

SINGAPORE
Singapore Local Economic Development:
The Case of the Economic Development Board (EDB)¹

Synopsis. Singapore is today ranked among the world's strongest and most competitive economies. Forty years ago, it had a very different economy. It was beset with acute housing shortage and severe unemployment. The Economic Development Board (EDB) has played a key role in developing Singapore's economy, creating wealth and jobs for the population. Established since 1960, the EDB is Singapore's one-stop and lead government agency for planning and executing economic strategies to enhance Singapore's position as a global hub for business and investment. The EDB seeks to facilitate and support both local and foreign investors in manufacturing and services sectors to develop and expand new business opportunities, especially capital-intensive, knowledge-intensive and innovation-intensive activities.

Rationale for the Establishment of EDB

Post-independence Singapore, forty years ago, was a third world country with a GNP per capita of less than US\$320.² The city's population was then growing rapidly,³ unemployment was rising (over 13 per cent per year) and its infrastructure was poor. More than two-thirds of its population was living in slums and squatter settlements on the city's fringe (Yuen, 2005). According to the United Nations Industrial Survey Mission (1960-61), some 214,000 new jobs (50% increase in workforce) had to be created for the decade of 1961-70 (Yuen, 1991). During the colonial period, Singapore's economy was primarily dependent on entrepôt trade. But this economic activity and primary production offered little prospect for job expansion. The withdrawal of British troops in the post-independence period further aggravated the unemployment situation, requiring the creation of another 40,000 new jobs. Besides housing, employment generation was the priority.

Following the recommendation of United Nations Industrial Survey Mission (1960-61), the most feasible solution to Singapore's then unemployment and economic development was to embark on a bold and comprehensive program of industrialization. Labor-intensive industries were a prime target. However, industrialization was a relatively new experience to Singapore.⁴ Singapore had no industrial tradition. Both capital and entrepreneurship had historically been active in trading and commercial activities. The majority of its working population was in trade, processing and service activities. Expertise was, therefore, accumulated in these activities rather than in industrial establishments. It was recognized that such commercial capital was not easily adaptable to industrial investment without deliberate government intervention. Also, Singapore's domestic market was too small to support many viable industries (Goh, 1963). It soon became

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² Singapore was a former British colony (1819-1959). In 1959, it obtained internal self-rule, joined the Malaysia federation from 1963-1965 and became an independent country on 9 August 1965.

³ During the decade from 1947-57, Singapore's population was growing at an annual growth rate of 4.4 per cent, of which 3.4 per cent represented natural increase and 1 per cent immigration. In 1957, the crude birth rate peaked at 42.7 per thousand. Beginning in 1949, family planning services were offered by the private Singapore Family Planning Association, which by 1960 was receiving government funds and assistance. Since the mid-1960s, Singapore's government has attempted to control the country's rate of population growth with a mixture of publicity, exhortation, and material incentives and disincentives. Since 1986, the government has reversed its family planning policy to encourage more births with the trend of low population growth.

⁴ The colonial government had set up the Singapore Industrial Promotion Board in 1957 for the promotion and development of industries.

evident to the new rulers that to succeed, the industrialization effort in Singapore would need the active support and encouragement of the government.

The EDB was accordingly set up in 1961 with a budget of S\$100 million to spearhead a program of rapid industrialization to create new jobs and promote economic development. The EDB replaced the Singapore Industrial Promotion Board (SIPB), which had a revolving fund of S\$1 million and a staff consisting only of a manager and a confidential secretary. The SIPB was found to be too small to be effective on the scale required to promote industrialization and growth. The EDB was given extensive powers and was initially entrusted with not only the financing of industries, promotion, manpower development and provision of incentives but also the development of industrial estates (Economic Development Board Ordinance 1961, No. 21 of 1961). However, as the industrialization program gathered momentum, the functions of the EDB also grew in complexity. In consequence, a decision was made in 1968 to streamline its functions to better enable the EDB to concentrate on investment promotion. In June 1968, a public limited company, the Development Bank of Singapore, and another statutory board, the Jurong Town Corporation (JTC), were formed to take over the industrial financing and industrial estate development functions of the EDB respectively.

Responsibility and Services

The EDB is responsible for investment promotion and the continued economic success of Singapore. In 2006, it contributed to more than 40 per cent of Singapore's GDP; achieving S\$8.8 billion commitments in new manufacturing investments while service companies committed S\$2.8 billion in new business spending (The EDB Annual Report, 2006/07). The EDB works closely with the Ministry of Trade and Industry to provide long-term planning and strategic directions to Singapore's industrialization program in terms of specific industrial trends and target industrial sectors. Its vision is to promote Singapore as a compelling global hub for business and investment, and its mission is to create sustainable GDP growth for Singapore, good jobs and business opportunities for the population (http://www.edb.gov.sg/edb/sg/en_uk/index/about_us/vision___mission.html).

The EDB, in promoting Singapore, markets Singapore as a Total Business Centre, the location to 'begin your journey in Asia'. There are marketing brochures explaining 'why Singapore'. Investment promotion is not just to corporations but also extends to individuals, and is worldwide. Recognizing that investors are not homogenous, the EDB now provides an extensive range of focused programs, policies and schemes to attract three groups: investors, startups and individuals, to Singapore. To the investors, the EDB offers the following services:

- strong and stable physical, legal and social infrastructure including a wide range of factory space from vacant plots of land to ready-built low-rise and high-rise units, workshops and warehouses in a typology of industrial estates, business parks and science parks;
- pro-business policies and tax regime, the current corporate tax rate for all companies is a flat rate of 18% and Singapore has been variously rated as Asia's most competitive economy (World Competitiveness Report 2007, world's easiest place to do business (World Bank, Doing Business 2007: How to Reform; Asia's No. 1 place to live, work and play (Mercer Human Resource Consulting, 2005-06);
- wide range of flexible financial schemes, for example, loans for equipment and machinery, for international expansion (loan of up to S\$15 million to buy fixed assets and finance company's overseas projects or orders), SME rebate scheme (cash rebates to adjust to increased labor expenses due to higher CPF contribution rates), Local Enterprise and Association Development Program where industry associations can get a grant to take the lead in envisioning and shaping their industry, etc;

- highly skilled domestic labor force and easy entry of foreign talent;
- ever-expanding network of free trade and investment guarantee agreements that give Singapore-based businesses preferential and safe access to international markets.

To the start-ups, EDB offers with SPRING Singapore information and networks, market opportunities, work pass and financing options (e.g. Micro Loan Program where businesses with less than 10 employees can apply for loans of up to \$50,000 to fund operations; Start-up Enterprise Development Scheme where innovative Singapore-based start-ups below three years old can get a matching dollar from SPRING for every dollar an investor puts into the start-up business, up to \$300,000). SPRING Singapore is the enterprise development agency for growing innovative companies and fostering a competitive small, medium-sized enterprises (SME) sector. The promotion of local enterprises has become increasingly important.

Although began with a focus on multi-national corporations (MNCs), the EDB economic strategy has diversified to include SMEs since the mid-1980s, and over the past decade, to the individual. Since the 1985-86 recession, the government has repositioned its economic strategy and encouraged more local companies, both government-linked and private to invest abroad, 'go regional'. The 'go regional' policy is as much to capitalize on the rapid economic growth and industrialization of the Asia-Pacific region as is to transcend Singapore's domestic constraints and diversify the sources of growth in Singapore's economy.

To the individual, the EDB offers the Global Investor Program where EDB will assist in connecting foreign entrepreneurs and investors with local business networks for business collaboration opportunities. The EDB will also help with immigration facilitation for the individual's entry and stay in Singapore.

Investors are valued partners. Since 1991, the EDB has developed four awards programs to recognize the contribution of investors to Singapore:

- Distinguished Partner in Progress Award is the first award launched in 1991. It is the highest award given to companies for significant contributions to Singapore's economy;
- Distinguished Friends of Singapore Program, inaugurated in 1998, acknowledges outstanding personal contributions to Singapore's economy. These individuals are the highest corporate managers at the Chairman, President or CEO level;
- Friends of Singapore (Business) Award, launched in 2000, aims to show appreciation to investors at the Managing Director or Chief Executive level who, as operational managers based in Singapore, have been instrumental in day-to-day dealings with EDB; and
- Honorary Citizen Award, introduced in 2003, is given to outstanding global talent in recognition of their relentless support and invaluable contributions to Singapore. This is Singapore's most prestigious and exclusive national award.

To achieve its mission, the EDB has investment promotion offices all over the world, in North America (7), Europe (5), and Asia (7). With globalization, under the Singapore Unlimited initiative,⁵ the EDB looks to the world for resources in finance, technology, manpower and information, while promoting foreign investments in high value-added industries.

⁵ The Singapore Unlimited vision articulates Singapore's aspirations to become a first league developed nation and its strategies to enhance its economic activities in an integrated, holistic manner, using a total

Restructuring the economy

During the early years of the EDB, to attract foreign investment, pioneer status is given to many industries with attendant tax holidays, tariff protection and other benefits. Planned industrial estates with the necessary infrastructure are developed by JTC in various parts of Singapore to facilitate quick industrial start-up (Figure 1). An example is Texas Instruments, which started its production line 50 days after committing S\$6 million to make semiconductors and integrated circuits for export to world markets (the EDB took six months to secure this investment). Besides being an investment promotion agency and in addition to working with other relevant government agencies, the EDB has invested in projects to produce the necessary manpower, skills and technologies for industries. In 1971, it has established an Overseas Training Program for Singapore workforce training in industrialized countries (e.g. Rollei of Germany and Philips of Holland), and subsequently, technology and design training institutions in Singapore, jointly with the governments of Japan, Germany and France. Additionally, the EDB administers the Skills Development Fund to encourage the right kind of manpower training. The development of a highly educated and flexible workforce is very important, and Singapore has been cultivating its human capital by building a wide pool of skilled knowledge workers. The result of all these developments is rapid economic growth and full employment.



Figure 1: JTC ready built flatted factory

By the close of the 1960s, manufacturing has become the lead sector of Singapore's economic growth, contributing 18 per cent of GDP. Structurally, the economy has changed; an important industrial sector has been added to the traditional entrepôt trade economy. By the early 1970s, Singapore has reached full employment. During the period 1965-86, Singapore achieved high rates of GDP growth: between 8 and 10 per cent per annum in real terms for the entire period though there was some variation between sub-periods. For example, between 1965-1973, Singapore experienced an annual average growth of 12.7 per cent, which fell to 8.7 per cent per annum in the following

approach to systems involving all parties--political leaders and government, institutions and academia, chambers of commerce and trade associations, industrialists and labor, foreign investors and local companies, the people, and all who have identified themselves to be Singapore's stakeholders. See EDB (1995).

period, 1973-1979, and to 8.6 per cent per annum in the period 1979-1984. By the 1980s, Singapore has joined the ranks of Hong Kong, South Korea and Taiwan to become one of four newly industrialising countries in Asia. Its per capita income has increased to become the second highest in Asia after that of Japan.

Singapore's economic progress is an important factor in predisposing its distinguished public housing achievement. The success of the economic development program has provided residents with the means for translating housing need into demand, and created an economic position that is sufficiently strong for the government to undertake and finance its various development projects. With growth and full employment, Singapore's industrial base has restructured and broadened from labor-intensive to capital, skill- and knowledge-intensive, and high technology areas, such as R&D, engineering design, computer peripherals and software services and silicon wafers (Table 1). Emphasis is on expanding R&D and high technology industries (Yuen, 1992). Under this thrust, MNCs such as Texas Instruments has begun to undertake R&D activities in Singapore as an extension of their successful manufacturing operations. Manufacturing companies are encouraged to adopt more capital-intensive modes of operation and upgrade to higher skilled and higher value-added activities.

To assist, the EDB has set up the EDB Investments Pte Ltd (EDBI), wholly owned investment arm of EDB, in 1991 to make investments into companies that will grow key industry clusters and promote emergent technologies and innovations. Through the EDBI, the EDB seeks to catalyst growth in various new growth areas. For example, in the area of private equity, it has set up the Technopreneurship Investment Fund (TIF), wholly owned by EDBI, to draw more venture capital activities to develop a venture financing industry in Singapore, and grow locally based companies with high growth potential. TIF has invested in more than 100 partnerships worldwide. Product diversification is a crucial factor in enhancing sustained export performance and growth. Two engines of economic growth: manufacturing and services, has been identified in Singapore's industrial restructuring process. In 2006, manufacturing share of GDP is 28 per cent. The goal is to double Singapore's total manufacturing output to S\$300 billion, and annual manufacturing value-added to S\$80 billion, by 2018 (EDB Annual Report 2006/07). Manufacturing is expected to contribute at least 20–25 per cent to GDP over the next 10 years. EDB's new targets of promotion include international service corporations in the financial, educational, lifestyle, medical, biomedical sciences, IT and software sectors, and emerging growth businesses such as clean energy and water.

Table 1: Singapore's Industrial Transformation

	1960s	1970s	1980s	1990s & 2000s
Industry Focus	Labor intensive, import substitution, low value added	Export-oriented, medium value-added, semi-skilled, semi-automated	Value-added, highly skilled, technology intensive, highly automated	Very high value-added technology, knowledge-based manufacturing and services
			Services Industries as 2 nd engine of growth, development of SMEs (Small Medium-sized Enterprises)	Regionalization as external economic wing
Products	Sugar, soap, beer, other beverages, TV, oil refining, basic chemicals, car assembly, cement, construction steel	Consumer electronics, semiconductor assembly, textile and garments, oilfield equipment and services	Industrial electronics, computers and peripherals, integrated circuit (IC) testing, automotive, aerospace and other precision engineering components, fine chemicals, petrochemicals, pharmaceutical and medical devices	Wafer fabrication, IC design, biotech, research and development, petrochemical hub (Jurong Island), info-communication and media medical services, logistics, education and others

Source: Seetoh and Ong (2008), p115.

Since the 1990s, with deepening globalization, the EDB has broadened its role to business architect in strategic planning partnerships, helping companies to configure and design activities, create economic space beyond Singapore. The notion is to encourage local companies and Singapore-based multinationals to take resource-dependent operations (e.g. labor-intensive industries) to resource-rich countries in the region, and upgrade their Singapore operations to higher-end activities that require Singapore's unique set of competencies. Singapore has created new economic space by establishing industrial parks in the region, for instance, in China, India, Indonesia, the Philippines and Vietnam. The building of an external wing not only supplements the domestic economy, and is 'a major thrust in the next phase of Singapore's economic development' but also one step closer towards the 'national vision' of becoming a developed nation (EDB, 1993, p.1).

Institutional Structure

Figure 2 sets out the organization structure of the EDB.

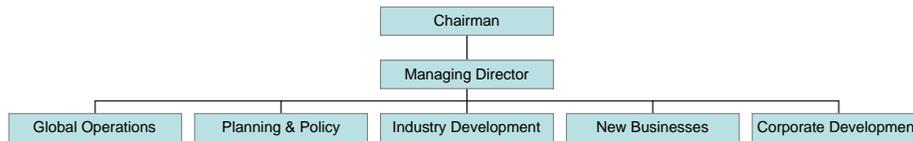


Figure 2: Organization of the EDB

Notes: Global Operation oversees EDB offices in America, Europe and Asia-Pacific; Planning and Policy includes international policy, business environment, planning–resource development; Industry Development includes electronics, info-communications and media, precision and transport engineering, biomedical sciences, consumer and professional services, education, energy, chemicals and engineering services, logistics; New Businesses include clean energy, environment and water, international organizations, lifestyle and sports, natural resources and new technologies; Corporate Development covers administration, communications, finance and human resources.

Source: EDB website, <http://www.edb.gov.sg/>

Structured as a statutory board, the EDB is an autonomous government agency created by special legislation to implement specific socio-economic development programs, in this case, economic development. Other statutory boards include JTC (for industrial estate development), and the Housing and Development Board (for public housing development). As statutory boards, they are not entitled to the legal privileges and immunities of government departments, but enjoy greater autonomy in terms of policy, administration, finance and flexibility in the performance of their functions. Statutory boards are not new but have existed since the colonial period. In the post-independence years, however, a much larger number of statutory boards have been set up to promote national development.

Even though statutory boards are legally separate from the civil service, they are answerable to the ministry, which has jurisdiction over them (their accounts have to be audited by the Auditor-General or person nominated by the minister in charge and the minister has also to approve the annual budget estimates and present their financial statements and annual reports to parliament). Such an administrative structure also helps to facilitate coordination between statutory boards and government departments, especially those within the same ministry. The EDB, JTC and Spring Singapore are within the same ministry: Ministry of Trade and Industry. The main difference between statutory boards and government departments is that while the government departments are entrusted with performing regulatory and routine functions, the statutory boards are expected to expedite the implementation of their specific entrusted socio-economic programme.

For Financial Year (FY) 2006, government budget provision for the Ministry of Trade and Industry was S\$1.63 billion (28 per cent was for operating expenditure and 72 per cent to development expenditure). Of this, the EDB was allocated an operating grant of S\$107.07 million to carry out its activities. To which, the EDB forecasted the commitment levels to be \$8-8.5 billion of fixed asset investments in the manufacturing sector and S\$2.5-2.7 billion of total business spending in traded services. On employment, 20,000-25,000 new jobs were projected, of which 70 per cent would be for knowledge and skilled workers. In contrast, SPRING Singapore received an operating grant of S\$47.10 million.

Conclusion

Singapore has made remarkable economic progress since the early 1960s. To a large extent, the EDB has been effective in promoting investment. It has created a whole new industrial economy. There are more than 7,000 MNCs in Singapore; about half of these have regional operations. The MNCs are carefully selected to 'fit' the target sectors and/or specific manufacturing process chain spectrum (Seetoh and Ong, 2008). To remain robust, Singapore's economic structure has diversified; startups and SMEs are increasingly featured in economic development. Strong manufacturing and services sectors have become the twin pillars of the economy. There is a wide range of businesses, particularly in the higher value-adding activities. With the help of the EDB, other government support agencies and fiscal incentives, industries have automated, mechanized and restructured their activities to stay competitive.

Moving forward, the EDB has charted several strategies to realize its vision of Singapore as a premier hub for value-creating investments: strengthen industry clusters, identify and grow new clusters, nurture innovation-driven enterprises, develop new geographies, and make Singapore's environment conducive and competitive for global business. A number of factors can perhaps be discerned as having contributed to EDB's pivotal role in Singapore's economic growth. The first is clear and strong government support that is translated into the operating institutional framework—a one-stop, pro-business quasi-public agency, with resources for implementation. The second is the EDB philosophy of 'committed to deliver, courage to dream and bold in design', which has resulted in a carefully crafted economic development program. The third is the capacity to change, to stay ahead of world trends, innovate and make quick adjustments to meet changing times. Such legerity is crucial to staying competitive. The Singapore EDB experience is a reassertion of other aspects of Singapore's post-independence development that provides one model of how given the appropriate operational environment, concepts can be translated into practical programs and implemented to achieve the desired results.

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