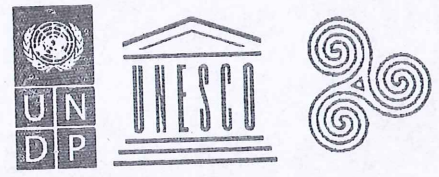


Regional Project for Cultural, Urban and  
Environmental Heritage in Latin America  
and the Caribbean (RLA)



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# The economics of museums and their financing: a preliminary analysis

WORKING PAPER

Regional Project on Cultural Heritage and Development  
UNDP UNESCO



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THE ECONOMICS OF MUSEUMS AND THEIR FINANCING:  
A PRELIMINARY ANALYSIS

Ahmet Aykac

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## PRESENTATION

At a time when museums are becoming more and more important in the process of conserving our past, as well as our present creation in science, art, culture, technology, etc., these institutions, whether public or private, face problems inherent of the present financial crisis. The management of a museum goes beyond the general concept of basic management by art historians, anthropologists, and museologists and calls for a working knowledge of financing and economics.

Whenever the upgrading of a museum is required (e.g. in the fields of architecture, conservation, educational facilities, etc.), or the setting up of a new museum, the cost of funding comes to light; when approaching funding institutions, one is faced with the question, why finance museums? What are the economic, social, and educational benefits involved? In other words, what is the benefit in terms of economics for having a museum in the first place?

In order to draw up a preliminary analysis on this subject, the UNESCO/UNDP Regional Project on Cultural Heritage and Development, with funds provided by UNESCO, commended this study to Mr. Ahmet Aykac, economist from INSEAD (European Institute of Business Administration in France). Mr. Aykac visited museums in Peru, Ecuador, Colombia and Mexico, where he compiled valuable information on the economic aspects and possibilities of financing museum activities.

His findings, included in this document, will be used as the basic working paper for a possible workshop to be organized in 1986 on the economics of museums, aimed at museum specialists, foundations and financing institutions such as banks, both national and international, and finance corporations.

Sylvio Mutal  
Chief Technical Adviser  
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and Development

## EXECUTIVE SUMMARY

1. The preoccupation with justifying museum projects on the basis of their contribution to development as seen in terms of macro economic activity is misplaced and may be misleading. What is required is a better understanding of the **microeconomic** behavior of museums.
2. The analysis of museums from a microeconomic perspective reveals that the nature of their cost structure and the "market" within which they operate makes it optimal for them to rely on donations for survival. These may be from the private or public sector.
3. This reliance on donations makes the optimal form of organization the "not-for-profit" structure. This form of organization is not, as it commonly seems to be believed, to ensure low prices or public service but is the result of the market conditions facing a museum.
4. A more detailed analysis of the museum in terms of the activities it carries out reveals that some of those activities may better be analysed as pure market transactions whereas others are subject to market failure and as such require intervention.
5. There are advantages to dealing with museums and museum projects in terms of these activities, in effect as a portfolio, rather than the totality of the organization.

6. Using the tools of investment analysis in a straightforward manner in evaluating museum projects would be misleading. Such projects will in general have positive social returns and negative financial returns. Neither piece of information should stand on its own in reaching a decision and neither should be ignored. There are adjacent fields that have devised methods of trying to deal with such situations which may profitably be utilised in museum management.

7. The two critical aspects of understanding the economics of museums is to develop a systems approach to museum activities and to estimate the cost relationship linking the different activities.

## I. INTRODUCTION

The aim of this study is relatively restrained. It is not intended to be a final document on the economics of museums - quite the contrary. Its principle aim is to point out directions of future work if one is to construct a viable and empirically implementable economic model of a museum. This model being of use in evaluating museum projects as well as the management of the museum in general. Thus it is more exploratory in nature.

The exploration turned out to have two distinct aspects. The first involved the role of museums in the process of development. An overwhelming majority of the interviews I had in connection with this study stressed the importance and contribution of museums to development. This also turned out to be consistent with much of the literature I was able to browse through on museums. It colored the way museum officials thought about their charge and led them to think about justifying museum projects pretty much like any other development project. The end result was a preoccupation with economic rates of return and their proper calculation. Although commendable these efforts at a macro level seemed to overlook some serious problems. From a scientific point of view, the arguments on the role of museums in development led to no empirically verifiable results or hypotheses and as such could not be settled. One either believed in such a contribution or one did not. That the majority of those involved

believe in the role proposed, is not necessarily relevant for its accuracy - majorities are known to have made serious errors on many issues. Just think of the majority views on development itself a mere fifteen years ago! On the other hand, this preoccupation with development seems to have carried with it the corollary that only those projects contributing to development deserve financing. This may be a valid opinion but is far from being a self evident truth. Finally, the rate of return did not seem to be questioned as the appropriate indicator of the economic desirability of a project.

The second aspect of the exploration involved probing into why several of the problems mentioned above persisted. Here the source seems to be the insistence on the macro place of museums in development. Very little effort seems to have been spent on clarifying the economics of the organization called a museum from a micro point of view. The paucity of views on the economic behavior of the museum as an entity, its organization, and its environment was striking when compared to the emphasis on developmental aspects. Yet, analysing the micro behavior of museums does reveal very interesting leads into the financing and management of museums as I will try to show further on in the report.

Thus the report is intended to be exploratory in nature. It is based on interviews carried out with museum officials, museologists, and development bankers as well as government officials in Peru, Ecuador, Colombia, and Mexico. There are a variety of museum types and organizations represented in these countries as well as different

levels of income. The choice obviously is not intended to be random and neither is there a reason for it to be so except in so far as it would explain the insistence on developmental issues. Then again, the same insistence can be observed on the part of museologists in Paris also. The discussions I had with non-economists, I have had to translate into an economists framework in order to deduce the implications. (As such, some of the persons interviewed may not readily recognize their statements.) Although the point of departure is a limited number of countries, I would argue that the conclusions drawn from the study are easily generalizable to museums anywhere. Especially since the aim of the study was to indicate directions of development for better understanding the economics of museums.

The report is organized as follows: the second chapter presents a brief review of the elements of economics essential for analysing museums. It defines some of the economic principles and vocabulary that is utilized in later chapters in the analysis. The third chapter presents a detailed analysis of museums from an economic point of view. The basic argument here is that looking at museums from a macro point of view is not correct and a micro analysis of museum activities is provided. The final chapter presents the conclusions and directions for further study. Most of the analysis, although presented verbally, can be done in the standard mathematics routinely used by economists. I have presented the arguments without the formal proofs in order to avoid uselessly complicating the document.

Commenting on an alien field is a tricky business with its advantages and disadvantages. Imbibed with the innocence of ignorance, one may make statements which lead the more knowledgeable to look at their area of interest from a slightly different perspective; statements about the Emperors' clothes being the extreme version of this fortunate state of affairs. The same ignorance may, however, also lead to utter nonsensical statements - which unfortunately is the more common outcome. Therefore, being reasonably risk averse, when invited to produce a document on the economics of museums and the financing of museum projects, I chose to stick closer to the "economics" despite the urging of my ego to make statements about museums in general. Having learned a great deal about museums, I hope that in return this report may initiate work to better understand their economics.

## II. WHAT IS ECONOMICS GOOD AT ?

For roughly some two hundred years now concepts of markets, prices, efficiency concerns, and resource allocation problems have acquired such prominence that scarcely an issue arises where they are not evoked. Economic reasoning has been woven into the social fabric to such a degree that virtually no decision is reached without some reference to the teachings of the queen of the social sciences. It is taken to be a self evident fact that any claim on resources needs to be justified by economic arguments; either through belief or due to the fact that financing agencies require it.

This state of affairs is, by-and-large, how it should be except that, the economic reasoning woven into the social fabric not being of uniform quality, the economic arguments utilized are often misleading and sometimes outright wrong. The power of economics resides in its ability to reduce fairly complicated phenomena into manageable proportions from which generalizable propositions may be deduced. Obviously, if the nature of these reductions is not properly understood, the likelihood of erroneous applications is very high. In this section, we shall review those parts of economic reasoning useful in reducing that likelihood for museum applications.



## A) The Nature of Prices, Markets, Production, and Exchange

The crown jewel of economic reasoning on which all policy decisions having to do with resource allocation are based is welfare theory: that branch of economics dealing with social wellbeing. Welfare theory, although highly abstract at first glance, attempts to answer a very pragmatic question: is society getting as much as is possible from a given deployment of its limited resources? Although more shall be said on welfare theory below, the basic idea is that by depicting the conditions under which society would be obtaining the most from its given resources, the theory provides a framework within which proposed allocations may be evaluated. It actually does more than that by permitting an aggregation from the level of individual wellbeing to the social level so that statements may be made about Society although the point of departure is the Individual.

Although welfare theory is, explicitly or implicitly, at the base of all policy decisions involving resource allocations, an indiscriminating application of some of the more obvious results of welfare theory may not be at all desirable. In order to see this explicitly, one must look briefly at the building blocks of welfare theory, i.e. the nature of prices and markets.

## Prices and the individual as consumer:

The starting point for the analysis of prices is the individual. It is assumed that an individual will make decisions that she thinks are best for her and which will satisfy her wants at the least possible cost. This cost is what she has to give up in order to get what she wants - this is what we call a price. It is important to realize that this "cost" which we call a price is not the money price that we commonly think of. The "price" of a car is the goods that could not be bought because of the purchase of the car. When we quote that price as being, say, \$10000, that is a short-hand way of referring to all the goods that could have been bought for that amount of money.

Now, the greater the value of any commodity to an individual, the more she will be willing to give up in order to obtain it; i.e. the higher a price she will be willing to pay. Note that no assumption is made as to why any given individual will attach a high (or low) value to something - that is a purely subjective element. What is ascertained is that the willingness to pay a higher price is indicative of a higher value to the individual. Note that although an individual will not willingly pay more for a commodity than she feels it is worth to her, she would be very happy if she could get it by paying less. The difference between what she would have been willing to pay and what she actually pays generates surplus value for her; for example, if I were willing to give up five cinemas for the pleasure of listening to Maurice Andre live but I only had to give up three, I would have

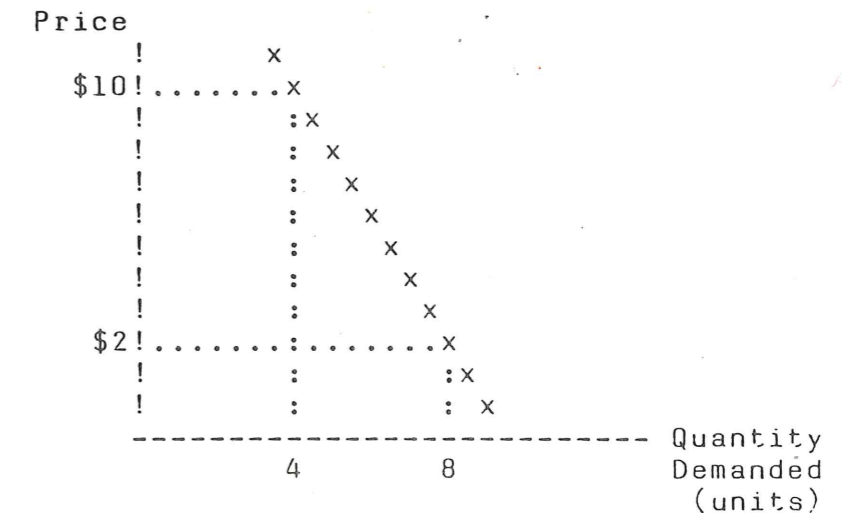
surplus value because I could listen to Andre and also see two of the movies I was willing to miss.

Thus, from the individuals point of view, she has a set of subjective values that she attaches to commodities, a flow of income, and she is faced with a set of prices determined on the markets (through a process to be described below). The decision problem is to determine how much of her limited funds she will be allocating to the different commodities. Without entering into the details, let us note that economic analysis assumes that people will behave so as to get the greatest (subjective) value out of their limited income - this is, in the jargon of economics, known as Utility Maximization.

Basically, the person asks herself how much she will have to "pay" for an additional unit of any commodity vis-a-vis how much subjective value (utility) she will get from it. As long as the price is less than the utility, she will be willing to buy an additional unit. She will stop at the point where the price of an additional unit is just equal to its utility. Note that as people have more of a good, in general they will value an additional unit less and so be willing to pay less for it. This is why the "Demand Curve" for most commodities is drawn with a downward slope.

GRAPH I

A TYPICAL DEMAND CURVE



Prices and production:

Here again, the starting point for the analysis is the individual firm. It is again assumed that the firm, or those running it, will make decisions that they believe are in the best interest of the firm. The interest of the firm is taken to be the profits it can generate. This is not as restrictive as may appear at first glance; however, it is not the aim of this study to expand on such issues. The firm is an entity that purchases inputs such as capital, labor, raw materials and other intermediate goods, energy etc. and transforms them into an output

which, presumably, someone wants to buy. In the process of producing the output, the firm incurs costs and in the process of selling the output the firm gets revenues. Note that what the firm produces is not really that important at this level of generality; it could be a car, a house, a machine, a lunch, a vacation, an exhibition or almost anything. What is of importance is that there is the transformation of a set of inputs into a set of outputs. We shall, however, have more to say on this below.

Thus, the firm is faced with the technological conditions of transformation of inputs to outputs, the prices of the inputs, and certain demand conditions on the market. The decision problem is to decide upon what quantities of each input to use and how much to produce. Basically, the decision maker asks herself how much revenue it could generate by selling another unit vis-a-vis how much it would cost to produce that additional unit (this "last" unit in economic jargon is called the "marginal" unit). As long as the marginal revenue (i.e. the revenue of the last unit) exceeds the marginal cost (the cost of the last unit), production will be expanded. This will stop where the marginal cost is just equal to the marginal revenue. In a similar way, the decision maker will ask herself how much an additional unit of an input will contribute to the firm's output and compare that with the cost of that additional unit. More of an input will be hired up to the point where the value of its contribution to output is just equal to its cost to the firm.

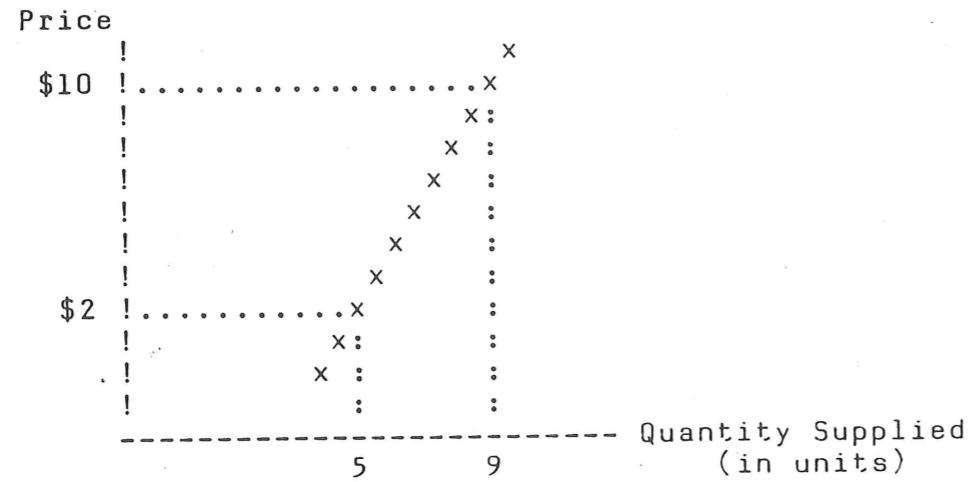
It is important to keep in mind that the "cost" to the firm includes a "fair" profit on the capital invested in that particular activity. This is a cost in the sense that by investing in a given activity one is refraining from putting that amount in some other activity. Therefore, the return in the chosen area should be at least as much as in the activity foregone. This is known as the "opportunity cost" and will be touched upon again below.

Now, as it will, in general, cost more to produce successive units of output, the firm will be willing to supply more goods to the market only if it can get a higher price for them. This is why the "Supply Curve" for most commodities is drawn with an upward slope. This is what is shown in the hypothetical supply curve of Graph II.

#### The behavior of markets:

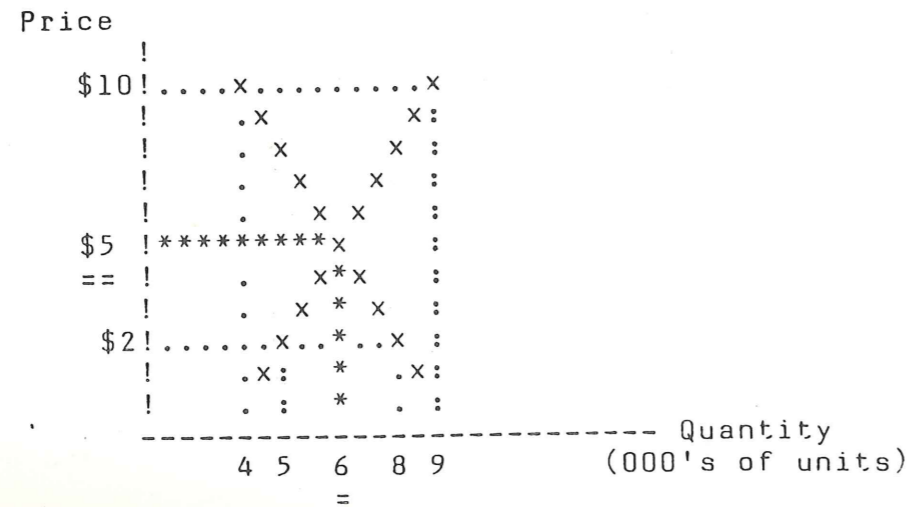
Markets consist of a great number of consumers each with their own tastes and incomes. In light of these, and in the manner described above, they will make up their minds about how much of any good they are willing to buy at different prices. These, when added up, give us the market demand for any given good. In a similar way, one can arrive at the market supply curve. It is by looking at the interaction of the market demand and supply curves that we will see how markets operate and what the welfare implications are. If we redraw the typical demand and supply relations above together, the interaction will be clear.

GRAPH II  
A TYPICAL SUPPLY CURVE



GRAPH III

A TYPICAL MARKET



Graph III reproduces Graph's I and II, which were drawn for one consumer and one firm respectively, for a thousand of each (assuming for simplicity that they are all identical). At a price of \$10, the quantity demanded is known to be 4000 units whereas the quantity supplied is 9000 units. There is more of the good being produced than people are willing to buy at that price. The firms, seeing that they cannot sell everything they produce, will reduce their prices in order to gain more customers. At lower prices, as we had seen, the firm will be willing to sell lower quantities. On the other hand, as prices fall the quantity demanded will rise. This process will go on as long as the quantity supplied exceeds the quantity demanded and will stop when supply and demand are equal - at a price of \$5 and quantity of 6000 units. If the price is too low, say at \$2, the quantity demanded ( 8000 units ) exceeds the amount supplied at that price ( 5000 units). The excess demand will lead the firms to increase their prices which will increase production and choke off some of the demand. This process will go on as long as demand exceeds supply. It will come to an end when supply and demand are equal.

The basic principle is that when there is an imbalance between supply and demand, either the competition between firms for the limited customers or the competition between consumers for the limited goods will cause movements in prices. The movements in prices will, in turn, provoke a change in the quantity decisions of the consumers and producers until the imbalances are removed from the system.

## B) Some Results From Welfare Theory and The Role of Prices

The dynamics of the market and the underlying behavior of the individual units explained above will ensure that markets will tend to equilibrium. The more important step for our purposes is to link this to welfare results. First a look at the consumer.

The willingness to pay on the part of the consumer is indicative of the value that is attached to the specific good. For any price ( except zero ) there will always be some consumers who find that it is too high for what they feel the good is worth to them. There will also be those who would have been willing to pay more and are therefore enjoying a surplus. There will also be those for which the price is just at their cutoff point - even a slightly higher price would have dissuaded them from purchasing the good. This last group is referred to as the "marginal" consumer. Thus, it can be inferred that the price at which the market reaches equilibrium corresponds to the valuation of the marginal consumer; all other consumers are extracting a surplus because they would have been willing to pay more but they are only paying the market price and those consumers who do not value it so highly are not purchasing. Therefore, the equilibrium price formed in a competitive market corresponds to the minimum valuation of that good by society. There are, as we had seen, those who value the good higher and who are extracting a surplus. The sum of those consumer surpluses is the contribution toward the welfare of society.

Then, why not let the price be zero ( i.e. a free good) so that everyone is extracting a surplus and therefore the sum of the surpluses (i.e. welfare) will be maximal for society? The reason is that there are very few goods that can be made available on a market at zero cost. Since society's resources are limited, the production of one good implies that, in general, there are less resources available for other goods that society may also want. That is what we understand by costs - opportunities foregone. Therefore in the allocation of its resources, society should take these costs into account. It is exactly these costs that the firm has to deal with. As a firm expands its production, it uses more resources and therefore their opportunity cost increases. Only if society values the goods highly can the firm afford to profitably attract additional resources.

Keeping in mind the behavior of the firm described above, it will be seen that the equilibrium price that gets formed on the market will just cover the cost of the last unit produced. Further units would entail a cost higher than that which the consumers would be willing to pay and therefore would be a loss for the firm. Previous units, on the other hand, cost less than the market price and therefore generate a surplus - called the producers surplus. This surplus also constitutes a contribution to the welfare of society. As a matter of fact, the sum of the consumer and producer surpluses constitutes the contribution of the production and exchange of any commodity to social welfare.

Note the special role played by prices in this process. First of all,

it is the indicator of how much individuals value any given commodity. As a result, movements in prices signal changes in valuations and therefore set off the process by which society's productive mechanism meets its members' needs. This causes a reallocation of its limited resources to meet the needs so expressed. On the other hand, it signals to individuals the opportunity cost of meeting their needs. If that cost becomes too high, prices begin to rise and people become more reticent to demand the goods involved. Thus the crucial role played by prices is to convey information between the consumers and producers as to the relative valuation of different goods and their relative costs.

The process of market adjustments described previously will ensure that the equilibrium price will be such that the evaluation by the marginal consumer will just equal the cost of meeting his demand. All other units will be generating a surplus. Therefore, society will be getting the most utility from its limited resources - welfare will be maximized. Also, by having a very special commodity called MONEY which gives generalized purchasing power, we can get rid of the problem of having to state the "price" of a good in terms of all the goods foregone and simply state it in terms of that one commodity i.e. Dollars, Francs, Lires, Sucres, Pesos as the case may be.

The general conditions for a welfare maximum are that the competitive price be such that it is equal to the marginal cost of production. This will give the optimal rate of production of each good. The com-

ination of resources used in the production of this quantity of output should be such that the value of the contribution of each input should just cover its cost. These conditions, when they are met, lead to what is called a Pareto Optimal allocation: one where, not only is society making the most efficient use of its limited resources but where it is impossible to make someone better off without making someone else worse off. Thus under these conditions there is no reallocation of resources that would benefit society from an efficiency point of view.

There are several aspects of these conditions that are worth pondering. First, is the idea of "competitive" markets. Although there are various implications of this condition, for our purposes the important one is that all market agents act as price takers. This means that there is no producer or consumer big or influential enough to set and maintain prices. This must be true in the input as well as the output markets. We will shortly see what happens if this not the case; however, it is obvious that there will be some distortions.

Second, it is important to realize that Pareto Optimality (or welfare maximum), in and of itself, says nothing about equity or social justice. Unless one is already predisposed to think so, there is no reason for that allocation which is the most efficient to necessarily be the most equitable, or the most desirable for that matter. What is important to realize and incorporate into policy making, however, is that objectives of equity or justice are not free goods and will entail an estimable cost in the form of efficiency losses.

### C) What If The Market "Fails"

The above summary was intended to stress the important role that prices and markets played in economic analysis. It was also intended to underline the crucial information content required of prices if they are to play this pivotal role. Specifically, they should be able to reflect the valuations of goods by individuals in society and the opportunity cost of the resources used in the production of those goods. Should, for one reason or another, prices cease to contain that information, or cease to convey it unambiguously, the efficiency of the resulting resource allocation would be suspect since we could no longer be sure that economic agents were getting the "correct" signal. This is what is referred to as "market failure". When markets "fail", there is need for a non-market agent, usually the government, to intervene in order to "correct" for the failure and its effects. The nature of the intervention should thus depend upon the nature of the failure which provoked it.

One type of failure occurs when market agents have market power, that is, they are able to influence prices. The most extreme case of this is the case of a monopoly where there is only one producer on the market. Not being subject to competition, the monopolist can reduce output, therefore increase prices, and increase her profits. Although a monopolist would not waste resources, in the sense of using more than is necessary, there will be a reduction of social welfare relative to the competitive case. This occurs because the monopolist restricts

output and increases price so that not enough of the monopolized good is being produced ( by extension, there is too much of other goods being produced) to be consistent with welfare maximum. The higher price reduces the consumers surplus. Some of this reduction is just a transfer from the consumer to the producer in that there will be greater producers surplus. Welfare theory has nothing to say on this because it is a pure transfer and it is not upto the economist to decide whose surplus is more valuable. However, there will be a pure welfare loss because certain consumers who would have been in the market under perfect competition are driven out due to the higher prices charged by the monopolist. Their surplus, not even being transferred to the monopolist, is therefore totally lost for society. This type of failure usually calls forth some form of regulation of the monopolized industry by an extra-market entity. That the regulating body usually ends up being some governmental agency is not inherent to the economic problem but is due to the political system.

Markets will also fail if there are "externalities". This refers to situations where there are costs or benefits generated by the market process which are not accounted for in the prices that get formed. The standard example of an external diseconomy ( or cost) is that of pollution in its various forms. This cost accompanies most economic activities but until recently, and still in many countries, it was not accounted for in the prices that got formed. Thus, the true cost of production of pollution generating goods was understated. This being the case there was too much of those goods produced relative to what the situa-

tion would have been had all costs been accounted for. The opposite is true of external economies ( or benefits ). A standard example is individual vaccinations. When someone purchases a vaccine, she protects herself from getting infected and therefore pays a price for the benefit. However, not being infected has the external benefit of not carrying germs which can infect someone else. The market prices do not normally take this social benefit into account. Thus, if the market were left to its devices, too little of the vaccine would be produced.

There is an extreme form of external economies that is of particular interest. In principle it would arise when, once the good is produced, you cannot prevent people from benefitting from it and therefore you are not able to charge a price for its use. It would also occur if, once the good is produced, the marginal cost of servicing an additional customer were zero. In this case, since the marginal cost is zero, the price should also be zero. An example for both cases would be national defence. Once you decide to have such defence forces, they will provide defence against foreign aggression for all individuals living on national territory. You physically cannot deprive a certain Ms. Anonymous living at 10 Central Street from protection because she has not paid her bill. She will take advantage of that protection if it is available to anyone. Similarly, once the national defence forces are there, the cost does not increase everytime a baby gets born despite the fact that each baby is an additional "consumer" of "national defence services". The marginal cost of servicing these additional customers being nill, they should not be charged any price.

Goods subject to this extreme form of external economies are referred to as Public Goods. The crucial aspect of public goods is that, since one cannot charge a non-zero price for their use, they will not be produced at all by private firms in a market left to its own devices. This is just the extreme form of the under (or over) production results of the general "externalities" case. The types of interventions possible in cases of externalities are quite varied, ranging from tax-and-transfer mechanisms to the creation of tradeable rights, and constitute some of the most interesting applications of economic analysis.

But, in a fundamental way and as I tried to outline above, economics is about efficiency. That is where it is at its best. It is the most powerful tool for determining the least cost way of achieving a predetermined objective. Yet, it has no demonstrated superiority in determining what the objectives should be. Oddly enough however, although most people would not disagree with this claim, they seem to overlook the fact that an unquestioning application of market results implicitly takes efficiency as being the arbiter between several, conflicting objectives. This should constantly be kept in mind when analysing the economic nature of museums.



### III. THE "ECONOMIC" NATURE OF MUSEUMS

Using the tools of economics summarized above to analyse museums requires stating explicitly the objectives that museums are pursuing, understanding the nature and process by which "museum services" are produced and consumed, and finally looking at the nature of the "market" within which transactions take place. To the extent that this "market" is "perfect" a certain set of implications will follow concerning the economic organization of museums. To the extent that there are imperfections in this market, and depending on the nature of the imperfections, there will be a different set of implications. It is this analysis to which we turn now.

A) What is the nature of the activity to be financed ?

The starting point of the analysis is the definition of a museum as adopted by ICOM in its 11th General Assembly (Copenhagen, 1974) and which constitutes the 3rd article of its statutes:

A museum is a non-profitmaking, permanent institution in the service of society and of its development, and open to the public, which acquires, conserves, researches, communicates, and exhibits, for purposes of study, education and enjoyment, material evidence of man and his environment.

There are several aspects of this definition which immediately stand

out and which seem to be common to other definitions of museums also (c.f. Professional Practices, Association of Art Museum Directors, N.Y., 1972):

1. Non-profitmaking. Although the intent of this designation is usually quite clear, i.e. the institution will not aim at a pricing policy that generates, purposefully, a surplus of revenues over costs intended for distribution to the owners of the resources employed, its implications (and applications) are not. Generally, non-profitmaking is simply taken to mean that accounting revenues should equal accounting costs. One adds up the, more or less carefully, projected costs and submits that to the decision-maker for approval. If it is approved, the implication is that an allocation of funds equal to the costs have been made so that there is no profit. If is not approved, the implication is that there is a deficit so that some costs are to be cut or a more determined fund raising effort is to be undertaken.

Also note in passing that "non-profitmaking" is an unfortunate designation. There are, as their hapless owners would attest, a great number of "for-profit" institutions that are "non-profitmaking"! The intent would have been better captured by "not-for-profit institution".

Behind this, albeit schematized, mode of behavior is the belief that somehow a not-for-profit organization is fundamentally different. That, since it is not driven by the profit motive, the purity of its intentions in pursuing the goal of social benefits is beyond question and,

by extension, that therefore it cannot, and should not, be managed like a profit seeking organization. I shall argue in the following chapter that there are very sound reasons as to why museums are best organized as not-for-profit institutions.

There seem to be confusion at several different levels in such reasoning. The first level consists of a misunderstanding of the economic role of profits in society. The existence of profits in any given area of activity indicates a paucity of resources flowing to that area thus keeping supply low relative to potential demand. As a result prices will be kept high and profits will accrue to those firms engaging in that activity. Should more resources be allocated to that activity, output would go up driving prices down. This process would continue as long as profits existed and would stop when profits were driven to zero by competition. Lower prices and higher output means an increase in social welfare. The opposite process would occur if there were losses being made in an area.

It is important to note that, as pointed out in Chapter II, "costs", in an economic sense already include a fair rate of profit so that when we say that profits will attract new competitors, we are referring to excess profits above and beyond the fair rate. It is this excess profit that will be driven to zero by competition. Thus profits, to the extent that resources are mobile, play a critical role in contributing to social well-being. If there are blockages to the flow of resources, then obviously profits cannot play the role just described;

but then, is that an argument against the profit motive or the blockages.

A second level of confusion involves "costs" in a socially relevant sense and monetary accounting figures. By-and-large, monetary accounting figures are irrelevant for most social decisions. Those figures are the result of various conventions aimed at reporting historical costs (or benefits) measured by monetary market prices. Accounting figures do not deal in opportunity costs, which are the relevant costs for decision making. And, as we had seen in the previous chapter, it is under fairly specific conditions that the money prices correspond to the opportunity costs. Although it is true that prices may be kept lower if accounting profits are constrained to be zero, from a social point of view it is not at all obvious that the net effect will be positive.

A third level of confusion seems to exist as to the interlinkages that exist between the different museum activities. What part of the museums' activities are not-for-profit? If there are a series of interlinkages, what are the so-called transfer prices between these activities? Can surpluses be generated in some activities so as to cover deficits in others thus keeping the overall budget in balance?

2. Service of society and its development. Again, although the intent of this is fairly clear its implications for economic analysis are not. For any sort of analysis, one would need a yardstick to eval-

uate the extent to which an activity attains its stated aims. Unfortunately, there is no agreed upon measure of "service to society and its development" except peoples prior beliefs. If one is predisposed to believe that museums (or the army) contribute positively to these aims, one will see that in the results. If one is inclined to believe that such activities are a waste of resources, that is what one will see.

As I had tried to argue in the previous chapter, economics has its peculiar definitions of what constitutes "service to society and development". As we had seen, they are intimately linked with the ideas of welfare and therefore efficiency. It is not at all obvious that these are the correct or overriding criteria in the context of museums. Economic analysis refuses to make "welfare" comparisons between individuals or groups, and rightly so; society routinely makes such choices through its political processes in the name of "service to society". Similarly, "development" is a concept encompassing sociological, historical, cultural, and political dimensions as well as the more obvious one of income generation. There are, thus, several ways an activity can positively contribute to development - the criteria of which is not income generation or efficiency in a readily recognizable sense.

The extent to which various social activities have been brow-beaten by what I shall call "economism", rather than clear analytic thinking, has probably gone beyond the point of usefulness.

3. Activities. Museums are defined to be carrying out several types of activities: acquisition, conservation, research, communication, and exhibition for the purpose of study, education, and enjoyment. (It is presumably taken to be self evident that "study, education, and enjoyment" are "in the service of society and its development" so that by contributing to these, museums are also contributing to society and its development!)

Thus, there are multiple activities with multiple outputs in this institution called a museum. Yet it seems that these activities do not all carry the same weight. If anything, the existence of a permanent collection with exhibitions open to the public seems to be the defining characteristic of a museum. In my analysis below, I will consider the totality of these activities and point out the effects of dealing with just subsets. The importance of looking at the separate activities will become clearer as we go along.

B) The economic nature of the museums' activities:

The "commodity" in which museums are dealing is "material evidence of man and his environment". They acquire, conserve, research, communicate, and exhibit this commodity. In doing so they produce "outputs" which are used for "study, education, and enjoyment" thus contributing to society and its development. In bare outline this is what museums do according to the definition given by the competent authorities.

From an economic analysis and financing point of view, the process by which the material evidence of man and his environment gets transformed into the final result of study, education, or enjoyment is crucial. It is in analysing this transformation process and the markets within which its various transactions take place that one will see if, and where, these markets fail and thus think analytically of how to correct for such failures.

1. Acquisition: There are a large number of things that constitute material evidence of man and his environment. As such, there are a large number of potential markets from which these things can be procured. Despite the fact that there would be differences between various types of museums, in general these markets have the characteristics of being (a) very thin and (b) very supply inelastic. These twin characteristics mean that there are not a large number of transactions taking place on those markets and that price changes will not bring forth any large change in quantities of goods supplied. Indeed, in most cases, the supply of goods is fixed so that there will be no increase in supply in response to price increases. This may be due to the fact that there is an absolute limit on the goods available ( an overwhelming majority of artists are no longer with us to increase the supply of their art, from pre-Colombian to modern ) and/or the fact that, being the repository of the "national heritage" (or possessing a permanent collection) the objects held simply are not put on the

market. This does not mean that these objects cannot be sold, it means that there would have to be very significant price movements before they are sold (despite legal restrictions).

From an economic point of view, markets that have these characteristics will not lead to welfare maximizing resource allocations. The power of the price mechanism to signal society's evaluation of a good becomes subject to doubt when the market is very thin. Similarly, that supply cannot be increased as the price increases, is indicative of the inability to reallocate resources so as to meet the desires of society; and, unfortunately, in economics two wrongs do not make a right.

If exhibitions and other uses of the acquired items were priced competitively, in the sense of Chapter II above, then the maximum amount that would be paid for such items is well defined; it would correspond to the present value of the excess profits due to the item in question. The minimum amount would have to be sufficient to compensate the previous owner for what she feels she is giving up. Within these limits, the price would just lead to a transfer between the buyer and the seller without any analytical preference for either.

However, if pricing at the consumers' end is not what we have called competitive then any price for the item being acquired is as arbitrary as any other. The fact that there may be well defined auctions or other means for structuring the sales of such items does not get rid of the arbitrariness in the pricing analytically. Sending an agent to such

an auction with nine million dollars is just as logical as eight or ten million and statements such as "she paid too much" can just as easily represent envy of a larger budget as fact.

Thus, there are several problems with the activity of acquisition from an economic analysis point of view even when considering outright purchasing. The issue gets somewhat more complex when dealing with finds from digs; we shall touch upon these further below. Once an item is acquired, however, it has to be cared for - that is what I shall turn to now.

2. Conservation: For most commodities, the maximum amount that would be paid for conservation is fairly well defined: it corresponds to the annuity equivalent of the replacement cost over the expected increase in lifetime due to the conservation. If conservation were to cost more than that, it would be cheaper to replace the item. This is where, with very few exceptions, museum items differ for the replacement cost is infinite. If an item is lost due to irretrievable decay, it cannot be replaced at any cost. What is lost, is lost for good.

There follows several conclusions from this simple premise. First, unless an infinite discount rate is imposed, conservation activities will always turn out to be "profitable" by standard investment evaluation techniques since the opportunity cost is infinite. Second, despite its profitability, a market for such activities cannot be

expected to come into existence by the free operation of market forces due to the risk of infinite costs. Thus there is need for a non-market force to intervene.

The nature of the intervention is not to decide whether to spend money on the conservation activity, for that is always profitable, but to decide where to stop spending money on conservation and the order of priority of items to be conserved. Obviously, there are issues of the conservation techniques to be utilised in carrying out the work since they have different cost implications. Although that gets into areas beyond the scope of this particular study, it would seem that there is reason to be especially carefull in evaluating the "costs" of alternative methods. Flexibility and conservatism may command a premium in this case.

3. Research: This activity, even in the case of research directed at consumer goods where the outcome is fairely well defined, is not easily analysed in economic terms. In principle one would spend no more at the margin than what one would expect to gain from an eventual finding again at the margin on this activity. Even this is subject to many qualifiers when the nature of the uncertainty is taken into account. When dealing with research in the humanities and arts one may make a similar statement but it would be too vacuous to offer any guidance.

As a matter of fact, it is not at all obvious what the economic benefit

of research is in such areas - or even if there is any. I do not intend to belittle the research in such areas but rather to raise the question as to whether it requires an economic justification at all. One may always refer to arguments as to the effects on labor productivity and so forth but they are very dubious at best and insignificant empirically. Thus there probably is no use in trying to evaluate the economic benefits of research per se and it is best considered as a, necessary, contribution to Mankinds stock of knowledge about itself. Any evaluation to be done should be on the quality of the research project, not its economics.

Having said that, there are aspects of museum research that may implicitly be analysed in economic terms. These may be grouped under three main headings: a) contributions to acquisitions, b) contributions to communications, and finally c) contributions to exhibitions. The fist item refers to the fact that research such as digs contribute directly to the museums' building of its collections. As such, it would be subject to the same form of analysis as acquisitions. The second refers to activities of the research staff such as publishing research output, photographing, answering technical inquiries, relations with visiting scholars, supervising replicas and so forth. Finally, the last item refers to activities like classifying, cataloging, and interpreting collections as well as documenting travelling exhibits. The economics of the second and third items will be taken up below.

4. Communication: Much of what a museum does involves communicating with the public at large and/or students of a particular discipline treated by the museum. Here we will be looking at communication in a slightly restricted sense as exhibitions, which is the most obvious way that a museum communicates, will be treated separately.

Analysing the communication activity is relatively straightforward for most of it can be seen in the context of market transactions. There is a cost involved with "communicating" and there are some expected benefits from doing so. The amount allocated to this activity, therefore should be such that the cost, at the margin, of communicating equals the expected benefits, again at the margin. The costs of communicating are more-or-less obvious and will not be dwelt upon further here but the benefits require some categorization. These benefits may accrue from students of museum related disciplines, from benefactors, and from the general public.

The first two are overtly market transactions in that the utility of the party receiving the communication will be reflected in the price she is willing to pay. In the first instance, students of various disciplines will be willing to pay a price for the output of research alluded to previously because it is of value to them (and also they probably will have included such expenditures in their own research budgets under an item usually depicted under "documentation" or "miscellaneous"). In the second instance, the communication with donors is an investment which is expected to generate some returns and

as such is not to be treated differently from any investment decision. Thus these two aspects may be left to the dictates of the market and there is no obvious need for intervention or transfer mechanisms.

The communication with the general public is not as clear cut. The aim in such communication is presumably to get the man-in-the-street involved with the museum; not necessarily as a serious student of some discipline or donor but simply as a visitor or repeat visitor. After all, that is, in principle, the "raison d'être" of museums. If pricing at the exhibition end were competitive, then one could treat such communication as one would treat advertising for any commodity - you would push advertising to the point where the marginal amount spent generated just enough revenue to pay for itself. Since entry prices are in general kept low, the above logic, under very general conditions, would lead to too little being spent on such communication. Thus, there would seem to be reason for not relying on the operation of the market in this area.

The nature of the intervention would be to readjust the price signal so that a more efficient allocation of resources be made in this area. How this could be done we will see below.

5. Exhibition: This activity is, along with the existence of a permanent collection, the defining characteristic of a "museum". As such it requires special attention. From the point of view of those who

would visit an exhibition, there is clearly some subjective value attached to being able to do so. Here I am essentially thinking of voluntary visits but the basic argument holds true for "obligatory" visits such as those organized by educational institutions - there is somebody who attaches a value to the visit to the point of requiring it. As I had argued in Chapter II, the best indicator of an individual's evaluation of a service is her willingness to pay for it. In a similar vein, the value to society of the involuntary visits is the willingness of the government to pay. It would also seem fair to assume that the lower the price, the greater will be the number of people for whom their subjective evaluation will exceed that price. It is important to note that even if lower prices may increase visits, they may not increase revenues. This would occur if, say, a 10% reduction in prices led to a 5% increase in visits. Although there are more people coming, each is being charged less and the end result will be a fall in revenue. Where this is the case, demand for the item in question is said to be inelastic. In any case, demand for exhibitions a priori would seem to comply with the principles mentioned in Chapter II as regards the welfare implications of prices from the demand side.

From the supply side, the situation is not the same. Once a museum exists, the marginal cost of another visitor coming to see an exhibition is zero. Within fairly large limits, the number of people visiting a museum on any given day will not effect its costs, thus, the marginal cost of "servicing" another "customer" is nill. Since the opportunity cost to society is zero, the welfare maximizing price of

this service should also be zero. **Any other price is, from an economic point-of-view, arbitrary.** Although arbitrary, this price does have an upper limit: the price that a profit maximizing monopolist would charge had she been given the right to do so. Between these limits, any price that the decision maker chooses is as acceptable as any other from an economic analysis point of view. If there were other objectives, evaluation of a pricing policy would be based on its ability to contribute to those objectives.

At this point, it would be useful to clarify a widespread confusion on profits. It is important to realize that the reason why a museum can charge a price as low as zero **has nothing to do with the fact that it is a not-for-profit institution.** It is linked to the nature and structure of its marginal costs. Even a profit maximizing competitive firm, under such cost conditions would be forced to charge a price of zero. That is why such services would not get provided by a "free" market. It will not be the elimination of the profit motive from one activity that will keep prices low. What counts is the opportunity cost of the resources and they include **profits which could have been made elsewhere.**

Before a museum comes into existence, however, the analysis is quite different. At that point, before the resources are committed, there is an opportunity cost to society of putting them into a museum rather than something else. If there were market determined prices at the exhibition end, these prices (which would reflect society's evaluation



of exhibition services) could be compared to the costs and a decision reached. Since prices will not, as I had argued above, reflect preferences in this instance, another mechanism has to be found for the evaluation of the benefits. It is understood that I take "benefits" in a large sense to include other objectives that a government might have. More will be said on value measurement in the absence of prices below. A similar argument applies in the case of an existing museum planning a new exhibition for there are opportunity costs of allocating resources to such an activity rather than something else.

C) The economic organization of museums :

In the light of the analyses above what can be said of the economic organization of museums analytically? First note that the activities of a museum involve "markets" or transactions that have distinct characteristics which will influence the transformation process taking place. Thus when one talks of the financing of museums (or museum projects), one is essentially interested in the financing of a series of distinct but interrelated activities which contribute to this transformation. Given the distinctness of the activities, an immediate question to bring up is whether the museum should be treated as a single entity for analytic purposes.

First, it is to be noted that there is no overwhelming logical reason for treating the museum as a single entity. From an analytical point

of view, the major logical reason for such treatment would be due to what are known as "economies of scale" whereby being bigger implies cost savings. Although I am not aware of empirical work on museums testing for the existence of such scale economies, casual empiricism would indicate that they are weak, if they exist at all. On the other hand, treating the activities individually and exposing the links that exist between them would lead to significant increases in clarity.

The defining characteristic of museums being the existence of a permanent collection and exhibitions, let us take as a museum an organization that carries out just those two activities. This does not mean that the other activities mentioned above are not carried out but merely that they are subcontracted to other "enterprises" which offer such services at a price. The question for the management of the museum is how much to purchase of these different services whereas the "firms" have to decide how much to charge for the services they are offering. Since, with the exception of the communications activity, these "markets" were shown to fail, it is obvious that the transactions are not going to take place at market prices but at imputed values of the activities. The communications aspect can be treated as a purely market phenomenon which has both outlays and revenues for the museum and reveals no obvious reason for a subsidy either way.

Looked at from this perspective, the management of the existing resources of a museum, and the generation of new ones, is analogous to that of an integrated company which has to deal with a "portfolio" of

firms each dealing in its own activity but contributing significantly to the other activities of the overall entity. Since the individual markets had failed and are internalized by the overall organization, the problem is finding appropriate "transfer prices" at which transactions will take place. This is something we know more about.

#### IV. CONSEQUENCES

In the previous chapter the activities of a museum were analysed from an economic point of view. In this Chapter, I shall take this analysis a bit further and explore some of the consequences.

##### A) Outline of an "economic theory of museums"

First note that the "not-for-profit" status of museums is not due to the altruistic motives of the museum community (although they may have played a role), but that there are sound economic reasons as to why organizations which rely on **donations** must generally be set up as nonprofit. In summary, the argument is as follows: When someone gives money to a museum (be it an individual or the collectivity) she is trying to buy some service. In the case of what is usually called a "price", the link between the payor and the service rendered is a direct one. The purchaser usually will know if the service was rendered to her satisfaction and will act accordingly. In the case of donations the situation is not as clear. The link between an individual contribution and increased production of services or their quality is not observable. Thus the donor does not know whether her contribution was used for upgrading museum services or for distribution of earnings. The not-for-profit form of organization, by making it illegal to act in such a way, provides some assurance to donors that their contributions

are being used for the purposes for which they were collected.

But why should museums rely on donations (be they public or private) as a major source of financing? The usual argument for this, as pointed out in previous chapters, is that museums are a public good and generate significant positive externalities. This in turn justifies subsidies (public or private). There probably is a measure of truth in this rationale in that tourism, cultural integration, employment, etc., will be favorably affected by the existence of a prominent museum in the community.

However, the question is not so much the existence of such external benefits as their importance. Is it reasonable to assume that the ratio of these external benefits to the private benefits exceed the ratio of donations to gate receipts? Given that the ratio of donations (be they public or private) to ticket revenues range from about two to four and one half depending on the country, the external benefits should be around twice to four times as great as the private benefits. Although there is no hard evidence either way, there are indications that such numbers are on the high side.

A related argument is that museums constitute a "merit" good and as such its price should be kept low enough for most people to be able to afford it. This is achieved through public or private subsidies. Again, although there is an argument to made for subsidies, it is not based on income redistribution. As a matter of fact, most museum visitors are

tourists (internal or external) and it would be difficult to believe that museums are organized on a not-for-profit basis so that the local population can subsidize the tourists.

The question still stands as to why museums are financed so heavily by private or public donations. Why not raise entry fees? The answer lies in the structure of museum costs alluded to in the previous Chapter. Given the nature of museum activities, fixed costs constitute a disproportionately large fraction of the total costs of a museum. As we had seen previously, when the ratio of marginal costs to fixed costs is very low, efficient pricing at marginal cost will lead to gate receipts which will not cover total costs.

Indeed, it appears likely that for the performing arts the demand curve lies entirely below the average cost curve so that **there is no price at which receipts from ticket sales will cover total costs.** It is very likely that the same is true of museums. Under such conditions, if the museum could engage in effective price discrimination, it may be able to capture enough of the consumer surplus to cover its costs. But effective price discrimination requires that "consumers" with highly inelastic demand be identifiable and that their entry rights (or tickets) be nontransferable. In certain cases these conditions may be met (after all foreign tourists, in general, are not that difficult to identify) and price discrimination beneficially practiced. As a general rule however, this is not the case.

Although it may be difficult to carry out effective discrimination through the price of tickets, it is feasible to ask individuals to discriminate by willingly donating an amount if the value they place upon museum services exceeds the cost of entry. This is, in effect, what museums and other not-for-profit organisations all over the world are doing. In some countries such as the United States most of the donating is done directly by individuals (or the private sector) so that the voluntary discrimination aspect is much more obvious. To the extent that such donations are tax deductible, the state is indirectly involved in such transfers. The same type of phenomena is taking place, however, in other countries where the state directly does the donating. In countries where the per capita income is high enough, a case can be made that private donations are probably more efficient than direct government subsidies but that is beyond the scope of this study (and not true for a great number of countries whose per capita incomes would not be high enough). It can also be shown that matching funds type of donations by the government are, in general, preferable in terms of welfare to lump sum subsidies; the proof of this is also beyond the scope of this paper.

Thus, there are very sound economic reasons as to why financing museums, to a large extent, through donations is the optimal mode and why it is optimal to organize museums as not-for-profit institutions. This leads to the question of how museum projects should be evaluated: if socially optimal financing is the use of donations, can evaluation methods based on some form of internal rate of return calculation be

used? Strictly speaking, the answer is no. The possibility of such projects' generating enough revenues to cover costs (both in a discounted sense) is nil - otherwise it would not have been optimal to use donations. Thus, the financial return on museum projects will always be negative due to the wedge of required donations. Were the donations to be included in the calculations from the start however, even the most useless of projects could be made to look financially viable.

On the other hand, when proper account is taken of external benefits, a total museum project will almost certainly end up having a positive "social" rate of return. Funding institutions, which have to ration credit, are therefore caught in a quandary for if they do not extend credit there are potential social losses and if they do, they undertake negative financial returns. When forced to navigate between Scylla and Charybdis, they usually end up being keener on avoiding the recognizable monster of negative financial returns rather than the whirlpool of dubious potential social benefits lost. The only way they would be willing to finance such a project is if, ex ante, they decided to leave aside financial considerations; which, for all intents and purposes, becomes a donation however.

In summary, financial returns are not the appropriate criteria by which to evaluate museum projects. As a matter of fact, such criteria are irrelevant for any project for which, as the late Harry Johnson, an eminent economist, put it, "... the ability to pay high interest rates

is not necessarily a proof of the superior social desirability of the project to be financed." The relevant criteria for project evaluation would be the social rate of return calculated on the basis of correctly imputed costs and benefits. The financing question is then the conceptually distinct one of calculating the required stream of transfers and determining the optimal source and vehicle for their realization.

A relevant question to ask at this point is what constitutes a museum project? Is it one entity with several subparts for which an overall rate of return should be calculated or is it several conceptually distinct projects which are to be evaluated separately but which are intimately linked? I had argued at the end of the last Chapter that a "museum" could analytically be looked at as a collection of distinct entities, with distinct economic characteristics, but which contribute to a common objective. Following up on this would lead to a conception of museum projects that are of the latter type referred to above.

Indeed, it turns out that this has not only analytical but also pragmatic benefits. If the museum is treated as a "portfolio" of "firms", the implication is that the management of a museum will have before it a "portfolio" of "projects". Each of these projects will have a different social rate of return and a different financial structure - that is, a different transfer requirement. The different projects would represent an interest for different groups from which the required transfers may be sought and yet central co-ordination is not sacrificed. Also, by creating more degrees of freedom, the possibilities for strategic

management are obviously enhanced. For example, take the well worn tool of the "portfolio matrix" which some managers have found useful in another context. The portfolio of projects available to the museum manager may be categorized according to the social and financial returns calculated and put into a two-by-two matrix as follows:

A HYPOTHETICAL RETURN MATRIX

		-----			
Social Return	High	B	C		
	Low	A	D		
		Low	High		
		Financial Return			

The projects falling in quadrant C are projects that have both a high social return and a high financial return and thus represent the best of both worlds. They are projects, such as the so-called "blockbuster" exhibitions, that the museum will not find difficult to finance and which will generate a surplus. The projects in quadrant A, on the other hand would be those that have no redeeming value what-so-ever and which may well be forgotten to the benefit of everyone. Quadrants B and D may be interpreted in a similar fashion. It is very likely that the majority of museum projects will fall in quadrant B but by no means all of them and it is precisely the ability to distinguish be-

tween these that is the added value. Note also that the breaking up of the "museum" into a portfolio of activities also allows for a very flexible way of spatial allocation of activities while at the same time controlling the overall impact of the museum. Unfortunately, it is beyond the scope of this study to get into the details of how such tools could be put to use in museum management yet it is important to realize that they exist and with a little effort may be very helpful.

A very significant benefit, or cost depending on one's point-of-view, of shifting the emphasis to the activities is that this would require an explicit and empirically viable depiction of the systemic links that exist between the different activities and their contribution to the output of a museum. To the best of my understanding this has not, as yet, been done. What do the individual activities contribute to the chain of activities leading up to the museums' output? What are the economic costs of the individual activities (as opposed to the accounting costs) and what value do they add? Given that there are multiple outputs, how does any given activity contribute to each? Does it contribute to each? In short, what are the input-output relationships at each stage of the process? In effect, this implies analysing what each activity contributes to the others in terms of costs, benefits, and their functioning. Not only are these required for an understanding of the institution called a museum, but also crucial to be able to sort out the nature of the transfers taking place and the value of each activity for the others (as for the totality of the museum for that matter). It is by understanding such interrelationships that

appropriate transfer pricing mechanisms can be set up and the management of museums be put on a sounder footing.

Very often this type of approach is criticized by saying that it is next to impossible to carry out such valuations because there are no prices on which to base evaluations. I would argue that this attitude is due to several misconceptions as to the nature of what needs to be done. These misconceptions may be grouped under three main headings: (1) erroneous conception of that which is being exchanged, (2) erroneous conception of what economics is good at, and (3) erroneous conception of the importance of monetary values in decision making.

The first refers to the fact that every decision involves some form of exchange in that something is given up for which something else is obtained. Therefore, it is very important to understand what is being exchanged in order to be able to correctly measure what difference it would make. Obviously, if there is an error in this understanding one will end up trying to measure the wrong thing. The most obvious candidates for causing such misunderstandings are trying to value the basic resources rather than the activity, trying to value the level of ultimate utility rather than the comparative values, thinking in terms of tangible goods as the object of exchange rather than the activity of exchange from which utility is derived etc. .

The second had been discussed in detail in Chapter II and I will not dwell on it any further here. I would like to point out, however, that

there are methods of comparative valuation in the absence of prices or where prices do not convey the information they are thought to. These are collectively described in the book by Sinden and Worrell mentioned in the Acknowledgements section of this report.

The third refers to keeping in mind why one needs valuations. Due to what I have called "brow-beating", there seems to have occurred a rash of goal displacement cases whereby effort is directed toward approximating market prices which do not exist. But valuations are made to aid decisions and as such the valuation is a means, **not an end**. They provide comparative information on the alternatives and thus make rational decisions possible. It follows that the information that one needs depends on the decision one is required to make and in many cases the relevant information is not very great and not money prices. Concentrating on the **information** requirements of the decision at hand rather than reverting to recreating money prices would prevent many misguided efforts.

#### B) Where to go from here

There is much work to be done both in terms of the conceptual framework and in terms of its empirical counterpart before the economics of museums are properly understood. Yet, if there is one result to be drawn from this study it should be the direction that these efforts should take. Most work on the economics of museums has been on trying

to understand or clarify the role played by museums in the development process. Although not an intrinsically unworthy endeavor, it is one at the macro level which can yield neither testable hypotheses nor useful empirical guidelines. It is not going to be the weight of empirical evidence that convinces one of the benefits of museums, on the contrary, it will be one's beliefs that condition what one sees. This being the case, the manner in which museums contribute to development is largely beside the point in terms of financing museums and museum projects. This, as hinted at above, requires a micro approach aimed at understanding the workings of the organization called a **museum** and the markets within which it operates.

The conceptual effort, therefore, should be directed toward specifying the "production" process of museums and the interaction of the different components and inputs. The usual response of museologists to this statement is that these relations are already known to them - a conviction which may be true in a museological sense but which is not true in an economic sense. This type of reaction is similar to the engineers' view that she knows all about a certain production process; she may know the techniques of production but, more-often-than-not, precious little about the underlying economics of production. There is need to develop this understanding more thoroughly. I have proposed some beginnings above which may be taken further along various directions. A very straightforward extension would be to formalize what I have done further and derive their consequences. Another crucial, and related, avenue would be the application of systems theory to museums

and the development the implications.

A related development which must proceed pari passu with the conceptual understanding is the empirical issue of measurement and indicators. As I tried to point out, prices in the standard sense of the word are not the only or most important pieces of information to have. Although they may be used where available, they should always be used with caution. Since there will be internal transfers taking place, as will be evident in the conceptual developments, the shadow prices of such transfers will be the critical values to determine. I have pointed out earlier that there is existing work in this area but further work may be required in developing indicators of such shadow values.

Finally, it should be kept in mind that a museum is an **organization** and, in principle, a purposeful organization. The unique character of the service it provides should not lead to the erroneous conclusion that it requires a unique **method of analysis**. Standard methods and tools of analysis will suffice provided that proper caution is taken in their application. Commonality of the methods of analysis do not distract from the uniqueness of the object studied.

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In order to prevent this report from resembling a scholarly paper, I have not cited exact references in the body of the text. I have, however, made use of the following:

Hansmann, H. "The Role of Nonprofit Enterprise." Yale Law Journal, Vol. 89, (April 1980), pp. 835 - 901

Sinden, J. and Worrell, A. , Unpriced Values: Decisions Without Market Prices, Wiley & Sons, New York, 1979

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