



AJPA  
Asian  
Journal  
of  
Public  
Affairs

# *Asian Journal of Public Affairs*, VOL. 1, NO. 2

## TABLE OF CONTENTS

---

<i>Notes from the Editors' Desk</i> Editorial Board	4
 COMMENTARIES	
<hr/>	
<i>Bhutan's Contribution to Public Policy-Making</i> Dr. Caroline Brassard	6
<i>The War on Terrorism: What Went Wrong?</i> Touqir Hussain	8
 ARTICLES	
<hr/>	
<i>"Orthodoxing" Monetary Policy: Political Opposition and the Road Ahead for the Bank of Japan</i> Melvin Koh Kint Hock	10
<i>Beyond the "Bomb in the Basement": Israel's Nuclear Predicament and Policy Options</i> Michael Raska	22
 POLICY ANALYSIS EXERCISE ABSTRACT	
<hr/>	
<i>The Universal Service Obligation of Telecoms: A South Asian Case Study of Two Government Agencies</i> Sundeep Malik	34
 BOOK REVIEWS	
<hr/>	
<i>A Review of Anne Marie Slaughter's "The Idea that is America: Keeping Faith with Our Values in a Dangerous World"</i> Erika Graffunder and Allen Lai	37
<i>A Review of Tony Cleaver's "Understanding the World Economy"</i> Fabio Silva	40
<i>A Review of Miguel Mendonça's "Feed-in-Tariffs: Accelerating the Deployment of Renewable Energy"</i> Wei Long Poh	43

ANNOTATED LIST OF BOOKS RECEIVED 46

---

GPPN SUPPLEMENT

---

- |   |    |
|---|----|
| <i>Debating the Public Policy Curriculum</i><br>Vimal Balasubramaniam | 49 |
| <i>Globalizing Yourself</i><br>Neena Moorjani                         | 51 |

THE JOURNAL

---

The *Asian Journal of Public Affairs* is a web-based, academic publication regarding public affairs issues pertaining to Asia and the Oceania region. Spearheaded by graduate students and printed on a biannual basis, *AJPA* was established to analyse and influence policy-making within Asia through an interdisciplinary lens, including but not limited to Public Policy, Public Management, International Relations, International Political Economy, and Economics. Each edition features scholarly submissions, case studies, book reviews, and commentaries from distinguished figures. The Journal seeks an audience of scholars and practitioners and is published by the Lee Kuan Yew School of Public Policy (LKY SPP).

## EDITORIAL TEAM

---

The Journal is run by Student Editors with the vital support of Senior Advisors, Professor Mukul Asher and Associate Professor Darryl Jarvis.

The 2007/2008 Editorial Team consists of the following individuals:

Akshar Saxena  
Amit Verma  
Angel Lam  
Anja Gaentzsch  
Bianca-Martina Rohner  
David S. Ragsdale  
Fabio Goncalves Da Silva  
James Orum Sheppard  
Jose Tito Baeza Huesca  
Maciej Drozd  
Meita Kartikaningsih  
Sanjana Govindan  
Vimal Balasubramaniam

## CALL FOR SUBMISSIONS

---

Current graduate students and recent alumni are invited to submit papers, case studies, and book reviews for the third edition of the *Asian Journal of Public Affairs*.

**Paper Guidelines:** Please substantiate your analysis with tangible policy recommendations. Papers should not exceed 6,000 words excluding endnotes and bibliography. Submissions must include a one-page abstract of the paper with contact information. Citations must follow the social science author-date system in the Chicago Manual of Style. Authors are also encouraged to submit policy case studies (max. 6,000 words) and brief book reviews (max. 1,000 words).

**Final Submissions Deadline (Vol. 2, No. 1, Spring 2008):**  
March 31, 2008

## NOTES FROM THE EDITOR'S DESK

---

Dear Reader,

The *Asian Journal of Public Affairs* welcomes you to our Second Issue. Contributors from four continents address policy challenges emanating from Asia that shape the today's state of the world. This idea – that the global trajectory of the first decades of the 20th century will inexorably lead through Asia – lies at the foundation of this Issue. It seeks to echo the 2007 Global Public Policy Network (GPPN) Conference, “Globalizing Asia or Asian Globalization”, held at the Lee Kuan Yew School of Public Policy in Singapore, and by doing so, further stir the debate on public policies that know no boundaries.

We open with a commentary by Dr. Caroline Brassard, an experienced practitioner and scholar of economic growth and development, who examines **Bhutan's Contribution to Public Policy Making**. Dr Brassard's piece highlights three issues that may arise from the adoption of an alternate indicator of Gross National Happiness. Happiness and prosperity, as former Pakistani Ambassador Touqir Husain's commentary on the **War on Terror** suggests, is perhaps one element lacking in the West's approach to Islam. Instead, the West's unpopular leadership, a politically insensitive and military dominated strategy has alienated Muslims and lost its influence on them. The multifaceted relationship between the West and the Muslim world are also highlighted in Dr. Anne-Marie Slaughter's book **“The Idea that is America”** in which she not only looks at the history and evolution of America, but also at the challenges that America faces today.

In parallel, the international security concern over nuclear proliferation and the threat of weapons of mass destruction continues to warrant great concern. Developments in the Middle East have consequences for Asia: China, India, Pakistan and North Korea have or are suspected of having nuclear arsenal. Examining **Israel's Nuclear Predicament and Policy Options** provides great insights not only into Middle Eastern politics but also into the current debate on nuclear proliferation and security within Asia.

While governments fret over the threat of terrorism and nuclear weapons, the world economy suffers from the consequences of the subprime crisis. Asian economies have so far escaped relatively unscathed from the recent turmoil in the financial markets, but the threat of global recession is undoubtedly of great concern. A look at monetary policy in Asia may therefore provide valuable insights into the reactions of Asian governments to a rapidly changing macroeconomic environment, as was the case with the **Bank of Japan's changing monetary policies**.

Expanding on the theme of global economic adjustments, the book review of John Cleaver's **Understanding the World Economy** highlights the economic theory behind current market trends. High oil prices, global warming and the quest for new energy sources have been the topics of much debate. The review of Miguel Mendonça's **Feed-in Tariffs: Accelerating the Development of Renewable Energy** provides a timely analysis of the government's

role in providing low-carbon energy.

Finally, two graduate students of the Lee Kuan Yew School of Public Policy directly reflect on the proceedings of the 2007 GPPN Conference. Established in 2005, the GPPN aims at fostering education and research in the field of public affairs within globalization. These two pieces raise the issues of how **individuals** and **public policy educators can become more attuned to the imperative of globalization.**

We hope you will find this second issue of *AJPA* both informative and stimulating. On behalf of the editorial board we would like to thank all those who have provided their advice and guided us with their

valuable support. We are especially grateful to our faculty advisors, Prof. Mukul Asher and Assoc. Prof. Darryl Jarvis and to our constant supporter, Ruth Choe. The Editorial Board would also like to thank MPA students from partner programmes – at the Hertie School of Governance, Institut d'Etudes Politiques de Paris, London School of Economics and Political Science and Columbia University's School of International and Public Affairs – for their support and feedback at the inaugural student GPPN Conference in Berlin held in October 2007.

Yours Sincerely,

The *AJPA* Editorial Board  
February 2008

## BHUTAN'S CONTRIBUTION TO PUBLIC POLICY-MAKING

*Caroline Brassard*

*Happiness is only an emotional state of being. It is an illusion. Is there anything absolute and permanent in the nature of prosperity? It too is an illusion. The only way that an illusion can be sustained is when it is shared by everyone*

Lyonpo Jigmi Thinley,  
Foreign Minister  
Kingdom of Bhutan 2001

Citizens are often said to be ahead of their government representatives in understanding the social and economic implications of their fast changing local environments. In Bhutan however, citizens are struggling to keep up with the pace of change, led by none other than their own King. Just in the last few years, a new constitution was enacted; and processes of decentralizing expenditure and democratization have both gathered speed. But what seems to have attracted worldwide attention is that 33 years after its creation, the innovative development framework in Bhutan is no longer just a philosophy. It is becoming a real measurable goal, just in time for the monarchy's centennial celebrations.

Since the 2007 BBC documentary "The Happiness Formula" was aired, many have heard of Bhutan's development strategy that centres on the concept of Gross National Happiness (GNH). The term, coined by King Jigme Singye Wangchuck in 1972, signalled the monarch's commitment to building an economy that would serve Bhutan's culture based on non-material spiritual Buddhist values.

The GNH framework has four components: economic growth and development; preservation and promotion of cultural heritage; preservation and sustainable use of the environment; and good governance. A lot of effort has been undertaken on a clear methodology to measure GNH, and to transform the "concept" into well-defined indicators. The question on everyone's mind now is whether this framework can be applied beyond Bhutan.

Since the 1990s, the emergence of happiness - however you define it - in development literature has led to a flurry of research in economics, psychology, ecology and sociology.

---

*Caroline Brassard worked as an economist for the Government of Ontario in Canada, and then undertook research and long term consultancy work on poverty reduction strategies for several international non-governmental organizations in developing countries, including United Nations Children's Fund in Madagascar, CARE in Bangladesh and Save the Children in Vietnam. She then went on to the University of London, where she taught empirical analysis for economics and management for two years, prior to joining the Lee Kuan Yew School of Public Policy. Caroline continues to consult with various international organizations including the United Nations Development Programme and she teaches development economics, poverty alleviation strategies and empirical analysis for public policy. Her current research focuses on comparing policies to alleviate poverty and reduce inequalities in Vietnam and China, examining historical socio-economic development policies in Vietnam and analyzing the alternative development path in Bhutan.*

Many researchers have tried to design innovative indicators that reflect well-being as part of the development goals. For example, over the past decade or so, spin-offs from the Human Development Indicators were designed and implemented to measure different aspects of well-being, such as the Gender Related Development Index, the Green Development Index and the Pollution Sensitive Human Development Index. These are all intended to better represent social welfare and environmental performance within the development context.

Many observers are now looking at the potential for GNH as an international standard, or as an overarching goal for both developed and developing countries. But even as GNH becomes a measurable objective, some policy changes may be needed, even in Bhutan. Indeed, one of the biggest challenges is to ensure that policies and priorities are compatible with the GNH framework. For example, there may be policies in conflict with GNH. There may even be a potential mismatch between public policy and the overall GNH objective. In this context, I highlight three questions that Bhutanese policy makers need to address promptly and appropriately.

*First, how will the GNH framework affect and shape bureaucratic behaviour?* A new type of competition may emerge within and between various ministries, as they try to tie in their activities to the framework. This could give rise to conflicting policies that are made "in the name of GNH". Although meant to streamline development strategy, it may lead to an uncoordinated approach to development between stakeholders and between sectors.

*Second, how can a balance be ensured between efficiency and equity within this framework?* Several dichotomies come to mind, especially since about 85 percent of the population depends on nine percent cultivable land; leading, for example, to issues of land-use and environmental conservation. Many questions arise: how can one avoid high social costs due to rural development; or, ensure self-sufficiency in food, or deal with urban employment pressures.

*Third, how can external events affecting GNH be managed?* Bhutan is advantaged because of its small size and its relative political stability. But many external factors may threaten its success in implementing GNH as an overarching goal. For example, Bhutan is highly dependent on foreign aid and investment. It is also very vulnerable to India's shifts in policies. Indeed, Bhutan's excessive dependency on India, its major trading partner, means that a sudden weakening of the Indian Rupee would immediately hurt its trade balance and spark spiralling inflation. Can the GNH framework transcend regional economic destabilization?

Despite these challenges, the Bhutanese expect to achieve sustainable development and ensure high levels of well-being in a framework that goes beyond social, economic and environmental aspects. Public policies are not always exportable, but the GNH framework and its indicators *can* be applicable to other countries and *should* be exportable. It is only then that Bhutan's contribution to public policy making can make a difference, and create hope for an international model towards the convergence of "global well-being".



## THE WAR ON TERRORISM: WHAT WENT WRONG?

---

*Touqir Hussain*

What has gone wrong with the war on terrorism that its failures have been as big as its successes?

First, the campaign was launched in the accompaniment of dangerous war hysteria in the West that led to the profiling of Islam as a universal creed of terrorism. Everything wrong with Muslim societies was equated with religion, thereby making the war on terrorism look like a war on Islam, and the distinction between the terrorists and their societies was blurred.

The West then claimed that it was a war of ideas, provoking Muslims to uphold and defend their value system. Elements on both sides began seeing their basic value system as under siege and exaggerated their mutual fears defaming and demonizing each other. Moral issues were undifferentiated or confused, or sacrificed to self-righteousness. Each side began judging the other with its own ideals, ideals from which it has fallen short itself. No wonder in the Islamic world the Islamists, moderates and extremists alike began "winning" this war of ideas as religion became the centre of discourse - while the West was looking at it as the source of the problem and the Muslims as the key part of the solution.

Many Muslims now believe that Islam is under siege and the only way for them to break free will be to wage "Jihad". The extremists have been able to present Muslims as victims and the West as oppressors.

This victim complex is helping Muslims to find external reasons for their own failings and consequently turning the attention away from self-reform to fighting the external "enemy".

The West will not succeed in the war on terrorism as long as the tensions with the Islamic world continue and Muslims believe it is not theirs but the West's war they are being made to fight, even at the expense of national cohesion and social stability, as is the case in Pakistan. No wonder President Musharraf has become deeply unpopular. But unfortunately Washington is still relating to Pakistan as a compliant ally with a client regime and pliant citizens as in the past and continues to see Pakistan through Musharraf's eyes.

Washington does not realize that Pakistan's domestic order has been changing and that this has been happening for some time even since before 9/11. Pakistan, like much of the Islamic world, has been under a slow and sustained assault from an illiberal, pro-Western elite and religious extremism has been fomenting such popular feelings as national honour, social discontent and religious identity. The liberal intelligentsia has been protesting in the name of freedom and progress and the weak and vulnerable masses could do no more than despair and contemplate extreme and illusionary avenues to empowerment, swayed as they were by ideologues, demagogues and political opportunists.

---

*Touqir Hussain, Visiting Professor at the University of Virginia, served formerly as Ambassador of Pakistan to Japan.*

The US has alienated both, on one hand by blocking true democratic reform and on the other by appearing to be working against Islam.

The US does not realize that while Pakistan may be a crucial partner in the war on terrorism, it is also a conflicted country in search of stability and a reformulated vision of its role in world events. However, if achieving near-term stability and future reform of Pakistan is subordinated to the war on terrorism, the US will have no partner to pursue this war. Thus, Pakistan will become a target instead of a partner, creating an even bigger crisis.

The war on terrorism is for the long haul. The US must for a moment focus on Pakistan and not this war. A stable and prosperous Pakistan will become a more willing and effective partner in the war on terrorism and enhance US capacity to fix Afghanistan. Besides that, Pakistan's stability is critical to the fulfilment of America's larger economic and strategic objectives in the region. All US aspirations to help India become a great power and a balancer to China will remain stillborn if Pakistan remains troubled, a threat to itself, to the regional peace and stability and to US and global security.

The US can make a good beginning by throwing its weight behind the revival of full democratic reform and neither support Musharraf's emergency measures nor broker any deals to extend the lease of life of his system. People want full restoration of democracy based on free, fair and inclusive elections, which must take place as planned. This should be followed by a reassessment of the strategy of the war on terrorism that is based on the support of the people and not just

the regime. A relationship with people is essential to strengthen a future democratic regime and to ensure the success of the war on terrorism.

Finally, the US should stop talking about Islam and exercise the full range of its economic strength and diplomatic assets to repair the damage done to the relations with the Islamic world and address the underlying issues that cradle extremism. Extremism is essentially a crisis within the Islamic world, which should be left alone to deal with it. The West must help, but through a different strategy, which would co-opt people. But by taking the lead in fighting it with the help of unpopular leaderships and a politically insensitive and military dominated strategy that has maligned religion, the West has alienated Muslims and lost its influence on them.

## “ORTHODOXING” MONETARY POLICY: POLITICAL OPPOSITION AND THE ROAD AHEAD FOR THE BOJ

---

*Melvin Koh Kint Hock*

*Japan's strategy of "quantitative monetary easing" ended in March 2006 with the Bank of Japan's (BoJ) decision to withdraw the policy. Four months later, the BoJ raised its benchmark overnight interest rates to 0.25 percent. The decision to raise rates, which was widely anticipated, may seem like a small and calculated step. But this switch in monetary policy undoubtedly represented a massive leap for Japan, where interest rates have resided at zero for most of the past six years. This paper first delves into Japan's history of liquidity targeting and argues that there is no clear evidence whether measures taken under liquidity targeting were effective in pulling Japan out from its deflationary spiral. The second half of the paper then seeks to examine the opposing stances of the BoJ and the Japanese government to trace how the BoJ's decision to raise interest rates ended up as a contentious political issue. Finally, the paper concludes with a discussion of the road ahead for the BoJ and maintains that the Bank is likely to retain its independence from the Japanese government in the near future.*

### **An Arcane and Perverse Monetary Policy**

Keynes, in 1920, wrote, "There is no subtler, no surer means of overturning the existing basis of society than to debauch the currency". These words have often been used to describe the evils of inflation. Japan, with its zero interest rate policy (ZIRP) and the Bank of Japan's (BoJ) practice of flooding the economy with excess cash can also provide incriminating evidence of a national currency being led astray. Hence, it is no wonder that Japanese monetary policy has long been viewed as "arcane and perverse" by some central bankers (Ward 2006). To understand how one of the world's largest economies ended up with such an unorthodox monetary policy, one has to briefly understand the history of liquidity targeting in Japan and the unfortunate circumstances leading to it.

When the 1980s' stock bubble burst in Japan, the economy did not sink directly into severe recession. However, the negative shock generated by the collapse of the asset price bubble did take a toll on the Japanese economy. Year after year, the Japanese economy underperformed and grew below potential, which led to a decade of economic stagnation in the 1990s, better known as Japan's "lost decade". As Japan's output gap (a measure of spare capacity) continued to widen, prices started falling in the late 1990s. Deflation eroded corporate profits and increased the real burden of outstanding debts, leading to wage cuts and increased unemployment, which further depressed consumption spending and economic growth. In February 1999 the BoJ was

---

*Melvin Koh Kint Hock is a Singapore national and a final year student in the Department of Economics at the National University of Singapore (melvinkoh@nus.edu.sg).*

compelled to introduce zero interest rates. The aim was to help Japan's sick economy by guiding the nominal unsecured overnight call rate (OCR) to zero percent in order to encourage lending, investment and consumption. This effectively placed Japan into what is commonly known as a liquidity trap and the zero interest rates meant that its central bank had very little tools left to influence monetary policy.<sup>1</sup>

However, the effectiveness of Japan's ZIRP was limited because besides residing in a liquidity trap, Japan was also unfortunately caught in a financial trap. Banks were worried about the volume of non-performing loans in their portfolios and were more concerned with limiting risks than extending new loans. Hence lending became resistant to changes in the cost of credit. As an indication of the vulnerability of the BoJ to changing economic conditions during that period, current governor Toshihiko Fukui analogized the BoJ to a boxer with his hands bound behind his back (Fukui 2003). However, it was clear that the BoJ had not given up fighting despite the lack of monetary policy tools at its disposal. When its move failed to jumpstart Japan's stagnant economy, and when a premature decision to terminate ZIRP in the autumn of 2000 proved a costly monetary policy mistake, the BoJ embarked on an unprecedented monetary policy experiment in March 2001 by replacing Japanese commercial banks' current account balance at the BoJ as the main target of monetary operations, in place of the OCR. The BoJ raised the current account target many times over - from one trillion yen to thirty-five trillion yen - between March 2001 and December 2004. These increases in current account balances were achieved primarily through the purchase of long-term Japanese government bonds by the BoJ.<sup>2</sup> As the new target level exceeded the level of non interest-paying required reserves, the call rate - the rate at which banks lend to one another - came close to zero percent.

This method of flooding commercial banks with liquidity became known as quantitative easing and reflected the recognition among Japan's central bankers that deflation was so entrenched in the economy that zero interest rates alone were not enough to stimulate the economy. The announcement of the quantitative easing policy was also accompanied by an additional clause, which stated that quantitative easing and zero interest rates would continue to be in place until the consumer price index (excluding fresh food) registered stably at zero percent or saw consisted year-on-year increase (Ito 2006).

## **The Effectiveness of Liquidity Targeting**

Japan's ZIRP, together with a policy of almost limitless monetary abundance were seen as emergency measures to save the economy from a deflationary spiral and to rescue the banking system (heavily saddled with bad loans)

---

<sup>1</sup> For example, the BoJ would be incapable of taking any action to combat emerging market bubbles if the need to raise interest rates arises. The threat of market bubbles developing in Japan during the late 1990s is not impossible due to the large amount of liquidity present in the financial system. Hence, overinvestment by exuberant investors can lead to overvalued assets (formation of an asset bubble) in the economy.

<sup>2</sup> By buying up Japanese bonds, the BoJ is effectively supplying liquidity to the economy.

from the brink of breakdown. One of the main aims of quantitative easing was to achieve real effects by raising inflation expectations in the market. For example, the injection of monetary base at zero interest rates sought to tell Japanese consumers that the BoJ was committed to maintaining the ZIRP until inflation criteria were met.<sup>3</sup> Hence, with large amounts of liquidity flooding the economy, Japanese consumers who believed in the imminent end of deflation would be tempted to spend *now* instead of waiting for prices to start rising. This change in consumer psychology would stimulate spending and the resultant upward pressure on prices would allow Japan to break out from its liquidity trap.

Additionally, the injection of money into the economy was also intended to stimulate bank lending to rescue Japan from its financial trap. With positive expected future inflation and nominal interest rates being held at zero, real interest rates would be pushed into the negative zone.<sup>4</sup> Hence, currency would earn a negative rate of return and banks would respond by expanding their lending volume to reduce the cost of holding currency on their balance sheets. However, whether quantitative easing *did* encourage credit extension by Japanese banks, remains unclear. While there is no evidence of a spike in overall lending since the introduction of the program, it is also difficult to know whether the pace of credit creation would have been even more sluggish in the absence of the program. However, some have argued that quantitative easing helped to boost credit creation by supporting the weaker players in Japan’s financial system. For example, the program of quantitative easing reduced the variance of certificate of deposit rates across banks and left weaker Japanese banks (with lower credit ratings) relatively less disadvantaged in raising capital than they would have been in the absence of the program (FRBSF Economic Letter 2006). The encouragement of greater risk tolerance in the Japanese financial system may have been one of the intentions of the program of quantitative easing. However, the lending of support to weaker banks may also have led to the unintended outcome of a delay in the implementation of structural reforms in Japan’s financial system.

Both objectives identified above hinge on the requisite condition that banks and the public expect future inflation to rise. Hence, the absence of an explicit target inflation rate may be seen as a weakness of the BoJ’s approach in influencing public and corporate expectations (Ueda 2005). As a result, there have been calls for Japan to adopt an explicit inflation-targeting regime by affirming its continuation of the policy of monetary expansion until a target inflation rate is achieved.<sup>5</sup>

---

<sup>3</sup> Using quantitative easing to influence public expectations about inflation is known as the “policy duration effect” in Japan. Since withdrawing liquidity from the economy with minimal disruptions takes time, the BoJ’s injection of monetary base aimed to reassure Japanese consumers that it was committed to the ZIRP until inflation starts to rise.

<sup>4</sup> The relationship between nominal real interest rates, real interest rates and the expected inflation rate is given by the Fisher equation:  $r_r = r_n - \pi^e$ , where real interest rates ( $r_r$ ) equal nominal interest rates ( $r_n$ ) minus the expected inflation rate ( $\pi^e$ ).

<sup>5</sup> BoJ’s actual policy target appears vague in intent: it states that it will pursue its policy keeping in mind a consumer price rise in a range of zero to two percent. This is not considered an inflation target to which the bank commits itself and it is feared

Furthermore, the announcement of the explicit goal of the BoJ’s policy would also increase the ex-post accountability of the independent central bank for its own actions. But some have argued that an announcement of an inflation target would be insufficient to guarantee the success of BoJ’s approach (FRBSF Economic Letter 2001). For example, without any instrument to guarantee the exit from deflation, credibility would be lost by announcing inflation targeting. Furthermore, the BoJ’s other concern has been that positive inflation expectations, once generated, might be difficult to contain (Ito 2006).

While the effectiveness of liquidity targeting in boosting the economy remains debatable, the monetary easing measures taken under quantitative easing have undoubtedly helped to block the different channels through which external shocks may induce liquidity concerns, hence securing financial market stability, and preventing the economy from sinking further into a deflationary spiral. For example, external volatilities such as the 2001 September 11 attacks, and military action in Iraq did not lead to a liquidity squeeze in Japan, which may potentially damage the economy (Fukui 2003). Hence, the provision of liquidity has worked as a safety valve against any credit crunch that might further threaten systemic stability in the Japanese economy.

### **“Orthodoxing” Monetary Policy**

The BoJ’s decision to end quantitative easing on 9 March 2006 meant that it switched its operating target from the targeting of current account balances with the BoJ to the country’s key overnight lending rate. However, zero interest rates had to remain for several months while the BoJ gradually withdrew liquidity from the economy in order to avoid any disruption to the financial system. Finally, in July 2006, the Bank ended the ZIRP after more than six years by raising the OCR to 0.25 percent. Following its first rate hike, the BoJ implemented another 25 basis point increase in February 2007 to bring nominal interest rates to 0.5 percent, which from then on have been kept on hold until now in the face of subdued inflation.

This drastic shift in monetary policy has been widely seen as a move precipitated by BoJ Governor Toshihiko Fukui.<sup>6</sup> As the Japanese economy began to show signs of emergence from its trough, Fukui was adamant that steps be taken to protect the economy from inflation. Fukui believed that normalising borrowing costs was essential in preventing runaway inflation, which may occur when rising corporate profits filter through to households, hence spurring domestic spending and leading to upward price pressures. Raising interest rates on the back of a strengthening economy would also render the carry trade less profitable for investors. Simply put, the yen carry trade involves investors borrowing at near zero percent interest rates in yen and using the loan to buy assets denominated in other currencies which yield a higher return. Hence, by narrowing the gap between interest rates of Japan and other foreign countries, the carry trade would fall in profitability and its gradual

---

that as long as policy criteria remain unclear, the bank’s communication with the markets could falter.

<sup>6</sup> Fukui has previously admitted that he wanted his legacy to be the successful end of drastic monetary measures and the return to a healthier interest-rate regime.

unwinding would reduce Japan’s vulnerability to the fluctuations of the global financial system. Thus, regaining control of the interest-rate tool was essential to allow the Bank to preach austerity to markets and to keep inflationary pressures in check.

It is no surprise that the BoJ’s decision to end its policy of liquidity targeting has been met with scepticism and opposition, both from within and outside Japan. The increase in the OCR target was a momentous switch marking the change in Japan’s monetary policy and was also the most contentious issue on the agenda. Some believed that with the lack of current hard evidence of inflation, Japan could sink back into deflation if it raised interest-rates excessively. For example, OECD Chief Economist Jean-Phillippe Cotis expressed his view that the only solution for the Japanese authorities is to have interest rates as low as possible in order to overcome deflation (Kyodo News 2007). To understand the controversy surrounding Japan’s switch in monetary policy this paper will approach the issue from different perspectives by considering the players involved in this dispute and the events underlining the controversy.

## **The Players**

### *The Bank of Japan*

With conditions in Japan improving, BoJ Governor Toshihiko Fukui has made open his desire to wean Japan off its addiction to cheap money and to end the anomalous zero interest rate era. Fukui has repeatedly cited the dangers of prolonging an ultra-loose monetary policy, and emphasized the need to carry out small and phased interest rate hikes to achieve sustained economic growth in the medium and long term. Fukui is anxious to avoid a repetition of the Bank’s mistake in the 1980s, when an easy monetary policy created an asset bubble; and has vowed to raise rates “without delay” should investment become rampant (Time Magazine 2006). Data leading up to the decision to raise rates in July 2006 pointed to the increasingly robust health of the economy. For example, bank lending in 2006 rose up to June at a pace unprecedented in the last decade, suggesting that the chronic overcapacity that had haunted the country’s deflationary phase was now ceasing (The Economist Intelligence Unit 2006). Furthermore, the Tankan business-sentiment survey also indicated that Japan’s largest companies plan to increase investment at the quickest pace in 16 years. Hence, an interest-rate hike by the BoJ was widely anticipated.

While it is generally agreed that credit tightening is necessary to stem the flow of cheap money which can lead to potentially detrimental runaway investment, contention arose over whether Japan is truly out of the deflation trap. For example, in September 2006, statisticians in Japan carried out their five-yearly overhaul of the inflation figures (using 2005 instead of 2000 as the base year), and they discovered that Japan had not shaken off deflation completely until July 2006 when the core annual inflation rate reached 0.2 percent for only the second consecutive month (The Economist 2006). This reshuffling of inflation figures contrasted sharply with the BoJ’s belief that Japan had already escaped deflation in late 2005 and that consumer prices were already rising at an annual rate of 0.6 percent. Hence, the rate hike in July seemed

premature in hindsight. Furthermore, part of the upward price momentum which Japan faced could have been brought about by the sharp upturn in the price of oil in 2004 and 2005. In light of these inconsistencies, how then could the BoJ justify its second rate hike early in 2007? It is important to note that Fukui and other officials from the BoJ focus on the overall price trend instead of price changes observed from monthly data. This practice partly developed from Fukui's experience in the banking system collapse after the bursting of the asset bubble. To prevent a reprise of that meltdown, Fukui has insisted that the Bank adopt a more forward looking approach instead of having to react hastily to any news emanating from the market (The Economist 2007). Armed with the belief that Japan's recovering economy would push against its supply constraints over the next few years, Fukui was adamant in his stance that gradual rate hikes were required to keep upward inflation pressures in check.

Furthermore, Fukui was also concerned about the unhealthy boom in the yen carry trade, where investors procure the yen at low costs in Japan to invest in higher yielding assets overseas. Japan's OCR of 0.5 percent is still immensely low compared to the Federal Reserve's key rate of 5.25 percent and the European Central Bank's main rate of 4.00 percent.<sup>7</sup> Given the large differentials between Japan's rates and other asset classes, Fukui's current adoption of gradual tightening is unable to impact the profitability of yen-carry traders much. However, Fukui believes that the dangers of keeping such a loose monetary policy for so long outweigh any short-term gains, and the sooner "normalcy" is achieved the better (The Economist 2006).<sup>8</sup> This also means that the OCR will not remain at 0.5 percent forever and future rate hikes are to be expected in Japan.

Now that the Rubicon has been crossed, there is no turning back without compromise of the BoJ's credibility. The BoJ has a delicate job ahead as the Japanese economy is still convalescing, and prudent steering of monetary policy is needed to guide the economy onto a stable growth path. Yet, being overly cautious may lead to the risk of an asset bubble forming. By raising the OCR, the BoJ is sending a strong signal to the markets of its confidence in the sustainability of the growth of Japan's economy. Hence, how the Bank steers monetary policy from now on and whether Japan's economy can continue its growth path will determine people's judgment of whether the BoJ has done the right thing in exiting from the ZIRP. It is also possible that Japan's economic health in the wake of the interest rate hikes may have a bearing on the degree of independence the BoJ enjoys from the government, as will be examined in the later part of this paper.

---

<sup>7</sup> The Federal Reserve's key rate has recently been cut by half a percentage point to 4.75% by the Federal Reserve in an attempt to calm the growing financial panic around the world.

<sup>8</sup> Fukui's fears were proven true when the recent credit turmoil sparked a massive unwinding of the yen carry trade, which momentarily drove up the yen, hurting Japanese exporters.



## *The Japanese Government*

The BoJ gained its independence from the Ministry of Finance after a major revision to the Bank of Japan Law in April 1998. This revision effectively gave BoJ officials autonomy from the government, but also put more responsibility and accountability upon the central bank management. Hence, mounting political pressure from Prime Minister Shinzo Abe’s ruling LDP to discourage future credit tightening can be seen as an infringement of the Bank’s autonomy. However, an extra qualification has to be added. If the BoJ is perceived to be behaving irresponsibly towards the public (i.e. by killing off the nascent recovery in the Japanese economy through interest rate hikes), does the government have a legal and moral obligation to step in and interfere? Furthermore, the differences in the role of an independent central bank during inflationary and deflationary periods should be recognised. The virtue of an independent central bank in an inflationary environment lies, in its ability to reject government demands to monetise its fiscal debt. However, in the face of prolonged deflation, excessive money printing is unlikely to be the real problem and a more cooperative stance from the central bank may be desired.

## **The Events**

### *Event One – Raising of OCR in 2000*

Analysis of two events (past and future) underlying the controversy over rate hikes in the Japanese economy may prove illuminating to our examination of the dichotomy between independence and responsibility in the rivalry between the BoJ and the Japanese government. The first event this paper will be looking at is the fiasco of August 2000, when the BoJ raised the OCR by 25 basis points only to reinstate the zero interest-rate policy a few months later after discovering the Japanese economy was not robust enough to absorb the rate hike. However, the damage had already been done, as the CPI dropped by 0.7 percent in 2000 and 2001 and deflation reached an all-time low in 2003. Before the OCR was raised, the government had attempted to exercise its right to request for the postponement of a board vote on the pending decision to raise interest rates.<sup>9</sup> However, the BoJ rejected the decision (widely perceived as a political move to assert central bank independence), citing substantial improvement in Japan’s economic conditions as justification for a rate hike and went ahead with its decision. With memories of that severe miscalculation by the BoJ still fresh in their minds, Japanese politicians today are anxious to avoid a repeat of the 2000 blunder by discouraging any increase in interest rates at a period which they deem to be premature.

There are two issues that can be considered here. Firstly, would a small interest rate hike, six years on, still put a severe brake on economic growth? It is important to realise that the Japanese economy has moved on since the

---

<sup>9</sup> Two government representatives - one from the Finance Ministry and another from the Cabinet Office - attend the policy board’s meetings as observers. They can invoke their rights to request the postponement of a board vote on a policy change until another meeting. The board decision is made by a majority vote. The two government observers have no voting rights.

1990s. Factors such as a weaker yen compared with six years ago, stronger corporate balance sheets, a buoyant labour market and rising consumer prices are in favour of a rate hike. In the words of Merrill Lynch Chief Economist, Jesper Koll, the rate rise in July 2006 was "absolutely" the right move at the right time (CBC News 2006). Despite stronger fundamentals the Japanese economy is still very much in a process of rationalization and structural reformation. There is no guarantee that the fragile rebound of the Japanese economy would not be prematurely crushed in the face of interest rate hikes. Furthermore, Japan may not have totally shaken off deflation unlike what some policymakers believe, as domestic consumption may not be as strong as the figures depict them to be. Besides the issue of the choice of base year as previously discussed, it should also be noted that the core CPI in Japan excludes prices of fresh food, but not energy prices. Hence, exclusion of energy, another commodity with volatile price movements (which has showed a spectacular increase in the past few years) may reveal a much lower or even negative inflation rate during the last few months of 2006.

The doubtful judgment over the decision to raise rates leads to the second issue of whether the blunder of 2000 can be considered a mistake *ex-ante*. No doubt, it was a mistake *ex-post*, as the economy sank into recession a few months after the decision to terminate ZIRP. Whether the decision was a mistake *ex-ante* is not so clear, as the economy did show signs of recovery in early 2000 and a small interest rate hike of 25 basis points was thought to be small enough not to cause major disturbance to domestic demand (consumption and investment). On the other hand, there were forecasts that predicted slower growth in the U.S. and Japan due to the bursting of the ICT bubble. Furthermore, the rate hike was undertaken when the CPI still showed negative inflation, with no clear signs indicating an end of deflation (Ito 2006). Hence, it can be argued that the decision to withdraw from the ZIRP was also a mistake *ex-ante*. In today's context, although the Japanese economy is definitely much more robust than before, there is still no clear sign that Japan has totally escaped the deflation trap. Also, the threat of a housing slump in the U.S. may potentially slow down global growth and set back Japan's economic recovery.<sup>10</sup> Hence, it is crucial that the BoJ's officials pay heed to such signs in steering its future monetary policy in order to avoid committing another "ex-ante" error.

### *Event Two – Upper-house Elections in July 2007*

The second motive underlying the contentious issue of interest rate hikes is the upper-house elections in Japan in July 2007.<sup>11</sup> Prime Minister Abe's

---

<sup>10</sup> So far, the subprime fiasco has had limited impact on the Japanese economy as its financial institutions had drastically reduced risk-taking behaviour in the aftermath of the bursting of the property and equity bubbles. Hence, these institutions dabbled less in the market for leveraged structured products (which was the source of trouble from defaults on U.S. subprime mortgages). Nonetheless, global pessimism about financial shares and the unwinding of the carry trade had roiled Japan's currency and stock markets. At the peak of market instability in August 2007, the BoJ injected extra funds into the banking system in a bid to restore calm to its panicky credit market.

<sup>11</sup> The ruling LDP lost one house of parliament when results of the Upper House elections were announced and the series of political gaffes and scandals in Prime

government has adopted a focus on policies to spur growth and to curb the expansion of the world’s largest public debt. Hence, fears of a rate hike choking off current economic expansion and casting a pall over the LDP’s elections prospects provide more than enough justification for the government to oppose further rate hikes from the BoJ. A rate hike would also raise the real cost of financing the government’s huge fiscal deficit, which may set back its fiscal rehabilitation plans. Hence, government officials have continuously voiced opposition to rate increases with the most vocal opposition of credit tightening, LDP Secretary General Hidenao Nakagawa, even going so far as to suggest curbing the BoJ’s independence and weakening the Bank’s decision-making power.<sup>12</sup>

It is clear that the Japanese government also has its own vested interest in the contention over interest rate hikes. However, such overt bullying from the government will undoubtedly compromise the international credibility of the BoJ as an independent custodian of Japanese monetary policy. Furthermore, the government’s strong opposition to monetary tightening may make further decisions by the BoJ to keep rates on hold look like signs of weaknesses (i.e. caving in to political pressures), even if this may be what the Bank regards as the optimal policy for the economy at the time. Under the current circumstances, the conflicting issues of independence and responsibility can only be best resolved through greater coordination and cooperation between the BoJ and the government. Reaching a consensual agreement through a negotiation process in this period should not be seen as compromising the independence of the central bank. In the words of Ben Bernanke,

Greater cooperation for a time between the Bank of Japan and the fiscal authorities is in no way inconsistent with the independence of the central bank, any more than cooperation between two independent nations in pursuit of a common objective is inconsistent with the principle of national sovereignty (Bernanke 2003).

## **The Road Ahead – Would BoJ’s Independence be Curbed?**

Despite opposition from the political arena, there is little doubt that the BoJ under Fukui is staying very focused on normalising interest rates. In 2007, land prices rose for the first time in 16 years, a sign of an upward crawl in domestic prices from broadening economic growth. Strong economic data driven by a robust corporate sector may also sway the BoJ to raise rates again soon. But besides hinging on Japan’s economic performance, the ease with which the BoJ will be able to raise rates again depends on whether or not the degree of independence the Bank currently enjoys is curbed by the government.<sup>13</sup> Presently, the BoJ does not regard itself as a fully independent

---

Minister Shinzo Abe’s political party following their bruising electoral defeat eventually led to his resignation in September 2007.

<sup>12</sup> Hidenao Nakagawa, who resigned shortly after the electoral defeat, blamed Fukui’s interest rate hikes for hurting regional economies and contributing to the LDP’s defeat.

<sup>13</sup> Besides growing uncertainty about the potential repercussions of the U.S. subprime turmoil, the growing political instability from the resignation of Prime Minister Shinzo Abe and the leadership battle within the ruling Liberal Democratic

bank, as a certain degree of dependence is still enshrined under Article 4 of the revised Bank of Japan Law.<sup>14</sup>

Despite the government's heavy-handed campaign against a rate hike, it is unlikely that the strength of the BoJ's independence would be weakened in the future. Firstly, the fact that the government had supported the revision of the law and legalized it in 1998 may make any public retraction of legislation now appear like an embarrassing policy flip-flop. Of course, it would be wrong to equate legal central bank independence with *de facto* independence. However, central bank independence instituted through legislation definitely contributes additional robustness. As political scientist John Carey once described, "the act of writing rules down can contribute to their binding force" (Carey 2000). Furthermore, the incentive and ability of the government to curb the BoJ's independence can also be called into question. For example, this paper has identified how steering future monetary policy is a delicate task in Japan. Given the heavy and difficult responsibilities associated with monetary policymaking in Japan, it may not be in the best interests of the government to fight for a place in the monetary policy hot seat. For instance, in the August 2000 fiasco, it was easy for the government to criticise the BoJ for its policy blunder. However, things might turn out very different if the government were to assume direct responsibility for Japan's economic woes arising from monetary policy slip-ups.

Besides the question of motivation, the government may also be limited in its ability to clip the BoJ's wings. The revision to the law in 1998 allowed the BoJ to retain significant informational advantage over the government (Dwyer 2007) and the transparency requirement has also meant that the BoJ can justify its policies and share its views directly with the public through policy statements and publications instead of going through the government. Hence, the availability of power resources at the hands of the BoJ will perpetuate its independence; and government officials, instead of trying to curb the Bank's independence, may fare better in advancing their political agendas by trying to forge stronger and more direct relationships with bank officials. Lastly, central bank independence is now globally recognized as a desirable hallmark of quality policymaking. Given Japan's political and economic standing in the international dimension, it has a strong incentive to maintain its international legitimacy as well as to attract financial investors, who have shown a preference to gravitate towards countries with independent central banks.<sup>15</sup>

---

Party may also impede economic growth and put a brake on future interest rate hikes.

<sup>14</sup> Article 4 states that "In recognition of the fact that currency and monetary control is a component of overall economic policy, the Bank of Japan shall always maintain close contact with the government and exchange views sufficiently, so that its currency and monetary control and the basic stance of the government's economic policy shall be mutually harmonious".

<http://www.boj.or.jp/en/type/law/bojlaws/bojlaw1.htm>

<sup>15</sup> One common explanation for this trend is that central bank independence is important as a signal that the destination country will not allow inflation to threaten growth or diminish the real value of government assets investors hold.

## **Conclusion**

This paper has delved into a case study of Japan's prolonged period of economic underperformance, where traditional monetary transmission failed to work and a controversial and unconventional policy of quantitative easing and zero interest rates had to be put in place. After more than a decade of a prolonged slump, signs of the economic malaise coming to an end are showing, and in response the BoJ has eagerly raised rates to bring monetary policy back on the road to normalcy. But the political chorus of objections that has erupted in response to the BoJ's rate hikes has raised questions about the Bank's de facto independence from the government. It is unlikely that the thinly-veiled threats to the BoJ's independence would translate into any actual weakening of the Bank's independence. Nonetheless, the shadow of political pressure will always remain over future rate decisions made by the BoJ. Even without hard proof of direct political intervention from the government, market analysts may still surmise that the BoJ has refrained from rate hikes due to pressure from politicians. This is an issue which must be addressed by both the BoJ and the Japanese ministry. When market participants judge central bank decisions on ideological rather than empirical grounds, the resultant breakdown of trust and communication between the two parties can bring about disaster for the economy.

## References

- Bernanke, Ben. 2003. Some Thoughts on Monetary Policy in Japan. Remarks made before the Japan Society of Monetary Economics, May 31, Tokyo.
- BIS Papers No. 31, December 2006. *Japanese Monetary Policy: 1998-2005 and beyond*, by Takatoshi Ito. <http://www.bis.org/publ/bppdf/bispap31i.pdf>
- Carey, John M. 2000. Parchment, Equilibria and Institutions, *Journal of Comparative Political Studies*. 33 (67): 735-761.
- CBC News. 14 July 2006. Bank of Japan Raises Rates After 6 Years At 0 Percent. <http://www.cbc.ca/money/story/2006/07/14/bankjapan-rates.html>
- Dwyer, Jennifer H. 2007. Hunter College. *The BOJ Law and Economic Policy Making Reforms: A 10 Year Assessment*.
- Federal Reserve Bank of San Francisco Economic Letter Number 28. October 2006. *Did Quantitative Easing by the Bank of Japan Work?* by Mark M. Spiegel. San Francisco: Research Department. <http://www.frbsf.org/publications/economics/letter/2006/el2006-28.html>
- Federal Reserve Bank of San Francisco Economic Letter Number 31. November 2001. *Quantitative Easing by the Bank of Japan*, by Mark M. Spiegel. San Francisco: Research Department. <http://www.frbsf.org/publications/economics/letter/2001/el2001-31.html>
- Fukui, Toshihiko. 2003. Challenges for Monetary Policy in Japan. Speech given at the Spring Meeting of the Japan Society of Monetary Economics. June 1, Tokyo.
- National Bureau of Economic Research Working Paper No. 10818. September 2006. *Inflation Targeting and Japan: Why Has the Bank of Japan Not Adopted Inflation Targeting?* by Takatoshi Ito. <http://www.nber.org/papers/w10818>
- Kyodo News. 13 March 2007. OECD Urges Japan to Keep Interest Rates Low to Combat Deflation. <http://asia.news.yahoo.com/070313/kyodo/d8nrbsh80.html>
- Missions and Activities of the Bank of Japan. <http://www.boj.or.jp/en/type/exp/about/mission.htm> (Accessed April 2007)
- The Bank of Japan Law <http://www.boj.or.jp/en/type/law/bojlaws/bojlaw1.htm> (Accessed April 2007)
- The Economist 2006a *Adjusting the Rear-View Mirror: Japan's Economy*. 380 (8493).
- \_\_\_\_\_. 2006b. *Walking on Eggshells. Bank of Japan*. 381 (8509)
- The Economist Online Edition*. 22 February 2007. A Hiker's Guide to Japan [http://www.economist.com/finance/displaystory.cfm?story\\_id=8749589](http://www.economist.com/finance/displaystory.cfm?story_id=8749589)
- The Economist Intelligence Unit*. 6 February 2006. Inflating Economy, Inflaming Tensions. [http://eiu.ecnext.com/coms2/gi\\_0294-102626/Monetary-policy-Inflating-economy-inflaming.html](http://eiu.ecnext.com/coms2/gi_0294-102626/Monetary-policy-Inflating-economy-inflaming.html)
- Time Magazine*. 10 July 2006. Japan Takes Flight. <http://www.time.com/time/magazine/article/0,9171,501060717-1211640,00.html>
- Ueda, Kazuo. 2005. The Bank of Japan's Struggle with the Zero Lower Bound on Nominal Interest Rates: Exercises in Expectations Management. *International Finance* 8(2): 329-250.
- Ward, Robert. 2006. Japan's Gain - Global Pain? *Banker's Association for Finance and Trade*. 11(2): 3-4.

## BEYOND THE “BOMB IN THE BASEMENT”: ISRAEL’S NUCLEAR PREDICAMENT AND POLICY OPTIONS

---

*Michael Raska*

*Can Israel live in a “nuclear balance of terror” with Iran? Should Israel open a Pandora’s Box and modify its long-held policy of nuclear opacity: never admitting nor denying its possession of nuclear weapons? If so, under what conditions, in what form, and what direction? What options does Israel have in preparing for the “day after” if Iran indeed crosses the “point of no return” and attains nuclear weapon capability? Or will Israel ensure that the “day after” will never come?*

*This paper argues it is unlikely that Israel will accept the possibility of nuclear weapons in the hands of Iranian leaders. In particular, Israel’s defense policy choices - defensive at the strategic level, but offensive at the tactical level - will likely continue to reflect Israel’s historical experience, evolving threat perceptions, and its military capabilities. However, with increasing risk of regional nuclear proliferation, Israel will also have to prepare to review its nuclear deterrent options. In the process, it will likely confront the complexity in revising its nuclear doctrine, and move beyond the simple dichotomy of the “bomb in the basement” versus the “bomb on the table” debate.*

### **Introduction**

Ambiguity is not a bomb, ambiguity is an attitude and if the ones who want to destroy Israel have an ambiguous fear it is ok. Then you don’t need bombs.

Shimon Peres, Israeli Prime Minister (1984-86/1995-96)

Throughout the Cold War, Israel was able to prevent the proliferation of nuclear arms in the Middle East. A policy of nuclear opacity (*Amimut* in Hebrew) - whereby never admitting nor denying its possession of nuclear weapons - has been at the core of Israel’s deterrence. The policy was spontaneously conceived in 1963 when then deputy Defense Minister, Shimon Peres, was bluntly confronted by United States’ President John F. Kennedy: “Are you making an atom bomb?” (Karpin 2006, 251). Peres responded, “I can say to you clearly that we shall not introduce atomic weapons into the region. We will certainly not be the first to do so” (Mitnick 2006, 1). In 1966, Israeli Prime Minister Levi Eshkol refined the country’s nuclear policy through the Knesset to a declaratory formula which has remained intact to the present day: “Israel will not be the first to introduce nuclear weapons in the Middle East” (Rosen 1977, 1367).

---

*Michael Raska is a PhD student at the Lee Kuan Yew School of Public Policy, National University of Singapore. He specializes in international security, defence transformation, and political-military dynamics of weapons of mass destruction. This article reflects insights he gained in Israel as a visiting research fellow at the Hebrew University of Jerusalem.*

In 1981, after the annihilation of Iraq's nuclear reactor, Osirak, at Tuwaitha by Israeli warplanes, Prime Minister Menachem Begin proclaimed, "under no circumstances would we [Israel] allow the enemy to develop weapons of mass destruction against our nation. We will defend Israel's citizens, in time, with all the means at our disposal" (Israel MFA 1981). Under the "Begin Doctrine", as it became known, Israel would not allow itself to be the second country to introduce nuclear weapons in the Middle East.

A quarter of a century later, the viability of both the Begin Doctrine and the state's policy of nuclear opacity are confronted with another test. Iran is gradually defying international diplomatic pressure and moving closer to producing highly enriched uranium – a critical stage for developing nuclear weapons (Albright 2006). Concerns over Iran's covert efforts to develop its nuclear weapon capability, a claim that Tehran denies, are amplified by the development of its medium-range ballistic missile program (Shehab III), and an open call by its leaders for Israel's destruction. In translation from Farsi, Iranian President Ahmadinejad said, "the regime occupying Jerusalem should be eliminated from the pages of history" (BBC 2006).

For Israel, the essence of the emerging Iranian threat is the increasing convergence between radical Islamist ideology, long-range missile capability, and nuclear weapons (Inbar 2005). This poses several challenges and questions for Israeli policy-makers. In particular, can Israel live in a "nuclear balance of terror" with Iran? Should Israel open Pandora's Box and modify its long-held policy of nuclear opacity of a "bomb in the basement"? If so, under what conditions, in what form, and in which direction? What alternative options does Israel have to prepare for the "day after" if Iran indeed develops nuclear weapons? Or will Israel ensure that the "day after" will never come?

This article attempts to provide some, albeit partial, answers to these questions. It argues that Israel will unlikely accept the possibility of nuclear weapon proliferation in the Middle East, particularly in the hands of its standing or potential adversaries. Israel's defence policy choices - defensive at the strategic level, but offensive at the tactical level - will likely continue to reflect the country's historical experience, evolving threat perceptions, and its military capabilities. In this context, Israel may attempt to use force to deny Iran and/or other neighbouring states with similar goals to develop their nuclear weaponry capabilities. As Inbar (2005) noted, while preventive military action would inevitably carry considerable political and strategic risks, inaction may yield far worse consequences.

At the same time, Israel will be discreetly preparing for the "day after", quietly reviewing its nuclear deterrent policy options. First, Israel will likely move toward developing a second-strike nuclear capability by integrating its nuclear weapons into a limited strategic triad that would allow launching nuclear warheads from the air, land, and sea. Second, it will continue to strengthen its defense cooperation with the US, particularly on the multi-layered anti-ballistic missile program (Arrow), space-based Ofeq intelligence satellite system, and other emerging advanced platforms. This can serve to counter both a potential missile threat as well as amplify intelligence surveillance capabilities. Finally, and on a strategic level, it will be quietly reviewing options for a possible open nuclear doctrine and the modalities of its use. In



this context, Israeli policy makers will have to confront the complexity of devising a nuclear doctrine thus moving beyond the dichotomy of the "bomb in the basement" versus the "bomb on the table" debate. Ultimately, Israel will have to decide when, how, and how much to disclose in order to maximize its nuclear deterrence policy.

According to General Moshe Ya'alon, former Chief of Staff of the Israel Defense Force (IDF), Israel now stands in the crossfire of two extreme threats: (1) a sub-conventional low-intensity conflict against terrorism on one hand, and (2) supra-conventional threat emanating from long-range ballistic missiles and potential regional proliferation of WMD on the other. The sum of all fears is the possible nexus of these two hybrid threats – a hostile state with extremist ideology [Iran] acquiring an offensive nuclear capability and providing its nuclear umbrella to its terror proxies [Hezbollah] or deliberately threatening Israel's destruction (Ben-David 2004).

## Understanding Israel's Nuclear Option

The existence of an undeclared Israeli nuclear arsenal can be understood in the framework of prevailing historical lessons stemming from its war experiences and lessons from the Holocaust: the belief that Israel is fending for its survival alone. This belief has essentially shaped Israel's strategic choices. Since its inception in May 1948, Israel's core belief was that it could not alter the intentions of its neighbours per se, but could only affect their capability to carry out those intentions. Thus, at the core of Israel's defence strategy is deterrence – to discourage adversaries from particular courses of action by instilling fear or doubt that the cost of such action would far outweigh its potential gain.

In particular, Israel's security policy has been traditionally defensive – to prevent the outbreak or escalation of war with the neighbouring Arab states; and to ensure their acceptance of Israel's existence. If, however, deterrence has failed or when Israeli security was endangered, Israel has used offensive tactics, i.e. initiating rapid preventive or pre-emptive warfare by transferring war into enemy territory, using speed, precision, and firepower; pursuing the "surprise" element. Ultimately, from an Israeli perspective, Israel had no choice (*Ein brera* in Hebrew) but to pursue peace through military superiority. As Cohen (1999) noted, "the response to Israel's security problems did not lie in diplomacy, but in an activist defence policy based on a deterrence posture Israel would develop on its own. A nuclear option would be central to this posture".

The utility of nuclear opacity in Israel's defence strategy can be ascertained from the magnitude of its influence on other nations' perceptions, strategies, and actions (Cohen 1999). The secrecy that Israel has maintained on its nuclear program, and its perceived ambiguity, have created much suspicion and speculation abroad of Israel's possession of nuclear weapons (Rosen 1977). This "bomb in the basement" has enabled Israel to successfully navigate through the conundrums of the Cold War's nuclear age, deterring Soviet intervention in Arab-Israeli wars, as well as providing an "equalizing" insurance policy of last resort vis-à-vis surrounding, quantitatively superior Arab

armies (Hough 1997). Many also believe that Israel's deliberate nuclear ambiguity has brought about open peace talks with Egypt (1979) and Jordan (1994).

Most importantly, under the "bomb in the basement" policy, the absence of overt nuclear testing, Israel was able to evade the nuances of international arms control treaties, sanctions, and inspections designed to prevent the proliferation of nuclear weapons. In particular, Israel has not signed the 1970 Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Israel has also evaded the US Arms Export Control Act (1976), specifically the Symington Amendment, which "prohibits most U.S. economic and military assistance to any country delivering or receiving nuclear enrichment equipment, material, or technology not safeguarded by the International Atomic Energy Agency" (Blanche 1999, 25).

Overall, Israel's policy of nuclear opacity has served its security by: (1) deterring conventional attacks by enemy states; (2) deterring all levels of unconventional attacks (chemical, biological/nuclear); (3) pre-empting enemy state nuclear attacks, if deterrence fails; (4) supporting conventional pre-emption against enemy state nuclear assets to deter enemy's counter-retaliation; (5) supporting conventional pre-emption against enemy non-nuclear assets; (6) to undertake nuclear war-fighting, if deterrence fails; and (7) ultimately, projecting nuclear weapons for the "Samson Option" – an all-out destruction of all enemy's population centres, and subsequent self-destruction (Beres 1996).

## Israel's Threat Perceptions

Since the end of the Cold War, Israel's threat spectrum, and the sources and nature of the threats, have been shifting compared with earlier decades. Israel's defence strategy has traditionally distinguished two types of security: "basic or fundamental security" (*bitachon yisodi*) and "current security" (*bitachon shotef* or in short *batash*). The former has been referred to major conventional wars – real and potential that stipulated essential risks for Israel's existence; the latter represented terrorist attacks, border skirmishes, and intrusions that harmed, but did not seriously threaten the existence of Israel. In the conventional arena, Israel has distinguished three types of military commitments, the so-called "circles of defence": (1) perimeter (inner ring), (2) intra-frontier, and (3) remote commitments (outer ring). Perimeter defence denoted conventional military warfare vis-à-vis large standing Arab armies in the immediate vicinity of Israel's frontiers; intra-frontier commitments referred to defence within Israel's territory principally against Palestinian terrorists, and remote military commitments stipulated contingencies and threats in a considerable distance from Israel (Cohen 1992).

While the probability of a conventional war with the "inner ring" countries has diminished in the last decade (with the exception of Syria), the development of long-range ballistic missiles in conjunction with regional asymmetrical threats (Weapons of Mass Destruction, or WMD) has enabled the "outer ring" countries, primarily Iran, to directly threaten Israel (Inbar 2002). Clearly, Israel's conventional qualitative superiority has been offset by the increasing asymmetric WMD capabilities of neighbouring countries. Syria, Libya, and

Egypt have also been producing chemical-warfare agents and possess the capability to deliver chemical weapons by bombers or surface-to-surface missiles on targets in Israel (Barnaby 1996).

According to General Moshe Ya'alon, former Chief of Staff of the Israel Defence Force (IDF), Israel now stands in the crossfire of two extreme threats: (1) a sub-conventional low-intensity conflict against terrorism on one hand, and (2) supra-conventional threat emanating from long-range ballistic missiles and potential regional proliferation of WMD on the other. The sum of all fears is the possible nexus of these two hybrid threats – a hostile state with extremist ideology [Iran] acquiring an offensive nuclear capability and providing its nuclear umbrella to its terror proxies [Hezbollah] or deliberately threatening Israel's destruction (Ben-David 2004).

With the looming risks of "point of no return" (Iran crossing the technological threshold of developing a nuclear weapon capability), Israeli policy makers cannot accept a nuclear balance of terror with Iran. First, a nuclear Iran would represent an existential threat to Israel's security by linking radical Islamic regime, long-range missile capability, and nuclear weapons. Israel's small and dense population is exceedingly vulnerable to a nuclear attack (Inbar 2006). Second, a nuclear Iran could embolden radical Arab groups as well as more moderate Arab states into acting more aggressively vis-à-vis Israel. Third, a nuclear Iran would open a Pandora's Box of a regional nuclear arms race: Iranian efforts to develop nuclear capability are already igniting nuclear fears in the neighbouring states; Saudi Arabia, Egypt and Turkey have recently announced plans to start their own civilian nuclear programs under the auspices of the IAEA (New York Times 2007). Fourth, a nuclear Iran would effectively negate Israel's advantage in conventional deterrence, freedom of action, and military superiority. In the words of Parsi (2006, 34) "it would not only end Israel's (nuclear weapons) monopoly in the Middle East, it will also shake a fundamental tenet of Israel's military doctrine – the idea that Israel can only survive in the Middle East by maintaining military superiority". Fifth, a nuclear Iran would solidify its regional hegemony aspirations as well as enhance its control of the region's energy resources.

However, assessing the timeframe of the "point of no return" as to when Iran would de facto cross a particular technological threshold, or actually attain nuclear weapons and mount them on its long-range surface-to-surface missiles, remains unclear. The range of available estimates attempting to ascertain how advanced the Iranian nuclear program really is indicates there is no clear authoritative assessment (Landau 2007). For example, in December 2005, Meir Dagan, Chief of the Mossad, Israel's intelligence arm, warned that Iran's nuclear power threshold could be realized within a few months. Other high-ranking Israeli officers have shared similar estimates. Lt. Gen. Dan Halutz, former Chief of Staff of the IDF and Maj. Gen Aharon Zeevi, Chief of the IDF Intelligence Department estimated that March 2006 was the "point of no return" (Inbar 2006). In contrast, U.S. intelligence estimates have projected that Iran is about a decade away from manufacturing key ingredients for a nuclear weapon. According to the revised 2005 U.S. National Intelligence Estimate (NIE), which represents a consensus among U.S. intelligence agencies, there are credible indicators that Iran's military is mastering

technologies through its energy program that could be diverted to bomb-making within the next ten years (Washington Post 2005).

A recent IAEA report released in August 2007, indicates that twelve 164-machine cascades centrifuges were operating simultaneously (about 1968 operational centrifuges), fed with Uranium Hexafluoride (UF<sub>6</sub>). According to the report, Iran has stated that it has reached enrichment levels up to 4.8% U-235, while IAEA sample confirmed 3.7% (IAEA 2007). In September 2007, Iran has announced that it has now 3,000 centrifuges enriching uranium, completing the fuel cycle. While the claim could not be independently verified by the IAEA, the agency noted that the 3,000 centrifuges would represent a point of no-return for an industrial production of enriched uranium (BBC 2007).

## Assessing Israel's Policy Options

### *Preventive Use of Force*

Does Israel have no choice but to face the reality of a nuclear-capable Iran? If Israel indeed loses its nuclear monopoly in the Middle East, what policy choices do Israeli policy-makers have? Will Israel attempt to use force to prevent such a scenario? How would Iran retaliate? Israeli policymakers are determined to prevent Iran or any other neighbouring state acquiring nuclear weapons. In December 2005, Ariel Sharon warned that "Israel - and not only Israel - cannot accept a nuclear Iran; we have the ability to deal with this and we're making all the necessary preparations to be ready for such a situation." (World Net Daily 2005). Such statements may not be a mere rhetoric. On 6 September 2007, Israel conducted a highly-classified air attack on Syria on what Israeli and US intelligence analysts judged as a partly constructed Syrian nuclear facility, apparently modelled on North Korea's design (New York Times 2007). While intelligence estimates pointed that the Syrian facility was years from completion, the timing of the attack may imply that Israel is determined to neutralize even a nascent nuclear project in a neighbouring state. More importantly, it may send a signal to Iran and its nuclear aspirations. While the details of the raid remain wrapped in secrecy, according to a senior Israeli official, the strike was intended to "re-establish the credibility of our deterrent power" (New York Times 2007).

However, a potential Israeli preventive air strike on selected key Iranian nuclear installations would embrace much greater difficulties. In particular, Iran has spread out its nuclear facilities and constructed the bulk of their nuclear complex underground to protect it from conventional air strikes. The difficulty would be further amplified by: (1) the distance that Israeli jets would have to fly over to reach their targets (1000 km) – while the latest Israeli multi-role fighters F-15I are certainly capable of flying the distance, the challenge would be flying either over Arab or Turkish airspace; (2) the potential collateral damage stemming from possible nuclear radiation and contamination of the targeted area; (3) the effectiveness of the upgraded Iranian air defences in countering Israeli fighters (i.e. Russian-made Tor-M1 air defence systems coupled with Iranian upgraded Mig and Sukhoi fighter jets); and (4) the cost of Iranian retaliation. In this context, Iran could respond by interfering with the flow of oil from the Persian Gulf, launching counter-

attacks with conventional ballistic missiles against Israel as well as US bases in the region, and igniting its network of terrorist organizations such as Hezbollah and attacking Israel (Inbar 2006).

Would the use of force prove a necessary instrument for Israel, sufficient to coerce Iranian leaders? Much of that depends on the effectiveness and outcome of the existing "carrots and sticks" - economic sanctions as well as incentives offered by the international community to Tehran. Iran has so far showed defiance in freezing its uranium enrichment program and signing the Additional Protocol to the safeguards agreement with the IAEA in exchange for economic benefits offered by the EU3 (France, Germany, and the United Kingdom). The lackluster diplomatic progress, embarked in October 2003, made some analysts question whether Iran is "playing for time" while the international community is "playing with time" (Landau 2007). Yet, the key problem may lie in the lack of consensus within the international community in dealing with Iran - Russia and China oppose any moves toward sanctions and certainly any use of force vis-à-vis Iran.

### *Reviewing Israel's Nuclear Doctrine*

If Iran, or any other neighbouring state in the Middle East, does indeed develop nuclear weapons capability, and openly declares its status confirmed by an overt nuclear test, then Israel will no longer be able to sustain its ambiguous policy and would have to rethink its policy of "bomb in the basement". In the words of Netanyahu, "If an Arab or Muslim country acquires and wields nuclear weapons, this will force a re-alignment in the entire Middle East, in the world in fact. And certainly Israel will have to consider its long held policies as well" (BBC 2006).

Depending on the complexity and modalities of the Iranian "nuclear introduction", Israeli policy makers will have to move beyond the simple dichotomy of the "bomb in the basement" versus the "bomb on the table" debate. In particular, Israel will have to decide when, how, and how much to disclose in order to maximize its nuclear deterrent. According to Beres (1996, 133):

These are not simple questions. Quite the contrary, they are questions of enormous complexity. Acknowledging this complexity, and building its strategic theory accordingly, Israel must learn to use the orthodox in unorthodox ways, acting not merely to disclose, but to reveal purposefully, subtly, and with long-term nuclear advantage.

Theoretically, in the process of configuring the modalities of the use of Israel's nuclear arsenal, Israeli policy makers will have to consider at least four options in reviewing its nuclear doctrine:

*Israel maintains a status-quo by keeping its nuclear opacity intact*

Israel may opt for a flexible response by keeping the foundations of its nuclear ambiguity intact. Thus, if Israel's nuclear capabilities, protective efforts, and its nuclear doctrine may remain undisclosed, but not denied either - Israel would continue to signal that is willing and able to deliver an appropriate destructive response. However, as Beres has argued, such a posture may lower the enemy state perceptions of Israel's nuclear deterrent, and increase

the risks for a pre-emptive nuclear strike. Specifically, "with the bomb kept silently in the basement, Israel's imperative communications could be compromised perilously. Unable to know for certain whether Israel's retaliatory/counter-retaliatory abilities were aptly formidable, enemy states could conclude, rightly or wrongly, that a first-strike attack or post-pre-emption reprisal would be cost effective" (Beres 1996).

*Israel accepts nuclear parity, shifts to a declaratory status based on Mutually Assured Destruction (MAD). Israel declares a "ready arsenal" (launch-on warning); a second-strike nuclear capability; and devises a nuclear war-fighting doctrine*

Israel may switch to an open nuclear posture, yet, with multiple options of disclosure to maximize gains for Israeli nuclear requirements (Beres 1996). It can opt for nuclear deterrence based on nuclear parity and MAD or it may stipulate a war-fighting doctrine, either counter-force or counter-value, by envisioning how a nuclear war would actually be fought in case deterrence fails. Here, Israel would have to determine how enemy states such as Iran would be more likely deterred, and how to amplify the credibility and perceptions of its own ability to retaliate. Appropriate strategy would have to be complemented by the configuration of its nuclear posture. For example, Israel may switch to a "ready arsenal" – launch on warning mode, targeting enemy's population and industrial centres (counter-value). But the modalities, risks, costs, and benefits of a particular strategy would have to be carefully weighted, in order to maximize Israel's nuclear advantage.

*Israel shifts to a policy of a minimum credible deterrence in the form of a "recessed deterrence" – no first use/second strike capability*

Israel can opt for a policy of minimum credible deterrence – in case Iran or any other Arab state in the Middle East does not overtly test a nuclear weapon nor openly discloses its nuclear arsenal. Following the Indian model, Israel's nuclear doctrine would then underline a policy of no first use, however, its nuclear configuration would have to guarantee sufficient capability for a second-strike that would cause unacceptable damage to the enemy. Given Israel's geostrategic constraints, however, this option would invite an increasing risk for the enemy's pre-emptive first strike on Israel, assuming that Israel cannot trade space for time, or afford to lose a single city. Also, the survivability of Israel's assets to a potential strike would have to be guaranteed. Therefore, this option seems unlikely to maximize Israel's nuclear advantage.

*Israel resorts to international arms control regime or pursues denuclearization of the Middle East*

Fourth, Israel may rethink the possibility of negotiating regional arms-control talks, and support a WMD-free Middle East. According to Joseph Cirincione, Director for Non-proliferation at the Carnegie Endowment for International Peace, "Bringing them [Israeli nukes] out into the open and putting them on the table as part of a regional deal may be the only way to prevent others from building their own bombs in their basements" (CFR 2007). In the Israeli perspective, however, this option seems unlikely. In order to consider

disarmament, there would have to be a "comprehensive peace" with Arab countries as well as Iran. Furthermore, Iran would have to renounce its nuclear programs in conjunction with the dismantlement of Egypt, Syria and Saudi Arabia's chemical and biological weapons programs.

### **Israel's Nuclear Assets**

Notwithstanding the fact that Israel has never officially admitted the possession of nuclear weapons, based on the 1988 testimony by Mordechai Vanunu (a renegade Israeli nuclear technician working at the highly-classified Dimona nuclear facility), Israel does have nuclear arsenal amplified by the capability to produce nuclear weapons at the rate of three or four a year. According to Jane's Intelligence, Israel's nuclear arsenal includes at least 200 tactical nuclear weapons – boosted fission weapons and neutron bombs, with a combined total yield of 50 MT, including aerial bombs, artillery shells and mines, along with delivery systems such as the Jericho-2 intermediate-range ballistic missile (Blanche 1999).

To maximize its nuclear advantage in preparing for "the day after", Israel will have to reconfigure its nuclear assets to a strategic triad – develop the capability to launch nuclear warheads from air, land and sea. At the same time, it would have to minimize the vulnerability of its arsenal, enhance its early-warning, intelligence, and command and control capabilities. Simultaneously, it would have to enhance its missile defence capability (i.e. anti-ballistic missile program Arrow 2).

In particular, Israel currently deploys the majority of its missiles - at least 50 Jericho 2 nuclear-tipped missiles - at the Zachariah (which in Hebrew means "God remembers with vengeance") air force base near Tel Aviv. The Jericho 2 missile is believed to be a 14 m long and 1.5 m wide, with two solid-propellant stages, and range up to 3,500 km with a warhead of 1000 kg, which is sufficient for 1 MT yield nuclear warhead (Hough 1997). Based on 2002 Ikonos satellite-imagery (Global Security 2002), the Jericho 2 missiles are not stored in hardened silos, but in limestone caves and nearby nuclear bunkers underneath the site. In short, the Zachariah missile base is obsolete and vulnerable to a nuclear first strike, which could be potentially destroyed by a 20 kt nuclear warhead. Furthermore, Israel's anti-missile defences are based on land and hence more vulnerable to aerial detection and tracking (Hough 1997).

Thus many prominent Israeli strategists argue that Israel's strategic deterrent should be moved to the sea (Creveld 2004). This would create artificial strategic depth that Israel needs, and at the same time provide Israeli policy makers an option for a second strike capability. To this end, Israel has already acquired three state-of-the-art German-made Dolphin-class submarines (worth \$320 million each), which are believed to be armed with nuclear-tipped Popeye Turbo cruise missiles, aimed at deterring a potential aggressor from initiating a surprise first-strike attack on Israel. Israel has not confirmed the presence of the nuclear-armed cruise missiles; however, it refers to the Dolphin submarines as "national deterrence assets" (Parsi 2006). Currently, under a system of rotation, two of the submarines remain at sea – one in the

Red Sea and Persian Gulf, the second in the Mediterranean – the third remains on standby (Israeli Weapons 2007).

Finally, any change in Israel's nuclear strategy will likely increase the demand for both plutonium and tritium produced at the Israeli nuclear research facility at Dimona in the Negev Desert. Tritium is used to significantly enhance the yield of a nuclear weapon, either through boosting or fission, or through thermonuclear fusion. However, tritium decays rapidly (its half-life is only 12.3 years) and is difficult to obtain. In the Israeli context, Israel needs Dimona to replace the tritium in its nuclear weapons. Specifically, assuming that Israel has 200 weapons with an average of 4g of tritium in each one and 40 neutron bombs with an additional 20g each, the total Israeli inventory is at least 1.6 kg of tritium. This means that Dimona must replace at least 88g of tritium each year. Without Dimona, Israel will need at least a 30-40 MW nuclear reactor to keep the current arsenal (Hough 1998). However, after 44 years of operation, Dimona is suffering from a neutron radiation from the reactor core, which has changed the reactor structure at the atomic level, thereby increasing the risks for a nuclear accident.

## **Conclusion**

The spectre of the nuclear proliferation in the Middle East is pushing Israel's nuclear opacity on the table. The key question is whether Israel will be able to maintain a nuclear monopoly and prevent nuclear proliferation in the volatile region. The prospect of nuclear weapons in the hands of an erratic and vindictive Iranian regime threatening Israel's existence is not an acceptable option for Israel's policy makers. Based on Israeli threat perceptions and historical experience, Israel may have no choice, as a measure of last resort, but to attempt once again to deny its enemy the capability to develop nuclear weapons. As Ehud Barak noted (BBC 2006), the prevailing lesson from Israel's war experience has been the belief that "ultimately we [Israel] are standing alone." This belief may essentially continue to drive Israel's strategic choices.

At the same time, Israel will have to reassess its nuclear strategy, and modify its policies beyond nuclear opacity. Its strategic choices will impact the development and deployment of its nuclear weapons. In doing so, Israel will have to address a number of complexities pertaining to the question how to maximize its nuclear deterrent, particularly in the eyes of its adversaries. This also means enhancing survivability of Israel's nuclear assets. Ultimately, however, Israel will have to increasingly conceptualize the possibility of openly integrating its nuclear doctrine into its defense strategy. Unless the Pandora's Box of nuclear proliferation in the Middle East remains closed.



## References

- Albright, David. 2006. When Could Iran Get the Bomb? *Bulletin of the Atomic Scientists*. 62(4): 26-33.
- Barnaby, Frank. 1996. Capping Israel's Nuclear Volcano, in *Between War and Peace: Dilemmas for Israeli Security*, edited by Efraim Karsh, 106. Portland: Frank Cass, 1996.
- BBC. 5 October 2006. Will Israel Bomb Iran?  
[http://news.bbc.co.uk/2/hi/programmes/this\\_world/5377996.stm](http://news.bbc.co.uk/2/hi/programmes/this_world/5377996.stm)
- \_\_\_\_\_. 2 September 2007. Iran 'reaches key nuclear goal'  
[http://news.bbc.co.uk/2/hi/middle\\_east/6974903.stm](http://news.bbc.co.uk/2/hi/middle_east/6974903.stm)
- Ben-David, Alon. 2004. Double Jeopardy. *Jane's Defence Weekly*.  
17 November 2004: 19-28.
- Beres, Louis Rene. 1996. Israel's Bomb in the Basement: A Revisiting of Deliberate Ambiguity vs. Disclosure. in *Between War and Peace: Dilemmas for Israeli Security*, edited by Efraim Karsh, 113-136. Portland: Frank Cass, 1996.
- Blanche, Ed. 1999. Israel Addresses the Threats of the New Millennium. *Jane's Intelligence Review*. February 1999: 25.
- Cohen, Avner. 1999. *Israel and the Bomb*. New York: Columbia University Press.
- Cohen, Stuart. 1992. Changing Emphases in Israel's Military Commitment, 1981-1991: Causes and Consequences. *Journal of Strategic Studies* 15(3): 330-350.
- Council on Foreign Relations. February 2006. *Israel's Nuclear Program and Middle East Peace*.  
[http://www.cfr.org/publication/9822/israels\\_nuclear\\_program\\_and\\_middle\\_east\\_peace.html#6](http://www.cfr.org/publication/9822/israels_nuclear_program_and_middle_east_peace.html#6)
- Crevelde, Martin. 2004. *Defending Israel: A Controversial Plan toward Peace*. New York: St. Martin's Press.
- Global Security. 2002. *Beit Zachariah: New Analysis*  
[http://www.globalsecurity.org/wmd/world/israel/sedot\\_mikha.htm](http://www.globalsecurity.org/wmd/world/israel/sedot_mikha.htm)  
Accessed: 26 Sept. 2007)
- Hough, Harold. 1997. Could Israel's Nuclear Assets Survive a First Strike? *Jane's Intelligence Review*. September 1997: 407.
- \_\_\_\_\_. 1998. Israel Reviews its Nuclear Deterrent. *Jane's Intelligence Review*. November 1998: 12.
- IAEA. 30 August 2007. *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*  
<http://www.iaea.org/Publications/Documents/Board/2007/gov2007-48.pdf>
- Inbar, Efraim. 2002. Israel's Strategic Environment in the 1990s. *Journal of Strategic Studies* 25(1): 21-38.
- \_\_\_\_\_. 2005. The Imperative to Use Force against Iranian Nuclearization. *BESA Perspective Papers on Current Affairs*  
<http://www.biu.ac.il/Besa/perspectives12.html>
- \_\_\_\_\_. 2006. The Need to Block a Nuclear Iran. *Middle East Review of International Affairs*. 10(1)  
<http://meria.idc.ac.il/journal/2006/issue1/jv10no1a7.html>
- Israeli Weapons. *SSK Dolphin Class Attack Submarine*. <http://www.israeli-weapons.com/weapons/naval/dolphin/Dolphin.html> (Accessed: 26 Sept. 2007)
- Karpin, Michael. 2006. *The Bomb in the Basement*. New York: Simon & Schuster.
- Landau, Emily. 2007. Iran's Nuclear Advances: The Politics of Playing with Time. *Strategic Assessment*. 10(1) [http://www.tau.ac.il/jcss/sa/10\\_1\\_03.html](http://www.tau.ac.il/jcss/sa/10_1_03.html)
- Mitnick, Joshua. 2006. Why Israel Maintains Nuclear Ambiguity. *Christian Science Monitor*. <http://www.csmonitor.com/2006/1214/p07s02-wome.html>
- New York Times*. 15 April 2007. With Eye on Iran, Rivals Also Want Nuclear Power.  
<http://www.nytimes.com/2007/04/15/world/middleeast/15sunnis.html>

- \_\_\_\_\_. 15 October 2007. Israeli Target in Syria was Nuclear Site, Analysts Say.
- Parsi, Trita. 2006. Is Nuclear Parity with Iran a Blessing in Disguise for Israel? *Jane's Intelligence Review*. January 2006: 34.
- Rosen, Steven. 1977. A Stable System of Mutual Nuclear Deterrence in the Arab-Israeli Conflict. *The American Political Science Review*. 71(4): 1367-2383.
- State of Israel. Ministry of Foreign Affairs Press Statement. 9 June 1981. Press Conference with Prime Minister Begin, I.D.F. Chief of Staff Eitan, I.A.F. Commander Ivri and Director of Military Intelligence Saguy.  
<http://www.mfa.gov.il/MFA/Foreign+Relations/Israels+Foreign+Relations+since+1947/1981-1982/>
- Washington Post*. 2 August 2005. Iran is Judged 10 Years From Nuclear Bomb.  
<http://www.washingtonpost.com/wpdyn/content/article/2005/08/01/AR2005080101453.html>
- World Net Daily*. 11 December 2005. Israel Plans Strike on Nuclear Iran.  
[http://www.worldnetdaily.com/news/article.asp?ARTICLE\\_ID=47848](http://www.worldnetdaily.com/news/article.asp?ARTICLE_ID=47848)

# THE UNIVERSAL SERVICE OBLIGATION OF TELECOMS: A SOUTH ASIAN CASE STUDY OF TWO GOVERNMENT AGENCIES

---

*Sundeep Malik*

*The Policy Analysis Exercise (PAE) is a public policy or management study completed as part of the Lee Kuan Yew School of Public Policy's Master in Public Policy curriculum. PAEs are usually undertaken for a client and provide an in-depth look at an issue affecting the client's organisation that is particularly problematic, which may require outside expertise, or which the organisation does not have the time or resources to address itself.*

## **Telecom Sector: History and Recent Developments**

The telecommunications sector has been a public monopoly in most of the emerging economies. Development of this vital sector was initially seen as a relatively low priority by policy makers. An increasing demand for telecommunication services provided the thrust for governments to initiate steps to reorganize this sector.

The significant initiatives included setting up of Telecom Commissions for making policy decisions. These were conceived as executive organs, generally placed under the ambit of the Federal Ministry of Communications. This has been followed up with formulation of national level telecom policies. These policies have aimed at accelerated telecommunications growth and network expansion. Another chief goal of these policies has been to foster increased competition and liberalization in this sector.

In spite of the increased competition, governments continued to play the role of a regulator and that of a service provider. To overcome this anomaly, the sector witnessed setting up of an independent telecom regulatory authority. Such authorities have been mandated to provide an effective regulatory framework and adequate safeguards to ensure fair competition and protection of consumer interests.

Increased competition gave rise to the emergence of private service providers which rapidly introduced new products and services, making use of the latest technologies. This resulted in putting downward pressure on prices, which was good for consumers, but adversely affected the viability of the public telecom enterprises. The gap in tele-density (number of telephone lines per 100 people) between urban and rural areas also widened. Realization of achieving universal service obligation (USO) has thus been slow though progressing. All this has resulted in imposing multiple challenges on public enterprises. Immediate policy initiatives are required to be implemented for

---

*Sundeep Malik is an Indian national and a graduate in finance at University of Delhi, India and a recent graduate of public policy at the Lee Kuan Yew School of Public Policy at National University of Singapore.*

making these public enterprises compete efficiently in the liberalized environment and realize the objective of USO.

The PAE has sought to identify suitable policy initiatives required for making the public enterprise compete in the liberalized telecom sector. The term “deliver” in the policy question specifically refers to efficient and reliable telecom services being delivered by former public monopolies. It is also significant to mention that the PAE is not a business management exercise. This is because even though these former monopolies are business enterprises, their policies fall in the public policy domain owing to majority government ownership (taxpayer’s money). The PAE has, thus, not focused on the choices available to the managers of these public enterprises. These two public enterprises, former South Asian public telecom monopolies, have been hereafter referred to as ABC and XYZ

### **The Case Studies: ABC and XYZ**

ABC and XYZ are the two former public monopolies with assets amounting to over USD 10 billion. While ABC has always been government owned, XYZ was conceived as a 100 percent government owned company to render telecom services in selected major cities of the country. With the advent of economic reforms in general and liberalization in the telecom sector, competition was introduced in basic and value added services. This gave rise to the situation wherein the public enterprises were no longer monopolies in providing basic telecom services and also began facing increasing competition from the private operators in the value added services. Public enterprises were daunted with the rising wage bills and restrictive government controls. This raised the critical question of whether these former public monopolies will be able to provide reliable and efficient telecom services, and, also continue to make profits. This question acquired the dimension of a public policy problem as the government is the major equity holder and thus involved substantial taxpayer’s money. Further, ABC continued to be chiefly responsible for USO, which became challenging as rural telephony required huge investments and also had to be affordable.

### **Findings from the South Asian Case Studies**

Policy options were identified after analysis of the approaches adopted towards former public telecom monopolies in Asia Pacific nations like Singapore, Indonesia and Australia as well as analyzing the latest trends in the concerned South Asian country. This led to the identification of two broad policy options namely: (i) changes in ownership pattern/ management pattern of the public enterprises; and (ii) streamlining the USO Fund (USOF). These identified policy options were then evaluated in terms of economic viability, political viability, organisation capacity and public value.

The PAE has made two significant policy recommendations. First, it has recommended that the government share in the two public enterprises should be reduced. While XYZ should be privatised, ABC should be gradually disinvested. This has been recommended because the factors that motivate the privatisation of XYZ are found to be absent for ABC. Unlike XYZ, ABC, being a 100 percent government owned public enterprise, and not yet listed, has

never been exposed to market forces. To realize its true value, ABC needs to continue to expand its services and provide them efficiently. It is therefore more feasible that the government should reduce its holding in a gradual manner. This will enable ABC to gear up to face increasing competition and provide adequate funds for the expansion of its services. On this basis, gradual reduction in government holding in ABC is concluded to be economically viable.

Second, the PAE has recommended the efficacy of meeting USO through an “Integrated Package” having two components namely: Streamlining USOF Collection, Allocation and Disbursement Mechanism and making USO open to Non-Fixed Line technologies and providing for sharing of network infrastructure.

With the implementation of these policy changes, the two former public monopolies will be able to provide efficient, reliable and affordable telecom services as well as achieve the objective of USO. Public value can then considered to be realized.

## A REVIEW OF ANNE-MARIE SLAUGHTER'S *THE IDEA THAT IS AMERICA: KEEPING FAITH WITH OUR VALUES IN A DANGEROUS WORLD*

---

*Erika Graffunder and Allen Lai*

In her book, *The Idea that is America*, Professor Anne-Marie Slaughter describes American values by looking at the history and development of America since the time of George Washington. In addition to the universally accepted and well-known virtues of liberty, democracy, equity and justice, Slaughter also includes tolerance, humility and faith as values of America in this book. The author further elaborates why these seven values have made up what America is today, through many international events pertaining to American foreign policy then and now. The way Slaughter has written her book actually reflects the way she thinks these values should be upheld in America, and she does this in an engaging, pragmatic, comprehensive, balanced, neutral, and humane style of writing.

The reviewers, coming from different continents (Asia and America) decided that in understanding *The Idea that is America*, it was important to bring the debate over "Asian values" and "Western values" to the fore. This is in response to Slaughter's position that the values that are "America" are universal. The reviewers would like to contribute to this discussion by agreeing with Slaughter and taking this position one step further. Although the values that Slaughter has chosen may be universal, they may be approached differently within distinct cultural contexts. It is precisely through the integration of approaches that attaining these val-

ues can be achieved on the path towards greater humanity and a better world.

This review will highlight the value of "tolerance". In reading what Slaughter says about tolerance, it would seem that Americans struggle with tolerance despite it being a value. In our own discussion, we found that other cultures may also be struggling with this same value. The world may strive for tolerance, but still has a long way to go. Slaughter indicates that, "tolerance is an active process of engaging, listening and responding [... where parties] cannot just agree to respect each other; [they] have to work at it." Slaughter further links tolerance to the idea of liberal democracy and debate. She indicates that, "for this kind of dialogue to occur, the participants on both sides must actually be prepared not only to persuade but to be persuaded, to accept the possibility of actually shifting position or even [...] completely changing their minds" (Slaughter 2007, 161). This definition awoke our curiosity and motivated a philosophical deliberation resulting in a new appreciation for this value. As a stimulus to thoughtful and positive debate, this book makes a great contribution.

The virtue of tolerance is universal like the other values in this book. Yet the approaches to tolerance may be defined differently in diverse cultural contexts. In Chinese, tolerance is a word composed of two

actions: to receive and to bear. This has explained how Chinese culture interpreted tolerance. To be tolerant, you need first to actively listen and attentively receive the information sent out by the stimulus from the counterpart, which is then processed internally into understanding and appreciation before further action is taken. At this stage, there is a tendency to suppress opinions and to remain neutral in order to avoid conflict. In this way, tolerance in the Chinese value system is tightly linked with compliance and obedience and attentive listening plays a major role. The virtue of tolerance thus has been nourished by a system based on the triple-think principle (action after you think it over three times). Although this approach is good in avoiding conflict, it may not actually embody tolerance as intended in Slaughter's book, because avoiding conflict does not imply openness to another differing view and does not allow the opportunity for discourse and an opportunity for either party to change their views. Thus, the approach may only be partially attaining its goal of tolerance. In short, an approach to tolerance that suppresses ideas does not help to reach the level of understanding that is required for true tolerance.

The American approach to tolerance is not always better. It seems to focus more on speaking than on listening, undermining the ability to achieve true tolerance in a different way. Merriam-Webster defines tolerance as, "sympathy or indulgence for beliefs or practices differing from or conflicting with one's own".<sup>16</sup> The focus in this definition

is placed on the conflict that must be overcome or accepted. Slaughter openly admits that, "Americans are often shocked when [they] see polls about how people in [other] countries perceive [them]. [The] response is typically to think that the citizens of other countries don't truly understand what [they] are trying to do in the world" (Slaughter 2007, 168). She goes on to say that the typical response continues by speaking more, providing more explanations. This raises a paradox because the moment you fight for tolerance, the more intolerant you have become. Indeed, despite indicating that *listening* is the key to tolerance that is often missed in America, Slaughter fails to mention listening as much as speaking.

Slaughter brings the value of tolerance to life by focusing on the current built-up of intolerance towards the Arab and Muslim world. She describes a solution relating to cultural exchanges and sponsorship of education in the Muslim world to enhance understanding. The opinion of the reviewers is that these exchanges may be too superficial to facilitate true cultural understanding that leads to tolerance. However, if they provide an opportunity for people from diverse backgrounds to come together such that they can learn the value of different approaches to tolerance, perhaps we can move beyond dialogue to true tolerance, where people are not afraid to speak up and others remember to listen.

Slaughter also suggests that we need to focus on the positive aspects of Islam: Its own strong tradition of tolerance and the strength of its values and traditions. This is absolutely true. Unfortunately, even she is unable to resist falling into the norms of speaking tolerance as

<sup>16</sup> Merriam-Webster.  
<http://www.merriam-webster.com/dictionary/tolerance>  
 (Accessed: 2 December 2007).

opposed to listening. She talks about a “once-tolerant” Islam as though all facets of Islam today have changed. She also alludes to democratic reform in a discourse relating to what could be done to “help progressive elements in the Arab and Muslim world” (Slaughter 2007, 169). This doesn’t sound like the listening that she identifies as key and it does not seem to indicate the sense of working together at the level of respected peers that are building mutual tolerance. That said, as we discovered from our own cross-cultural discourse on the subject of tolerance,

working more closely together, as Slaughter suggests, will result in a stronger understanding of one another. If this is done with the openness that is suggested in her book, the world will be better off.

Perhaps to become tolerant, these activities need to be focused on appreciating the differences in our approaches and integrating them for better results. For tolerance to prevail, many should start to listen more, while others need to speak up and be heard.



## A REVIEW OF TONY CLEAVER'S *UNDERSTANDING THE WORLD ECONOMY*

---

*Fabio Silva*

Tony Cleaver is currently a part-time teaching fellow of economics at Durham Business School in the United Kingdom and has taught in schools in Singapore, Chile, Colombia and the Netherlands. Besides *Understanding the World Economy* (2006), he has published *Economics: The Basics* in 2004, also by Routledge.

*Understanding the World Economy* by Tony Cleaver is an introductory book that presents several key issues in world economics in a practical and accessible way. Thereby, it provides reasonably easy explanations of tricky issues, allowing easier access for undergraduate students or ordinary readers on topics such as economic organisation, market failure, economic integration and development.

As the first edition was published in 1997, additional and updated information has been included for this 2007 edition, broadening its analysis to cover issues like the currency union in the European Union, the financial crises in Asia, Russia and Argentina, and the economics of oil.

The book shows the author's concern over finding ways to improve the functioning of market economies in order to deliver better living standards for all, while he also discusses failed mechanisms used in command economies like the USSR. Meanwhile, his analysis shows a preference for government

intervention in the economy as a way of mitigating market failures without, however, distorting market interactions. A clear influence of Keynesianism seems to become evident.

In the first chapters the author explains and compares two different concepts of economic organisation - command versus market economies - presenting the different solutions each of these systems give to different economic problems and to their own failures. The discussion of these different systems, besides the traditional approach to market economies, helps the reader to understand the characteristics of command economies, which represented the main alternative to capitalism during most of the last century. Since many introductory books today do not provide an analysis of this kind of economic system, Cleaver's work is a good choice for those looking for a discussion of these broader conceptual themes.

The first chapter compares the Soviet, capitalist and societal forms of economic organisation, guided by three questions: what, who, and for whom does the society produce its goods? The second chapter then discusses transition economies and how different countries from the former Soviet Union and China have chosen different pathways for the transition from a command to a market oriented economy. This

---

*Fábio Silva is a Brazilian national and current a graduate student of public policy at the Lee Kuan Yew School of Public Policy, National University of Singapore (fabio.silva@nus.edu.sg).*

process has differed from country to country, occurring relatively faster (“big bang”) in eastern European countries like Poland, while appearing disorganized in the case of Russia though rather well defined and controlled in China. The author also explains why and how these systems collapsed, comparing them to the capitalist system of the West. The third chapter is dedicated to micro and macroeconomic concepts, both explained in an accessible way without relying on complicated charts and graphics. Concepts focused upon include individual preferences, market interactions, price, aggregate demand and supply.

Chapter four discusses the issue of employment and inflation, which has marked the economic theory debates throughout the twentieth century. It does so by contrasting Keynesian, i.e. demand-side with supply-side theories. Besides, the author explores the mechanism of “creative destruction”, framed as an important characteristic of capitalism that is responsible for both technological development as well as market failures.

Chapters 5, 6 and 8 analyse the issue of economic integration. By doing so, the benefits and costs of integration experiences like NAFTA and EU, and the different levels of economic integration are exposed. As the most developed example of market integration that exists today, the author focuses his analysis on the EU and the process behind its formation. The discussion also extends to how governments can improve their country’s participation in world trade through strategies such as those used by Japan. Chapter 8 presents the building blocks of a currency union, and in particular how the EU has developed from the

Treaty of Rome until the adoption of the Euro.

The issue of money, banking and international finance is presented in chapter 7. The focus lies on current financial structures as well as on the principles underlying any banking system and its importance in promoting trade, both domestically and internationally.

Chapter 9 deals with the economy of oil markets, based in the analysis of three actors: producers, intermediaries and consumers. The producers analysed here are mainly the OPEC nations and it is explained how this oil cartel influences the global prices of petroleum, which is traded by some few “major” companies such as BP, ExxonMobil and Shell representing the intermediaries. The consumers are the countries that depend on the imports of oil to make their economies work. Alongside, the dynamics of the oligopolistic systems and the new tendency of the industry to move towards different sources of energy are also explained.

The last chapters are dedicated to the discussion of foreign debt and financial crises that have affected many countries since the debt crises of the 1980’s. Here the cases of the Mexican, Asian, Russian and Argentinean crises as well as the main factors behind them are explained. Chapter 11 discusses the concept of development, starting from its roots to its measurement and strategies, and also lays out the concepts and strategies of growth and the rise of the Asian dragons. Chapter 12 discusses the problem of natural resources management in market economies. Here is analysed how markets can incorporate non-apparent costs of the production of different products, and how

governments can regulate the economy in order to avoid the problem of the “tragedy of the commons” while maintaining a sustainable path of development.

Tony Cleaver’s conclusion calls the attention to the importance of the equalitarian distribution of gains of the current international economic structure, and the risks of polarising the world between two opposite

groups, namely the rich and the poor.

To sum up, the book provides an excellent opportunity to study important issues concerning the world economy, such as trade, financial systems and resources management. This is achieved in an accessible way.

## A REVIEW OF MIGUEL MENDONÇA'S *FEED-IN TARIFFS: ACCELERATING THE DEPLOYMENT OF RENEWABLE ENERGY*

---

*Wei Leong Poh*

This book is aimed at policy makers looking for possible prescriptions that would enable an increased deployment of renewable energy (RE) through feed-in tariffs (FIT). The recent escalation of crude oil prices has done no less than just sending jitters down the spine of politicians as it also serves as a grim reminder that the time for pursuing a reliable and sustainable energy regime has finally come. The discourse on the political will that would allow for the powering of national economies with RE is not new, and neither are the various instruments available that encourage RE deployment including FIT.

Mendonça's book comes at a time when the FIT schemes are fit for assessment since they were introduced in the late part of the twentieth century in some countries, with the consequence that their effectiveness as adopted differently in various countries would only be known around this time. It is with this that reading Mendonça's book on FIT provides the reader with a useful insight on how implementing a pricing law that requires energy suppliers to pay a fixed rate for electricity produced from renewable sources has been successfully achieved. FIT requires that the price be calculated and the payments made over a period of time, so that it becomes profitable

for investments in renewable sources to take off.

There is an optimism that Mendonça would be able to provide for breakthrough ideas that may arise from his piecing together of the case studies of the countries that have successfully institutionalized FIT. This anticipation emanates from the knowledge that Mendonça works for the World Future Council, a non-governmental organization that explores implementation gaps resulting from institutional inadequacies. Mendonça himself also has background training in forestry, geography, landscape management, journalism, and history, and for a study of FIT systems that invokes multi-disciplinary training, the author seems suited for an exposition of the future prospect of FIT in other countries which have yet to implement it.

Given that FIT comes in different forms depending on the type of technology, infrastructure and stakeholders, Mendonça does not confine the discussions to any RE source. Indeed this is as much a part of Mendonça's thesis in this book that it is both feasible and profitable for any country to adopt FIT for any RE source – feasible on the counts that RE harnessing technologies are available, and profitable on the basis that increased RE deployment has led to a concomitant increase in

---

*Wei Leong Poh is a Singaporean national and recent graduate of Biodiversity, Conservation and Management at the School of Geography, Oxford University (wei.poh@seh.oxon.org).*

jobs in the RE sector as some countries have shown.

What is therefore the reason that is holding governments back? The author first explains the strong mental barrier that is formed as a result of the prevailing perception that deploying RE is fraught with difficulties, and involves high risks with no guarantee of reliability. Such a mindset needs to be dismissed since history has shown humans to be highly adaptable in the face of changing circumstances. The urgency of deploying RE in the face of depleting natural resources and addressing climate change issues is no exception, and humans would have the will to develop RE technology to suit our needs.

Mendonça therefore argues that FIT provides the fastest and lowest-cost deployment of renewable energy compared to other existing RE deployment instruments such as the quota model, the tendering system and the net metering system. These instruments have been briefly discussed in the book and are also compared with the FIT model in terms of their advantages and disadvantages. The conclusion by the author is that the FIT model stands superior in terms of performance which provides the basis for his argument in this book.

The success of FIT is supported by testimonials of four developed countries, namely Germany, Spain, the United States of America (especially California), and Japan. These are countries with a national power grid infrastructure which show considerable degrees of success with FIT, and hence countries with a suitable grid infrastructure are urged to consider FIT too. Germany and Spain being the top two exemplary models of FIT are covered in

detail showing their experiences with adopting FIT and how they rise to the challenge by making the necessary adjustments. What makes it interesting is that Germany and Spain have different FIT designs, but the fact that they are nonetheless successful in their own ways demonstrates that there is no one fixed way of implementing FIT.

The evolution of the FIT systems is explained chronologically which makes understanding of how each country overcomes the barriers easy. Germany implemented the first feed-in law (*Stromeinspeisungsgesetz*, or StrEG) in 1990 on a small-scale basis which did not meet much resistance and was well received. Harnessing RE then proceeded on a larger scale but not without having its attendant problems. Subsequent negotiations led to the 2000 Renewable Energy Sources Act, (*Erneuerbare-Energien-Gesetz*, EEG) which differentiates tariffs according to the type of RE technology, the level of maturity of the technology and the size and site of the RE source. Notwithstanding these, another amendment was made to the EEG in 2004 to improve the efficiency of the FIT system. What is particularly instructive from here is that in a relatively short time span of fourteen years, Germany is able to deploy RE effectively through the FIT system, and this quick implementation of FIT is consistent with the whole theme of the book.

Spain also manages to achieve FIT success within a short time period starting from the Electric Power Act in 1997. The interplay of government regulation and private enterprise is apparent here. This public-private dynamic, coupled with the relevant changes made to the Royal Decree in 1998 and subsequently in

2004 are the foremost reasons why Spain succeeded so quickly. The short time frame needs not be over-emphasized here once again, but what is relevant to policy makers from both the Germany and Spain case studies is that the establishment of FIT is not a one step process. There has to be an exchange of opinions and an earnest cooperation between the government and the RE suppliers so that the FIT model would be integrated in such a way suitable to the national characteristics and the political preference.

References to developing countries are also made including the factors that have hindered RE deployment. They are primarily the subsidies for fossil fuels and the lack of infrastructure capacity and energy access. The author uses Mauritius and parts of China to illustrate that the flexibility of FIT schemes allows application to both on-grid and off-grid areas. The harnessing of energy sources does not necessarily have to be made with a high level of technology and Mauritius provides an example of how a problem in the sugarcane industry can be transformed into an opportunity that enables FIT to be implemented.

On the whole, these case studies show that the devil is in the details for both challenges and solutions. There is a great deal of permutation within each country in putting the key legal and economic elements together for effective FIT implementation. However, the key considerations are the ability to provide incentives to reduce costs, the design of the tariffs specific to the different RE source and technology, the level of market penetration and demands and the infrastructure capacity. As the case studies have shown, gradual changes in legislation would help to address the problem of a common pricing rate stemming from the different profitability associated with different types of RE technology. Such fine-tuning of legislations does not take place overnight but at least over a decade. One consequential point arising here is that only in countries with governments possessing consistent political visions in RE deployment for at least a decade would the FIT scheme see the light of day in the end. Therefore, this book is also a celebration of those countries which have worked and endured enough to push through the FIT system.

## ANNOTATED LIST OF BOOKS

---

### *Editor's Note*

*The Asian Journal of Public Affairs annotates all books sent to us for review. Currently, we are able to do so only for books published in the English language.*

## I

YONG, JAMES SL. *E-Government in Asia: Enabling Public Service Innovation in the 21st Century. Second Edition.* Singapore: Marshall Cavendish. 2005. Pp. 421. US\$25.00. Paper. ISBN: 9812325913.

Illustrates e-Government initiatives in 10 different countries in Asia and assesses how different public administrations encounter and utilize these new strategies. Offers an extensive while not all-encompassing survey of the reform issues at stake, of experiences in several Asian economies and of lessons learnt. The book is divided into three parts. Part I defines the concept of electronic government and reviews different perspectives of the issue. Part II focuses on different economies in Asia, examines the reform process, its key obstacles and opportunities as experienced by the chosen case studies. Part III places e-government in the context of specific sectors and actual practices. Recommended for practitioners and more generally to public sector executives, as well as to private sector officials dealing with public organisations, to academics and to students.

James SL Yong is presently a Senior Director with leading information technology (IT) and engineering services firm National Computer Systems Pte Ltd (NCS) and is based in Singapore. He has more than two decades experience in IT, finance, marketing and professional services management.

## II

RENQING, JIN. *Fiscal Policy in China. First Edition.* Cengage Learning. 2007. Pp. 192. US\$24.95. Hardcover. ISBN: 9812659676.

Analyses the evolution of China's fiscal policy from the establishment of the People's Republic of China in 1949 until as recent as 2005. Emphasizes the changes of fiscal policy measures in China after 1992. Contrasts three distinct time periods of fiscal policy, with fiscal tightening from 1993-1997, pumppriming in the deflationary period of 1997-2002 and fiscal prudence in the years following 2003 when the Chinese economy started to face inflationary pressures due to excessive liquidity. Gives a unique prospect of China's fiscal policy in the future and provides the reader with insights from a key policy maker's point of view. Outlines future changes to take place in China, including the establishment of a standard system of intergovernmental transfer, the creation of a level playing field between non-state firms and state-

owned firms and the standardization of non-tax revenues to bring them under budgetary control.

Jin Renqing was the Minister of Finance of the People's Republic of China from 2003-2007.

### III

SMITH, DENIS and ELLIOT, DOMINIC. (Eds). *Key Readings in Crisis Management: System and Structures for Prevention and Recovery*. New York: Routledge. 2006. Pp. 436. US\$48.95. Paper. ISBN: 0415315212.

A compilation of readings that sample the process of crisis management. Provides conceptualization of the crisis process and analyses issues concerning the creation of its conditions, problems associated with its management and dealing with its aftermath. Divided into four sections with each section featuring expert commentary and analysis on the following topics: Understanding Crisis Management; Modeling the Crisis Management Process; The Crisis of Management: Cultural and Psychological Dynamics of Risk and Crisis Management; Crisis Management in Practice. Recommended for managers, public officials, academics, as well as researchers dealing with crisis management issues.

Denis Smith is Professor of Management at the University of Glasgow; Dominic Elliot is Professor of Business Continuity and Strategic Management at the Center for Risk and Crisis Management, University of Liverpool Management School.

### IV

DAS, TARUN, RICHTER, FRANK-JÜRGEN and MATHUR, COLETTE. *India Rising: Emergence of a New World Power*. Marshall Cavendish Business. 2005. Pp. 236. US\$25.00. Paper. ISBN: 9812611967.

Illustrates the challenges that India is facing in the 21st century and highlights India's potential of becoming the next world power. Focuses on the opportunities and difficulties of globalization in the Indian context and analyses how India's responses to problems such as rising income inequality are beginning to pay off and how these reforms will change India in the future. The book uses the 10 pillars of sustainable growth and includes contributions from contributions from senior leaders in business and government as well as media and civil society. Recommended for policymakers, researchers, business leaders and public policy students with an interest in the rapidly rising Asian economies.

Tarun Das is presently working as Professor (Public Policy and Research Methodology) and Area Head (Economics) in the Institute for Integrated Learning in Management, New Delhi. Frank-Jürgen Richter serves as president of HORASIS: The Global Visions Community. Colette Mathur is the Co-President of "Euro India Forum" and special adviser to the Managing Board for India at the World Economic Forum.



## V

KOTCH, JOHN BANY and RICHTER, FRANK-JÜRGEN. *Korea Confronts the Future*. Marshall Cavendish International. 2005. Pp. 212. US\$25.00. Paper. ISBN: 9812328351.

Details and presents a comprehensive study on the futures of North and South Korea both as an economic and political entity. Analyses the factors surrounding the possible unification of the Korean Peninsula, the degree to which this might be achieved and the impact that it is likely to have not only in the Northeast Asian region, but also its bearings on the international economy, security and politics. Constitutes a timely publication that seeks to capture the dynamics of change on the Korean peninsula today by linking three broad dimensions in twelve scenarios: the condition of the South Korean economy, the trajectory of North-South relations and the changing role of Korea's regional neighbors and the United States. Offers different assessments on the challenges facing both Koreas and provides the reader with a comprehensive outlook on Korea's future. Recommended for academics, practitioners, researchers and students interested in the political and economic development of North and South Korea.

Frank-Jürgen Richter serves as president of HORASIS: The Global Visions Community.

## DEBATING THE PUBLIC POLICY CURRICULUM

---

*Vimal Balasubramaniam*

The diversity of policy issues across the world and the need for dedicated people with a nuanced understanding of every policy problem demands the mastery of many fields of study. Thus, there is a distinct need to have specialists trained and groomed in the sphere of formulation and implementation of public policy. The topic during one of the break-out sessions explored this theme with the desire to posit probable changes to the current programme structure and core curriculum. While the search for coherence and responsiveness in programme structure and curriculum was aptly called the “never-ending search”, questions raised throughout the session looked at a rather important aspect of learning from a student perspective: are courses teaching what students need to learn, and what determines what students need to learn?

As a student of public policy, this question is extremely important to me as I would be part of the process both as a subject and also as a probable contributor. Opinions throughout the session ranged from addressing the needs of the market for policy graduates to considering the courses offered as the public sector MBA in order to determine what students need to learn. Firstly, doing as the employers think what the students need to know would mean policy schools are working backwards in designing a curriculum. This implies that there is little that one moulds and shapes as a policy school and

leaves the designing up to the demands of the labour market.

To me a school is about creation of knowledge and not a mere provider of knowledge in demand. The discomfiting aspect of this approach is that there is a possibility of a wedge between creating public value - which I believe is the cornerstone of any public policy course - and what the market demands in terms of curriculum design. Further, what does one mean by the market? There is a lack of clarity on who should attend public policy schools. Value addition to those already in responsible positions may not necessarily be what the positions demand of them.

Secondly, assuming that an MBA is about efficient administration of a business organization, the skill sets are unique and different in both an MBA and an MPA or MPP. I believe that the difference is crucial to understand, because if every public administrator could perform with the same skill-set as demanded by the business environment, then there would be no real mission for public policy schools. What one deals with as a public administrator is a messy table that needs to be reorganized and that has many reorganizers working at different ends of the table. The challenges are varied and diverse within countries, across regions and most certainly at a transnational level. These challenges sometimes have skewed the distribution of author-

---

*Vimal Balasubramaniam is an Indian National and a graduate student of Public Policy at the Lee Kuan Yew School of Public Policy, National University of Singapore (vimsaa@gmail.com).*

ity and responsibility. Therefore, the curriculum is not only about being able to change policy variables and achieving desired results, but to be able to tackle any challenge, political or otherwise, and taking a step forward. While certain skills such as communication are shared across many professions, the breadth of issues to be covered in public policy schools is vast and therefore it is not only about imparting skills but to lay an intellectual foundation to build upon.

The reason why I say that a student is only a probable contributor to the program structure is because on the one hand a student may not have a say at all in the course one undertakes and on the other hand one may have complete freedom to design one's own curriculum. The range between the two extremes is more of a comfortable region to play from, depending on the type of students present in the course. It is also important to note that what students' desires need not always be of highest intellectual and academic rigor. This is not to take away the credit from what students could contribute to the debate of curriculum design. I would think that a course is of no use if it cannot take the shape of its constituents into account and at the same time retain the drive to initiate understanding at greater depth. It is in this realm that students step in to contribute to their own learning process.

As a student of public policy, my focus is not that of employability, lack of "coherence" or that of what one needs to be taught. It is about my role in the program structure, which I would define as sharing ideas, holding healthy debates, and bringing in real life situations. This

is even more important in a diverse classroom as the role of every student determines the increase in the quality of outcome for each student. If the program structure has to complement this role of the student, there has to be a case wherein learning skills are the only core courses while areas of study (economics, sociology, and other subjects) are combined according to the specialization areas of students. As a measurement of whether a student has learned what one has to, it is not classroom participation or examination that determines the same. It is the process of analysis and provision of an alternative to cases under study in addition to mastery of the four "C's" mentioned by Professor Wu Xun during the session: commitment, competency, communication, and concept.

It was heartening to see that the session did reach a conclusion wherein one saw that the focus should not only be on employability or catering to demand, but to build values that in turn create values through different mediums. The ultimate decider on responsiveness can only be witnessed when examining the roles that alumni play in society. As is with every course, I believe that the effect of two years of learning to formulate policy can only be witnessed when it is in play in society. While popularity of courses amongst students may measure the importance and desirability of a course, popularity alone does not determine desirability in the long-run. Knowing and witnessing alumni in action is the only concrete way to measure whether one has learned what is needed and whether one has managed to create value for society at large.

*Neena Moorjani*

Out of all my travels around the world, one memory stands out from the rest as the most unusual. In January 1999, I spent three days in the capital of Laos, Vientiane. One day while walking down a main street to visit one of the few tourist sites, the Victory Gate, I happened to pass by two women each operating laminating machines. I was so puzzled by their presence and wished that I could speak their language for just a few minutes to ask them why they chose that particular location to operate their business when there were no offices close by, and why they had no problem standing next to a competitor.

I have often thought about that episode and marvelled how being in a foreign country can stretch one's mind. It has been my many travels around the world and learning to speak a few foreign languages that have been pivotal in my being comfortable with the concept of globalization. The Economist argues that the process of globalization takes place through the exchange of ideas: "Markets, like conversations, are a form of exchange. And globalization is what results when the exchange extends across national borders<sup>17</sup>".

So for those of us who are trying to be more global, here are a few concrete ways to achieve this goal. One,

grab a ticket and get out of your comfort zone. I have been fortunate enough to have travelled to more than a third of the countries within Asia and to many parts of the world. Although most of my visits to foreign countries have been for vacation, my experience in those countries has played a useful role in formulating my worldview and more specifically in some of the jobs I have held, especially in being more at ease while speaking with people from countries that I have visited.

For example, in my early twenties I visited a leprosy village in China across the border from Hong Kong. I learned from the nurse who arranged our visit that China had done a great job in reducing the leper population because they forced them to live away from others and therefore greatly reduced the spread of the disease. In doing some research on the leper population in India, I learned that India was unable to match this reduction because lepers in India were not forced to live apart from others. Understanding how China and India differed in one area of public policy has been a key way for me to differentiate the two upcoming superpowers.

Extensive travelling has played a pivotal role in the success achieved by many entrepreneurs and government officials. Minister Mentor Lee Kuan Yew saw this in a trip to Bombay a few months ago, when he

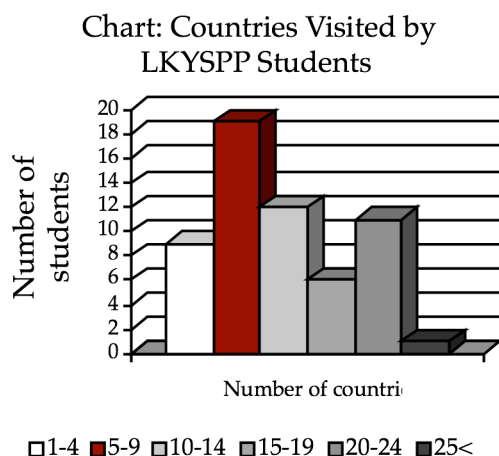
---

<sup>17</sup> *Straits Times*, October 30, 2007  
"Ethnic diversity benefits India's businessmen"

---

*Neena Moorjani, is an American, and a candidate for Master in Public Administration at the Lee Kuan Yew School of Public Policy, National University of Singapore (g07075079@nus.edu.sg).*

met with the heads of many successful businesses: "In addition to English, most [of those he met] could speak multiple Indian languages...and many had links around the world, were educated at home and overseas, and some ran global businesses"<sup>18</sup>. Further examples in the government sector abound. Current World Bank President Robert Zoellick spent one year studying in Hong Kong, former President Bill Clinton spent time in Oxford University, Deng Xiao Ping spent five years in France.



Fortunately a significant number of the current Master of Public Administration students have travelled abroad (see chart). Undoubtedly their experiences in a multitude of different settings have contributed to the fruitful exchange of ideas we are having here at the Lee Kuan Yew School of Public Policy.

But it is not enough to simply go to another country. The second concrete way to become more global is to engage ourselves in learning a foreign language. For many this is a tall order, especially for those coming from countries where English is

the native language. English is the language of the Internet and of international business; but to allow ourselves to settle for knowing just one language, while our competitors learn English in addition to their native language is foolish.

In addition to trying to learn another language, attention must also be given to how we learn that language. I spent six years studying French as a teenager in Hong Kong, but had no opportunities to practice the language. However, I did manage to finally put it to use during my last job in the U.S. government when I travelled to Geneva and France. Knowing French certainly made my time there a lot less daunting. My little knowledge of Hindi (learned while watching Bollywood movies as a child) has been invaluable in getting around India. I also studied Mandarin for a year at the age of 14 and decided to live in Beijing for almost a year prior to moving to Singapore so that I could become more proficient in the language and understand the country better.

Most of the MPA student body is conversational in more than one language. This bodes well for calling our class a truly globalized student body. Of course there is still much work to be done in this area. Some of our educational systems are notorious for poorly equipping their students with satisfactory levels of language proficiency. In a recent report in the Financial Times, "Only 9 of 147 countries ranked lower than Japan last year in average scores on the widely used English language proficiency test run by the Educational Testing Service of the US." This shocking statistic can only be understood when one speaks to a Japanese student who explains that

<sup>18</sup> Cox, S. (ed.) 2006. *Economics: Making Sense of the Modern Economy*. (2<sup>nd</sup> edition). Bloomberg Press.

traditionally learning English has been viewed with suspicion.

I would like to go one step further and propose a third way of how we can become more global. It is, however, an area that has so far not been received too warmly, namely the adoption of foreign names. In coming to this school, I have met many students with Chinese names and not all had corresponding English names. For the few that do have English names, I managed to develop relationships with quicker because of the familiarity factor. A few of my classmates from China

are ambivalent on the issue and one has refused to adopt an English name which, in his view, was submitting to a Western-oriented world system. My own name is thankfully easily used in Chinese, so luckily I do not have that problem. But I strongly suspect that those who are not keen to adapt to the current surrounding may be those who are more hesitant to embrace globalization. Shakespeare was the first to ponder the question "What's in a Name?" Juliet had her response and I have mine: the world.