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5	MOSHE ADLER		5
6	Columbia University, New York, NY, USA		6
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Abstract

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The Economics of Superstars sets out to explain the relationship between talent and success in the arts, but there is no agreement about what this relationship is. But whatever its other features may be, superstardom means that market output is concentrated on just a few artists. Concentration always raises the question of efficiency. Superstardom may be inefficient not only because it raises prices for consumers but also because it deprives other artists of the opportunity to practice art. Artists who do not practice art lose psychic income. Because psychic income cannot be transferred from one person to another, the loss of this income may be inefficient. This chapter reviews theories of superstardom and theories about the emergence of stars. The efficiency of superstardom is discussed in terms of effects on consumers and the use of publicity rights by the star. The chapter goes on to deal with the loss of opportunities to practice art that are caused by superstardom and suggests ways to alleviate the problem. Finally the empirical literature that tests the different theories of superstardom is reviewed.

## Keywords

superstars, stardom, talent

22 JEL classification: Z1, Z10

 

## 1. Theories of superstardom

# 1.1. Why does superstardom occur?

Superstars in the arts, sport etc. are individuals who attain considerable prominence and success in their field and whose earnings as a result are significantly greater than the earnings of their competitors. According to Rosen (1981), superstardom in the arts is due to two factors: a hierarchy of talent, and the perfect or nearly perfect reproducibility of art. A good illustration of Rosen's argument comes from the music or theater markets. In the past a singer or an actor, no matter how good she or he was, could serve only a limited number of people. Hence singers and actors of all levels of talent could find audiences. But now that music can be perfectly reproduced on recordings, and theater has been supplemented or displaced by movies and videos, every consumer can inexpensively consume the performances of the best artist.

But if the best artist is significantly better than her competitors, then in fact "each consumer consuming the best" is a special case. Consider singers producing and selling CDs. The best artist in these circumstances is a monopolist, and whether profit maximization calls for a low price and selling to all consumers, or a high price and selling only to a few, depends on the elasticity of the demand for her product. Only if demand is highly elastic will it be profit-maximizing to serve the whole market. Particularly interesting in Rosen's model is the case in which there are several artists with the same top-level talent. Because the average cost of producing CDs is decreasing (the cost of producing the music recorded on a CD is a fixed cost), there will still be only one star even in this case. But since competition among these top-level artists to be the star would be fierce, the star would be able to charge only the average cost of production in selling her CDs. The star would, therefore, be poor.

Hence in Rosen's model there are two extreme possibilities. If there is an artist who is significantly more talented than the rest, this artist, unless the demand is nearly perfectly elastic, sets a high price for her art and sells it to only a fraction of consumers. If there are several artists of equal talent, one of them serves the whole market, but she is poor. Thus according to Rosen's model, if a star is extremely popular and extremely rich, her talent must be greater than the rest by just the right amount.

Adler (1985) argues that the existence of superstars is not due to differences in talent. He suggests that there are in fact many artists who possess stardom-quality talent; what produces superstars is the need on the part of consumers to consume the same art that others do. This need arises from the fact that the consumption of a piece of art is not a momentary experience but a dynamic process in which "the more you know, the more you enjoy". Consumers build "consumption capital" in art, and the larger the capital

<sup>&</sup>lt;sup>1</sup> Rosen (1981, p. 852).

the greater is the enjoyment from each encounter with the art and the artist [Stigler and Becker (1977)].<sup>2</sup>

The acquisition of this knowledge occurs in three ways. It can result from exposure to the art itself, from discussions about the art with friends or acquaintances, or from reading about the art in newspapers and magazines. When the artist is popular, it is easier to find discussants who are familiar with the artist or to find media coverage; hence consumers prefer to consume what others also consume.

Because the number of artists who can be popular at any one time is limited, not all talented artists can be successful. However, the frustration of an unsuccessful artist does not end with not having an audience. She must also suffer consumers' judgment that she deserves her fate. It is easy to conclude that an artist who is not as popular "is not as good". Thus, the hierarchy of success manufactures a hierarchy of pseudo-talent in its own image, tending to reinforce the spurious perception of a talent differential.

### 1.2. The emergence of superstars

Rosen's model relies on known differences in talent and it therefore includes a straightforward process by which superstars emerge. MacDonald (1988), considering only the performing arts, defines talent differently, and describes a dynamic process through which stars emerge. He argues that every performing artist is capable of producing either a good or a bad performance. The difference in talent between artists is seen not in the quality of their good or bad performances, but in the probability that a particular performance will be good. This probability is the same throughout the artist's career. But from the vantage point of audiences, the probability of a good performance is lower for a new performer than for a known performer. This is because many artists try their luck at performing and those who perform poorly drop out. Those who perform well, on the other hand, stay, and their probability of performing well in the future is higher. Therefore artists with a good track record can command higher ticket prices and entertain larger audiences. In these circumstances, artists of equal talent do equally well.

Adler (1985) also describes a dynamic process for the emergence of a star, but in this process the star emerges from among several artists who are all equally talented. In this model the emergence of the star arises from a chance event: consumers select an artist at random when they add a new artist to their consumption basket, and it is simply by pure chance that one of these artists ends up with more patrons than the rest. This initial advantage makes the lucky artist the most popular, and since consumers prefer popular artists, other consumers will switch to her as well. An initial advantage can thus snowball into superstardom.

Pure luck is just one possible mechanism by which consumers initially choose a particular artist. Indeed artists themselves do not usually entrust this choice to chance.

<sup>&</sup>lt;sup>2</sup> Harvey Leibenstein (1950) described a "bandwagon effect" that causes consumers to consume the same goods that other consumers do. Leibenstein attributed the effect to the need of consumers to conform or to be stylish.

An author, for instance, may purchase copies of her own book in order to try to push it onto the bestseller list. A musician may pay "payola" (even though it is illegal) to convince a disk jockey to play her music on the radio. And, most importantly, artists use publicity such as appearances on talk shows and coverage in tabloids and magazines to signal their popularity. None of this detracts from the possibility, however, that the allocation of publicity resources to artists is independent of differences in artistic talent.<sup>3</sup> We return to this issue in a following section.

### 1.3. The efficiency of stardom

## 1.3.1. The effect on consumers

Are the prices that stars charge too high? Economists do not have a yardstick for determining whether prices are too high or too low. But they distinguish between prices that are determined in markets with free entry and markets with barriers to entry. We can analyze the issue of market power via the example of the market for music CDs.

Entry into a market is said to be free if an artist who is as talented as the star can offer her CDs for a slightly lower price and capture the market. According to Rosen, this is indeed the case, and the art market is therefore efficient. However in Adler's model, consumers prefer the most popular artist and therefore even an artist who is as talented as the star cannot entice audiences away from the star, not even by offering a lower price. Hence in this model entry is not free, and there are theoretical grounds for government control of prices.

Borghans and Groot (1998) argue that once the necessary condition for superstardom is added to Rosen's theory, entry into the art market is not free anymore, and the art market is therefore not efficient. Unwittingly, though, Borghans and Groot 's addition turns Rosen's theory into Adler's theory. This is ironic because Borghans and Groot object to Adler's theory on the grounds that if there are several artists who have the potential of being a superstar, each would invest resources in enhancing her chances to be the one, and as a result the total income of the superstar would decrease. While this is of course true, Borghans and Groot acknowledge that the maximum that an artist would be willing to invest in promotion is the expected value of becoming a superstar. If there are many artists with the same superstar-potential, the probability that any particular one will become the winner will be low, and the expected value of becoming a superstar will therefore be low as well. Thus each artist's investment in promotion will be small and the lucky superstar's income, even after accounting for the promotion expenses, will be large.<sup>4</sup>

Borghans and Groot begin their analysis of Rosen's theory by proving that talent differences and the reproducibility of art are not sufficient on their own to produce

<sup>&</sup>lt;sup>3</sup> This raises the possibility that the star could be an artist of a lesser talent; see Bonus and Ronte (1997).

<sup>&</sup>lt;sup>4</sup> Borghans and Groot (1998, p. 557).

superstar earnings. Their proof is via an example of n consumers and n artists, but the case of two consumers and two artists is just as illustrative.

Assume that art cannot be replicated, and that the cost of producing art is zero. Assume also that artist A is less talented than artist B, that the consumers a and b are identical, and that the consumers' reservation prices for the art of A and B are \$1 and \$2, respectively. Each consumer consumes just one unit of art. Finally assume that artist A charges \$1 for his art, which he sells to consumer a, and artist B charges \$2 for her art, which she sells to consumer b; with these prices, each consumer is equally satisfied. In other words, the lower price that artist A charges constitutes full compensation for his lower talent. Now suppose that all of a sudden art can be replicated costlessly. Intuition may lead one to believe that artist B would be able to increase her income by selling to both consumers, but Borghans and Groot show that this is actually not the case. If B were to charge more than \$1.00 for her art say \$1.50, then artist A will charge a price that is at least \$1.00 lower than B's price, say \$0.25, and capture the whole market. Hence, competition would force the superstar to charge only \$1.00 and as a result the superstar would earn exactly the same income that she would have earned had replication not been possible.

Borghans and Groot conclude that something else must explain the high incomes of superstars. It must be that consumers stay with the superstar even when there is another artist who charges a price that is so low that it is sufficient to compensate them for his smaller talent. According to Borghans and Groot the reason for this loyalty is that consumers prefer to "watch the performance of someone known to be 'the best'". The problem with this argument is that it is contradictory. If the lower price already constitutes full compensation for the smaller talent, why would the consumer still prefer to watch "the best"? Substitute "most popular" for "the best" in their statement, however, and the argument, now identical to Adler's, is consistent. When replication is not possible a price difference compensates consumers for the talent difference, and each artist is equally popular (or equally unpopular). When replication becomes possible the same price difference continues to compensate consumers for the talent difference, but it does not compensate them for the difference in popularity, which exists when all consumers patronize the same artist. Of course, if consumers value popularity no difference in talent is required to produce it.

### 1.3.2. Publicity rights

The most novel challenge to the efficiency of the stardom system comes from the literature about publicity rights. The seminal article in this literature is by Madow (1993) who argues that the existence of these rights is inefficient because they restrict the public's

<sup>&</sup>lt;sup>5</sup> Borghans and Groot (1998, p. 561).

<sup>&</sup>lt;sup>6</sup> There must be a price differential that constitutes full compensation for the talent differential, because otherwise there would be no equilibrium in a world in which replication is not possible.

use of symbols. Madow cites as an example a greeting card that carries a photograph of John Wayne wearing lipstick. The card's message is probably that masculinity and homosexuality are not contradictory. But whatever the exact message is, it is clear that John Wayne was not its creator. Had the greeting card company had to pay for the use of the photograph it would have paid for a symbol that was in large part its own creation. Furthermore, Wayne might well have refused to sell his image for this use. In fact, during hearings on a bill to create publicity rights in New York State in 1989, Wayne's children cited this "abuse" of their father's image as a justification for the bill. Thus publicity rights amount to censorship.

While the distance between a star's intentions and the actual symbol that they become may be larger in this particular case than it is in most other cases, Madow argues that a large distance is nevertheless typical. Even the U.S. military does not treat Wayne as a positive hero, according to Madow, because when it warns soldiers against taking foolish risks, it admonishes them not to "John Wayne it". Nevertheless, do stars deserve to have publicity rights in those cases in which they are indeed the creators of the symbols that they become? If the stars had not created these symbols, consumers would have created them themselves, Madow argues, perhaps through the snowballing process discussed above.

As an example for this process Madow cites the emergence of Albert Einstein as the symbol of genius. According to Missner (1985, p. 268), Niels Bohr and Werner Heisenberg made equally great contributions to science. It was serendipity that favored Einstein. In 1921 he came to New York as a member of a Zionist delegation that was headed by Chaim Weizman, the head of the Zionist movement at the time. Thousands of New York Jews went to the port to greet the Zionist delegation, but the newspapers reported that the enthusiasm was not for Weizman and Zionism but for Einstein and his theory of relativity. This made Einstein a subject of newspaper interviews, and propelled his ascendance as the symbol of genius.

The moral justification for the existence of publicity rights notwithstanding, the question is whether stars can charge prices that are inefficiently high for these rights. Can a star who is not a symbol offer to serve as a symbol at a lower price, and enter the market? Even if a star could turn herself into a symbol at will, she could not do so overnight, since she would need the active participation of the public. Hence there are barriers to entry into the market for symbols, and the prices charged for the use of publicity rights are probably inefficiently high.

## 2. Superstars and other artists

### 2.1. Are there too many artists?

According to Frank and Cook (1995), the large incomes that superstars earn cause too many artists to attempt to be the winners. While seeking stardom these "surplus" artists forgo income from non-artistic jobs and some may even neglect the normal education

that would have permitted them to earn high incomes doing regular jobs. Hence false dreams of success may cause poverty. Frank and Cook call on the government to limit the remuneration of artists in order to make superstardom less attractive.

In his review of Frank and Cook's book, Rosen (1996) was skeptical about the empirical relevance of their argument, arguing that artists who seek success learn what their personal odds are quickly; when these odds are low they quit the field rapidly. Rosen also suggested that the effect of false dreams on the rate of poverty is negligible; in other words, the poor are not poor because they dream of being rich.

# 2.2. Superstardom and the psychic income of artists

It appears that artists derive psychic income from practicing art, because their monetary incomes from producing art are consistently lower than in equivalent alternative occupations [Jeffri (1991); Throsby (1992); Wassall and Alper (1992); Menger and Gurgand (1996)]. When artists do not practice art this psychic income is lost. In regular markets when a business fails, its loss is another business's gain. But when an artist cannot practice art because consumers flock to superstars, her loss of psychic income is not transferred either to the superstar or to her audiences. It is simply lost. This loss would only be efficient if there were other gains from superstardom that exceeded this loss. Whether there are depends in part on what gives rise to superstardom in the first place. If artists are displaced because they are less talented than the superstar, as in Rosen's model, then their displacement would be efficient. Why encourage anyone to produce an inferior product? But if the displaced artists are just as talented as the stars, and the only reason they are displaced is that consumers prefer popular artists, then the loss of benefits to the artists no longer practicing art must be weighed against the benefits to consumers from increasing the concentration in the art market.

There is no doubt that a certain degree of concentration in the arts is desirable. If every consumer patronized a different artist there would be no common culture. But is more concentration always better than less concentration? As we have noted, increased concentration results in an uncompensated loss of psychic income as unsuccessful artists stop practicing their art. But a government policy measure to increase the number of artists as a means of reducing concentration is likely to be costly. These costs need to be balanced, suggesting that there will be an optimal level of concentration, i.e. an optimal number of artists.

## 2.3. Government policy and the optimal number of artists

If concentration is regarded as excessive, it could be reduced by means of a tax. What sort of tax might this be? The loss of psychic income amongst artists when superstars

<sup>&</sup>lt;sup>7</sup> This assumes that artistic psychic income, while perhaps requiring a minimum audience in order to exist, does not increase with audience size.

emerge arises because of an externality; a consumer who flocks to a star instead of patronizing a lesser-known artist disregards the loss of psychic income that she inflicts on that artist. This externality can be internalized by a Pigouvian tax, but implementing the tax poses a unique problem. While a consumer should pay the tax if she flocks to a star who is already overly popular, she should not pay the tax if she were one of the star's first patrons. How could the "first" patrons be distinguished from the "rest"?

A way to implement a discriminatory tax is as follows. Let the total number of consumers be C and let the optimal number of artists be N. Assume that each consumer buys one CD, on which they would have to pay a tax. At the same time, however, the government would issue each person who claims to be an artist a book containing C/N tax-rebate certificates that bear her name. The artist would distribute these certificates free of charge to consumers who would then present their certificates to the government for payment. The number of artists who receive the rebate books may be large, far exceeding N, but the number who end up having patrons would nevertheless be the optimal number, because consumers will prefer the most popular artist who is not yet "full". Thus a successful artist would sell C/N CDs. The level of the tax will be set sufficiently high to discourage consumers from paying the tax and flocking.

It should be emphasized that under this system it is consumers, not the government, who determine who the successful artists are, and that no consumer actually pays the tax, because each gets a rebate. Nevertheless, the artists are still being subsidized, because consumers end up spending more on collecting information about "their" artists than they would under the unencumbered superstardom system. Of course, like with any other tax policy the cost of implementing this policy would have to be taken into account in any assessment of its desirability.

### 3. Empirical testing of superstardom theories

Is stardom the reward for superior talent or does stardom arise because of consumers' need for a common culture? This section reviews the studies and makes a suggestion for an additional test.

## 3.1. Testing superstardom in the arts

Whereas talent in general is not measurable, the harmonic quality of a singer's voice is. Hamlen (1991, 1994) measured the relationship between it and record sales and discovered that record sales do increase with the quality of the voice, but that the differences in talent far exceed the differences in sales. Hamlen interprets this result as being inconsistent with Rosen's "reward for talent" explanation, but Schulze (2003) argues that "it is by no means clear that the harmonic content of voice is the relevant measure for artistic quality for singers of non-classical music (rock, folk and so on)". There is no

doubt that the quality of the songs, not just the quality of the voice, must be measured as well, but this may not be possible.<sup>8</sup>

Chung and Cox (1994) take another approach to testing the two theories. They show that the distribution of success among artists follows a snowballing process (a Yule distribution). In that process the probability that a consumer would buy a particular CD increases with the number of previous sales of that CD. There always remains a small probability that a consumer will choose a new CD that no other consumer has yet bought. When this happens, other consumers may follow suit and an initial small advantage may snowball into success. Chung and Cox believe that this lends support to Adler's theory over Rosen's, but Schulze (2003) argues that the process is also consistent with consumers' choices that are based on talent.

Regardless of whether or not one agrees with Chung and Cox, their study shows clearly how important it is for artists to have an initial advantage. But how do artists acquire this advantage? Do they employ techniques that emphasize their talent, or do they choose entirely unrelated means? The proverbial "casting couch" comes to mind, but the singer Britney Spears showed that it is also possible to capture headlines by claiming to be chaste. Madonna captured headlines at the beginning of her career when her husband "protected" her by routinely beating up photographers. What is required is a systematic study of a sizeable sample of stars' (unauthorized) biographies in order to determine how important non-talent factors were in the early stages of their careers. Ideally these biographies would be compared to the biographies of artists who have not been successful. However, because there are few biographies of unsuccessful artists, the ideal may be impossible to achieve.

One example of how an initial advantage is generated is provided by Ginsburgh and van Ours (2003) in an article about the Queen Elizabeth Piano Competition. Pianists who achieve high success in the competition are rewarded by subsequent success. While this may appear to be as it should be, Ginsburgh and van Ours show that the order in which the pianists perform in the competition – which is assigned randomly – affects the results of the competition. Since success in the competition is random, why does it influence subsequent success in the market place? The answer may be that success in the competition serves not as an indicator of the artist with the most talent (consumers may even believe that all those who make it into the finals are equally talented) but as a focal point for consumers who wish to listen to artists that others listen to.

#### 3.2. Testing superstardom in sports

Theories of superstardom have also been tested empirically in sports. Talent differences are easier to measure in sport than in art, and Seaman (2003) has asked whether it is possible to learn from the relationship between talent and income in the two areas. He found

<sup>&</sup>lt;sup>8</sup> Hamlen also finds that success in the singles market leads to success in the regular album market, but this finding is consistent with both theories of stardom and is therefore not informative. A consumer may buy the full album either because she liked the single or because the success of the single is a signal that the artist is popular.

only two studies about talent and income in sports. Lucifora and Simmons (2003), in a study of Italian soccer, showed that the distribution of soccer players' incomes is more skewed than the distribution of talent, attributing this finding to audiences' preference for watching star players over watching equally talented but less well-known players. This may be a confirmation of Adler's theory that consumers prefer to watch players or artists with whom they and other spectators are already familiar. The preference for familiar athletes may also explain the finding of Blass (1992) that the income of baseball batters increases with experience rather than with productivity.

It is important, however, to note some differences between art and sports that diminish the value of sports economics for the understanding of art economics. Sports are competitive and in a competition every participant must accomplish the same task. For example, in a country where sumo wrestling does not exist an athlete who is a great sumo wrestler and only a mediocre football player will have to play football. In art, however, there are no such limitations and therefore an artist has more opportunities to display his or her idiosyncratic talent. This is why in art, unlike in sports, there are no measurable standards.

## 4. Conclusion

As the debate about the international enforcement of copyrights makes clear, globalization intensifies the phenomenon of superstardom. A global culture, with a global set of superstars, is replacing local cultures with local stars, and it is therefore important to know what this means for consumers, artists and art. Economists have started to examine these questions only very recently. As this chapter has shown, there are those who believe that the global superstars will simply be the best artists on the planet. From their vantage point, there is no reason for concern. However, this chapter has also shown that a single global culture could possibly destroy local cultures not because it is better but simply because it is global. If the emergence of a global culture cannot be stopped, and if this culture does not have to be superior to be triumphant, the question becomes how to democratize the process that builds this culture. "The Economics of Superstars" is thus rife with open questions.

### Uncited references

[Benhamou (2002)]

### References

Adler, M. (1985). "Stardom and talent". American Economic Review 75, 208–212. Benhamou, F. (2002). L'économie du star-system. Odile Jacob, Paris.

Bonus, H., Ronte, D. (1997). "Credibility and economic value in the visual arts". Journal of Cultural Eco-nomics 21, 103-118. Blass, A.A. (1992). "Does the baseball labor market contradict the human capital model of investment?" Review of Economics and Statistics 7, 261–268.

Borghans, L., Groot, L. (1998). "Superstardom and monopolistic power: Why media stars earn more than their marginal contribution to welfare". Journal of Institutional and Theoretical Economics 54, 546-571.

Chung, K., Cox, R. (1994). "A stochastic model of superstardom: An application of the Yule distribution". Review of Economics and Statistics 76, 771–775.

Frank, R.H., Cook, P.J. (1995). The Winner-Take-All Society. The Free Press, New York.

Ginsburgh, V., van Ours, J. (2003). "Expert opinion and compensation: Evidence from a musical competition". American Economic Review 93, 289–296.

Hamlen, W. (1991). "Superstardom in popular music: Empirical evidence". Review of Economics and Statistics 73, 729–733.

Hamlen, W. (1994). "Variety and superstardom in popular music". Economic Inquiry 32, 395–406. 

Jeffri, J. (1991). The Artists Training and Career Project: Painters. Columbia University, Research Center for Arts and Culture, New York. 

Leibenstein, H. (1950). "Bandwagon, snob, and Veblen effects in the theory of consumers' demand". Quarterly Journal of Economics LXIV, 183-207.

Lucifora, C., Simmons, R. (2003). "Superstar effects in sport: Evidence from Italian soccer". Journal of Sports Economics 4, 35-55. 

MacDonald, G. (1988). "The economics of rising stars". American Economic Review 78, 155-166. 

Madow, M. (1993). "Private ownership of public image: Popular culture and publicity rights". California Law Review 81 (1), 125–152. 

Menger, P.-M., Gurgand, M. (1996). "Work and compensated unemployment in the performing arts: Exogenous and endogenous uncertainty in artistic labor markets". In: Ginsburgh, V.A., Menger, P.-M. (Eds.), Economics of the Arts: Selected Essays. North-Holland, Amsterdam, pp. 347–381.

Missner, M. (1985). "Why Einstein became famous in America". Social Studies of Science 15 (2), 267–291. 

Rosen, S. (1981). "The economics of superstars". American Economic Review 71, 845–858. 

Rosen, S. (1996). "Book review: The winner-take-all society". Journal of Economic Literature 34, 133–136. 

Schulze, G.G. (2003). "Superstars". In: Towse, R. (Ed.), Handbook of Cultural Economics. Edward Elgar, Cheltenham, pp. 431–436.

Stigler, G., Becker, G. (1977). "De gustibus non est disputandum". American Economic Review 67, 76–90. 

Throsby, D. (1992). "Artists as workers". In: Towse, R., Khakee, A. (Eds.), Cultural Economics. Springer-Verlag, Heidelberg, pp. 201–208.

Seaman, B.A. (2003). "Cultural and sport economics: Conceptual twins?" Journal of Cultural Economics 27, 81-126.

Wassall, G.H., Alper, N.O. (1992). "Towards a unified theory of the determinants of the earnings of artists". In: Towse, R., Khakee, A. (Eds.), Cultural Economics. Springer-Verlag, Heidelberg, pp. 187–200.

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