THE NEED FOR PRIVATE SECTOR-PUBLIC SECTOR COLLABORATIVE PLANNING IN SINGAPORE

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ABSTRACT

Singapore faces a massive over-supply of a comprehensive range of property developments today. This over-supply is expected to continue increasing till 1988. As a result, the local property market has gravitated to a trough. The slide of the property market began in 1982 after the market peaked briefly at an unprecedented high point. The depressed property market is adversely affecting Singapore's economic growth. The examination of recent government land sales to the private sector reveals possible causative agents. The land sales were conducted as a central part of Singapore's urban redevelopment programme. The backdrop to the investigation is provided by an understanding of the government's plans for Singapore's economic development. Pronounced cyclicality of the property market is analysed to be an artifact of strictly public sector planning for urban redevelopment. A private sector-public sector collaborative planning effort for urban development is proposed to ensure a better balance of supply and demand.
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CONCLUSIONS
INTRODUCTION

The island republic of Singapore emerged at the beginning of this decade as one of the progressive newly industrialising countries. While much of the world was still caught in a recession towards the end of the 1970's, Singapore embarked on a rapid modernisation programme. The new dawn of Singapore's economic development arrived at the end of 1978 when the republic awakened from a 4-year period of economic slowdown that was accompanied by a weak, local property market. The ambitions of this city state required a drastic urban face-lift and infrastructural improvements in an effort to become a world-class financial, commercial services and convention centre.

As Singapore's property market strengthened towards the end of 1978, signs were ominous for a construction boom within the next 2 years. Singapore's government saw this to be the appropriate moment to accelerate the on-going urban renewal programme that would lead to the republic's modernisation. Through its agency, the Urban Redevelopment Authority, the government sold large amounts of urban land in 1978-82 to the private sector for a comprehensive range of developments. Hotels with convention and exhibition facilities, office and commercial buildings, warehouses and factories, and condominium projects would be developed on
the purchased land parcels. By 1988, all these developments would come on-stream. In 1982, however, Singapore's property market then began to slump, in the wake of a massive real estate over-supply. The market price of properties depreciated by 25%-35% over the following 2 years.¹ Today, the property market continues to soften, and a number of these projects are being delayed or shelved. The faltering property market has led to a slow-down in Singapore's economic growth.

That there are problems with Singapore's economy now is a fact which the government does not deny; however, the government side-steps the issue of the cause and effect of the current economic slow-down. On 29 March 1985, in a Parliamentary session, the Minister for Trade and Industry, Dr. Richard Hu, said that the recovery of the property market is necessary for the local economy to continue its growth. He terms the property sector as "the fundamental sector" and said that this sector has to recover before the other sectors of the economy since Singapore has limited amounts of land. According to him, Singapore's property market was simply going through its natural 7-9 year cycle, and that it had gravitated into a trough corresponding to that of 1978.

It is my hypothesis that inadequacies in government

planning led to the current property cycle peaking rapidly in 1981, to be suddenly followed by a trough that has yet to bottom-out in 1985. The government was not aware of how its system of land sales was creating speculative gains that would eventually be lost. The escalation of property prices to a peak in 1981 was an unintended consequence of the manner in which the Urban Redevelopment Authority conducted the sale of government land. Developers contributed to this escalation by making irrationally high bids for the government land. In the 1983 Economic Survey, the Ministry of Trade and Industry's Statistics Department suggested that the slide of the property market was caused by the crash of the local stock market. However, I shall show that the same actors, interacting in the land sale, precipitated the property market collapse as surely as they contributed to the market's unsustainable peak. As the property sector is an important part of Singapore's economy, the economic ripples caused by the current centralised urban planning imply a reconsideration of how planning should be done. I propose a collaborative planning effort, by both the private and public sectors for urban development, whereby the property sector will be less prone to cycles. Collaborative planning involves the coming together of both sectors to decide the scale and timing for urban redevelopment. More will be said about this in Chapter 5.

The first 2 chapters of my thesis set the background and
relate how public sector urban planning has adversely affected Singapore's economy. Chapter 1 relates how the urban renewal programme has been the lever for Singapore's modernisation in the light of the republic's economic development since 1959. The sale of government land is portrayed as a major component of Singapore's urban renewal scheme. I then discuss the relationship of the two major actors of this programme, the private sector and the Urban Redevelopment Authority. Chapter 2 provides an analysis of the Urban Redevelopment Authority's tender system for selling land by examining the conditions of the tender. A decision model of the tender system enables us to study the impacts of the tender system on the property market. I also test the decision model with empirical observations. It is in this framework that we can see the inadequacies of public sector planning for urban renewal. Furthermore, we see how the interaction of developers with the government agency in the land sales fostered the "unreal estate boom".

Chapter 3 describes a model of Singapore's economic development that reflects the policy-makers' pragmatism. I describe how regional circumstances act as the stimuli for the formulation of ad hoc policies. I also offer a view on how the decision to construct a mass rapid transit system affected the pace and pattern of the urban renewal programme. We can then see that the government showed undue optimism and opportunism in its urban redevelopment policies. Chapter 4 merges the inferences
drawn from the analysis of the URA land sale strategies and the government's style of policy-making. From this, I construct the mechanism that provoked a sudden peaking and just as sudden collapse of the property market. I describe how the property market collapse has led to a depressed economy. The chapter also includes an account of recent government measures to prop up the market. I argue that such measures do not address the system defects inherent in the management of Singapore's urban redevelopment. A possible solution is a collaborative planning effort for urban redevelopment. Chapter 5 discusses the merits of collaborative planning for urban redevelopment. Such a planning mechanism features facilitated informational processes and an avenue for social learning. Collaborative planning involves decentralisation and points are made as to why the republic's government should welcome this. All the arguments mesh into an overview of how costs can be better controlled and uncertainty better dealt with. By way of concluding my thesis, I draw attention to some areas for further research.
CHAPTER 1

BACKGROUND

This chapter gives a brief historical account of Singapore and its development over the last 26 years. It highlights the way the government went about the task of ensuring the economic viability of the country. A model for urban development evolved as the country progressed. The government currently envisions Singapore as a space-age garden city with facilities that will establish it as the key financial centre in Asia. This is the unifying concept of the present urban redevelopment programme. The government embarked on a plan in the late 70's to rapidly achieve its objectives. Private sector participation is necessary in Singapore's modernisation, and so the Urban Redevelopment Authority was formed to orchestrate the combined efforts of both public and private sectors. The government, with a virtual monopoly on urban land, releases designated parcels for development in a series of land sales. Private developers willingly carry the risks and the financial burden of the urban renewal programme in the pursuit of profit. Effectively, they are just implementers of government policies in this top-down scheme.

1.1 THE DEVELOPMENT OF SINGAPORE (1959-1985)

Singapore is an island republic in S-E Asia, about 225 square miles in size. It gained its independence from Great Britain in 1959, and in 1963 formed an uneasy alliance with Malaysia, then known as Malaya. The alliance was short-lived, and Singapore left the Federation of Malaya in 1965. Few believed the island republic could become economically viable on its own as it has no natural
resources of any kind. The only natural asset that the republic possessed was its harbour, and under a pragmatic leadership, one of the prongs of economic development centred on the exploitation of this asset.

In order to harness the island's harbour potential, the government quickly realised that the port facilities had to be expanded along with the redevelopment of the city that had grown around the waterfront. To this end, the urban redevelopment scheme was launched. The renewed city would be able to accommodate the communication link-ups, and house the trading and financial institutions which are structural elements of an entrepot port. Thus, the ends of Singapore's physical development is economic viability. The means rested on the ability to make the most efficient use of its limited land area.

Singapore's port has since become the second largest port in the world, in terms of tonnage handled, having leapfrogged over Hong Kong, Yokohama and New York City in the last two and a half decades. It has emerged as one of the most well-run economies of the Third World, and today its population of 2.5 million people can look back to more than 20 years of sustained growth. The republic's leadership can take full credit for weaving this success story and making Singapore the most politically stable country in a region filled with unrest and racial conflicts. As the republic grew more and more prosperous, the government's aspirations for it also grew. Thus, schemes to achieve
economic viability were modified to propel Singapore to the forefront of world commerce.

1.2 THE SPACE-AGE GARDEN CITY
The government's vision for Singapore's urban centre has evolved into that of a clean and green city boasting a skyline that would be the envy of any other city. The government believes that the form of the city is critical in realising Singapore's function as a major financial and services centre. The government envisages such functions as being necessary to sustain Singapore's growth. In the late 70's when Singapore was on the verge of a construction boom, the government saw this as an opportune time to catalyse the republic's modernisation. The perceived pot of gold at the rainbow's end of accelerated development became the establishment of Singapore as Asia's prime financial centre.

To this end, the government designated a multitude of urban land sites from its land-bank for comprehensive development mainly by the private sector. Two major urban satellites, Raffles City and Marina Centre, would be constructed by 1986 to offer services and facilities to tourists, business travellers and multinational corporations operating in Singapore. Raffles City, a project covering 3 hectares, would contain 2 hotels (one of which would be the world's tallest hotel at 73 storeys), a 42-storey office tower, and a 7-storey podium to house the country's largest convention
and shopping centre. While the government has retained much of the financial interests in this urban satellite, it sub-divided Marina Centre and sold the two parcels to the private sector for an even larger scale development.

The government believed that Singapore's metamorphosis would be completed by the construction of a mass rapid transit system. In this way, traffic congestion would be relieved and travel time in the republic would be reduced. The proceeds from the sale of the urban land parcels to private developers would finance the mass rapid transit system. Thus, the government conceived the idea of making one component of Singapore's modernisation pay for the other. The Urban Redevelopment Authority (URA), a quasi-government agency, would manage the land sales and be the guiding force of the urban redevelopment. The URA's capacity to perform in this manner is defined by the statute known as the Urban Redevelopment Authority Act enacted by Parliament in 1974.

1.3 THE URBAN REDEVELOPMENT AUTHORITY

As the transformation of Singapore unfolded, the need for an urban environment consistent with the aspirations of a modern city state became increasingly evident. In 1966, the government established the Urban Renewal Department within the public sector housing agency, Housing Development Board (HDB), for the sole purpose of creating such an environment. The physical, social and economic
regeneration which was entrusted to the Urban Renewal Department focuses principally on the Central Area. Historically, the Central Area was the origin of urban growth in Singapore; for this reason, banking and commercial activity was concentrated there. However, the persistent, haphazard development and congestion in that area was too great a task for just a department within the HDB to undertake. In 1974, the Urban Redevelopment Authority was formed to take up this challenge and accorded the same status as the HDB — an independent statutory body under the auspices of the Ministry of National Development.

1.4 THE SALE OF SITES PROGRAMME

The URA promotes urban renewal primarily by selling government land, mostly in or close to the Central Area, to private developers via a tender system (discussed in Chapter 3). In eleven land sales, the URA has established itself as the most significant source of development sites. The first land sale was launched in 1967 and the 11th conducted in 1982.

1.4.1 THE GOVERNMENT'S LAND BANK1

The URA acts as the agent for the government which is the biggest land-owner in the republic through its colonial legacy. When the British gave Singapore its independence,

1 the main source for this section is Motha (1981) except for the effect of zoning.
the crown's ownership of land was transferred to the new republic's government. The government is able to add to its land-bank through legislation providing for compulsory acquisition based on the principle of eminent domain. Furthermore, legislation also endows the government with exclusive rights to land reclamation. By filling soil around the Central Area waterfront, the government has created vacant land for the extension of the Central Area sea-wards. The government owns about 70% of the land in Singapore and its monopoly of land will increase further. This is because many of the land leases held by the private sector will expire in the next decade, and the land will revert to the government.

Compulsory acquisition of land is the most effective device available to the government for keeping urban renewal in motion. The compensation that the government makes to the land-owners is based on "current use" values assessed in November 1973. The government is able to assemble fragmented and/or under-utilised sites, usually in private ownership, into larger land parcels more feasible for comprehensive development. The land parcels are then offered for sale to private developers by the URA. The government is able to increase the value of its land parcels by exercising its powers of zoning. In most cases, the land parcels are not zoned to be of higher land-use than adjacent sites. Rather, other sites of potentially competing usage in another part of the city may be re-zoned.
to embody lower commercial use. The result is enhancement of government land value at the expense of private land.

1.4.2 TOP-DOWN MANAGEMENT IN URBAN RENEWAL

The Sale of Sites Programme ensures that land parcels revert to private ownership. The government plans the redevelopment and provides the basic infrastructure together with other urban services to facilitate private development. The private sector supplies the finances, a vital element of the programme, and the expertise for implementing the redevelopment plans. The URA sees this scheme of urban redevelopment to be one of co-operation between the public and private sector.

The URA specifies the conditions for development in line with the agency's planning objectives. The timing of the land sales is supposedly influenced by feedback from the private sector and market analysis for the various types of development planned. In reality, however, policy directives from the Minister for National Development override all other factors. The urban redevelopment programme, thus, really involves top-down management in the sense that the directives come overwhelmingly from the centre of power in the government. The implementers of the programme, the private sector, are unable to shift the course or the design of the programme and are not privy to all the related information. Vital information such as what other land parcels would be released as well as when in the
future is not disclosed. Yet, they bear the burden of the urban redevelopment of Singapore by financially and physically ensuring its realisation. Even though there is co-operation by private developers with the government in Singapore's urban redevelopment, there is no collaboration in planning for this programme.

1.4.3 WHY DEVELOPERS PARTICIPATE

Without the government acting as an intermediary as current legislation allows, private developers would have poor access to potentially profit-embodying land. Private developers are keen to participate in the Sales of Sites Programme to gain this access. In addition, the URA's land parcels are free of all encumbrances and receive highest priority for approval by the Ministry of National Development; this applies also in the event that the developer wishes to make minor amendments to the building plans at a later stage.

In this case, the developer has to obtain permission from the URA first and then submit the amended building plan to the Ministry of National Development's Development Control Division for final approval. During a property boom, time saved in the Development Control Division's review of the revised building plans can mean a substantial difference in profits.

Last but not least, URA land parcels are exempt from development charges. The Singapore government extracts a
tax from developers, termed as the development charge, for the enhanced value of land which the government re-zones or has given approval for more intensive use. The government imposes such a tax in line with its stated philosophy that developers should not have windfall gains without returning part of it to society. The development charge is predicated on 70% of the enhanced value of the land, as assessed by the government.

Thus, the land parcels offered by the URA have much appeal to the private sector. This is evident in the great interest in the Sale of Sites Programme especially in the heydays of 1978 to 1981. Developers from many parts of East Asia competed with local developers in these years with the result that the urban land market soared. However, the fact that information does not readily flow from the top to the bottom in the redevelopment programme leads to irrational expectations on the part of developers. Furthermore, the tender system which the URA employs to sell land prohibits the information exchange among developers vying for land parcels in the Sale of Sites Programme. The possibility then exists for naive developers who have less than an adequate sense of the market but are willing to enter into the urban land market at greater expense to themselves than necessary. These two

1 Planning (Development Charges) Amendment Rules, 1976 (S. 222/76)
factors in tandem allowed the government to gross S$2.86 billion in the 5 sales of 1978-1982. The inherent instability accompanying this top-down scheme and the restriction of information flow among developers finally became apparent in 1983.

The next chapter presents an analysis of the tender system in an effort to show how developers from the private sector are induced into biting off more than they can chew in URA's land sales. We shall see how this allocation of land parcels used by the URA drives land prices up and is effectively a destabilising element of Singapore's urban redevelopment.

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1 URA released this figure to local press in 1985. See also Appendix D.
CHAPTER 2

PLANNING GONE WRONG

In the Sale of Sites Programme, the URA makes use of a tender system to allocate land parcels to developers. The URA attaches conditions to the tender to prevent land speculation and to expedite construction. The tender can be analysed as a decision model that incorporates prequalification, a constrained market mechanism, adjudication and bargaining. The tender results in added costs for development. Speculation instead of being excluded is nurtured in the property market. The URA is itself guilty of making speculative gains by extracting increases in land price through the tender. The URA's 1978-82 land sales shaped the exaggerated peak and trough of Singapore's current property cycle. Irrational expectations on the part of URA, developers and final consumers fuelled this rapid rise then collapse in property prices. The market is not likely to recover because of a massive over-supply of which URA projects are a major proportion. The end result is that URA's urban renewal plans have gone astray.

2.1 URA'S TENDER SYSTEM

The tender is an allocation device used in engineering projects to award construction contracts to contractors submitting the best bids. The ideal bid would be the proposal having the technically superior project design with the lowest construction cost. This hardly ever happens since the attributes of project design and costs usually have an inverse relationship. Thus, a trade-off must be made. The proposal selected, then, is the one having an adjudged optimal mix of construction cost and
project design. The URA makes use of this system to allocate land designated for development to private developers based on the principle of the optimal combination of development design and price bid for the land. From the URA's perspective, however, the highest bid for the land parcel coupled with the adjudged superior design would be the ideal bid.

The tender system is put into operation when the URA launches a sale, consisting of several land parcels, as part of the urban renewal programme. For each land parcel, the URA stipulates the specifications and constraints for development, and the conditions for tender for the sites. The specifications include the type of use for the building, plot ratio (floor area ratio), building density and height restrictions if any. The URA issues developer's packets which contain all this information, as well as site plans and the necessary documents for preparing a tender. Interested developers then commission architects to design a proposed development within the URA constraints.

The URA specifies a time period, usually 3 months, for developers to prepare their tenders. For each land parcel that a developer is interested in, he must deliver the price bid in a sealed envelope to URA's headquarters by the given date. The proposed designs in the form of plans and models must accompany the price bids. URA officials then select what they believe to be the best tender for
each parcel, after which a public announcement of the results is made. The URA's decision on the awarding of tenders is final, and there is no recourse for appeal by unsuccessful tenderers.

2.2 CONDITIONS FOR TENDERING
The URA attaches a whole list of conditions to the tender and purchase of the land parcels. The stated objective of the agency in doing so is to prevent land speculation and to ensure that development takes place within a specified time frame. The developers participating in the tender are subject to the following conditions:

1) That a detailed design with a model of the proposed scheme, except for industrial projects, must be submitted by the tenderer.

2) That the tender, comprising the design and the actual bid for the land parcel, must be prepared and submitted by the tenderer in the strictest of confidence. No communication is permitted among individual tenderers and upon discovery of collusion, the guilty parties will be disqualified from the tender. The fear of government reprisals in Singapore is shared by all commercial entities, and so collusion is virtually non-existent.

3) The selection of the winning tender will be solely from the tenders received i.e. no correspondence from the tenderers will be entertained from the time that the tenders are submitted to the announcement of the
results.

4) That the tenderer agrees to a schedule of payments for the land parcel, set by the agency, and is bound to undertake the development of the parcel. The maximum period for payment is 10 years. In such a case, the interest at 1% above the average local prime rate is payable to the agency. Once the parcel has been awarded, no sub-sale or re-sale of the land parcel is allowed, except with URA's permission.

5) A specific construction time of the proposed development is set by the agency. Unless the agency revises this schedule, any delays will be subject to penalties payable to the agency. Penalties are calculated as 2% of the land cost per month of delay and pro-rated accordingly.

6) In the event of substantial delays, URA has the right to buy back on advantageous terms.

7) The purchaser must retain 30% of the scheme in one ownership for 10 years after completion. The company incorporated to develop the land must also have substantial paid-up capital in relation to the development costs.

8) The construction force for the proposed development must comprise at least 50% of imported labour. This condition is in line with the government's aim that Singapore's small native labour pool is to be employed for more highly skilled work.
2.3 URA'S TENDER SYSTEM AS A DECISION MODEL

The URA's tender system for allocating land parcels to the private sector can be analysed in the form of a decision model, with 4 components: pre-qualification, constrained market, adjudication and bargaining.

2.3.1 PRE-QUALIFICATION

The first component of the decision-making process of the URA is the pre-qualification stage. In requiring the submission of scale models and architectural plans and perspectives, and the agreement to the schedule of payments, the URA effectively defines the pool of tenderers. These conditions ensure that only developers with substantial financial resources and accessibility to technical expertise - therefore, those most likely to see the project through to completion - are able to participate in the tender.

2.3.2 CONSTRAINED MARKET

The fundamental condition of confidentiality to be observed by the tenderers and the agency embody the secrecy in this system - this secret bidding is what separates the tender from the auction as an allocational process. The auction is a pure market mechanism where bids are made in the open allowing for counter-bids. On the other hand, the tender is a quasi-market mechanism as it allows a one-time bid only. The fact that communication among tenderers is prohibited means that developers are unable to assess each
other's feelings of the market. In this way, only a very rough idea of a given land parcel's price is held by the tenderers. Their willingness to pay would be bench-marked from their individual expectations of the market as well as the prevailing market price for a comparable site. An optimistic developer might submit a bid which is above the site's market price, expecting its price to appreciate. An overly optimistic developer might well bid far above market price. Furthermore, being unaware of what the rest are bidding, the overly optimistic developer might also bid far above the rest of the tenderers.

The URA constrains the market mechanism further by setting a floor price for each land parcel, which is probably URA's assessed value for the site. The URA withdrew certain land parcels from the 10th land sale in 1981 on the basis that the bids for the parcels were "unrealistic". By this, the URA meant that the bids were below the floor price that it had set for the land parcels. Presumably, the floor price is URA's precautionary measure against all the tenderers colluding to under-bid. However, the floor price also weeds out a pool of tenderers who may have a less optimistic, but more realistic, expectation of the market than URA.

2.3.3 ADJUDICATION
The URA judges the merits of the proposed development's design as a criterion for awarding the land parcel. Importance is accorded to aesthetics and the blending of
adjacent proposed developments into a harmonious urban environment. In having the design criterion in the tender, the URA does not share Hough and Kratz's belief (1983) that the marketplace will respond favourably to "good" new architecture. The URA's idea of "good" architecture is, in all likelihood, influenced by the government's zest for a futuristic city; adjudication allows URA to fulfill the government's desire. Thus, projects embodying state-of-the-art architecture are likely to be favoured. Architects of world-renown such as Kenzo Tange, I.M. Pei, Paul Rudolph and John Portman were commissioned by tenderers to produce several outstanding designs. The URA shows preference for buildings of eye-catching architecture with high-quality finish rather than buildings that embody cost-saving innovations.

2.3.4 BARGAINING

Within the spirit of traditional tenders, bargaining by the decision-maker and the tenderer is excluded. However, the URA or its chosen nominee has on occasion engaged in bargaining. This might happen in the event that a developer has submitted an adjudged superior design accompanied by a much lower bid than the highest bid submitted for the same land parcel. The developer is then discreetly asked to revise his bid upwards, if he is willing, so that the URA can have its cake and eat it too. Thus, URA contravenes its own rules by giving the developer another try at bidding and raises doubt about
the equity of this system.

2.3.5 IMPLICATIONS OF THE MODEL
The main observation that crystallises from the decision model of URA's tender system is that all 4 decision-making stages could possibly lead to greater development costs to be borne by the developer. Consider the pre-qualification of tenderers: developers are made aware that they are in a high-stakes game where everyone is well-equipped financially and able to commission the most famous architects. A one-upmanship mentality is, thus, evoked - the tendency will be to bid a little higher and submit a more eye-catching proposal. For the developer that submits the winning tender, his costs of development are certainly factored upwards because of this.

However, unsuccessful tenders also incur costs for the other developers and architects because of the lengthy time involved in preparing tenders. The requirement of scale models translates to high costs as models of elaborate schemes cost up to S$45,000 in 1980.¹ The local architects are known to subsidise the costs of preparing tenders just so that developers would engage their services rather than that of foreign architects. The developer who tendered unsuccessfully would usually pay a local architect an "abortive" fee of S$5,000-10,000. However, the

¹ this and the following cost figures in this section are obtained from the local developer, Far East Organisation
architectural work done on each design can cost up to 3 times as much. Over a period of tenders, local architects would charge the rest of society more for their services to recoup costs incurred in subsidising tender preparations. "Abortive" fees of foreign architects are known to be in the region of S$100,000 but in this case, the developer incurs all the cost.

The URA's choice among the tenders is also based on the constrained market mechanism. In submitting a bid, a developer has to assess what a given land parcel is worth to him and what it is worth to other tenderers. Most developers calculate the land parcel's worth using the "affordable cost" method. They start off by forecasting the selling price of the completed project and then take away the costs of development including interest payments, overheads, and architects' fee. The balance is the land cost and the profit. The developer has a feel of what the land is worth to him once he decides his profit margin.

The key to the exercise is predicting the expected selling price 4-5 years ahead. This is where the problems lie. Developers who expect the market to continue on an upward trend would estimate a higher selling price than the current price.

At the same time, each developer is trying to guess what a given land parcel is worth to the others. The mentality of one-upsmanship pervades this guessing game, especially
if developers think that the upward trend is a permanent feature, and that URA projects are highly profitable.
Large developers espousing this view would add a premium to their bids for prestigious projects to increase their chances of securing the tender. On the other hand, other developers wanting to jump on the money-making bandwagon would strategically bid for smaller and less coveted sites. In this case, these developers would also add premiums to their bids. Thus, high bids would be submitted for most if not all the land parcels offered for sale. In the event, however, that developers begin to have a pessimistic view of the market and bid lower consequently, the URA's floor price device ensures that purchase prices do not move down. The parcels are simply withdrawn and lower purchase prices do not become evident. Effectively, the purchase price can move only upwards in each successive sale.

The international firm of real estate valuers, Richard Ellis made the satirical comment that it was a happy coincidence for the URA that its 3 sales of 1979-81 should set new records in land prices each time. Richard Ellis also compiled a data-base of the purchase prices of the URA land sales based on market information (see Appendix E). A survey of the land prices paid by the winning tenderers gives empirical support to the idea that developers participating in URA tenders are induced to over-bid.¹ The

¹ Richard Ellis: 1983 Singapore Property Market Review
best example of this is from the 9th sale in 1980 where a developer paid $\$4500$ psf for a land parcel on Cecil Street, in the Central Area, that had been independently assessed at $\$3000$ psf, prior to the sale. In the same sale, there were also 2 roughly comparable parcels on this street and all were given planning approval for the same plot ratio. The purchase prices (psf) for the other parcels were $\$3200$ and $\$3700$. Even differences in frontage do not account for such a disparity; this dispersion of prices is simply a manifestation of the constrained market mechanism.

The design criterion of URA possibly introduces the most significant costs into the development process. This is especially true for the prestigious projects, many of which were proposed in the URA land sales. Firstly, foreign architects are invariably commissioned for the design work because they are perceived to be more accomplished technically than local architects. Naturally, their fees are significantly higher than local architects and they build in costs for travel and other expenses. Secondly, the elaborate design of a project means more costly construction specifications. Thus, higher quality materials and finishes would be used as well as higher skilled workers, all entailing greater costs. The services of foreign consultant engineers and contractors would then be required, bringing up the costs yet again. These elements of the construction of the proposed project
makes the project extremely vulnerable to cost escalation. For example, Marina Square which is one of the two developments at Marina Centre, situated on the land parcel sold in 1978, was originally estimated to cost a total of S$800 million in 1980. Its developers have since suffered from added costs of another S$250 million. The magnificently designed Rahardja Centre, also at Marina Centre, had its construction cost adjusted upwards by S$300 million even before the foundation work was completed. There is some evidence (Hough and Kratz, 1983) that the greater building costs of "good" new architecture can be recovered from premiums in rents but the process of cost recovery can be painfully slow for the developer.

Bargaining is a two-pronged weapon for added costs because it contains the cost factoring of both the constrained market and adjudication. If the URA is able to persuade the developer, who has submitted the superior design, to meet the highest price already bid for the land parcel in question, the developer will then be awarded the land parcel. His carrying costs are much higher than what would have been that of others vying for this land parcel. This is because his purchase price will be the highest, or close to the highest, in addition to his financial burden of construction being the greatest. The trade-off between design and price bid is circumvented by the URA in this event, but the development costs are amplified.
2.4 EFFECTS ON THE PROPERTY MARKET

The major effect that the URA tender system had on Singapore's property market is that after each of the sales in 1979-81, land prices soared. The media gave much publicity to the fact that many of the land parcels in the prestigious parts of the urban area commanded record-breaking bids. As a result, prices of land-sites adjacent to these parcels were adjusted accordingly. The property market as a whole was given a boost; in hindsight, this was an artificial boost. Together with the momentum that the market was picking up from pent-up demand since 1978, the upward trend looked extremely strong.

Consumers rationalised that the increasing sophistication of developments from the URA land sales which would come on-line later would mean more costs for them. Existing real estate developments were also re-valued upwards for 2 reasons. One is that land prices which are a major portion of development costs in Singapore were climbing. The other is that both speculators' and investors' willingness to pay had also gone up. For example, prime office rents and sales prices rose more than 200% in real terms between 1979 and the end of 1981.¹ Speculators had grasped that real estate promised quick returns. Investors were concerned with the upward trend that might put properties beyond their reach.

¹ The Economist Magazine, 4 Feb 84
In a tight market, where the quantity demanded is greater than that supplied for a given price, the demand schedule will shift upwards so that the market equilibrates at a higher price. The shift reflects a greater willingness to pay on the part of consumers. However, Singapore's property market in 1980-81 was more heated than it was tight. In such a market, the demand schedule would not only shift upwards but possibly transform into a more inelastic schedule, albeit temporarily. If this transformation occurs, the high costs of development of the URA land parcels could be transferred to the final consumers by the winning tenderers. As regulated by the Housing Developers Act, however, they were unable to sell or lease any of the developed units, since their projects were only about to commence. The Act requires the developer to be issued a developer's license by the Ministry of National Development only after all building plans are finalised and approved. Other developers with completed real estate developments to offer, on the other hand, were able to capitalise the appreciation in property prices.

Thus, the URA tender system, a significant cause of the price increases, has created a positive externality for developers not involved in URA projects. The unintended beneficiaries are given a "free ride", and in the market of 1979-82, there were many such free rides. The tender system, therefore, makes the local property market more
inefficient by providing another opportunity for free rides. This is another adverse effect that URA's tender system has on Singapore's property market.

The strong upward trend of the property market in 1979-81 did not go unnoticed by the URA. It is ironic that URA's conditions are attached to the tender to prevent speculation, while the agency engaged in speculation itself. This is particularly apparent if we differentiate between the concepts of land price (or worth) and land value. The URA enhanced the value of the land parcels through site assembly and, subsequently, planning for higher density developments. The agency added value to most of the land parcels offered for sale in 1978-82, much before the market began to heat up. The URA only started its land sales when the market strengthened in 1978 and continued selling only in a strong market.

Through this strategy, URA's tender system extracted increases in price that were not commensurate with increases in value. Indeed, the agency did not create new value apart from what had already been embodied in the land parcels. The capitalisation of this illusionary increase in land value was the speculative gains made by the URA. Furthermore, in riding along on the upward trend, URA and the government allowed speculation and land price increases to feed each other, creating a self-fulfilling cycle. Only when calls by the public to curb speculation became louder
in 1982, did the government introduce measures to stop the free rides.

The most dire effect of the tender system is that it "sowed the seeds of destruction" within the property market. Land and in turn, property prices were pushed up too high too soon. The incompatibility of land prices and land values became obvious even to the frenzied market. It was then apparent that the astronomical prices had no relation to the level of real demand. The market realised that real demand would not support these prices, which exaggerated the value. Speculative demand had sustained the prices primarily, but the speculative demand, being transient, was dying out. The market was sent on a slide from 1982 onwards with the further realisation that it could not absorb URA's numerous projects upon completion. Final demand was simply not growing at the same pace as supply. The signs of an over-supply were ominous by 1983 and analysts predicted that the glut would continue to grow with a vengeance till 1988. However, none ventured to say that the glut would actually be corrected progressively after 1988.

2.5 COLLAPSE OF THE PROPERTY MARKET

The quick softening of the property market by 1982 caused final user transactions to suffer an astounding 61.3% reduction in nominal value. The 1982 transactions amounted
to S$616 million against a 1981 high of S$1.59 billion. In spite of the gloom in the property market, the URA still released 17 sites that year. The 11th URA Land Sale placed emphasis on the development of office and terraced warehouse projects. Altogether, the sales of 1978-82 ensured the private sector's commitment of about S$3 billion dollars towards the purchase of government land.

The significant increase in the republic's commercial space vacancy rates is an indication of the increasing over-supply. Table 1 compares the vacancy rates of Singapore's stock of office and shop (retail) space in the years 1981 and 1984 to show this increase.

**TABLE 1: 1981 vrs. 1984 VACANCIES**

<table>
<thead>
<tr>
<th>National Vacancy Rates</th>
<th>office</th>
<th>shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 1981:</td>
<td>4.4%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Mar 1984:</td>
<td>9.8%</td>
<td>13.0%</td>
</tr>
</tbody>
</table>

(source: Building Statistics Quarterly, 1984)

As with the property markets of many of the developed countries, **vacancy rates of 5-7% are what developers in**
Singapore can be comfortable with. Thus, the current vacancy rates which, by all estimates, have increased from last year's are causing developers more despair. The picture is even more bleak in the Central Area, the focus of URA's push for development. The March 1984 vacancy rate for the private sector's office and shop space in the Central Area was 13% and 12.4% respectively. The private sector stock of office and shop space is 48% and 20% respectively of the Central Area stock. This is particularly worrying since the Central Area contains about 60% of the whole island's office space; and the proportion is growing fast, as URA projects come on-line.

One can assess just how much the URA is contributing to the growing glut by referring to URA statistics for the land sales (see Appendix 3), and to projections by the chartered surveyors, Simon Lim, Oh & Partners. Table 2 shows the contribution of URA projects to Singapore's stock of the various types of developed space by 1987-88. Simon Lim, Oh & partners provide the forecast for the overall increase to the stock and the excess space in the market by 1987-88. This is assuming that all the URA projects are completed on schedule.

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1 Building Statistics Quarterly, Mar 84
2 ibid
3 ibid
4 Far Eastern Economic Review, 28 Feb 85
TABLE 2: THE GROWING GLUT

<table>
<thead>
<tr>
<th>Type of development</th>
<th>URA's addition</th>
<th>overall increase</th>
<th>projected excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel (rooms)</td>
<td>8,600</td>
<td>15,700</td>
<td>9,600</td>
</tr>
<tr>
<td>Apartments (units)</td>
<td>4,614</td>
<td>19,600</td>
<td>5,400</td>
</tr>
<tr>
<td>Office*</td>
<td>3.2</td>
<td>7.3</td>
<td>6.2</td>
</tr>
<tr>
<td>Shop*</td>
<td>4.3</td>
<td>5.0</td>
<td>3.7</td>
</tr>
<tr>
<td>Warehouse*</td>
<td>3.1</td>
<td>8.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Factory*</td>
<td>1.1</td>
<td>17.0</td>
<td>12.7</td>
</tr>
</tbody>
</table>

* in millions of square feet
(sources: Simon Lim, Oh & Partners
Urban Redevelopment Authority)

It seems that the URA correctly anticipated the demand for warehouse projects. However, where other types of development are concerned, it lacks foresight in planning. It is paradoxical that URA's chairman, Mr. C.S. Koh, should state in the agency's 1983 annual report that the URA has succeeded in balancing demand and supply of real estate in Singapore through its land sales. Furthermore, he defended the launching of the 11th sale in 1982's weak market by saying that "the making available of more commercial space should help to further stabilise prices and rentals."
Instead, the URA has *exacerbated* especially the glut in the hotel and retail sectors. In the agency's provision of shop space through its projects, URA has almost *single-handedly* created the shop space over-supply. The agency would be contributing 86% to the shop space stock increase while 74% of this stock increase will not be absorbed. URA hotel projects will account for 55% of the hotel room glut in 1988 if all these projects are completed on time. The projections for hotel room demand are based on a best guess estimate of a 6% annual growth in tourist arrivals.

Towards the end of the 1970's, the Singapore Tourist Promotion Board (STPB), a quasi-government agency, predicted a 12% compounded growth rate in tourist arrivals for the 1980's. However, after the last of the URA land sales in 1982, the STPB revised its prediction to a 10% growth rate. In the following year, against everyone's expectations, tourist arrivals dropped by 4%. Last year, however, the drop in arrivals was offset by a 4% increase. Hoare and Govett (Far East) and Simon Lim, Oh & Partners are currently of the opinion that 6% is the most likely growth rate. At this rate, the occupancy rate of hotels will continue to decline over the next few years to 56.4% in 1987-88. New major hotels require about 70% to break even, in contrast to established hotels that could show profits with 50%-60% occupancy rates. Even with the highly optimistic 10% growth in tourist arrivals annually, the 12 hotel projects from the 1978-82 URA land sales do not
promise to be profit-making ventures.

2.6 THE TROUBLE WITH URA PROJECTS

The sentiment among the developers who have secured projects from the last 5 URA land sales is that the term "winning tender" is inappropriate. According to market sources, not one of the developers who had submitted a winning tender for any of the commercial or residential land parcels has shown a profit. Most of the developers have suffered losses and those with on-going projects are carrying great financial burdens. Nevertheless, it is evident that they have placed themselves in such a quandary by willingly over-bidding in the URA land sales.

Towards the end of 1984, a consortium of 4 of Hong Kong's largest and most experienced developers returned the 2 land parcels which they had secured in the 9th land sale to URA. The consortium forfeited S$16 million in payments already made to the URA for the land parcels which were collectively worth S$62 million in 1980-81. After this, URA informed the other developers undertaking the agency's projects that it would not take back any other land parcels.

The country's second largest developer, Singapore Land, is running into financial problems as a result of investments in 2 major URA projects. Singapore Land has a 68% stake in Gateway, the prestigious twin towers of office space in the Central Area, designed by I.M. Pei. The land parcel was
acquired in the 9th sale for about S$140 million with construction costs estimated at S$350 million. By mid-1983, the book value of the project was just S$407 million. The independent valuation for it was S$244 million at the end of 1984, even though construction costs were also re-estimated at S$500 million. The completed project will supply 750,000 square feet, but it is anybody's guess what the completion date will be. The first tower was scheduled for completion in 1986, but work has stopped since the end of 1984.

The other troubled Singapore Land project is the billion dollar Marina Square in which the developer has a 32% share. This project, designed by John Portman, will feature 3 hotels containing 2100 rooms in all. With over 630,000 square feet of retail space on its premises, Marina Square is the largest development of its kind in Southeast Asia. Marina Square should have come on-line at the end of last year, but its consortium of developers, faced with problems on both the hotel and retail fronts, has delayed its completion. The hotel occupancy rate in Singapore is currently 65% which is a far cry from the average rate of 86% in 1978-81.

The Harapan Group of Indonesia made a spectacular entrance to property development in Singapore by securing 6 prime hotel sites in the 7th, 8th and 9th URA land sales. It is showing losses in all its investments in URA projects. Its
largest and most extravagant project is the Rahardja Centre in which work has stopped at the foundations. This complex, designed by the Chicago firm of Daniel, Mann, Johnson and Mendenhall, will feature 3 hotels with a total of 2700 rooms. A convention and exhibition structure encompassing 360,000 square feet, the largest in Southeast Asia, is integrated into the complex. The Harapan Group acquired the project site from the URA with a S$400 million bid in 1982. Today, the site is probably not worth more than S$240 million. The current estimate of the project cost is S$1.1 billion which is about 37% more than the original estimate in 1983. The cost is likely to escalate further because of the indefinite delay in construction. In fact, it is unlikely that this project will be completed within the next 5-8 years. Thus, one of the focal points of the Central Area redevelopment, according to the URA, may persist as an unsightly hole in the ground.

It seems, therefore, that some of URA's most prestigious projects are not going to be completed on schedule. URA's tender conditions for land parcels are supposed to ensure that developers keep to their specified construction so that supply is quickly brought on-line to balance demand. The twist is that delays in augmenting the supply are more likely to achieve the balance now, if at all. Almost without exception, the URA has given developers extensions based on 30% of the original construction period, but this may still be an insufficient allowance.
The financial squeeze on the developers is also felt by URA. Developers still owe URA S$2 billion out of the S$3 billion committed to the agency in the sales of 1978-1982. Many developers have defaulted on their payments. In 1983, URA did not receive payments of S$81 million for 7 parcels of land. At the beginning of this year, the Minister of National Development agreed to developer's requests for a 3-year moratorium on payments for URA land parcels. Only the interest payments would then apply, in accordance with the conditions of the tender. Even so, some analysts suggest that not all the interest payments may be forthcoming.

2.7 A RECENT "NON-DEVELOPMENT"

Recently, developers in the republic gave a strong indication of their expectations for a worsening property market and a weakening economy. A piece of prime land for commercial development, known as Orchard Square, was put up for sale in March this year. Only one developer made an offer to purchase the 7-acre land parcel situated on the Orchard Road Strip. Before 1985, this land parcel was coveted by a multitude of developers. This event, or what the local press called a "non-event", deserves some consideration as there may be other implications involved.

The owner of the land, a private company called Ngee Ann Kongsi, obtained in-principle approval from the Development Control Division for a 10-storey commercial development.
This valuable site was the object of a legal struggle between its owner, Ngee Ann Kongsi, and the company that it was leased to for 99 years. One of the terms under the Agreement and Deed of Compromise approved by the High Court last year is the engagement of the URA as the sale agent. The URA agreed to perform in this capacity for a percentage of the purchase price. Once again, the sale of the land parcel would be conducted using the tender system. However, URA dispensed with the requirement for scale models; the price bid for Orchard Square was to be accompanied only by the design plans.

The sole developer submitting a tender is the largest development company in Singapore, the Far East Organisation. It is the only prominent developer in the republic that is not heavily involved in the costly URA projects. Although it participated in most of the tenders, it only secured some minor projects. In this most recent case, URA disqualified Far East Organisation's bid on the basis that the required 5% deposit was not posted. The Sunday Monitor reported on 21 April 85 that the developer had bid about S$725 psf for Orchard Square, just 25% of the 1983 purchase price of an adjacent piece of land.

This recent occurrence in Singapore's property market seems to suggest that developers have very little faith left in the profitability of commercial development at this point in time. They are even ignoring the 3 maxims of property
development - location, location, location - since the Orchard Square site is the focal point of the existing tourist and commercial belt. Possibly, developers were so cash-starved that they were no longer able to undertake any developments beyond what they have in the pipe-line. Furthermore, banks were probably not willing to extend more credit to developers for new projects, particularly developers with deficits from undertaking URA projects. However, it is also reasonable to infer that developers were wary of being further involved with the URA. Indeed, with so many developers in financial despair and more closely scrutinised by financiers, doubts are raised about the private sector's willingness to participate in future URA land sales.

Thus, the URA's planning and its use of the tender system appear to have put private developers in financial straits. However, other factors also contributed to the developers' misfortunes. Developers were too pre-occupied with the profit motive to realise that they were bidding themselves into trouble. Speculation and irrational expectations on the part of developers, consumers and the URA pushed prices up to levels that could not be sustained any further. On the other hand, URA can be reproached for not upholding its stated objectives of preventing speculation and balancing supply and demand in urban renewal programme. The setbacks in the programme indicate that URA has inadequately promoted Singapore's urban renewal. There is also reason to believe
that the URA is less credible in the eyes of developers.

I have provided fragmented evidence to show that URA's land sale strategy incorporating the tender system was the underlying mechanism of the property's market sudden rise and fall. The catalytic elements within this mechanism are the marketeers' irrational expectations and speculation. However, this is far from conclusive, and there may be other factors which have yet to be revealed. The chain of effect can be better detailed with some understanding of Singapore's economic development strategies. The next chapter provides a model of Singapore's economic growth. From this, we can obtain an idea of what the government intended by selling so much land so quickly.
CHAPTER 3

EXPLAINING URA’S ACTION

This chapter provides two perspectives for understanding the government's acceleration of the urban redevelopment programme in Singapore. The first considers the long term economic planning of the government and examines the changes in strategies according to the needs and capabilities of the republic. The second gives an insight to the importance of regional political and economic conditions to the republic's economic plans. A 3-phase development model is presented which exposes the pragmatism and opportunism of the government. In the past, the government's entrepreneurial skills have served Singapore very well. The decision to build the mass rapid transit system (MRT) is another enterprising venture by the government. The MRT construction impacts on the urban redevelopment programme as schemes are designed by the government to capitalise the externalities that the MRT creates. The government's optimism for Singapore's modernisation stems from an inadequate assessment of regional economic conditions. Singapore's success story is turning sour because of a turn in economic and political events in the region.

3.1 NATIONAL DEVELOPMENT PLANNING

The preparation of Singapore's Master Plan, the comprehensive physical plan for the island, commenced in 1951 and was approved by the Colonial government in 1958. In 1960, after Singapore attained independence, the incoming government put the Master Plan into operation to regulate the republic's development and provided legislation to revise the plan every 5 years. The periodic
revisions are closely tied to the prevailing economic strategies employed by the government. By the mid-1960's, Singapore's dynamic leadership perceived limitations in the Master Plan, which reflected the Colonial government's conservative policies. In 1967, the government embarked on a major planning project with assistance from the United Nations Development Program (UNDP). In 1971, the project concluded with the Concept Plan as its finished product (Tan, 1972). The Concept Plan is concerned with the long-range strategy for Singapore's development and covers projections over a 20-year period ending in 1992. The UNDP team made these projections based a 1992 target population of 3.4 million people in the republic. The acceleration of the urban redevelopment reduced the projected time frame of the Concept Plan by 4-5 years (or by 20-25% of the expected period). In all probability, the Master Plan, revised in 1975, would have been altered once again by the stepping up of Singapore's urban redevelopment.

Why did the government step up the sales of urban land in the years of 1978-1982? The answer lies in two perspectives. One concerns an internal dynamic incorporated in the long term economic development model of the country. The other focuses on the impact of external factors on the republic's economic development.

3.2 LONG TERM ECONOMIC PLANNING

Up until now, the foresight of the Singapore government was
almost legendary throughout the world; indeed, the economic planning of the island has been used as a model by some Third World countries. Since Singapore attained independence from Great Britain 24 years ago, the republic's economic fortunes have gone from strength to strength. The republic's GDP has averaged an increase of 8.2% over the two decades with inflation rising at half this rate annually. This rate of increase outpaces Japan and is almost on parity with Saudi Arabia. Today, the per capita GDP of Singapore is about $6,400 per annum, which is higher than Spain's and catching up with Italy's. Much of this can be attributed to the government's economic development strategies. The key actors involved in shaping these policies have been the Prime Minister, Mr. Lee Kuan Yew, the recently retired Deputy Prime Minister, Dr. Goh Keng Swee, the Prime Minister's Permanent Secretary, Mr. Ngiam Tong Dow, and the republic's chief economic adviser, Mr. Albert Winsemius.

A conceptual model of the economic master plan is helpful in understanding the economic development of Singapore. The model can be schematically represented by a 3-tier pyramid denoting the 3 distinct phases of the republic's development. In a physical sense, the transverse dimensions of successive tiers of a pyramid are strictly dictated by the size of the base. This physical condition translates to a condition for development in this model. Therefore, the foundations of the development of Singapore
are in themselves constraints for future directions.

EXHIBIT 1: CONCEPTUAL MODEL OF SINGAPORE'S ECONOMIC DEVELOPMENT

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Towards Viability</td>
<td>(1959-1970)</td>
</tr>
<tr>
<td>II</td>
<td>Towards Efficiency</td>
<td>(1970-1978)</td>
</tr>
<tr>
<td>III</td>
<td>Towards Modernisation</td>
<td>(after 1978)</td>
</tr>
</tbody>
</table>

CONCEPT: THE DYNAMICS OF DEVELOPMENT ARE FOSTERED INTERNALLY

* Phase I - Towards Viability (1959-1970)
* Phase II - Towards Efficiency (1970-1978)
* Phase III - Towards Modernisation (after 1978)

Exhibit I presents the conceptual model of the republic's economic development. The next 3 sections outlines the key elements of each of the 3 phases of development.

3.2.1 PHASE I - TOWARDS VIABILITY (1959-1970)

1) Bringing down the high unemployment rate left behind by the British in 1959.

2) Providing rapidly constructed, affordable high-rise housing for the low-income group which represented
about 50% of the population then.

3) Instituting population growth controls to retard the then high fertility rates so that "less can have more".

4) Initiating labour-intensive industrialisation on a large-scale, and promoting the trade and services sectors.

5) Implementing the statutory Master Plan for Singapore's development as spelled out in the Planning Ordinance (1959) controlling all development.

6) Launching a land reclamation scheme to increase land acreage within the island's sovereignty.

7) Using the mechanisms of compulsory acquisition to increase the amount of land banked by the government for eventual phasing into more efficient land usage.

3.2.2 PHASE II - TOWARDS EFFICIENCY (1970-1978)

8) Using the UNDP's Concept Plan as the guiding framework for national development planning, and revising the Master Plan in 1975 in accordance with the Concept Plan.

9) Investing in human capital by upgrading and expanding the educational system, and initiating vocational training programmes.

10) Starting the urban renewal programme in an effort to maximise economic yields of land.

11) Setting the target of housing 90% of the population in government-built high-rise apartment buildings (HDB flats) in densely populated satellite towns.

12) Promoting the tourist trade, expanding the level of
financial services, and boosting the manufacturing sector.

3.2.3 PHASE III - TOWARDS MODERNISATION (after 1978)
13) Switching to capital-intensive manufacturing, faced with a tight labour market resulting from a strong economy coupled with low population growth.
14) Further upgrading of financial services, trading facilities and expanding the tourist industry, with projections for 12% compounded growth yearly in 1980's for the latter.
15) Increasing investment in infrastructure such as a new international airport and constructing a mass rapid transit (MRT) system.
16) Setting the target of the annual GDP growth rate of 8% in 1981-1990 to reach Japan's 1980 per capita GNP by the end of the decade.

3.2.4 IMPLICATIONS OF THE MODEL
The model captures the general transitions that Singapore has experienced in the 26 years of nation-building by its leadership. During Singapore's infancy, the government was concerned with addressing the problems left behind by the British and creating a viable economic infrastructure. By the 1970's, it was obvious that the government had achieved its objectives. Singapore had then entered a new stage in its life where the government looked to sustaining the republic's steady growth. The government identified what it believed to be the factors limiting the prospects for
continued growth to attain an efficient economic regime. At this stage, attempts were made to enhance both the output and cost-effectiveness of the manufacturing sector as one of the cornerstones of the economy.

By the mid-1970's, the government realised that cost-effectiveness could be achieved if the manufacturing industries became capital-intensive. However, manufacturing output would still be constrained by the republic's small labour pool, the result of the government's family-planning policy. The importing of foreign labour could only alleviate this to a small extent. Therefore, Singapore could realistically aspire to be a secondary manufacturing force only, superseded by larger countries such as South Korea, Taiwan and many of the 24 countries of the OECD. On the other hand, the government's ambitions of propelling Singapore to the forefront of the world's financial and commodities trading markets and of establishing the republic as a world-class convention centre are not so remote. The stage for the republic's modernisation was thus set.

In light of the government's pragmatic style of operation, the frenetic release of government land in the urban area can be readily understood. The main intellectual thrust of these policies is provided by political leadership that possesses business acumen. The "businessman" mentality, therefore, pervades the economic planning; such a mentality
can be characterised as acknowledging the virtues of using other investors' money to work out personal ambitions. In fact, this formula has been rather successful since foreign capital has indeed financed much of Singapore's growth. The contribution of foreign enterprises to the republic's GDP rose from 18% in 1971 to 28% in 1981. In URA's 1978-82 land sales, the government solicited an investment of S$8.32 billion (1982 dollars), including construction costs, from the private sector. Foreign developers take up about 40% of this, with the Harapan Group of Indonesia being the biggest investor.

Perhaps, the government's pragmatic vision was that the construction and property sectors are bound to wane as the main engine of the economy, especially in a country that is land-scarce and developing so fast. In this case, a sector of the economy that is bound to decline is used to foster the growth of those that have greater promise, financial services and tourism. Capitalising on the boom in construction, when developers were land-hungry, would seem a reasonable way of ensuring that an abundance of commercial space would be available for the financial services sector. By the same token, more hotel rooms would be available for the tourist industry that was projected to grow phenomenally.

Furthermore, a greater supply of commercial space and hotel rooms, ceteris paribus, would result in lowered prices for these goods. Singapore's commercial space and
hotel rooms are among the most expensive of the major cities in the world. Reduced commercial space rents and hotel room rates constitute an incentive for more foreign companies to establish offices locally and for even more tourists to come. While it is in the interests of private developers to promote the growth of these two sectors to reap more profits, an immense oversupply results in their actually subsidising the financial services and tourist sector. We could imagine that the government subscribes to the notion that economic profits tend to zero in the long run. It then promoted this notion for the case of private developers who had made huge profits from a tight market early in the boom. However, Singapore is experiencing such a fearsome oversupply that many developers are on the verge of collapse, and foreclosure may well occur in the short run.

3.3 CONTINGENT ECONOMIC POLICIES

With this perspective, government action is seen as being very sensitive to regional and global economic and political circumstances. Government formulates ad hoc policies which they perceive to fit loosely into the framework of long term plans. The pragmatic facet of governmental policy-making is fully manifest. The model for economic development can be modified to incorporate the constraints imposed by regional circumstances.
3.3.1 REGIONAL ECONOMIC CIRCUMSTANCES

The stepping up of the land sales happened at the time when the future sovereignty of Hong Kong was seriously in doubt. There was a significant flight of capital from Hong Kong which is the other major financial centre in the Pacific basin. Indeed, the story of Singapore's and Hong Kong's economic fortunes is much like an East Asian tale of two cities. Both are land-scarce countries, predominantly populated by overseas Chinese, possessing no natural resources except their harbours and their people, and
having English as the commercial language. The race by the two countries to be the prime financial centre in Asia has been an intense one and Singapore's government saw Hong Kong's potential fall as Singapore's rise. The government had hopes that the capital flight from Hong Kong would be channelled to Singapore. To capture this foreign capital, it was necessary to create more investment opportunities.

Though the race to be Asia's most important financial centre seemed a two horse affair, both countries faced competition to become the region's main commodities exchange market. Malaysia had been fine-tuning its economic performance over the last decade and its government gave strong indications of trying to establish their capital city, Kuala Lumpur, as a regional stocks and commodities trading centre. Therefore, in the region there are three markets vying for the third spoke of the world-wide round-the-clock trading cycle, London and Chicago being the established centres in the Western hemisphere. Tokyo, Seoul and Taipei are in the same time zone but they are disadvantaged by not speaking English and by over-regulation. Aside from the trading regulations of each of the cities involved, the other crucial factor on which success hinges is the level of infrastructure development and facilities available.

Towards the end of the 70's, China gave strong signals to the rest of the world of opening their doors to global trade. The volume of trade that would be generated by the
emergence of China into world capitalism meant new opportunities for Singapore to leap-frog over Hong Kong. An important comparative advantage for Singapore is that the Chinese dialect officially recognised there is Mandarin, which is also the official dialect of China. Hong Kong's Chinese, on the other hand, are predominantly Cantonese-speaking. The sentiment was that Tokyo would not be able to benefit as much from this as Hong Kong or Singapore, as it is non-Chinese speaking and ethnically different. Furthermore, the Japanese had been China's aggressor in World War II.

While the countries of Southeast Asia were registering significant growth in their economies, the rest of the world was caught in a recession. A host of strategic planners and economic forecasters were indicating that the region of the 80's would be Southeast Asia. Singapore, the economic power of the region, saw this as an opportune time to further consolidate its position by drawing much of the anticipated flux of investments into the region.

Thus, regional events helped set the scene for the government to make a bold push forward in Singapore's urban redevelopment programme. The impetus would be provided by the URA land sales in quick succession in the wake of a construction boom in the country. Allowing for a lag-time of 4-6 years for the proposed developments of individual parcels, the republic would offer a comprehensive range of
facilities demanded by multi-national firms and overseas visitors by 1985. By 1988, Singapore would have one of the most modern commercial centres in the world and be in the position to increase its share of regional trade and financial services.

3.3.2 REGIONAL POLITICAL CIRCUMSTANCES

Aside from the regional economic conditions, the political climate of South-east Asia also affected the government's policy-making. Vietnam's ambitions of expanding into the South-east Asian peninsula probably poses the greatest threat to the region's and, therefore, Singapore's long-term economic prospects and political stability. This factor coupled is by Singapore's mistrust of its immediate neighbours, Malaysia and Indonesia, who are seen as potential antagonists. Racial tensions between different ethnic groups in the region have been defused in the last 20 years but the possibility of such problems can never be discounted. While Singapore is predominantly Chinese and in pursuit of better relationships with China, Indonesia and Malaysia are predominantly Malay and wary of China's hegemony. Both countries have policies to increase the share of their national income and assets of the indigenous majority at the expense of the overseas Chinese.

The government's objective of maximising revenue from the sale of lands to finance infrastructure upgrading could be seen as a measure to conserve the large foreign exchange reserves of the country for more desperate times. By 1980,
Singapore's foreign exchange reserves were estimated at $16 billion. The current estimate is $30 billion, twice that of China's, the world's 9th largest economy. In the event of war or conflict, the foreign exchange reserves would be employed in a game where the stakes would be far more important. In a speech at the National Day Rally in August, 1984, the Prime Minister hinted at such a rationale when he said that the constitution might be amended to prevent Singapore's future leaders from using the reserves except under dire circumstances.

3.4 LESSONS FROM HONG KONG'S MRT CONSTRUCTION

While the construction of the mass rapid transit (MRT) system is generally outside the scope of this thesis, it does affect the urban redevelopment programme. In theory, Singapore's accelerated urban redevelopment was to be mainly financed by the private sector and this would in turn pay for the MRT. Thompson's (1982) analysis of the construction of Hong Kong's mass rapid transit system made apparent some planning strategies which would benefit the public sector. I believe that the government's action in stepping up URA land sales indicates that it was applying such strategies.

Hong Kong's government realised at the later stages of building the mass rapid transit system that the positive externalities engendered by the MRT could be capitalised by a systematic and thorough approach. Sites adjacent to MRT
stations would increase in market value as a result of the increased flow of pedestrian traffic there. Conventional creation of the MRT along existing densely populated corridors would not allow the monetary benefits embodied in the externalities to be captured by the public sector. In such areas, compulsory acquisition of land would not only be expensive and tedious but would also bear political repercussions.

The hotel and commercial developments that had been taking place mainly on privately owned land in the Orchard Road Strip established it as Singapore's tourist and retail belt. Most of the sites in that area that were feasible for development were also in the hands of private developers who had already submitted development proposals for planning approval. Therefore, a re-ordering of the pattern of hotel and retail developments would enable the government to create value in publicly owned areas such as the reclaimed land that is Marina Centre. By selling the land, the public sector would be able to capitalise the value that it had intentionally created.

However, the government's plan to integrate a new commercial and tourist belt into the Central Area is questionable. The Orchard Road Area is still maturing as a tourist and commercial belt in that it possess sufficient capacity to sustain far more amenities and facilities for the tourist and retail industry. Furthermore, there is no
reason to doubt that further upgrading if needed in the near future is not possible. The Orchard Road area was only established as Singapore's tourist and commercial belt 12-15 years ago. The potential of this area has never been doubted by developers, chartered surveyors, and retailers. Indeed, Prof. Motha of the National University of Singapore's Building and Estate Management Faculty believes that this area will be Singapore's counterpart of the Ginza in Tokyo.

Perhaps the government sought to emulate Hong Kong, which succeeded in creating a new tourist belt in Kowloon's Tsim Sha Tsui East across the harbour from the existing one at Queens Central. However, the relevant difference is that Hong Kong's tourist arrivals and retail volume far exceed that of Singapore. In addition, Hong Kong's internal market is far larger since its population is at least twice as large as Singapore's. Thus, the government's plan to create a new tourist and commercial belt implies weak planning and/or opportunism on the part of the government.

3.5 "OPPORTUNISM" COSTS
The government has applied the principle of "making somebody else's money work for you" which seemed both an efficient and effective way of sustaining growth. However, the opportunism of the government and the quick shifts in economic planning recently have made Singapore's economic development vulnerable to changes in regional
circumstances. As such, the ambitions of the

government for Singapore's urban redevelopment programme

has been halted by several regional events. Firstly, Japan

and Australia have continued to increase their shares of

the financial services market in the Pacific basin,

primarily at the expense of Singapore. Secondly, Hong Kong

has also rebounded back into this market and is enjoying a

steady recovery with the resolution of the sovereignty

issue.

Thirdly and most significantly, tourism has dropped causing

much embarrassment for the Singapore Tourist Promotion

Board which had projected a 12% compounded increase in

arrivals for the rest of the decade. Two factors

contribute to this counter-trend. One is the strong

Singapore dollar kept high by the government because

Singapore is a net importer that is currently building the

S$5 billion MRT, using foreign labour and imported

materials. While this factor could have been predicted,

the other was totally unexpected - the levying of travel

taxes and excise duty on citizens of Indonesia and Malaysia

returning to their own countries. Travellers from these

two countries comprise the majority of the visitors to

Singapore.

Even if some events which transpired could not have been

anticipated, the government's push for Singapore's rapid

modernisation still seems to have been ill-considered. The

policy directives to the URA to accelerate urban renewal
appear to have been predicated only on best case scenarios. The government was overly optimistic in counting on high rates of growth in the key sectors of tourism and financial services. The most telling example of unfounded optimism is STPB's prediction of the very high tourism growth rate through the decade. STPB's forecast certainly played a vital role in URA's planning for so many hotel projects. However, the fact that the government readily accepted the growth forecast and immediately took measures to accommodate the growth implies that it did not perform an adequate economic impact analysis. This notion finds support from the disclaimer later made by STPB's chairman, Mr. K.C. Yuen, of the impossibility of making accurate long-term projections "with so many variables involved".

The oversupply of a wide range of property developments in the form of URA projects is the result of a government gamble that did not pay off. The immensity of the oversupply is evidence of the government's taking such a risky gamble. The collapse of the local property market has reverberated through the economy, and this is discussed in the following chapter. Singapore is experiencing a depression in contrast to the strengthening economies of its neighbours in Southeast Asia. The projected real growth for Singapore this year is 5.9% against an expected inflation rate of 3.8%, which will be the lowest growth rate since 1975 - when the local property market was also at a trough, and most oil-importing countries were in a
recession as result of 1972's oil crisis. The labour market is slackening and the urban redevelopment programme has come to a standstill. The Sale of Sites Programme has been dormant for 3 years. The win-win situation, or at very least the win-no lose situation, envisioned by the government is turning out to be a lose-lose situation.

1 Nomura Research Institute projections for 1985 compared with GDP figures from Economic Survey of Singapore, 1984
The forces that shaped the property cycle are the government's unfounded optimism for growth, marketeers' irrational expectations and speculative activity. Exacerbating factors were URA's land sale strategies and adverse shifts in the regional economic climate. The lack of information flow resulted in uninformed decision-making by the private sector. Because of this, there was no opportunity in turn to critically review the public sector's plans and basis for making such plans. The property market's collapse impairs the economic and political climate. The trade, financial and construction sectors all face substantial problems. Members of Parliament have critiqued the government's rationality in accelerating urban redevelopment. The government is trying to shift up the equilibrium price and quantity in the property market. In so doing, the government is enhancing market volatility as the market is prevented from operating under established rules. Intervention, through changing the regulatory order of the market, also creates more uncertainty in Singapore's urban redevelopment.

4.1 HOW THE PROPERTY CYCLE WAS SHAPED

The analysis of Singapore's economic development model and the understanding of the URA's system of land sales together yield a picture of how the property cycle was shaped. A chain of causality can be constructed:

1) The government elicits inaccurate predictions for growth in key sectors. Exogenous factors such as favourable regional circumstances and increase in
regional tourism would lead to a rise in external demand for Singapore's services. The implications of this is the government's notion that the time frame set for Singapore's economic and physical development could be shortened substantially. An inadequate economic impact analysis is the root cause of this optimism.

2) The government gives policy directives to the URA to accelerate the urban renewal programme and to plan in accordance with demand projections. The government makes the decision to construct the MRT as it believes the system to be vital for successful expansion of Central Area. The government conceives the idea: the renewed city that would need this infrastructural upgrading would, in its redevelopment, generate funds to build the MRT. The government's opportunism commits it to extracting finances from the private sector for this purpose.

3) Developers from the private sector unquestioningly embark on the projects. The government does not have to provide new incentives for them to do so. Developers are motivated by expectations of significant profits. However, developers have irrational expectations because of lack of information exchange among themselves. The tender system is the URA's device for extracting premiums on land prices from developers. The tender restricts information flow, and also adds substantial costs for the developer to the development process.
4) Higher costs of development are spread to consumers of property. With each land sale, new records are set for prices, which then fuel demand, resulting in speculation. Consumers' willingness to pay reach unjustifiable heights. Developers see more profit and will pay more for land. A self-fulfilling cycle is formed. The exacerbating factor is the land sale strategy of the URA.

5) The market correction comes as consumers realise that property prices are way above the latter's intrinsic values. Worse yet, the market now sees that demand projections were off the mark and an immense over-supply is imminent. Shifts in the regional political and economic circumstances which are unfavorable to Singapore occur, and catalyse the fall of the property market.

Thus, the interplay of the government's optimism and opportunism and the private sector's unquestioning belief in government forecasts and long-term economic planning provided the impetus for Singapore's modernisation. However, there remained a fundamental flaw - an unfounded conviction that there would be demand for all the developments. URA's timing of the land sales and its use of the tender system provided the boost to the machine to accelerate itself into inevitable problems.

Developers were infected by the government's optimism
because of the top-down scheme of the urban redevelopment programme. The flow of information proceeded only in a downward direction. Developers were not able to exchange information freely among themselves as well as participate in a dialogue with the government. For this reason, both the developers and the government were denied the possibility of jointly reviewing the government's economic forecast.

Therefore, a scheme with free information flow for urban redevelopment might possibly not have led to the sudden rise and fall of the property market. No doubt, the urban renewal programme in Singapore is suffering some setbacks, but this may not be adequate persuasion to the government to allow private sector participation in planning. However, the collapsed property market has affected Singapore's economy to a large extent. Furthermore, there are also repercussions on the local political climate. The following sections account for the severe effects of the property market collapse on the economic and political system. This should draw attention to the need for private sector involvement in planning for Singapore's development.

4.2 THE STUMBLING ECONOMY

Basically, the collapsed property market affects Singapore's economy in 2 ways. The growing glut of property, particularly URA's hotel projects, impact adversely on the trade sector. Depressed property prices
have negative effects on the other major sectors of Singapore's economy: the financial and business services, manufacturing and the construction sector.

4.2.1 THE TRADE SECTOR

Hoteliers are preparing for leaner times as more and more evidence of the hotel industry's declining profitability appears. The Business Times (Singapore) reported on 25 April 85 that there was an almost "unmitigated gloom" in the hotel industry last year. With an average occupancy rate of 75.5%, all but 2 hotel groups decreased their earnings per share in 1984. The occupancy rate is expected to drop further to about 62% in 1985 as several URA projects and the government-controlled Development Bank of Singapore's Raffles City bring about 2000 more rooms online though the year. The hotel industry is one of the key industries in the largest sector of Singapore's economy, the trade sector. The excess capacity of the hotel industry, therefore, is detracting from the efficient running of the economy.

Another component of the trade sector which is affected by the collapsed property market is the trading of stocks and shares. The local stock market was lackluster in 1984. The Asian Wall Street Journal on 7 Jan 85 quoted stock analysts as saying that the prospects for many publicly traded companies remain troubled primarily because of depressed property prices. Over 1984, the Stock Exchange of Singapore's All-Property Index which comprises property
stocks shed 19%. The strength of the stock market is taken by both foreign and local investors to indicate the strength of the local economy. The weakness of the stock market, thus, further dampens Singapore's flagging economy by affecting the confidence of investors. This in turn undermines property demand all the more in a self-perpetuating spiral.

4.2.2 THE FINANCIAL SECTOR

The substantial fall in property prices gave the banking system a rude shock since 25% of all bank lending in Singapore finances property deals. Furthermore, 60% of all loans made by banks operating in Singapore are secured against land and buildings, according to Hoare Govett (Far East).¹ The banks' valuation basis for properties, on which loans are made, has progressively slid down since 1982. The Sunday Times reported, on 17 Mar 85, that banks have about S$7.3 billion in building loans at a time when developers are hard put to sell off their properties. The banks have their hands tied, however, as additional pressure on developers to provide more security (or collateral) may cause a "domino" effect. Developers, contractors, sub-contractors and whoever else down the line would simply cave in. Banks might then be the reluctant owners of a number of URA projects including the prestigious developments such as Marina Square, Rahardja

¹ The Economist Magazine, 4 Feb 84
Centre and Gateway.

4.2.3 THE CONSTRUCTION SECTOR

The construction industry, directly linked to the property development sector, is contracting as a result of the private sector slow-down in building. This contrasts with 1979-83 when the construction sector was one of the fastest growing sectors of the local economy. In 1983, it was the second largest contributor to the increase in Singapore's GDP because of on-going projects initiated at the height of the boom. However, the value of construction contracts awarded, particularly in the private sector, has decreased since 1982-83 (Economic Development Board, 1983).

In the last 10 years, construction activity accounted for 5-7% of Singapore's GDP, but this proportion underestimates its importance to the economy. As is true for any free market economy, the multiplier effects of construction through the economy are very significant. For example, Singapore's manufacturing sector grew in 1980-83 partly because of the increased output in industries producing bricks, tiles and cement because of the construction boom then. There are no detailed studies in Singapore which quantify the effect of a construction slow-down on the economy. However, such a study has been performed for the USA giving an idea of the importance of construction to a country's economy. Grebler and Burns (1982) found that increased construction activity lead or coincided with
increased growth in USA's GNP over the period 1950-1978. They also found a correlation between decreased construction activity and troughs in the USA's GNP cycle. Construction in the USA accounted for about 11% of the GNP over the period of their investigation.

4.3 POLITICAL REPERCUSSIONS

The parliamentary sessions of 1985 have been chequered by heated debates in the House of Parliament over government planning. Members of Parliament raised the issue of the policy directives that led to the immense volume of the URA land sales. The Ministry of National Development was at the receiving end of these questions but was unable to provide answers to the satisfaction of the backbenchers. This prompted the Members of Parliament to ask the Minister if a Master Plan for national development truly existed. In their opinion, national development revolving around the urban renewal programme appeared so haphazard as to suggest that there was no adherence to a long term plan.

The Members of Parliament who level the harshest criticisms against the development planning of the Ministry of National Development and the URA are, surprisingly, not either of the 2 opposition members in Parliament. They comprise a disagreeing faction of the ruling party, a phenomenon unknown till now. Furthermore, the government has never before had to suffer the indignity of responding to charges that long term planning is not being practised.
Mr. Toh Chin Chye, the former chairman of the ruling party and one of the most outspoken backbenchers in parliament, has been rallying against the "burgeoning government intervention in the economy". In the Budget debate on 13 Mar 85, Mr. Toh made the following remarks, which express the sentiment of the disagreeing faction:

The government hopes that the private sector will be the engine of growth in future years. But the private sector is running out of gas. This hope will be a pious hope if the government does not first set its house in order.

Three companies are being liquidated every 2 days and private sector deficits faced are caused by structural, not cyclical, factors.

4.4 EFFORTS TO PROP UP THE MARKET

In recognition of the resounding impact of the collapsed property market on the economy, the government recently embarked on several ways to give new life to the market. These measures are either in the form of providing incentives to consumers to invest in property or giving concessions to developers. The giving of incentives to consumers raises demand, while making concessions to developers lowers costs of supply. In the latter case, developers are able to supply property at lower prices without incurring additional losses. Theoretically, the market would equilibrate at a higher price and at a greater quantity consumed.
4.4.1 RAISING THE DEMAND

In the past, owners of Housing Development Board (HDB) apartments (government-built housing) could only invest in commercial and industrial property valued at less than $350,000 for their own businesses. The statutory limit for investment was $250,000 for new applicants of HDB apartments. On 16 Feb 85, the HDB removed these restrictions. The First Deputy Prime Minister, Mr. Goh Chok Tong, said in Parliament that the removal of such restrictions would "maximise their creativity" and would benefit society as a whole. He further implied that the restrictions had interfered with people's investment decisions.

On 7 Mar 85 in Parliament, Mr. Goh said that the government might even allow citizens to make use of their savings deposited with the Central Provident Fund to invest in what he calls "sound and secure" properties like flats, shops, offices and factories. The Central Provident Fund (CPF) is the largest enforced savings scheme in the world. A quarter of a worker's pre-tax pay packet in Singapore goes into the CPF mandatorily. His employer adds to the worker's deposit by contributing another 25% of the wage to the CPF under the worker's name. Current legislation stipulates that a citizen may only withdraw his CPF deposits at the age of 55 years and above. With government approval, however, a citizen may use his deposits to buy his first home even before the age of 55. This rule may
soon be amended. Mr. Goh informed Parliament that the government "is looking into ways in which CPF depositors can withdraw funds to buy, perhaps, a second, a third piece of residential property or invest them in secure investments like commercial and industrial property."

Another government measure to increase the propensity of consumers to invest in property is offering credit at a lower interest rate. On 25 Mar 85, the government-owned finance company, Credit POSB, cut its mortgage rate for private housing and commercial loans. In all probability, the government intended to spark off a round of rate-cutting by other banks and finance companies. The government announced this move as being in line with its objective of promoting home-ownership and achieving a 100% home-owning society. A round of rate-cutting did not result as other finance houses and banks obtain their funds at greater cost than the Credit POSB. However, the finance companies and banks were pressured into creating financing packages with more flexible terms in order to maintain their market share of property loans. The Sunday Monitor reported on 28 Mar 85 that a number of major banks did, indeed, take this course of action.

4.4.2 LOWERING SUPPLY COSTS
The government has granted waivers of penalties to developers for delays in URA projects. Otherwise, developers are obliged to pay liquidated damages to the URA
under the agency's conditions for tender. At 2% of the land cost per month of delay, these penalty payments are felt by developers in sound financial health, let alone those in lean times. The government has also given extension periods equal to 30% of the scheduled period for construction. For the major projects which involve a 5-year construction period, the extensions given would be up to 18 months.

In addition to waiving penalties and granting of extensions, the government has decided to freeze payments for purchased land to the URA. The government announced, a 3-year moratorium on payments in March this year. Such a move is significant in giving a life-line to developers involved with URA projects. The URA estimates that its revenues will be about S$53,000 this financial year as opposed to S$408 million in the 1981-82 financial year. Most developers undertaking the major URA projects had made their huge financial problems clear to the URA over the last year. These 3 measures which relate specifically to developers of URA projects were necessary since a number of developers might have folded, including some major ones, or simply abandoned the URA projects. The government's fear of the urban renewal programme becoming a national embarrassment is evidenced from the fact that it did not give comparable concessions to other developers.

The government's main concession to developers in the private sector as a whole is in making provisions to
improve the developers' cash flow. The Ministry for National Development (MND) introduced a new set of rules in January 1985 which comprises amendments to the Housing Developers (Control & Licensing) Act, the Housing Developer's Rules and the Sale of Properties Rules. The effect of these amendments is to solicit progress payments from buyers of property within a shorter time frame. Progress payments are made at each specified stage (or milestone) of the project schedule; the completion of the foundation work is one such milestone. With the new rules, the buyer now has to forward 20% more of the agreed purchase price when MND issues the Temporary Occupational Licence. The MND implemented this new progress payment schedule after a year of review. However, what the Ministry has given to developers with one hand, it takes away with the other. The Ministry had to impose tighter control on quality and the completion date of projects to give buyers more protection. Otherwise, buyers would have raised their voices in protest.

4.5 EXACERBATING MARKET VOLATILITY
The government is changing the regulations for property development and purchase in an effort to shift demand and affect the costs of supply. Effectively, the government is transforming the nature of the property market in Singapore. Government intervention can be a powerful device for modulating the ups and downs of the market but
There is no text material missing here. Pages have been incorrectly numbered.
incursions into the property market. The government's cure of market intervention holds no guarantee for success, but introduces greater uncertainty in property development. The old order of planning for urban redevelopment must, therefore, be changed. The following chapter discusses the merits of a collaborative planning effort as a replacement of the old regime.
CHAPTER 5
THE MERITS OF COLLABORATIVE PLANNING

Collaborative planning for urban development promises many benefits which strictly public sector planning cannot. The benefits are imparted to government, developers, society and, thus, the economy. Economic benefits are derived from reduced transaction costs in the market through a greater flow of information. The government, in being a partner of the collaborative planning body, also actualises its potential in being a facilitator of social learning. Collaboration in planning ensures that a more efficient and stable regulatory framework for property development is possible. Uncertainty is then better dealt with because the endogenous factors governing price and costs can at least be determined. Decentralisation is necessitated but a possible benefit for the government is a larger power base. Furthermore, collaboration provides an avenue to nation-building through grooming new leaders from the private sector. Singapore's private developers are willing to participate in such an effort to stabilise its costs of operations. There are also indications that Singapore's new leadership may promote this partnership.

5.1 COLLABORATIVE PLANNING
A collaborative planning effort for urban redevelopment is one that has participation from both private and public sectors. Such a body would be primarily concerned with the urban renewal programme since both sectors have substantial interests in it. There would be joint planning of how much government land is to be released and at which time periods. Both sectors can come to an agreement on the type
and scale of developments that they assess as being demanded by the market. This is where collaboration in planning for urban redevelopment differs from the current practice of "co-operation" in urban redevelopment. Currently, developers have no idea of the amount of land that the public sector intends to release over a given time. Nor do developers know in advance the planned usage and intensity of development for the released land parcels. It is only just before each URA land sale that developers know which sites are up for sale and the respective planned developments of each site. For developers to have more rational expectations of the market, they must have a feel of forthcoming changes in land supply for private development. Collaborative planning provides a medium for the exchange of ideas on development between the private sector and government. The narrow scope of this thesis does not permit me to delineate a structural framework for collaborative planning. However, in the following sections, I shall discuss the significant benefits that such a planning mechanism holds for Singapore's urban and national development.

5.2 CONTROLLING COSTS
The previous chapter discussed how the government was enhancing the volatility of the market contrary to its intentions of creating stability. To the extent that the property sector has such a great influence on the local economy, its fluctuations should certainly be dampened.
Where public sector planning has led to and further aggravates the cyclical nature of property development, collaborative planning may be a moderating force.

There are high costs in the expansion and contraction of the economy as firms enter and exit. These costs are borne by society. In Singapore's case, the resulting increase in the costs of doing business can lead to a loss of its competitive edge in the export and trading market. In East Asia, only Japan has a higher cost for operating an enterprise than Singapore. The republic is so heavily dependent on trade and commerce that in order to sustain growth, it has to continually increase its market share.

It is vital, therefore, that the republic should endeavour to control these cost increases, especially at a time when its economy needs streamlining. Efforts must first be directed at the "fundamental" sector. **The need for a more informed private sector participation, centred on an exchange of ideas with the government, is more critical than ever.**

A collaborative planning effort in the urban redevelopment of Singapore promises many economic benefits. Certainly, one benefit is the reduced costs of transactions. According to Miller (1982), transaction costs have 2 components: (1) search and information costs and (2) time on the market. Time on the market is certainly a significant cost factor in Singapore's property market.
Developers are unable to move the sluggish sale of properties in the extremely weak market conditions. The time on the market translates to opportunity costs for developers. In addition, Miller says that markets with significant transaction costs are characterised by price dispersion. As we have seen earlier, price dispersion in the local property market is brought about by URA's tender system. If information continues to be either restricted or costly to acquire, then the price dispersion will persist. The economics of information theory suggests that marketeers who are able to gather more information will derive more gains or incur less costs.

Hardoy and Satterwhaite (1975) made note of an observation that "perhaps urban disturbances or riots have not occurred in Singapore because the present economic prosperity has enough crumbs even for the urban poor." Of course, the urban poor is an almost extinct group in Singapore, but continued mishaps in planning may well play havoc with Singapore's economy. Social upheaval, which has been typical of many countries in the region, might then be a reality in Singapore.

5.3 THE INFORMATIONAL PROCESS
When the government intervenes in the local property market to affect the nature of the market and property development in Singapore, it is casting itself in the role of the nation's experimenter. Schon (1971) describes such a role
as seeking first to identify the correct solution, then to train society in its adaptation. Schon believes that if a government is to solve new public problems, it must create the systems for doing so. Furthermore, government must discard the structure and mechanisms that grow up around the old problems. In Singapore's case, it is evident that there are difficulties with the traditional planning models and the information systems incorporated within. Wilensky (1967) asserted that these are problems which are inherent in the structure and the process of bureaucratic organisations such as government. The truth comes painfully close for Singapore's urban redevelopment. It is the mechanisms by which urban redevelopment is promoted and managed that engendered the problems in the first place.

Schon says that government must then design and implement new institutional processes, through which new problems can continually be confronted, and old structures continually discarded. He believes that government should be an informational process. With a collaborative planning effort, both Singapore's government and its chosen implementers of the republic's development, the private sector, will embody this informational process. The socio-economic and the socio-political constraints under which the public sector operates will be evident to the private sector. Inversely, the private sector's financial constraints will be appreciated by the public sector. The government would then be obliged to organise and transfer
within its system the data and the directives on which policies and programmes are based. The private sector would likewise be better monitored. The government can then institute a more stable and efficient regulatory framework for property development. Speculative activity by marketeers could then be suppressed. This would be a worthy accomplishment, in view of speculative demand's large role in fuelling price increases in the property market.

Many of the endogenous factors which govern market movement could be jointly specified by the government and private sectors. No doubt, a collaborative planning effort would still work with unpredictable exogenous factors, which also affect market movement. Even then collaborative planning will deal with uncertainty more adequately than strictly public sector planning. The immediate benefit is that decision-making by both the private sector and public sector will be less of what Lindblom calls "the science of muddling through". This can only bear favourable consequences for Singapore's economic and physical development.

Allowing for the fact that cycles will still persist reflecting changes in global events, the government can then act in tandem with the private sector to modulate the cycles. Public sector construction can then be jointly planned as countercyclical activity. This contrasts with
the government's procyclical construction of the
prestigious urban satellite, Raffles City. The government
is now faced with the headache of filling the tenancy for
this development, which will be completed before the end of
1985. Better use can be made of public investment in
construction, and collaborative planning allows the co-
ordination of both sector's activities.

5.4 DECENTRALISING FOR NATION BUILDING
A collaborative planning body for urban redevelopment
requires that the private sector be able to review and
affect government policy-making and implementational
strategies. Essentially, this is a step towards de-
centralisation of government. Singapore's government has
already a mild form of decentralisation by setting up
quasi-government agencies such as the URA. The government
is delegating managerial responsibility of urban renewal to
the URA but its policy directives still shift the course of
URA's actions.

The desired effect of delegation is the creation of a
business-like organisation, exemplified by the URA. The
government's foremost objective in the management of urban
renewal is efficiency. However, the many setbacks of
urban redevelopment, which have in turn adversely affected
the local economy, hardly attest to achieving efficiency.
Minor modifications of the URA's strategies for managing
urban renewal are not likely to improve efficiency to a
significant extent. This becomes apparent in the light of organisational behaviour. The URA was created to be a business-like organisation; as such, the agency will seek to perpetuate its organisational existence and goals. The URA cannot help but seek to maximise revenues for the government, whether or not the government continues to be opportunistic.

A collaborative planning body would restrain the public sector from being a predator on the private sector. Such a planning body for urban redevelopment would be predicated primarily on devolution, a form of decentralisation. Devolution entails the creation of a unit of government with a distinct legal status from central government. The boundary separating the collaborative body from government is drawn from the former's ability to plan and not legislate. However, it is essential that government can hand out responsibility effectively. For all intents and purposes then, the collaborative planning body must be a planning satellite in government. Thus, a re-arrangement of government structure would be necessary to ensure that responsibility is adequately assigned. This re-arrangement is in effect deconcentration, which is another form of decentralisation. The collaborative planning body in lying within government makes it accountable to society. Its distinction from government enables it to act more quickly to any societal call for changes in planning.

Singapore's government structure can accommodate this
addition because the nation is young and still imbued with the
dynamism of its leadership. The private sector would then be made to bear a social burden by being answerable to
society. However, it is compensated by the benefit of its financial burden being reduced through less risks in the
development process. Rondinelli et al (1983) observes that devolution enhances productivity and is an avenue for well-informed participation. The training in administration, afforded by decentralisation, will establish a new breed of leaders from the private sector for Singapore. This breed of leaders would have cultivated a sense of nationalism and social awareness while possessing enterpreneurial skills. This is vital because of Singapore's prosperity is contingent on its leadership's enterprise. The fact that the government is experiencing a transition of leadership, as the pioneers retire, drives the point home.

Decentralisation is weakened by failure of the central government to transfer financial resources (Conyers, 1983). However, the collaborative planning body does not result in the private sector bearing less financial responsibility for urban redevelopment. By all accounts, the status quo in the financing of development will be preserved even if risks are reduced for the private sector.

The prerequisite for the realisation of decentralisation is that central government must enjoy a strong power base. Singapore's government fulfills this prerequisite. The
same government has ruled Singapore since the country's independence from the British. Furthermore, no drastic political turnarounds are likely in the near future as the opposition is disorganised. In the 1984 elections, only 2 were voted in by the electorate. Singapore's Parliament currently has 79 seats. However, the government was jolted back to earth because it captured 12\% less of the popular vote than in 1980. The paradox of decentralisation is that the power base is enlarged. It would seem that political prudence may dictate a consideration of a private sector-public sector collaboration in planning. Rondinelli and Cheema (1983) advise governments not to think about decentralisation but just to do it. By the same token, Singapore's government should be prompted to set up a collaborative planning body as a vehicle of consolidating its power.

5.5 LEARNING THROUGH COLLABORATION

The promotion and management of the urban redevelopment programme in Singapore can also be seen to take the form of the centre-periphery model. The government and its agency, URA, lie in the centre and the private sector in the periphery. If evaluation tends to be limited to the role of establishing the extent of peripheral conformity with central policy, as Schon (1971) says, barriers exist for the government to learn from the private sector. This is, in itself, an undesirable state of affairs. However, there are further consequences of this barrier to learning. The
significance of the private sector's role for developing property for society's consumption means that the private sector is attuned to the needs of society. Thus, Singapore's government in being unable to learn from the private sector is further impeded from learning from society. The government cannot then know the requisites of the people with regard to Singapore's urban redevelopment.

Current problems in the urban redevelopment programme could also be read as reflecting a gap in the government's understanding of its people. The persistence of centralised planning could conceivably result in a form and function of a city that does not increase the welfare of its users. Indeed, the government's image of Singapore as the space-age garden city has met with some cries of derision. It would be wise to heed Turner's (1968) words of caution. He said that a government's influence on development will be proportional to its understanding of ordinary people's needs and its ability to work, not for them but, with them.

5.6 WILLING PARTNERS?

Singapore's developers have made many appeals to the government for assistance in recent months. It is clear, therefore, that violent movements of the property market are far from beneficial to them. There is every reason to believe that they are ready to collaborate in planning with the government. The top-down scheme of urban
redevelopment in Singapore has not served them well thus far. The stabilisation of the property cycle, through collaborative planning, may mean less profits for them when the market is at its strongest. However, stabilisation also ensures that losses are cut down in weaker markets, since the depression will be milder. Developers in Singapore have begun to realise that the short-run losses can be extremely significant. To hope for huge profits when the peak comes again is an idea that is now far removed from their minds. They have already seen that, in the short-run, some of them are compelled to exit from the market because of foreclosure by creditors.

There are already calls by the private sector for a fore-runner to a collaborative planning body. In April this year, the Institute of Surveyors and Valuers urged the set-up of a consultative committee to look into the dangers of "wild fluctuations in property prices". The Institute suggested that the committee should comprise representatives from the public sector and developers along with it. The Institute said that the committee should formulate a strategy to ensure that future price variations are gradual rather than precipitous.

Friedman and Hudson (1974) observe that any lasting change in process and structure must come from within the organisation. Far-reaching changes in awareness, attitudes and values on the part of its constituents are
involved. This is the operating principle of organisational development. The self-transformation is initiated through learning and, in turn, the new process leads to greater learning. It is evident that the government has realised that it has made some errors of judgement in its urban redevelopment policies. In his Budget Speech of 9 Mar 1985, the Finance Minister, Mr. Tony Tan said:

"It is vital that we utilise our limited supply of land as efficiently as possible. The most effective way to ensure the most optimum use of our land resources is, as far as possible, to allow market forces to dictate the allocation and pricing of land. We should try to remove bureaucratic hurdles which distort the economic use of land.

As the major owner of land in Singapore, Government should ensure that there is an adequate supply of land in order to prevent prices from escalating. But Government should never release too much land at any one time so as to create a property slump. Until the demand for property catches up with the supply that is in the pipeline, I see no need for government departments, or statutory boards, to embark on new commercial or office developments."

In a subtle way, the Finance Minister was blaming the top-down scheme of urban renewal programme for depressing the property market and the resulting economic slow-down. Clearly, he is pointing out the inadequacies of the government policy to accelerate urban redevelopment and URA's management of the programme. The Minister made a significant statement that "policies which were correct, when we were in the early stages of development, are no longer appropriate, now that we are on the verge of
becoming a newly industrialised society." The Minister is one of the second echelon of leaders, who will steer Singapore's development path when all the members of the old leadership have left the political arena. If he voices the thoughts of the incoming leadership, Singapore's government might well be a willing partner in a collaborative planning mechanism.
CONCLUSIONS

Abrams (1959) said that "there is no doubt that planning by the state, whether such a state be monocratic, fascist, or communist, can sometimes work miracles." He contended that:

with state planning, there is more accuracy in the forecast and in the product. The state decides what is good and what is needed, and somehow everything and everyone is expected to fall into line as projected because the whole economy is planned.....

To a large extent, this describes Singapore's success story in the first 20 years as a nation. Thereafter, the government's ambitious plans for Singapore took on a scale that invited difficulties for ordered and smooth urban development. Forecasting exogenous factors, which sustain growth in the externally-oriented economy, is no easy task. The government were badly off-track. In hindsight, it is easy to criticise the government's misjudgement. However, the inescapable fact is that "to err is human". The call for collaborative planning is not to address the problems in making predictions. Instead, it is to correct the system defects that exacerbate the intensity of these errors. It is to ensure that there are ways to deal with errors if and when they are made.
Collaboration in planning is a check against the government's engaging in the real estate business where the government monopolises the main factor of production—land. After all, the welfare motive that justifies the government's forays into the property market, resulting in financial deficits for the private sector, is dubious. If anything, the welfare of society has decreased with higher transaction costs and a host of under-used buildings. Collaborative planning ensures that the private sector can, to some extent, "regulate" the government's abuse or misuse of its monopoly. A bi-directional regulatory feedback mechanism exists, simultaneous with the information flow across private and public sector.

Private sector and public sector will then restrain, not sustain, each other's speculative tendencies. As long as the government continues to be the real estate dealer par excellence, it or its agency, URA, will always be tempted to devise ways to extract premiums on land. The need for this checking mechanism is, thus, all the more important. Collaborative planning is the only viable recourse insofar as there is no possibility of the government relinquishing its land bank.

The relevant question is then: "How can the collaborative planning mechanism stand up to the government's ideology for government to accept it?" Certainly, the Finance Minister has spoken about the need to restore the market as the meeting place of the supply and demand of
land. However, a monopoly operating in free market conditions nevertheless entails deadweight losses to society. The government, which has been put in power by the people as caretakers of their welfare, cannot ignore this economic fact. Thus, when the free market fails to allocate equitably to society under monopoly conditions, collaborative planning which dampens the monopoly power must be considered by policy-makers.

Students of government might also have serious reservations about the intended consequences of collaborative planning. In their minds, collaborative planning could lead to collusion between private and public sector. However, Singapore's government has an impeccable record of clean government. In the past 26 years, it has shown tenacity in preserving national interests. It is definitely not in Singapore's interests that land and property prices should be kept artificially high through collusion. Foreign investors would be discouraged from venturing into Singapore. The country would lose its competitive edge as an exporter of goods and services because land and space, as factors of production, would be too expensive. Thus, collusion by the private and public sector may result in stable and high property prices but the trade-off made here would be higher costs of production. Collaboration without collusion, on the other hand, ensures that the property market is stable and that prices never rise or fall too much.
Though the government's focus on the ills and the cures of accelerated urban redevelopment is different from mine, I believe that collaborative planning may yet be a reality. Naturally, the process of instituting such a mechanism is likely to be incremental. Still, the statements of the second echelon leaders indicate that there is a new mentality in the government - one that is more liberal than that of the old leadership, and one that would adopt new forms of planning and decision-making. The setting up of a high-level 12-man Economic Committee, comprising 9 members from the private sector, in April this year exemplifies the point. The Economic Committee is charged with the task of reviewing the government's 10-year Economic Development Plan for Singapore for this decade. Sub-committees will also be formed to conduct detailed sectoral reviews of the economy. Clearly, this represents a move towards some collaboration in planning for urban development.

Furthermore, the government's drive for computerisation throughout Singapore can enhance the efficiency and effectiveness of collaborative planning. Computers are valuable tools for the compiling of data and information from both sectors. The collaborative planning body will then have a data-base of past, present and future developments for forecasting purposes. Historic and present vacancy rates and purchase prices of land and property would be featured in the data-base. This information can be freely disseminated to developers in and
outside of Singapore. The vital free flow of information is, thus, facilitated. Furthermore, there is now a wide range of computer packages which enables sophisticated forecasting and market analyses to be quickly and inexpensively performed.

Land is finite and, thus, a scarce resource. In the little island republic of Singapore, land is much more so of a scarce resource. It is desirable that land is utilised in such a way as to give the country the greatest money and social benefits. Collaborative planning in Singapore's urban development may be a possible mechanism of ensuring this optimality.

Towards such an end, there are some areas which could be further researched to gather more support or disprove the viability of collaborative planning. The URA's tender system, an exacerbating agent of the cyclical nature of property development, could be the object of investigation. It may be interesting to quantitatively account for the costs built into the development process and examine how much of this is spread to society by URA tenders. A comparison of the tender system and the auction system for land sales may offer a perspective on seeing the costs and benefits to society of each system. The Hong Kong government employs the auction system for land sales. A comparative study of urban development in Hong Kong and Singapore may highlight significant differences in policy-
making and planning, with the land sale systems as the unit of analysis.

The viability of the collaborative planning body depends largely on this mechanism being able to operate in the existing political and legal framework of Singapore. The regulations of property development are a component of the legal framework. Legislation relating to land, especially compulsory acquisition and zoning, is also part of the framework. Research should be directed towards establishing which reforms are needed for collaborative planning to be effective, and what is the likelihood of these reforms being made. Furthermore, an investigation should also define constraints under which a collaborative planning body would operate.
APPENDIX A

The main map of Singapore shows the location of the Central Area and the URA sites sold outside this area (source: URA Chronicle of Sale Sites)

Singapore has one of the highest population densities in the world. Over 2.5 million people live on an island of 618 sq. km. in area or about 4,000 people per sq. km.

The Central Area, which is the central business district of Singapore, is in the south, where trade and commerce has been established from Singapore's earliest days.

Most of the URA projects are in this Central Area. However, some projects are widely spread, from West Coast to Ang Mo Kio roughly in the centre of the island, to Changi on the northeast coastline.

(source: MND)
APPENDIX B

The maps show the URA sites sold in the Central Area and the Orchard Road Strip. In the upper map, Marina Centre is bounded by Marina East and Marina South, it is not labelled.
### APPENDIX C

#### SUMMARY STATISTICS OF URA SALE OF SITES PROGRAMME

<table>
<thead>
<tr>
<th>Sales</th>
<th>Year Launched</th>
<th>Site Area (sq m)</th>
<th>Floor Space Generated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Office (sq m)</td>
</tr>
<tr>
<td>First</td>
<td>1967</td>
<td>139338</td>
<td>56 723</td>
</tr>
<tr>
<td>Second</td>
<td>1968</td>
<td>52 772</td>
<td>163 881</td>
</tr>
<tr>
<td>Third</td>
<td>1969</td>
<td>76 142</td>
<td>159 013</td>
</tr>
<tr>
<td>Fourth</td>
<td>1974</td>
<td>67 066</td>
<td>18 500</td>
</tr>
<tr>
<td>Fifth</td>
<td>1976</td>
<td>46 805</td>
<td>3 857</td>
</tr>
<tr>
<td>Sixth</td>
<td>1977</td>
<td>37 513</td>
<td>13 883</td>
</tr>
<tr>
<td>Seventh</td>
<td>1978</td>
<td>226 773</td>
<td>19 062</td>
</tr>
<tr>
<td>Eighth</td>
<td>1979</td>
<td>118 760</td>
<td>79 261</td>
</tr>
<tr>
<td>Ninth</td>
<td>1980</td>
<td>177 137</td>
<td>128 806</td>
</tr>
<tr>
<td>Tenth</td>
<td>1981</td>
<td>536 334</td>
<td>-</td>
</tr>
<tr>
<td>Eleventh</td>
<td>1982</td>
<td>88 921</td>
<td>70 636</td>
</tr>
</tbody>
</table>

(source Urban Redevelopment Authority)

reproduced from the Building and Real Estate Statistics Yearbook 1983
APPENDIX D

The tables below show the amount of investment generated by the URA land sales and the revenue forthcoming to URA for the land parcels. The upper table is reproduced from URA’s Chronicle of Sale Sites.

<table>
<thead>
<tr>
<th>Year of award of tender</th>
<th>Number of sale</th>
<th>Amount generated from sale of sites ($ million)</th>
<th>Financial Year</th>
<th>Revenue received from sales of sites ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>6th</td>
<td>97</td>
<td>78/79</td>
<td>5</td>
</tr>
<tr>
<td>1979</td>
<td>7th</td>
<td>287</td>
<td>79/80</td>
<td>40</td>
</tr>
<tr>
<td>1980</td>
<td>8th</td>
<td>458</td>
<td>80/81</td>
<td>21</td>
</tr>
<tr>
<td>1981</td>
<td>9th</td>
<td>1,165</td>
<td>81/82</td>
<td>408</td>
</tr>
<tr>
<td>1981</td>
<td>10th</td>
<td>437</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>11th</td>
<td>513</td>
<td>82/83</td>
<td>293</td>
</tr>
<tr>
<td>1983</td>
<td>no sale</td>
<td>—</td>
<td>83/84</td>
<td>119</td>
</tr>
<tr>
<td>1984</td>
<td>no sale</td>
<td>—</td>
<td>84/85</td>
<td>191**</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>2,957</td>
<td></td>
<td>1,077</td>
</tr>
</tbody>
</table>

* Developers were given maximum 10 years to pay for land.
** Estimated revenue.
The following 5 tables are reproduced from Richard Ellis' 1983 review of the Singapore Property Market. They show the purchase price for land parcels in the 7th to 10th URA land sale, as estimated by Richard Ellis.

### U.R.A. Seventh Sale (awarded in 1980)

<table>
<thead>
<tr>
<th>Land Parcel No.</th>
<th>Location/Name of Development</th>
<th>Type of Development</th>
<th>Plot Ratio/ Site Area (sq. m.)</th>
<th>Developer</th>
<th>Tender Price $ psm</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>Cuppage Road/Koek Road — Cuppage Plaza</td>
<td>Cinemaintenance/rooms</td>
<td>2.68 3055.5</td>
<td>Orchard Plaza Pte Ltd</td>
<td>6,300</td>
</tr>
<tr>
<td>71</td>
<td>Cuppage Road/Emerald Hill — Centrepoint</td>
<td>Shopping Plaza</td>
<td>3.50 4454</td>
<td>Cold Storage (S) Pte Ltd</td>
<td>3,450</td>
</tr>
<tr>
<td>72</td>
<td>Orchard Road/Buying Road/Kom Ka Lane — Merchandising Centre</td>
<td>450 bedrooms hotels/shopping</td>
<td>2.76 10325</td>
<td>Good Property Land Development Pte Ltd</td>
<td>4,530 (land) 2,150 (terraces)</td>
</tr>
<tr>
<td>73</td>
<td>H4 Street/Cobram Street — Excelsior Hotel</td>
<td>Shopping</td>
<td>6 2,143.5</td>
<td>Yangco Pte Ltd</td>
<td>6,100</td>
</tr>
<tr>
<td>74 &amp; 75</td>
<td>East Coast Road/Jo Chat Road — People's Park Kalong</td>
<td>Shopping</td>
<td>2.04 8031</td>
<td>People's Park Dev Ltd</td>
<td>2,735</td>
</tr>
<tr>
<td>76 &amp; 77</td>
<td>Leonie Hill Road/Leonie Hill — Horizon Tower</td>
<td>Residential condominium</td>
<td>618.6 20643</td>
<td>Horizon Dev &amp; Investment Pte Ltd</td>
<td>650</td>
</tr>
<tr>
<td>78</td>
<td>Arcadia Road — Arcadia Garden</td>
<td>Residential condominium</td>
<td>64.2 39964</td>
<td>Singapore Land Pte Ltd</td>
<td>230</td>
</tr>
<tr>
<td>79 &amp; 80</td>
<td>Marine Parade Road/ East Coast Parkway — Parkway Plaza</td>
<td>Shopping/entertainment</td>
<td>1.89 31536.6</td>
<td>Parkway Properties Pte Ltd</td>
<td>670</td>
</tr>
<tr>
<td>81</td>
<td>Tanglin Pagar Road Enggor Road — Amara Hotel</td>
<td>Shopping</td>
<td>2.68 9930</td>
<td>Amara Hotels Pte Ltd</td>
<td>660</td>
</tr>
<tr>
<td>82</td>
<td>New Bridge Road/Cana Road — Fujiwara Hotel</td>
<td>100 bedrooms hotel/shopping</td>
<td>4.5 4149.4</td>
<td>Neener Products Pte Ltd</td>
<td>4,400</td>
</tr>
<tr>
<td>83 &amp; 84 &amp; 85</td>
<td>Marine Centre</td>
<td>2,082 bedrooms hotel with ancillary/shopping/entertainment</td>
<td>2.07 152395</td>
<td>Marine Centre Hotel Ltd</td>
<td>1,065 (land) 1,065 (terraces)</td>
</tr>
</tbody>
</table>

### U.R.A. Eighth Sale (awarded in 1980)

<table>
<thead>
<tr>
<th>Land Parcel No.</th>
<th>Location/Name of Development</th>
<th>Type of Development</th>
<th>Plot Ratio/ Density</th>
<th>Site Area (sq. m.)</th>
<th>Developer</th>
<th>Tender Price $ psm</th>
</tr>
</thead>
<tbody>
<tr>
<td>87</td>
<td>Victoria Street/Area Street</td>
<td>370 bedrooms hotel/shopping</td>
<td>3 8023</td>
<td>Golden Landmark Pte Ltd</td>
<td>3,030</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>Moore Road/Bencopin Street — Fortune Centre</td>
<td>Shopping/office</td>
<td>3 6224.7</td>
<td>Golden Fortune Development Pte Ltd</td>
<td>2,100</td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>Queen Street/Moore Road — Guar – Inn Building</td>
<td>Shopping/office</td>
<td>3 1465.3</td>
<td>Yoon Wa P Properties (S) Pte Ltd</td>
<td>3,230</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>Rooker Road/Queen Street — Hor Lui Sui Building</td>
<td>Shopping/office</td>
<td>3 4179.3</td>
<td>Hor Lui Sui Pte Ltd</td>
<td>4,950</td>
<td></td>
</tr>
<tr>
<td>91 &amp; 92</td>
<td>Moore Road/Queen Street — Masa Plaza</td>
<td>Shopping/office</td>
<td>3 3,104.5</td>
<td>Masa Development Pte Ltd</td>
<td>2,800</td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>Raffles Place — CUB Centre</td>
<td>63-storey office</td>
<td>3 22541</td>
<td>CUB Centre Ltd</td>
<td>22,500</td>
<td></td>
</tr>
<tr>
<td>94 &amp; 95</td>
<td>Beach Road</td>
<td>Shopping/entertainment</td>
<td>3 3,077.74</td>
<td>Mango Fry Ltd Pte Ltd</td>
<td>4,300</td>
<td></td>
</tr>
<tr>
<td>96</td>
<td>Upper Circular Road, South Bridge Road — Riverine Gateway</td>
<td>Shopping/entertainment</td>
<td>3.5 7,229</td>
<td>Premier Reit Pte Ltd</td>
<td>4,300</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>Chin Swee Road</td>
<td>Flat</td>
<td>1 532.4</td>
<td>Gardner Landmark Pte Ltd</td>
<td>1,260</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>Orchard Boulevard Be —</td>
<td>Residential condominium</td>
<td>1 921</td>
<td>United Overseas Land Ltd</td>
<td>2,600</td>
<td></td>
</tr>
</tbody>
</table>
URA LAND SALE purchase prices continued

<table>
<thead>
<tr>
<th>Parcel No.</th>
<th>Development Type</th>
<th>Density (sq. m.)</th>
<th>Developer</th>
<th>Tender Price $ p.m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td>New Bridge Road/Upper Cross Street — Cluny Court</td>
<td>600 bedrooms/hotel/office</td>
<td>People's Park Development Ltd</td>
<td>6300</td>
</tr>
<tr>
<td>100 &amp; 100A</td>
<td>Suntec City — Hotel Nikko</td>
<td>509 bedrooms/hotel/office</td>
<td>People's Park Development Ltd</td>
<td>1100</td>
</tr>
<tr>
<td>101</td>
<td>Clubhouse Road/Kok Road</td>
<td>341 bedrooms/hotel/office</td>
<td>People's Park Development Ltd</td>
<td>2200</td>
</tr>
<tr>
<td>102</td>
<td>Tannery Lane/Getting Lane</td>
<td>Restaurant/warehouse</td>
<td>People's Park Development Ltd</td>
<td>2150</td>
</tr>
<tr>
<td>103</td>
<td>Market Street/Link Street — Tat Lee Bank Bldg</td>
<td>Office</td>
<td>People's Park Development Ltd</td>
<td>4300</td>
</tr>
<tr>
<td>104</td>
<td>Pasir Panjang Road</td>
<td>Association/Religious Building</td>
<td>People's Park Development Ltd</td>
<td>2300</td>
</tr>
<tr>
<td>105 &amp; 106</td>
<td>Guerard Road</td>
<td>Association/Religious Building</td>
<td>People's Park Development Ltd</td>
<td>2300</td>
</tr>
<tr>
<td>108</td>
<td>Upper Chang Road — Chang Merlion</td>
<td>293 bedrooms/hotel/office</td>
<td>People's Park Development Ltd</td>
<td>960</td>
</tr>
</tbody>
</table>

U.R.A. Ninth Sale (awarded in April 1981)

<table>
<thead>
<tr>
<th>Parcel No.</th>
<th>Development Type</th>
<th>Density (sq. m.)</th>
<th>Developer</th>
<th>Tender Price $ p.m.</th>
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</thead>
<tbody>
<tr>
<td>109 &amp; 110</td>
<td>South Canal Road/Chunx Street Synagogue Street</td>
<td>Office</td>
<td>People's Park Development Ltd</td>
<td>24000</td>
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<tr>
<td>111</td>
<td>Cecil Street/Boon Tat Street</td>
<td>Office</td>
<td>People's Park Development Ltd</td>
<td>6750</td>
</tr>
<tr>
<td>112</td>
<td>Cecil Street/Sanday Street</td>
<td>Office</td>
<td>People's Park Development Ltd</td>
<td>5600</td>
</tr>
<tr>
<td>113</td>
<td>Cecil Street/McFarlane Street</td>
<td>Office</td>
<td>People's Park Development Ltd</td>
<td>23000</td>
</tr>
<tr>
<td>114</td>
<td>Cecil Street/Robinson Road</td>
<td>Office</td>
<td>People's Park Development Ltd</td>
<td>30000</td>
</tr>
<tr>
<td>115</td>
<td>Palmer Road/Shaw</td>
<td>Office</td>
<td>People's Park Development Ltd</td>
<td>23000</td>
</tr>
<tr>
<td>116</td>
<td>Beach Road/Piscina Highway</td>
<td>Office</td>
<td>People's Park Development Ltd</td>
<td>15000</td>
</tr>
<tr>
<td>117 &amp; 118</td>
<td>Marina Centre — Panorama Centre</td>
<td>2,830 bedrooms/hotel/shopping and cinema</td>
<td>People's Park Development Ltd</td>
<td>45000</td>
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<tr>
<td>119</td>
<td>Orchard Boulevard Crucian Road Extension</td>
<td>Flats</td>
<td>People's Park Development Ltd</td>
<td>4500</td>
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<tr>
<td>120</td>
<td>Newton Road/Lincoln Road</td>
<td>Residential Condominium</td>
<td>People's Park Development Ltd</td>
<td>20000</td>
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<tr>
<td>121</td>
<td>Marine Parade Road EAST COAST PARKWAY — People's Park Tower</td>
<td>Office/shopping</td>
<td>People's Park Development Ltd</td>
<td>21500</td>
</tr>
<tr>
<td>122</td>
<td>West Coast Road/Clementi Road</td>
<td>Warehouse</td>
<td>People's Park Development Ltd</td>
<td>2000</td>
</tr>
<tr>
<td>123 &amp; 124</td>
<td>West Coast Road/Clementi Road</td>
<td>Warehouse</td>
<td>People's Park Development Ltd</td>
<td>2250</td>
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<tr>
<td>125</td>
<td>West Coast Road/Clementi Road</td>
<td>Warehouse</td>
<td>People's Park Development Ltd</td>
<td>600</td>
</tr>
<tr>
<td>126 &amp; 127</td>
<td>West Coast Road/Clementi Road</td>
<td>Warehouse</td>
<td>People's Park Development Ltd</td>
<td>1400</td>
</tr>
<tr>
<td>128</td>
<td>Eunos Road S/Eunos Avenue J</td>
<td>Flats</td>
<td>People's Park Development Ltd</td>
<td>2250</td>
</tr>
<tr>
<td>129</td>
<td>Airport Road/Airport Link</td>
<td>Warehouse</td>
<td>People's Park Development Ltd</td>
<td>2150</td>
</tr>
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</table>

111
<table>
<thead>
<tr>
<th>Land Parcel No.</th>
<th>Location/Name of Development</th>
<th>Type of Development</th>
<th>Site Area (sq. m.)</th>
<th>Developer</th>
<th>Tender Price $ (p.m.)</th>
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<tbody>
<tr>
<td>130</td>
<td>Lovang Avenue</td>
<td>Condominium type housing</td>
<td>82111.2</td>
<td>Singapore Airlines Ltd</td>
<td>160</td>
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<tr>
<td>131</td>
<td>Bukit South Road</td>
<td>Condominium type housing</td>
<td>34223</td>
<td>The First Life Insurance Co. Pte Ltd</td>
<td>500</td>
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<tr>
<td>132 &amp; 132A</td>
<td>East Coast Parkway, Bukit South Avenue</td>
<td>Condominium type housing</td>
<td>93462.1</td>
<td>Eastern Lion Pte Ltd</td>
<td>870</td>
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<tr>
<td>133 &amp; 134</td>
<td>Marine Parade Road, East Coast Parkway, Sago Road</td>
<td>Condominium type housing</td>
<td>103182.0</td>
<td>Overseas Union Bank Ltd</td>
<td>620</td>
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<tr>
<td>135</td>
<td>Mountbatten Road, Amber Road</td>
<td>Condominium type housing</td>
<td>14161.8</td>
<td>Holy Realty Co. (M) Pte Ltd</td>
<td>1320</td>
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<tr>
<td>136</td>
<td>Upper Ayer Rajah Road, Pandan Express Road</td>
<td>Condominium type housing</td>
<td>61235.6</td>
<td>Island Concrete Pte Ltd</td>
<td>250</td>
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<tr>
<td>137</td>
<td>Yio Chu Kang Road, Ang Mo Kio Avenue 4</td>
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<td>40100.6</td>
<td>Far Horizon Construction</td>
<td>290</td>
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<tr>
<td>138</td>
<td>Eunos Road 2, Eunos Avenue 2</td>
<td>Flatted factory</td>
<td>11747.6</td>
<td>Kow Aik Hang Co Pte Ltd</td>
<td>2260</td>
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<tr>
<td>139</td>
<td>Eunos Road 5, Eunos Avenue 4</td>
<td>Flatted Factory</td>
<td>14088.8</td>
<td>Golden Wall Realty Pte Ltd</td>
<td>2390</td>
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<tr>
<td>140</td>
<td>Tampines Lane, Geylang Lane</td>
<td>Warehouse</td>
<td>3691.0</td>
<td>Koon Wah Realty (S) Pte Ltd</td>
<td>2930</td>
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<tr>
<td>141</td>
<td>Airport Road, Airport Line</td>
<td>Warehouse</td>
<td>90148</td>
<td>Great Pacific Investments Pte Ltd</td>
<td>2840</td>
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<tr>
<td>142</td>
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<td>Warehouse</td>
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<td>People Investment Pte Ltd</td>
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<tr>
<td>143</td>
<td>Airport Road, Airport Line</td>
<td>Warehouse</td>
<td>12029.6</td>
<td>City Developments Ltd</td>
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<tr>
<td>144 &amp; 145</td>
<td>Airport Road, Airport Line</td>
<td>Warehouse</td>
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<td>United Overseas Bank Ltd</td>
<td>1275</td>
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<tr>
<td>146 &amp; 147</td>
<td>Airport Road, Airport Line</td>
<td>Warehouse</td>
<td>21964</td>
<td>Sin Hua Land Development Pte Ltd</td>
<td>2750</td>
</tr>
</tbody>
</table>
The Ministry of Trade and Industry released the figure showing the Property Index in the 1983 Economic Survey of Singapore. In 1984, no such figure was found in the Survey. The indices for mid 1983 to mid 1985 are extrapolated. This was done using data for property prices (sources Richard Ellis and Jones Lang Wooton) for 1978 to 1983 as a basis for comparison with the Ministry's index. A set of curves were produced and fitted with the index. Data for 1983 through to April 85 was adjusted to conform to the scale of the index. The exercise was a crude one but does reflect real price movements.


RONDINELLI, D., NELLIS, J. & CHEEMA, G. "Decentralisation in Developing Countries: A Review of Recent Experience", World Bank Staff Working Paper No. 168, World Bank,


