken into account. In other words: the intercept of the price-size line differs between artists, but the slope of the line does not. In this case, there is variance at two levels: the level of the works of art and the level

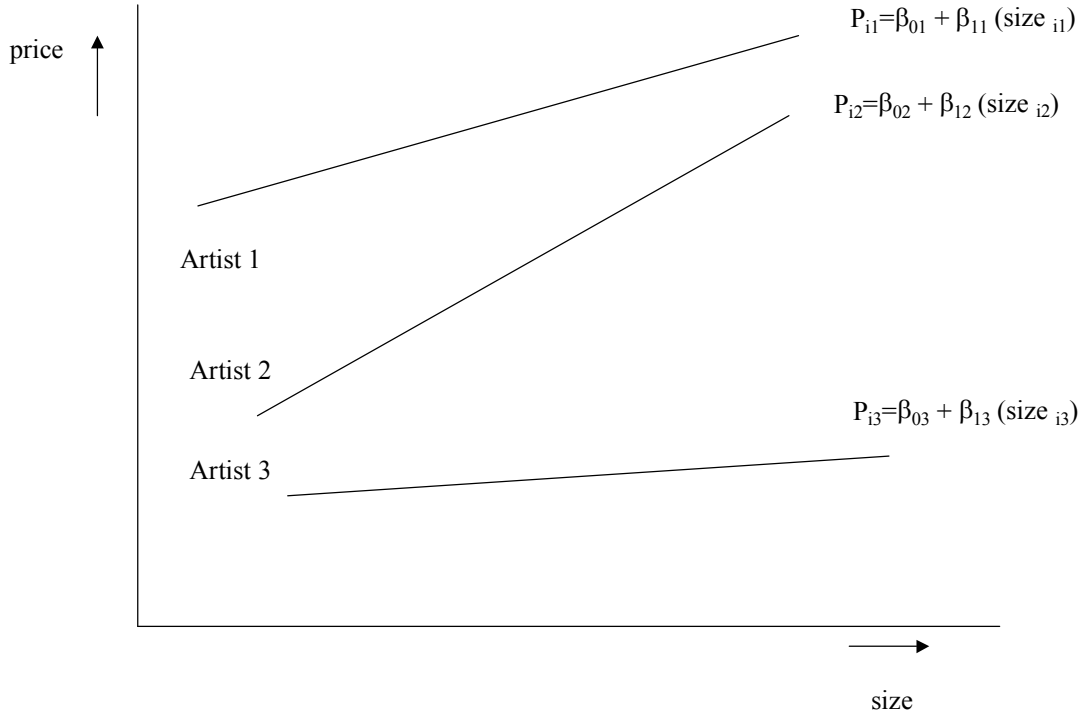
of artists. The variance at the level of artists can be modelled, and is likely to include factors such as experience, education, and previous prices for works sold to museums and at auctions. In this chapter, we look further than the relation between artwork and artist, since we also include gallery characteristics in the analysis. In the same manner as in which there may be different price-size lines for artists, differences between galleries can explain observed relations at the level of works and artists. Since these differences are modelled in a similar way as the relation between works of art and artists, this relation is not depicted graphically.[13]

Figure 6.2 The Relation Between Price and Size of a Work for Different Artists



Finally, not just the intercept, but also the slope of the line that depicts the relationship between size and price can vary between different artists. Some artists may, for example, charge less for a size increase of their work than other artists. For example, Van Gogh's paintings are all expensive, regardless of their format. In that case the lines in Figure 6.2 would no longer be parallel, but differ both in intercept and in slope, as in Figure 6.3.

Figure 6.3 Differences in the Relation Between Price and Size of a Work for Different Artists



These three models have a straightforward algebraic representation, as can be seen below. First, a base-line model is shown, then a fixed-effects model that includes explanatory variables at each of the three levels. Finally, we present a random-effects model in which the relation between price and size differs between artists:

The base-line model

$$Price_{ijk} = Constant + v_{0k} + u_{0jk} + e_{0ijk} \quad \text{(I)}$$

The fixed-effects model

$$Price_{ijk} = Constant + A_{ijk} + B_{jk} + C_k + v_{0k} + u_{0jk} + e_{0ijk} \quad \text{(II)}$$

The random-effects model

$$Price_{ijk} = Constant + A_{ijk} + B_{jk} + C_k + D_{1j} + v_{0k} + u_{0jk} + e_{0ijk} \text{ with}$$
$$D_{1j} = Constant + u_{1jk} \quad \text{(III)}$$

Where i, j and k indicate the three observed levels (work of art, artist and gallery respectively); A, B, C stand for vectors of explanatory variables at the level of works of art, artists and galleries respectively; v, u and e represent error terms; D_{1j} is a 'random' term that varies between artists (the j-level) with an error term of u_{1jk}. The base-line model, which has

no explanatory power, is used to evaluate changes in explained variance (i.e. the three error terms).[14]

6.6 Analysis

In this section we estimate hedonic price functions with a multilevel structure (Table 6.4). Model 1, the base-line model (type I), has no explanatory power but merely serves as a point of reference. Models 2-4 are fixed-effects models (type II), where clusters of variables are introduced at each level. Model 5 is a random-effects model (type III), where the relationship between price and size is allowed to vary for different artists. In all models we use actual prices in EURO rather than the log of prices.

The discussion of the results is organised as follows: we first look at the fixed-effects of the included variables at each level separately, as well as the changes in (un)explained variance from one model to another. These findings are based on Model 4 in Table 6.4 and on the summary of (un)explained variances that is depicted in Table 6.5. Next, we briefly discuss the random-effects Model 5. We conclude with an overall evaluation of the changes in explanatory power across the models. This discussion is again based on Table 6.5.

Determinants on the Level of Works of Art

In Model 4, the reference category for the year of sale is 1992. The global slump of the art market is reflected in a negative effect of the year-dummies for 1993 until 1996.[15] Prices in 1997 and 1998 are significantly higher than the year of reference, 1992. For the material of the artwork, the reference category is paintings. This is at the same time the most expensive material; for instance, a print is on average €1,991 cheaper than a painting.[16] Size is also included as an explanatory variable. We use standardised values for size in order to make sculptures and (glass or ceramic) objects comparable with two-dimensional works of art. The size of sculptures and pottery is in centimetres height; size of paintings is in square centimetres. For every extra standard deviation of size, the price of an artwork increases by 630 EURO; with a t-value of 52.5 this variable is a very strong predictor of prices. Thus the effects that we hypothesised for material and size (section 6.4) are confirmed by the data.

Including artwork-related variables in Model 2 results in a large drop in unexplained variance at the level of works of art (Table 6.5). At the level of artists and galleries, however, the unexplained variance increases rather than decreases. This indicates that within the body of work of one artist, price and size correlate strongly for reasons mentioned before (section 6.4). The characteristics of the works are however of no help for the explanation of price differences between artists. On the contrary: size and other material differences between works of art partly mask price differences between the work of different artists, as is indicated by the increase in unexplained variance on the level of artists.

Table 6.4 Multilevel Hedonic Price Functions for Contemporary Art in Dutch Galleries

	Model 1 Baseline-model		**Model 2** Works of art		**Model 3** Works of art & artists		**Model 4** Works of art, artists & galleries		**Model 5** Works of art, size, artists & galleries	
Constant	1,978	*48* **	2,131	*72* **	1,268	*156* **	882	*198* **	791	189 **
Characteristics of works of art (A_{ijk})										
Year sold										
Sold in 1992			0		0		0		0	
Sold in 1993			-155	*60* **	-156	*59* **	-164	*59* **	-113	*55* *
Sold in 1994			-95	*64*	-108	*63* ~	-118	*63* ~	-85	*59*
Sold in 1995			4	*64*	-2	*63*	-13	*63*	-6	*59*
Sold in 1996			-56	*67*	-64	*67*	-73	*67*	-60	*62*
Sold in 1997			266	*64* **	259	*63* **	259	*63* **	310	*59* **
Sold in 1998			372	*64* **	364	*63* **	371	*63* **	402	*59* **
Material										
Painting			0		0		0		0	
Print			-1,895	*63* **	-1,989	*63* **	-1,991	*63* **	-1,886	*59* **
Sculpture			-336	*45* **	-315	*44* **	-318	*43* **	-279	*42* **
Drawing			-711	*68* **	-725	*67* **	-725	*67* **	-670	*62* **
Watercolour			-628	*60* **	-686	*59* **	-683	*59* **	-567	*55* **
Glass			-402	*66* **	-417	*64* **	-425	*64* **	-378	*60* **
Other			-346	*85* **	-329	*83* **	-329	*83* **	-227	*78* **
Standardised size * 10^{-3}			0.63	*0.012* **	0.63	*0.012* **	0.63	*0.012* **	0.85+ $u_{size\ jk}$	*0.024* **
Characteristics of artists (B_{jk})										
Sale characteristics (1992-1998)										
Number of works sold					8.72	*2.44* **	7.64	*2.45* **	3.88	2.35 ~
Number of works sold squared					-0.037	*0.010* **	-0.033	*0.010* **	-0.017	0.009 ~
Number of different galleries					24.05	*17.15*	30.69	*17.16* ~	26.33	16.74
Number of different mediums					7.97	*27.30*	-0.75	*27.3*	16.66	26.14
Demographics*										
Age					11.20	*2.62* **	10.89	*2.61* **	13.62	2.52 **
Female					-141	*48* **	-138	*48* **	-156	47 **
Foreign nationality					263	*105* *	268	*105* *	258	102 *
Place of residence										
Amsterdam					145	*55* **	138	*55* *	133	54 *
Rotterdam					-202	*105* ~	-200	*106* ~	-168	105
Abroad					539	*99* **	525	*99* **	496	96 **
Other					0		0		0	

Continued at page 132

Determinants on the Level of Artists

As can be seen in Model 4, the main effect on price of the number of works an artist sells is clearly positive: apparently success on the market translates into higher prices and increases in sales simultaneously. This can either be interpreted as a evidence of a so-called 'Veblen effect' on the art market, which means that prices are used by collectors as an indicator of quality (Leibenstein, 1950, Throsby, 1994b). An alternative interpretation is that dealers and artists choose for a penetration strategy; accordingly they start pricing low and only increase the price level when a critical level of sales has been established. The negative effect on price of the squared number of works sold indicates that the overall effect evens out when the number of works sold increases. The peak of the price influence of the number of works sold lies at 206 works of art. Finally, variables measuring the diversification in the artist's body of work (i.e. the number of different techniques and the number of galleries sold through) do not have significant effects on price.

Demographic variables (sex, age, residence) also have significant effects on the price level across artists. As expected, the works of older artists are more expensive than the works of their younger colleagues. Every year of age difference 'creates' a price gap of 11 EURO between two similar artists. There is no evidence that this age effect evens out, since polynomial age terms did not have a significant impact on prices. Female artists receive a lower price for their works of art. The effect reported here is smaller, however, than the 20 percent gender gap in prices that we found in the descriptive analysis in section 6.3. We partly explain the gender gap by including factors such as age or the size of the work. The work of female artists is not only cheaper because the maker is female, but also because female artists are on average younger than their male colleagues and because females have had different careers - in terms of government recognition - than men.[17]

As predicted, the most expensive works of art are those of foreign artists living abroad, while a small price premium is evident for Amsterdam artists. A 'price penalty' of €202 exists for artists living in Rotterdam. Compared to the reference group of artists living elsewhere in the Netherlands, the works of Amsterdam artists are on average about €140 more expensive. Finally, the effects of institutional recognition on prices are mixed. Some grants have a positive effect on the price level of an artist; the participation in other arrangements leads to a downward pressure on price. It is outside the scope of this chapter to look in detail at the effects of all different grants. The analysis shows that an artist who has received a BKR-subsidy is across the board more than €155 more expensive than a colleague who did not receive such a subsidy. People who receive a small grant (BKV) from the government tend to sell for slightly lower prices; surprisingly, the large prestigious grants (IS) of the government also have a negative effect of €165. Furthermore, the price level on the private market of an artist is positively correlated with his or her price level on the market for museum acquisitions.

Table 6.4 Continued

	Model 1 Baseline-model	**Model 2** Works of art	**Model 3** Works of art & artists		**Model 4** Works of art, artists & galleries		**Model 5** Works of art, size, artists & galleries	
Career characteristics								
Participated in the BKR			152	*52* **	155	*52* **	72	*50*
Received small grant (BKV)			-120	*60* *	-125	*60* *	-109	*59* ~
Received large grant (IS)			-168	*66* *	-165	*67* *	-152	*65* *
Commissions from the government			173	*69* *	174	*70* *	193	*68* **
Sold to a museum			98	*66*	87	*67*	62	*65*
Average price of work			0.05	*0.01* **	0.05	*0.001* **	0.04	*0.01* **
Characteristics of galleries (C_k)								
Sale characteristics (1992-1998)								
Number of works sold					2.98	*0.71* **	2.98	*0.66* **
Number of artists					-7.87	*4.59* ~	-8.57	*4.30* *
Percentage selling to museums					2.09	*1.92*	2.29	*1.83*
Location of the gallery								
Amsterdam					181	*98* ~	223	*92* *
Rotterdam					95	*162*	29	*154*
The Hague					99	*133*	71	*125*
Other					0		0	
Demographics*								
Age of the gallery					7.98	*4.84* ~	8.16	*4.54* ~
Affiliation								
Traditional/commercial					86	*105*	73	*99*
Avant-garde/experimental					20	*110*	40	*104*
No clearly distinguishable affiliation					0		0	
Other statistics								
Total variance	2,555,103	2,180,586	1,933,573		1,873,186		1,710,035	
e_{0ijk} (works of art)	1,654,307	1,178,073	1,175,623		1,175,816		917,436	
u_{0jk} (artists)	608,083	695,248	564,225		564,252		680,803	
v_{0k} (galleries)	292,713	307,265	193,725		133,116		111,796	
$u_{size\ jk}$							0.42	
Covariance $u_{size\ jk}$ - u_{0jk}							307	
-2 log likelihood	206,038	202,762	202,353		202,312		200,987	
N (works of art)	11,869	11,869	11,869		11,869		11,869	
N (artists)	2,089	2,089	2,089		2,089		2,089	
N (galleries)	203	203	203		203		203	

* Control dummies indicating missing values on demographic variables were included in the analysis. They are not depicted, since they were insignificant.
Standard errors in italics; ~ significant at 10% level; * significant at 5% level; ** significant at 1% level

Adding artist-related variables explains a large amount of variance not just at the level of artists but also at the gallery level, as is shown in Table 6.5. Apparently, price differences between galleries are partly explained by characteristics of the artists. In other words: 'expensive' galleries are to some extent expensive because they sell works of 'expensive' artists (old, foreign, male artists, for example). This implies that one function of the galleries is to pass on price-increasing (or price-decreasing) factors at the artist's level to the general public. This mechanism does not occur between works of art and artists and galleries, as can be seen by comparing the explained variance in Model 4 with the model containing only characteristics of works of art (Model 2). Thus galleries choose expensive or cheap *artists*, rather than expensive or cheap *works of art*.

Determinants on the Level of Galleries

Remarkably, most characteristics of galleries do not have a significant effect and do not explain a large amount of variance either. A small positive effect exists for the number of works sold through a gallery (almost 3 EURO for every additional work), but the magnitude of this gallery effect is much smaller than the effect of numbers sold by an artist. Apparently, galleries are not able to add economic value themselves, apart from the selection function mentioned above. Compared to the rest of the Netherlands, galleries located in Amsterdam are more expensive than their competitors elsewhere in the country (approximately 181 EURO per artwork). This may be caused by higher operating costs in the capital, and/or by Amsterdam's role as the centre of the Dutch art world. The age of the gallery only has a small, albeit significant effect: for every additional year the gallery exists, the price increases on average by approximately 8 EURO per artwork. The affiliation of the gallery (traditional versus experimental) does not have a significant effect on the price of works sold. This finding does not preclude that both gallery circuits can have their own local price maximum.

The Random-effects Model

To repeat, Models 1 - 4 focused on the fixed effects of determinants in the data set. Finally, we show a random-effects model (Model 5) in which we relax the (unlikely) assumption that the size effect is identical for all artists. Thus, we estimate a model similar to Model 4 with one extra equation, in which the size effect is modelled (in this case with a constant and an error term). Model 5 is a first step towards a better understanding of the complexities of price formation.

In this representation, the main effect of size is 0.85, which means that on average an increase in size with one standard deviation leads to a price increase of € 850. This effect varies between artists with a normally distributed error term $u_{\text{size jk}}$. The variance of this error term is 0.42, the standard error its square-root: 0.64. Therefore close to two thirds of the size-effects of all artists (what they charge extra for a larger work) lies between 210 EURO and 1,490

EURO for an extra standard deviation of size. The covariance between $u_{\text{size jk}}$ and $u_{0\text{jk}}$ is positive (307), which indicates a positive correlation between intercept and slope. The main advancement of Model 5 is that we learn that expensive artists charge higher prices for each extra square centimetre of art than their 'cheap' colleagues. In terms of the example depicted in Figure 6.3, this implies that the price-size lines for artists with a low initial price-level are less steep than the price-size lines of artists with a higher initial price-level. This model performs better in terms of explained variance than the fixed effect models, particularly on the level of works of art. This is mainly due to relaxing the assumption that size has a constant effect. More variance is now found across artists. The effects of the other explanatory variables change little.

Explained Variance

To evaluate Models 1-4, we will once again look at the explanatory power of the models indicated by the (changes in) explained variance as depicted in Table 6.5. We only compare the fixed-effect Models 1-4.[18] The baseline model shows the initial variance at the three levels. In the baseline model, almost two thirds (65%) of the total variance occurs at the level of the works of art; 24 percent can be attributed to the artists and 11 percent is apparent among galleries. Including characteristics of works of art explains 15 percent of the total variance. This main effect breaks down in three separate effects: the variance among works of art drops with 29 percent, and the variance among artists and galleries increases with 14 and 5 percent respectively. This indicates that characteristics of the works of art partly 'mask' differences between artists and galleries. In other words: when we control for the size and medium of the works, the differences between galleries and (most notably) artists are larger than without accounting for the characteristics of the works of art. Thus, 'cheap' artists often make slightly larger works of art using more expensive techniques.

Table 6.5 Changes in (un)Explained Variance Across Models 1-4*

	Baseline model		% change Model 2	% change Model 3	% change Model 4	Model 4	
Total variance	2,555,103	(100%)	-15	-24	-27	1,873,186	(100%)
E_{0ijk} (work of art)	1,654,307	(65%)	-29	-29	-29	1,175,816	(63%)
U_{0jk} (artist)	608,083	(24%)	+14	-7	-7	564,252	(30%)
V_{0k} (gallery)	292,713	(11%)	+5	-34	-55	133,116	(7%)

* All changes in variance are relative to the baseline model

The next step is to include characteristics of the artists in the model. The overall unexplained variance drops with another 9 percent, which is due to reduced variance among artists (-7%)

and particularly among galleries (-34%). In other words: characteristics of the artists explain some variance among artists, and a much larger part of variance among galleries. Including gallery characteristics does not alter the (un)explained variance among artists or works of art, and improves our explanatory power on the level of galleries with another 22 percent. From these shifts among galleries, we can see that characteristics of artists are the strongest predictor of price differences among galleries. Therefore we conclude that galleries derive their price level particularly from the artists they represent, and less from their own characteristics.

In Model 4, 63 percent of the remaining variance is at the level of works of art, 30 percent occurs among artists and only 7 percent across galleries. Overall, we account for 27 percent of the variance in prices in our data. In terms of explained variance, our model performs best among galleries, whereas it turns out to be most difficult to explain variance on the level of artists.

6.7 Conclusion

The model we developed in this study predicts prices on the Dutch market with the help of a large number of potential determinants. The breakdown of variance in price into three levels not only allows for better estimation and modelling, it is also helpful for exploring new theoretical edges and reinterpreting existing ideas about the intriguing and seemingly randomly determined prices of works of visual art. This exploratory model highlights some interesting processes in explaining prices of visual art. These can be summarised as follows: our study reinforces earlier findings that size is one of the strongest predictors (Frey and Pommerehne, 1989; Sagot-Duvauroux et al. 1992). The multilevel character of our analysis adds to this finding that size only explains variance on the level of works of art, not on the level of artists or galleries. In other words, price differences in the body of work of different artists are not explained by differences in size of these works. The relation between size and price was further explored in a random-effects model. This model shows that the initial price-level of artists correlates with the price of extra centimetres.

In the hedonic price function estimated here, the number of works sold has a significant positive effect on prices. This is in line with previous studies that suggest that when artists become successful, prices of their works and sales increase simultaneously (Rouget et al., 1991). On a theoretical level, this effect may point at a ‘Veblen-effect’, where price is seen as an indication of quality. Another explanation is that artists and galleries follow a market-penetration strategy: they start with low prices, and increase the price level when the artist becomes successful. Another finding from existing research, that artists who make work in different media sell for higher prices (Frey and Pommerehne 1989), is not supported by our analysis.

Strong overall predictors of the price level are the size and material of the work, and the age and place of residence of the artist. Remarkable is that artist's characteristics explain a large amount of variance on the level of galleries; in other words, the fact that galleries sell expensive works has more to do with the artist they represent than with their own characteristics. This suggests that the main function of galleries is to select artists. Conversely, gallery characteristics, such as the age of the gallery or its institutional affiliation, explain only a small amount of variance in prices.

Due to the richness of our data, some aspects of the price mechanism on the art market have remained sketchy in our analysis. Indeed, because our study is the first quantitative study that focuses on the primary rather than the secondary art market, it is of necessity exploratory: apart from answering questions it also raises new ones. Future research should focus on the way government intervention in the art world in general affects the market and the price mechanism in particular. Also, the gender dynamics of the price mechanism should be analysed in more detail than we were able to do here. Finally, the potentials of multilevel modelling have not been exhausted in our analysis; we have, for instance, only allowed the effect of size to fluctuate for different artists. In future research the effect of other variables on the level of artists and galleries should be studied in greater detail.

To conclude: the approach adopted in this chapter is attractive both for empirical (better estimates, more accurate interpretations) and theoretical reasons. This chapter suggest that we can indeed improve our understanding of how markets work by paying close attention to the fact that supply, demand and prices of art (and, in fact, of almost all commodities) are determined by factors that operate on *different levels* of analysis. The identification and modelling of those different levels is a step away from the mechanic and over-abstracted approach towards markets that is common in economics, and a step towards incorporating the social and institutional processes that underlie market exchange.

Notes

[1] Sagot-Duvauroux et al. (1992) add a fourth level of 'macro-economic factors' (p. 91).

[2] According to one estimate, only 0,5% of the works sold today will still have market value in 30 years (Caplin 1989, p. 242).

[3] For a more elaborate critique, see Bonus and Ronte (1997).

[4] In the analysis of auction data, the levels of analysis differ from the levels in our data. The methodological problems are however identical. A different way to solve this problem is to estimate relations for each individual artist in the sample. See for instance Galenson (2000).

[5] Almost all works of art with missing values on medium and size were sold in 1992, the first year included in our analysis. From 1993 onwards, the quality of the data on the actual works has improved significantly. Consequently, almost all transactions for the years 1993 to 1998 are included in the analysis.

[6] By contrast, other research has shown that the average age of Dutch visual artists is around 45 (Brouwer and Meulenbeek 2000, p. 21). On average Dutch visual artists start their career around the age of 28, as can be seen in the Dutch labour market monitor of graduates from arts education (Rengers 2000). The youngest artist selling via the government arrangement is 30.

[7] The artist's profession has 'feminised' rapidly over the past decades. Consequently, the older cohorts of visual artists consist of a larger percentage of male artists than the recent cohorts. Since commercial success on the art market is correlated with age, we expect that the percentage of men selling through the arrangement will decline in the future in the favour of women.

[8] Hedonic price functions are applicable whenever (large scale) data sets on prices and their potential determinants are available. Hedonic models are used to estimate demand or prices for a wide range of goods including real estate (Case et al., 1997), cars (Murray and Sarantis, 1999), life stock (Jabbar, 1998) and wine (Nerlove, 1995).

[9] In other studies, experience does not prove to be an important determinant of the labour market success of artists (see Throsby, 1996; Towse, 1996; Rengers & Madden, 2000). Instead, other - more precise - indicators of career progress have been used, including earlier achievements in the art world. These earlier achievements, such as prestigious exhibitions in galleries and museums, prizes, and publications on the artist's body of *oeuvre*, are likely to be particularly important for demand. For data reasons, this chapter focuses on earlier achievements of the artists on the government market and other forms of government involvement. The advantage of these data is the fact that the registration is complete and systematic. The disadvantage is the fact that most activities relating to the private market are outside the scope of the government.

[10] The idea that recognition by experts such as critics has strong repercussions for the economic value of a work of art has become a major theme in the sociology of art (cf. Becker 1982, Crane 1987, Moulin 1987, 1994). A strong statement comes from Pierre Bourdieu, who argues in *The Field of Cultural Production* that the actual production process on art markets is not the production of the work of art itself, but the 'consecration' of the artist (Bourdieu 1993, p 76). According to Bourdieu a work of art has value in proportion to the labour that 'cultural businessmen' have performed to consecrate the work, i.e. to produce 'belief' in its value.

[11] Career and labour market differences are also apparent in the cultural sector. Rengers and Madden (2000, p. 338) for instance report 'a persistent earnings gap between male and female artists' in Australia. See also Cowen (1996) and Janssen (2001).

[12] Many applications of multilevel models can be found in educational research, where pupils are nested within classes and within schools. See for instance Nutall et al. (1989) or Goldstein and Spiegelhalter (1996). The programme used for the estimation is MLWIN (Multilevel for Windows).

[13] In a two dimensional space, this picture would look identical to Figures 6.1 - 6.3, with different labels on the axes. A 'complete' graphical representation of the three levels (works of art, artists and galleries) would be three-dimensional.

[14] Our data differ from the model depicted here in the sense that artists are not uniquely nested within galleries. Table 2 shows that artists are - on average - represented by 1.44 galleries. To check whether this violation of the assumptions influenced the results, we estimated the same models on a selection of the data in which artists were represented by only one gallery. This analysis produced similar results, and is therefore left aside.

[15] For an overview of worldwide trends on the art market, see: http://www.art-sales-index.com.

[16] This strong negative effect on price does not imply that artists who sell prints are worse off, as becomes clear from model 4. These artists usually sell prints in large quantities, which correlates with a high price.

[17] We performed a separate stepwise analysis (not reported here) for the price difference between men and women. In this analysis the gross price-difference between works of male and female artist was €231. Including year and medium dummies increased the gender gap to €270. Including size (-€27), city of residence (-€8), and

most importantly age (-€54) and the career characteristics (-€36), reduced the unexplained gender gap to €144, which almost equals the gender gap reported in table 4.

[18] Comparing variance between fixed-effect and random-effect models is irrelevant, since the modelling of variance across levels differs between the two.

7 The Economic Lives of Artists: Conclusion and Discussion

This chapter summarises the relevant findings from the preceding chapters. The economic lives of artists are described and explanations for the observed career patterns are drawn. The merits of work-preference and winner-take-all theory for understanding the economic lives of artists are examined. To conclude, suggestions for further empirical research, cultural policy and avenues for further research are discussed.

7. 1 Introduction

This thesis studies the economic aspects of the lives of artists. The central question of how career differences among artists can be explained is examined in detail in five chapters, each of which is built around a specific topic in artists' labour markets and careers. Two important approaches provide the theoretical background of the thesis: the theories of 'work-preference' (Throsby, 1994a) and 'winner-take-all' (Frank & Cook, 1995). In the first chapter, the roots of the two approaches are traced back to the ideas of two of the founding fathers of economics, Adam Smith and Alfred Marshall. This historical account provides a useful context for contemporary studies of the artists' labour market as well as for the chapters of the thesis.

The chapters consider both the static and longitudinal implications of the two approaches. Different career indicators or dependent variables are investigated as the chapters progress from general labour market indicators to specific statistical measures of artistic success. Along the way, the analyses reveal new statistics on the Dutch cultural sector, and new insights into the implications of government arts labour market policies. Figure 1.1 (page 17) summarises the dependent variables and the organisation of the chapters.

In accordance with common specifications of work-preference and winner-take-all theory, career progress is explained throughout this thesis by an extended set of human capital variables as well as a number of demographic variables. The most important right hand side variables that will be discussed in this chapter are the experience of the artist, received government grants, arts education, gender and place of residence.

This chapter reflects on five issues. In section 7.2 the main findings of the independent chapters are briefly summarised. The remaining sections discuss overarching themes and implications of the chapters taken together. The economic lives of artists are described in 7.3. Section 7.4 reviews the explanations that are offered by the previously mentioned explanatory variables. The relative merits of work-preference and winner-take-all theory for understanding

and modelling the careers of artists are considered in 7.5. Finally, section 7.6 discusses implications for further research and cultural policy.

7.2 Findings from the Chapters

This section summarises the answers to the central questions of the chapters as summed up in table 1.1 (page 19).

Chapter 2 focuses on the hours that artists supply to cultural and non-cultural labour markets and studies how wage fluctuations affect artists' allocation of work time. The chapter reports two main findings. First, in accordance with work-preference theory, artists indeed appear to increase the number of hours that they work in the cultural labour market when they earn a higher wage in the non-cultural or general labour market. Second, work-preference fails to correctly predict the number of hours supplied to the cultural labour market in response to changes in arts wages. Artists with higher wages within the cultural sector often supply fewer hours.

In chapter 3 predictions of both the human capital model and the winner-take-all model for the careers of graduate artists are derived and tested. The chapter looks specifically at the hourly wages of graduate artists and at two measures of artistic achievements. The chapter finds that indicators of 'economic' or financial success are best predicted by the human capital model and indicators of 'artistic' success by the winner-take-all model.

Chapter 4 focuses on the earnings of visual artists through the government and through the private market. Central in the chapter is the question how the (arts) policies of the Dutch government influence these earnings. The analyses show that subsidising artists enhances a winner-take-all tendency for the market at large. Financial success on both the private and the public market appears to be not particularly related to human capital, but to personal characteristics, government recognition and (unobserved) talents.

The role of exhibitions in visual artists' careers is examined in chapter 5. The exhibitions are broken down into exhibitions in four circuits (private, public, informal and foreign) and described in terms of their distribution and relation to the experience of the artists. The chapter finds that success breeds success, both within and between the exhibition circuits. Furthermore, exhibiting is positively influenced by the experience of the artist and his or her subsidy history.

Chapter 6 finally analyses the price level of works of contemporary art in Dutch galleries. The determinants of prices are modelled on three different levels: the work of art (size, material), the artist (age, sex, place of residence, institutional recognition), and the gallery (location, institutional affiliation, age). The main findings are that the size and material of works of art,

and the age and place of residence of the artist are strong predictors of price; that differences in size and materials partly 'mask' price differences between artists; and that the variance in prices across galleries is largely explained by characteristics of the artists they represent.

7.3 Careers of Artists

In the remainder of this chapter overarching themes are discussed. This section sketches a general picture of how artists' careers evolve. The next section discusses explanations for the observed career patterns.

The Early Career

The education of an artist begins early. Most aspiring artists are already undertaking out-of-school arts education during their primary and/or secondary school years. Because participation in out-of-school arts education is positively correlated with class (De Haan & Knulst, 1998), this implies that artists come from higher cultural or economic strata. This class effect is supported by two empirical findings in chapter 3. First: the parents of students of arts education are higher educated than the parents of the other students in higher vocational education. Second: the students of arts education themselves have higher levels of (secondary) education than the other students in higher vocational education (see also Rengers, 2000).

The importance of (arts) education can also be seen from data on the formal arts educational credentials of artists. Chapters 4 and 5 show that over 90% of the visual artists in the Netherlands obtained an arts degree. Also in most other artists' professions, a large majority of artists graduated from arts education – as is shown in chapter 2.[1] The non-arts educated group of artists can be divided into two sets of similar size: those who followed arts education but did not graduate and a group of *autodidacts,* or self-educated artists. This last faction most resembles the Bohemian anti-academic ideals of the profession, even though only very rarely these artists are actually self-educated. In most cases, the autodidacts have received arts training outside the system of formal arts education.

Although artists start their education early, they begin their careers on the labour market late. Chapter 3 shows that graduating artists are on average 1.5 years older than other graduates from higher vocational education. There are two empirical explanations for this late career start. First, the group of aspiring artists is more diverse in terms of age and previous experiences than the graduates in most other educational fields. Second, the educational careers of artists are relatively long. Artists spend longer on average in arts education and are also more likely than other graduates to follow post-academic education. In some artistic professions, post-academic education even is the norm - for instance for aspiring musicians who aim for a professional career in an orchestra or ensemble.

Labour Market Entrance

Chapter 3 shows that after the completion of arts education, most graduate artists pursue a career in the cultural sector. This is not, however, without a price. In the first years of their career, graduates from arts education earn significantly less than equally educated graduates. The gap in gross total monthly earnings 1.5 year after graduation is about 400 guilders (or €180). This gap is particularly attributable to differences in hours worked; graduate artists work fewer hours than non-arts graduates. This becomes clear from preceding reports on the same data that are analysed in chapter 3. Allen and Rademaekers (1999) for instance show that only 44% of graduate artists work fulltime, in opposition to 80% of all graduates of higher vocational education. The gross hourly wages of the graduate artist (€10.22 or 22.50 guilders in 1998) are however similar to those of the other graduates.

In spite of difficulties during the initial years of labour market participation - indicated by the earnings gap and a higher than average use of social security - most graduates eventually find employment in the cultural sector. Chapter 3 shows that six years after graduation, about two thirds of arts graduates work exclusively in the cultural sector; 13% work both inside and outside the sector, and 13% work outside the sector. The remaining 11% are not employed. There are no clearly discernible wage differences between graduate artists working inside the sector and those working outside the sector. Apparently, the economic value of a degree from arts education is comparable between the general labour market and the cultural sector. However, artists who spread their labour market activities across the two sectors earn lower wages and work longer hours. The labour market behaviour of this group of artists most strongly resembles the clichés about working as an artist.

Chapter 3 furthermore shows that the careers of graduate artists converge rather than diverge as artists pass through the first 6 years of their professional lives. Inequalities in gross wages, earnings, hours worked and labour market participation decrease between 1.5 years and 6 years following graduation. This has a straightforward explanation. After initial difficulties, more and more artists find employment, the importance of social security for artists' careers decreases and the inequalities in economic indicators fall accordingly. This finding is indirectly confirmed by the analyses of the labour supply of artists in chapter 2. Two trends are discernible as artists move up the career ladder. First, they substitute work outside the cultural sector for work within the sector. Second, the artists cut back the number of hours they are working until they have a more 'regular' working week.

The Careers of Visual Artists in the Cultural Sector

From chapter 4 onwards, the focus is on the economic lives of visual artists within the cultural sector. The analysis begins with the observation that visual artists in the Netherlands have two distinct creative careers: one in the 'government market' and one in the 'private market'. The

career of the artist in the government market consists of his or her route through the complex system of grants, subsidies, acquisitions, art lending and commissions that exists at various levels of Dutch government. The career of a visual artist in the private market is reflected in his or her exhibitions, commissions, and sales to individuals and companies.

How is the visual arts market structured? As is shown in figure 4.1, the largest part of the market in terms of income (37 per cent) is made up by acquisitions by individuals and firms, through galleries, intermediaries and directly from the artists' studio. The second largest income source for visual artists (19 per cent) consists of government subsidies, which account for the largest part of the 'public' segment of the market. Private commissions (19%) and government commissions (17%) are the third major source of income for the visual artists. In terms of market share, the Dutch government is responsible for more than 40 percent of total market value.

The majority of visual artists have a career in both the private and the public market. Of the visual artists studied in chapter 4, 60% had earnings through both markets in one year, 15% had earnings exclusively from the public market and 25% exclusively from the private market. If we focus on a period of more years, however, virtually all artists appear to work in the two markets. Artists can generally work as freely in both markets, where in many other countries the system of government earnings is much more restrictive. Furthermore, visual artists appear not to be driven by differences in (potential) earnings on the markets. This can be seen from the fact that in chapter 4 the ratio of potential earnings on the two markets has no impact on the decision of the artist to focus on either of the two markets.

Reward Systems

Still, both private and public careers have different reward systems and incentive structures, and their own internal logic. The government career of the visual artist is largely influenced by policy goals. There is, for example, a raft of measures specifically targeted at younger visual artists, as these artists are identified by policymakers as facing difficulties in getting established in the private market. Young and inexperienced artists can, therefore, receive financial rewards in the public market that seem high relative to their levels of artistic human capital. The internal logic of the government system is also evident in the correlation between the various policy instruments: artists who score well on the one measure are also more likely to be successful in the application for other measures (chapters 4 and 5). This phenomenon has been coined the 'Matthew-effect' ("For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath." Matthew, XXV: 29).[2]

The careers of visual artists on the private market lack such an institutionalised logic, which is translated into less predictable career patterns. Two factors in the private market reflect the

difference in structure between the private and the public market. First, chapters 4 to 6 confirm that getting established in the private market takes longer. Second, having a broad portfolio of activities has a positive impact on the chances of getting established. Chapter 5 shows that spreading activities over a number of exhibition spaces increases the odds of exhibiting elsewhere, which – in turn – potentially generates other career spin-offs.

But even without clearly observable routes to fame in the private market, the Matthew-effect also plays a role there. The chapters on the careers of visual artists reveal a number of mechanisms, which indicate that success also 'snowballs' in the private market.[3] There is, for instance, a positive correlation between market earnings and public earnings (chapter 4). Moreover, receiving a prestigious 'individual subsidy' from the government triggers success on both markets later in an artist's career (chapters 4 and 5). A similar mechanism is apparent in the primary market for works of visual art, studied in chapter 6. This chapter reveals a positive relation between the price-level and the number of works that an artist sells. Likewise, a positive relation exists between the initial price level of an artist and his or her price per squared centimetres.

7.4 Interpreting Career Differences

Throughout this thesis, an extended set of human capital and demographic variables is included as explanatory variables. This section discusses the effects of the most important recurring variables: the experience of the artist, received government grants, arts education, place of residence and gender. Effects of singular variables that are only relevant in one chapter are not discussed here.

Experience

All chapters address the question whether professional experience has a positive impact on the career of an artist. In accordance with common formulations of human-capital theory, all but one chapter use experience measured in years as the independent variable. In the data used in chapter 6, only the age of the artist was available. This chapter consequently focuses on the effect of age instead of experience.

Most chapters reveal that experience is a good predictor of success. The positive impact of age or experience on the success of an artist clearly shows up in the data in chapter 3. The graduate artists studied in this chapter move up on the career ladder between 1.5 and 6 years after graduation, as indicated by a rise in labour market participation, significant wage-increases and a drop in the use of social security. Observations on the careers of visual artists in the Netherlands support this finding. The analyses of chapters 4 to 6 reveal positive effects of experience on earnings among visual artists, in particular on the private market in a number

of ways. Not only do more experienced artists exhibit more frequently in galleries, they also sell more works of art for higher prices than their younger colleagues.[4]

Unlike private market earnings, public earnings appear to be not particularly related to the experience of the artist (chapter 4). Insignificant experience effects are also found for the creative earnings of various generations of artists in chapter 2, as well as for the exhibition careers of visual artists in the informal market in chapter 5. This variation in the experience effects can be due to the fact that experience measured in years of potential experience is only a crude proxy for the labour market and artistic events that together constitute a career in the arts. Breaking down experience into constitutive elements reveals that some events positively influence a career and others negatively influence a career. These effects even out, which reduces the significance of the single experience measure.

This was for instance revealed in chapter 6 when the effects of earlier grants and subsidies on later price-levels of the works of visual artists were studied. Different types of grants appear to have opposite (and not always clearly interpretable) effects on current price levels on the private market. This finding suggests that including more precise experience terms not necessarily leads to a better insight in the overall effect of experience.

Grants

In most chapters, government subsidisation shows clear effects on artistic careers. In chapter 4 the effects of earlier grants are for instance discernible if (later) public earnings are considered: granted artists have higher earnings through the public market later on in their career. These career effects are apparent for most government subsidies, and are the strongest for the 'individual subsidies', the most prestigious (and largest) subsidies available to individual visual artists in the Netherlands (chapters 4 and 5). Contrary to the effect of the smaller grants, the signal of a prestigious grant spills over to the private market. Thus, receivers of individual subsidies also have a more prosperous creative career through the private market.

There is also evidence that subsidised artists are more successful when their career is measured in artistic success variables, such as (perceived) reputation, media attention (chapter 3) or exhibitions (chapter 5). Working abroad as an artist has a comparable effect. Chapter 3 shows that artists who have worked professionally in a foreign country are more successful artistically later on in their career.

The effects of received grants and/or working abroad as an artist are not apparent when in chapter 3 total wages or earnings are considered. To discern an impact of these factors, total earnings data must be disaggregated. Artists who receive a government grant do not, for example, earn a better total wage than artists who did not receive a government grant. Instead,

the total wage level appears to be influenced by overall earlier labour market success. There is for instance a clear correlation between the wage rates of graduates six years after graduation and their initial labour market entrance.

(Arts) Education

One of the puzzles that this thesis presents relates to the impact of arts education. Judging from the figures described in the previous section, arts education is important for the careers of artists, if only because so many artists graduate in an artistic domain. Yet the popularity arts education in itself does not justify the conclusion that arts education contributes much to artists' careers. Therefore, this thesis has studied one of the basic questions of human capital theory, applied to the careers of artists: what are the differences in wages and/or earnings between artists with different amounts and types of artistic human capital, indicated by their (arts) education?

Unlike the effects of education on careers in most fields of the labour market, arts education is found to have little to no effect on career progress of artists - regardless of how careers are measured. Autodidacts (self-educated artists) thus have comparable careers to (arts) educated artists. This finding is consistent over the chapters. In chapter 2, artists with or without (completed) arts education have similar careers in terms of creative earnings and labour supply. The chapters on (visual) artists sketch a similar picture. Education plays no role in the private or public career tracks of visual artists (chapter 4), and graduate artists do not hold more exhibitions - whether exhibiting in the Netherlands or abroad (chapter 5). Consistent with common findings in educational research, the location or prestige of the arts college that an artist attended is also found to have no long-lasting impact on the career of an artist (chapter 3).

This finding is the more interesting in light of the strong growth of the number of students in arts education and the extension of educational careers of artists over the past decades. Before shifting attention to theoretical explanations for this phenomenon, one point should be made. The insignificance of education for artists' careers found in the empirical studies in this thesis may result from the inability to model talent. If artists who have entered the cultural sector without arts education are significantly more talented than artists with formal arts education, making conclusions from the data in this thesis about the role of education becomes tricky. This subtle point is largely overlooked by (cultural) economists, even though Filer noted as far back as 1990 that "[t]he learning that takes place in college may have a significant impact on the earnings of those artists who attend college even though the average earnings of this group are not substantially larger than those of a different, perhaps more talented, group who did not go to college […] so policy conclusions regarding the rationality of college attendance for artists must be made carefully (Filer, 1990: 29)."

A similar influence may explain why in chapter 3 there appears to be no effect of whether the parents of a graduate artist were themselves artists or employed in the cultural sector. The data refutes the popular hypothesis that these artists are more likely to be successful, either because they have inherited favourable artists' genes from their parents or because they have more resources in the cultural sector. What is found, however, is that individuals whose parents are working in the cultural sector are more likely to enter arts education.

But also without a full understanding of the potentially disturbing influence of talent in a statistical model of career progress, the relation between arts education and career progress remains interesting. Winner-take-all and work-preference theory each provide an elegant explanation for its negligible influence on the average earnings of artists.

If we are to understand the popularity of arts education from work-preference theory we should focus on its consumptive aspects. If arts students are primarily motivated by their compulsive desire to create, rather than by investment motives, it is easy to see why arts education is so popular. An explanation from a winner-take-all perspective relates the popularity of art schools and the long educational careers to the oversupply of artists. Because so many people compete for scarce resources in the cultural sector, each artist has an incentive to follow more education in order to signal quality to potential employers. Thus the growth of arts education can be characterised as an 'arms race' for arts educational credentials.

Place of Residence

The chapters of this thesis also find that place of residence also influences an artist's career. All but the fourth chapter (in which no such data were available) show that artists who work or live in the larger cities and in particular in the (cultural) capital (both in the Netherlands and in Australia) are more successful than artists from the rest of the country. There are a number of explanations for this finding. In the first place, artists move to and away from arts centres for reasons related to success or failure. Second, the higher earnings in artistic capital might simply compensate for higher living costs, and these artists may not be earning more in real terms. Third, geographical location may play a signalling role of artist quality, which – in turn - explains that artists who are centrally located in the art world fare better than peripheral artists.

Gender

Finally, it appears that artists' careers differ between the sexes. Female artists are persistently less successful than male artists, regardless of which indicator of career progress is studied. This thesis reports a considerable gross gender gap of approximately one third in terms of wages or earnings (chapter 2), around 20 per cent in terms of total earnings of graduate artists

(chapter 3), 30 per cent in terms of public earnings and 26 per cent in terms of market earnings (chapter 4) and around 20 per cent in terms of price-levels for works of visual arts (chapter 6).

The gender gap in the cultural sector is thus comparable to other sectors of the labour market in the Netherlands (Tijdens, 2001). Yet it does not discourage females to enter artists' professions. In fact, the cultural sector is feminising at a remarkable speed. The strong appeal of the sector to women is particularly noticeable at institutions of arts education: the bulk of the increase in numbers of arts graduates over the past decades is due to a growing influx of women (Rengers, 2001).

At the same time, the increase in the number of females partly explains their career difficulties. In the performing arts there is direct competition between (young) women. Only very rarely can women act or dance in roles originally created for men. In economic parlance, the supply of female performing artists exceeds the supply of female roles. The imbalance is less evident among male performers, and virtually non-existent for certain sub groups of artists – simple examples being male dancers and older male actors. It is unlikely that supply and demand for female performers will balance in the short run, because audiences are accustomed to classic plays, dances and music and the classics have a given distribution of male and female parts. This is discussed in more detail in Rengers (2001).[5]

The oversupply of female performing artists – interesting though it may be – does not hold for all artistic domains. A gender gap is also evident in parts of the cultural sector where direct competition based on gender is irrelevant, like in the visual arts. There is no reason, other than bigotry, to expect the works of female visual artists to be less than normal substitutes for works of male artists, and yet the inequality between male and female artists is of similar magnitude as in the performing arts. In the visual arts the gender discrepancy is particularly evident in the private market (chapters 4 and 6), where total market earnings are significantly lower for female artists. Fewer women sell through galleries and when they do, their arts sells at lower prices.

In career and labour market terms the cultural sector is clearly not as friendly to women artists as the liberal image of the sector might suggest. This is all the more interesting in light of evidence showing that the majority of cultural consumers are female (De Haan & Knulst, 2000). Although not extensively studied in this thesis, the less successful careers of the few immigrant artists in the Netherlands point in the same direction - a discrepancy between the norms and values promoted in the cultural sector and the actual careers of people in the sector (see also Rengers, 2001 and Struyk & Rengers, 2000).

7.5 The Theories

The theories of 'work-preference' and 'winner-take-all' provide the *Leitmotivs* of this thesis. These two approaches have firm roots in economic theory, as was put forward in the first chapter. What can be concluded from the analyses of this thesis about the merits of the two theories for the explanation of artists' careers?

The Bohemian Artist

The work-preference and winner-take-all theories contain a number of elements that are traceable to the picture of the Bohemian artist. The notion of a Bohemian refers to a romanticised image of the lifestyle of gypsies from Central-Europe, to which Bohemia (the main part of the current Czech Republic) belongs. The ideal of Bohemian artists, with their eccentric life-style that reflects protest against or indifference to convention, evolved in the era of Romanticism and has shaped our current preconceptions about artists and their careers. Bohemian artists are literally anti-academic. Historically, these artists refused to participate in the system of the French 'Académie', which controlled the visual artists' profession in 19th century France. Stereotypically, Bohemians are uncorrupted by outside incentives; they are anti-bourgeois, anti-market and driven by a desire to create in freedom.

Work-preference-theory has a number of Romantic elements: the underlying concept of the struggling artist, the assumption that artists subsidise their art by working outside the sector, and the indifference of artists to changes in arts wage-rates. Winner-take-all theory, which perhaps sketches an even grimmer picture of arts professions, also has Bohemian elements: the prediction that young adults are blinded by the success of a few superstars and thus behave as lemmings in the choice of a profession; the rocket-like careers of some artists and the *Verelendung* among others – where success breeds success and failure breeds failure.

Evaluating Work-preference Theory

The literary predictions of work-preference theory are partly confirmed, partly rejected by the analysis and interpretation of the working behaviour of artists in this thesis.

The theory accurately describes how artists use work outside the cultural sector to fund their creative work. In common with the theory, artists 'buy' more arts-time when they are collecting a higher wage on the outside labour market. By focussing on struggling artists, however, the theory overlooks the large group of established artists and cultural workers who have 'regular' labour market characteristics. Dutch data suggests that struggling artists who are working on both cultural and non-cultural markets are not the norm. The theory thus models a minority segment of the total arts labour market.

Despite its romanticism and the limited applicability of its initial formulation, the work-preference theory nevertheless is a useful tool in the analysis of artistic careers of artists. It is instructive to break down artists' activities and study the different career paths in terms of their (mutual) influences. This 'deconstructive' approach works well when applied to separate careers in public and private arts markets and in separating exhibition careers or –portfolios and allows for a better understanding of the sector and the role of the government than was previously possible.

It is however doubtful whether the strict preference order and the simple utility function on which the model is based are justified simplifications. Instead, artists could be modelled as having various equally important labour market activities that belong to a 'career-portfolio'.[6] In empirical terms, the model furthermore overlooks two sources of (financial) support that are likely to be important in the explanation of artists' career patterns: support from spouse and/or family and the availability of non-labour income. The impact of these factors on labour supply is widely established in labour economics. Moreover, anecdote suggests that numerous artists indeed support their own work through inherited money, or because their spouse provides an (often considerable) income.

Evaluating Winner-take-all Theory

The conclusions on the merits of winner-take-all theory for this thesis are similar to those for work-preference theory. The basic career predictions of the theory were in part validated and in part refuted by the artists' data studied in this thesis.

Winner-take-all theory provides for the snowballing mechanisms that are apparent in artists' careers when specific variables relating to (artistic) success are studied. The theory correctly portrays the positive correlation between market earnings and public earnings; between prestigious individual subsidies and overall success; between the initial price level and the price of extra centimetres of works of visual art; between the number of artworks sold and prices-levels and between the various exhibition careers of visual artists.

In this thesis however, winner-take-all theory does not work well for the variables for which it was originally developed: wages and earnings. A strong refutation of the predictions of the theory can be read from the finding in chapter 3 that the earnings and the labour market behaviour of artists converge in the initial years of their career. The *Verelendung* in monetary terms of large groups of artists – that is predicted by Frank & Cook – is thus not supported by the data. Another refutation can be found in that established artists become more normal, rather than more distinct, in terms of their labour market behaviour. This differs from winner-take-all-theory in which the focus is on extravagant earnings and labour market behaviour.

Obviously, arts labour and product markets generate winners whose earnings can be exorbitant compared to the average earnings in the sector. The mechanisms that produce these winners yet appear to be irrelevant for describing careers of artists other than the winners themselves.[7] Instead, this thesis suggests that winner-take-all theory has empirical validity when we are willing to accept that the losers in one market-segment can be the winners in other segments. This can for instance be seen from the finding that dropout artists have earnings that are comparable to the earnings of artists employed within the cultural sector. The theory thus seems well applicable to independent market segments, but less useful for explaining overarching issues of inequality among artists.

7.6 Some Recommendations for Research and Policy

This final section makes recommendations for further (empirical) analysis of the sector, for the development of cultural policy and for avenues of further research.

Empirical Analyses

Researchers and governments alike often focus on the entire population of artists, instead of collecting data on separate groups of artists. This is understandable from an empirical point of view. Collecting survey-data on artists has always proven difficult and there is ample evidence that artists are getting increasingly antagonistic towards participating in this type of empirical research. Still, combining as diverse groups as writers, dancers, visual artists and designers for pragmatic reasons only seems not the way to go – in particular because it blurs a proper understanding of the cultural sector and cultural policy in empirical and theoretical terms.

There are a number of reasons why creativity in data gathering would facilitate the development of more sophisticated understanding of artistic careers. First, searching for data sources other than new surveys encourages new angles and fresh perspectives in modelling, rather than just repeat existing models on new data. Second, alternative data sources are widely available in the cultural sector. It would be negligence not to utilise new administrative data generated by governments, arts councils and funding bodies. Often, these data can be beneficially applied in the academic study of the sector. The list of potential data sources is even longer. Many other public and private institutions, including museums, libraries, art auctions and even pension funds track artists for various reasons and their registrations may also contain valuable information on careers and labour markets in the cultural sector. This thesis has utilised some of these ‘alternative’ data sources, and stands as a testimony to the fresh insights and new approaches that such alternative data encourages.

Apart from these ‘alternative’ data, this thesis presents new analyses on data that were originally compiled for the purpose of policy evaluation. The strategy of using existing

cultural statistics for re-analysis is also promising, in particular because the data have seldom been analysed exhaustively. This being said, much needs to be improved in terms of the availability and accessibility of such data. Far too often, materials disappear into the drawers of scholars, research institutes and governments never to reappear. As an example of good practice, the appendix to the introductory chapter of this thesis contains an overview of the data used and information on how to obtain the data.

Policy-implications

This thesis suggests that artists who earn a higher wage in the cultural sector will work fewer hours in the sector. These artists substitute working hours for leisure, instead of increasing the length of their working week – as is often assumed. A policy implication of this finding is that governments and art councils should not automatically assume that artists who receive government grants respond to these grants by increasing their output. Artists on a grant may in fact prefer a more comfortable working week to supplying more hours and effort.

Indeed, the thesis has implications for arts policy targeting. The analysis here indicates that, if the object is to increase arts production, grants are more effectively targeted at 'struggling' artists (whose arts wage is lower than their non-arts wage), for it is only these artists who will predictably work longer and, by assumption, produce more art in response to the financial incentive of subsidy.

Second, the thesis suggests that various artistic disciplines have their own peculiar career tracks. From this it follows that instruments of cultural policy that work well for one group of artists may be unsuccessful when applied to other groups of artists. It is therefore advisable to study the effects of generic instruments of cultural policy for various subgroups of artists carefully before implementing policy – rather than to assume that the whole cultural sector can be governed with the same instruments.

Some of the cultural policies in the Netherlands appear to be based on this last assumption. The recent Income Provisions for Artists Act in the Netherlands ("Wet Inkomensvoorziening Kunstenaars" or WIK) for instance treats all artists in a similar way, even though the measure itself seems to be deduced from the career difficulties of visual artists. In the same way the system of evaluation of cultural institutions in the Netherlands can be criticised. The four-yearly system of evaluation ("Kunstenplansystematiek") was originally derived from the life cycles of theatre groups but is now applied to all cultural institutions, including museums whose lifecycles are generally much longer.

Avenues for Further Research

This thesis suggests a number of avenues for further research into artists' careers and into the theories that formed the theoretical foundation. Further research could be conducted in at least four directions.

1) The theoretical edge not studied extensively in this thesis relates to sociological aspects of artists' careers. There exists an extensive literature on the reputations of artists and on the relation between reputations and economic or financial success. This body of literature could be beneficially applied to the empirical study of artists' careers.

2) This thesis leaves a number of specific questions on the structure of the professional group of artists unanswered. First: a satisfactory explanation for the (growing) popularity of the cultural professions among females is lacking. This issue is even more interesting in the light of the considerable gender gap reported in this thesis. Second, the growth of the number of students in arts education as well as the increased length of educational careers of artists deserve further study. A promising strategy for this topic is to examine background characteristics, motives and educational careers of students who enter arts education in greater detail. Third, the issue of who leaves the profession can be explored further. This thesis shows that the popular picture of artists as young gamblers is not supported by the data. In the same time, much remains unclear about the artists who do drop out of their profession. Who are they? And when or why do they drop out?

3) At least three empirical issues relating to artists' careers remain unexplained. In the first place, the career differences between visual and performing artist (as summarised in figure 2.2) deserve further empirical study. Second, the longitudinal aspects of artists' careers theories have not been fully explored. For instance: we know only very little about lifetime earnings of artists. Conclusions on income distributions as well as extravagant earnings of artists are likely do be different if a longer time-horizon is chosen. Third: the impact of financial support from spouses and/or family as well as the financial endowments and non-labour income of the artists deserve more attention.

4) Our understanding of artists' careers and labour markets can be deepened by studying how particular the findings presented in this thesis are. This can be done in a number of ways. First, data on artists' careers should be compared for multiple countries and/or times. So far, differences in methodologies and methods of data collection obstruct comprehensive comparisons. Second, conducting (career) studies in similarly structured labour markets, such as sports labour markets, can deepen our understanding of artists' careers and labour markets. Such a comparison across careers in various professions can also reveal in how far winner-take-all phenomena play a role in various occupations. Finally, a study of the effects of shifts

in subsidy systems for artists' careers can broaden our understanding of this important factor in the economic lives of artists.

Notes

[1] The original report on the data on which the analyses in chapter 2 are based contains more elaborate data on educational levels than the figures presented in chapter 2 (Throsby and Thompson, 1994).

[2] The application of this metaphor to the social sciences can be traced back to Merton (1968). See De Nooy (1996) for an elaborate critique of the subsidy system and the Matthew-effect in the Netherlands.

[3] Comparable mechanisms have been reported in the study of firm-internal labour markets and career systems, for instance by Lazear (1995, 1999) and Rosenbaum (1984).

[4] One nuance should be made: these effects may be inflated, because of self-selection of successful artists.

[5] This explanation is an application of the so-called crowding or sex-segregation hypothesis to the (performing) arts. See for instance Blau *et al* (1998) for an elaborate treatment of sex differences in the overall labour market.

[6] Menger (2001) provides this and a number of other theoretical and methodological challenges to artists' labour markets.

[7] This finding resembles earlier critique on the theory: that Frank and Cook exaggerate the magnitude of the phenomenon by focussing on 'stars', rather than the whole distribution. Sherwin Rosen, who has written extensively on superstar phenomena (1981) and on income distribution (Rosen and Neal 1998), has brought this critique forward. Rosen claims for instance that "there is compelling empirical evidence (…) that lawyers who do not make partner in big firms live nicely as partners in smaller ones, that would-be Picassos live useful and rewarding lives as commercial artists, and similarly for just about every high risk occupation." (Rosen, 1996, p. 135).

Samenvatting

Zelfs Giorgio Vasari, de godfather van de kunstgeschiedenis, kon de verleiding niet weerstaan. De Italiaanse architect, schilder en schrijver mopperde al in 1568 dat het slecht gesteld was met de inkomens van kunstenaars in zijn tijd. Zijn citaat uit *De levens van de grootste schilders, beeldhouwers en architecten*, het boek dat beschouwd wordt als de eerste kunsthistorische studie, vormt de opmaat voor dit proefschrift.

Als we de literatuur die sindsdien over dit onderwerp is verschenen de revue laten passeren, dan is er sinds het midden van de 16e eeuw niet veel verbeterd in de inkomenspositie van de kunstenaars. Hoogstens zijn de opvattingen over het schrale kunstenaarsbestaan met de jaren veranderd. Dat blijkt uit het andere citaat waarmee dit proefschrift opent. Giacomo Puccini beschrijft daarin de romantiek van het bestaan van de 19e eeuwse Bohémien kunstenaars, die arm maar gelukkig door het leven gaan.

Het beeld van de arme, briljante kunstenaar die niet gedreven wordt door het profane verlangen naar geld of roem maar creëert uit noodzaak en roeping was niet alleen een dankbaar voorbeeld voor kunsthistorici, dichters en componisten. Ook bij de minder poëtisch ingestelde economen, de filosofen van ons dagelijks brood, komen we al vroeg verwijzingen naar de afwijkende beroepsloopbanen van (doorgaans beeldend) kunstenaars tegen. En zoals de zure opmerkingen van Vasari en de romantische opvattingen van Puccini ons beeld van de getormenteerde kunstenaar mede vorm hebben gegeven, zo zijn de ideeën van Adam Smith en Alfred Marshall bepalend geweest voor de economische kijk op het kunstenaarschap.

Dit blijkt uit het eerste, inleidende hoofdstuk van dit proefschrift, waarin de wortels van twee moderne theorieën over de economie van het kunstenaarschap geïntroduceerd worden. De twee theoretische invalshoeken, *work-preference* en *winner-take-all* vormen de basis voor de verdere empirische hoofdstukken van dit proefschrift. In het inleidende hoofdstuk wordt een link gelegd tussen work-preference theorie en de theorie van Adam Smith over beloningsverschillen. Verder blijkt uit het eerste hoofdstuk dat veel van de grondslagen van winner-take-all theorie terug te vinden zijn in het werk van een andere grondlegger van de moderne economische wetenschap, Alfred Marshall.

Work-preference, (‘werk-voorkeur’) is vooral verbonden is met het werk van Throsby (1994a,b). Kunstenaars hebben volgens Throsby een sterke voorkeur voor werkzaamheden binnen hun eigen vakgebied en maken daarbij andere afwegingen tussen werk en vrije tijd dan de gemiddelde Nederlander. De theorie verschaft bovendien inzicht in de gemengde beroepspraktijk van kunstenaars. Kunstenaars gebruiken volgens de theorie de inkomsten uit

andere werkzaamheden, zoals lesgeven of werk buiten de sector, slechts als broodnodige aanvulling op de gemiddeld lage verdiensten als kunstenaar.

Winner-take-all (‘de winnaar krijgt alles’) is een populaire term sinds het gelijknamige boek van Frank en Cook (1995). Het begrip verwijst naar de ogenschijnlijk zeer scheve verdeling van inkomsten onder kunstenaars, waarbij een klein aantal kunstenaars – de “winners” – een veelvoud verdient van wat de gemiddelde kunstenaar aan het eind van de maand overhoudt. De theorie voorspelt dat de carrières van kunstenaars over de tijd steeds verder uiteen gaan lopen. In de ogen van Frank en Cook leiden kleine, vaak niet te benoemen verschillen bij enkele kunstenaars tot een sneeuwbaleffect, terwijl de meeste collega’s met lege handen achterblijven. De theorie is gebaseerd op de veronderstelling dat op bepaalde arbeidsmarkten, waaronder die in de sport en in de kunsten, mensen beloond worden op grond van relatieve, en niet van absolute kwaliteiten.

Na de korte excursie door de geschiedenis van het economisch denken in de inleiding worden in de hoofdstukken twee tot en met zes beide theorieën aan een grondige empirische toets onderworpen. Het tweede hoofdstuk behandelt het arbeidsaanbod en de reacties van Australische kunstenaars op loonveranderingen binnen en buiten de culturele sector. Het hoofdstuk toont aan dat – in overeenstemming met Throsby’s theorie van work-preference – kunstenaars werk buiten de culturele sector gebruiken als indirecte subsidie voor hun eigen kunstenaarschap. Bovendien blijkt dat kunstenaars, naarmate zij een hoger uurloon verdienen buiten de kunsten, minder uren werken buiten de sector. Throsby’s theorie gaat echter niet op voor het arbeidsmarktgedrag van kunstenaars binnen de culturele sector. Volgens de analyses in het tweede hoofdstuk schroeven kunstenaars hun creatieve werkweek terug zodra zij beter gaan verdienen. De kunstenaars verkiezen een normale werkweek en extra vrije tijd boven het romantische ideaal van een volledige overgave aan de kunsten.

Het derde hoofdstuk volgt afgestudeerden van het kunstonderwijs in de eerste jaren van hun professionele loopbaan. Het hoofdstuk laat zien dat de afgestudeerde kunstenaars een trage arbeidsmarktintrede kennen. Zo verdienen de afgestudeerden van het kunstonderwijs anderhalf jaar na diplomering duidelijk minder dan afgestudeerden van de andere opleidingen binnen het Hbo. In het hoofdstuk wordt vervolgens de arbeidsmarktsituatie van de afgestudeerden gemiddeld zes jaar na de diploma-uitrijking in kaart gebracht. De ongelijkheid tussen afgestudeerden blijkt te zijn afgenomen: na zes jaar werken meer kunstenaars, en zijn de lonen, werkweken en totale inkomens gelijker verdeeld. Deze bevinding is een verwerping van winner-take-all theorie, die groeiende verschillen tussen de afgestudeerden voorspelt. Eerder lijkt de arbeidsmarktintrede en de loonontwikkeling van de afgestudeerde kunstenaars zich te voltrekken volgens de voorspellingen van standaard human capital theorie. Dit geldt niet voor de artistieke ontwikkeling van de afgestudeerden: er zijn aanwijzingen dat de verschillen tussen kunstenaars in termen van artistieke prestaties wel toenemen over de tijd.

De hoofdstukken vier tot en met zes richten zich op beeldend kunstenaars, en niet zoals hoofdstukken twee en drie op de gehele kunstenaarspopulatie. Hoofdstuk vier behandelt de creatieve inkomsten van beeldend kunstenaars. Deze zijn onderverdeeld in inkomsten via de overheid en inkomsten via de vrije markt voor beeldende kunst. In het hoofdstuk komt naar voren dat er een geringe maar significante correlatie bestaat tussen de inkomsten op beide markten, hetgeen in overeenstemming is met winner-take-all theorie. Daarbij blijkt dat succes op beide markten niet zozeer samenhangt met human capital maar met het (ongemeten) talent van de kunstenaar en met zijn subsidiegeschiedenis.

Het vijfde hoofdstuk bestudeert de exposities van beeldend kunstenaars in een periode van twaalf jaar. Het hoofdstuk onderscheidt tentoonstellingen op de markt, bij de overheid, in het informele kunstenaarscircuit en in het buitenland. De belangrijkste bevinding in dit hoofdstuk is dat er een sneeuwbaleffect optreedt op de expositiemarkt: de ene expositie leidt tot de volgende, en zo voorts. Dit effect vindt vooral plaats binnen de onderscheiden circuits, maar in mindere mate ook tussen de circuits. Wie dit jaar exposeert in een galerie heeft volgend jaar betere kansen op nog zo'n expositie, en ziet de kansen op andersoortige exposities ook licht stijgen. Daarnaast worden de kansen op de expositiemarkt beïnvloed door de ervaring van de kunstenaar en zijn subsidiegeschiedenis.

Het laatste empirische hoofdstuk bevat een uitbreide analyse van de determinanten van de prijs van een kunstwerk in een Nederlandse galerie. Prijsverschillen worden herleid tot drie soorten karakteristieken: kenmerken van kunstwerken, zoals het formaat en de gebruikte technieken en materialen; kenmerken van kunstenaars, zoals hun leeftijd, geslacht en subsidiegeschiedenis en tenslotte kernmerken van de galeries waar de kunstwerken verkocht zijn. Uit de analyse blijkt dat prijzen vooral samenhangen met het formaat en materiaal van het kunstwerk en met de leeftijd en woonplaats van de kunstenaar. Galeriekenmerken spelen nauwelijks een rol bij de verklaring van prijsverschillen. Dat wil zeggen dat – in termen van de uiteindelijke verkoopprijs - galeries weinig kunnen 'toevoegen' aan het prijsniveau van de kunstenaars die zij vertegenwoordigen.

Uit de afzonderlijke empirische hoofdstukken komt een algemeen van de economie van het kunstenaarschap naar voren. Zo blijkt dat kunstenaars jong beginnen. De meeste aspirant-kunstenaars volgen vanaf jonge leeftijd kunstonderwijs, hetzij via privé- of groepsles, hetzij via school. Hieruit blijkt dat kunstenaars elitair zijn; lang niet alle ouders hebben namelijk tijd en geld over voor de culturele ontwikkeling van hun kinderen. Deze suggestie wordt ondersteund door de bevinding dat kunststudenten, net als hun ouders, relatief hoog opgeleid zijn. Het kunstonderwijs lijkt qua achtergrond van de studenten dan ook meer op de universiteit dan op de andere Hbo-opleidingen. Het kunstonderwijs is in meer opzichten afwijkend. Zo zijn kunststudenten relatief oud ten opzichte van de meeste andere Hbo'ers en telt het kunstonderwijs veel spijtoptanten die na een al dan niet geslaagde opleiding of carrière

in een andere sector alsnog voor de kunst kiezen. Tenslotte hebben kunstenaars relatief lange studieloopbanen en kiezen zij vaker voor een vervolgopleiding na de kunstopleiding.

De meeste afgestudeerden zoeken na hun diplomering emplooi in de culturele sector. Dat heeft een prijs: anderhalf jaar na afstuderen verdienen afgestudeerde kunstenaars bruto €180 per maand minder dan de gemiddelde Hbo'er. Dit inkomensverschil is vooral terug te voeren op verschillen in de omvang van de werkweek. De bruto uurlonen van kunstenaars lopen niet uit de pas met het Hbo-gemiddelde.

De verschillen met andere Hbo'ers lijken vooral op te treden aan het begin van de loopbaan van de kunstenaars. Zes jaar na afstuderen is de arbeidsmarktpositie van de afgestudeerden van het kunstonderwijs namelijk duidelijk verbeterd: de kunstenaars doen minder vaak een beroep op de sociale zekerheid en twee derde van de afgestudeerden werkt volledig binnen de culturele sector. Van de afgestudeerden werkt elf procent buiten de sector. Opvallend genoeg ontlopen de inkomens van deze twee groepen elkaar nauwelijks. Dit geeft aan dat een diploma van het kunstonderwijs gelijk gewaardeerd wordt binnen en buiten de culturele sector. Tenslotte combineert dertien procent van de afgestudeerden werkzaamheden binnen en buiten de kunsten. Alleen deze groep voldoet aan het clichématige beeld van hard werkende maar niettemin arme kunstenaar.

Vanaf hoofdstuk vier ligt de nadruk op de creatieve carrières van beeldend kunstenaars. Dit deel begint met een analyse van de invloed van de overheid op de markt voor beeldende kunst. Beeldend kunstenaars hebben in Nederland namelijk twee verschillende loopbanen: één binnen de door het rijk gefinancierde regelingen – subsidies, aankopen, opdrachten en via de kunstuitleen – en één op de vrije markt – die met name bestaat uit de opdrachten en aankopen van bedrijven en particulieren. Qua grootte ontlopen de markten elkaar weinig: de overheid financiert direct en indirect zo'n 43 procent van de totale creatieve inkomens van beeldend kunstenaars; de resterende 57 procent wordt op de vrije markt verdiend.

Beide markten kennen een eigen logica: de vrije markt functioneert volgens de wetten van vraag en aanbod, terwijl de overheid de dynamiek van haar eigen regelingen beïnvloedt. Een gevolg hiervan is bijvoorbeeld dat er op de publieke markt, in tegenstelling tot op de vrije markt, geen duidelijke inkomensverschillen bestaan tussen jonge en oude kunstenaars. Wel treedt er bij de regelingen van het rijk vaak het "Mattheüs-effect" op ("Want wie heeft, dien zal gegeven worden, en hij zal overvloedig hebben; maar wie niet heeft, van dien zal ook genomen worden hetgeen hij heeft.", Mattheüs, XXV: 29), waarbij eerder beloonde kunstenaars meer kans maken op succes, terwijl eenmaal afgewezen kunstenaars hun plaatsje in de analen van de overheid wel kunnen vergeten.

De carrières op de vrije markt kennen deze institutionele logica niet. Wel zijn er duidelijke leeftijdseffecten: ervaren kunstenaars scoren doorgaans beter op de vrije markt. Daarnaast

suggereren de analyses in dit proefschrift dat het voor beeldend kunstenaars zaak is om veel verschillende deelloopbanen na te streven: in het publieke circuit, bij galeries, maar ook in het informele en het buitenlandse circuit. Een goed gevulde portfolio van activiteiten vergroot namelijk de kans op een succesvolle carrière.

Tevens onderzoekt dit proefschrift een aantal mogelijke verklaringen voor de uiteenlopende carrières van kunstenaars. In de eerste plaats wordt uitgebreid stilgestaan bij de invloed van beroepservaring op het succes van de kunstenaars. De analyses laten zien dat ervaren kunstenaars meestal succesvoller zijn dan hun beginnende collega's. Zo toont hoofdstuk drie aan dat kunstenaars in de eerste jaren na het completeren van hun opleiding een duidelijke verbetering van hun arbeidsmarktsituatie doormaken. Een vergelijkbare trend is zichtbaar op de vrije markt voor beeldende kunst. Meer ervaren kunstenaars verkopen meer werken en vragen hogere prijzen. Overigens is dit ervaringseffect niet in alle hoofdstukken zichtbaar. Dit heeft onder andere te maken met het feit dat het aantal jaar dat een kunstenaar professioneel werkzaam is slechts een ruwe maat is voor het human capital dat een kunstenaar opbouwt tijdens zijn carrière.

Een tweede factor die in bijna alle hoofdstukken onderzocht is, betreft de invloed van (individuele) subsidies op de loopbanen van de kunstenaars. In de meeste gevallen is het effect duidelijk: kunstenaars die van de overheid subsidies ontvangen zijn later in hun carrière succesvoller dan de kunstenaars die niet gesubsidieerd worden. Het toegenomen succes is (het Mattheüs-effect indachtig) vooral zichtbaar op de overheidsmarkt, maar treedt in enkele gevallen ook op de vrije markt op. Dit is met name het geval voor de grote en prestigieuze 'individuele subsidies' voor beeldend kunstenaars, zo blijkt uit hoofdstuk vier.

Subsidies hebben vooral effect op artistiek succes. Gesubsidieerde beeldend kunstenaars exposeren vaker, worden vaker genoemd in de media en schatten hun eigen reputatie in de kunstwereld hoger in dan niet gesubsidieerde kunstenaars. Subsidiëring heeft echter geen invloed op het totale inkomen van de kunstenaar. De niet-gesubsidieerde kunstenaars slagen er in om via andere kanalen een verglijkbaar inkomen te verwerven.

De derde onderzochte factor betreft de invloed van opleiding op succes later in de loopbaan. Opvallend genoeg blijkt uit bijna alle hoofdstukken dat de opleiding nauwelijks invloed heeft. Autodidacten (kunstenaars zonder formele opleiding) en kunstenaars die hun opleiding niet afmaakten zijn net zo succesvol als hun gediplomeerde vakbroeders en –zusters. Deze bevinding werpt de vraag op hoe we de groeiende populariteit van de kunstopleidingen kunnen verklaren. De studentenaantallen in het kunstonderwijs zijn de afgelopen decennia namelijk fors gestegen, en vrijwel alle professionele kunstenaars hebben inmiddels een 'kunstdiploma' op zak.

Aangezien bijna alle kunstenaars een kunstopleiding volgen is er waarschijnlijk iets bijzonders aan de hand met de mensen die zonder opleiding voor een professioneel kunstenaarsbestaan kiezen. Het is goed denkbaar dat de autodidacten en uitvallers meer talent hebben dan de kunstenaars die wel hun opleiding afmaken, en dat er daarom geen verschil in succes en/of inkomen bestaat tussen de groepen. Een vergelijkbare redenering schetst een aantrekkelijke verklaring voor de bevinding dat er geen verschil in succes is tussen kunstenaars wiens ouders een achtergrond in de culturele sector hebben en kunstenaars wiens ouders elders werkzaam waren.

De verschillen kunnen ook zonder een beroep op het heikele concept 'talent' verklaard worden met behulp van de twee centrale theorieën in dit proefschrift. De theorie van work-preference suggereert bijvoorbeeld dat het kunstonderwijs geen investering in de eigen loopbaan hoeft te zijn, maar veel eerder de eerste periode van 'consumptie' van het kunstenaarschap. Winner-take-all theorie geeft een andere verklaring. Aangezien kunstenaars volgens deze theorie in voortdurende concurrentie met hun collega's verwikkeld zijn om de schaarse plaatsen aan de top, hebben alle kunstenaars er individueel belang bij om extra onderwijs te volgen. Daarmee willen zij een signaal afgeven dat zij beter en productiever zijn dan hun buren. Als alle kunstenaars dezelfde prikkel ervaren, verandert er echter weinig tot niets in het effect van onderwijs op collectief niveau, behalve dan dat iedereen meer onderwijs volgt.

Een vierde factor is de woonplaats van de kunstenaar. Kunstenaars die dicht bij het centrum van de culturele wereld wonen zijn succesvoller dan kunstenaars die in de periferie wonen en werken.

De laatste factor die een duidelijke invloed heeft op de loopbaan van de kunstenaar is sekse. Vrouwen blijken ook in de culturele sector minder succesvol dan mannen. Dit proefschrift bevat verschillende schattingen van de precieze omvang van het sekseverschil. In het tweede hoofdstuk komt een (bruto) loon- en inkomensverschil naar voren van ruim dertig procent. Hoofdstuk drie documenteert een verschil van twintig procent in de inkomens van afgestudeerde kunstenaars. Het vierde hoofdstuk komt uit op dertig procent verschil in inkomsten via de overheidsmarkt en zesentwintig procent in inkomsten via de vrije markt. Hoofdstuk zes laat tenslotte zien dat de verkoopprijs van kunstwerken van mannen ongeveer twintig procent boven die van vrouwen ligt.

Het sekseverschil in de culturele sector is van dezelfde orde van grootte als dat in andere sectoren in onze economie. Deze verschillen zijn opvallend gezien het zorgvuldig gekoesterd 'progressieve' imago van de sector. Ondanks de duidelijke sekseverschillen in inkomen is de culturele sector de laatste decennia in trek bij vrouwen. Zo laten de instroomcijfers vooral een stijging van de aantallen vrouwelijk kunststudenten zien. Hierdoor is het kunstberoep in een

rap tempo aan het veranderen van een mannenberoep in een (althans getalsmatig) door vrouwen gedomineerde professie.

In sommige uitvoerende kunstvormen is de feminisering van de beroepsgroep een mogelijke verklaring voor de verschillen is succes. Een mooi voorbeeld vormen acteurs en dansers. Aangezien meer en meer jonge vrouwen van de opleiding stromen, en er tegelijkertijd nog steeds veel klassieke stukken (met een 'klassieke' verdeling van rollen) gespeeld en gedanst worden, is het onwaarschijnlijk dat op de korte termijn de positie van vrouwen verbetert. De concurrentie onder jonge vrouwen om dezelfde rollen is namelijk onverminderd hoog. Dat geldt niet voor oude acteurs voor wie relatief veel interessante rollen beschikbaar zijn of voor mannelijke dansers, die relatief schaars zijn ten opzichte van de hoeveelheid beschikbaar werk.

Deze concurrentieoverwegingen vertellen echter niet het hele verhaal. Ook in de beeldende kunst treden namelijk duidelijke loopbaanverschillen tussen mannen en vrouwen op. Qua inkomsten steken mannelijke beeldend kunstenaars vooral op de vrije markt boven hun vrouwelijke collega's (of wellicht concurrenten) uit. Mannen verkopen meer, exposeren vaker in galeries en vragen hogere prijzen voor hun werk. De sekseverschillen zijn op de overheidsmarkt minder zichtbaar.

Op grond van de analyses in de hoofdstukken kan een aantal conclusies getrokken worden over de twee centrale theorieën in dit proefschrift. Bovendien bevat dit proefschrift lessen voor toekomstig onderzoek, voor dataverzameling en voor overheidsbeleid in de culturele sector.

De achilleshiel van beide centrale theorieën in dit proefschrift, work-preference en winner-take-all, blijkt hun romantische invalshoek te zijn. De benaderingen zijn deels gebaseerd op het ideaal van de Bohémien, de kunstenaar wars van conventies en instituties wiens leven draait om het scheppen van kunst omwille van de kunst. Deze romantische elementen zijn duidelijk aanwijsbaar in beide theorieën: het beeld van de straatarme kunstenaar, wiens geluk bepaald wordt door zijn artistieke werkzaamheden, de ondoordachte beslissingen van bevlogen jongeren om zich tot de kunst te bekeren en de groeiende ongelijkheid tussen een handjevol commercieel succesvolle entertainers en het legioen werkelijke kunstenaars.

Deze romantische elementen blijven in de uitgebreide empirische analyses in dit proefschrift niet overeind, en dringen daarmee de waardevolle aspecten van work-preference en winner-take-all theorie enigszins naar de achtergrond. Zo blijkt work-preference goed bruikbaar bij het verklaren van de rol die werkzaamheden buiten de culturele sector spelen in de loopbaan van de kunstenaar, maar overschat de theorie de liefde van de kunstenaar voor het werk in zijn eigen beroep. In overeenstemming met de theorie subsidiëren kunstenaars hun eigen beroep met baantjes buiten de sector en ruilen ze deze werkzaamheden graag in voor werk als

kunstenaar. In hun werk in de kunsten zijn kunstenaars echter lang niet zo onverzadigbaar als Throsby's theorie – en het beeld van de Bohemién kunstenaar – veronderstelt. Kunstenaars streven namelijk naar een normale werkweek, en maken afwegingen tussen werk en vrije tijd die vergelijkbaar zijn met de afwegingen van werknemers in andere sectoren.

De conclusies omtrent de merites van winner-take-all theorie zijn vergelijkbaar. De theorie is bruikbaar voor het beschrijven en analyseren van een deel van de economische werkelijkheid van het kunstenaarsberoep, maar schiet daarbuiten tekort. De theorie is met name bruikbaar voor de analyse van de dynamiek van deelmarkten waarop kunstenaars actief zijn. Onder beeldend kunstenaars is de theorie bijvoorbeeld toepasbaar op de afzonderlijke activiteiten op de galeriemarkt, op de overheidsmarkt, op de buitenlandse markt en op de opdrachtenmarkt, maar gaat zij niet op als de totale activiteiten van de kunstenaar (de feitelijk optelsom van alle werkzaamheden) wordt bestudeerd. Zo kleunt de theorie mis in haar voorspelling over de groeiende inkomensongelijkheid onder beginnende kunstenaars. Hoofdstuk drie toont namelijk aan dat de inkomens van de afgestudeerde kunstenaars juist convergeren. Wel voorspelt de theorie correct dat de ongelijkheid in afzonderlijk artistieke activiteiten toeneemt.

Dit proefschrift plaatst tevens een aantal kanttekeningen bij verder (empirisch) onderzoek in de sector. In de eerste plaats toont dit proefschrift aan dat het zeker niet nodig is om steeds nieuwe gegevens te verzamelen met behulp van enquêtes. De culturele sector is namelijk rijk aan potentiële databronnen die nog niet of nauwelijks geanalyseerd zijn en die nieuwe en completere inzichten in de werking van de arbeidsmarkt in deze sector kunnen verschaffen. In dit proefschrift worden twee soorten 'alternatieve' data geanalyseerd: in de eerste plaats gegevens die door anderen verzameld zijn, met name voor beleidsevaluaties, en in de tweede plaats institutionele of biografische gegevens die om verschillende, vaak ambtelijke redenen, centraal geadministreerd worden.

Een tweede reden om niet automatisch voor vragenlijsten te kiezen is het feit dat het enquête-instrument in de culturele sector een steeds botter middel is geworden. Naast het feit dat er vraagtekens te plaatsen zijn bij de representativiteit van de bestanden met namen en adressen van kunstenaars, spreken de soms dramatisch lage responscijfers (vaak minder dan 20%) boekdelen.

Op grond van de analyses in dit proefschrift kunnen ten minste twee beleidsaanbevelingen gedaan worden. In de eerste plaats zou de overheid zich moeten realiseren dat het subsidiëren van succesvolle kunstenaars niet automatisch leidt tot meer of betere kunstproductie, aangezien kunstenaars de neiging hebben om extra inkomen aan te wenden voor een prettiger verhouding tussen gewerkte uren en vrije tijd. Als het de overheid menens is met het bevorderen van de (omvang van) de kunstproductie dan moeten juist de marginale kunstenaars overheidssteun ontvangen.

In de tweede plaats toont dit proefschrift aan dat het niet redelijk is om te veronderstellen dat de loopbanen van verschillende groepen kunstenaars zich langs dezelfde lijnen voltrekken. Op grond van deze constatering kunnen er vraagtekens geplaatst worden bij verschillende beleidsmaatregelen en wetten in de culturele sector waarin de problematiek binnen één kunstdiscipline leidraad is geweest bij het formuleren van beleid. Voorbeelden zijn de Wet Inkomensvoorziening Kunstenaars, die sterk leunt op de loopbanen van autonome beeldend kunstenaars en de vierjaarlijkse evaluaties van kunstinstellingen in het kader van de Kunstenplan systematiek. Deze evaluaties zijn gebaseerd zijn op de levenscycli van gezelschappen in de podiumkunsten. Het is echter niet voor de hand liggend om culturele instellingen wiens levenscyclus veel langer is, zoals musea, volgens dezelfde systematiek te beoordelen. De overheid moet dan ook terughoudend zijn met het formuleren van overkoepelend beleid dat voor alle kunstenaars of kunstinstellingen geldt. Een zorgvuldige inschatting vooraf van hoe generieke beleidsmaatregelen uitpakken voor verschillende groepen kunstenaars verdient aanbeveling.

Tenslotte schetst dit proefschrift vier richtingen voor verder onderzoek naar de economie van het kunstenaarschap. Ten eerste zijn een aantal sociologische theorieën over de arbeidsmarkt voor kunstenaars onderbelicht gebleven. Ten tweede verdient de demografische en sociale opbouw van de beroepsgroep van kunstenaars meer aandacht. Zo is er geen bevredigende verklaring voor de groeiende populariteit van het kunstonderwijs, met name onder vrouwen. Ook weten we nog weinig over kunstenaars die stoppen en voor een beroep buiten de culturele sector kiezen. Ten derde behoeft een aantal empirische aspecten van de kunstenaarsloopbanen verdere studie: dit betreft onder andere de analyse van loopbaanverschillen tussen uitvoerende en scheppende kunstenaars, het verzamelen en analyseren van longitudinale data over kunstenaarsloopbanen, en het beter in kaart brengen van financiële steun van partners en familie van de kunstenaars. Ten vierde is het relevant om te bezien hoe specifiek de bevindingen van dit proefschrift zijn, bijvoorbeeld door vergelijking van de uitkomsten met andere landen, subsidiesystemen, periodes en arbeidsmarkten, zoals de arbeidsmarkt voor sporters.

References

Abbing, Hans (1989), *Een economie van de kunsten. Beschouwingen over kunst en kunstbeleid*, Groningen: Historische Uitgeverij.

------ (2002), *The Exceptional Economy of the Arts; An Interdisciplinary Approach to a Privileged and Relentless Sector*, Amsterdam University Press.

Abdukadir, Gulnaz (1992), 'Liquidity Constraints as a Cause of Moonlighting', *Applied Economics*, **24 (12)**: 1307-10.

Adler, M. (1985), 'Stardom and Talent', *American Economic Review*, **75**: 208-212.

Albert, S. (1998), 'Movie Stars and the Distribution of Financially Successful Films in the Motion Picture Industry', *Journal of Cultural Economics* **22 (4)**: 249-270.

Allen, David (1998), 'The Moonlighting Decision of Unmarried Men and Women: Family and Labour Market Influence', *Atlantic Economic Journal*, **26 (2)**: 190-205.

Allen, J. P. and Ramaekers, G. W. M. (1999), *De arbeidsmarktpositie van afgestudeerden van het Hoger Beroepsonderwijs, HBO-Monitor 1997*, HBO-raad Den Haag.

Alper, N. O. [et al.] (1996), *Artists in the Work Force: Employment and Earnings, 1970 to 1990*, National Endowment for the Arts.

Alper, N.O. and Wassall, G.H. (1992), 'Toward a Unified Theory of the Determinants of the Earnings of Artists', in R. Towse and A. Khakee (eds.), *Cultural Economics*, Springer Verlag, Heidelberg.

------ (1998), 'Artists' Labor Market Experiences: A Preliminary Analysis Using Longitudinal Data', in: Heikkinnen, M. and Koskinen, T., eds. *Workshop on the Economics of Artists and Arts Policy: Selection of Papers*, Helsinki: The Arts Council of Finland: 9-33.

Anderson, Robert C. (1974), 'Paintings as an Investment', *Economic Inquiry* **12**: 13-26.

Ashenfelter, Orly (1989), 'How Auctions Work for Wine and Art', *Journal of Economic Perspectives* **3**: 23-36.

Australian Bureau of Statistics & Australian Department of Communication and the Arts (1997), *Cultural trends in Australia: Statistical Overview 1997*, ABS Adelaide.

Bastiat, F. (1850, 2002), 'Economic Harmonies', digital copy through www.econlib.org.

Baumol, W. J. and W. G. Bowen (1966), *Performing Arts: the Economic Dilemma: a Study of Problems Common to Theater, Opera, Music and Dance,* New York.

Baumol, William J. (1986), 'Unnatural Value: Or Art Investment as Floating Crap Game', *American Economic Review* **76**: 10-15.

Becker, Gary S. (1964), *Human Capital: a Theoretical and Empirical Analysis, with Special Reference to Education*, National Bureau of Economic Research, General Series no. 80.

Becker, Howard S. (1984), *Art Worlds*, Berkeley, University of California Press.

Benhamou, F. (2000), 'The Opposition between Two Models of Labour Market Adjustment: The Case of Audio-visual and Performing Arts Activities in France and Great Britain over a Ten Year Period', in: *Journal of Cultural Economics* **24**: 301-319.

Berndt, E.R. (1991), *The Practice of Econometrics: Classic and Contemporary*, Addison-Wesley.

Blau, F. D., Ferber, M. A. and Winkler, A. E. (1998), *The Economics of Women, Men, and Work*, Prentice Hall.

Blau, J. R. (1988), 'Study of the Arts: a reappraisal', in: *Annual Review of Sociology*, **14**: 269-292.

Blaug, M. (2001), 'Where are we now on Cultural Economics', in: *Journal of Economic Surveys* **15 (2)**: 123-143.

Bonetti, S.M. and Madden, C.D. (1996), 'Harmony, Aesthetics and Anaesthesia: Utilising a Broad Definition of Cultural Economics', *Cultural Policy*, **2 (2)**: 255-268.

Bonus, Holger and Dieter Ronte (1997), 'Credibility and Economic Value in the Visual Arts', *Journal of Cultural Economics* **21**: 103-118.

Bourdieu, P. (1989), *Opstellen over smaak, Habitus en het veldbegrip*, Van Gennep Amsterdam.

------ (1993), *The Field of Cultural Production. Essays on Art and Literature,* Cambridge, Polity Press.

Bowness, Alan (1990), *The Conditions of Success: How the Modern Artist Rises to Fame*, London, Thames and Hudson.

Brouwer, Natasja and Heidi Meulenbeek (2000), *De markt voor beeldende kunst; de markt en de financiële positie van de beeldend kunstenaars 1998*, Ministerie van Onderwijs, Cultuur en Wetenschappen, Den Haag.

Buelens, Nathalie and Victor Ginsburgh (1993), 'Revisiting Baumol's "Art As A Floating Crap Game"', *European Economic Review* **37**: 1351-1371.

Bystryn, M. (1989), 'Art Galleries As Gatekeepers: The Case of Abstract Expressionism', in: *Art and Society: Readings in the Sociology of the Arts*, State University of New York: 177-191.

Caplin, Lee (1989), *The Business of Art*, Englewood Cliffs, Prentice-Hall.

Case, Bradford, Henry O. Pollakowski and Susan M. Wachter (1997), 'Frequency of Transaction and House Price Modelling', *The Journal of Real Estate Finance and Economics* **14 (1/2)**: 173-187.

Caves, Richard E. (2000), *Creative Industries: Contracts between Art and Commerce*, Cambridge: Harvard University Press.

Cowell, F. (1995), *Measuring Inequality*, Londen.

Cowen, Tyler (1996), 'Why Women Succeed, and Fail, in the Arts', *Journal of Cultural Economics* **20 (2)**: 93-113.

Crane, Diana (1987), *Transformation of the Avant-Garde*, Chicago, University of Chicago Press.

------ (1989), 'Reward systems in Avant-Garde Art: Social Networks and Stylistic Change', in: *Art and Society: Readings in the Sociology of the Arts*, State University of New York: 261-277.

Csikszentmihalyi, Mihaly (1997), *Creativity: Flow and the Psychology of Discovery and Invention*, Harper Collins, New York.

De Nooy, W. (1996), 'De kracht van verandering: onvoorziene effecten van het nieuwe beeldende kunstbeleid', in: *Boekmancahier* **8**: 321-328.

De Nooy, W. and IJdens, T. (1994), *Kwaliteit en professionaliteit, Evaluatie van het Fonds voor Beeldende Kunsten, Vormgeving en Bouwkunst*, Rotterdam.

De Vries, en Ramaekers, G. (2002), *Kunstenmonitor 2000; de arbeidsmarktpositie van afgestudeerden van het kunstvakonderwijs*, HBO-raad, Den Haag: 56-62.

De Wolf, I.F. and Van Der Velden, R.K.W. (2001), 'Selection Processes for Three Types of Academic Jobs; an Experiment among Dutch Employers of Social Sciences Graduates', *European Sociological Review*: 317-330.

Elstad, J. I. (1997), 'Collective Reproduction Through Individual Efforts: The Location of Norwegian Artists in the Income Hierarchy', *International Journal of Cultural Policy* **3 (2)**: 267-288.

Fase, Martin M.G. (1996), 'Purchase of Art: Consumption and Investment', *De Economist* **144 (4)**: 649-669.

Fase, Martin M.G. and Mariska Van Tol (1994), 'Het monetaire rendement van beleggen in schilderijen', *Economisch Statistische Berichten*: 684-689.

Faulkner, R. R. and Anderson, A. B. (1987), 'Short Term Projects and Emergent Careers: Evidence from Hollywood', in: *American Journal of Sociology* **92**: 879-909.

Filer, R.K. (1986), 'The 'Starving Artist' - Myth or Reality? Earnings of Artists in the United States', *Journal of Political Economy* **49**: 56–75.

------ (1990), 'Arts and Academe: the Effects of Education on the Earnings of Artists', in: *Journal of Cultural Economics* **14 (2)**: 15-39.

Frank R.H. & Cook, P.J. (1995), *The Winner-Take-All-Society: How More and More Americans Compete for Ever Fewer and Bigger Prizes, Encouraging Economic Waste, Income Inequality, and an Impoverished Cultural Life*, The Free Press, New York.

Frank, R.H. (1998), 'Winner-take-all Markets and Wage Discrimination', in: Brinston, M.C. & Nee, V. (eds.), *New Institutionalism in Sociology*, Russell Sage Foundation New York: 208-223.

Frey, B. S. (1997), *Not Just for the Money; an Economic Theory of Personal Motivation*, Edward Elgar, Cheltenham.

------ (1997b), 'Art Markets and Economics: Introduction', *Journal of Cultural Economics*, **21**: 165-173.

------ (2000), *Arts and Economics: Analysis & Cultural Policy,* Springer, Berlin.

Frey, B. S. and R. Eichenberger (1995), 'On the Return of Art Investment Return Analyses', Journal of Cultural Economics **19**: 207-220.

Frey, B. S. and Pommerehne, W. W. (1989), *Muses and Markets*, Oxford, Basil Blackwell.

Galenson, David W. (2000), 'The Careers of Modern Artists', *Journal of Cultural Economics* **24 (2)**: 87-112.

Galenson, D. W. and Jensen, R. (2001), 'Young Geniuses and Old Masters: The Life Cycles of Great Artists from Masaccio to Jasper Johns', *NBER Working Paper* No. W8368.

Ginsburgh, V.A. and Menger, P.-M. (eds.) (1996), *Economics of the Arts: Selected Essays*, North Holland, Amsterdam.

Goetzmann, William N. (1993), 'Accounting for Taste: Art and the Financial Markets Over Three Centuries', *American Economic Review* **83 (5)**: 1370-1376.

Goldstein, H. and Spiegelhalter, D. J. (1996), 'League Tables and their Limitations: Statistical Issues in Comparisons of Institutional Performance', *Journal of the Royal Statistical Society*, **A. 159**: 385-443.

Groot, W. and Oosterbeek, H. (1994), 'Earnings Effects of Different Components of Schooling: Human Capital versus Screening', *The Review of Economics and Statistics* **76**: 317-321.

Gubbels, Truus (1995), 'Korting en krediet voor beeldende kunst', *Boekmancahier* **7 (23, 24)**: 8-22, 193-204.

Gubbels, Truus and Gerben Voolstra (eds.), (1998), *Visies op beleid en markt*, Amsterdam, Boekmanstichting/Mondriaan Stichting.

Guilkey, D. K. and Murphy, J. L. (1993), 'Estimation and Testing in the Random Effect Probit Model', *Journal of Econometrics* **59**: 301-317.

Haan, J. de en Knulst, W. (1998), *De kunstzinnige burger wordt ouder: kunstbeoefening in de vrije tijd opnieuw onderzocht,* LOKV, Utrecht (Katernen Kunsteducatie).

Heinich, N. (1996), *The Glory of Van Gogh: an Anthropology of Admiration*, Princeton: Princeton University Press.

Heikkinen, M. (1995), 'Evaluating the Effects of Direct Support on the Economic Situation of Artists', *Journal of Cultural Economics* **19 (3)**: 261–271.

Heilbrun, James and Charles M. Gray (1993), *The Economics Of Art And Culture. An American Perspective*, Cambridge, Cambridge University Press.

Hitters, E. (1996), *Patronen van patronage*, Dissertation University of Utrecht.

Hofecker, F.-O. (1995), *Current Trends in the Financing of Culture in Europe*, Centre of Cultural Research, Vienna for the Circle Round Table in Barcelona, April.

Hughes, R. (1993), *The Culture of Complaint: the Fraying of America*, Oxford University Press.

IJdens, T. (2000), *Schots en Scheef*, Dissertation Erasmus University of Rotterdam, ECKCW Rotterdam.

Jabbar, M. A. (1998), 'Buyer Preferences for Sheep and Goats in Southern Nigeria: A Hedonic Price Analysis', *Agricultural Economics*, **18 (1)**: 21-30.

Janssen, Susanne (2001), 'The Empirical Study of Careers in Literature and the Arts', in: Schram, D.H., & Steen, G.J. (Eds.), *Psychology and Sociology of Literature* Amsterdam: John Benjamins.

Jeffri, J. (1989), *Information on Artists*, Research Centre for Arts and Culture, Columbia University, New York.

Katz, Eliakim and Syrquin, Moshie (1982), 'The Failure of Psychic Income as a Source of Market Failure', *Journal of Post Keynesian Economics*, **4 (4)**: 623-7.

Kempers, B. (1987), *Kunst, macht en mecenaat; Het beroep van schilder in sociale verhoudingen 1250-1600*, Amsterdam.

Kimenyi, Mwangi S. (1991), 'Race, Amenities and Psychic Income', *Review of Black Political Economy*, **20 (1)**: 49-58.

Kimmel, J. and Powell, L.M. (1999), 'Moonlighting Trends and Related Policy Issues in Canada and the United States', *Canadian Public Policy*, **25(2)**: 207-231.

Lang, G.E. and Lang, K. (1990), *Etched in Memory*, University of Carolina Press.

Layard, R. and Psacharopoulos, G. (1974), 'The Screening Hypothesis and the Returns to Education', in: *Journal of Political Economy* **82**: 985-998.

Lazear, E. P. (1995), *Personnel Economics*, Cambridge, Mass.: MIT Press.

------ (1999), 'Personnel Economics: Past Lessons and Future Directions', *NBER Working Paper* 6957.

Lazear, E. P. and Rosen, S. (1981), 'Rank Order Tournaments as Optimum Labour Contracts', in: *Journal of Political Economy* **87**: 1261-1284.

Leibenstein, Harvey (1950), 'Bandwagon, Snob, and Veblen Effects in the Theory of Consumers' Demand', *Quarterly Journal of Economics* **64 (2)**: 183-207.

MacDonald, G. M. (1988), 'The Economics of Rising Stars', *American Economic Review*, **78 (1)**: 155-166.

Maddala, G. S. (1983), *Limited-Dependent and Qualitative Variables in Econometrics*, Cambridge University Press.

Madden, C., (2001), 'Using Economic Impacts in Arts and Cultural Advocacy: A Cautionary Note', *Media International Australia Incorporating Culture and Policy*, **98 (1)**: 161-178.

Madden, C. and Bloom, T., (2001), 'Advocating Creativity', *International Journal of Cultural Policy*, **7 (3)**: 409-436.

Marshall, A. (1961), *Principles of Economics: an Introductory Volume*, London: Macmillan.

McConnell, Campbell R. and Brue, Stanley L. (1995), *Contemporary Labour Economics*, McGraw Hill.

Menger, Pierre-Michel (1999), 'Artistic Labour Markets and Careers', *Annual Review of Sociology* **25**: 541-574.

------ (2001), 'Artists as Workers: Theoretical and Methodological Challenges', in: *Poetics* **28**: 241-254.

Menger, P-M. and Gurand, M. (1996), 'Work and Compensated Unemployment in the Performing Arts: Exogenous and Endogenous Uncertainty in Artistic Labour Markets', In: Gingsburg and Menger, eds.

Merton, Robert K. (1973, 1968), 'The Matthew Effect in Science', *The Sociology of Science. Theoretical and Empirical Investigations*, University of Chicago Press: 439-459.

Meulenbeek, H., Poot, T. and Rengers, M. (1998), *De financiële positie van beeldende kunstenaars 1993-1996,* Foundation for Economic Research of the University of

Amsterdam, on behalf of the Dutch ministry of Education, Culture and Sciences, Rijswijk.

Mossetto, G. (1993), *Aesthetics and Economics,* Kluwer Academic Press.

Moulin, Raymonde (1987), *The French Art Market. A Sociological View*, New Brunswick, Rutgers University Press.

------ (1992), *L'artiste, l'institution et le marché*. Paris, Flammarion.

------ (1994). 'The Construction of Art Values', *International Sociology* **9 (1)**: 5-12.

Murray, Jonathan and Nicholas Sarantis (1999), 'Quality, User Cost, Forward-looking Behaviour, and the Demand for Cars in the UK', *Journal of Economics and Business*, **51 (3)**: 237-258.

Nerlove, Marc (1995), 'Hedonic Price Functions and the Measurement of Preferences: The Case of Swedish Wine Consumers', *European Economic Review* **39 (9)**: 1697-1716.

Netzer, D. (1978), *The Subsidized Muse: Public Support for the Arts in the United States*, Cambridge University Press.

Nuttall, D. L., Goldstein, H., Prosser, R. and Rasbash, J. (1989), 'Differential School Effectiveness', *International Journal of Educational Research* **13**: 769-776.

O'Brien, J. and Feist, A. (1997), *Employment in the Arts and Cultural Industries: An Analysis of the Labour Force Survey and Other Sources,* The Arts Council of England, London.

O'Sullivan, Tim et al, eds. (1994), *Key Concepts in Communication and Cultural Studies: Second Edition*, Routledge.

Peacock, A. & Rizzo, I. eds. (1994), *Cultural Economics and Cultural policies*, Kluwer Academic publishers, Dordrecht.

Pesando, James E. (1993), 'Art as an Investment: The Market for Modern Prints', *American Economic Review* **83 (5)**: 1075-1089.

Peterson, R. and White, H. G. (1989), 'The Simplex Located in Art Worlds', in: *Art and Society: Readings in the Sociology of the Arts*, State University of New York: 243-261.

Platner, S. (1996), *High Art Down Home. An Economic Ethnography of a Local Art Market.* Chicago, Chicago University Press.

Pommerehne, Werner W. and Lars P. Feld (1997), 'The Impact of Museum Purchase on the Auction Prices of Paintings', *Journal of Cultural Economics* **21 (3)**: 249-271.

Rengers, M. (1998), 'Visual Artists in the Netherlands: Civil servants, Self Employed or Both?', in: Heikkinnen, M. and Koskinen, T., eds. *Workshop on the Economics of Artists and Arts Policy: Selection of Papers*, Helsinki: The Arts Council of Finland: 55-72.

------ (1999), 'Loopbanen van beeldend kunstenaars' in de *Witte Raaf* **77**: 40-41.

------ (2000), *De arbeidsmarktpositie van afgestudeerden van het kunstvakonderwijs: Kunsten-monitor 1998*, De HBO-Raad, Den Haag.

------ (2001), *Kunst-werk [V/M], Loopbanen van vrouwen en mannen in de beeldende kunst, muziek en podiumkunsten*, Theater Instituut Nederland, Amsterdam.

------ (2002), 'De loopbanen van afgestudeerden: de eerste zes jaar', Hoofdstuk 4 in: De Vries en Ramaekers (2002), HBO-raad, Den Haag: 56-62.

Rengers, Merijn and Christopher Madden (2000), 'Living Art: Artists between Making Art and Making a Living', *Australian Bulletin of Labour* **26 (4)**: 325-354.

Rengers, M. and Meulenbeek, H. (1997), 'Ambtenaar of ondernemer? De inkomens van beeldend kunstenaars onder de loep', in: *Boekmancahier* **32**: 148-157.

Rengers, Merijn and Erik Plug (2001), 'Private or Public? How Dutch Visual Artists Choose between Working for the Market and the Government', *Journal of Cultural Economics* **25 (1)**: 1-20.

Rengers, Merijn and Olav Velthuis (2002), 'Determinants of Prices for Contemporary Art in Dutch Galleries, 1992-1998', *Journal of Cultural Economics*, **26 (1)**: 1-28.

Rosen, S. (1981), 'The Economics of Superstars', *American Economic Review,* **71**: 848-858.

------ (1986), 'Prizes and Incentives in Elimination Tournaments', in: *American Economic Review* **76**: 701-715.

------ (1996), 'Review of the Winner-take-all-society', in: *Journal of Economic Literature*.

Rosen, S. and Neal, D. (1998), 'Theories of the Distribution of Labour Earnings', *NBER Working Paper* No. W6378.

Rosenbaum, J. E. (1984), *Career Mobility in a Corporate Hierarchy*, Academic Press London.

Rouget, Bernard, Dominique Sagot-Duvauroux and Sylvie Pflieger (1991), *Le marché de l'art contemporain en France. Prix en stratégies*, Paris, La documentation Française.

Ruskin, J. (1905; 1857), *A Joy Forever*, London.

Sagot-Duvauroux, Dominique, Sylvie Pflieger and Bernard Rouget (1992), 'Factors Affecting Price on the Contemporary Art Market', in Ruth Towse and Abdul Khakee, eds, *Cultural Economics*, Berlin, Springer.

Say, J-B. (1803, 2002), 'Traite d'Économie Politique', digital copy through www.econlib.org.

Schneider, Friedrich and Werner Pommerehne (1983), 'Analyzing the Market of Works of Contemporary Fine Arts: An Exploratory Study', *Journal of Cultural Economics* **7**: 41-67.

Schuster, J.M.D. (1985), 'The Interrelationships between Public and Private Funding of the Arts in the United States' in: *Journal of Arts Management and Law*, **14 (4)**: 77-105.

Schwarze, Johannes (1991), 'Determinanten der Mehrfachbeschaftigung', *Konjunkturpolitik*, **37 (1-2)**, 87-113.

Sharir, Shmuel (1976), 'Work Choices Under and Earnings Target: The Case of Multiple Job Holding', *Journal of Behavioural Economics*, **5 (2)**: 93-118.

Shishko, Robert and Rostker, Bernard (1976), 'The Economics of Multiple Job Holding', *American Economic Review*, **66 (3)**: 298-308.

Singer, L. (1981), 'Supply Decisions of Professional Artists', *American Economic Review*, **71 (2)**: 341-346.

------ (1978), 'Microeconomics of the Art Market', *Journal of Cultural Economics* **2**: 21-40.

Smith, A. (1776, 1970), *The Wealth of Nations,* London: Dent.

Spence, A. M. (1973), 'Job Market Signalling', in: *Quarterly Journal of Economics* **87**: 355-374.

Statistics New Zealand & Ministry of Cultural Affairs (1998), *Employment in the Cultural Sector/Nga Mahi ki te Taha Tikanga-a-Iwi*, Wellington New Zealand.

Stigler, George and Becker, Gary (1977), 'De Gustibus Non Est Disputandum', *American Economic Review,* **67 (2)**: 76-90.

Struyk, Inkie en M. Rengers (2000), *Rollen en rolpatronen: loopbanen van vrouwen en mannen in de podiumkunsten*, Theater Instituut Nederland, Amsterdam.

Sussman, Deborah (1998), *Moonlighting: A Growing Way of Life*, Statistics Canada.

Throsby, D. & Thompson, B. (1994), *But What Do You Do For a Living? A New Economic Study of Australian Artists,* Australia Council for the Arts, Sydney.

Throsby, D. (1992), 'Artists as Workers', in R. Towse and A. Khakee, eds., *Cultural Economics*, Springer Verlag, Heidelberg.

------ (1994a), 'A Work Preference Model of Artists' Behaviour', in A. Peacock and I. Rizzo (eds.), *Cultural Economics and Cultural Policies*, Kluwer Academic publishers, Dordrecht: 69–80.

------ (1994b), 'The Production and Consumption of the Arts: The View of Cultural Economics', *Journal of Economic Literature*, **23**:1-29.

------ (1996a), 'Economic Circumstances of the Performing Artist: Baumol and Bowen Thirty Years On', *Journal of Cultural Economics,* **20**: 225-240.

------ (1996b), 'Disaggregated Earnings Functions for Artists', in V.A. Ginsburgh and P.-M. Menger (eds.), *Economics of the Arts: Selected Essays*: 331–346.

------ (2001), *Economics and Culture*, Cambridge University Press.

Thurow, L. C. (1975), *Generating Inequality*, New York.

------ (1978), 'Psychic Income: Useful or Useless?', *American Economic Review* **68 (2)**: 142-145.

------ (1981), 'Psychic Income: A Market Failure', *Journal of Post Keynesian Economics* **3 (2)**: 183-93.

Tijdens, K. G. (2001), *De vrouwenloonwijzer. Werk, lonen en beroepen van vrouwen*, AIAS, University of Amsterdam.

Towse, R. (1992), *Singers in the Marketplace*, *The Economics of the Singing Profession*, Oxford.

------ (1996a), *The Economics of Artists Labour Markets*, The Arts Council of England, London.

------ (1996b), 'Economics of Training Artists', in V.A. Ginsburgh & P.-M. Menger eds.: *Economics of the Arts: Selected Essays,* North Holland, Amsterdam.

------ (2000), *Creativity, Incentive and Reward. An Economic Analysis of Copyright and Culture in the Information Age*, Dissertation Erasmus Universiteit Rotterdam.

------ (2001), 'Partly for the money: Rewards and Incentives to Artists', in: *Kyklos* **54**: 473-490.

Towse, R. and A. Khakee, eds. (1992), *Cultural Economics*, Heidelberg: Springer Verlag.

Van der Linden, I., and Rengers, M. (1999), *Kunstenmonitor 1997; de arbeidsmarktpositie van afgestudeerden van het kunstvakonderwijs*, ROA Maastricht.

Vasari, G. (1987), *Lives of the Artist: Volume 1. A Selection Translated by George Bull*, Penguin Books Londen.

Veblen, Thorstein Bunde (1966), *The Theory of the Leisure Class*, New York.

Velthuis, O. (2002), *Talking Prices*, Thesis Erasmus University Rotterdam.

Vinken, H. and Wiekeraad, M. (1999), *Beeldende kunstbeleid OC & W: subsidies, opdrachten en aankopen 1996 en 1989-1996*, IVA: Instituut voor sociaal-wetenschappelijk onderzoek en advies.

Waits, R.C. and McNertney, E.M. (1984), 'An Economic Model of Artistic Behavior', *Journal of Cultural Economics,* **8**: 49-60.

Wassall, G.H. and Alper, N.O. (1992), 'Toward a Unified Theory of the Determinants of the Earnings of Artists', in R. Towse and A. Khakee (eds.), *Cultural Economics*, Springer Verlag, Heidelberg.

White, H.C. & White, C.A. (1965), *Canvases and Careers; Institutional Change in the French Painting World*, Wiley New York.

White, H.C. (1993), *Careers and Creativity, Social Forces in the Arts,* Westview, Social Inequality Series.

Withers, G. (1985), 'Artists' Subsidy of the Arts', *Australian Economics Papers*, December: 290-295.

Zimmler, A. & Toepler, S. (1996), 'Cultural Policies and the Welfare State: the Cases of Sweden, Germany, and the United States', in: *The Journal of Arts Management, Law, and Society* **26 (3)**: 167-191.

Zolberg, Vera L. (1990), *Constructing a Sociology of the Arts*, Cambridge, Cambridge University Press.

Curriculum Vitae

Merijn Rengers (Amsterdam, 1973) completed his secondary education in 1991 at the Barlaeus Gymnasium, Amsterdam. Between 1991 and 1996 he studied economics and art history at the University of Amsterdam. In 1993 he began his ongoing work as a freelance journalist with a special interest in economics, sports and culture. In 1995 he spent a semester at the University of California at Berkeley and in 1996 he graduated as a general economist at the University of Amsterdam with a Masters thesis on the labour market for visual artists in the Netherlands. In September 1996 he continued his study of this topic as a Ph.D. student at the Interuniversity Center for Social Science Theory and Methodology (ICS), Utrecht University.

Since 1996 he has worked on various studies in the field of careers and the labour market in the cultural sector. Five of those studies appear as chapters in this book. One of the chapters was written when he was a visiting scholar at Macquarie University in Sydney, Australia in 1999. Between 1998 and 2001 he furthermore worked as a lecturer at the Faculty of History and Arts of the Erasmus University Rotterdam.

Currently, Merijn Rengers works as a researcher at this faculty and continues his work as a freelance journalist for various media.

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