

**DYNAMIC CONSIDERATIONS IN THE PRICING OF PUBLIC
ENTERPRISE AND THE POLICY MAKER'S OBJECTIVES BY
REVEALED PREFERENCE: AN APPLICATION TO SELECTED
ASIAN ECONOMIES**

J. Harris *

S. Harik **

The conceptual problems involved in the pricing of public goods have received considerable academic attention. A good deal of literature has been directed to the "markets" for public goods for which no price rationing is directly possible (for example, national defence), but for which preferences of individual agents nevertheless produce signals (for example, voting). The target of this paper, however, is the pricing over time of public enterprises for which price rationing is possible, and for which central authorities have monopoly supply rights (for example, electricity). Our attention is confined to the developing economy, the market mechanisms of which do not, for one reason or another, produce modern growth as a natural outcome of the economy's day to day operation. Further, we will eschew the static consequences of these pricing decisions for the longer run implications they may have for growth in an economy which is otherwise backward. In fact, it will be suggested below that the attainment of various long run objectives is very likely inconsistent with static targets, like allocative efficiency, in the developing economy context. Predictably, lessons are provided by received microeconomic theory, though by a different branch of it than public goods theorists normally employ.

** Lecturer in Economics and Statistics at the University of Singapore
Assistant Professor of Economics at Western Michigan University. (This
paper extends a framework developed by Dr. Harris in a public finance
symposium in Singapore in March, 1979.)*

Section I reviews optimal pricing schemes associated with various static and dynamic objectives. It is concerned with the consequences of various dynamic pricing schemes, and includes some special considerations which are likely to apply to the developing economy landscape. Section II asks what certain pricing choices may reveal about policy maker's targets, and examines data from enterprises in China, India, Singapore, Thailand, the Philippines, Korea, Turkey and Iraq. A conclusion follows.

I. THE CONSEQUENCES OF PRICING PROGRAMS

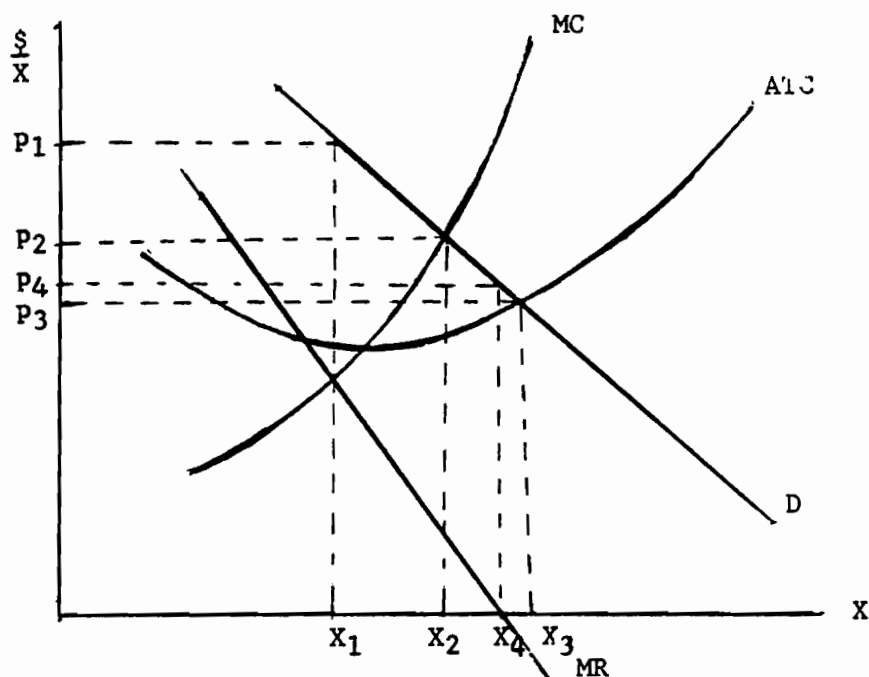
(a) Static Programs

For reference, Figure One denotes the static pricing scheme suggested by various targets when the supplier has monopoly supply rights. The literature most often identifies two targets available to private management-ownership: maximim profits and maximum revenue (the latter suggested by Baumol (1959)). Williamson (1970) proposed a combination of the two. The interested reader is directed to Koutsoyiannis (1975) for an excellent review. The former is accomplished by price-quantity combination (p_1, x_1) , where marginal revenue has fallen to equality with marginal cost, and the latter is accomplished by combination (p_4, x_4) , where marginal revenue has fallen to zero.

Central authorities may identify other objectives, of course. Given an institution which makes pricing a public choice (public ownership, regulation), central authorities may seek to avoid the static dead weight loss associated with (p_1, x_1) in favor of either a marginal cost or an average cost pricing rule. The marginal cost rule simulates pure competition by operation at (p_2, x_2) , where marginal cost equals unit price.

The average cost rule (which may include a "normal" rate of return) yields combination (p_3, x_3) . There is some doubt about which program best simulates a purely competitive market, however, and because entry is barred to new suppliers, and the monopoly supplier has market power, there is no reason to expect the two schemes to yield the same answer. Thus (p_2, x_2) could require a subsidy, or furnish "super-normal" returns.

FIGURE ONE



(b) Dynamic Programs

Over time, the distinctions between the schemes outlined above may turn out to be meaningless in any case. Static schemes necessarily ignore dynamic consequences, the most important of which is that of profit's contribution to capital accumulation and growth. The enterprise, public or private, which is eventually liable for its debts cannot stray from profit maximization indefinitely without suffering permanently damaged growth, even with access to credit.

The most general description of the mechanics behind an entire family of assertions in this general area is provided by Leland (1972a, 1972b), who considers the optimal pricing schemes associated with a rather general class of long term targets. Leland's point of departure from the static pricing framework turns on the question of financing additions to capital stock which form the basis for sales revenues in subsequent time periods,

and therefore for further capital accumulation. Thus, the enterprise which seeks to maximize the discounted stream of sales revenues should not maximize sales revenues in every time period (1972a). Put differently, the enterprise which maximizes a stream of sales revenues borrows more than one which maximizes profits. The connection between the two is provided by a capital accumulation constraint which binds both programs as the horizon of the planners recedes.

It is possible to consider a very general class of long run targets. Leland (1972b) employs the same analytics in dealing with the enterprise which seeks to maximize a discounted stream of (a) profits, (b) sales revenues, (c) output, (d) a utility function defined on profits and sales revenues, and (e) profit per worker. A turnpike approach established that as the horizon of the planner recedes, the optimal price and output program gets closer to one which would have maximized static profits in each case. That being the case, the enterprise which adopts an alternative arbitrary target, must, for the most part, maximize profits anyway. One ought not observe enterprises straying from static profit maximization chronically, therefore, even if profit maximization is not their true objective.

Leland's result is a very powerful one. It implies that the central authority which, as in Figure One, chooses to simulate the workings of a purely competitive market by opting for a marginal cost or an average cost pricing rule does so at the expense not only of current profits for the enterprise, but at the expense of the enterprise's long run ability to produce output, income per worker, capacity, and sales revenue. Consequently, the public enterprise which includes in its objectives the long term goal of enlarged capacity and the ability to supply output to purchasers, but employs a competitive pricing rule, will fall chronically short of its target. Figure One therefore deletes a marginal social benefit for a variety of cases.

It may be argued, however, that the abandonment of a competitive pricing rule will shift the benefits to be derived from the consumption of the enterprise's output from the current generation to subsequent generations. It is obvious from Figure One, and is well known generally, that the profit (growth) maximizing pricing scheme entails a loss of current consumers surplus. Consumer surplus is defined as

$$(\int_0^x p(x)dx) - xp(x)$$

for any level of current production, x , given the inverse demand function, $p(x)$.

The matter of intergenerational equity is easily considered. We can employ the Rawls criterion by imagining that the planner makes decisions for an arbitrary class of consumers (the public), who have the same preferences, are risk-averse, and can only reveal their preference regarding a given pricing scheme objectively when they do not know their own return from the pricing scheme. A pricing scheme which has differential returns from different generations can only be judged objectively when the public does not know which generation it is to be a part of. We employ the maximum principle, and suggest that the optimal program, $x(t)$, is one that solves the following problem:

$$\max_{\{x(t)\}} \min_t \left(\int_0^t x(t) p(x(t)) dx - x(t) p(x(t)) \right)$$

Here, t represents a generation. The output program is then one which yields the greatest consumer surplus for the generation which is worst off. There is always the possibility, after all, that an arbitrary generation which does not yet know its place in the sequence could end up in the worst off position. The Rawls criterion at least ensures that such a generation's position is as comfortable as possible.

Without exploring the properties of the solution to the output and pricing program which is equity-optimal, it is nevertheless clear that the growth maximizing program cannot also be an equity-optimal program, since the first generation pays a consumers' surplus penalty when the profit maximizing combination (p_1, x_1) is approximated. Equity goals are thus inconsistent with long term growth targets, and, given Leland's results with long term revenue, output, capacity, and income per worker targets.

(c) The Social Cost of the Enterprise's Foregone Profits

In the developing economy context, as suggested above, one cost of foregone profits for the public enterprise is the infringement of its growth. But there may be further social costs to foregone profits which make the equity targets even less tenable.

Presumably, in the short run, additions to capacity not financeable through profits genuinely available are financed by funds produced by other sectors (which comprise the enterprise's debts). We could normally rely on a set of financial institutions to raise and channel funds to the highest return in preference to less efficient uses, but the developing

economy's financial structure is incomplete, and sometimes proves to be channeling funds in the wrong direction. The true social cost of foregone profits consequently must include an allowance for the fact that the funds channeled to the public enterprise could have been successfully employed elsewhere, given other sectors' rates of return. So the static costs of profit maximization are misstated in another way, as well, to the extent that the luxury of an equitable or statically efficient pricing scheme denies resources to other growing sectors, straining a financial system which already copes poorly. A profit maximizing program entails no such financial drag, of course.

We have, then, an entire set of targets to consider, both static and dynamic, superimposed on an institutionally incomplete economy, for which marginal social costs and marginal social benefits can be expected to be misstated. Pricing schemes for the public enterprise which appear statically efficient in simulating a competitive price may be (a) statically inefficient in misstating the social cost of foregone profits, and (b) dynamically inefficient in denying legitimate allowance for consequences felt beyond one time period. So the consequence of apparently statically efficient, or equitable, pricing schemes is dynamic inefficiency. The consequence of dynamically efficient pricing schemes is likely to be a loss of equity across generations. We next ask whether or not an observed set of public enterprise prices reveals anything about policy maker's preferences along these lines and the consequences they are willing to endure, ex-post.

II. OBSERVED PRICING PROGRAMS AND THE PREFERENCES OF POLICY MAKERS

Consider now a public enterprise for which unit price, p , is observable, along with unit production cost, ATC . The observations presumably are produced by some unobservable demand function and cost structure which the policy maker has confronted at a given point of time. We thus have

$$\Theta = P / ATC$$

as the observed markup rate, and we wish to draw some conclusions about the policy maker's objectives from an observation of Θ , even though the demand and cost structures which produced it elude us.

The notion of cost itself is very far from being unambiguous, and firms can gain by padding their costs through the use of various accounting methods, especially in the depreciation expense. The problem reduces to which is the relevant cost of production--the 'original cost' or the 'reproduction cost'. Governments and regulatory commissions prefer the use of the original cost because of its simplicity and because it is usually lower than reproduction cost. This definition tends to be misleading because of changes in the value of the currency which, in periods of inflation would result in a declining rate of return.

Firms prefer the use of the 'reproduction cost new,' and Garfield and Lovejoy (1964) suggest a simple approach to its valuation; the 'trended original cost.' This is done by multiplying the recorded actual cost of each property unit or class by the ratio of the appropriate index number of prices for the current year to that of the year in which the property unit was installed. The main objection to this 'cost' is that it measures the cost of duplicating a partially obsolete plant which would not be built again.

Even with an acceptable definition of cost several difficulties are immediately apparent. Firstly, θ does not bear a one-to-one correspondence to profits. That is, one markup rate can be associated with two (or more) profit figures. Unfortunately, given the results of Section 1b, above, it is profits which form an intermediate target for the policy maker with long term objectives of growth and capacity, rather than the markup rate. Maximizing profits does not, generally, mean maximizing θ , and the maximal θ available to the policy maker necessarily occurs at a lower level of output than does maximal profits. Nevertheless, a "high" θ does indicate a willingness to use market power for whatever objective the policy maker has in mind.

The second problem concerns the operational definition of a 'high' or 'low' θ . When θ approximates unity, it is not at all clear whether (a) the policy maker had market power which would have made a higher value of θ attainable, but chose a low value, anyway, or (b) the policy maker is faced with a demand and cost structure which puts a strict upper bound on the markup rate employed. Accordingly, we adopt a revealed preference approach, as follows:

1. Consider two markup rates, θ_1 and θ_2 . θ_1 is revealed preferred (RP) to θ_2 if θ_1 is chosen when θ_2 could have been. θ_2 is RP to θ_1 if it is chosen when θ_1 could have been. The choice of any when the other is

unattainable, given cost and demand structures, reveals nothing about the policy maker's objectives.

Therefore, if θ_1 RP θ_2 , and if $\theta_1 - \theta_2, \theta_1$ is a "high" markup rate. If θ_1 RP θ_2 , and if $\theta_1 - \theta_2, \theta_1$ is a "low" markup rate. In practice, we may have only one observation, say θ^* . But it is clear that θ^* is RP to any $\theta - \theta^*$. At the same time, if there is only one observation, we can never infer that θ^* is RP to any $\theta - \theta^*$, since we have no proof that θ is attainable (as indeed it may not be). Therefore,

2. An observed markup rate, θ^* , is always RP to a $\theta > \theta^*$, but never RP to a $\theta < \theta^*$, assuming θ^* is the only markup rate observable.

We will thus occasionally find ourselves in a position where we can conclude that the policy maker has abandoned a target associated with a low markup rate for one associated with a higher markup rate. But we are unlikely to find ourselves in a position where we can infer the opposite: that the policy maker has abandoned a target associated with a high markup rate for one associated with a low markup rate. Bearing in mind that profits have a relationship to 0 (which is not one to one), we may observe policy makers abandoning inter-generational equity objectives for any of several others: long term growth in output, long term income per worker, long term sales revenues from output, long term additions to capacity, and of course, long term profits. Some of these objectives are quite consistent with those presumably associated with planners in developing economies, though the use of market power in the pricing of public enterprise is not conventionally taken as a planning device. It is, nevertheless, an option which may have been open to planners and policy makers in several Asian economies for which some data are available, and it is to these data that we now turn.

Tables I through IX list markup rates for various enterprises in China (Tables I, II), India (Tables I, II), Thailand (Table III), Singapore (Table IV), the Philippines (Table V), Korea (Table VI), Turkey (Table VII), and Iraq (Table VIII). In each case, except that for Singapore, Iraq and Turkey, the markup rate is the ratio of unit price to average total (variable and fixed) cost. The Singapore, Iraq and Turkey data are not fully comparable, giving the ratio of revenue to paid up capital or profits to value added, but are employed for lack of a better alternative. Among those economies listed is a wide variety of institutional landscapes. In

China and Turkey, nearly all the enterprises are public enterprises, while in the Philippines the opposite is true. In each of the cases listed, however, it is possible to view the pricing alternative chosen by a policy maker. The crude average markups and standard deviations are listed in Table IX. Chinese markups ranged from 1.20 for truck production to 2.39 for writing paper. Generally, Chinese pricing patterns emerged with highest markups on producer goods. The markup rates on Indian enterprises was lower across the board. The Indian data exhibit not only lower markups but less variability. Of all the industrial categories listed in Tables I and II, India's markup is higher than China's in only three of 20 instances—for farm machinery, bricks and coal. All of this suggests a willingness of Chinese policy makers to price the output of public enterprises substantially above cost in selected industries, while their Indian counterparts were either (a) unwilling to employ a high markup rate, or (b) unable to do much better than to recover unit production costs. It should be kept in mind that Chinese policy makers had another instrument at their disposal, wage rates, which furnished them another degree of freedom in the selection of markup rates. However, this power makes the choice of high markup rates even more revealing. We note also, from Table II, that although the Chinese planners set their highest markup rate on producer goods, no discernable pattern emerges from the Indian markup ranking, again suggesting that the Chinese markup practice is quite discretionary.

The scope of public enterprises in Thailand is much narrower, of course. Table III nevertheless suggests a willingness on the part of the Thai policy makers to markup public enterprises which very nearly matches the Chinese (the means are, respectively, 1.317, and 1.275). The Thai data exhibit less variability, however. Markup rates varied from 1.905 for the Fuel Organization to 0.942 for Aeronautical Radio of Thailand, which is below cost. The markup on electricity, 1.247 for the Electricity Generating Authority of Thailand and 1.076 for the Metropolitan Authority, compares 1.99 for China and 1.247 for India.

Unfortunately, the Singapore data is not quite comparable, since the markup rate available is unit price divided by unit paid up capital. But the mean for Singapore, at 1.229, is the fourth lowest markup average for the countries considered here. Unfortunately, statutory board markups (electricity, communications and others) were unavailable, and are omitted from Table IV. We nevertheless noted

Table I
Markup Rates — Selected Chinese
and Indian Enterprises

Commodity	China	India
All Industries	1.375	1.170
Iron and Steel	1.666	1.299
Electricity	1.991	1.247
Coal	1.237	1.350
Machine Building	1.644	1.025
Textiles	1.190	1.111
Paper	1.208	1.278
Ceramics	1.975	1.381
Plate Glass	1.488	1.169
Leather	1.103	1.139
Writing Paper	1.027	1.261
Reed pulp	1.236	1.236
Paper board	1.250	1.364

Source: Liu Jung-Chao, "Wages and Profits of Selected Industries in China," *Economic Development and Cultural Change*, Vol. 26., No. 4, July, 1978. Most data are from the years 1957 to 1960. Liu employs the profit-cost ratio, π/TC . The markup rate is given by $\pi/p / ATC = 1 + a$.

Table II
Markup Rates — Selected
Chinese Commodities and Their
Relationship to the Indian Rankings

Commodity	China	India	Indian Ranking
Printing Paper	2.39	1.28	11
Electrical Machinery	2.06	1.25	15
Electricity	1.99	1.25	15
Cables and Wires	1.92	1.28	11
Machine Tools	1.76	1.40	1
Gasoline	1.74	1.37	4
Tools	1.70	1.35	7
Iron and Steel	1.66	1.29	10
Machine Building	1.64	1.02	32
Ammonium Sulfate	1.60	1.39	2
Cotton Cloth	1.52	1.10	25
Diesel Engines	1.50	1.16	22
Plate Glass	1.49	1.17	20
Heavy Machinery	1.40	1.03	31
Locomotives Wagons	1.34	1.07	29
Bricks	1.33	1.38	3
Combine Harvester	1.25	0.87	33
Coal	1.24	1.35	7
Farm Machinery	1.20	1.36	5
Trucks	1.20	1.08	28

Source: Liu (1978)

Table III
Markup Rates — Selected Public
Enterprises in Thailand

Enterprise	Markup Rate
Rice Account Unit	1.706
Thailand Tobacco Company	1.300
Government Warehouse Organization	1.307
Electricity Generating Authority of Thailand	1.247
Telephone Organization of Thailand	1.712
Forest Industry Organization	1.715
Fuel Organization	1.905
Metropolitan Electricity Authority	1.076
Port Authority of Thailand	1.531
Sugar Refining Plants	1.546
State Railways of Thailand	0.953
Chemical Fertilizer Company	0.958
Aeronautical Radio of Thailand	0.942

Source: Issara Suwanabol, "Theories of Public Enterprises: Lessons From Thailand," August 1977, Dept. Political Science, ANU (reprinted in Ker Sin Tze, "Public Enterprises in ASEAN — An Introductory Survey," ISEAS, 1978). Given $\pi/TR = \beta$, we have $\theta = p/ATC = (1-\beta)^{-1}$, presented above. Data are from 1976.

Table IV
Approximate Markup Rates, Selected
Public Enterprises in Singapore

Company	Approximate Markup Over Paid Up Capital
Jurong Abbattoir	1.022
Primary Industries Enterprises	1.261
Singapore National Printers	1.505
Keppel Shipyard	1.663
Neptune Orient Lines	0.920
Singamarrex	0.992
Sembawang Holdings	1.319
Insurance Corporation of Singapore	1.440
DBS Finance	1.140
Singapore Factory Development	1.187
SIA	1.654
Singapore Cable Cars	1.551
Container Warehousing and Transport	0.966
National Engineering Services	0.921
Development Resources	0.948
International Development and Construction	1.466
DBS Realty	1.008
Intraco*	1.244
DBS*	1.070

* Semi-state companies

Source: Lee Sheng-Yi, "Public Enterprises and Development in Singapore," **Malayan Economic Review**, October 1976 (Reprinted in Ker (1978)0. Data are from 1974.

Table V
Markup Rates of Selected Public
Enterprises in the Philippines

Enterprise	Markup Rate
Philippine National Railways	0.948
National Power Corporation	1.274
Manila Gas Corporation	1.096
Metropolitan Waterworks and Sewage	0.840
Communications and Electricity Development	
Authority	1.185
Bureau of Fisheries	1.381
Abaca and Other Fibres Development Board	1.272
Police Commission	1.645
Oil Industry Commission	3.546
Atomic Energy Commission	1.139
Philippine National Bank	1.089
Development Bank of the Philippines	1.138

Source: **Philippine Journal of Public Administration**, Vol. 18, 1974
 (Reprinted in Ker (1978)).

Table VI
Markup Rates:
Selected Korean Enterprises

Enterprise	Markup Rate
Korea National Railroad	1.186
Korea Electric Company	1.333
Korean Telephone Service	1.396
Korean Rice Administration	.914

Source: Brown, G.T., (1973)

Table VII
Markup Rates: Selected
Turkish Enterprises

Enterprise	Markup Rate
Agricultural Enterprise	1.200
Mining and Power	1.210
Coal, Petroleum, Steel	1.112
Manufacturing	1.143
Transport and Communications	.823

Source: World Bank, **Turkey: Prospects and Problems of an Expanding Economy**, 1975 pp. 376-80.

Data refer to the public portion of each sector cited.

Table VIII
Markup Rates:
Selected Iraqi Enterprises

Enterprise	Markup Rate
Manufacturing	1.64
Oil Refining	1.45
Construction	1.28
Electricity and Water	1.25
Transport and Communications	1.50
Railways	.862
Trade (Wholesale and Retail)	1.71
Banking and Insurance	1.79
Mining and Quarrying	1.175
Other Services*	1.41

Source: Haseeb, K., (1964)

*includes: Health, Recreation, Hotels, Restaurants, Entertainment, etc.

Data refer to the public portion of each sector cited.

Table IX
Mean Markup Rates and Standard
Deviation of Selected Countries

Country	Crude Average Markup	Deviation
Iraq	1.379	.3082
Thailand	1.377	.3327
China	1.375	.5239
Singapore	1.229	.2560
Korea	1.207	.2121
India	1.170	.1061
Turkey	1.098	.1549
Philippines	1.084*	.7125

Source: Tables I - IX

*deletes oil industry commission

Table X
Operating Surplus of Statutory
Boards of Singapore

Board	Surplus (\$ million)
Housing Development Board (1977)	-59.0
Port of Singapore Authority (1976)	133.0
Public Utilities Board (1976)	89.8
Telecommunications Authority of Singapore (1976)	118.2
Jurong Town Corporation (1976)	52.9
Post Office Savings Bank (1976)	7.2

Source: Ker (1978)

the statutory board operating surpluses in Table X. These surpluses range from a high of S\$133.0 million for the Port of Singapore Authority to a loss of S\$59 million for the Housing Development Board. The Public Utilities Board surplus, at S\$89.9 million, appears rather small when compared to the ability of PSA and TAS to generate surpluses.

The mean markup for the Philippine public enterprises, at 1.379, essentially matches those for China, Thailand and Iraq. When the markup figure for the Oil Industry Commission is deleted, however, the mean drops to 1.084, which would have been the lowest in the group of five countries. The markup rates for the Philippines include several below cost: The National Railway, at 0.948, and Metropolitan Waterworks, at 0.840. As Ker points out, the philosophy of public enterprise in the Philippines has been to turn the enterprises over to the private sector when possible, and this may account for the low mean markup for Table VI.

Korea has the third lowest markup of the group of countries considered. The markup ranges from 1.396 on telephone service to a negative markup on rice. The government subsidizes the sale of rice since it is a very important item in the Korean diet. Coal sales have a negative markup but no figures were found, and hence could not be included in Table VI. If coal were included, the average markup would have been lower than 1.207. The government controlled the price of coal briquets because until 1966 coal was Korea's only heating and cooking fuel. In 1964, Korea started its first oil refinery which increased domestic refining of petroleum and relieved some of the demand pressure on coal.

The Turkish data refer to the public enterprise portion of each sector considered. The data show an extremely low markup rate for public enterprise. Most of the subsidies go into the transportation and communications sector. Even if that sector is not considered, Turkey would still have an average markup rate of 1.166 which would qualify it for the second lowest markup rate.

Unfortunately, the most recent data on Iraq is from the sixties. Nevertheless we still get an idea of government policies with respect to public enterprise since the socialist government took over King Faisal's regime in 1958. The data suggest that Iraq merits first place among the countries considered and compared to Thailand and China. The data also suggest that the industries which are completely controlled by the government have the lowest markup rates but are still relatively high with

respect to other countries. These completely controlled industries are Electricity and Water, Railways, and Mining and Quarrying.

On a country to country basis, we offer these observations:

The Philippine data indicate no preference on the part of the policy makers to abandon an intergenerational target for the other targets: growth, profits, sales, output, capacity, and income per worker. However, the Philippine practice of turning public enterprise over to the private sector may alter this conclusion. On the other hand, we have no support for the alternative hypothesis - that the policy makers abandoned growth targets for an equity target.

The data for India offers no support for the same hypothesis. Markup rates for Indian, Turkish and Korean enterprises are too low to reveal much about policy makers' preferences. The data for China, Thailand and Iraq, however, feature markup rates sufficiently high to warrant support for one hypothesis - that policy makers in these three countries abandoned intergenerational equity for long term growth objectives. There are numerous instances in Tables I, III, and to a certain extent VIII, where the choice was made of a markup rate at least fifty percent over cost. For China, these occur in the printing paper (2.39), electrical machinery (2.06), electricity (1.99), cables and wires (1.92), machine tools (1.76), gasoline (1.74), tools (1.70), iron and steel (1.66), machine building (1.64), ammonium sulfate (1.60), cotton cloth (1.52), and diesel engine (1.50) industries. For Thailand, these occur for the Rice Account Unit (1.706), Telephone Organization (1.712), Forest Industry (1.715), Fuel (1.905), Port Authority (1.531), and Sugar Refining (1.546) organizations. For Iraq, these occur in Manufacturing (1.64), Transport and Communications (1.5), Trade (1.71), and Banking and Insurance (1.79).

It appears, then, that long term growth objectives are preferred to intergenerational equity targets in China, Thailand and Iraq. Data does not support the same conclusion for India, the Philippines, and of course, for Singapore, Korea and Turkey. Better data for Singapore might alter this conclusion. It should also be noted that the other hypothesis - that long term targets are abandoned for intergenerational equity targets - is not generally testable without extraneous cost and demand data. To illustrate, if it were correct to assume that India and China, being at such similar stages of development, had essentially the same demand structures and technologies, we could defend the hypothesis that India's policy makers revealed preferred equity targets to long term growth targets, having chosen 0 of 1.170 when a 0 of 1.375 was available.

CONCLUSION

Having reviewed markup rate data in public enterprise in eight Asian economies, we came to a strong conclusion about the objectives of policy makers in China and Thailand, and to some degree, in Iraq, with the aid of some received microeconomic theory. A tentative hypothesis was also ventured regarding policy makers' preferences in India, and in view of the obvious similarities between China and India, this hypothesis may be a very reasonable one. An extension to Korea and Turkey is tempting but less advisable. Lui Jung-Chao reached a very similar conclusion when he noted, with the aid of the same data, that growth in China had been more impressive than that in India, though living standards in the two countries were roughly similar. Our analysis, which focuses on the pricing decision of policy makers in a rather more formal format suggest that these differences may have emerged as a result of planning philosophies in high places. We are tempted to extend this conclusion to Thailand, but are unable to extend it further. Further research in this area might provide some interesting insights into what goes on in board rooms in Manila, Singapore, and for that matter, in a host of other developing nations.

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دراسة تطبيقية حول سياسة التسعير في المشروعات العامة واهداف صانعي القرارات

ج . هاريس
سليم حريق

هذه الدراسة تطبيق لسياسات التسعير في المشروعات العامة (القطاع العام). على اقتصاد ثمانية من الاقطار الآسيوية. وتتعرض الدراسة كذلك الى بحث الاهداف التي ترمى اليها حكومات بعض الدول أمثال الصين، الهند، العراق، وتايلاند وغيرها.

واتضح ان هناك تشابه بين سياسات التسعير والاهداف المالية في كل من الصين والهند. والكاتب يوافق بعض الكتاب في أن النمو في الصين كان شاملا اكثر منه في الهند مع ان مستويات المعيشة كانت متقاربة في البلدين .

وفي النتيجة يقرر الباحث ان الاختلافات في السياسات يعود اساسا الى اختلاف الايديولوجيات الاقتصادية بشكل واضح في هذه البلدان.

و يتمنى البحث أن تتاح فرصة أخرى لنشر ابحاث اكثر عمقاً يمكن تطبيقها على بلدان أخرى مثل الفلبين، وسنغافورة ودول نامية أخرى.