# MACROECONOMIC ANALYSIS OF PRIVATISATION PROGRAMS AND ECONOMIC PERFORMANCE: THE CASE OF ASEAN-5

Mahendhiran Nair Bala Shanmugam Mudiarasan Kuppusamy

Monash University, Sunway Campus Malaysia

#### 1. INTRODUCTION

Governments throughout the world, in recent years have increasingly recognized the economic and social advantages of privatization. Since the first privatization program undertook by the British government in 1979, many governments have privatized their state owned enterprises (SOE) and earned more than US\$1 trillion in proceeds (Dyck, 2000). Various government based reports and academic studies have highlighted that the responsibility shift (from government to private sector) has several important implications to a country. Privatization provides macroeconomic (increased state revenue) and political benefits (lesser burden for the state to provide goods and services to the public) in a country.

Meanwhile, several studies have shown that privatization enhances operating efficiency, improves productivity and enhances economic performance of a country (Galal, 1994; Megginson et al., 1994; De-Souza and Megginson, 1999 and La Porta and Lopez-de-Silanes, 1999).

Other studies highlight the drawbacks of privatization. One of the limitations of the privatization is that certain privileged people, for example senior management and board of directors, receive a large proportion of the benefits gained from privatization. However the costs are borne by the many, which include the shareholders, employees and

consumers. For example, Kikeri and Nellis (2002) argued that the process in which the privatization is carried out lacks transparency and is filled with corrupt practices that undermine the benefits of privatization. Wright (1999) argued that privatization of a big electricity company in Chile had resulted in the managers making personal gains 850 times more than the gains obtained by the minority shareholders. Black et al., (1999) highlighted the fraudulent activities undertaken by shareholders that took place during the privatization of Yukos Oil in Russia. Dyck (2000) argued that the disappointment faced in privatization activities in some countries have increased the challenges for privatization to take place in other developing countries.

In the case of ASEAN-5, the benefits of privatization are also mixed. This report takes stock of the empirical evidence of the privatization process in the 1990s on the economic performance of ASEAN-5. Here, we examined if governance has improved during the post privatization period. This report also examines the effects of privatization and good governance on economic performance (market capitalization, hard budget – public sector debt, overall productivity and output) in five ASEAN countries, namely, Malaysia, Singapore, the Philippines, Thailand and Indonesia.

This section of the report is organized as follows. In Section 2, we provide a brief review of the relevant literatures on cost-benefit analysis of privatization. In Section 3, we provide a conceptual framework to study the relationship between privatization, governance and economic performance. In Section 4, the empirical model to assess the impact of privatization on governance and economic performance (overall productivity, market capitalization, public sector debt and real gross domestic product) is examined.

In Section 5, we will examine if the impact of privatization policies have raised the overall level of corporate governance of ASEAN-5. Here, we will examine the performance of ASEAN-5 countries with other developed and developing countries. In Section 6, ASEAN-5 will be benchmarked with selected developed and developing countries using a pattern recognition statistical method developed by Nair and Kuppusamy (2003).

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Ideally, we would have liked to ascertain this for the period from the middle of 1980s to 2002. However, due to data limitations, we were only able to assess the impact of privatization policies on the overall general governance levels from 1996 to 2002. A summary of the main results and concluding remarks are given in Section 7.

# 2. PRIVATIZATION, GOVERNANCE AND ECONOMIC PERFORMANCE: A LITERATURE REVIEW

There are extensive studies in the literature examining the impact of privatization on the economic performance in the various developed, developing and transition economies. Upon reviewing the literatures, we find that much of the literature has empirically examined the impact of privatization to both micro performances, e.g. profitability, efficiency, and to the macro level factors such as economic growth.

Pinto et al., (1993) surveyed 75 state owned enterprises (SOEs) in Poland over the period 1989 to 1992. The authors examined the performance of the sample firms six months before and two and half years after privatization. The study found that rapid change of ownership in the sample firms has valuable effects to relative prices of the firms. More specifically, they found that post privatization performance in the sample firms were relatively higher compared to pre-privatization.

Galal et al., (1994) measured the effects of divestiture by comparing pre and post privatization performance in 12 large firms in four sample countries, that is, Chile, Malaysia, Mexico and United Kingdom. It was found that divestiture has significantly improved economic performance in 11 sample firms, while one remained insignificant. The authors concluded that this was largely associated with the increase in investments, improved productivity, appropriate pricing policies, increased competition and effective regulation policies. Their analysis showed that privatization has resulted in economic improvements in the privatized entities. Similarly, Megginson et al., (1994) compared average performance ratios for 61 firms in 18 countries both before and after privatization. The study period for this study was from 1961 to 1989. The empirical result showed that privatization has drastically increased output, operating efficiency, profitability, more capital investment and higher dividend payments.

Majumdar (1996) compared the performance of SOEs, mixed ownership enterprises and private firms in India over the period 1973 to 1989. The result showed that the privately owned firms had higher efficiency scores of 97 percent compared to mixed ownership firms of 91 percent and SOEs of 64 percent.

La Porta et al., (1997) examined the benefits of privatization in Mexico over the period 1983 to 1991 for 218 firms. Specifically, the authors focused on aspects of increased prices as firms capitalize on the market power, layoffs and lower wages as firms roll back generous labor contracts after privatization. The authors found that privatization has increased the ratio of operating income to sales by 24 percent. They argued that transfers from the society to the firm are partially offset by taxes that take up half of the gain in operating efficiency.

Pohl et al., (1997) analyzed the financial and operating performance for more than 6,500 industrial firms in Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic and Slovenia during 1992 to 1995. It was found that privatization has great impact on the company restructuring efforts in the sample countries. The study found that firms with privatization maturity of more than 4 years tend to have higher productivity of 3 to5 times more than SOEs.

Smith et al., (1997) studied the impact of foreign and employee ownership on firm performance in 22,735 firms in Slovenia over the period 1989 to 1992. The result showed that an increase of one percent in foreign ownership contributes to an increase of four percent in value-added as compared to an increase of only 1.4 percent in an employee

ownership firm. Further, firms with increased revenues, profits and exports have higher foreign ownership as opposed to employee ownership.

Boubakri et al., (1998) studied post privatization financial and operating performance of seventy-nine firms in twenty developing countries and thirty-two industries over the period 1980 to 1992. The authors found that privatization had increased output, enhanced operating efficiency, profitability, capital investments and dividend payments. Moreover, close to 60 percent of the sample firms had shown a 10 percent increase in employment after privatization.

Earle and Saul (1998) examined whether privatization had affected labor productivity in Russian industrial firms. The sample consisted of 86 state owned firms, 299 partially privatized firms and 45 newly created firms. By employing least squares regression, the authors found that outsider ownership scheme had positive and significant effects on labor productivity. On the other hand, firms with insider control tended to have negative long run implications for the firms.

De Souza and Megginson (1999), compared pre and post financial and operating performance of newly privatized firms in 10 developing and 15 developed countries over the period 1990 to 1994. They found that post privatization, the sample firms had achieved better performance in terms of increased real sales output, operating efficiency and profitability. Moreover, the capital investment had also increased slightly while the unemployment rate has declined considerably.

Claessens and Simeon (1999) investigated the effects of management turnover to profitability and labor productivity in 706 firms in Czech Republic over the period 1992 to 1997. The results implied that change of management or privatization had significantly improved profitability and labor productivity in almost 90 percent of the sample firms.

Frydman et al., (1999) compared the performance of SOEs and private owned firms in the Czech Republic, Hungary and Poland using a sample of 218 manufacturing firms, which consists of 90 state owned and 128 privatized firms. The evidence shows that privatized firms and outside controlled firms had enhanced revenue and productivity over the sample years, while firms controlled by insiders had not seen any significant improvement.

De Souza et al. (2000) extended their earlier study by including additional forty firms (118 firms), four more countries (29 countries) and different study period (1961 to 1995). They found that profitability, efficiency, output and capital expenditure had increased tremendously in the sample firms over the years. Thus, they concluded that stronger profitability is earned in firms with lower employee ownership and higher state ownership, whereas output gains are higher in competitive markets. They also argued that higher economy growth and enhanced efficiency could be obtained when foreign ownership is high in the privatized firms.

Boardman et al., (2000) analyzed the performance of nine privatized Canadian firms between the year 1988 and 1995. They compared a variety of five years pre privatization ratios to three years post privatization ratios. They found that the return on sales or assets had doubled after privatization together with efficiency, sales and capital investment. In addition, the unemployment rate and leverage had also declined significantly.

Bortolotti et al., (2001) examined the determinants of privatization from a panel of 34 countries over the period 1977 to 1999. They found that countries, which are wealthy, democratic, with high stock market liquidity, stable political environment and hard budget constraints often tended to privatize state owned firms. However, the result also shows that the extent of privatization in terms of revenues and shares sold were limited to civil law countries - whereby the shareholders are poorly protected. They also showed that if banks are powerful in the countries, and the capital markets are underdeveloped, there are fewer tendencies to privatize state-owned enterprises.

Based from the above-mentioned literatures, there is consensus in the literatures that privatized firms in developed countries tend to have higher economic performance,

largely due to good governance in the country (Kaufmann et al., 2003). On the micro level, privatized firms had gained higher efficiency and productivity while increased economic growth could also be seen in countries that had undergone large privatization programs. In some cases, privatized firms in developing and transition economies have shown mixed results. In countries with foreign participation, employee ownership and existence of a strong and independent regularity bodies, the privatization exercise has led to positive outcomes to the enterprises and the countries.

In the cases of weak supervision of the privatization process, in some developing countries, there has been mismanagement of the privatized entities leading to poor investor confidence in these countries. For example, the case of managers pocketing more than 850 times the price given to minority shareholders in a takeover bid (Dyck, 2000) clearly shows the lack of proper governance and of possible fraudulent activities by the internal management.

### 3. RELATIONSHIP BETWEEN PRIVATISATION, GOVERNANCE AND ECONOMIC PERFORMANCE: A CONCEPTUAL FRAMEWORK

In the previous section, we reviewed the literature pertaining to the impact of privatization on economic performance in developed, developing and transition economies. As mentioned earlier, there is general consensus that privatization in developed countries have resulted in better governance, thus resulting in increased efficiency and output in these enterprises. These studies have also shown that privatization in developed economies had increased market capitalization, output per capita (real GDP per capita) and reduced public sector debt. However, the impact of privatization in developing and transition economies has been mixed.

The outcomes of the privatization policies on the SOEs and the economy depend on two major factors, which are related to the issue of general governance level in the country. The first, when risks associated to SOEs are also transferred to the private sector along with equity stake, there is incentive for senior management to adhere to the best practices

of the industry. This is to minimize their risk of diminution of the shareholder value. In the absence of transfer of risk (along the transfer of equity stake), there will be strong tendency for senior management to take high-risk gamble. This is because they benefit irrespective the performance of the entity, i.e., leading to the market failure problem commonly known as *moral hazard*.

Second, the strength and independence of the Institutions of Corporate Governance (ICG), both internal and external to organizations are vital in determining the performance of the privatized SOEs.<sup>1</sup> Dyck (2000) argues that weak and lack of independence in the internal and external ICGs can lead to two new types of *market failures*. The first is called the '*grabbing hands*' of the state/public and insiders in the privatized firms.

'Public-grabbing hands' includes officials within the public service departments who ask for bribes in return for services. In some cases, these officials request a percentage of diverted assets of the privatized firms. One of the major problems with 'public grabbing hand' is that if it is not curtailed, it may lead to the economic activity leaving the formal economy and moving to the underground economy (Dyck, 2000).

'Private-grabbing hands' happens when an insider of a privatized firm divert resources at the cost of other stakeholders. This includes senior management receiving remuneration packages that is not in line with the companies' performance, transfer of investor resources at non-market price to themselves, and misallocation of the investors' resources to build empires. Other forms of private grabbing hand includes the sale of the privatized company assets below the market price to other companies that he/she have interest in, or the purchase of assets from another company at above market price, where he/she has stake in.

The second type of market failure that Dyck (2000) argues occurs in the corporate sector is known as *'tunneling'*, where managers and/or funds managers of an enterprise devise

<sup>&</sup>lt;sup>1</sup> The broad view and functions of the internal ICG and external ICG are summarized in Table 3.1.

various mechanisms to transfer the investors' assets to themselves. The tunneling activity takes place due to the lack of appropriate incentives for intermediaries and banks. This problem is compounded by poor regulatory supervision.

In this section, we argue that the effects of privatization at the firm level do have a significant impact at the macro level of an economy. Should the internal and external ICG be sound, large privatized firms would certainly adhere to the best practices in their sectors. Moreover, well functioning ICGs will not only be a source of enhancing good governance, but it will also be a source of information to stakeholders and potential investors on the state of the firm. Thus, firms are able to raise capital for good investment project if they adhere to best practices, and allocate their resources efficiently.

Further, investors' confidence can be upheld if the ICG makes management of privatized corporations accountable to the decisions they have taken. For accountability mechanisms to function well investors and stakeholders should have easy access to accurate and credible information on the enterprise, its stakeholders (both majority and minority), policies and dealings. In other words, 'transparency' becomes the cornerstone of a successful privatized entity.

Strong and independent internal and external ICG will add positive externalities to the economy. If large privatized enterprises adhere to high corporate standards, this will force smaller firms, suppliers and other service providers of these privatized entities to follow similar governance standards. Hence, enhancing the overall corporate governance level, will result in better economic performance (lower public sector debt and increase in the overall productivity, market capitalization and output of the country).

On the other hand, if internal and external ICGs are weak, there would be a general tendency for the ICGs to be 'hijacked' by parties with stake in the privatized entities, ultimately leading to the 'grabbing hands' and the 'tunneling' problems. This will eventually lead to a loss of confidence, not only in the privatized entities, but also in the

economy as a whole. This will result in higher public sector debts (due to corporate bailouts), lower productivity, lower market capitalization and lower output.

	INTERNAL		EXTERNAL				
			Organizations		Legal Institutions		
Formality	Institution	Primary function	Institution	Primary function	Institution	Primary function	
Least formal	Ownership structure	Account, Info.	Business Associate/Business Groups	Account, Info.			
	directors	Account, Info.	Banks	Account, Info.			
					Constitutions	Accountability	
			Information intermediaries	Information			
			Financial intermediaries Regulators of intermediaries (private & public)	Information	Securities and banking laws	Account, Info	
	'Independent' board of	Account Info		Incorporation Jowa		Accountability	
	directors	Account, Info.		incorporation laws		Accountability	
	Company by laws	Account, Info.		Corporate laws		Accountability	
Most formal	Compensation plans	Accountability		Disclosure laws		Information	

 Table 3.1: Institutions of Corporate Governance

#### Source: Dyck (2000)

For example, in the middle of the 1990s, the Czech republic due to weak internal and external ICGs, many of the firms that were privatized were 'tunneled out', resulting in these firms amassing massive debts. With investors in dire straits and disenchanted workers, these firms had difficulty raising capital to fund future investments. The New York Times ran a full page ad warning potential investors – "think twice before you invest in the Czech Republic'. Otherwise, you could be left to 'twist in the wind' warning investors' loss to shareholders" (New York Times, November 8, 1999). During difficult economic times, the 'grabbing hands' and 'tunneling' situation would get worse, sending a fragile economy into a tail spin downwards.

The success or failures of privatization policies in enhancing the economic performance of a country hinges on the effectiveness of the external and internal ICG in raising the level of corporate governance in the country. Thus, privatized entities with strong and independent ICGs tend to have high level of governance, resulting in better shareholder value. The link between privatization, governance and economic performance can be summarized in Figure 3.1.

Figure 3.1: Relationship between Privatization, Governance and Economic Performance



The relationship between privatization and level of governance and economic performance of countries can be explained using Figure 3.2. Assume that there are three countries, Country A, Country B and Country C that have undertaken privatization of their major SOEs, and the levels of governance in these countries varied, that is,  $g_A$ ,  $g_B$ , and  $g_C$ . The differences in the overall governance levels may be attributed to the type of ownership structure of the privatized entities, level of risk transferred along with the ownership, the strength of the internal ICGs in the privatized entities, and the strength of the external ICGs.





Assume perfect competition between these countries in all three markets. This will result in varied levels of economic performance  $e_A, e_B$  and  $e_C$ . Note that if  $g_A > g_B > g_C$ , then  $e_A > e_B > e_C$ . Countries with higher levels of governance (because of the privatization process) tend to have lower probability of the above-mentioned market failures occurring (moral hazard, grabbing hands and tunneling). Hence, fostering a conducive investment climate, resulting in better economic performance.

For example, if the internal and external ICGs are further strengthened in the privatized entities as in Country B, these entities will operate more efficiently and productively. This will result in an inflow of investment into the privatized entities. If all the privatized entities are able to achieve high standard of corporate governance, the multiplier effect will result in a natural upward movement in the overall competitiveness of the economy (as shown in Figure 3.3).

On the other hand, if the ICGs weaken further as in Country C, the level of governance will deteriorate which put a drag on the competitiveness of the firm and the economy. Erosion of competitiveness will result in a massive outflow of investment, resulting in the collapse of the economy, and eventually leading to a collapse of the state (as shown in Figure 3.4).



Figure 3.3: Impact of successful privatization policies on the overall economy



Collapse of the economy and ultimately the state

In the above analysis, we have outlined scenarios of privatization exercises when the external and internal ICGs are weak and strong. In the next section, we develop and empirical model to assess the effects of privatization on economic performance.

# 4. RELATIONSHIP BETWEEN PRIVATISATION, GOVERNANCE AND ECONOMIC PERFORMANCE: THE MODEL AND DATA

Widespread privatization of SOEs both in developed and developing countries highlights the need to evaluate the impact of privatization policies on economic performance. Assessing these effects empirically is challenging due to two major methodological problems. First, measuring privatization policies at the macro level may not be straightforward. This is because, the privatization of SOEs in any country occur at different times and in varying stages. Thus, the impact on the overall economy may vary on the types of SOEs that have been privatized, and their overall contribution to the economy. Second, the success or failure of privatization policies is closely tied to the state of corporate governance in the country. Finding appropriate (and measurable) proxies for corporate governance for the overall economy prove to be challenging.

To overcome the first methodological problem, we evaluate the impact of privatization by assessing the corporate governance environment post - privatization period (1996 to 2002). Generally, if the privatization of major SOEs were successful, the corporate governance environment would be positive, and the converse is also true.

Given, restrictions to the modeling technique, we are able to assess the aggregate impact of privatization policies by assessing the general perception of governance in the country. Thus, if privatization of SOEs in the country failed, this will be reasonably captured by the general perceptions of the corporate governance environment in the country.

This leads naturally to the second methodological problem of measuring the overall governance in a country. In order to measure overall governance in a particular country, we developed an index called as the 'Governance Index' ( $I_G$ ). This index consists of seven important characteristics of governance. They are:

- (1) The process, by which governments are selected, monitored and replaced. There are two main variables that represent this component, namely, voice and accountability and political stability.
  - I1: Voice and Accountability

This variable measures the political process, civil liberalities and political rights. More intrinsically, this variable measures the extent to which citizens are able to choose their government.

I2: Political Stability

This variable measures perceptions of the likelihood the government will be overthrown and occurrence of violence in the country.

- (2) The capacity of the government to effectively formulate and implement sound policies.
  - I3: Government Effectiveness

This variable measures the perception of the quality of public service, bureaucracy, competence of civil services, independence of civil workers from political pressures and credibility of the government's commitment to policies in a single grouping.

I4: Regulatory Quality

This variable measures the incidence of market unfriendly policies (e.g. price controls or inadequate bank supervision).

- (3) The respect of the citizens and the state of the institutions that govern economic and social interactions among them.
  - Is: Rule of Law

This variable measures the extent to which agents have confidence in and abide by rules of society that includes perceptions on violence and nonviolence crimes, effectiveness of the judiciary and enforceability of contracts.

I6: Control of Corruption

This variable measures perceptions of the control of corruption in the country.

(4) The level of transparency in a country.

#### I7: Transparency index

This variable measures the level of transparency in a country.

Note that data for  $I_1$  to  $I_6$  was taken from Kaufmann et al., (2003). The indices are between  $-2.5 \le I_i \le 2.5$ , where;

-2.5 denote the lowest level of governance for the *i*th government characteristic.

$$I_i = \begin{cases} 2.5 \text{ denote the highest level of governance for the ith government characteristic } \end{cases}$$

The governance indices are derived from extensive survey conducted by Kaufmann et al., (2003). I<sub>7</sub> is taken from the *IMD World Competitiveness Yearbook*. This index was gauged from a base of 10 {i.e. I<sub>7</sub> =0 denotes the lowest transparency, while I<sub>7</sub> = 10 denotes the highest transparency}. To maintain consistency in the base of all our governance indices, we converted the base of I<sub>7</sub> to that of I<sub>1</sub> – I<sub>6</sub>. We then developed an overall governance index (denoted as I<sub>G</sub>), which captures the seven governance characteristics described above. The overall governance index (I<sub>G</sub>) is measured in the following way:

$$I_G = \frac{1}{7} \sum_{i=1}^7 I_i$$

Note that if all the I<sub>i</sub>'s increase, the level of overall governance in country (I<sub>G</sub>) increases.

In our study, we were able to obtain data for the above-mentioned governance indices for several countries for 1996, 1998, 2000 and 2002. ASEAN-5's governance environment was then compared with the following thirteen other countries:

1.	Australia	6. Norway	11. Mexico
2.	Brazil	7. Ireland	12. New Zealand
3.	Taiwan	8. Chile	13. Korea
4.	Finland	9. South Africa	
5.	India	10. Switzerland	

Apart from the governance measurements, we have also used several indicators to measure economic performance (overall productivity, market capitalization, hard budget (public debt), output (real GDP per capita)). The overall productivity and public sector debt were obtained from the *IMD World Competitiveness Yearbook (various issues)*. Meanwhile, the data on the stock market capitalization was obtained from the *World Exchange Federation (WEF) Statistics*. The real GDP per capita data was obtained from *World Bank statistics*.

One of the primary objectives of this study is to assess the impact of privatization policies on economic performance. Based on the arguments above, the cost and benefit of privatization policies depend very much on the strength of the ICGs (which sets the conditions for the governance environment). The relationships between privatization, governance and economic performance are summarized in Figure 4.1.



Figure 4.1: Relationship between Privatization, Governance & Economic Performance

The causal link between privatization, governance and economic performance can be estimated using the following model *ceteri-paribus* (all other factors are constant):

 $y_i = \beta_0 + \beta_0 I_{Gi} + \varepsilon_i$ , for i = 1, ..., n countries,

where,  $y_i$  is the dependent variable for the economic performance (overall productivity, market capitalization, public debt and real GDP per capita),  $I_G$  is the explanatory variable that measures the overall level of corporate governance (as a result of the privatization policies), and  $\varepsilon$  is the residuals that satisfies the standard regularity conditions (i.e.,  $\varepsilon_i \square N(0, \sigma^2)$ ).

# 5. PRIVATISATION PROGRAM AND ECONOMIC PERFORMANCE: THE CASE OF ASEAN-5

In this section, we will first examine the relationship between governance, and economic performance (overall productivity, market capitalization, public sector debt and real output) from 1996 to 2002 (post privatization period) for the sample countries. We will then study the trends in the governance and the economic performance for ASEAN-5 during the post privatization period.

#### 5.1 Privatization Program and Overall Productivity

Patterns for governance and overall productivity for all the countries in the sample are given in Chart 5.1 to Chart 5.4. In general, most of the developed countries are in the upper right quadrant of the scatter plot, while the developing countries are in the lower left quadrant. The overall trend shows that countries with high governance tend to have higher productivity level. Countries such as Ireland, Switzerland and Norway have seen consistent increase in the governance index over the four selected years. In tandem with that, the overall productivity in these countries has also increased significantly.

In 1996, Singapore's governance index was 1.56 points with an overall productivity of \$50,050 per worker. In 1998, the governance index decreased to 1.52 points. Subsequently, the overall productivity for this year also fell slightly to \$47,220 per worker. In 2000, Singapore's governance index increased to 1.69 points. However, Singapore's overall productivity fell to \$43,056 per worker. In 2002, Singapore's governance index fell to 1.59 points, but the overall productivity increased marginally to \$47,475 per worker relative to the previous period.

In the case of Malaysia, we observe that from 1996 to 1998, the governance index fell from 0.62 to 0.58, while the overall productivity increased from \$12,126 to \$20,937 per worker. By 2000, the governance index fell to 0.36, while the overall productivity in

Malaysia increased marginally to \$21,837 per worker. There was an increase in 2002 for both governance index of 0.38 and overall productivity of \$22,969 per worker.

In 1996, the overall governance index and the overall productivity level for Thailand were -0.10 points and \$4,418 per worker, respectively. In 1998, both the overall governance index and overall productivity level for Thailand increased to 0.08 points and \$11,762 per worker, respectively. In the next two years (i.e. 2000 and 2002), the overall governance index increased to 0.11 points and 0.15 points, respectively. However, the overall productivity in the year 2000 saw marginal decrease from the previous year – of \$11,696 per worker. In 2002, the overall productivity for Thailand increased to \$15,149 per worker.

The Philippines was positioned in the negative region of the charts (except in the year 1998). The Philippines' governance index in 1996 was -0.05, with a corresponding overall productivity of \$3,072 per worker. In 1998, the governance index increased to 0.15. The overall productivity in this year also increased to \$10,063 per worker. In 2000, the overall governance index for the Philippines decreased again to -0.09 (refer to Chart 7.3). However, the overall productivity in the Philippines increased marginally to \$10,694 per worker. By 2002, the Philippines saw a fall in the overall governance index to -0.17 and a corresponding fall in the overall productivity to \$10,470 per worker.

Indonesia was in the lowest left end quadrant in all the charts, largely due to its negative overall governance index. In 1996, the overall governance index was -0.29 point, while the overall productivity was \$2,411 per worker. In 1998, the overall governance index fell to -0.47 point. However, the overall productivity in this year increased significantly to \$8,037 per worker. By 1998, the overall governance index improved slightly (albeit in negative region) to -0.38 points, while the overall productivity fell to \$6,660 per worker. In 2002, the overall productivity in Indonesia increased marginally to \$6,774 per worker, despite the fall in the governance index of -0.47 point.



Chart 5.2: Governance Index vs. Overall Productivity 1998



Chart 5.1: Governance Index vs. Overall Productivity 1996



Chart 5.3: Governance Index vs. Overall Productivity 2000

Chart 5.4: Governance Index vs. Overall Productivity 2002



### 5.2 Privatization Program and Market Capitalization

In this section, we will examine the relationship between privatization (i.e., the governance level) and market capitalization. Chart 5.5 to Chart 5.8 provides the scatter plots for governance and market capitalization.

Generally, we observe that the developed countries (Switzerland, Australia, Ireland, Finland and New Zealand) have the highest level of governance in all the four selected years, ranging above 1 point (in 1996 and 1998) and above 1.5 point (in 2000 and 2002). Australia and Switzerland seem to have very high market capitalization over the years, ranging from \$300 to \$800 million. Meanwhile Finland, Ireland and New Zealand have market capitalization between \$50 to US\$100 million during the four selected years.

In the case of Singapore, the governance index and market capitalization was 1.56 points and \$153 billion, respectively in 1996. In 1998, both the governance index and market capitalization fell to 1.52 points and \$96 billion, respectively. By 2000 however, Singapore's governance index and market capitalization increased to 1.69 points and \$155 billion, respectively. In 2002, Singapore's governance index fell slightly to 1.59 points. In tandem, market capitalization in Singapore also fell to \$102 billion in this year.

In 1996, Malaysia's market capitalization was \$300 million with a governance index of 0.62 point. However, after the Asian Financial Crisis in 1997 has weakened Malaysia's stock market in which the composite index reached as low as 300 points and the market capitalization in 1998 declined close to \$100 million. During the same period, the governance index fell slightly to 0.58 point. By 2000, Malaysia's governance index fell further to 0.35 point with the market capitalization still hovering around \$100 million mark. In 2002, the governance index improved slightly to 0.38 point and market capitalization increased to \$122 million.

The overall governance index for Thailand in 1996 was -0.10 points. Meanwhile, the market capitalization for Thailand in this year was \$95 billion. In 1998, the overall governance index moved up to 0.08 points. However, the market capitalization in this year decreased significantly to \$34 billion. This reduction was attributed to the 1997 Asian financial crisis that caused major outflow of capital from Thailand. In 2000, while the overall governance index increased further to 0.11 points, the market capitalization reduced further to \$29 billion. By 2002, both the overall governance index and market capitalization in Thailand saw a significant increase of 0.15 points and \$45 billion, respectively.

The Philippines on the other hand, had low overall governance level and market capitalization over the four years. The governance index and market capitalization was -0.05 and \$80 billion, respectively in 1996. In 1998, the governance index increased to 0.15. However, the market capitalization fell to \$34 billion in this year. In the subsequent years, both the governance index and the market capitalization saw continuous downfall, of -0.09 and \$25 billion in 2000, and -0.17 and \$16 billion in 2002, respectively.

Meanwhile, Indonesia had the lowest governance level and also low market capitalization among the other ASEAN countries over the years. In 1996, the governance index and market capitalization in Indonesia was -0.29 and \$90 billion, respectively. Both the governance index and market capitalization decreased to -0.47 and \$22 billion, respectively in 1998. By 2000, the governance index improved marginally to -0.38, while the market capitalization in Indonesia also improved to \$26 billion. In 2002, while the governance index fell to -0.47, the market capitalization increased to \$30 billion.



Chart 5.5: Governance vs. Market Capitalization 1996

Chart 5.6: Governance vs. Market Capitalization 1998





Chart 5.7: Governance Index vs. Market Capitalization 2000

Chart 5.8: Governance Index vs. Market Capitalization 2002



#### 5.3 Privatization Program and Hard Budget (Public Sector Debt)

In this section we will examine the impact of the privatization program on public sector debt. Charts 5.9 to Chart 5.12 are the scatter plots for governance and public sector debt.

From the scatter plots, we observe that developed countries seem to experience improvements in the governance and lower public debt. Most of the developing countries seem to have experienced a decrease in the governance level and an increase in the public debt over the sample period.

In 1996, the governance index for Singapore was at 1.56 points while the public sector debt was at \$63.9 billion. Singapore's governance index decreased to 1.52 points in 1998 while the public sector debt increased to \$68.8 billion. In 2000, the overall governance index increased to 1.69 while the public sector debt also increased to \$80 billion. By 2002, the governance indicator decreased to 1.59 points, while the public sector debt increased to a whopping \$271 billion.

In the case of Malaysia, with the fall in governance index from 0.62 to 0.58 (from 1996 to 1998), the public sector debt fell marginally from \$35.7 billion to \$26.3 billion. A substantial fall in the governance in 2000 of 0.35, saw public debt increase to \$33.1 billion. In 2002, the overall governance improved marginally to 0.38, however, the public sector debt continuously increased to \$36 billion.

Thailand (together with the other developing countries) is again in the lower ends of the charts in all the years. While the overall governance index increased from –0.10 points in 1996 to 0.08 points in 1998, the public sector debt increased significantly from \$6.7 billion in 1996 to \$11.5 billion in 1998. This increase in public sector debt is attributed to the 1997 Asian Financial Crisis. However in 2000, the public sector debt in Thailand saw sharp reduction to \$2.8 billion (the overall governance index in this year increased to 0.11 points). The year 2002 again saw sharp increase in the public sector debt of \$62.5 billion (the overall governance index in this year).

The Philippines overall governance index increased marginally from -0.05 in 1996 to 0.15 in 1998. By 2002, the governance index fell to -0.17 points. The public sector debt also kept increasing after the year 1998. In 1996, the public sector debt in the Philippines was \$44.1 billion. This reduced to \$40 billion in 1998. In 2000, the public sector debt increased to \$48.8 billion, and peaked to \$60.3 billion in 2002.

Indonesia had negative overall governance index over the four years. From -0.29 point in 1996 the governance index fell to -0.47 in 1998. The public sector debt in both these periods was same, that is, \$54 billion. In 2000, the governance index increased slightly to -0.38 point. However, the public sector debt increased to \$64 billion in this year. By 2002, Indonesia's governance index fell to -0.47 and public sector debt increased to \$131 billion.



Chart 5.9: Governance Index vs. Public Sector Debt 1996



Chart 5.10: Governance Index vs. Public Sector Debt 1998

Chart 5.11: Governance Index vs. Public Sector Debt 2000





Chart 5.12: Governance Index vs. Public Sector Debt 2002

#### 5.4 Privatization Program and National Output (real GDP per capita)

The trend between governance and real output is given in Chart 5.13 to Chart 5.16. The general trend is that countries with high governance levels seem to have higher output levels. Almost all the developed countries have improved their governance level throughout the sample years, and have experienced increase in output.

In 1996, Singapore was in the second position behind Norway (the leading country), with a governance index of 1.56 points and GDP per capita of \$28,472. In 1998, the governance index of Singapore fell slightly to 1.52 points. In tandem with the fall in the index, the real GDP per capita in Singapore also decreased to \$21,789. In 2000, both the governance index and GDP per capita increased to 1.69 points and \$22,437. By 2002, Singapore's governance index fell slightly to 1.59 points, followed by a fall in the GDP per capita to \$20,906.

Malaysia saw a big fall in real GDP per capita during the 1997 Asian Financial Crisis period. During this period, the overall governance was on a downward trend, that is, from 0.62 in 1996, 0.58 in 1998, 0.36 in 2000, and increasing slightly to 0.38 in 2002. During these periods, real GDP per capita in Malaysia also saw continuously decrease – from \$9,020 per capita in 1996, \$8,142 in 1998, \$3,680 in 2000 and \$3,814 in 2002.

In the case of Thailand, the overall governance index increased significantly over the four years: -0.10 (1996), 0.08 (1998), 0.11 (2000) and 0.15 (2002). The real GDP per capita on the other hand, seem to be fluctuating over the years. In 1996, the real GDP per capita was \$2,770. This reduced to \$1,788 in 1998, before increasing again to \$2,001 in 2000. By 2002, the real GDP per capita in Thailand declined to \$1,955.

In the case of the Philippines, the overall governance index was -0.05 in 1996, while the real GDP per capita was \$1,177. In 1998, the governance index increased to 0.15, but the real GDP per capita decreased to \$866. In 1998, the governance index fell further to 0.09 points, and during this period, the real GDP per capita increased marginally to \$998. In 2002, the Philippines governance index shrank to -0.17 points with a corresponding decline in the national output level of \$977 per capita.

In the case of Indonesia, both the governance index and the real GDP per capita in all the four years were low. In 1996, the governance index and real GDP was -0.29 point and \$1,038 per capita, respectively. In 1998, both the governance index and real GDP decreased to -0.47 point and \$263 per capita, respectively. By 2000, the governance index increased marginally to -0.38 point. Subsequently, the real GDP also increased to \$654 per capita. In 2002, while the governance index fell to -0.47 point, the real GDP increased to \$802 per capita.



Chart 5.13: Governance Index vs. GDP Per Capita 1996





Chart 5.15: Governance Index vs. GDP Per Capita 2000





### 5.5. Conclusion

As mentioned in the previous sections, successful privatization schemes will enhance the governance in the SOEs, provided the internal and external ICGs are strong and independent. As the privatized entities enhance their governance and economic performance, this will increase the overall governance level in the economy, hence, enhancing the national economic performance via the 'multiplier effect'.

In this section, we empirically tested the above hypotheses for a sample of countries and examined the case of ASEAN-5 that is, Singapore, Malaysia, Thailand, the Philippines, and Indonesia. The empirical model showed that privatization programs in Singapore (proxied by higher overall governance level) had positive impact on overall productivity, market capitalization and economic output. It was also shown that successful privatization program also reduce public sector debt (though not statistically significant). However, privatization program undertaken in the other ASEAN countries had little success in enhancing overall productivity, market capitalization and economic output. The privatization program in Indonesia in the 1990s proved to be the least effective in raising the overall level of governance and economic performance.

# 6. MACROECONOMIC ANALYSIS OF PRIVATISATION PROGRAM AND ECONOMIC PERFORMANCE: BENCHMARKING ASEAN-5 WITH SELECTED DEVELOPED & DEVELOPING COUNTRIES

In this section, the ASEAN-5 countries will be benchmarked with other developed and developing countries, using a multivariate statistical method developed by Nair and Kuppusamy (2003). The method will classify countries in five bands based on the success of the privatization programs and the level of developments in terms of economic performance overall productivity, market capitalization, hard budget (public debt), output (real GDP per capita).

The present empirical method will provide a framework to assess the level of success ASEAN countries have achieved in increasing the overall governance and economic performance (through privatization program) vis-à-vis other developed and developing countries.

### 6.1 The Theoretical Framework and Empirical Algorithm

The present approach assumes that countries are at five different stages of development with respect to governance. The developments are dependent on the effectiveness of the privatization programs in these countries. The different levels of governance have an impact on the level of economic performance in these countries. Countries that have strong and independent ICGs tend to have higher levels of governance and this result in higher levels of economic performance (as given in Figure 6.1).



### Figure 6.1: Privatization, Governance & Economic Performance

Governance level

From Figure 6.1, we observe that countries in Band 1 have the highest level of governance and economic performance levels. On the other hand, countries in Band 5 have the lowest levels of governance and economic performance levels. In our analysis, we argue that successful privatization programs will increase the overall governance levels, hence the economic performance of countries. This will mean that over time, developing countries will move up from lower bands (Band 5) towards the upper bands (Band 1) if the privatization programs have been successfully implemented. The algorithm to capture the band movements from 1996 to 2002 is given in Figure 6.2.



Figure 6.2 Band classification algorithm (Nair & Kuppusamy, 2003)

Note that the algorithm for classifying the countries in the respective bands will be based on the governance factors. Increased governance level is the proxy for successful privatization program. On the other hand, unsuccessful privatization program will lead to a decrease or low overall governance level.

#### 6.2 Empirical Results

Table 6.1 provides the band configuration for governance indicators for the sample countries (including ASEAN-5). We observe that most of the developed countries in the sample were in Band 1 and Band 2 in all the four periods (1996, 1998, 2000 and 2002). Singapore was also in Band 1 in all the four periods. In 1996, Singapore was the only country in Band 1. In 1998, Singapore was clustered in fifth place behind Switzerland, Finland, New Zealand, and Norway in Band 1. By 2000, Singapore was again the sole country in Band 1, before falling to fifth place of Band 1 in 2002 (led by Finland, Switzerland, New Zealand and Norway).

Malaysia was in third place (behind Chile and Taiwan and ahead of South Korea) of Band 3 in 1996. In 1998, Malaysia moved up to Band 2 and in third place behind Taiwan and Chile. Malaysia moved down again to Band 3 in 2000 -- Malaysia was leading six other countries in this year (South Africa, Thailand, Brazil, Mexico, India and the Philippines). By 2002, Malaysia was clustered in Band 2 (in third place behind Taiwan and South Korea).

Thailand was in Band 4 in 1996 (second position behind South Africa) before moving up to Band 3 (fourth place behind South Korea, South Africa, and the Philippines) in 1998. In 2000, Thailand remained in Band 3 with a slight fall to fifth place of the band (behind Taiwan, South Korea, Malaysia, and South Africa). By 2002, Thailand became the leader of Band 3 (ahead of Mexico, Brazil, India and the Philippines).

In 1996, the Philippines were in third place of Band 4. In 1998, the Philippines moved up to Band 3 (third place behind South Korea and South Africa) and remained in this band in 2000 and 2002. Note that the Philippines was in the (ninth/last place) of Band 3 in 2000 and remained in last place in 2002.

Indonesia was in Band 5 in all the four periods. In 1996, Indonesia was behind China in Band 5 and became the sole country in this band from 1998 onwards. We note that the mean figure for Indonesia was constantly negative in all the periods.

1996	Band 1	Band 2	Band 3	Band 4	Band 5
	Singapore	NewZealand	Japan	Brazil	China
		Switzerland	Chile	Mexico	Indonesia
		Norway	Taiwan	Philippines	
		Finland	Malaysia	SouthAfrica	
		Sweden	Korea	Thailand	
		UK		India	
		Germany			
		Australia			
		Ireland			
		US			
		Canada			
	Mean	Mean	Mean	Mean	Mean
Voice and Accountability	0.38	1.53	0.62	0.18	-1.05
Political Stability	1.29	1.16	0.75	-0.23	-0.06
Government effectiveness	2.04	1.65	0.89	0.01	0.26
Regulatory quality	1.95	1.31	0.83	0.23	0.34
Rule of law	2.01	1.86	1.05	0.05	-0.12
Control of corruption	2.04	1.87	0.80	-0.13	-0.44

Table 6.1: Band configuration for Governance Factors

1998	Band 1	Band 2	Band 3	Band 4	Band 5
	Singapore	Switzerland	Malaysia	China	Indonesia
		Finland	Korea		
		NewZealand	Philippines		
		UK	SouthAfrica		
		Norway	Thailand		
		Sweden	Brazil		
		Ireland	Mexico		
		Canada	India		
		Australia			
		Germany			
		US			
		Taiwan			
		Japan			
		Chile			
	Mean	Mean	Mean	Mean	Mean
Voice and Accountability	0.01	1.30	0.32	-1.51	-1.33
Political Stability	1.40	1.29	-0.10	0.29	-1.52
Government effectiveness	2.50	1.88	0.21	0.18	-0.58
Regulatory quality	1.65	1.27	0.40	-0.07	0.10
Rule of law	2.24	1.89	0.24	-0.22	-0.97
Control of corruption	2.50	2.08	0.04	-0.20	-0.99

2000	Band 1	Band 2	Band 3	Band 4	Band 5
	Singapore	Finland	Taiwan	China	Indonesia
		Switzerland	Korea		
		Sweden	SouthAfrica		
		UK	Malaysia		
		Australia	Thailand		
		Ireland	Brazil		
		Canada	Mexico		
		NewZealand	India		
		Germany	Philippines		
		US			
		Norway			
		Japan			
		Chile			
	Mean	Mean	Mean	Mean	Mean
Voice and Accountability	1.35	1.34	0.45	-1.37	-0.52
Political Stability	1.34	1.34	0.14	0.27	-1.85
Government effectiveness	1.77	1.76	0.36	0.24	-0.49
Regulatory quality	1.40	1.39	0.42	-0.20	-0.43
Rule of law	1.93	1.92	0.22	-0.32	-0.90
Control of corruption	2.01	2.00	0.05	-0.34	-1.09

2002	Band 1	Band 2	Band 3	Band 4	Band 5
	Finland	Japan	SouthAfrica	China	Indonesia
	Switzerland	Taiwan	Thailand		
	Sweden	Korea	Mexico		
	NewZealand	Malaysia	Brazil		
	Norway		India		
	Australia		Philippines		
	Singapore				
	Canada				
	UK				
	Germany				
	Ireland				
	US				
	Chile				
	Mean	Mean	Mean	Mean	Mean
Voice and Accountability	1.43	0.56	0.35	-1.38	-0.49
Political Stability	1.20	0.72	-0.08	0.22	-1.37
Government effectiveness	1.86	0.96	0.09	0.18	-0.56
Regulatory quality	1.66	0.87	0.24	-0.41	-0.68
Rule of law	1.80	0.95	-0.08	-0.22	-0.80
Control of corruption	2.01	0.68	-0.14	-0.41	-1.16

From the above analysis, we can summarize that Singapore has the best governance level among the ASEAN-5 and remained in Band 1 (pace setter) in all the four periods. Malaysia, Thailand and the Philippines were constantly in Band 3 and Band 4 (adapter and adopter) over the sample periods. Malaysia moved up to Band 2 in 2002. Indonesia had the weakest governance level -- it remained in Band 5 (starter) throughout the sample periods.

Table 6.2 provides the band configuration for economic performance for the twenty five countries. Here, economic performance for ASEAN-5 was benchmarked by using four economic performance variables, namely, overall productivity, market capitalization, GDP per capita and public sector debt.

Singapore was in Band 2 in 1996, behind with Norway. In 1998, Singapore remained in this band, but fell to third place behind Norway and Ireland. By 2000, Singapore was still in Band 2, but moved down further to sixth (last) place of the band. In 2002, Singapore was in Band 3 behind New Zealand, South Africa and Korea.

Malaysia was in Band 3 (third place) in 1996. Malaysia moved down to Band 4 in 1998 (top three place), before moving back to Band 3 in 2000. However, Malaysia was in fifth place (out of eight) in this year. By 2002, Malaysia moved up to fourth place of Band 3 (ahead of Chile, Mexico, Thailand, the Philippines, and Indonesia).

Thailand was in Band 4 in 1996 (fourth place) and 1998 (sixth place). In 2000, Thailand moved up to Band 3 (in sixth place) and remained in this band in 2002 (in seventh place). Similarly, the Philippines was also in Band 4 in 1996 (seventh place) and 1998 (ninth place). In 2000, the Philippines moved up to Band 3 (seventh place) and remained in this band in 2002 (eight places). Finally, Indonesia was in the last place of Band 4 in 1996 and 1998. In 2000, Indonesia moved up to Band 3 (still in the last place) and moved down to Band 4 in 2002, behind China.

In summary, most of the ASEAN-5 (except for Singapore) was clustered in Band 3 to Band 4 in all the four periods. Singapore was in Band 2 in most of the years, except in 2002, when Singapore fell to Band 3 because of the high public sector debt in the country in this year. However, Singapore was still ahead of all the other ASEAN countries in terms of the overall economic performance.

1996	Band 1	Band 2	Band 3	Band 4	Band 5
	Sw itzerland	Norw ay	Australia	Brazil	Mexico
		Singapore	Taiw an	Korea	India
		Finland	Malaysia	Chile	
		New Zealand	South Africa	Thailand	
		Ireland		China	
				Philippines	
				Indonesia	
	Mean	Mean	Mean	Mean	Mean
Overall Productivity	8.56	4.61	-0.17	-3.37	-3.67
Mkt Capital	9.75	-2.91	5.27	-1.4	-3.25
GDP Per cap	6.1	4.81	-0.22	-3.09	-3.81
Debt	-1.69	0.24	-0.15	2.96	-9.61
1998	Band 1	Band 2	Band 3	Band 4	Band 5
	Sw itzerland	Norw ay	Australia	Chile	India
		Ireland	Taiw an	Korea	
		Singapore	Finland	Malaysia	
		New Zealand		Brazil	
				South Africa	
				Thailand	
				China	
				Mexico	
				Philippines	
				Indonesia	
	Mean	Mean	Mean	Mean	Mean
Overall Productivity	4.03	4.31	4.02	-2.66	-6.73
Mkt Capital	15.46	-2.17	3.02	-1.51	-0.74
GDP Per cap	6.23	5.33	2.8	-3.18	-4.15
Debt	-1.08	1.49	-0.56	1.15	-14.72

# Table 6.2: Band configuration for Economic Performance Factors

2000	Band 1	Band 2	Band 3	Band 4	Band 5	
	Sw itzerland	Norw ay	New Zealand	China	Mexico	
		Ireland	Korea		Brazil	
		Finland	South Africa		India	
		Australia	Chile			
		Taiw an	Malaysia			
		Singapore Thailand				
			Philippines			
			Indonesia			
	Mean	Mean	Mean	Mean	Mean	
Overall Productivity	4.07	4.65	-1.75	-5.7	-4.11	
Mkt Capital	12.86	0.27	-2.72	8.35	-0.38	
GDP Per cap	8.16	4.4	-2.63	-4.06	-3.16	
Debt	0.15	0.75	2.56	1.31	-8.82	

2002	Band 1	Band 2	Band 3	Band 4	Band 5
	Sw itzerland	Norw ay	New Zealand	China	Brazil
	Australia	Ireland	South Africa	Indonesia	India
		Taiw an	Korea		
		Finland	Singapore		
		Malaysia			
			Chile		
			Mexico		
			Thailand		
			Philippines		
	Mean	Mean	Mean	Mean	Mean
Overall Productivity	3.8	5.68	-2.06	-2.09	-5.52
Mkt Capital	8.74	-0.65	-2.23	-1.17	8.73
GDP Per cap	5.26	5	-2.48	-1.47	-3.78
Debt	0.61	3.27	1.44	-8.28	-2.4

#### 6.3. Conclusion

In this section of the report, a multivariate statistical method was used to benchmark the performance of ASEAN-5 countries with other developing and developed countries from 1996 to 2002 (post privatization period). Summary of the band transition for the respective ASEAN-5 countries are given in Table 6.3.

Country	Indicator	1996	1998	2000	2002
Singapore	Governance	1	1	1	1
	Economic Performance	2	2	2	3
Malaysia	Governance	3	3	3	2
	Economic Performance	3	4	3	3
Thailand	Governance	4	3	3	3
	Economic Performance	4	4	3	3
Philippines	Governance	4	3	3	3
	Economic Performance	4	4	3	3
Indonesia	Governance	5	5	5	5
	Economic Performance	4	4	3	4

Table 6.3: Band Transition (1996 – 2002) for ASEAN-5

Based from the empirical analysis, the privatization program in Singapore in 1980s and 1990s has been successful in terms of increasing the overall governance level and economic performance. Though there have been improvements in the overall governance ranking and economic performance in the other ASEAN countries, nevertheless the governance-gap and economic performance-gap between the four ASEAN countries (Malaysia, Thailand, Philippines and Indonesia) and other developed countries (Band 1 countries such as Singapore, Finland, Switzerland, Australia, New Zealand, Ireland and Norway) have widened over the sample period (1996 – 2002).

In this section, pertinent policies and strategies that were adopted by countries in Band 1 will be discussed. In general, countries in Band 1 have a systematic policies (both short term and long term) to increase greater governance, transparency, and accountability over the last two decades. The following strategies were pursued in these countries to increase the overall governance and economic performance:

- Strengthening both the internal and external institutions of corporate governance.
- Providing better access to new technology and infostructure to the population. Shareholders have better and faster access to information, thus they are able to hold public servants and corporate directors more accountable for their actions.
- Speeding up the implementation of electronic government and assisting all stakeholders to use this digital medium and electronic procurement system.
- Educating all segment of the society on the importance of good governance, integrity and best practices. Further, ensuring schools, colleges and universities incorporate the study of governance and ethics as a part of their curriculum.
- Benchmarking local practices and operating procedures against laws, regulations, standards and codes, which are increasingly global in nature.

### 7. CONCLUSIONS

In summary, this report examined the impact of privatization programs on overall governance and economic performance in selected ASEAN countries. The study also benchmarked the performance of these ASEAN countries with other developed and developing countries. Empirical evidence suggests that Singapore is the best performing ASEAN country in terms of overall governance and economic performance. In this study, we also examined some of the strategies adopted in highly developed countries (Band 1 countries) in terms of increasing their overall governance and economic performance. These findings will be important in the formulation of better privatization programs in Malaysia, Thailand, Philippines and Indonesia.

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