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RAISINA FILES

Debating the World
in the Asian Century

EDITED BY HARSH V. PANT & RITIKA PASSI



Raisina Files is an annual property of ORF, a collection of essays that engage and provoke readers on some of the key aspects of the changing global order that will implicate an emerging Asia. Each essay stresses how the larger debates playing out around the world are pertinent to Asia as a geography and a pivot in today's international order. Arguments and analyses presented in this collection, which firmly put India and Asia at the nucleus, will be useful in taking the intellectual discussion forward and enunciating policy suggestions in a rapidly evolving Asian and global context

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FINDING ASIA: DEBATING ORDER, ENTITY AND LEADERSHIP

Harsh V. Pant & Ritika Passi

Observer Research Foundation

Let there be chaos: A global order in disarray

THE year gone by has challenged some of the fundamental assumptions undergirding the global order for the last several decades—politically, socially, economically and culturally. As it settles itself into a ‘new normal,’ the transition is likely to be anything but calm, orderly and predictable.

The lingering aftermath of the 2007-08 global financial crisis very discernibly attests to the tangible destabilisation of the international system—in the form of anaemic growth rates, stalling productivity and insufficient demand—that is further fuelling negative rhetoric against the very feature that has been greasing the wheels of the system for the past few decades: globalisation. What is more, it has disrupted the narrative of openness to trade and mutually beneficial cooperation previously championed by the part of the world that is today threatening to turn isolationist. This is in stark contrast to high growth rates in Asia—which remains the en-

gine of global growth after emerging countries, such as China and India, were instrumental in pulling the world out of recession immediately post-crisis. Even more disconcerting is the impact of this geo-economic flux on geopolitics. The world is entering into an era of increasing uncertainty, where the global security order appears too weak to respond to immediate as well as long-term threats. All these global trends have significant implications not only for India and Asia, but for the world beyond.

India is set to continue to be the world’s fastest growing large economy; Vietnam is seeing a rapid rise of electronics and garment exports; and Philippines and Malaysia are witnessing resilient domestic demand. Optimism is high for the Regional Comprehensive Economic Partnership—between 16 Asian nations that collectively account for about 30% of the world’s GDP—concluding negotiations this year after a breakthrough in the most recent round to liberalise 80% of the tariffs in the region. Regional integration through myriad connectivity projects, not the least of which is China’s massive Belt and Road Initiative, continues apace, binding the region and catapulting a redistribution of economic power from the traditional torchbearers in

the West to Asia.

What makes this transition rife with pitfalls is a lack of certitude about Asia's capacity to continue generating growth amidst concerns such as rising debts that restrict, for instance, China's ability to replace the United States as the world's bankroller, and the reality of automation cutting jobs in sectors that have traditionally derived the most gains from trade in developing nations. Deeper fault-lines lie in Asian geopolitics, which is witnessing a 'return of history' adding visible stress to the current international environment. Contestations over territory and considerable augmentation in military power are driving security competition in the region. Increasingly, Asia is becoming the new cockpit of great power and regional rivalry currently being manifested in increasing inter-state conflicts. More than anything else, this security competition defines the present contours and possible trajectories of the so-called 'Asian order.' Closer to home, its most conspicuous manifestation has been in China's increasing aggressiveness in the East and South China Seas as it seeks to curb US dominance in maritime Asia. Such trends are neither an exclusively Asian—take the 'Crimean Affair' and the subsequent rivalry between the European Union (EU) and Russia over Ukraine—nor are they restricted to one 'sub-set' of Asia—underlined by Iran and Saudi Arabia's politicking in Yemen and Syria to derive the most mileage for themselves in the Middle East. International politics characterised by power politics, balance of power rhetoric and a zero-sum approach make it harder to not only maintain a stable international order, but also to navigate through global interactions that seem to, at every turn pit, an ascendant China seeking to enhance its influence commensurate with its growing economic and military might against that of the world's resident power, the United States.

Asia, with its history of antagonism and long-standing territorial disputes, as well as an entrenched trust deficit, offers significantly more ground for geopolitics to play out on. The region is also home to three so-called 'revisionist' powers, inflating the scope and ramifications of geopolitical games in the offing. The tendency to address regional governance issues through the narrow prism of national interest and geopolitics causes greater international upheaval, again limiting said order's

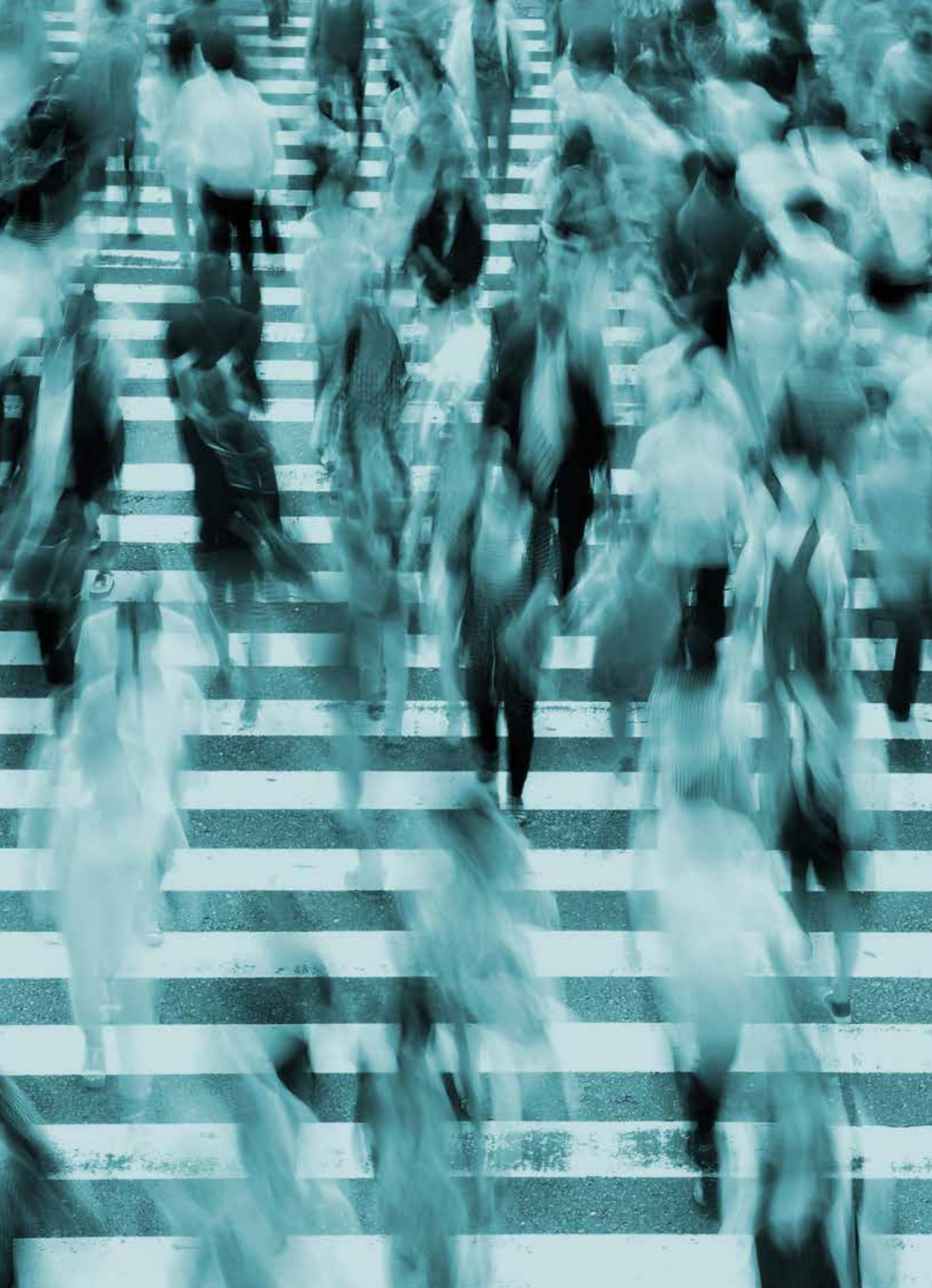
potential to engender stability in international interactions.

Political developments in the EU as a result of slow growth rates and rising unemployment levels, exacerbated by the refugee influx, coupled with the electoral mandates across the trans-Atlantic, underscore that the liberal capitalist and liberal democratic status quo that has steered the global order in the last few decades is in the process of being ruptured. The trans-Atlantic order is undergoing a significant change, which propelled by emerging 'anti-establishment' leadership, and the accompanying political conversations, lends weight to an impression that traditional powers and actors are either unable or unwilling to maintain and shape the world order.

This is in contrast to an emerging Asia with its increasing economic weight and military heft that is eager to participate in global economic and governance processes. Just as Europe and the United States have been hijacked by populist voices that are putting the far-right in power, Asian countries, too, are also witnessing the rise of political conservatism which is both nationalist and parochial in its outlook. Authoritarian statism, with the rise of strongmen leaders in Asia, will likely lead to perhaps more than some measure of chaos—not least because of their personality-driven pursuits—as they find themselves taking the reins in the remaining ensembles of a liberal democratic international order. This makes for a particularly uncertain mix in the international system.

Finding Asia

As Asia finds itself in the limelight, whether in terms of major power relations, rising insecurity and potential for conflict, or economic governance, it is worth asking, even before broaching the reality of an 'Asian Century' just what is 'Asia.' Asia, as it appears today, is a divided continent and far from being a cohesive unit with no single voice to provide an 'Asian' view. Its myriad civilisations, cultures and most importantly, its conflicts, militate in fact against a view of singular Asia anytime soon. Unlike Europe or America, the Asian states also do not share a common normative framework; bonds of history, culture and values are flimsy at best and sometimes even contradictory. Even as states in



this continent are most likely to take up the baton of global leadership in the coming times, their own differences—whether between two states or sub-regional divides such as those seen in the Middle East and South Asia—are very likely to be the Gordian knot that needs to be unknotted before Asia can claim for itself an entire century. Most foreseeable is the impending race between the Asian power houses—China, India and Japan—to lead the Asian century. China is far from becoming a unifying force in Asia. Its problems in East Asia, with ASEAN countries, in Central Asia and its ambiguous role in the Middle East underline a major power still in search of not only a role but also acceptance. In terms of relative power, the other Asian contenders lag far behind. Their lack of relative power has also hindered their willingness to step up and fill the vacuum presently being felt with the gradual withdrawal of the US from the Asia-Pacific, even as that ambition exists. However, the one trend that has the capacity to transform this gloomy narrative is the common goal, and indeed necessity, of continued growth and development. It is this impulse that is effectively knitting the region together through trade discussions, FTAs and regional connectivity projects. There has been a spate of free trade agreements that India, for instance, has signed in recent times or is in the process of negotiating. China has the Regional Comprehensive Economic Partnership to offer. As far as inter-Asian connectivity is concerned, China's Belt and Road Initiative is a grand formulation for closer inter-connectedness in Asia. India, has also initiated its own efforts in this regard, most visible in the Sagar Mala project and Project Mausam. However, there is little cooperation when it comes to generating complementarities in individual efforts on closer inter-connectedness, even in a field of recognisable mutual benefit, among these two countries at the forefront in Asia. This is because of 1) a lack of trust and suspicion that continue to inform perceptions over how these states view each other's initiatives—and which smaller states use to their advantage to hedge their bets, only complicating the state of affairs; and 2) the greater reciprocity between economic objectives and security aims that rising powers begin to benefit from—the China-Pakistan Economic Corridor, a crowning feature of China's Belt and Road Initiative is a ready illustration—and as already inferred, while

there may be consensus on the first, there isn't likely to be on the second.

While an Asia of Asians, and an Asian order defined by Asians and for Asians, will therefore have to wait, the imperative at present is to ask how Asian states can reconcile their national interests and relieve themselves of the security dilemma they face vis-à-vis each other, while ensuring that the necessity to balance each state does not translate into a zero-sum game.

Can Asia Lead?

The most important question for the Asian century to become a reality remains whether Asia can lead the new global order. For the foreseeable future, this looks like a difficult undertaking given the 'domestic' environment of Asia discussed above. Europe became a global example only after the Second World War. Its integration, critical to its becoming this vaunted example, was however subsidised by an external agency in the form of the United States which effectively took control of Europe's security. The American role and the European trajectory was replicated, to a lesser degree, in Asia after the end of the Cold War. The emergence of the Association of Southeast Asian Nations (ASEAN) as a vanguard of Asian integration happened in an international environment where the United States was the global hegemon and provided public goods in the Asia-Pacific. The current trends where the United States appears to be on a relative decline have engendered a 'free-for-all' competition in the region; ASEAN, as a protégé of the United States is today more divided than ever before. Rather than emerging as a fulcrum of global solutions, it seems as if the Asian Century is in danger of becoming the epicenter of destabilising global trends, whether it is of inter-state conflict of terrorism or of an inchoate management of global public goods.

Competition, rather than a confluence of interests, defines contemporary Asia. Small states are fearful of being sidelined by large states; coastal states are fighting over the control of the oceans; consumers of energy are constantly being fearful of overdependence on energy producers; export-oriented economies are skeptical of market access in consumer states; and lastly, democratic states are pitted against authoritarian regimes. How these

differing perceptions of national interests play out will largely define the Asian Century.


The contradictions of Asia's rise are most visible in the debate over multipolarity. The emerging nations in Asia vie for greater voice in global affairs and seek democratisation of global institutions and regimes as a means of voicing discontent largely directed at the US hegemony. Yet, at the same time, they detest any prospect of Chinese hegemony in Asia. When it comes to making a choice between two alternatives—China's ascendance to the forefront of Asian politics and continued US hegemony in Asia-Pacific—the latter sounds much more promising than the former. The perils of global multipolarity, which translates into America's global decline and a race for Asian hegemony, cannot be sidelined. As Peter Temin and David Vines state in their book *The Leaderless Economy*, "A hegemonic country has the power to help countries cooperate with one another for the maintenance and, when needed, the restoration of prosperity... When no country can or will act as hegemon, a world crisis erupts." Furthermore, a multipolar world, even when intrinsically more democratic, may not necessarily be the most efficacious system for preventing international conflicts. The current strategic flux in global and regional order, therefore, leaves much to chance.

Clearly the impending Asian century will not be smooth sailing. Is Asia prepared to manage its contradictions? Are the rules, norms and institutions of Asia's existing regional architecture robust enough? Are Asian states ready to engage in sustained dialogue to institutionalise certain common understandings and resolve underlying conflicts? For one, recent years have seen the most robust regional institutions, such as the ASEAN and the Asian Development Bank (ADB), dithering under external pressure. Asian states have proposed new institutions and governance structures, although of course their effectiveness remains a matter of speculation and their robustness yet to be tried and tested. Asia's fate and future will inevitably be decided by its collective will to solve problems and resolve issues.

India: A pivot in a pivot?

India has a pivotal role to play if the dream of an

Asian Century is to become a reality. Its central position in Asia, growing economic and military power, and historical role in Asian and global politics provides it enough firepower to be a central player in shaping Asia's future. Equally significant are the robust democratic underpinnings of India's rise that make India unique as a rising power with a stake in the extant liberal democratic global order. Shifts in Indian foreign policy in the last quarter of a decade have been momentous. Asia has emerged as its most important focus in global politics. From 'looking east' to 'acting east,' India has shed some of its traditional reservations and is increasingly embracing the logic of expanding its influence beyond South Asia. However, doubts galore about its capability to shoulder this responsibility. Notwithstanding India's economic strides, poverty remains a major challenge. A substantial proportion of its population still remains unaffected from the growth trajectory it has experienced in the post-Cold War period. Its military focus is still very much defined by the traditional threats posed on its land frontiers by its hostile neighbours. It still lacks the appropriate institutional and bureaucratic apparatus to further its influence across its immediate frontiers. More importantly, it is its willingness to be engaged in and contribute to Asian peace, security and governance that is being debated among strategists and political commentators, both in India and abroad. The challenges India has to surmount therefore remain substantial; yet, the opportunities beckoning India are also tremendous.

We at Observer Research Foundation have invited some of the finest minds in the world to reflect on the rise of Asia in the present global order. These interventions range from debating the idea of the 'Asian Century' and exploring the rapidly evolving domestic political and social contexts in the region to examining the challenges of global and regional governance. We present these essays with the hope that they will contribute to the new intellectual and policy conversations about the world which is going to be more 'Asian' in its texture in the coming years. India must take a lead in starting these conversations, and in so doing, navigate its people and lead other nations, with as comprehensive an understanding as possible, through the twists and turns that are but a hallmark of a transitioning global order. 

IS THE 'ASIAN CENTURY' OVER BEFORE IT HAS BEGUN?

Michael Auslin

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EVER since Japan began to be viewed as an economic juggernaut in the 1970s, the world has anticipated the 'Asian Century.' Predictions of America and Europe's inevitable decline and Asia's inexorable rise have been staples of books, newspaper and magazine articles, and news shows for decades.¹ In a tectonic shift in global power similar to the one that took place in the early 20th century, we are told, the countries of the Indo-Pacific will begin to dominate global economics, politics and security.²

Such claims seem merely to reflect reality. Over three billion people live in the great geographic arc from India to Japan, and one in every three persons on our planet is either Chinese or Indian. The formerly war-ravaged and impoverished countries of the Indo-Pacific now export forty percent of the goods bought by consumers around the world.³ The world's most populous countries and largest militaries are in the Indo-Pacific, and millions of Asian immigrants are changing the societies to which they have moved. Asian art, cuisine and pop

culture have spread throughout the world. Whether you care about the Indo-Pacific or not, it is a part of your world.

Meanwhile, more Asians than ever in history are benefitting from economic growth and political stability. The region has not seen a real war since the Sino-Vietnamese clash of 1979. Since the mid-1980s, democracy has spread to Taiwan, South Korea, the Philippines, Mongolia, Indonesia and elsewhere. Hundreds of millions of Chinese, Indians, Vietnamese and others have been lifted out of poverty. Lifespans throughout the region have increased, and the standard of living in Asia's major cities now rivals (sometimes exceeds) that of the West. Scientists and scholars from Asian countries play leading roles in research institutes, laboratories and universities around the globe. Some of the world's most advanced industrial factories are in countries like Japan, South Korea and Taiwan.

Perhaps because much of Asia has been peaceful for a few decades, many outside the region—and inside it as well—seem to take for granted that it

will always be so.⁴ As their European counterparts did in the first decade of the 20th century, many observers today argue that the great volume of trade, the unhindered movement of people and the bevy of regional political organisations have made war in Asia impossible. Perhaps most importantly, when compared with the strife-torn Middle East, aging Europe or crisis-beset Africa, the Asia-Pacific region looks like the one major area of the world where opportunity, economic growth and political development are still possible. In short, the global future looks increasingly Asian.

Perhaps the main reason for that is an economic one. Most global consumers can hardly imagine a world without Asia as its workshop. China and Japan are two of the world's three largest economies, and the majority of clothing, textiles and consumer electronics are produced in Asia.⁵ A massive building boom accompanied the decades of post-World War II growth, as capital investment in plants, ports, roads, airports and office buildings transformed rice paddies into business parks, while sleepy capital cities became financial and industrial magnets. Today, 18 of the world's 25 largest container ports are in Asia, including all of the top eight, while the largest US port, Los Angeles, is only ranked nineteenth.⁶ Perhaps even more impressively, urbanisation has erased traditional villages across Asia, and megacities like Tokyo-Yokohama, Shanghai, Jakarta and Mumbai now burst with tens of millions of people, from the world's wealthiest tycoons to its most poverty-stricken strivers.

The story of global economic activity for the past two decades largely has been the story of China, taking over from Japan and the Four Asian Tigers as the driver of economic growth in Asia. In the space of one generation, China has become the largest or second-largest trading partner of 78 countries around the globe, including the United States, Japan and South Korea.⁷ By some measures, China is now the first-, second- or third-largest trading partner of nearly every nation on earth.

According to the International Monetary Fund, China is central to the entire world economic structure, as its imports help prop up the economies of major players such as Germany, smaller ones like Australia, and fledgling countries in Africa.⁸ The world has grown used to miracle stories of people like Jack Ma, the founder of e-commerce

giant Alibaba, who became China's richest man in a few hours when his company's initial public offering on the New York Stock Exchange netted him \$13 billion.⁹ Shelves of books have been written about China's economic explosion and how it is transforming the world.¹⁰

China is just one example of how hundreds of millions of Asians have been pulled out of deep poverty. As late as 1990, just before Deng Xiaoping made his famous push to revitalise economic reform, per capita GDP in China was just \$340. Ten years later, it had almost tripled, to \$945, and in 2014, the World Bank estimated it to be \$7,590, more than a sixfold increase in twenty years.¹¹ In 1953, just 13% of China's people lived in urban areas. In the 2010 census, that figure stood at 49% and had grown by 13 percentage points in just the previous decade.¹² China's largest cities have exploded in size, and the country now boasts 170 cities with over a million people, as well as five with over 10 million.¹³

Like its more developed neighbours, China has rapidly become a technologically sophisticated society. China had nearly one billion mobile phone users in 2011, with millions signing up every month. Sina Weibo, the world's biggest social networking site, attracts a large percentage of China's nearly 600 million internet users.¹⁴ Such success stories of modernisation can be repeated throughout Asia, lending credence to the idea that Asia's future is a golden one.

What most of the cheerleaders for Asia miss is the other side of the story. Despite enormous progress, growth and modernisation, Asia still struggles with enormous problems. Because so many of those weaknesses have been ignored, they now threaten the region's future. From economics through domestic politics and security, solving the challenges facing Asia will demand the full attention of policymakers, thinkers, business leaders and citizens.

The world is just beginning to wake up to the fact that Asia's economic miracle is at risk. After decades of hearing about double-digit economic growth in Japan and China, and impressive growth in the Four Tigers, the pace of GDP growth has slowed dramatically. Japan's generation-long stagnation is perhaps the best known example, but when China's stock market crashed in the summer of 2015, many observers for the first time appeared to recognise





that the problems in the region were widespread and endemic.

Among the suspect assumptions that have driven hype over the Asia Century are that China's economy will continue to grow for decades, that India is poised to take its place if it should falter, and that Southeast Asia remains just steps away from explosive economic performance.

In reality, from Japan to India, the nations of Asia struggle to maintain growth, balance their economies and fight slowdowns. In most of these countries, the days of high-flying growth are long over, while for others, they never began. It is past time for the rest of the world to pay attention to the threats to Asia's economic health. Uneven development, asset bubbles, malinvestment, labour issues and state control over markets are just some of the features of economic risk in the Asia-Pacific. And because Asian economies are increasingly interlinked, problems in one country spill over to others. Even if Asia's economies manage to muddle through, the world must ask what will happen to global trade and investment if growth in Asia simply cools off.

There is little doubt that the world must prepare for a China whose growth has dramatically slowed if not stagnated, and for mature economies like Japan to never recapture their former economic vibrancy. As for the developing states, the risk is that they will never attain the growth needed to ensure the modernisation of their societies.

Most of Asia's developed countries, including Japan, South Korea, Taiwan and Singapore, are facing or will soon face unprecedented demographic drops. China's one-child policy and horrendous environmental pollution will also bring a population decline in the world's most populous nation, at a

time when the country is not yet rich enough to deal with the resulting dislocation. On the other hand, India has a growing surfeit of young people and needs to improve educational standards, expand its urban and rural infrastructure, and find them all jobs. Much of Southeast Asia is in the same situation as India. Demographics will put enormous pressure on Asia's domestic political and economic systems; understanding this is a must for understanding risk in the region.

Another enormous area of risk is Asia's unfinished political revolutions, in both democracies and autocracies. How political leaders respond to economic and social challenges will ensure domestic tranquility or produce civil unrest. An Asia whose political systems fail to provide stability, legitimacy and growth is an Asia that will become increasingly troubled. The region's history is full of examples of domestic failure leading to wider dislocation.¹⁵ At the same time, embattled regimes have regularly sought to defuse tensions at home by exporting instability abroad, even to the point of invading neighbouring countries.

The gains of democracy continue to be put at risk by corruption, cliques, protest, cynicism and fear of instability. The spread of democracy, which has succeeded so well in recent decades, may be reaching a limit—how temporary is impossible to say. Even mature democracies, like Japan, face a crisis of political confidence, and a “political arthritis” that leaves vital problems unsolved.

Democracies are afflicted by malaise, cynicism and anger at the growing gulf between the haves and the have-nots. In Japan, where life remains comfortable and envied by most other Asian nations, voter participation rates in elections continue to drop,

“The Asia-Pacific remains fettered by centuries of history. Its largest, most powerful nations—China, Japan, India—were also once its major imperial powers. Today, these giants have no formal allies among their neighbours, and few close partnerships.

as many young people turn away from politics, convinced that the country will never pull out of its economic stagnation. South Korea is in the midst of a political crisis, as President Park Geun-hye was impeached for a bribery and influence-peddling scandal, after millions of South Koreans demonstrated in the streets against her. The Thai military continues to hold power after overthrowing the elected government, while in Malaysia, Prime Minister Najib is under fire for a billion-dollar financial scandal. Democrats around Asia are pessimistic about the future, helping stir populism and broader discontent.

Autocracies are in similar straits. In China, the Communist Party has become ever more isolated from the citizenry and is seen as corrupt, inefficient and often brutal. President Xi Jinping has cracked down on civil society, arresting lawyers and pressuring non-governmental organisations, even as he has gathered more power into his own hands.

Fearful of its lack of legitimacy, the Chinese government remains unshakably committed to preventing any geographic area from splitting from the country at large. This dynamic drives the government's repressive policies towards Hong Kong, Taiwan, Tibet and Xinjiang, and is rooted in the knowledge that these regions would readily sever ties with Beijing if they could. A China riven by fission among its parts is the central leadership's greatest fear. Fears about the future of Chinese stability are growing, in part due to uncertainty over Xi Jinping's future plans. Nor is it far-fetched to conclude that China's increasing belligerence over territorial disputes comes from a desire to shift attention away from increasing government control at home.

But if Asia's domestic political systems are under

strain, its diplomatic relations are at just as much risk. Few observers think about war in Asia. After all, the Indo-Pacific has not seen a region-wide total war since 1945. After Hiroshima and Nagasaki, the last major clash between Asian nations was the 1962 Sino-Indian War, and there has been no extended conflict between Asian nations since the 1979 Sino-Vietnamese border war. Given the growing trade and wealth in the region, a casual visitor to Asia could be excused for assuming that Indo-Pacific nations are too busy getting rich to waste time on territorial disputes and military confrontations. In fact, modernisation and economic growth have led to a new era of insecurity and a growing threat of armed conflict.

More than any other region, the Asia-Pacific remains fettered by centuries of history. Its largest and most powerful nations, China, Japan and India, were also its major imperial powers through millennia of history. Today, these giants have no formal allies among their neighbours, and few close partnerships. Because of this, Asia lacks longstanding, tested, respected political mechanisms for cooperation between states. This is a problem for a region with both major security tensions and a need for continued economic integration. Given the stakes, all countries in the region should be striving to create and maintain a political community that contributes to both growth and political stability. Yet such an achievement is far off on the horizon.

Despite facing many of the same problems, there is little that links Asia's nations together. Beyond a rudimentary sense of “Asian-ness,” there remains no effective regional political community. There is no NATO, no EU in Asia that can try to solve common problems in a joint manner, or work to

address bilateral issues in a broader framework. This lack of regional unity is a largely underappreciated risk factor.


The danger of a lack of political community is that there are no mechanisms for mitigating such deep antipathy, certainly between major players such as India and China or Japan and Korea. A nation like China is all too ready to threaten economic or political action in response to their antagonists. The various nations have few working relationships that can help defuse crises. Nor is there a core of powerful liberal nations committed to playing an honest broker's role or trying to set regional norms. How well can Asia weather another regional economic crisis like the one in 1997, or a major border dispute?

The immediate cause of rising insecurity is simple: as China has grown stronger, it has become more assertive, even coercive. Beijing has embraced the role of a revisionist power, seeking to define new regional rules of behaviour and confronting those neighbors with which it has disagreements. Japan and Taiwan, along with many countries in South-east Asia, fear a rising China, as does India, though to a lesser degree. That fear, fueled by numerous unresolved territorial disputes in the East and South China Seas and by growing concern over maintaining vital trade routes and control of natural resources, is causing an arms race in Asia. The region's waters have become the scene of regular paramilitary confrontations: From the divided Korean peninsula to the Taiwan Strait, and from the Kurile Islands in the north to the Spratleys and Paracels in the South China Sea, coast guards, paramilitary forces, maritime patrols and air forces jockey for position, sometimes leading to the ramming of ships and the sinking of fishing vessels.

The Indo-Pacific contains its own 'great game'

between great and small powers. Some of this competition is simply for greater influence, but some is for concrete gain such as wresting away territory or gaining de facto client states. At the highest level, that between China and its neighbours, it is for determining the basic structure of the region and the rules and norms that guide it. It is a contest in which no one, not even China, feels assured of its own strength. Asia's simmering military competition, stand-offs, mini-confrontations and saber rattling have until recently been ignored in good-news discussions of the Indo-Pacific.

The rapid transformation of Asia's security environment threatens to undo the work of decades. China's rise is upsetting the political and military equilibrium and causing other nations to build their own military power. In addition, an increasingly nuclear capable North Korea has moved from bizarre annoyance to deadly threat, while numerous territorial disputes between countries both large and small are helping fuel the arms race. Even without an ongoing war, the region now spends more than Europe on military budgets, paying out \$287 billion in 2013 for weaponry.¹⁶ An accident or miscalculation on the part of any of these great and small powers in the region, fueled by nationalist passion, could result in an armed clash that might spiral out of control.

The 'Asian century' thus may not turn out to be an era when Asia imposes a peaceful order on the world, when freedom continues to expand, or where the region remains the engine of global economic growth. What it imposes may instead be conflict and instability. The nations of the Indo-Pacific and the world must prepare for the possibility of economic stagnation, social and political unrest, even armed conflict. The emergence of those would mark the end of the Asian century. 

1 Early examples of this include Herman Kahn, *The Emerging Japanese Superstate: Challenge and Response* (New York: Prentice Hall, 1970) and Ezra Vogel, *Japan as Number One: Lessons for America* (New York: Harper, 1979).

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GLOBALISATION IN THE ASIAN CENTURY

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Introduction

PREDICTIONS that the 21st century will be the Asian century appear to have been borne out already. From the 1990s there has been a decisive shift in global economic activity—current projections pit the centre of economic activity globally between India and China by the middle of the century.¹ This shift in economic activity—arguably a return to patterns before the industrial revolution—has occurred over an unprecedentedly short period of time. Over 2003–2013, the global median level of real income nearly doubled.² This was essentially an Asian effect, the only region to experience sustained productivity growth and catch-up this century; above all, this transformation has been driven by Chinese and Indian growths. China is likely to overtake the United States soon as the world's largest economy and the World Economic Forum predicts that India will become the world's third-largest economy by 2030.³

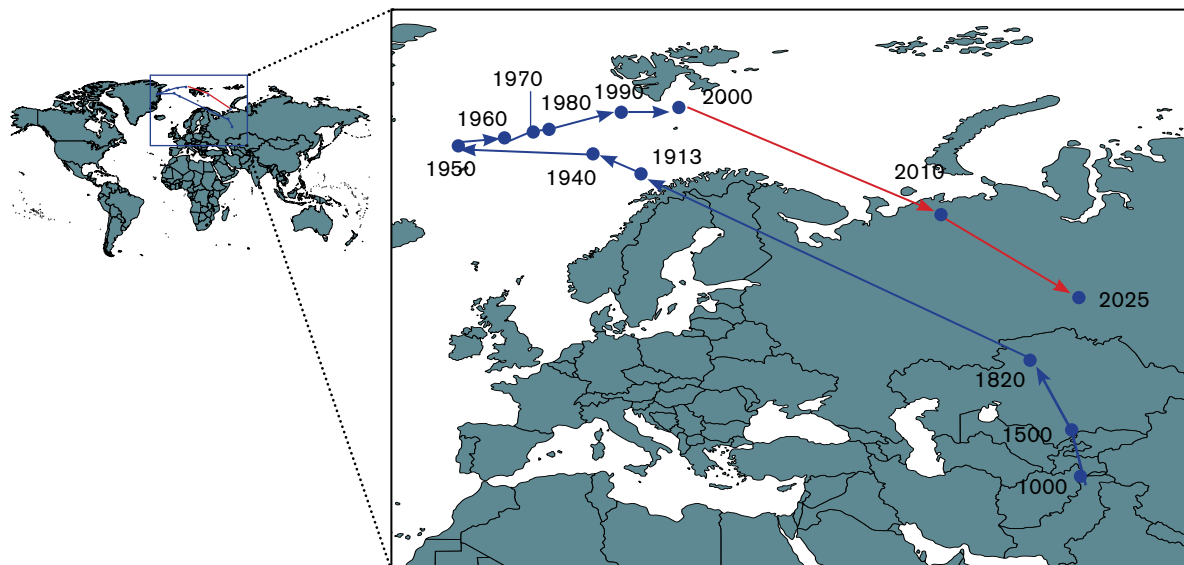
Asian economies succeeded through embracing globalisation, but they did so on their terms. More subtly, emerging economies have come to play a much greater role in global economic governance, notably as the G7 was superseded by the G20 and through a more active role within the World Trade Organisation (WTO) in particular. Further, emerging economies have started to construct institutions of international economic cooperation and governance parallel to existing ones established and dominated by Western powers. Asian economies, particularly China, have forged new trade and investment relationships with emerging economies in Africa and Latin America. The period before the global financial crisis was characterised by a phase of hyper-globalisation based on a particular conception of global integration that came to be associated with a policy package of openness to trade and financial flows and general economic liberalisation. This came to be seen as driven by US economic hegemony, often dubbed the Washington Consensus, although the European Union



By far the most rapid shift in the world's economic center of gravity happened in 2000-10, reversing previous decades of development

Evolution of the earth's economic center of gravity¹

AD 1 to 2025



¹ Economic center of gravity is calculated by weighting locations by GDP in three dimensions and projected to the nearest point on the earth's surface.

The surface projection of the center of gravity shifts north over the course of the century, reflecting the fact that in three-dimensional space America and Asia are not only "next" to each other, but also "across" from each other.

SOURCE: McKinsey Global Institute analysis using data from Angus Maddison; University of Groningen

was also an active player particularly in the field of financial liberalisation. The new economic relations promoted by emerging economies in Asia and elsewhere have reshaped the architecture of economic globalisation in the 21st century.

Globalisation interrupted?

Yet the future of these trends now poses major challenges for Asian countries, both in terms of globalisation generally and the role of Asian development models specifically. Only a decade ago, globalisation trends were widely expected simply to continue—global flows of trade, investment and finance would continue to grow, global economic governance would continue to evolve to promote such flows and reduce barriers to them. Since the 2007/08 global financial crisis (GFC) global growth has been continued to be anaemic—emerging economies were central to dragging the world economy out of the post-crisis downturn, but latterly growth has slowed in China and elsewhere (although it remains strong in India). China responded to the GFC with a major stimulus package, but with the slowdown there may

be emergent debt problems in its banking and shadow banking sectors.⁴

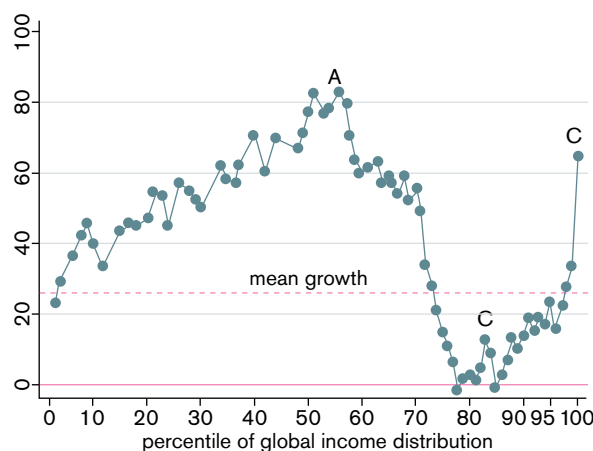
More fundamentally, developments since the GFC have challenged assumptions of ever-growing globalisation. Trade flows fell sharply at the start of the crisis and, although growth has resumed, it remains subdued and is no longer growing relative to GDP.⁵ Foreign direct investment flows of multinational corporations have only recently resumed growth, having slumped after the financial crisis, and they too have ceased to grow relative to GDP.⁶ The reversal of financial globalisation has been even more dramatic—international financial flows had grown exponentially from the 1970s but have fallen back since to a fraction of their pre-crisis levels; relative to GDP, international financial flows are now comparable to levels last seen in the mid-1980s.⁷ Much of this is driven by retrenchment of cross-border banking flows—unsurprisingly in the aftermath of a financial crisis—but it also points to reduced appetite for the risks of international investment. The persistence of these trends indicates more than just a cyclical phenomenon. Not only have flows fallen, barriers may also be returning. Even before the GFC, the Doha round of the

WTO had become deadlocked, not least because of a lack of agreement between emerging economies and Western powers. Whilst the financial crisis did not see a return to 1930s-style protectionism, trade barriers did rise and are partly responsible for the subdued level of global growth. The election of Donald Trump and the UK's Brexit vote point to a turn against globalisation; already the Trans-Pacific Partnership (TPP) and Transatlantic Trade and Investment Partnership (TTIP) negotiations appear doomed. There is historical precedent from the inter-war years for a turn against globalisation. Emerging Asian economies are central to the globalisation processes that have brought the world economy to its current juncture.

Rising Asia and the future of its development model

Whilst countries elsewhere have registered gains, the global transformation is essentially a story of the rise of emerging Asian economies—above all, China and India. Initially globalisation developed from the 1980s largely as an intensification of flows between developed countries, but a series of technological developments and policy shifts led to a wholesale shift of global manufacturing power. As Richard Baldwin has recently documented,⁸ economic globalisation of the past quarter century has seen the development of global value chains leading to the rapid industrialisation of emerging economies and the further deindustrialisation of developed economies. What is unprecedented here is the combination of trade openness with the new information and communication technologies (ICTs), enabling the flow of ideas and technological know-how. Offshoring enabled the transfer of advanced technology and the rapid evolution of manufacturing in emerging economies; this drove the unprecedented growth and catch-up in Asia. Emerging economies were able to access leading-edge technologies and multinational companies were able to transfer production to lower-wage economies. These new ICTs effectively eliminated many of the barriers to diffusion of advanced technological know-how, enabling a shift in manufacturing to Asia.

This wholesale shift in industrial production has



Cumulative real income growth between 1988 and 2008 at various percentiles of the global income distribution

Source: Milanovic, *Global Inequality*, 2016

created a profound pattern of winners and losers. In what Milanovic has characterised as the “greatest reshuffle of individual incomes since the industrial revolution,” growth in the two decades before the GFC was concentrated around the global—the vast majority in Asia—and amongst the global top one percent.⁹ On the other side, incomes stagnated for lower and middle income earners in developed countries; the timing and extent of this varied between countries, but the combined effects of globalisation, policy shifts, automation and anaemic growth have hit household income growth across the developed world.¹⁰ In these circumstances the populist backlash in Europe and the United States—focused on trade, immigration, or both—is not surprising. Increasingly, parallels are drawn with the inter-war retreat from the pre-First World War phase of globalisation.

The Asian growth model has been predicated upon export-led growth through manufacturing and high levels of savings and investment; since the 1997 East Asian crisis this has entailed current account surpluses. There are major external and internal challenges to the future of this model. The shift in industrial power over recent decades is very unlikely to be reversed in the foreseeable future; whatever his election promises, Donald Trump won't be able to engineer a renaissance in American manufacturing. Instead, the shift in manufacturing towards emerging economies is likely to continue. Nevertheless, the growth of world trade has slowed and Asian export growth has not picked up with the recovery of the global economy in contrast to

earlier global downturns. The rapid expansion of trade before the GFC with the spread of global value chains now appears exceptional. Trade barriers have risen, and may rise significantly further under the Trump administration. Further, the model itself became increasingly reliant on the United States as the 'consumer of last resort.' The imbalances that developed between trade deficits in the United States and surpluses in Asian economies cannot be sustained indefinitely (ultimately, growth of consumer demand in the United States was based on rising house prices, falling savings and rising debt). In the face of sluggish world trade growth Markus Rodlauer, deputy director for Asia and the Pacific at the International Monetary Fund, has gone so far as to assert that "[t]hat model that Asia had of relying on the trade channel—that's gone."¹¹ In the context of debt overhang and deleveraging in the global economy, even the spectre of 'secular stagnation' amongst the developed economies ever-growing Western consumer demand cannot be assumed.

Internally, too, there are a number of challenges to the continuation of this model. Latterly developing economies appear to be experiencing 'premature deindustrialisation'—manufacturing output and, especially, employment peaking at lower levels of income than was the case historically. This is particularly significant given the evidence that manufacturing is central to productivity growth and development. In general Asia has been the major exception to these trends; indeed, its very success in industrialisation appears to have limited the opportunities for further industrialisation in Africa and Latin America. However, India does display signs of this phenomenon,¹² although a combination of factors has underpinned its advantage in services trade. In the past manufacturing generated mass employment and was central to absorbing labour from agriculture. As advanced technology spreads modern factories in emerging economies, like their counterparts in the already industrialised world, these are far less labour intensive. In 2016 Foxconn was reported to have replaced 60,000 factory workers in China with robots.¹³ The demographics pose key challenges for China and India, particularly in both generating sufficient employment to continue to absorb workers with basic education and skills whilst also ensuring growth of a skilled workforce to enable up-grading of produc-

tion.¹⁴ This is closely related to the potential challenge of 'middle income trap'; it has been claimed that although countries may find it relatively easy to achieve some development, they appear to hit a ceiling rather than accede to the still small club of rich nations. Low-wage industries are increasingly footloose, but transitioning from initial export-led manufacturing growth to more sophisticated production as incomes rise requires a set of policies, skill generation and institutions.

Related to these developments, Asian economies have also experienced significant rises in inequality since 1990. Historically labour-intensive export-led industrialisation in Asia produced relatively egalitarian outcomes through strong growth of formal employment; although Asia remains on average more equal than Africa or Latin America, the general forces that have raised inequality in developed countries—globalisation, technological change and policy shifts—have also acted to manifest themselves in the same adverse manner across emerging Asian economies.¹⁵ In the face of mounting evidence that inequality is economically harmful and politically destabilising, these developments raise concerns over the sustainability of current development paths.

The rapid pace of industrialisation based on the spread of global value chains may render older policy packages redundant or inoperable, but neither upgrading nor ensuring inclusive growth is a simple task or an automatic process. Recent proposals for revitalising industry sketch out strategies that may enable governments to adapt policy tools to develop capabilities so that countries are able to upgrade within value chains.¹⁶

Asian economies and the reshaping of global finance

Trade and financial integration are often discussed separately, but for emerging economies these have become intertwined. In the aftermath of the 1997 East Asian currency crises emerging economies have attempted to manage their exchange rates to ensure continued export growth and strong external balances. This has been associated with an accumulation of reserves that has, in turn, brought

forth accusations of currency manipulation, particularly in the United States. The financial turbulence following the GFC, combined with low interest rates and quantitative easing, led to potentially disruptive capital flows to emerging economies. (This also led to accusations of currency manipulation against the United States; the possibility of currency wars remains). In response to this China, India and a number of emerging economies in East Asia and elsewhere instituted capital controls or utilised existing such provisions to manage these inflows. There has been a striking shift in the intellectual climate since the start of the crisis that now claims that capital controls are a potentially useful tool for emerging economies to manage capital flows and mitigate associated risks. The IMF in particular appears to have adopted a more lenient view of some forms of capital controls. This has occurred in the context of a marked retrenchment in international financial flows. Emerging economies have retained considerable access to international finance—in particular, external corporate debt in emerging economies has boomed over the past decade under conditions of accommodative monetary policy and weak economic prospects in developed economies.

Financial liberalisation had become increasingly entwined with trade agreements in practice. The General Agreement on Trade in Services under the auspices of the WTO does have provisions for opening up capital markets. Further, regional and bilateral trade agreements with developed countries have increasingly aimed at opening up emerging economies' financial markets. Bilateral investment treaties—the principal means of negotiating arrangements for foreign direct investment in the absence of an established global regime for this—also frequently include provisions for financial openness.

Here the emerging economies' response has shaped the evolution of the global financial architecture. Acting in consort through international economic agencies they have cooperated to create provisions to regulate capital flows and create policy space. National finance often underpinned the export-led growth model, directed to national priority sectors and export promotion. Asian countries have actively cooperated with emerging economies in Africa and Latin America on this. The result has been a shift to reregulate global finance in the aftermath of the GFC, in contrast

to earlier developments. This has been one of the influences in the shift in policy thinking in international agencies, but has also been reflected in the response of the G20 to emphasise measures to address international financial instability and effective macroprudential regulation.

This process of reregulation of international finance by emerging economies entails a partial return to national regulation of finance rather than the construction of a new global financial regime. The US dollar remains the dominant currency and although the IMF adding the Renminbi to its Special Drawing Rights is symbolic of China's global importance, there is little prospect of it rivalling the dollar in the foreseeable future. Rather than envisaging developments in terms of emergence of a single international monetary hegemon, in the way the United States in the 20th century took over from Britain in the 19th, emerging market economies are not seeking to create a unified international monetary system. Rather, they have used their increasing power to reshape the operation of global finance. As well as their activity within international economic agencies, there have been a number of key initiatives between emerging economies, notably the establishment of the New Development Bank (headquartered in Shanghai) and the Asian Infrastructure Investment Bank, as well as plans to create a BRICS-based credit rating agency.

Towards a new globalisation?

The global financial crisis bookended a phase of hyper-globalisation, based on a conception of a unified set of global rules and an expectation of continuously rising global flows. The financial crisis itself raised profound questions over the effectiveness of global arrangements in ensuring financial stability. While for earlier proponents of globalisation, the phenomenon could ensure general prosperity—or, at least, only a relatively small minority of national populations would be affected adversely—today, wider concerns over globalisation have emerged and strengthened.


In practice a far more disruptive reconfiguration of economic power has been underway. The combination of global integration and ICTs has meant that advanced technological know-how is no longer

essentially the preserve of richest countries. The establishment of global value chains has created industrialisation and productivity growth in emerging Asia at an unprecedented rate. This has also created major global patterns of winners and losers—the flip-side of income growth in middle income countries has meant stagnation of incomes for swathes of households in developed ones. The drive towards deeper trade agreements now appears to be over—the backlash from groups in developed countries appears to have effectively stopped TPP and TTIP. More widely the increased organisation of emerging economies within the WTO has changed the nature of global trade negotiations. For some analysts these developments raise the possibility of a reversal of globalisation, comparable to that seen during the Great Depression. The prospect of a return to US protectionism under a Trump administration and even the possibility of the European Union imploding do raise concerns. However, the analysis here points to a more nuanced outcome. The response to this from emerging Asian economies has been to cooperate with other emerging economies and effectively this is leading to a multi-polar system of globalisation.¹⁷ A series of initiatives amongst the BRICS are leading to emerging financial relations amongst emerging economies. China's New Silk Road strategy is an alternative mechanism for integration from traditional trade agreements, but could potentially integrate markets across Eurasia.

The emergence of a multipolar system of globalisation poses particular challenges for emerging Asian economies. The dangers of rising protectionism and an inward turn amongst developed economies have already been highlighted. Global trade negotiations through the WTO have stalled; regional trade negotiations continue, but these could lead to fragmentation of global trade. Further, critics have noted that recent regional trade agreements often contain provisions strengthening firms' intellectual property

rights. International technological diffusion has been central to the industrialisation of emerging Asia, and measures that entrench the advantages of developed country multinational enterprises may limit the ability of emerging economies to absorb best practice technology.

Although recent developments have focused attention on the potential for a rise in trade protection, the future development of the international financial system remains at least as important for emerging Asia. The global financial system remains US dollar-based. It has not functioned effectively to promote development—flows to emerging and developing countries have often been too low, too volatile and too short term. In response to the 1990s crises, emerging Asian economies have pursued strategies of reserve accumulation as an insurance policy, but this entails significant costs and creates global economic tensions. Since the 2007 global financial crisis emerging economies have effectively utilised countervailing power to enhance domestic policy space and promote new arrangements, but this falls some way short of reshaping the global financial system.¹⁸ A shift to a multipolar system which reflects the shifts in economic activity would offer the potential for the emergence of an international financial architecture more conducive to development finance. However, developments since the global financial crisis point to only limited reform and a marked continuation of existing relations.

The industrialisation of emerging Asia still looks set to continue. The Asian growth model does face challenges in the face of sluggish global growth, and of ensuring sustained productivity growth and inclusivity within nations. Nevertheless, emerging Asian economies have reshaped global production and through their increased role in international integration, they have reshaped the nature of globalisation from the Western hyper-globalisation model of the 1980s and 1990s. 

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THE FUTURE OF WORK IN ASIA

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Introduction

EVERY year, millions of young people enter the labour markets in Asia. Creating sufficient jobs to meet this demand is a huge challenge. What solutions work best needs to be determined in the local context. What this essay aims to do is look into the global opportunity structures for development, and reflect on what changing conditions could mean for the ability to create employment in Asia's emerging economies.

The global window of opportunity for development is closing

Ever since the Second Industrial Revolution started to peter out in the 1960s, global capitalism has faced a crisis of consumption demand. The decades that followed have been described by Wolfgang Streeck

as buying time to address the root cause of the crisis: that consumption demand grows slower than the increase in productivity. The inflation of the 1970s, the public debt of the 1980s, the private debt of the 1990s and the quantitative easing of the 2000s were all strategies to create demand by injecting future resources for consumption at present.¹

While all of these temporary fixes necessarily led to major crises, they bought the time needed to implement five strategies to "repair capitalism": 1) the rationalisation of production through technological automation aimed at increasing efficiency; 2) the globalisation of production by offshoring, profiting from cheap labour cost in developing economies; 3) the neoliberal approach to free the supply side from any "political cost," such as by lowering taxes, cutting back welfare and depressing wages; 4) financialisation as a strategy to side-step the crisis by looking for profits in the financial markets; and 5) the digital revolution, understood by Philipp Staab as the latest attempt to tackle the consumption crisis by rationalising the consump-

tive and distributive apparatus.²

So far, none of these strategies has succeeded to resolve the consumption crisis. On the contrary, deindustrialisation and automation have contributed to the crisis by creating un- and underemployment in the old industrial countries, leaving fewer people with disposable income for consumption. The series of financial crises has shown the risks of the financialisation strategy. Finally, the promise of digital capitalism to create new consumption demand may equally backfire, when digital disruption automates middle class jobs and further erodes consumption demand.³

Which of these global trends will reverse, continue or accelerate?

The technological rationalisation of the production apparatus, propelled by increasing global competition, will certainly continue. Despite the significant contribution of automation to unemployment⁴, there has been no widespread political resistance to it. Most of the public anger focuses on globalization and trade. Rising productivity, on the contrary, is celebrated as the only way to survive the breakneck global competition. In the absence of any political pushback, then, digital technologies like 3D printers have the potential to unleash a new wave of productivity increases through automation.

Digital automation is eroding the comparative advantage of cheap labour. This trend is accelerated in those countries that had reached the Lewis turning point, where the reserve army of cheap labour in the agricultural sector has dried up, as well as in ageing societies where the total labour pool is shrinking and wages have started to rise.⁵ For instance, in China, hourly wages increased on average by 12% annually over the last decade.⁶ Some of this cost has been offset by rising labour productivity.⁷ As the competitive advantage of cheap labour cost erodes, however, other factors like product quality, skilled workforce, supply chains and local governance become more prominent. Most importantly, increases in energy efficiency are making their mark. As a result, total costs of manufacture goods in some emerging economies are approaching those of the United States.⁸ All things considered, manufacturing in the United States is only 5% more ex-

pensive than in China.⁹ The tumbling labour cost, together with better energy efficiency, are making manufacturing in the old industrialised countries competitive again.

This cost convergence allows manufacturing industries to be more flexible and react quickly to shifting consumer demands. In the clothing and garment industries, shelf lives are getting increasingly shorter. But the long shipping time is the Achilles heel of these and other fast-moving consumer markets. Consequently, multinational companies like Walmart, Ford and Boeing, as well as small- and medium-size companies, have started to reshore production facilities back to their parent countries. The Reshoring Initiative, a non-profit organisation, estimates that 260,000 jobs have been created in the United States because of this shift.¹⁰ At the same time, the incentives for offshoring have deteriorated. At least in emerging economies with rising wages like China, if not the total numbers, then the composition of foreign direct investment is shifting from manufacturing to financial services. Accordingly, open manufacturing positions in China have been dropping consistently since 2012, indicating that job creation in the manufacturing sector is slowing shrinking.¹¹ This means we may be seeing the beginning of the reverse of the offshoring trend already.

The growing resentment against globalisation in post-Brexit Europe and Trump America may further accelerate reshoring. The rage of the losers of globalisation is hardly irrational. Decades of secular stagnation and jobless growth have depressed real wages and living standards, and condemned millions to underemployment and debt.¹² Garnished with racist vitriol and nationalistic hyperbole, right-wing populists have proven that the message 'globalisation has not worked for the working and middle classes' can win majorities. With the promise that the 'free movement of goods, people and ideas will benefit all' losing credibility among voters, politicians across the political spectrum will be tempted to play with the protectionist toolbox.

While the neoliberal cost-cutting paradigm is still perceived by many decision makers as "without alternative," public resentment against austerity is mounting. The election of Donald Trump as the US President is a watershed moment. American voters have entrusted their fate in a candidate who





has vowed to lay the axe at the foundations of the liberal world order. The political battle over the new paradigm is still raging, and it is far from clear what will replace the current order. Still, it seems that neoliberalism has passed its peak, and may soon begin to reverse.

Financialisation, in times of low profitability in the “real economy,” continues to be attractive for capital looking for profitable investments. In the aftermath of the 2008 financial crisis, political decision makers have refrained from any meaningful regulation of the financial markets. This free pass may change in case of another financial meltdown. Until then, the financialisation trend is likely to continue unabated.

Finally, digital automation is only just taking off. Artificial Intelligence, robots, smart grids and 3D printers will revolutionise the way we live, work and commute. Digital utopists have high hopes of curing diseases, mitigating climate change, and democratising energy and production. Digital dystopists fear that digital automation will create mass unemployment, pulverise the middle classes, erode democracy and pave the way for a global totalitarian regime. Optimists see excellent opportunities for high-skilled work arising, but even those are hard-pressed to see much hope for low-skilled labour. Accordingly, the political debate over Labour 4.0 is fully underway. Regardless of whether the promise to unleash a new wave of consumption demand is empty, venture capital and politicians alike are putting all their hopes on the Fourth Industrial Revolution. Digital automation, it seems, is bound to accelerate.

The race for development in Asia

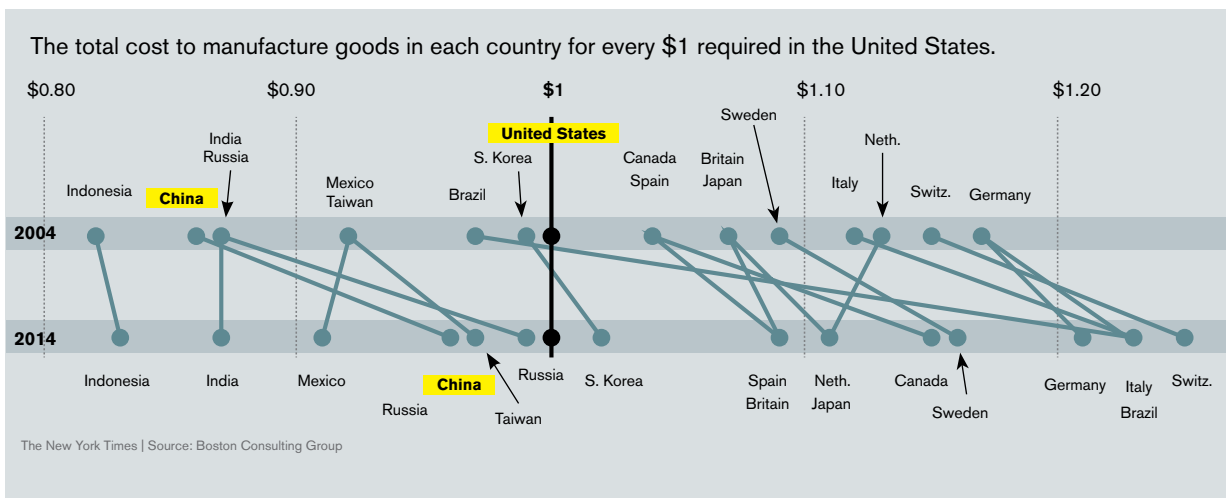
What will be the implications of these trends for the future of work in Asia? Most of Asia’s emerging economies have followed the export- and manufacturing-led development model. Taking advantage of its abundance of cheap labour, East Asia’s flying geese have moved from agriculture to light manufacturing to full industrialisation. What worked so spectacularly well in East Asia over the last decades, however, may no longer work under rapidly changing global conditions.

First, the global window of opportunity for

export-led growth seems to be closing. Given the dark political clouds on the horizon, it can no longer be taken for granted that OECD markets will stay open for Asian exports. Donald Trump has called the Trans-Pacific Partnership “a potential disaster for our country” and vowed to kill the deal on his very first day in office. More so, the United States and the United Kingdom seem determined to re-negotiate existing trade agreements. Other countries may also go down this road. Prudently, Asian population giants like China and India have already begun to reorient their development models towards their domestic markets. Smaller countries like Malaysia or South Korea are looking to their bigger neighbours. For geopolitical reasons, China may indeed be willing to found a regional trade regime around its Regional Comprehensive Economic Partnership. However, given the need to absorb its own excess capacities, it is unclear if China would be willing to replace the United States as the “buyer of last resort.” Asia’s emerging economies would, therefore, be wise to rethink their export orientation.

Second, digital automation may lead to jobless growth. Higher labour productivity means that less workers can produce the same output, leading to the need to cut jobs. Even if investment and growth rates stay high, the factories and workshops of tomorrow will be populated with robots. Multinational manufacturers are lining up to set up production facilities, creating a few hundreds of jobs, whereas a few years ago tens of thousands of workers would have been required for the same. This poses an enormous challenge to countries with high population growths, where millions of workers are looking for jobs. In India, every month one million young people are entering the labour market.¹³ Despite a benign global environment of low oil prices, leaving room for public spending on infrastructure as well as consumption demand, India’s track record in job creation has been disappointing.¹⁴ In fact, despite being an international investors’ darling, India loses 550 jobs per day.¹⁵ Indonesia, where the number of adults over 15 years increased by 3.1 million between 2014 and 2015, only 200,000 jobs have been created in the same period.¹⁶

Third, digital automation changes the quality of employment generated. A survey of employers in



major industries in ASEAN countries showed that the demand for high-skilled workers far outgrows the supply.¹⁷ Following the pattern in industrialised countries, the need for low-skilled workers dwindles. Given the low productivity in the agricultural sector, this surplus labour is likely to migrate to urban centres. In India, the urban population is projected to increase by anywhere between 300 to 400 million people.¹⁸ What will happen if the aspirations of these internal migrants remain unmet and frustrations rise?

Fourth, global trends may increase the risk for premature deindustrialisation. Dani Rodrik observed that in a globalised market, manufacturing moves on as soon as wages start to rise, leading to premature deindustrialisation in newly industrialising economies.¹⁹ By the time manufacturing in South Korea accounted for its highest proportion in jobs, incomes were around \$12,700. In India, factory employment started to decline as a share of employment when income was around \$3,300.²⁰ This trend is accelerated by financialisation, which encourages roaming hot money in pursuit of quick profits over long-term investments, increasing the risk for financial crises and external shocks.

Finally, the artificially intelligent robots of the future will not only compete with Asian workers from afar, they are also going to ultimately replace them. In the old industrialised countries, the service sector has long been the best hope to absorb those who were replaced by automation in the manufacturing sector. The flexible and decentralised nature of many low-skill service jobs made them so far relatively resistant to automation. Frey and Osborne, however, believe that this resistance

to rationalisation may end in the current wave of digital automation.²¹ Major breakthrough in big data, sensors and intuitive programming allow machines to take over tasks that seemed to be off limits only a short time ago. Plummeting costs of robotics make these machines increasingly competitive with human labour.²² As Brynjolfsson and McAfee point out, contrary to common belief, it is not necessarily the manual jobs which are the most easily automated.²³ Billions of years of evolution have equipped humans with a sophisticated motoric apparatus, while our cognitive abilities are not as impressive as we like to believe. Consequently, in this second wave of automation, it is rather the cognitive jobs than the manual ones, which are being automated. Put bluntly, it is easier to replace a tax clerk with a robot than a cleaning maid. Artificially intelligent robots will replace service sector employees with highly repetitive tasks like tax consultants, travel agents, legal clerks or call service providers. Platforms like Uber or Amazon are likely to disrupt local markets from pharmacies to logistics and retailers. A World Bank study estimates that the proportion of jobs threatened by automation in India is 69% and 77% in China.²⁴ The ILO estimates that 56% of jobs are at risk of being automated in the ASEAN-5 countries.²⁵ The difference in labour cost, however, makes it unlikely that low-skilled service workers in emerging economies are being replaced with machines anytime soon. This is even more true if these jobs are not subject to international competition, but embedded in the domestic market.

In sum, the global window for export-led,

“When development means to race up the global value chain, a productivity- and innovation-driven model seems like the best bet. But where will this innovation come from?”

manufacturing-led development is closing.²⁶ This means development has turned into a gigantic race against time.

How can emerging economies create jobs?

With the traditional route to development closed, the search for alternative development models is in full swing.

When development means to race up the global value chain, a productivity- and innovation-driven model seems like the best bet. But where will this innovation come from? In Asia's statist polities, it seems somewhat doubtful that political leaders are fully willing to trust their fate with the Schumpeterian creative destruction of the market. The secular stagnation in the neoliberal economies of the West may further discourage market-driven experiments. In South Asian societies, traditionally in the suffocating grip of its bureaucracies, the idea of state-led innovation may seem even more alien. Even in East Asia, the development state has been put to rest. In East Asian societies, with their cultural ideals of seniority, discipline and unity, out-of-the-box thinking and going against the grain are generally discouraged. How can such a cultural and political climate encourage disruptive innovation? This, however, may spell trouble for all the hopes in digital incubators. Where freedom is lacking, creativity seems unlikely to flourish.

In the digital economy, humans are needed to cater to the hopes and needs of humans. The human economy, from tourism to fashion, from

health services to elderly care, from food to arts and crafts, has enormous growth potential all over Asia. The human economy offers plenty of opportunities for employment generation. Until now, care work has largely been provided by family and neighbours, and remains largely without remuneration. Creating income from care work is especially attractive for women. Equally, the enormous potential of the tourism industry to create employment, directly and indirectly, has not yet been fully exploited. Finally, the human economy offers a new perspective for employment in the chronically unproductive agricultural sector. Organic farming, local products, and even urban farming cater to the ethics and health conscious young urban middle class consumers. Producing high quality agricultural products for this niche market can be a source of decent jobs for agricultural workers. While human economies have created millions of jobs in Thailand, the Philippines and Singapore, South Asian countries have not even begun to explore these opportunities in full.

Green growth offers new opportunities for development.²⁷ The International Renewable Energy Agency estimates that renewable energy employed 8.1 million people around the world in 2015.²⁸ China leads global employment in renewable energy with roughly 3.4 million direct and indirect jobs, followed by Brazil, the United States, India and Germany. Jobs continued to shift towards Asia and the share of the continent in global employment increased to 60%. In India, reaching the government's goal of 100 GW through photovoltaic source by 2022 could generate 1.1 million jobs in construction, project commissioning and design, business development, and operations and maintenance. With its

domestic focus, the construction industry seems to be better shielded against international competition than others. Enormous potential to create clean jobs also lies in energy efficiency.

So where will the jobs of tomorrow be created?

In a comprehensive study on the future of work in ASEAN countries, the ILO has looked into the impact of digital automation on the five major employment-generating sectors. New technologies like robotic automation, Internet of Things, 3D printing, sewbots, cloud computing and software robots are changing the skill set required from workers. The assessment looks very similar to the impact of digital automation in other regions of the world: while new high-skilled jobs are created to work with machines, low-skilled labour is increasingly being replaced. Engineers and technical experts are needed in the automotive, electronics and textile industries. Highly educated employees with certificates in medicine, business, finance, law, accounting and data analysis have good chances in business process outsourcing. Employees in the retail sector will need skills in data management, digital marketing and social media.

These expectations, however, need to be squared with the reshoring and protectionism trends. Asia still has many advantages going for a future in manufacturing.²⁹ The erosion of cheap labour's comparative advantage, and the ability to produce better quality close to the home markets, however, suggest otherwise.

With manufacturing on the way out, and the chronic labour surplus in the agricultural sector, only the service sector is left as a major job generator. Again, the digital revolution offers hope for high-skilled labour. By putting in place the infra-

structure for a global division of labour in real time, the digital revolution allows high-skilled workers in Asia to compete individually with their peers in the OECD countries. Aneesh Aneesh sees opportunities in research and development of software, engineering and design, animation, geographic information systems, processing of insurance claims, accounting, data entry and conversion, transcription and translation services, interactive customer services, finance and credit analysis, market analysis, archive administration and website development and maintenance.³⁰ What is different from the call centres of today is that these jobs require higher skills. Importantly, these "digital jobs" are not restricted to the IT sector, but arise across the entire spectrum of service sector. Major industry leaders have invested in crowdsourcing platforms, which allow outsourcing of tasks globally.


With its millions of highly educated workers, India is in a good position to compete in the globalising service markets. The National Association of Software and Services Companies suggests that India aims to capture 20% market share in Internet of Things sector, worth \$300bn.³¹ India aspires to build a cyber-security product and services industry of \$35 billion by 2025, and generate a skilled workforce of one million in the security sector.³² Following the path its IT industry has already taken, there is ample opportunity for English-speaking, highly skilled workers to create income in the global crowdsourcing industry. Compared to Western workers, which are being deprived of social security, decent wages and workplace co-determination, for Indian workers the gig economy may still offer a way to get ahead. Accordingly, domestic worker app companies are expanding between 20%-60% month-

to-month, bringing together households with domestic workers, at least those who have access to mobile technology and banking.³³ However, when digital crowdsourcing platforms allow employers to choose from offers originating from labour markets with vastly different wage levels, this extreme competition between the global labour reserve armies drives a race to the bottom, where only the lowest wages can prevail.

If the service sector will reward all these hopes is by no way certain. On the one hand, the digital division of labour allows service workers to compete in many more markets globally. On the other hand, some of these emerging jobs are already being automated.³⁴

In order to win the race for development, emerging economies need to move up the global value chain. Doing so requires major investment in the skills and creativity of the workforce. If human skills are the key to the future of work, policymakers need to limit the brain drain at all cost. Already today, India, China and the Philippines are major exporters of skilled labour.³⁵ If high-skilled workers feel they are not safe at night, or cannot find affordable hous-

ing, quality schools and health services, doctors, engineers and programmers may decide to look for a better life overseas. The key challenge is then to build liveable cities. Green and inclusive urban habitats not only create employment opportunities today, but also convince the creative workers of tomorrow to stay.

Creating jobs, therefore, is not a technical task, but a highly political one. Building a highly skilled workforce needs major investment in education, infrastructure and health services. In many transformation countries, the middle classes refuse to shoulder the tax burden for these investments. Unable to move up the global value chain, countries can then be stuck in a transformation trap of political conflict and economic stagnation.³⁶ Sustainable development, therefore, is only possible on a solid social foundation based on an inclusive compromise between established and emerging classes. Those societies who understand this basic equation of development will be best placed to solve the employment challenge of the 21st century. 

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THE EMERGING SOCIAL CONTRACT IN ASIA

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SOCIAL contract theory is about what kind of relationship a government should have with its citizens. In the academic discipline of International Relations, this is usually conveyed in Hobbesian terms, whereby citizens forego aspects of their liberty in exchange for security. In other words, it is a rational, transactional relationship. However, in his famous treatise on the social contract, Jean-Jacques Rousseau described ‘government’ as an expression of the general will of the population.¹ In this telling, the social contract is an emotional bond. Governments are not only meant to fulfil material needs but also to embody the emotional character of the people.

Thus, there is a tension inherent in the concept of a social contract—governments must look after the impulsive and emotional wants of the populace (what, in the individual, Freud called the id) as well as their rational and objective needs (in Freud’s terms, the ego).

Befitting its geographical and population size, and ethnic diversity, the Asian space displays a wider spectrum of ways in which this relationship

is played out. These range from the strongman approach of leaders—such as Rodrigo Duterte in the Philippines, with his death squads and boasts that he personally killed suspected criminals,² and Kim Jong-un in North Korea, with his staged executions and 200,000 political prisoners in re-education camps—to the more bureaucratic authoritarianism of China and its one party rule, the democratic authoritarianism of Singapore, and on to the more liberal democratic systems of Japan and India.

It would be trite even to attempt to posit a single Asian approach to this dilemma given the region’s diversity. However, there are certain trends emerging which can be identified that will have an impact on the way the social contract is managed in Asia. The four we will explore in this essay are the return of authoritarianism, the impact of technology, continuing inequality and urbanisation. Each of these is likely to challenge existing structures of governance in the region and test the prevailing notions of social contract in Asian states.

The return of authoritarianism

In the hubris of the immediate post-Cold War era, Francis Fukuyama famously declared the “end of history.”³ Liberal democracy and economics had supposedly triumphed and faced no foreseeable challenge from rival systems. Although a few diehard autocrats remained, most states were liberalising and moving to democratic forms of government. By the mid-1990s, authoritarian structures of governance were in the minority.⁴ The assumption was that this rump would quietly decline and wither. Yet, recent years have seen a resurgence in authoritarianism.

The problem was that whilst the number of electoral democracies globally increased to a high of 64% in 2006, the following eight years saw an annual decline in political rights and civil liberties.⁵ Even though more countries were holding elections, the extent to which this actually amounted to a free contest was severely limited. Commentators coined the terms ‘illiberal democracies’ and ‘semi-authoritarianism’ to describe this phenomenon.⁶ Thus, despite the apparent spread of democratic governance in recent decades, according to Freedom House, more countries in the Asia-Pacific region are not free (42%) than free (38%).⁷

The false assumption of many who pushed for democratisation in the last two decades, particularly in the United States, was that this would lead to liberalisation. But the two are distinct and can even be in conflict.⁸ In the Ancient world, the Romans rejected democracy as akin to mob rule, favouring liberty and the rule of law instead;⁹ without respect for due process and minority rights, democracy risks being a tyranny of the majority. Today, we have the rising spectre of populist leaders achieving democratic mandates on the basis of decidedly illiberal manifestos. Military rule has returned to Thailand and its constitutional position legitimised through a referendum.¹⁰ In Myanmar, democratic reforms have not spared the Rohingya people from oppression by their government.¹¹ This poses a challenge for liberal movements in states such as India, as it undermines arguments in favour of shared liberal values that are termed ‘elitist’ and so anti-democratic.

At the same time, it emboldens nondemocratic regimes like China, who can point to the erratic

decision-making of populists and suggest that such disorder is inherent to democratic governance.

Amid the distraction of Brexit and US elections, Xi Jinping (already enjoying a concentration of power his predecessors lacked and looking to remove potential rivals¹²), will soon have an opportunity to further consolidate his power with the impending election of five out of the seven seats to the politburo standing committee.¹³

Authoritarians are not only emboldened at home, but are beginning to converge in their foreign policy positions. Rodrigo Duterte’s pivot to China is but one example. In 2014, Michael Ignatieff saw the gas deal between Russia and China as another, heralding “the emergence of an alliance of authoritarian states with a combined population of 1.6 billion in the vast Eurasian space that stretches from the Polish border to the Pacific, from the Arctic Circle to the Afghan frontier.”¹⁴

As a broad trend, authoritarian populist leaders are problematic because the focus on them as individuals means that when mistakes are made, or policies don’t work out, they have no one to blame but themselves, and so must look for scapegoats. In countries that are ethnically mixed or ideologically divided, the temptation is to blame a minority group to bolster the support of the majority. This can lead to internal persecution and a breakdown of the idea that the social contract applies to all citizens.

In ethnically or ideologically homogenous states, the focus has to be on an external threat. Here, the government will focus on the security aspects of the social contract—at the inevitable expense of health and social care. Thus is set in train a vicious cycle of declining standards of governance and increasing needs to evoke nationalism and identity, and internal or external threats, to mask personal failures.

In other words, the domestic governance arrangements of states have an impact on state behaviour at home and abroad. That may seem self-evident, but the five principles of co-existence that are regularly evoked as a proto-charter of Asian international norms explicitly reject taking domestic governance into consideration in favour of non-interference in internal affairs. In an increasingly authoritarian world, that stance may become problematic as states begin to converge according to their domestic political systems. There is also the risk that the apparent efficiency of autocracies will be compared unfavourably with the messy compromises and delays of liberal





“Digital technology empowers governments by increasing their powers of surveillance. But the internet also undermines governments’ capacity to dominate the public discourse with official narratives of events or cover up corruption and malpractice.

democracy. The result may be a slide towards authoritarianism to respond to global trends—leaving the remaining liberal democracies isolated in the region.

Technology

Beyond the governmental challenges of global politics, Asia’s development means that it is increasingly being affected by technological changes. The number of people with access to the internet has risen dramatically in recent years. China now has 680 million internet users and an internet penetration of 52.2% of the population. India is second in the region in terms of total numbers of users with 375 million but its penetration lags behind at 34.8% (Japan has the highest penetration at over 91%). A number of countries in Asia have high rates of internet penetration, with Vietnam, Malaysia, Macau, Brunei, Singapore and South Korea all registering over 50%.¹⁵ The proliferation of internet lives, lived online rather than in the physical world, is likely to have profound social implications. In the digital world, traditional communities fragment, old social bonds are frayed and people can live a more atomised and individualistic existence.¹⁶

That is not to say they are entirely antisocial. New networked communities emerge and connect people in ways that were not possible before. The negative aspects of such potential, in the form of transnational terrorism, are evident, but it also brings benefits, such as more efficient and adaptive supply lines in the economic realm, as well as the greater opportunities for social activism and community organisation.¹⁷

On the one hand, digital technology empowers governments by increasing their powers of surveillance. Countries in the Asian region have been singled out as particularly vociferous in this regard, with high profile cases of people being punished for their internet use in Vietnam, Thailand, Malaysia, Indonesia and Cambodia.¹⁸ In its 2016 “Freedom on the Net” report, Freedom House described China as “the year’s worst abuser of internet freedom,” noting the seven-year prison term facing those accused of “spreading rumours on social media.”¹⁹

On the other hand, the internet also undermines governments’ capacity to dominate the public discourse with official narratives of events or cover up corruption and malpractice.²⁰ This can be useful for accountability but has its downsides. In the West, there has been much talk of ‘post-truth politics’ and fake news. The latter has long been a feature of Asian popular discourse due to governmental restrictions on information flows. Now, the glut of information has paradoxically led to the same result, with rumour and moral panic able to spread beyond the control of government.²¹

For the social contract between citizens and government to work effectively, the populace must have some basic trust that government statements are accurate—or at least not intentionally misleading—and that bureaucratic institutions are acting in the service of the public good. In turn, the government has a duty to correct misinformation in the public domain and devise policy according to national, rather than sectional, interests. Social media offer a chance to hold governments accountable by increasing awareness of issues as they arise; but the potential for false news to proliferate before governments can respond is a real challenge to the

health of public discourse. As internet use increases, so does the problem of how citizens obtain accurate information and how governments maintain public trust. Policymakers are increasingly concerned that digitisation might lead to a “growing sense of political disempowerment” with consequent effects on civic engagement, activism and political unrest.²²

Inequality

Asian development has rightly been lauded as having an important impact on the length and quality of people’s lives in the region. In China alone, over 600 million people have been taken out of poverty. Even excluding China, over 400 million people globally have been lifted out of extreme poverty.²³ Global average life expectancy increased by five years between 2000 and 2015, the fastest growth since the 1960s.²⁴ Asian citizens have on average a higher life expectancy than people from most other regions, though there are marked disparities between countries, ranging from a life expectancy of 60 in Afghanistan and 66 in Pakistan to 84 in Japan.²⁵ Adult literacy rates have improved but there are significant gender differences. For instance, in India the overall literacy rate according to the 2010 census was 64.8%, but the male literacy rate was 75.3% compared 53.7% among females.²⁶

In other words, there are unequal gains and some losers as well as winners behind Asia’s development story. There remain a substantial number of people left behind by the Asian economic miracle. In Bangladesh, 40.3% of young people between the ages of 15-24 are not engaged in employment, education or training.²⁷ In Nepal, 37.4% of children aged 5-17 are engaged in child labour. India hit the headlines last year when the annual Human Development Report revealed it was one of the most unequal societies in the world.²⁸ According to Credit Suisse, the richest 1% of India’s population own 53% of the country’s wealth whilst the poorer half owns just 4.1%.²⁹

These fissures beg the question: who is the current configuration of social contract designed to serve? Liberalising trade may enrich capitalist entrepreneurs and middle class professionals, but it also increases pressure on the poorer classes by widening the availability of labour and hence poten-

tially driving down working standards and pay. A rising Asian middle class was expected to challenge traditional structures of authority, both religious and secular, across the region in ways that were assumed would bring improvement in civil liberties. Instead, polling in China suggests that it is this very class that is the most supportive of authoritarian measures to curb dissent.

That said, a simple focus on reducing inequality will not necessarily help the situation of the poor in absolute terms. The Asian Development Bank notes the strange fact that “countries with the highest average income growth (but higher levels of inequality) saw some of the largest reductions in poverty” between 1990 and the present day.³⁰ Even if this is an empirical fact, the reality of substantial numbers of people getting richer alongside continuing poverty risks social unrest. The World Economic Forum in its 2016 Global Risks report noted that income inequality “could leave societies deeply unsettled” in the coming decade and had listed it as the number one global risk between 2012 and 2014 before reclassifying it with other factors.³¹

Urbanisation

Underlying the rapid economic growth of many Asian economies has been a substantial shift in populations from rural to urban areas. A 2015 World Migration Report suggests that the level of urbanisation in ASEAN countries is set to increase from 15 to over 60% by 2050.³² In China, urbanisation is likely to reach the levels of developed countries by 2050.³³ One striking example offered in the report is the Chinese city of Shenzhen, on the border with Hong Kong, which was home to a population of 20,000 in 1980 but “will have reached 12 million and megacity status within 40 years.”³⁴ This level of urbanisation has the potential to create huge problems in the future.

According to Asit K. Biswas and Cecilia Tortajada, “developing Asian cities simply do not have the administrative, management, institutional and financial capacities to manage urbanization and resulting socio-economic upheaval within such short periods.”³⁵ An analyst for Zurich bank has suggested that “rapid, often unplanned urbanization brings risks of profound social instability, risks to critical


infrastructure, potential water crises and the potential for devastating spread of disease.”³⁶ Although it is difficult to predict urbanisation trends—or even arrive at an agreed definition of the process—most analysts agree that more people are moving to towns and cities, and this is creating pressures on infrastructure and social cohesion.

If the social contract is defined in terms of providing for people’s material needs, there is a substantive difference in the provision of economic wealth between rural and urban areas. This is particularly evident in China, which has one of the highest disparities in the world. Despite an apparent narrowing in recent years, in 2015 the China Daily reported that annual average per capita disposable income in rural China was at 10,489 yuan (\$1,693) compared to 29,381 yuan (\$4,739) in urban areas.³⁷ In India in 2011-12, the per capita income in urban areas was calculated as INR 1,01,313 (\$1,483), compared to INR 40,772 (\$597) in rural areas.³⁸ These differences are likely to exacerbate migration, but also increase a sense of disconnection between urban political elites and their rural citizens.

Further to this, processes of urbanisation can lead to cultural and normative clashes between citizens from traditional societies, often with patriarchal or religiously conservative views, and more liberal urban communities. Such a stereotype does not apply across the region but is a noticeable pattern underlying instances of sexual assault, extrajudicial killing and kidnapping in some parts of Asia. Governments across the region are having to manage calls for greater political freedom and autonomy in rural areas whilst at the same time responding to the desire for more social freedom in urban towns and cities.

Conclusion

Although this essay has drawn attention to the positive and negative aspects of these trends, it does not wish to conclude with ‘on the one hand, on the other hand’ equivocation. In the opinion of this author, a stable social contract is best served by governments and peoples acknowledging the importance of liberty and the rule of law as well as democracy; social justice as well as development; and social harmony as well as technological advances and urbanisation.

The purpose of government is to unify its citizens wherever possible, and to offset the costs of public goods, like free trade, free movement and free speech, so that those who are negatively affected by them still feel valued. There are no easy answers to these challenges but increasing authoritarianism is clearly not a sustainable response. It is arguably not an accident that economic, social and political liberalisation, however flawed, have coincided with unprecedented levels of people rising out of poverty, both globally and in the region. Even as the social contract will continue to manifest itself in different forms in different states across Asia, it is likely to be most effective when governments are accountable to their citizens and responsive to their material and emotional needs—without pandering to narrow nationalism or identity politics. Above all, governments will have to manage the reflexive emotional responses (the id of these communities) brought forth by the uncertainty of new technologies, economic change and urbanisation, whilst serving their rational, egoistic needs. 

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MORE MEN, MORE VIOLENCE: GENDER AND CONFLICT IN ASIA

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Introduction

IN the last decade, the research community has provided substantial evidence of a link between gender inequality and various forms of politically motivated violence. On a global level, these results show that countries with relatively high gender inequality are more often involved in disputes with other states,¹ more often experience civil wars,² and are more repressive towards its own citizens³ compared to countries with more equal equations between men and women. Moreover, for countries that have experienced internal conflict in the past, peace is more fragile and increasingly likely to break down in countries with higher inequality.⁴ These results are overwhelmingly strong and hold through many alternative specifications and controlling for numerous alternative explanations.⁵ While there exists several explanations for why gender inequality would be linked to the use of violence, there is indeed more agreement on there being a causal

connection between gender inequality and conflict than there is on what gender inequality actually means and how it should be best captured. Studying the link between gender and conflict is additionally complicated by the fact that different geographical areas struggle with diverse forms of challenges as regards to gender inequality. For example, in one area, economic indicators of gender equality, such as women's participation in the labour force, can be quite high while political indicators remain poor. In another area, the situation can be quite the reverse.

Drawing on previous research, this essay will discuss one aspect of gender inequality—son preference, resulting in highly distorted sex ratios—which has been brought up as particularly important in the Asian context. The prevalent and strong son preference, resulting in highly distorted sex ratios, is a dimension of gender inequality where some Asian countries divert the most from the global average.⁶ From a security perspective, this is important, as we will outline below, for a number of reasons. For example, research argues that skewed sex ratios can be seen as



a manifestation of a broader societal norm where different groups in society are valued differently; groups that are valued lower are excluded and discriminated. Such a norm is further linked to norms that legitimise the use of violence, hence making violence more expected. In addition, an excess male population may provide resources in terms of individual men who are more easily targeted in mobilising for violence, as well as in gangs and for crime, because they have little to lose from engaging in violence. Moreover, these individuals are likely more susceptible to the hyper-masculine language that further facilitates the mobilisation process. The combined effect increases the risk of existing conflicts becoming violent.

The essay proceeds as follows. The first section provides a brief overview of the meaning of gender inequality in this line of research and the different explanations for why gender inequality increases the risk of violence. The second section focuses on using distorted sex ratios as an indicator of gender inequality. The third section discusses some of the potential security implications of skewed sex ratios, i.e., why and in what forms it may explain the use of political violence. The final section draws conclusions and broader implications.

Gender inequality and conflict: An overview

Gender inequality is used in the research field of armed conflict to capture norms assigning negative values and stereotypical roles to men and women, which result in an unfair distribution of power and other material resources to men's advantage. As this is a rather wide definition, different studies have focused on different components of gender inequality and often discussed it in different dimensions. A political dimension is used to capture women's (and men's) access to power as "a divisible, infinite resource and/or as the ability to reach goals."⁷ An economic dimension centres on access to material resources, which can be used by individuals to affect their own lives. A social dimension is discussed both in terms of the value given to individuals depending on their sex and the value attached to perceptions of femininity and masculinity in a society. Some studies have also focused on the physical

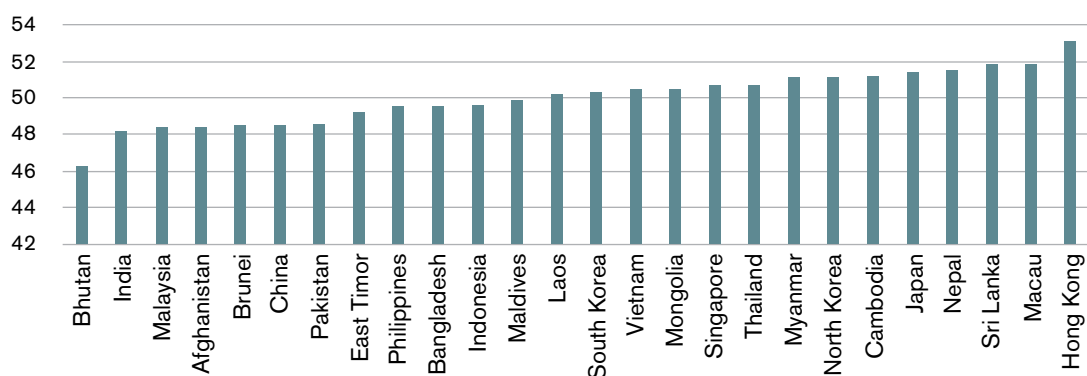
(in)security of women as an important dimension of gender (in)equality. This essay looks closer at the social dimension relating to sex ratios in the population.

There exist several quite diverse explanations for why gender inequality should increase the likelihood of violent conflict. Two clusters speak to the social dimension. The first cluster of explanations focuses on norms that may enhance violence, in particular given a hyper-masculinised political culture that lowers the threshold for violence. One rationale behind this is that an unequal distribution of resources between men and women is assumed to follow from a norm that assigns lesser value to women compared to men. Such a norm can be said to be indicative of a normative intolerance more broadly, which in turn tends to view violence as a legitimate tool. A second cluster focuses instead on capacity, suggesting that gender-unequal societies have less capacity in various forms, because a large part of the adult population is restricted from fully participating in society. Such societies are therefore less capable of resisting violent conflict. An alternative way to conceive of capacity is more negative, and concerns the direct provision of capacity to mobilise for conflict, in particular recruitment of young men. According to this explanation, societies with large male surpluses will more often see political violence, as there are more individuals available to mobilise. As is suggested below, a male surplus may be linked to both the normative explanation and to the explanation focusing on resources for mobilisation.

Distorted sex ratios as an indicator of gender inequality

According to Fisher's Principle, absent human manipulation the population on earth would naturally converge to have about the equal number of women and men.⁸ While more boys than girls are born (biologically we expect 103-106 boys born per 100 girls), boys have higher childhood mortality and women generally live longer than men. In most countries, the latter effects outperform the first, resulting in a female surplus. However, based on only a few (mainly Asian) countries having large numbers of missing women, the world population at present has significantly more men than women. UN data re-

Female population (% of total population) in Asian countries



veals a disturbing trend over time, moving towards a smaller and smaller female world proportion. This is due mainly to the two most populous countries also being among the most imbalanced in terms of sex ratios—China and India—who jointly account for about 75% of the male surplus worldwide. Table 1 provides World Bank estimates of the female proportion across Asian countries in 2015. As can be seen, there are a few other Asian countries with sex ratios as low as, or lower than, India and China; however, due to the large population sizes of China and India, these two countries also significantly skew the world average and will be the main focus of this analysis.

Although the proportion of women globally, and in Asia, has decreased over time, it is important to note that the trend is not irreversible. Some other Asian countries, including Pakistan, Bangladesh and South Korea, have instead moved towards increasingly balanced sex ratios during the last few decades.⁹ There is also substantial subnational variation. Here, India stands out. A number of districts, most of which are located in either the Northeast or South of India, have balanced sex ratios among young children. At the other extreme there are some districts with quite large distortions, including in most of the Northwest and Central states, such as in Haryana, Jammu & Kashmir, Punjab and Rajasthan, states known for having a strong son preference.¹⁰

But is a male surplus always a consequence of gender-unequal norms that prioritise and value sons/boys/men? Most likely not: in some countries male surpluses result from labor migratory patterns. Most strikingly this is seen in the Arabian Peninsula; for instance, in Qatar and the United Arab Emirates,

only about a quarter of the population is female. Such demographic imbalances capture aspects of gender distributions of labour and gendered patterns of migration, which in effect speak to gender inequality but of a less grave form than that of distorted sex ratios resulting from a son preference. Labour migratory patterns can also generate countries with female surpluses. For instance, in Hong Kong and Macao many men have left to seek work in mainland China, parallel to an influx of women from, for instance, the Philippines and Indonesia.

However, in the case of India and China, evidence suggests that strong son preference is the main driver of the male surplus. Sons are preferred for reasons such as their (perceived) higher capability to financially support parents; being able to continue the family line and be the recipients of inheritances (in patrilineal societies); and, in the case of India, the dowry system creates a significant financial burden of bearing and rearing daughters. The World Bank data quoted above estimates that India has 48 million more men than women, but let us take a closer look at India to see what existing survey and census data can tell us about the nuances, variations and sources of its male surplus.

In India, sex ratios (men: women) are measured both for the whole population and for children aged 0-6 years.¹¹ Looking at the sex ratio for each district's total population, variations across India are enormous, ranging from well below 90 to over 180 (men per 100 women). Interesting trends can be noted over time. While the overall sex ratio in the total population has decreased somewhat (from 108 in 1991 to 106 in 2011), the range between those districts with the lowest ratios compared to those

with the highest has increased markedly.¹² Distorted sex ratios in the total population of a region result mainly from gender inequality in the form of a strong son preference. However, as mentioned above, it is also the result of migration, especially rural-to-urban flows of young men. For instance, in the Union Territory of Daman and Diu, the very uneven sex ratio is to a large extent a consequence of migratory labour. Sex ratios in general can, therefore, also tell us about gender roles and opportunities in changing economical environments. These imbalanced sex ratios thus speak to gender stereotypical roles being the result of gender distributions of labour or gendered patterns of migration. This can, for example, be seen in the overrepresentation of young men in urban areas. Interestingly, there are studies that show that women in areas where many men have left to seek work elsewhere (e.g., Uttarakhand) actually become more empowered politically (in panchayats) and redefine their social roles.¹³

While the overall sex ratio in a district's population incorporates many aspects of gender inequality (gender-segregated labor market, son preference, etc.) but also components not clearly linked to gender inequality (including some aspects of migration), a more straightforward measure to interpret as an indication that men are valued higher is the sex distribution at birth or early childhood. As argued by Hudson and den Boer,¹⁴ distortions in these numbers can be perceived to be a clear indication of exaggerated gender inequality, as they capture a common practice to either allow the male child to live and not the girl child (due to sex-selective abortion, or active or passive infanticide) or consistently prioritise the male child in terms of nutrition and healthcare. Since such practices are almost univer-

sally the result of a son preference, it indicates that the value and status of females are deemed substantially lower than that of males.

As India does not collect data on sex ratios at birth (but for the category of children 0-6 years), we cannot provide a precise figure. However, selective abortions are estimated to account for at least 500,000 missing female births each year in India.¹⁵ Combined with other existing data¹⁶ it can be derived that India without doubt deviates from the global norm: the number of boys born is significantly higher than expected and it is not balanced out during early childhood. The census data suggests that increased levels of education and wealth over time have not closed the gap; on the contrary, from 1991 to 2001 it increased and between 2001 and 2011 it remained at about the same level. Survey data supports this conclusion, as it shows that the son preference is not reduced by higher education or income, as high education and income levels in fact correlate with a low ratio of girls born. One explanation is that sex-selective abortions and induced miscarriages in late pregnancy are relatively costly.¹⁷ Among young children, there is also higher than expected mortality among girls compared to boys. However, in this case the relationship with income is reversed so that girls born in poor households have higher mortality than boys, but there is no gender difference in mortality in wealthier households.¹⁸

The security implications of distorted sex ratios

A strong son preference resulting in male surpluses could indicate two processes/phenomena that are

“An excess male population provides resources that are easy targets in mobilising for violence: young men are the primary target group for recruitment as soldiers, and they are more receptive to hyper-masculine language.

important to consider in terms of security implications. As noted above, research suggests that gender inequality, for instance in the form of skewed sex ratios, is a manifestation of a broader societal norm where different groups in society are valued differently and that groups that are valued lower are excluded and discriminated. We should therefore expect to see overlap—if women are valued less than men, it is also likely that other “out-groups” in society, such as ethnic minorities and political opposition, are devalued.¹⁹ Evidence indeed suggests that such norms of intolerance correlate; for example, attitudinal survey-based studies show a correlation between sexist and racist attitudes.²⁰ Such societies are more likely to see the “superior” group dominate over other “inferior” groups. It is postulated that societies with a very high level of male-dominance in politics tend to be dominated by hyper-masculine political cultures.

Hence, where socially constructed gender roles are more equal, it is expected that respect for others in the private sphere will carry over into society at large. The cost of using violence would increase substantially and other methods of addressing grievances would become more institutionalised. Thus, societies with higher levels of gender equality are likely to have elites that are better at handling grievances by different groups.²¹ This suggestion is not only supported by studying the link between gender inequality and violent conflict across different countries: Melander notes that the relationship between gender inequality and internal conflict is found also at other levels of analysis than at the country-level.²² As found by Asal et al., groups that proscribe a gender-inclusive ideology are less likely to pursue their objectives using violent means.²³ At the individual level it has

been found that gender-equal attitudes are correlated with advocating peaceful conflict resolution; in fact, it appears that such attitudes carry more explanatory power than biological sex.²⁴


The other explanation relates to the resources available to rebel, riot and wage war. An excess male population provides resources that are easy targets in mobilising for violence, as young men are the primary group targeted to be recruited as soldiers.²⁵ Their susceptibility is further underscored by their receptiveness to hyper-masculine language. However, current consensus in civil war research is that armed conflict involves organised groups rather than individuals confronting each other at random. That said, the extent of gender inequality could make it easier to mobilise men. For example, Urdal finds that youth bulges are related to an increased risk of conflict.²⁶ Hudson et al.²⁷ expand this argument by looking closer at bulges resulting from very uneven sex ratios which, in turn, stem from serious forms of gender inequality. The authors claim that such a male surplus can result in a large number of dissatisfied, i.e., aggressive, men. According to this explanation, mobilisation for war is made easier for two reasons. First, the societies in which these men live have a hyper-masculinity-based culture that normatively encourage violence as means of resolving conflict. Second, many of these men become excluded from society, since social acceptance requires marriage,²⁸ which in turn is linked to having a higher likelihood of gathering and organising into groups, or “gangs.”²⁹ Thus, gender inequality creates a larger number of men with low opportunity costs (being unmarried and unemployed), these men are more susceptible to gender-based language in recruitment, and

the men are already connected in groups through which they can be more easily mobilised.

Conclusions

An important aspect of gender inequality, especially in several Asian countries, is distorted sex ratios. In this paper we have focused on the serious security implications that can result from such ratios. Notably, a consequence of a large surplus of men, regardless if due to inequality, migration or both, is that a large number of men are unable to fulfill the expected social male roles of husband, father and breadwinner, instead remaining unmarried and unemployed due to an excess of men in the labour market. Research findings are quite strong with respect to this being linked to men, on average, being more likely to become involved in various types of anti-social behaviour, including criminality, gang violence and political violence. In the context of armed conflict, they also form a base for mobilisation, having little to lose from engaging in violence. Since male surpluses in some countries result from gender unequal norms, there is also often overlap with other types of gender inequality in these societies. Hence, a male surplus may also be linked to women having less economic independence and influence and have less say in decision-making both in the public and private sphere. As mentioned previously, less female representation is also linked to more violent approaches to “resolving” conflicts and addressing popular grievances. This will certainly have consequences for the way India, China and other Asian states with skewed gender ratios and representations in society deal with domestic political upheaval—the chances of which are ripe in a region that faces increasingly pressing internal challenges, such as economic inequality, unemployment worries and significant climate change risks, as well as increased instances of radicalisation and extremist behavior. In short, not only is it more likely that domestic grievances could result in violence, their

‘resolution,’ too, is more likely to tend towards tools that are violence-based. What makes the situation further complicated is what a tendency towards violence when dealing with conflict means for inter-state relations in a politically sensitive geography as Asia.

A more volatile landscape and adverse repercussions for conflict governance is particularly worrisome given that the effects of current skewed birth numbers in India, China and elsewhere will be felt for generations to come. However, the trend is not irreversible. As evidenced by South Korea, where a public-awareness campaign was initiated in the mid-1990s, a society can move from large distortions to normal birth ratios in a few years.³⁰ Policy interventions can hence make a great difference even in the short term. While a change in the outcome may not reflect that a normative shift has taken place, such policies may in the long term also change people’s attitudes and trickle down to other aspects of more equal gender relations. Recent data from India and China suggests that these two countries may have started to move in a more positive direction. The latest census reports in India indicate that the ratios are perhaps stabilising and several laws and schemes have focused on curbing infanticide. Most recently, the Prime Minister launched the Beti Bachao – Beti Padhao (“Save girl child, educate girl”) campaign to reverse the distorted sex ratio, focusing foremost on the 100 districts deemed the most critical.³¹ In China, the regime has recently abolished the One Child Policy, partly to handle an ageing population, but also acknowledging that it helped create distorted sex ratios. While these schemes are important steps in the right direction, it is of utmost importance for these and other governments to work to improve gender equality on a much broader scale, including increasing female political representation and empowerment, and curbing gender-based violence. If not, there is a risk that the surplus of men in the younger population bands in the coming decades will continue to crowd out women’s interests and influence in decision-making, including that related to resolving violent conflict. 

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ADDRESSING GLOBAL JIHAD IN ASIA

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Introduction

THE concept of jihad is at least as resilient as modern statehood. What it lacks in resources, it makes up for through ideological commitment. Daesh's military successes in Syria and Iraq in 2014 and its attacks on Europe during 2015-16 have alerted governments that they face a multi-generational challenge. A challenge which will not disappear by killing operational leaders even if the immediate threat in terms of planning, financing and coordinating terrorist attacks is significantly degraded.

Why have Asian states failed so far to root out jihad as an instrument of politics as well as geopolitics? One reason is that for a sizeable number of people, 'jihad' and 'terrorism' are not synonymous. Despite preventing/countering violent extremism programmes, the inability to permanently delegitimise jihad as a political tool nullifies policing efforts and international treaties. Governments need to

build a new and exclusionary security architecture to address this reality.

Global overview

At its root, jihad is about territory and re-engineering the religious identity of people on that particular territory. It is about 'liberating' co-religionists from infidel rule. Whether imposed directly or through 'apostate' proxies, such rule is always assumed to be repressive of Muslim identity. As a global phenomenon, jihad emerged from the establishment of an American military presence in Saudi Arabia in 1990—an event whose provocative nature perhaps was not fully appreciated at the time.

Following the abolishment of the Ottoman Caliphate in 1924, some Islamic intellectuals yearned for a shared and sovereign realm—a wish which never faded among its strongest adherents. The First World War had unleashed the genie of nationalism and its corollary, the Westphalian nation-state,



upon the *Ummah*. Thereafter, political boundaries were seen as a Western ploy to divide Muslims into locally-administered territories and prevent them from developing a common identity.

How is this relevant to the persistence of present-day jihad in Asia? It explains the transnational nature of terrorism that is falsely conducted as a 'jihad,' regardless of the strength of local grievances. The American presence in Saudi Arabia in 1990 was seen as a neo-colonial occupation, a humiliation similar to 1924. Since the desert kingdom is the spiritual homeland of Sunni Islam, and the United States the sole superpower, a context arose wherein a near-universal sense of resentment among militant Sunnis was met by an omnipresent adversary with vulnerable interests scattered worldwide.

Global jihad is essentially anti-American jihad, and has been combated from that narrow perspective since 2001. Regional Islamists who sympathise with it, but maintain no obvious ties with its practitioners, are left to be dealt with by local regimes. Since these regimes are poorly resourced, they seek to undermine terrorist movements through covert deal-making (always a sign of long-term regime weakness) alternated with occasional shows of raw strength. Very rarely, if ever, can they follow up security efforts with the sustained development of institutional and administrative capacity.

This distinction between transient and lasting power is crucial: it explains for instance, why the military successes of the 2007 US Army 'surge' in Iraq were frittered away through political infighting over the following seven years, allowing Daesh to resurrect its networks. Any battlefield defeat suffered by jihadists can be reversed over a sufficiently long timeframe, because it tends to be the outcome of their own tactical mistakes rather than the cleverness of government strategists. Competitiveness among local planners breeds innovation, and innovation makes an attack more deadly since it increases the probability of defeating the bureaucratically bound intelligence-collection procedures of governments.

Unlikely and opportunistic alliances can emerge from terrorism, as opposed to the more puritanical concept of jihad. During the 1980s, Sunni and Shia militias in the Middle East competed for supremacy in their immediate neighbourhoods, most

notably Lebanon. Yet, by the early 1990s a sub-unit of Hizballah was training Sunni Al Qaeda members in suicide car and truck bombing techniques. The turnaround was due to operational factors—a result of the personal admiration which Osama bin Laden had for Hizballah's master terrorist Imad Mugniyeh, who pioneered the use of such bombings. While the two holy warriors shared a common purpose in spilling infidel blood, the larger ideological frameworks within which they operated, in particular Saudi-Iranian rivalry, precluded any strategic alliance.

There are two reasons for jihad's longevity, besides the reverence with which the very concept is held among its adherents. First, jihad lends itself to manipulation for geopolitical ends. Second, governments play the old colonial-era game of divide and conquer. By factionalising jihadist movements, they hope to split the unity and coherence of their opponent. What they do not realise is that politico-ideological divisions both prevent Islamist militants from creating a common rebel administration, and complicate the task of governance by the legitimate state apparatus.

The result is a slow-moving expansion of contested areas where neither the writ of the state nor the jihadists holds complete sway. The two biggest hubs of terrorism—the borderlands of Syria-Iraq and Afghanistan-Pakistan—are Shariah-possessed shadow states created in such contested spaces (Nigeria in West Africa is a third, smaller hub with less international impact, though very disruptive regionally). For jihadists based here, international boundaries are either nonexistent or at best, a convenient foil against hot pursuit by security forces. In both cases, sectarian rivalries have merged into power play by neighbouring countries. Interestingly, there is also an element of 'blowback.' Pakistan is facing terrorism thanks to its own policy of interfering in Afghan domestic affairs for over four decades. Syria is experiencing an Islamist rebellion because during the early 2000s, it played a crucial role in destabilising Iraq through Arab proxy warriors. Both regimes, Pakistan and Syria, have used the West's fear of jihadism to legitimate their own adventurous and repressive policies, by hinting that worse could yet come if efforts to promote popular and representative government are intensified.

Dynamic in Asia

Elsewhere, countries as distant as the United States are affected by the propaganda that filters out from the twinned hubs of 'Syraq' and 'AfPak.' Immediately at risk are Asian states with large Muslim populations that could be lured by the prospect of gaining martial skills against local authorities. The resurgence of Uighur militancy in Xinjiang for instance, can be partly traced to an inflow of East Turkestan Islamic Movement members to Syria. Until recently, China was content to watch the West panic about foreign fighters travelling to the Middle East, having itself calculated that these would only target Western nationals. Now it is growing concerned that its own overseas commercial and military interests, not to mention diplomatic installations, could come under attack.

The key strength of both Al Qaeda and Daesh has been their ability to forge local alliances. This quality has allowed them to spread out to new areas when threatened in their main bases. Upon being ousted from Afghanistan, mid-rank Al Qaeda operatives found shelter in Pakistan's frontier territories through hasty marital alliances. Senior leaders hid in cities due to sympathiser networks in the military and local Islamist parties dating back to the Soviet-Afghan War. Subsequently, upon becoming the collateral victims of American drone strikes and Pakistani security operations, many of these sympathisers supported Al Qaeda out of vengeance. Thus, what began in the 1980s as local jihad against the Soviets, became part of the global jihad when Arab terrorists led Pakistanis in opposing the United States. Their ability to do this very effectively will be explained below. Suffice it to say at this point that Pakistan's dual identity as both a South Asian state with weak governance structure and a pseudo-Arab state with fiercely competitive power factions and a praetorian army made it a perfect host for global jihad.

At the far end of South Asia, in Bangladesh, Daesh now seeks to pull off a similar feat by co-opting elements of the Jamaat-ul Mujahideen Bangladesh to carry out attacks on foreigners. With the JMB having experienced a crackdown under the Awami League government, together with the national branch of the Jamaat-e-Islami (a collabo-

rationist leftover from Pakistani colonisation), militants in Bangladesh are desperately looking for outside affirmation of their local agendas. Thus, while Daesh might not yet have raised its own cadres on Bangladeshi territory, being able to claim the July 2016 Dhaka attack as its own has demonstrated the group's ideological leadership among local jihadists.

Media reports suggest that Daesh is also looking to establish a 'province' in Southeast Asia, to make up for the territorial losses that followed its military setbacks in the Middle East. It has made itself popular with affiliates by issuing the loosest of directives: hit the enemy (however defined) as often as possible, wherever possible. Unlike Al Qaeda, which seeks to impose a degree of centralised control over an affiliate (partly as a result of harsh lessons learnt in Iraq in 2005-06), Daesh only seeks to unleash chaos. Its organisational philosophy is codified in the 2004 book *The Management of Savagery*, which advocates unrestricted use of terror to polarise communities and prevent the routine functioning of administrative systems. By this logic, multi-ethnic Asian countries like Myanmar and Malaysia risk being divided by provocative terrorist incidents designed to undermine societal cohesion.

Closer to home, India faces a problem that is only partly similar. On the one hand, there is no doubt of the need for continued vigilance against Daesh radicalisation. Managing inter-communal tensions after a major terrorist attack by home-grown militants will be a real challenge. On the other hand, the biggest terror threat to India comes from state-sponsored groups like Lashkar-e-Taiba. Analysts are rightly concerned that the emergence of Daesh in South Asia has added another layer of deniability to Pakistan's proxy war, allowing Islamabad to claim that any future attack on India is the work of stateless 'rogues.' This feeds into the false narrative peddled by states like the United Kingdom, that India and Pakistan have a shared opponent in terrorism. In the process, the fact that Pakistan seeks to fight its own domestic militancy by merely funnelling it in the direction of India is conveniently forgotten.

When grilled about the 2008 Mumbai attack, a former Pakistani prime minister told this writer it was Islamabad's responsibility to ensure such an event did not happen again. But what seems like a conciliatory comment is double-edged: Islam-

“It would be wholly inaccurate to explain global jihad as a Middle Eastern phenomenon, which almost by accident, got transplanted to South Asia by the Soviet-Afghan War.

abad was mortified that the attack both targeted third-country nationals *and* was unambiguously traced back to its own territory. However, it calculates that such a damning combination of circumstances is unlikely to recur. It is therefore not interested in stopping localised cross-border terrorism directed solely against Indian nationals, or cooperating with the West in stabilising Afghanistan. Influencing its decisions in a positive way requires covertly inflicting costs on the Pakistani army.

Pakistan as the ‘Mothership of Terror’

Indian Prime Minister Modi deserves credit for acknowledging what has been widely known since 2003. As reported by the Pakistani newsmagazine *Herald*:

al-Qaeda’s documents and the information found on computer discs regarding the organization’s ideology, tactics and financial transactions has convinced Americans of two fundamental facts about Islamic terrorism. One, that Saudi Arabia is the single largest source of al-Qaeda’s funding and, second, that Pakistan provides the friendliest politico-administrative environment for Islamic extremists to thrive.¹

The journalist and author Mohammad Hanif put it equally succinctly, describing Pakistan as “an international jihadi tourist resort.”² What is it about Pakistan that has made the country’s political climate favourable for global jihad?

The answer partly lies with the Pakistani army.

Its antipathy towards the United States stems from memories of Washington’s pressure to allow elections and the return of civilian rule after the death of Zia-ul-Haq in 1988, a divisive and deeply unpopular move among the then military leadership.³ Since then, government-to-government relations have been poisoned by the army. As the American scholar Stephen Cohen noted in 2011, “some sections of the army are even more anti-American than they are anti-India.”⁴ Within civil society, anti-Americanism has even deeper roots, having surfaced in four waves since 1947. The first was in 1953-54, when the Communist Party of Pakistan was banned and the country opted to join CENTO, a US-led alliance. Former leftists organised themselves into protest groups and publicly celebrated every American defeat in Vietnam during the following two decades. The second wave came in 1979, when Islamist parties tacitly encouraged by the Zia government dominated anti-American rhetoric in order to deny the left-leaning Pakistan People’s Party a political platform. The third wave came in 1990, when Pakistanis protested American preparations for war with Iraq. Large outflows of migrant workers to the Gulf since the 1970s had partially ‘Arabised’ sections of the Pakistani urban middle class, such that Arab animosity to the United States over its Israel policy found a receptive audience in many parts of Punjab and Sindh. Finally, the most recent wave came in 2011, when Osama bin Laden was killed in Abbottabad. In order to save itself from domestic criticism for having failed to stop the raid, the Pakistani military establishment, through its spin-doctors in the Inter-Services Intelligence (ISI), reframed the public debate in terms of national sovereignty. The United States was cast as a bully that had misused its armed

might to transgress into Pakistani territory and commit an illegal killing.

It would thus be wholly inaccurate to explain global jihad as a Middle Eastern phenomenon, which almost by accident, got transplanted to South Asia by the Soviet-Afghan War. Pakistan became the primary staging post for Al Qaeda during the 1990s because nowhere else did an Arab-style 'Deep State' run by a handful of top generals and their spymasters rule over such an administratively weak territory. When castigated for sheltering international terrorist fugitives, as it was in the early 1990s, Islamabad could always claim it had little control over its borders. After 9/11, it was quick to adapt to update its evasive discourse in tune with international academic and policy jargon, favouring the term 'non-state actors.' But as the Pakistani journalist Imtiaz Gul dryly observed, "the moment you induct religion into statecraft, the lines between state and non-state armies largely vanish." And the Pakistani army has been training its personnel to think of themselves as Islamic holy warriors since the 1960s.

The ISI in particular deserves credit for manipulating domestic and international discourse on its sponsorship of terrorists very effectively. One of its biggest propaganda successes was in 1998, when the United States launched missile strikes against Al Qaeda camps in Afghanistan. The strikes inadvertently killed 22 ISI and Harkat-ul Mujahideen trainers at a camp known as Salman Farsi. When word of the deaths was leaked, the agency went into damage control mode. It planted reports in the local English media that Sunni sectarian terrorists wanted for massacring Pakistani Shias were hiding in Afghanistan and that the Taliban was

refusing to hand them over. In this way, it brought some relief for the policy establishment in Islamabad, which was being excoriated for its closeness to the Taliban and unwillingness to leverage its ties for the purpose of shutting down Al Qaeda facilities. By perpetuating the fiction that the Taliban was a genuinely sovereign government and with whom even Pakistan had disagreements on terrorism, the ISI ensured that public embarrassment caused by the missile strikes quickly subsided. Years later, nobody made any comment when some of these same Sunni terrorists quietly re-entered Pakistan after the 2001 US invasion of Afghanistan and lived unmolested by security agencies. Others, who were suspected of being double agents, were taken into police custody and then liquidated to erase any chances that disclosure of their earlier activities might cause a scandal.

'Dividing jihad to control it'⁵

Pakistan's policy for dealing with domestic militancy is similar to Saudi Arabia's: to extravert it. The only difference is that Saudi Arabia is a relatively prosperous country due to oil wealth, while Pakistan has a rentier economy dependent on foreign largesse. Foreign targets, be they Western powers or neighbouring states in South Asia, serve as convenient substitutes for the policy establishment when needed to absorb public anger over poor governance and elite corruption. But despite its habit of conflating domestic and strategic power accretion strategies, the military part of this establishment has instrumentalised jihadists for entirely rational geopolitical gains. Just as Saudi Arabia used Sunni sectarianism

as a counterweight to Iranian revolutionary zeal after 1979, so has Pakistan used Pan-Islamism as a bridge to other Muslim countries. The International Islamic University in Islamabad, where Osama bin Laden's mentor Abdullah Azzam once lectured, was founded in 1980 as part of this drive. The Tablighi Jamaat's ijtema (convention) in Raiwind in Pakistani Punjab, the world's second-largest gathering of Muslims after the Hajj, became an entry point into jihadism for amateur adventurers who travelled to Pakistan, wanting to experience the thrills of paramilitary training with a mujahideen group. By positioning itself at the centre of the *Ummah's* military profile through its sponsorship of local jihad, and tacit encouragement for global jihad, Pakistan makes itself indispensable as a problem-solver. For who else but a rambunctious spoiler can ensure that peace does not return to Afghanistan or to Jammu and Kashmir? The conflictual dynamic that sustains the Pakistani military's outsized importance to the country's security requires that tensions be stoked with neighbouring powers.

Blowback can and does occur, but its effects upon the military are almost always limited. The vast majority of those killed by terrorists in Pakistan have been civilians and a few policemen, but not soldiers, sailors or airmen. Only the formation of the Pakistani Taliban in the mid-2000s, as a result of incitement by Al Qaeda, led to genuine damage being inflicted on the military establishment in the form of deliberate killings of soldiers and their families. As Isaac Kfir notes, in the Pakistani context militants have learned for the most part to focus their attacks on minorities, whether sectarian or ethnic, in order to avoid bringing down the full wrath of the security establishment upon themselves.⁶ As long as they exercise such self-control, they are left to local police forces to tackle. Since these forces are ill-equipped and ill-trained to handle even basic forensic investigations, never mind confronting terrorists armed with military-grade weaponry, police pursuit is not a serious concern for committed jihadists.


The tendency to deflect domestic militancy towards an external target is characteristic of states where an all-powerful intelligence monolith has responsibility for foreign and domestic intelligence, as well as covert operations. Pakistan's ISI and Saudi Arabia's General Intelligence Directorate perfectly fit this role, whereas the Indian Research and

Analysis Wing, or the American Central Intelligence Agency, or the British Secret Intelligence Service, would struggle exert a similar degree of insider-based control over a jihadist network. To manipulate a terrorist group's operational planning from within requires a high degree of penetration that is usually only feasible for highly resourced and ruthless secret police agencies. With democratic states usually having strict firewalls with regard to information sharing and oversight of covert operations, it is difficult for intelligence managers to execute activities which if publicly uncovered, can be conveniently dismissed as 'rogue' initiatives.

Another common tool used by intelligence agencies, in both authoritarian and democratic states, is factionalisation. But this carries the risk of inducing analytical blindness with regard to changing threat patterns. History indicates that factionalisation masks the subversive threat posed by supposed 'moderates' within the Islamist camp. Over-emphasising differences in doctrine or worldview, which are too arcane to concern ordinary jihadist footsoldiers, can leave government experts puzzled when a member of a not-so-extreme faction conducts a wholly unexpected attack. An example was the 2011 murder of the governor of Pakistani Punjab by one of his own bodyguards. As a Barelvi, the killer should have been praying at Sufi shrines and listening to qawwalis, according to the analytical orthodoxy prevailing at the time. Instead, he turned out to be a highly-strung individual who had previously been involved in an unauthorised shooting. As a devout Barelvi, he subscribed to the personality cult around the Prophet Mohammed, believing that anyone who insulted the Prophet deserved instant death, as did those who defended them via the state's legal system, such as the Punjab governor. In a more recent example, the 2013 splitting of Al Qaeda's regional affiliate in Iraq and Syria into Jabhat Fateh al-Sham (formerly Jabhat-al-Nusra) and Daesh momentarily led some top-ranking American officials to ponder if it were possible to use one group against the other. Such a suggestion could only have heartened Al Qaeda, which is playing a long game in 'Syrac' and building ties with local communities in preparation for filling the power vacuum that will follow Daesh's likely defeat by Western airpower.

Conclusion

Jihad is a concept inextricably woven into the historical discourse of the Islamic faith. That is not to overlook the fact that its conflation with mass casualty terrorism is a much more recent phenomenon. But the inability to separate overarching narratives from operational alliances and tactical actions means that a seamless continuum of militancy exists. States which are internally weak use this continuum, and their own equally seamless intelligence bureaucracies, to

convert jihad into an instrument of geopolitics and domestic security. The United States was and will remain the common target of global jihad, but with its foreign policy becoming more isolationist since the second Iraq war (2003-2011), regional opponents will dominate the attention of jihadist groups. With Daesh having shown that unrestrained brutality can go a long way towards carving out an exclusive territory where 'pure' Shariah law can be implemented, Asian states need to be vigilant about possible Emirates and mini-Emirates being constructed in their backyards, drawn with borders of blood. 

1 M. Ilyas Khan, "Borderline Case," *Herald*, February 2003, 33.

2 Mohammed Hanif, "Murshid, Marwa Na Daina," *Newsline*, June 2011, 26.

3 Ahmed Rashid, "Diplomatic Immunity," *Herald*, October 1990, 29.

4 Sairah Irshad Khan, "Dangerous Liaisons," *Newsline*, June 2011, 21.

5 This is an ISI tactic ably described in Sushant Sareen, *The Jihad Factory: Pakistan's Islamic Revolution in the Making* (New Delhi: Har-Anand, 2005), 134.

6 Isaac Kfir, "Sectarian Violence and Social Group Identity in Pakistan," *Studies in Conflict & Terrorism* 37, no.6 (2014):457-472.

BEYOND ONLINE RADICALISATION: EXPLORING TRANSNATIONALISM OF JIHAD

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A comparative approach for the study of transnational jihad

THE recent evolution of online propaganda from the Islamic State (ISIS) brings experts and policymakers to constantly rethink how one might define and respond to emerging forms of online radicalisation. In light of what ICSR researchers have observed when studying and witnessing this phenomenon over the last couple of years, it appears that the very concept of online radicalisation, as it has been debated in relation to ISIS' recruitment strategy, can be understood from two different perspectives. On the one hand, online radicalisation refers to the process through which radical ideological discourses are promoted and disseminated online and via different kinds of digital media, ranging from publicly available networks interacting on mainstream social platforms to private group forums with restricted access.¹

On the other hand, online radicalisation may be defined as the set of strategies that are being jointly applied by radical violent groups to consolidate and maintain a transnational audience of supporters. From this perspective, online radicalisation is to be understood as a paradigmatic shift likely to explain how individuals become exposed to radicalisation in the digital age.² As such, it does not only relate to the process through which radical views are being expressed online, but also to the relationship between the distinctive forms of radicalisation that operate both online and offline. As I will argue in this essay, thinking about online radicalisation from this perspective allows us to anticipate some of the issues one might face while implementing long-term counter-radicalisation policies to prevent emerging forms of radicalisation. As policymakers across the world face the challenge of responding to the changing nature of jihad, it has become crucial to analyse and identify the fundamental motive of ISIS media strategy: the aim to create a transnational audience. Beyond the issue of online radicalisation, it is the



‘transnationalism’ of a jihadi ideology that needs to be addressed, so as to anticipate and prevent future claims for such forms of violent radical discourses.

According to the French expert on jihadism Gilles Kepel,³ ISIS transnational communication and recruitment strategy introduced a third generation of jihadi terrorism, which is concomitant with the emergence of social media and Web 2.0. The first generation of jihadism refers to the way terrorist networks were consolidated locally and in the war zone, as occurred in Afghanistan in the 1980s and late 1990s. 9/11 introduced what Kepel describes as second-generation jihad, during which terrorism directed against the West was also designed to gain visibility in mainstream media and on the international political scene. With the creation of ISIS, today’s third-generation jihad has contributed to bringing into practice a theory initially formulated by one of Al Qaida’s leading strategists, Abu Mus’ab al-Sury, in his call to global jihad. In his manifesto, al-Sury envisions a communication strategy very similar to that of ISIS, which is meant to target a transnational community of sympathisers willing to act in their local environments but in the name of global jihad. Kepel argues that al-Sury foresaw what we know today as the phenomenon of foreign fighters and anticipated the shape that jihadism was about to take on the transnational scale. This precisely exemplifies how one may understand online radicalisation in relation to ISIS’ transnational propaganda.

Along with the fact that emerging forms of salafi-jihadism are now more likely to reach a transnational audience, these ideological stances promote a utopia like that of the caliphate that is now considered transnational in nature for challenging national politics. Amongst the terms that better expresses this idea is the notion of ‘virtual caliphate,’ conceptualised by ICSR researcher Charlie Winter.⁴ This idea of a virtual caliphate does not only resonate with the fact that ISIS propaganda involves online networks, but also with the fact that it is designed to convey the feeling of belonging to a transnational community of true believers committed to one ideology. This virtual community will, however, exist independently from the technologies originally used to spread propaganda, and it appears to be what is most likely to survive in the event the self-proclaimed caliphate in Iraq and Syria is defeated. As Winter demonstrates in a forthcoming ICSR

report,⁵ ISIS recently released a document outlining its new “media operative” in June 2016, which specifically highlights the importance of maintaining the perception of belonging to such an idealised vision of a transnational Islamic state.

This particular aspect of ISIS’ propaganda effectively brings us to consider the theme of online radicalisation in the broader spectrum to successfully anticipate its evolution in the long run. Admittedly, policymakers and key members of civil society have significantly raised awareness about the spread of ISIS propaganda on social media since 2014. Experts already evidenced the fact that the visibility of these networks considerably decreased on mainstream social platforms, such as Facebook and Twitter, after security agencies, governments and tech-companies started to implement online surveillance and censorship policies. One could therefore easily argue that policymakers across the world have been relatively proactive when handling the technical aspect of this crisis, whereas they may not always be aware of the challenges that the more ideological nature of ISIS “media operative” has laid before them.

In this regard, this essay broaches some of the questions that ISIS transnational propaganda raises from a comparative perspective and by considering different political and cultural environments. It will first discuss the cases of Europe as well as the Middle East and North Africa (MENA) region. Secondly, it will introduce a reflection on the way ISIS “media operative” resonates with the history of salafi-jihadism in Southeast Asia by commenting on the early evolution of Jemaah Islamiyah in Indonesia and Malaysia.⁶ In doing so, it will explore how salafi-jihadism progressively took shape in this part of Southeast Asia and consider to what extent this environment distinguishes itself from other environments of radicalisation.

The European perspective: Identity crisis and identity politics

Online radicalisation may often occur as the symptom of a crisis, through which constitutive elements of national politics are being questioned and chal-

lenged. With today's third generation of jihadism⁷ policymakers across the world have come to the realisation that they are facing an internal threat. For this reason, radicalisation is now being addressed, particularly in Europe, from a perspective very different from that of the post-9/11 debate on the war against terrorism in the United States.

Since governments are witnessing proof of radicalisation from within, they have begun to apply self-criticism and reflect on some of the local and national issues that potentially act as factors of radicalisation. In Europe, recruitment of foreign fighters has raised particular concerns with regards to the way second- or third-generation immigrants within local Muslim communities, as well as young individuals recently converted to Islam, are facing a form of identity crisis. As a result, the issue of radicalisation in Europe often relies—explicitly and implicitly—on a broad range of debates relating to immigration, cultural integration, and the relationship between secularism and democracy. Over the last two to three years, commentators have ironically faced with a more challenging task when evaluating these parameters, as the debate on radicalisation has introduced a trend towards identity politics from which many parties and political leaders have considerably benefited. The European case shows that anticipating radicalisation cannot only be achieved by acknowledging existing identity concerns, but also by preventing all political actors from capitalising on a resultant identity crisis.

A recent comparative case study conducted as part of Vox-Pol European research framework and in partnership with ICSR emphasised the significance of just this challenge.⁸ In order to assess the visibility of different violent radical groups on Twitter, the study compared two sets of publicly available accounts of right-wing nationalists and from the pro-ISIS community. Preliminary findings indicated that, whereas the pro-jihadi network interacting via Twitter appeared to be disrupted by the censorship policy currently applied to eradicate ISIS' propaganda, violent far-right nationalist groups have become increasingly visible. This provides substance to the argument that radicalisation in Europe does not only operate within the Muslim community and is not only limited to the question of how Muslim and non-Muslim Europeans can cohabit. To a large extent, the issue of radicalisation

raises a broad range of questions relating to what defines a 'European' identity and what 'democratic' values mean in a context of multiculturalism. This identity crisis, however, manifests itself in very different ways and has benefitted ISIS' transnational recruitment strategy as well other violent and non-violent radical groups.

Middle East and North Africa: Questioning the legitimacy of political Islam

Unlike most European foreign fighters, ISIS' target audience in the MENA region understands Islam as constitutive of its cultural and political environment. To a certain extent, the average citizen's theoretical and empirical knowledge of Islam in the Middle East does not lead to the same kind of identity struggles witnessed in the European context. Alternatively, Islam in the region became an object of politics, which had been recurrently used to rethink cultural and ideological identity in the post-colonial era. This phenomenon was jointly introduced by early reformist/modernist thinkers, Islamist activists and Pan-Islamist opposition movements. For this reason, ISIS' recruitment strategy in the MENA region should be analysed in relation to the historical evolution of political Islam as well as to the representative voices now competing for power in the region and on the international stage.

As much as ISIS portrays itself as the ultimate counter-culture by claiming to offer an alternative to secular democracy in the West, it also breaks with a long tradition of post-colonial thinkers and parties that contributed to the rise of political Islam in MENA countries. Admittedly, salafi-jihadism per se may already have initiated this transition by substituting jihad to political action as a way to implement a state policy, which conforms to the sharia and a rather literal interpretation of the Islamic tradition.

Indeed, prior to ISIS emerging forms of propaganda, salafism and salafi-jihadism had already upheld the concept of *tawhid*, which refers to the uniqueness of God as well as to the consolidation of the ummah (the community of believers). As applied by ISIS in its propaganda, this concept leads to the negation of

“ISIS strategically differentiates itself from Islamist movements, other salafi-jihadi groups and Western democratic governments. Apolitical, it targets a young population disillusioned with politics but willing to act on behalf of anti-imperialism.

pluralism and contests democratic deliberation, for it involves confronting diverging opinions instead of applying Islamic law as a unique and unquestionable truth. This concept is therefore crucial to ISIS ideology because it conveys the assumption that, unlike well-established political parties, those who advocate *tawhid* shall deliver a timeless and universal message, which aims at transcending politics. It is here where most of the distinction lies between ISIS propaganda and the broader range of political movements in the Pan-Islamist tradition. Amongst all political leaders, traditionalist parties and other jihadi groups competing for power in the region, ISIS appears to be the one that is most reluctant to compromise. In fact, other jihadi groups such as Al Qaida recently appeared as comparatively “moderate” for being willing to implement sharia progressively, after reaching a consensus.⁹ This further establishes the image of ISIS as an institution that is willing to sacrifice in order to achieve its heavenly mission, therefore refusing to play the political game. Commitment to jihad, preservation of *tawhid* and the eschatological narrative act as the ultimate alternative to political action, thereby promoting a message which remains, in all appearances, apolitical.

In addition, ISIS propaganda consistently directly attacks Islamist parties that have gained recognition after running for parliamentary or presidential elections. For example, conservative movements such as Erdogan’s administration in Turkey, Ennahda party in Tunisia or the Egyptian Muslim Brotherhood, which reveal different facets of political Islam, are all being strongly contested by ISIS. Each of these political institutions is not only criticised for their national and foreign policies but also for the fact that they have participated in democratic processes

to gain representation in government. In doing so, these Islamist parties have contributed to turning Islam into an object of debate restricted to national politics, which ISIS considers a threat to the fundamental principle of *tawhid*.

This partly explains why ISIS intends to strategically differentiate itself from both Islamist movements and other salafi-jihadi groups as well as from Western democratic governments. By breaking with a long tradition of political Islam, while portraying itself as apolitical, ISIS appears to target a young population still willing to engage and act on behalf of anti-imperialism, yet considerably disillusioned with politics. For this reason, implementing a successful de-radicalisation policy in the Middle East and North Africa raises different issues as those currently debated in the European context. Indeed, in order to anticipate such forms of radicalisation in the MENA region, policymakers may have to reflect on the relationship between emergent forms of salafi-jihadism and the longer tradition of political Islam. This will involve not only acknowledging how claims for political Islam historically laid the groundwork for the rise of radical violent groups, but also identifying under which conditions political Islam may alternatively help to prevent radicalisation and benefit pluralism.

The evolution and creation of JI in Southeast Asia: Exemplifying and defining transnational jihad

To a certain extent, some of the questions addressed above may also resonate with the case of Southeast Asia. For instance, commentators have recently wit-

nessed both Islamic and non-Islamic parties—such as the Pan-Malaysian Islamic Party and the United Malays National Organisation—pave the way for a specific ideological approach of Islam, which appears to be less compatible with pluralism.¹⁰ However, as the work of Kumar Ramakrishna¹¹ would suggest, studying the history of salafi-jihadism in Southeast Asia may be particularly helpful when it comes to identifying some of the characteristics of transnational or global jihad. His in-depth analysis of Malaysian and Indonesian jihadism in the aftermath of the 2004 Jakarta terrorist attack perfectly outlines the evolution that political Islam has undertaken from being a component of national politics to becoming what Al Qaida strategist al Suri conceptualised as global jihad. One of the reasons why this evolution can easily be traced and understood in the cases of Malaysia and Indonesia is because there is ready and visible evidence of the ideology transition initiated by the Jemaah Islamiyah (JI) leaders: Abdullah Sungkar and Abu Bakar Bashir.

Studying what can be considered as the early stages of JI shows how connections sporadically occurred between regional terrorist organisations. JI's history also reveals how this transnational network of supporters came to advocate one and only ideology to respond to local conflicts and national debates. Furthermore, it contributes towards explaining why JI pledged allegiance to ISIS in July 2014 and why the concepts of caliphate and an Islamic state resonate at the transnational scale. At the time of the Indonesian Darul Islam (DI) movement led by S. M. Kartosuwirjo in the 1950s, these terms already endorsed part of the meaning they have today. Indeed, Kartosuwirjo's vision was that of a state committed to the application of sharia law, for which one should engage in the ultimate sacrifice of jihad. This initial form of radical Islamism was progressively exposed to various influences over the second half the 20th and early 21st centuries, as Kartosuwirjo's disciples became familiar with both violent and non-violent schools of political Islam across the world.

Ramakrishna¹² reminds us that the DI movement itself appeared to have developed a close relationship with the Saudi-based World Islamic League, thereby promoting a scholarship and an approach of Islamic law “increasingly drawn to Saudi-style Wahabism.”¹³ In the 1970s, Sungkar and Bashir were far

more influenced by the Egyptian Muslim Brotherhood when consolidating what was about to become the JI terrorist group. After being incarcerated for nine years in Indonesia and having rebuilt their network in Malaysia, they embraced an approach of radical Islamism that was now driven towards salafi-jihadism.

Consequently, they became exposed to a new range of influences as they continued to seek theoretical as well as operational knowhow. In the early 1990s, they were receptive to the ideas of the Egyptian Mohammed al-Faraj, who advanced a far more radical approach than Islamist philosophers Mawdudi and Qutb.¹⁴ Finally, their engagement in Afghanistan led them to extend their network and to consider themselves as part of global jihad under the influence of Al Qaida leaders, who contributed to the conceptualisation of global jihad as a means to establish a transnational caliphate:

These shifts in global radical Salafi ideology post-Afghanistan were not lost on Sungkar and Bashir. In addition to their discussions with returning Indonesian veterans of the Afghan war, such as Hambali and Mukhlas (Neighbour 2004), both men met with international jihadi groups in Malaysia. Consequently, by 1994 Sungkar and Bashir were no longer talking about establishing merely an Islamic state in Indonesia. Over and above this, they were now talking of establishing a “khilafah (world Islamic state)” (Poer 2003). In this construction, a “world caliphate uniting all Muslim nations under a single, righteous exemplar and ruler” is the ultimate goal (Behrend, 2003).¹⁵

Arguably, the process through which Sungkar and Bashir introduced a transition from radical Islamism to salafi-jihadism in Southeast Asia hardly compares to the way this evolution took shape in the MENA region. As suggested earlier, emerging forms of salafi-jihadism in the Arab world tend to position themselves in opposition to a long tradition of political Islam. In addition, the divide between ISIS and other jihadi groups involved in the Syrian crisis, such as Jabhat al-Nosrah, indicates that salafi-jihadism recurrently faces internal struggles. In fact, one of ISIS' weaknesses potentially lies in the fact that imposing itself and acting as an absolute and apolitical transnational power will prevent it from answering

to people's specific needs and engaging with local issues. As a result, the organisation will hardly maintain its legitimacy as long as it is competing with radical Islamist parties as well as with local opposition movements, which themselves range from more liberal to more conservative approaches of political Islam, across the MENA region.

Alternatively, the context in which JI was created suggests that the transition from radical Islamism to salafi-jihadism was rather uninterrupted and successively exposed to a range of influences that potentially made it more open to the idea of a transnational caliphate relying on global jihad. In light of this, policymakers in the region may be particularly well placed to anticipate some of the issues relating to ISIS' transnational communication strategy as well as to online radicalisation in the broader spectrum.

Since the early 2000s, the case of JI has already led counter-radicalisation experts to discuss a set of questions that only recently became highly relevant in the European context. Among these were the issues of prisons as a favourable environment for radicalisation¹⁶ and the benefit of incorporating former members of terrorist organisations within de-radicalisation programmes.¹⁷ Researchers in this field also referenced concerns that hold appeal in the MENA region. For example, they highlighted the fact that some of the leading political forces competing for power nationally share a responsibility in the radicalisation process as soon as they capitalise on the way national and Islamic identities are understood.¹⁸ Across the literature, experts agree that repression and autocratic means are hardly efficient to restrain the spread of violent radical discourses. It may, however, be extremely helpful to identify the structural weaknesses of such transnational networks.

From Southeast Asia to South Asia

Bringing the discussion back to transnationalism and global jihad would also be particularly beneficial when implementing a successful long-term counter-radicalisation strategy in Southeast Asia as well as in South Asia. Indeed, extending the debate on online radicalisation to transnationalism allows us

to conceptualise the terrorist threat beyond the case of ISIS and to consider whether other jihadi groups in the region are likely to reaffirm interest in global jihad. According to Thomas Lynch,¹⁹ ISIS appears to be less appealing to South Asian local jihadi groups remaining loyal to Al Qaida:

ISIS' impact in South Asia has been conspicuously less than in other regions in general and especially on a Muslim per-capita basis. (...) Dozens of other longstanding jihadist outfits in Afghanistan, Pakistan and Bangladesh remain firmly with al-Qaeda; in the case of Lashkar-e-Tayyiban in Pakistan, it remains tied to the nationalist-Islamist aims of the security and intelligence services.


Nevertheless, anticipating emerging forms of radicalisation involves assessing the propensity of these groups to embrace the fundamental ideological principles of global jihad, which had been initially conceptualised by some of the Al Qaida leaders.

Although South Asian jihadi groups may have been considered as less likely to identify themselves as part of ISIS transnational communication strategy, they remain exposed to the same conceptual frameworks, which have been used by ISIS strategists to legitimise global jihad. Despite the fact that local jihadi terrorist organisations would appear to share more connections with Al Qaida, they may evolve to cultivate the idea of a "virtual caliphate," regardless of the outcome of the Syrian crisis. Comparing the cases of Southeast and South Asia in further details would, however, considerably benefit future research. This would not only help identify common denominators between different local jihadi groups across Asia, but also contribute in determining to what extent jihadism draws on transnationalism in a specific political environment.

Conclusion: Priorities for a transnational counter-radicalisation strategy

Understanding online radicalisation as a paradigmatic shift involves acknowledging the fact that ISIS-type salafi-jihadism is ideologically designed

to resonate within a transnational audience. As such, it intends to substitute national politics for an absolute and supposedly apolitical form of power. To a certain extent, digital technologies contribute to this phenomenon in facilitating transnational communication flows. However, online radicalisation may also be understood in relation to the way ISIS is framing and structuring its ideology. As such, it cannot only be defeated by technical or technological means, such as censorship, surveillance and online policing. Alternatively, the threat of a virtual

caliphate could be overcome by stimulating pluralism on the local level and by helping distinctive political voices regain legitimacy on the national scale. However, this can only be achieved by ensuring that all the parties and political actors involved genuinely commit to preserving pluralism and do not pave the way to strengthening radical views by engaging in identity politics. This is the most important challenge that all policymakers—regardless of specific political and cultural contexts—will face in future. 

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THE POWER OF POWER: ENERGY COMPLEXITIES IN ASIA

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Introduction

NATIONAL quests for energy require potential power at every turn. Certainly this is true in 21st century Asia, where competition among buyers is fuelling a power transition which is transforming the region and beyond. This paper explains how Asian nations have made modest attempts to establish regional and sub-regional energy infrastructure and frameworks to (1) ensure they have stable supply of primary energy sources, especially oil and natural gas, and (2) distribute electricity through inter-state and regional grids or even via an Asia-wide super grid as a collective good. Yet, this paper argues, these supply networks and grid plans have so far been largely weak and ineffective. 'Energy' in Asia is still seen largely through the prism of national interest and resource nationalism, giving rise to intense rivalry rather than productive cooperation. Energy issues are shaped by, and themselves shape, historic animosities, inter-state territorial and

maritime disputes, and a national race for regional and global leadership inherent in the great power transition reshaping the world. The challenge before these key actors, especially China, Japan, and India, is to manage their external energy needs effectively while pursuing political and strategic ambitions, but not disrupting the prevailing world order that has hitherto served their national interests.

This discussion unfolds in four parts. The first two offer contextual overviews of the energy scenario in Asia and of some of the major cooperative frameworks and infrastructure developments. The third discusses energy geopolitics—inter-state rivalry and competition for resources in the context of greater militarisation and pipeline politics. The fourth part concludes with a discussion of difficulties current and future.

Energy scenario in Asia

Annual updates from international and regional agencies present somewhat different scenarios of



global energy demand and supply, but all broadly agree that Asia will remain a site of rising demand over the next two decades as the continent appears set to remain the centre of gravity of global economic activity in terms of production, distribution, consumption, trade, investment, and infrastructure development.¹ Asia is of course not one single entity in any sense—political, economic, cultural or societal. For energy purposes, Central and West Asia (the Middle East) are net energy exporters while most countries in South, Southeast and Northeast Asia are net energy importers. Even among the importers, some, like China and India, have domestic energy sources, but which are insufficient to meet present and near-term demands. Others like Japan are almost totally dependent on imports. Among the net importers, level of demand varies considerably between ‘developed’ or OECD Asia, such as Japan and South Korea and ‘developing’ or non-OECD Asia, such as India, China and most South-east Asian nations. Demand in developed Asia is steady and projected to rise only marginally because the economies of these nations show signs of low to moderate growth, while demand in developing Asia has risen exponentially and is set to grow substantially. While Asia is unmistakably a site of supply as well as of huge demand, the primary concern of the key players has been with meeting their energy demands. Therefore, buyer nations are the main focus of discussion here.

According to BP’s *Energy Outlook 2014*, by 2035 Asia’s share of interregional energy imports will be 70 percent. Asia will then account for all growth in energy trade and India will have overtaken China as the world’s largest energy importer. Energy demands in industrialised countries in Europe and North America as well as in Japan will stagnate or even decrease through relatively reduced consumption and efficiencies. China, the report speculates, will take over from the United States as the world’s largest oil consumer by the 2030s, to be then taken over by India, which will become the largest energy consumer with the largest population and possibly the biggest economy. The 2016 Enerdata statistics already confirm China and India as number one and number three primary energy consumers, with the United States ranking second and Japan in fifth place with Russia fourth.² Thus, China and India appear to be positioned as the main Asian players

in the global energy market for a long time to come. Overall energy demand in Asia will also come from other developing Asian nations, alongside stable demand from resource-poor developed Asian nations such as Japan and South Korea.

The mix of energy sources in each nation’s total requirements or preferences will vary in the next decade and beyond, depending particularly upon national policy on climate change and development of nuclear and renewable energies. Even so, dependence on fossil fuels (oil, gas and coal) will remain substantial. Asia’s dependence on the Middle East/Persian Gulf region will remain high for both oil and natural gas. Demand for fossil fuel energy is rising not only in China and India but also in Japan, especially since the March 2011 Fukushima nuclear disaster forced closure of the nuclear power plants on which Japan depended for 30 percent of its electricity requirements, highlighting the vulnerability of reliance on nuclear energy.

Cooperative mechanisms

Global agencies such as the International Energy Agency (IEA) have set norms and principles that member states follow. They maintain what they understand to be sufficient oil reserves to combat any crisis from energy shortage. However, such institutions are Western-centric. Until South Korea was admitted in 2001, Japan was the IEA’s only Asian member. Norms and principles of these Western institutions have not found traction in Asia-led regional institutions, as rule-based legalistic frameworks are usually not the preferred choice for Asian institutional designs. Instead, soft-rule institutional structures and the ‘Asian/ASEAN Way’ with non-binding commitments and respect for state sovereignty define institutional designs. Institutionalisation of energy cooperation has been slow to materialise, in particular because of the intensity of geostrategic competition between the major players as discussed below.³

The main Asian institutional frameworks, such as the Association of South East Asian Nations (ASEAN), ASEAN plus three (APT), East Asia Summit (EAS), South Asian Association of Regional Cooperation (SAARC) and, more recently, the Trilateral (China, Japan and South Korea) Cooperation

Secretariat (TCS) have dialogued on cooperation for sourcing and distribution of energy. But such dialogues make minimal headway. The Shanghai Cooperation Organisation (SCO), comprising China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan, has considered an “energy club” that Russia first proposed at the SCO’s foundation in 2001. Yet divergence among members’ strategic interests has prevented or at least stalled establishment of this cooperative intra-regional energy framework. Typical of virtually all attempts by regional institutions to establish some form of energy cooperation, each of the members pursues national interest and sovereignty-bound outcomes. This narrow focus makes reconciling their differences on energy matters, which are both intrinsically important to national economy and therefore to national security, unfeasible. Members find it virtually impossible to identify regional or subregional interests as the basis for multilateral action. It is bilateralism which usually defines energy-related agreements, but which also reduces members’ concern with identifying collective interests, and curbs their appetite for multilateral frameworks or sharing energy infrastructure projects.

A regional power grid or even an Asia super grid could offer shared benefits to those connected to it, through assured supply and perhaps lower costs. But proposals for such a grid do not advance; all aspects of supplying and distributing power across the region concern issues of regulatory power that prospective national members find difficult to resolve. For example, ASEAN members have continued to pursue shared ideas and interests through ASEAN as a cohesive regional framework for the past 50 years and are also co-members of many other institutions. Yet even for them, progress on a transnational or an ASEAN-wide grid still remains limited, despite adopting a five-year plan for energy cooperation two decades ago. Similarly, in South Asia, SAARC member states signed a Framework Agreement for Energy Cooperation in the electricity sector at the 2014 SAARC summit, but tense interstate relations and disagreements on a range of divisive issues hosed down expectations of meaningful cooperation.⁴ In Northeast Asia, in the aftermath of the Fukushima nuclear disaster, an Asian super grid to maximise use of renewable energy was proposed by a Japanese corporate leader

in 2011 but the concept has barely developed since. Some question the need and have dubbed it “political fantasy.”⁵ The Asian super grid plan was mainly proposed and intended to be funded by private capital, but such a project is unlikely to take off without political support of China, Japan and South Korea, countries whose relations are soured by ongoing historical distrust, current territorial disputes, and other tensions arising from power shifts through the regional/global power transition now under way.

In these circumstances, it is highly unlikely that a rule-based Asia-wide energy institution will be formed anytime soon. At present, softer institutions subsumed under broader regional bodies, such as ASEAN, APT, SAARC and the TCS or even G-20, may be more appropriate forums for energy cooperation dialogue. As long as strategic rivalry and competition for energy remain the dominant features of interaction among Asian states, joint funding for sharing infrastructure and available resources seems like a pipe dream.

Establishing energy infrastructure requires financial capacity as well as political will and vision. Most of the current proposals for energy pipelines, together with new roads and high-speed railway networks in the region, are led by China, through its One Belt, One Road (OBOR) initiative and strategic vision, supported by massive financial injections through the Beijing-led Asian Infrastructure Investment Bank (AIIB) and the Silk Road Fund. While China takes the lead in building regional infrastructure projects involving a large number of countries around its proposed overland belt and maritime road, it is not obvious how other countries will benefit from these projects. Clearly such projects give China access to vital resources including energy, as well as regional influence and prestige. Strategic competitors such as India and Japan are unlikely to endorse initiatives under OBOR as these don’t necessarily serve their respective interests, and in some cases even go directly against them. This is certainly the case of the economic corridor currently under construction that passes the disputed Kashmir area.

On nuclear energy, another vital and emerging energy resource for electricity in Asia, it makes sense for nuclear nations to collaborate and share at least information and knowledge to advance the safety and security of both nuclear power plants and citizens. All regional members, nuclear-powered or

not, have a vested interest in ensuring the safety of such plants, given the danger of nuclear fallout from any disaster. However, there are as yet no formal or informal arrangements in place, despite the obvious benefits of regional cooperation in this policy area.

The complexity of national interests, needs, capacities and strategic perspectives, of the influence of domestic politics, and of the power dynamics and strategic manoeuvring that accompany them all, have both curbed and generally thwarted attempts at multilateral energy arrangements, let alone institutions, however informally they may be organised. Most energy-related deals are therefore conducted bilaterally. Each major player in Asia is trying to carve out, bolster, or retain its own sphere of influence in pursuing its energy security, whether in Africa, Central Asia, or, where Asian nations have traditionally secured their energy needs, the Middle East and Russia.

Geopolitics of energy

Energy as a commodity is by its very nature quintessentially political. Its vital role as a key enabler of national economic capacity gives it a deeply strategic edge, particularly through accessibility—supply and transportation/passage—and cost, making energy a hotly contested issue among all nations. Inevitably then, while Asia's national energy players discuss multilateral cooperation in multiple fora and frameworks, in practice the Asian energy scene is marked by intense competition and geopolitical rivalry, particularly among the biggest buyers. Japan recognises it is strategically beholden to its alliance relationship with the United States; it thus

follows its alliance partner even in pursuing punitive actions, including previously against Iran and most recently against Russia—actions that diminish its bargaining power with these crucial energy suppliers. China and India, the two major energy importers in Asia, do not have such constraints. China is largely unburdened by any alliance or ideational constraints and roams freely in the global market in pursuit of its needs, bolstered by its sphere of political influence and mostly positive reception to its moves to expand its economic sphere in some energy-rich parts of the world, such as in some African countries. In some isolated examples, Indian and Chinese companies have formed partnerships in their quest for energy in Sudan, Syria and Colombia, but the two nations generally compete.

Tensions from competition in energy pursuits sometimes add fuel to more complex disputes around territory and political leadership. One such example is the escalating conflict in sovereignty claims over two long-disputed island groups in northeast Asian waters—between Japan and South Korea over the Takeshima/Dokdo islands, and between Japan and China over the Senkaku/Diaoyu islands in the East China Sea. Similarly, the South China Sea remains a volatile site of interstate disputes among a number of Asian nations. Strategic alliances, concerns about China's ever stronger diplomatic muscle, and other geostrategic intrusions upon the international energy trade complicate energy diplomacy and have given rise to greater militarisation as energy importers seek secure supplies.

For Asian nations today, energy security is intrinsic to national security: a threat to energy is a threat to the state. It is therefore not surprising that Asian powers are pivoting their defense resources towards

“Energy as a commodity is by its very nature quintessentially political. Its vital role as a key enabler of national economic capacity gives it a deeply strategic edge, particularly through accessibility and cost.

naval strength. The continent's dependence on the Middle East, and now increasingly also on Africa, for energy resources means that most of Asia's trade in energy is still sea-borne. For instance, roughly three-quarters of Middle East oil exports are transported by sea to Asia through the Persian Gulf into the Indian Ocean, and then through the Malacca Strait into the Western Pacific to reach northeastern Asian shores. With political volatility of the region and chokepoints at both the Strait of Hormuz in the Persian Gulf and the Strait of Malacca in Southeast Asia, India and China are competing for influence in both the Indian Ocean and the South China Sea to guard against both traditional threats (the classic security dilemma) and non-traditional threats (terrorism and piracy). Some cooperative arrangements aim to secure safe passage of ships multilaterally, although increasingly the response to protecting against such threats has been militaristic in nature, leading to increased militarisation of the region.

For instance, India aims to maintain its edge in the Indian Ocean as a vital trade route, especially for energy from the Middle East. China's naval capacity is numerically superior to that of India's; however, in the Indian Ocean, this superiority is negated by India's geographic advantage. Indeed, India's military modernisation is continuing to project power beyond its shores in the Indian Ocean and in its neighborhood—such as Sri Lanka and Pakistan, where China is now building ports and other facilities to secure energy resources. China has pursued its energy security objectives through a “string of pearls” strategy, establishing footprints in littoral and maritime states around the Indian Ocean and the Indian subcontinent, and more recently through the OBOR initiative. India's answer to China's

Gwadar port in Pakistan is its collaboration with Teheran in developing the Chabahar port in Iran, effectively a pushback against China's expansionist activity in the Indian Ocean.

Djibouti, a small country on the northeastern coast of Africa, also exemplifies the growth of geopolitical and strategic competition through a greater military presence of a number of states. It has a deepwater port and its geostrategic position relative to the Middle East makes it an important location for global trade. It is estimated that some 20,000 ships, comprising 20 percent of world trade, pass through the port annually en route to their destinations in Europe, the United States and Asia. Given Djibouti's strategic significance, Japan and China, as well as Western powers, are increasing their naval presence in and around the country. Japan has established a naval base in Djibouti and deployed long-range maritime patrol aircraft, enabling it to more effectively monitor not only the sea lines of communication (SLOC) to the Gulf of Aden that carry energy supplies, but also China's deployment of warships to anti-piracy operations off the coast of Somalia. Japan has effectively used piracy against ships transporting its energy supplies to justify expanding the role of its Maritime Self-Defense Force and introduced a major reinterpretation in its constitution that expands the scope of its defence forces. Although constitutionally, it is still under military constraints, Japan is becoming increasingly active under pressure from the United States to take on a greater share of the burden. It is also driven by national interest to meet energy supplies, particularly since the 2011 Fukushima nuclear disaster increased national demand for fossil fuels

China has recently announced it will establish

in Djibouti a permanent military base that Beijing terms a support and logistic facility. Given China-Japan rivalry, it is likely that Japan will also increase its presence there to secure its interests. India, traditionally a strong player in Africa, now plays a smaller role, leaving New Delhi to essentially depend on the Japanese and US contributions to maritime security.

Without cooperative frameworks for safe passage, including responses to piracy threats, Asian nations compete with each other to protect their interests, which propels greater military presence along the sea routes, especially in the Indian Ocean. This competition and rivalry to secure SLOCs and access to energy resources is likely to remain a feature of the region. The advent of the incoming Trump Administration in Washington from 20 January 2017 presents an element of uncertainty, and makes more intense strategic competition instead of greater cooperation a distinct possibility.

Pipeline Politics

Secure transport of imported energy resources is essential, and shipping is only one means. Another is overland and undersea pipelines. Most gas and oil from Central Asia is exported via such pipelines. Like shipping, reliance on pipelines is fraught with danger. Many pipelines have to transit through third countries, where the transit country may seek terms unattractive to the supplier and/or buyer. This leaves both sides vulnerable, particularly the buyer. So, too, does distrust among states, and the prospects of terrorism, sabotage and deliberate attacks on pipelines. Should these possibilities eventuate, they can cause enormous economic damage to both supplier and consumer countries through the disruption of flow of fuel and emphasising vulnerabilities.

In Northeast Asia, the Japan-China rivalry, Japan's vexed relations with South Korea, and lingering distrust between Japan and Russia in the absence of a peace treaty at the end of World War II have resulted in slow progress on oil and gas pipeline projects from Eastern Russia to Northeast Asia. Russia is also wary of China's fast-growing economy and rising political assertiveness in the region, changes that could disadvantage Moscow's relations with Eastern Russia and Central Asian states.

Similar difficulties have arisen in building pipelines to China from energy-rich Central Asian states with which China has assiduously been building bilateral and multilateral relationships, particularly through the SCO. After years of negotiations, China now has pipelines transporting fuels from Turkmenistan and Kazakhstan. The China-Central Asia gas pipeline is under construction, though often hits snags because of the difficult geopolitics of a region in which Russia holds great influence.

India's efforts to bring oil and gas from Iran, Myanmar and Turkmenistan through overland or undersea pipeline projects have suffered similar setbacks, also because of interstate political distrust and historical rivalries. Distrust between India and Pakistan, and between India and Bangladesh has also stalled or halted pipeline projects or caused them to fail. Both China and India compete fiercely in seeking gas pipelines from Myanmar. India has a geographical disadvantage in accessing Central Asian resources as pipelines have to pass through Pakistan, India's arch-rival.

Friction between India and China in competing against each other to access resources from Myanmar has slowed progress on the Trans-ASEAN Gas Pipeline project. But so, too, has the lack of internal cohesion among ASEAN members. Although the Trans-ASEAN Pipeline was conceived in 1999 and is still under development, ASEAN members have repeatedly placed national interests before collective interest. Some pipelines have made significant progress as a result of interstate cooperation and convergence of agendas of other actors, such as multinational oil companies, banks and international agencies, but examples of successful cooperation are relatively rare.


Looking to the future

Today self-interest and resource nationalism drive the geopolitics of Asia's evolving energy landscape. There is little appetite for cooperative frameworks or for sharing resources—even technology (for example, in nuclear power generation), an area where all Asian nations could benefit from each other. Rivalry, suspicion, inter-state boundary disputes, trust deficits and mutual threat perception make it unlikely that

Asian states will either want to or be able to create an institutional environment that looks at the question of energy outside the current zero-sum game. While large-scale conflict is considered unlikely in Asia, energy security is one area where tensions could increase, with far reaching consequences for international energy diplomacy and broader political relations.

With its OBOR strategy and a leading role in the AIIB, China is set to significantly expand its influence in the region. China's lead role could be a welcome development, as no other nation in the region has the money, capacity and wherewithal that China has today. But the problem is that the United States—still a critical actor in the region—and the other major powers in Asia continue to view China with suspicion. They recognise Beijing's actions as essentially based on narrow self-interest without regard for other players, a

problem which is made more complex by Beijing's swiftly increasing clout. Until Beijing becomes more sensitive to the concerns of other Asian powers, or these other powers otherwise change their attitude towards China, strategic rivalry will define the regional political landscape and will unfold in a more aggressive form in securing and protecting the SLOCs so vital for energy trade in Asia and beyond.

Meanwhile, dialogue and limited cooperative initiatives in such regional forums as ASEAN, APT, SCO and SAARC will continue, contributing to a confidence-building environment. But there is need for dialogue between and among major energy players in the region. Some observers have suggested a Shangri-La type energy dialogue, but it is unclear who will take the leadership role in creating a concert among energy players in Asia.⁶ Perhaps it is time to initiate an Asia-wide dialogue on energy. 

1 US Energy Information Administrations, "Chapter 1 World Energy Demand and Economic Outlook," in *International Energy Outlook*, <http://www.eia.gov/outlooks/ieo/world.cfm> 2016; International Energy Agency, *Key World Energy Statistics*, 2016.

2 Global Energy Statistical Yearbook 2016, Enerdata, <http://www.enerdat.net/enerdatauk/press-and-publication/publications/world-energy-statistics-supply-and-demand.php>.

3 Purnendra Jain and Takamichi Mito, "The Institutionalization of Energy Cooperation in Asia," in *Asian Designs: Governance in the Contemporary World Order*, ed. Saadia M. Pekkanen (Ithaca: Cornell University Press, 2016), 135-158.

4 The 2016 SAARC summit was cancelled in view of inter-state tensions.

5 Walt Patterson, "Why an Asian Super Grid is a Political Fantasy," *The Third Pole*, May 31, 2016, <https://www.thethirdpole.net/2016/05/31/why-an-asian-super-grid-is-a-political-fantasy/>.

6 Mikal E. Herberg, "U.S., Japanese, and Asian Energy Security in a New Energy Era," NBR Special Report 51, 2015, 13, http://www.nbr.org/publications/specialreport/pdf/free/063015/SR51_AsianEnergySecurity_April2015.pdf.

THE NUCLEAR DETERRENCE DYNAMIC IN ASIA

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Introduction: The complex Asian nuclear deterrence environment

ASIA is home to five of the eight declared nuclear-armed states: China, India, North Korea, Pakistan and Russia, while a sixth, the United States, has an omnipresent role in the nuclear politics of the region. Asia is home to the most recent nuclear proliferators; the fastest growing nuclear arsenals; the most credible concerns about nuclear use—be it deliberate, accidental or by a rogue actor; the most likely candidates for future nuclear proliferation; and perhaps the most complex nuclear politics and relationships anywhere on the planet. It is also the only region where nuclear-armed states reside outside of the Nuclear Nonproliferation Treaty (NPT),¹ held by many as the centrepiece of global nuclear order. While

nuclear dynamics and challenges differ considerably whether one focuses on the subcontinent to the South or the Pacific Northeast of the region, the broader Asian nuclear order is co-constitutive, with actions in one theatre having knock-on effects in the others, and indeed, globally. The result is twofold: First, many of the axioms and lessons learnt from a predominantly western 20th century nuclear past may not necessarily apply, or at least not apply in the same way, to the 21st century nuclear Asia of today and tomorrow. Second, Asia seems likely to be the main stage where the major dramas and challenges of the second nuclear age and of global nuclear order more broadly will play out. Taken together, these two dynamics will likely necessitate a rethinking of how we manage and go about securing our global nuclear future.

In order to better understand these myriad pressures and challenges, this essay proceeds in four parts: the first looks at the current nuclear impasse in South Asia, and outlines the major complications and stumbling blocks toward better security and



stability between India and Pakistan; moving east, the second section explains current Chinese nuclear thinking and policy, and in particular how Chinese nuclear modernisation plans are creating new pressures and uncertainties across the continent; the third looks at China's contiguous neighbour, North Korea, and sets out to outline and explain the key issues involved in the ongoing North Korean nuclear phenomenon; finally, the last section considers the role of the United States as an offshore security balancer, and particularly the importance of credible US extended deterrence to prevent possible future regional proliferation.

Maintaining a delicate nuclear balance in South Asia

The second nuclear age began with a bang on the South Asian subcontinent in May 1998 as first India and then Pakistan overtly tested nuclear devices. While the international community had long been concerned about Indian and Pakistan nuclear weapons programmes (indeed, India conducted a so-called peaceful nuclear explosion in 1974), and both probably had some sort of nuclear capability by the late 1980s, the tests marked a significant turning point in international nuclear affairs. Neither India nor Pakistan had signed the NPT, the two had fought a series of bloody wars over the preceding decades, and tensions seemed set to increase rather than decrease with the advent of nuclear weapons into this already strained balance. In fact, just a year later, India and Pakistan fought the 1999 Kargil War in the shadow of nuclear weapons—somewhat dispelling the myth that nuclear weapons make such wars impossible—and have clashed on several other occasions since. As Feroz Hassan Khan put it just a few years after the tests: “...the region has witnessed increased regional tensions, a rise in religious extremism, a growing arms race, tense stand-offs, and even armed conflict.”² Since 1998, both India and Pakistan have developed their nuclear capabilities apace, adding more warheads and more sophisticated means of delivery to their nuclear arsenals. As of 2016, India probably has around 110 nuclear warheads and Pakistan perhaps 120,³ and the possibility of further

rapid expansion is a major concern.

The greatest fear in South Asia is that a regional nuclear arms race could lead to some type of inadvertent miscalculation following a minor skirmish that could escalate quickly to the nuclear level. This problem stems from the fact that Pakistani nuclear weapons are primarily about deterring superior Indian conventional forces, while Indian nuclear weapons are as much about China as they are Pakistan. The threat that India might be able to “take out” Pakistani nuclear assets with a quick conventional strike and overwhelm the country before a response could be ordered is a major concern for Pakistani planners. This issue has not been helped by the development of an Indian “Cold Start” doctrine, which in turn has led to an increased focus on tactical or battlefield nuclear deployments, such as the Nasr missile, by Pakistan.⁴ These challenges are exacerbated by geography, the contiguous border, and above all the very short warning times involved.

A second major concern is nuclear security, and particularly the possibility that terrorist groups might somehow acquire nuclear material, a nuclear device or precipitate or deepen a nuclear crisis. This challenge appears to be particularly acute in Pakistan given both the problems experienced with terrorist groups such as Al Qaeda in recent years, but also concerns about the security and safety of Pakistani nuclear assets and forces. A perceived requirement to keep Pakistani nuclear forces on alert and dispersed due to fears of an Indian conventional first strike does not help this predicament. Thus, India is concerned about the credibility of Pakistan command and control of its nuclear forces—a fear exacerbated by the unravelling of the A.Q. Khan nuclear smuggling network—while Pakistan fears that India could use its powerful conventional military to over-run Pakistan. Taken together, these developments make safely and securely controlling a crisis particularly problematic and worrying in South Asia.

What happens on the subcontinent also has considerable knock-on effects for the broader Asian region and for global nuclear order too. Pakistani actions to enhance their perceived security position vis-à-vis India by bolstering its nuclear capability will likely have effects to the West, such as in the Arabian Gulf and the Middle East, as well as in India. Likewise, Indian nuclear policy and expansion is likely

to be interpreted as a possible threat by China, and, as is explained below, vice-versa. More broadly, and especially given the trend towards more, rather than less, nuclear weapons in the region, developments in South Asia will be integral to the future of international nuclear institutions, not least the NPT, but also the rules and conditions for gaining access to international nuclear fuels markets, particularly after the framework for the eventual US-India civilian nuclear deal was announced in 2005.

Drivers and implications of Chinese nuclear policy

China became the fifth state to join the nuclear club and the last to do so before the NPT was signed, when it exploded its first nuclear device in 1964. Since this time Chinese planners have remained committed to deploying a minimum nuclear deterrent capability and the smallest nuclear force possible to meet perceived requirements—principally, threatening to inflict unacceptable damage in response to any attack, rather than entertaining any notions of nuclear war-fighting. Thus, China never built the enormous nuclear stockpiles and the sophisticated delivery systems amassed by the United States and the Soviet Union, and is currently estimated to have a nuclear stockpile of around 260 warheads.⁵ As a result, significant cuts to US and Russian nuclear stockpiles will probably need to be made before China will enter into any disarmament discussions.

In the past decade, the perceived requirements of a Chinese minimum nuclear deterrent capability have begun to shift, and Beijing now appears to be making a concerted effort to upgrade, modernise and perhaps also expand its nuclear forces. The main reason for this is a transformation in US policy that has seen a strong shift towards greater reliance on non-nuclear capabilities for deterrence as part of a New Triad of strategic forces. While this transformation is ostensibly about providing a more flexible suite of capabilities to deal with the nuclear challenges posed by so-called “rogue states,” these developments have caused alarm in China too, particularly about the credibility of an assured second nuclear strike capability. As Taylor

Fravel and Even Madeiros explain:

...concerns about maintaining a credible second strike [nuclear] force are driven by the U.S. military's development of a trifecta of nonnuclear strategic capabilities: (1) missile defences, (2) long-range conventional strike, and (3) sophisticated command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) assets to locate and target China's nuclear forces. The combination of these three capabilities, in the eyes of the Chinese, provides the United States with the ability to eliminate China's deterrent in a crisis without crossing the nuclear threshold, reopening the door to coercion of China.⁶

While these capabilities remain limited for now, the Chinese fear that a rapid expansion—both qualitatively and quantitatively—in the future could undermine the mutually assured deterrence relationship with the United States, and therefore curtail Chinese freedom of action in the region.

The result is that China has begun to rethink what is required for deterrence, and particularly the types of nuclear capability needed to survive a non-nuclear attack and overwhelm any ballistic missile defence. The need for more flexible and capable nuclear forces will raise questions for China's hitherto relaxed nuclear posture, particularly whether missiles and warheads can remain routinely de-mated, and if a policy of nuclear No First Use can be continued (especially with the introduction of the Type-094 nuclear-armed submarine). It is also difficult to see how these perceived pressures will not lead to a more diversified and larger Chinese nuclear force. However, while Chinese nuclear capabilities are principally about retaining a survivable force vis-à-vis the United States, such moves will also be met with concern by other states too. They may well drive further Indian nuclear expansion, with knock-on effects for Pakistan, the South Asian nuclear balance, and so on. But it is also likely to concern other actors to the north and east of the region, specifically Japan, South Korea and Taiwan—nations already concerned about what they perceive as expansionist Chinese tendencies.⁷ The implications for these states, and concurrently for US policy, is dealt with later in this essay.

Understanding the North Korean nuclear challenge

North Korea is the only state to test a nuclear weapon in the 21st century, and for many experts and commentators remains the number one nuclear proliferation challenge of the second nuclear age. It also typifies the inherent and intrinsic problems facing the international community in preventing a determined state from acquiring a nuclear capability. While Pyongyang's pursuit of a nuclear weapon can probably be traced all the way back to the 1970s, substantial international sanctions as well as chronic internal problems due to its pariah status have meant that it did not conduct its first nuclear test until 2006. However, since this time North Korea has conducted a further four nuclear tests (2009, 2012 and two in 2016), and has engaged in sabre-rattling and provocative rhetoric with its immediate regional neighbours, and especially its chief enemy, the United States. As of 2016, experts believe that Pyongyang may have built six to eight low-yield nuclear devices, have the requisite facilities and technical knowhow to either enrich uranium or reprocess plutonium to build more,⁸ and have a range of missiles of which these could be delivered to their targets.

Given the nature of the North Korean regime it is difficult to know anything for certain, but it is likely that its nuclear ambitions have been driven by a mixture of internal and external dynamics. Perhaps chief amongst these is the ever-present threat of attack from the United States and its regional allies, a fear that never went away after the Korean War of the early 1950s, and which was exacerbated by the deployment of US tactical nuclear weapons in South

Korea until 1991. A second reading is that a nuclear capability enhances the prestige of the country and the regime, and is the embodiment of North Korea as a modern, advanced state. Lastly, and linked to this, a nuclear weapons capability may be driven to some degree by domestic politics, and particularly the perceived need of the leader(s) of the regime to demonstrate to its citizens its power and strength. This appears to be especially true since the accession to power of Kim Jong-un in December 2011.

What is even less clear—thanks largely to the nature and limited understanding of the regime in Pyongyang—are North Korean intentions, and whether a nuclear North Korea will “play by the same rules” as the other nuclear powers. The main concern here regards the rationality of the leadership, which, given the highly centralised power structure in North Korea, exacerbates the chances of miscalculation or inadvertent escalation. This perception has been highlighted by aggressive recent North Korean actions—such as the sinking of the South Korea naval vessel *Cheonan* and the bombardment of Yeonpyeong island in 2010—as well as increasingly inflammatory rhetoric about the United States, including a threat to “wipe out Manhattan” in March 2016.⁹ But at the same time, other analysts believe that the North Korean regime's main objective is survival, that it accepts a condition of mutually assured destruction, and understands that any use of nuclear weapons would mean near obliteration. This apparent contradiction is summed up well by Denny Roy:

The first theory is that the leaders of North Korea are irrational or desperate, and their actions are strategically senseless. If this is the case, other Asia-Pacific

“US extended deterrence guarantees have been a key reason why more Northeast Asian states have not chosen to fully pursue nuclear weapons programmes. However, the security calculations of these states have begun to change in recent years.

governments will be unable to surmount their disagreements with Pyongyang through agreements and cooperation. They must also expect and prepare for hyper-aggressive and suicidal North Korean policies. A second common view holds that North Korean leaders believe they need an external enemy for domestic political purposes. They therefore engage in self-alienation to ensure continual tensions with the outside world. According to this view Pyongyang will never give up its nuclear weapons or reconcile with its adversaries. A third theory is that fomenting crises serves two basic North Korea objectives: security and extracting concessions. Pyongyang believes the risks of a tension-raising policy are acceptable given the potential rewards and lack of other options.¹⁰

The problem is that the United States, its regional allies, as well as Russia and China, are increasingly being forced to think about the worst-case scenario. The lack of trust between Pyongyang and its immediate neighbours has been further eroded by accusations that North Korea has supplied both nuclear and missile technology to other rogue actors across the globe.

US extended nuclear deterrence and the threat of regional proliferation

The final key dynamic in the Asian region, and the one that impacts on and shapes all the other

challenges described above, is the role of the United States. The United States has long been the “offshore balancer” that has underpinned Asian nuclear order, predominantly in the east, but also increasingly in the south too. This plays out in three different ways: 1) the stance taken toward states in the region regarding civilian nuclear energy and cooperative agreements; 2) the importance of the United States as a threat for North Korea and China; and 3) the extended nuclear deterrence guarantees provided to certain states in the region. This section focuses on the role of US extended deterrence to a handful of key regional players and particularly the growing threat that these states could choose to “go nuclear” in the near future.

US extended deterrence guarantees have been a central part of the Northeast Asian security architecture for decades, and are arguably a key reason why more states have not chosen to fully pursue nuclear weapons programmes. In fact, both South Korea and Taiwan had nuclear weapons research programmes in the 1970s that were curtailed thanks in part to security guarantees from Washington, and a strong alliance with the United States has meant that while Japan has long had at least the theoretical potential to produce a bomb in a relatively short period of time, it has chosen to forego this option. However, the security calculations of these states, and particularly the possible value of an indigenous nuclear weapons capability, have begun to change in recent years due to a growing concern about both Chinese and North Korean regional ambitions, and at the same time a loss of confidence in the United States to uphold and carry out their protective guarantee. Concerns about the credibility of the US nuclear assurance have been buttressed by the anti-nuclear agenda of President

Barack Obama and by a longer-term trend in US deterrence thinking to augment and even supplant nuclear weapons with advanced conventional weapons. This perception has been further clouded by the stance taken by then Republican nominee and now President-elect Donald Trump, which could mean the United States reducing its defence budget by encouraging its allies, especially Japan and South Korea, to build nuclear weapons.¹¹

The problem that the United States faces is that it must balance three often competing but also constitutive sets of nuclear priorities in the region: First, addressing the challenge posed by North Korea and ensuring that Pyongyang is deterred from destabilising actions; second, attempting to formulate a workable relationship with China while at the same time retaining strategic nuclear stability; and third, reassuring US allies against both North Korean action and the perception of increasing Chinese influence and power across the region. As I have argued elsewhere with Benjamin Zala:

...the way in which the US seeks to mitigate this cleavage between North Korea/China and the 'status quo' traditional US allies in the region is likely to have far reaching consequences for the 'pivot' eastwards and for the US-led nuclear non-proliferation agenda more broadly.¹²

Given the uncertainty that surrounds the future of US foreign policy after the 2016 election, the lack of clarity regarding the ongoing "pivot" to Asia, and the broader perception that the United States as a global power is in decline, it remains to be seen how these pressures will be balanced and nuclear politics will play out. While it may not currently be likely, it is certainly not impossible to see a proliferation cascade in Northeast Asia should the security environment become more acute in the years ahead.


Conclusion: The Asian nuclear century

During the first nuclear age, world attention focused on Europe, and the delicate balance of terror between the United States, its NATO allies and the Soviet Union. But the focus of the incipient second

nuclear age will unquestionably be Asia. The Asian continent is home to most of the world's current nuclear powers; is the most likely region for future nuclear proliferation; and is perhaps of the most concern when it comes to possible future nuclear use. To be sure, nuclear politics are likely to play out in different ways in the south and east of the region; inadvertent escalation, miscalculation, and the safe and secure command and control of nuclear weapons and material is the greatest risk between India and Pakistan, while proliferation (both horizontal and vertical) is clearly the main threat on the Pacific flank. But while geographically separated, these dynamics will nevertheless continue to be co-constitutive. Indian nuclear strategy will continue to influence Chinese thinking and actions as well as nuclear views in Pakistan, which in turn will likely drive instability among China's immediate regional neighbours. Chinese nuclear actions will have a considerable impact both to the south and the east; and US nuclear thinking, politics and strategy will have considerable knock-on effects in the region as it seeks to balance the competing goals of preventing proliferation, assuring allies, addressing the threat from North Korea, shaping a strategic relationship with China, and maintaining an even hand in South Asia. The role of Russia in the nuclear politics of the region will also loom large. Indeed, "great power" nuclear tensions between China, Russia and the United States seem most likely to play out in Asia in the coming century.

We should not take it for granted that nuclear politics will play out in the future Asian context in the same ways that they did in the past in Europe, and there is reason to believe that nuclear deterrence and nuclear geopolitics will become more, rather than less, complex in the years ahead. Three of the main players in the Asian nuclear context stand outside of the NPT; at least two states have the potential to develop a nuclear weapons capability in a short period of time; North Korea is unlikely to disarm any time soon; and the future role of the United States as regional nuclear balancer is increasingly uncertain. Add to this milieu a new suite of advanced weapons technologies with strategic potential, such as missile defence, precision strike weapons and cyber-attack capabilities, and the aspiration

of a world free from the threat of nuclear weapons seems a long way away—if anything, nuclear weapons are becoming *more* and not *less* important in Asia. Taken together it appears that we are

confronted with a complicated and unpredictable future strategic nuclear environment that may require new ideas and new thinking if the Asian nuclear century is not be our last. 

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- 1 This of course excludes Israel, which has never publicly admitted to having a nuclear weapons capability.
 - 2 Feroz Hassan Khan, "Challenges to nuclear stability in South Asia," *The Nonproliferation Review* 10, no.1 (2003): 62.
 - 3 For an up-to-date estimate of Indian and Pakistani nuclear forces, see "The nuclear notebook" produced by the Bulletin of the Atomic Scientists: <http://bos.sagepub.com/cgi/collection/nuclearnotebook>.
 - 4 See Zafar Khan, "Cold Start Doctrine: The conventional challenge to South Asian stability," *Contemporary Security Policy* 33, no. 3 (2012): 577-594.
 - 5 See "The nuclear notebook."
 - 6 Taylor Fravel and Evan Medeiros, "China's search for assured retaliation: the evolution of Chinese nuclear strategy and force structure," *International Security* 35, no. 2 (2010): 83.
 - 7 Lora Saalman, "Introduction," in *The China-India nuclear crossroads*, ed. Lora Saalman (Washington, D.C., The Carnegie Endowment for International Peace: 2012), 2.
 - 8 See David Albright, "Future directions in the DPRK's nuclear weapons program: three scenario's for 2020," US-Korea Institute at Johns Hopkins School of Advanced International Studies, February 2015, http://38north.org/wp-content/uploads/2015/09/NKNF_Future-Directions-2020.pdf.
 - 9 See Anna Fifield, "North Korea claims it could wipe out Manhattan with a hydrogen bomb," *The Washington Post*, March 13, 2016, https://www.washingtonpost.com/world/asia_pacific/north-korea-claims-it-could-wipe-out-manhattan-with-a-hydrogen-bomb/2016/03/13/3834cd54-e919-11e5-b0fd-073d5930a7b7_story.html?tid=sm_tw.
 - 10 Denny Roy, "Parsing Pyongyang's strategy," *Survival* 52, no. 1 (2010): 111-112.
 - 11 Gene Gerzhoy and Nick Miller, "Donald Trump thinks more countries should have nuclear weapons: here what the research says," *The Washington Post*, April 6, 2016, <https://www.washingtonpost.com/news/monkey-cage/wp/2016/04/06/should-more-countries-have-nuclear-weapons-donald-trump-thinks-so/>.
 - 12 Andrew Futter and Benjamin Zala, "Coordinating the arm swing with the pivot: nuclear deterrence, stability and US strategy in the Asia-Pacific," *The Pacific Review* 28, no. 3 (2015): 368.

SMALL POND, BIG NAVIES: MANAGING COMPETITION IN MARITIME ASIA

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NAVIES, and the competitions between them, are shaped by their strategic context, but have an important role in shaping that context too. Discussing the issue of how best to manage maritime competition in the Indian Ocean therefore requires a look at that strategic context and the way it affects navies, together with analysis of how the challenges it poses might be managed.

The Overall Context

When speaking of the Indian Ocean region (IOR), analysts sometimes use the word 'competition' to denote the fact that maritime engagement in the IOR clearly has both cooperative and competitive connotations, the former conducive to peace, the latter potentially leading to conflict. The peace and prosperity of the region demands that cooperative maritime engagement be encouraged and competitive engagement be managed and discouraged.

One vision of the future implies a recreation of the ancient pre-colonial past. Broadly,¹ the Indian Ocean area was the an 'uncommanded' sea, an area that was once largely free of great power naval rivalry and was instead the scene of a sea-based trading system that united the peoples of the whole area, from the Eastern Mediterranean to Southern China, in common commercial and cultural endeavour, and in which India, simply as a function of its geography, was the natural centre. At least at first glance, the general peacefulness of this maritime system seems to confirm the ideas of the Manchester School that free trade was and is a universal good in that the more nations trade, the more they prosper and the less they fight.

This is also the idea behind such visions as SAGAR (Security and Growth for All in the Region) as first outlined by Prime Minister Modi in Mauritius in March 2015.² In this speech and subsequently, Modi called for regional cooperation in developing the 'blue economy', for the harmonisation of maritime interests and for the cooperative

defence of maritime security by the IOR countries. The interests of extra-regional powers would be recognised and accommodated through a climate of trust and transparency and adherence to the disciplines of a rules-based order. This achieved, maritime disputes would be resolved and prosperity and peace would follow.

In turn, this would confirm the sea in its role as a strategic enabler, something that joins nations rather than a fence or a barrier that divides them. But, conversely, if that blue economy and sea-based trade is threatened by instabilities of various sorts the sea could well become an arena for increased maritime competition, disorder at sea and international tension. Instability, both ashore and at sea, can threaten trade and, importantly, the conditions for trade, whether it does so directly by threatening the good order at sea on which the safe passage of merchant ships depend, or indirectly by undermining the legal, social and economic conditions ashore that allow trade deals to be struck in the first place and then executed. There seem to be three main sources of instability that could have this effect:

- Challenges to free trade
- Chaos in the littorals
- Inter-state competition

Each source of instability will be discussed in turn, together with a review on how each might best be handled. It will be seen that each has significant consequences for the region's navies and that naval development and behaviour are part of the problem, but part of the solution too.

Challenges to free trade

Globalisation was supposed by its advocates to usher in an age of peace and prosperity by giving everyone a stake in success and interest in the efficiency and security of the world trading system, whether as consumers looking for reduced costs of living, commodity suppliers, or makers of components used in distributed international manufacturing processes. Further, this meant the world's navies had to work together to defend the trading system against such threats as piracy and other forms of transnational crimes at sea, instability and natural disasters ashore, and inter-state conflict. Navies, it was argued, were now entering a new era of cooperation at sea.

The South Korean shipping firm Hanjin, however, based its plans on the widespread assumption that international trade would keep on growing and had to file for bankruptcy when it became clear that trade was not in fact expanding. In the second quarter of 2016 it, in fact, fell by 0.8 percent, amidst lower consumption and investment. As a result, many of the world's 20 million containers and the ships to transport them were not needed.³ Free trade seems to be in trouble, as the World Trade Organisation's Doha round talks failed, and the Trans-Pacific Partnership flounders. China, like other major economies, is now making more of what it consumes and consumes more of what it makes. New restrictions are being put into place. The asymmetric effect of these restrictions will increase tension between states.⁴ There is likely to be increased competition for resources and even serious talk of trade wars.

Many have lost of faith in the very idea of globalisation. Neo-liberalism has benefitted capital much more than labour and so has led to greater social inequality.⁵ In turn, this has sparked a rise in populist anti-globalisation sentiment from Donald Trump in the United States, to Jeremy Corbyn and the Brexit vote in the United Kingdom. In the 2016 US presidential election even Hillary Clinton, the principal architect of the Trans-Pacific Partnership, was forced to back away from the project.⁶ The addition to this of a xenophobic nationalism empowered by the social media makes for a toxic mixture.

An additional problem for the IOR is that much of the trade in the area simply passes through it, perhaps with some trans-shipment in ports such as Colombo South to add value. Regional trade is only some 20 percent of the whole and much of that is between India and Australia.

In their doctrines, most navies emphasise the importance of the defence of sea-based trade against piracy, other illicit activities at sea and the possibility of an adversary seeking to interfere with it. But increasing doubts about the long-term future of free trade could well have the effect of reducing the incentives for navies to cooperate in defence of the system against the many things that threaten it, a requirement which has done much to improve inter-state relations since the Second World War. The less they enter into partnerships to defend the sea-based trading system, the more likely would maritime competition seem to be.





Solutions to the challenges of free trade?

It follows from this that there are two channels by which free trade and the cooperative maritime regime that is associated with it might be defended against the many challenges that confront it. The first is the very general response of greater efforts in tackling the rise of protectionist sentiment around the world. The second is to focus on the development of economic interdependency in the IOR. The first response is to defend globalisation; the second to develop what some have called 'glocalisation.'

The fact that much of India's energy requirement is sourced in the Gulf and Middle East and that perhaps half of India's merchandise, and a third of its overall trade passes through Southeast Asian waters gives India major interests in the stability of that area and explains why the country takes a leading place in the discourse on, and defence of, good order at sea. In the future this interest is likely to extend further into the Western Pacific in support of the country's Look and Act East narrative. To a lesser extent these considerations apply to most of the other major economies of the region as well.

Accordingly, they all have an interest in the defence of globalisation against the tide of protectionism that seems to be threatening it. Much of how such campaigns to 'hold the line' in defending the global sea-based trading system is beyond the limits of this paper, but the development and effective communication of an inclusive trade agenda that delivers opportunities for sections of the community who have hitherto suffered the consequences of change would certainly seem to be an important part of it.

In other respects, the requirement would seem to be for Indian Ocean states to do their utmost to retain and/or develop open trading relationships with the rest of the world as much as they can. Historically India has taken something of a lead here. India's Look East Policy was initiated by Prime Minister Narasimha Rao in the early 1990s as part of the country's economic reform package. Its immediate aim was to promote India's economic linkages with ASEAN and Indian-ASEAN trade has since greatly expanded. In 2014, Modi extended this to an Act East Policy, which deepened the linkages strategically and extended them to South Korea, Japan, Australia and the Pacific Island countries. At the Indian Ocean Conference

2016, India's Foreign Secretary S. Jaishankar summarised it thus: "For the Indian Ocean to attain its true potential, it is imperative that India, which is the centre of gravity, should be a facilitator rather than an obstruction. That requires a smoother movement of goods and people within India but also to its immediate neighborhood and beyond."⁷

This inevitably raises the question of how local states should react to the ambitious One Belt, One Road project currently being advanced by the Chinese. If the resultant economic dependencies really do go both ways in a manner which prevents China from using them as a form of strategic leverage, and if the detailed projects make economic sense when appraised objectively, there is much to be said for a policy of cautious engagement and for seeing this project as an opportunity for increased trade and reduced tension rather than a threat, but the caveats are nonetheless important. They no doubt help explain the existence of alternative visions of Asian integration, not least India's 'Project Mausam.'

Part and parcel of this is the need to develop economic cooperation *within* the IOR—so-called 'glocalisation.' Such measures might include campaigns to improve the 'Ease-of-Doing Business' scores that local countries have; the creation of production networks between countries that are drawn together through their association with the different parts of the manufacture and assembly of products; and improvements in physical connectivity and logistic systems. The cooperative development of the generally comparatively neglected 'blue' sections of the economies of Indian Ocean states would clearly be central to any such campaign.

To the degree they were successful, both campaigns would have the consequence of extending and developing the opportunity for navies to partner in defence of sea-based trading, an activity which encourages multilateral naval cooperation and which reduces the prospects of competition.

Chaos in the littorals

'Chaos in the littorals' was a term invented in order to denote situations of instability ashore in which criminal activity and international terrorism could flourish, leaching out onto the open sea in ways which could undermine the good order at sea on

which sea-based trade and regional peace and prosperity depends. The collapse of legitimate authority in Somalia has had that effect for some years in the growth of piracy at sea and of Al-Shabaab ashore. The currently growing problems in the Sulu and Celebes seas where the navies of the Philippines, Indonesia and Malaysia are struggling to cope with the activities of the ruthless Abu Sayyaf terrorist group, Sabah insurgents and widespread criminal activity at sea are another example, and the unfolding tragedy in the Yemen provides a third. They all have pronounced implications for good order at sea in general and navies in particular. In the latter case, for example, missiles have been fired at merchant ships and US warships and Saudi Arabia has taken control of the strategically sensitive Perim Island lest it fall into the hands of the Houthi rebels. This case also illustrates the point that local disorders of this sort can easily suck in contending countries (in this case Saudi Arabia and Iran) in a way which increases tension and naval competition.

Climate change and natural disasters in a region at once traditionally prone to them and acutely vulnerable because of its many island communities and densely populated, often low-lying, coastal regions can also be a major source of instability ashore and present a radical challenge to the oceanic order. The health of the Indian Ocean itself is at serious risk in ways which also threaten regional security.

Solutions to instability ashore?

The first, main and obvious response to the challenge of actual or potential local instability is sufficient economic development to head off social tensions or environmental disasters before they have a major destabilising effect. Addressing the haphazard urbanisation and defective infrastructure of so much of the Indian Ocean coastline should arguably be the first priority.

But navies have a major role to play here too, especially if they are able to cooperate in defence of the maritime order much like the way they have in the counter-insurgency and counter-drugs operations taking place off the coast of Somalia and in the Arabian Sea. In this sense navies and coastguards too, act as 'security providers.' The 2015 naval strategy publication 'Ensuring Secure Seas: Indian Maritime Security Strategy'⁸ reveals an emphasis on

the safety and security of seaborne trade and energy routes, on ensuring the freedom of navigation and on helping to maintain the law of the sea. All this requires cooperation with other navies in dealing with common threats at sea, humanitarian disasters, and the need where necessary to evacuate non-combatants from conflict areas. In conjunction with the coastguard, the navy contributes to search and rescue operations and, in the wake of the 2008 Mumbai attack, to anti-terrorist operations. In these operations the accent is on maritime partnerships with others rather than competition. This is a common theme of navies throughout the region. Developing this kind of multilateral naval cooperation not only meets a clear operational need, but also contributes to the maintenance of the maritime order by mitigating naval competition.

Briefly to reverse the title of this paper, here the problem is rather 'big pond, small navies.' Effectively, it is where the level of naval effort is insufficient to maintain authority over the sea that problems arise, such as off Somalia and in the Sulu/Celebes seas. In consequence, the Indian and other major navies of the region together with external naval powers devote particular effort to capacity-building, which, by providing local navies with the tools to control their littorals, helps reduce the instabilities which can so easily lead to international rivalries and tensions.

Inter-state competition

Finally, it would be naïve to ignore the future possibility of dangerously increasing tensions between India and Pakistan, between the United States and China, between China and India, Saudi-Arabia and Iran and so on. In such a maritime area as the Indo-Asia-Pacific region, it is hardly surprising that many of these issues should themselves be maritime. For this reason, naval planners throughout the region feel they have a duty to 'engage' in worst case analysis, and to produce as strong a force as they can in order to minimise strategic risk. Inevitably this produces security dilemmas where one country's defensive measures seem to justify its neighbour's responses in an endless chain of action and reaction. This leads to a retreat from collaborative engagement and a slide into heightened tensions

“Many issues dividing regional countries seem intractable. Experience from the wider Indo-Pacific area, however, suggests that there are behavioural and institutional means by which their maritime consequences can, to some extent, be managed.

and de-stabilising arms-racing. Concern about the arrival of China into the Indian Ocean, and its possible implications for India given its tensions with Pakistan, provides a clear example of this, especially given the close interest in the matter taken by the United States, Japan and Australia.

An open debate about the legitimacy, intentions and role of ‘outsiders’ in local seas (whether it be the United States and India in the East and South China Seas or China in the Indian Ocean) could well usefully shine a torch in such dark places. Thus, India, generally concerned about China’s growing naval presence in the Indian ocean area and alarmed about the surprise appearance of a PLA Navy SSN in a Chinese operated section of a Sri Lankan port, has specifically warned: “What we are beginning to see is the unfolding of China’s desire to be a maritime power...If a submarine docks in a port where a submarine has never docked before from that country, it cannot be a development without repercussions.”⁹ In a similar vein, the announcement in November 2016 that China intends to create a ‘naval base’ in Djibouti re-awakened fears that China was indeed in the process of setting up its much-discussed ‘string of pearls’ across the Indian Ocean in defence of its general trading interests in and across the area. Given that for years China has roundly condemned the establishment of such foreign bases as inherently aggressive, this reversal of view has, rightly or wrongly, caused some alarm in Delhi and elsewhere, and has been at least partly responsible for India’s development of closer naval relations with the United States, Japan and Australia.¹⁰

Continuing uncertainties about the likely role of the United States under President Trump add to the complexity of this issue.

Inter-state maritime competition: Solutions?

Many of the issues dividing regional countries seem intractable and so, unlikely to be resolved in the foreseeable future. Experience from the wider Indo-Pacific area, however, suggests that there are behavioural and institutional means by which their maritime consequences can, to some extent, be managed.

Perhaps oddly, the first recommendation here is that the maritime nations of the IOR maintain a level of naval and coastguard capability that is consistent with their maritime interests, which many do not. It is in the imbalance between commitments and resources that gaps exist which may be exploited by the malign in ways that de-stabilise relationships. India’s naval construction programme and its new doctrine aim to deal with this, and other nations are following suit. *Ensuring Secure Seas* does this by establishing clear naval aims that are consistent with the foreign policy objectives of the government in a manner which helps identify their military-technical requirements in terms of platforms, weapons and sensors. The final stage in this process is to assemble these requirements into a coherent and affordable construction programme designed to deliver the necessary capabilities in good time. This sounds obvious and easy, but is neither. Other IOR countries, well aware of the security consequences of mismatching resources and commitments, are endeavouring to take the same path.¹¹


This may of course result in close encounters at sea between prospective adversaries. Events in the South and East China Seas, however, point up the value of agreed ways of handling potential incidents

at sea. Tactical actions at sea which endanger life and violate the basic rules of the road have a high risk of being counter-productive. It may be better to direct high pressure water at the bridge and communications equipment of the other side in some stand-off at sea than to shoot at them, but it is still inherently dangerous. It could easily result in the victim, either at sea or ashore, losing control of the situation and doing something escalatory. It will often poison relationships afterwards as well, affecting the perceptions and assumptions that the parties have of each other. In perilous situations (as potentially all situations at sea are) control and restraint should be at a premium and competition in risk-taking frowned upon. Accordingly, continuous and unconditional participation in professional discussions to avoid and manage incidents at sea seems wise.

Likewise, full-scale, unconditional naval engagement even of possible adversaries in the whole gamut of naval interaction—ranging from ship visits, staff college exchanges through to participation in shared exercises at sea—do much to lessen tension, to develop greater transparency and to compensate for the perhaps inevitable requirement of naval planners to cater for the worst case.

The provision of a variety of neutral arenas in

which the protagonists can ventilate and discuss their differences seems advisable too. There is of course the often-heard criticism that the Indo-Pacific region as a whole has too many such institutions, producing an alphabet soup of acronyms for talking shops which achieve very little. But this misses the point that a plurality of sea-related institutions provides for a wider range of options, allows for the breadth of issues that are now embraced within the apparently limitless concept of maritime security to be dealt with, and more opportunities for the smaller powers to participate. Finally, as Churchill once said, for all its faults, “jaw, jaw is better than war, war.” One of the key differences between the situation now when compared to that before the First and Second World Wars, which were likewise periods of economic strain in which the international order was changing with some countries rising and others falling, was that today’s processes take place within a constellation of debate and discourse about maritime cooperation. This kind of constructive maritime engagement, in short, has its undoubted limitations but it is still infinitely preferable to the alternative.

None of these recommendations will of course end maritime competition, but they should at least do something to mitigate its destabilising potential. 

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- 1 There are exceptions to this vision. The maritime career of Zhneg He remains contested despite the best efforts of the Chinese. Geoff Wade, “The Pre-Modern East Asian Maritime Realm” in *The Sea, Identity and History: From the Bay of Bengal to the South China Sea*, eds. Satish Chandra and Humanshu Prabha Ray (Singapore: ISEAS, 2013), 102.
 - 2 G. Padmaja “Modi’s Maritime Diplomacy: A Strategic Opportunity,” *Maritime Affairs* 11, no. 2 (2015): 25-42.
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 - 5 Martin Jacques, “The Death of Neoliberalism and the Crisis in Western Politics,” *The Observer*, August 21, 2016. See also the massively successful Thomas Piketty’s *Capital in the Twenty-first Century* which attacks the system’s economic effectiveness.
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 - 10 Christopher D. Yung, Ross Rustici, “Not and Idea We Have to Shun: Chinese Overseas Basing Requirements in the 21st Century,” China Strategic Perspectives No. 7, National Defense University, October 2014, <http://ndupress.ndu.edu/Portals/68/Documents/stratperspective/china/ChinaPerspectives-7.pdf>.
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THE ASIAN SPACE RACE

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Introduction

ONCE seen as the exclusive domain of superpowers, space is becoming affordable for an increasing range of actors. However, like the cyber domain, space, too, is becoming more congested, contested and competitive. Driven by national ambition, geostrategic tensions and burgeoning economic opportunities, Asian countries' space capabilities are developing at an astonishing rate. This is a truly exciting time to be in the space sector, but the implications of the new Asian Space Race may have far-reaching consequences.

The global space sector was worth \$330 billion in 2015 and is one of the fastest-growing industries in the global economy. Today, space services are filtering into almost every aspect of modern life: satellite communications support, internet and TV services, distance learning, telemedicine and asset tracking; earth observation satellites that provide disaster monitoring, fisheries management, crop forecasting

and urban planning; precision, navigation and timing signals that are used for navigation in ships, aircraft and land vehicles, but which also support a range of public transport and taxi apps; these signals are also now widely used for financial transactions.

Once dominated by government agencies, 76% of revenue in the space sector is today generated by commercial activities. This has been achieved through the continued miniaturisation of electronics, which has permitted the construction of mini-satellites—'cubesats'—with capabilities previously only seen on much larger platforms. As a consequence, satellite manufacture and launch have become affordable for a greater number of nation states (70 states now consider themselves to be 'space-faring nations') and falling costs are also attracting an increasing breadth of commercial organisations to the space sector (even small to medium enterprises and universities). Indeed, the commercial space sector is experiencing something of a revolution as 'NewSpace' pioneers, new companies funded by wealthy entrepreneurs, have sought to upend the



established commercial space sector, which they consider to be too slow and unambitious.

Other innovations, like the upcoming launch of the OneWeb mega-constellation into the Low Earth Orbit (LEO), are also important advances in the space industry. This 680+ satellite constellation aims to provide affordable broadband globally and helps reach parts of the world that do not currently have access to the internet. Other entities are also proposing similar initiatives. Similar innovations are taking place in earth observation through companies such as Planet Labs, which aims to launch over 100 cubesats, Google's TerraBella and DigitalGlobe, which offers military-grade imagery commercially.¹ If all the mega-constellations planned come to fruition, the total number of satellites in orbit around the Earth will increase to around 8,000. Such plans are only buttressing the impetus to mass-manufacture satellites, which in turn is driving new solutions for cost-effective and rapid access to the LEO through the development of cheaper, reusable launch vehicles and space planes. It is also raising the very serious issues of tracking and removing space debris, space situational awareness and even space traffic management.

Asian space programmes

While much of the attention in the West has focused on high-profile NewSpace entrepreneurs, the Asian space sector is entering into something of a renaissance period. Government space agencies still dominate this market, with Russia and China the most established and active space actors. Both have recognised space as a critical element of the US network-centric warfare concept and have also identified it as America's Achilles heel. They have worked actively over the last fifteen years to close the gap with the United States through investment in space platforms, anti-satellite capabilities and missions in the military, commercial and scientific domains, and by integrating space into a broader deterrence strategy.

China has perhaps the most ambitious space programme in the region and has seen a remarkable string of successes in 2016: it launched a new launch facility in Hainan province; brought out three new launchers; tested space debris removal and on-or-

bit servicing capabilities; launched the world's first quantum communications satellite as well as a new maritime surveillance satellite providing a perpetual gaze over the South China Sea; and undertook a successful 30-day mission to its Tiangong-2 space capsule, paving the way for a permanently manned space station in the 2020s.

Russia has continued to witness success in the commercial space launch market, but President Putin has prioritised military space capabilities over the last fifteen years as he has sought to modernise the Russian Armed Forces. Recent tensions with NATO have spilled into the space domain, and operations in Syria have also highlighted the need for Russia to invest in hyperspectral and earth observation capabilities to help meet the growing demands of its counterterrorism campaign.

India and Japan, too, have developed impressive space expertise. Whilst they have traditionally upheld their commitment to use space for peaceful purposes, both are increasingly leaning towards military space programmes. This is with a view of offsetting the threats posed by regional competitors, predominantly China and North Korea. Similarly, South Korea has been accelerating its indigenous space programme, developing earth observation satellites and an indigenous launch vehicle in response to the developing nuclear programme in North Korea.

A number of smaller Asian nations are also growing space programmes, procuring or developing satellite communication (SATCOM) services and using the cubesat revolution to develop earth observation satellites—and this is being used by larger Asian nations to gain influence and customers for their launch vehicles. Indonesia, for instance, has launched two indigenous satellites, and plans to launch a military SATCOM capability in 2017. South Korea's fledgling space programme is maturing, and it is currently working to develop a national launch vehicle—NARO 2—following the success of the Russian-supported NARO-1 programme. Singaporean companies and universities launched six technology demonstrator cubesats in December 2015 onboard an Indian Polar Space Launch Vehicle (PSLV).²

In addition, there are two multinational bodies operating in Asia. The first is the Asia-Pacific Regional Space Agency Forum (ASPRAF), set up in 1993 by Japan and with 40 member states from

around the Asia-Pacific region but also a number of European states, such as the United Kingdom, Germany and France. The second is the Asia-Pacific Space Cooperation Organization that is led by China, has a fee-paying membership and is a more select grouping.

Japan has been particularly busy helping build space capacity across Asia. For example, the Bangladesh space agency, SPARRO, has been collaborating with the United States and Japan for a number of years now, gaining access to some of their constellations. It now intends to launch its own geostationary communications satellite in December 2017. Bhutan has sent three engineers to train in Japan and is looking to develop an earth observation cubesat, which it will launch in 2018. Similarly, the Philippines launched its very first earth observation micro-satellite in 2016. Developed indigenously with the help of two Japanese universities. Vietnam, too, has had support from Japan to build its national space centre and is co-developing both an electro-optical and radar satellites.

Meanwhile, China, too, has offered combined satellite and launch services to a range of countries. China launched the first communications satellite owned by LAOS, to provide services such as distance education and medicine, telecommunications and internet links, as well as facilitate anti-disaster efforts across the mountainous nation. China partnered with Sri Lankan firm SupremeSat to launch a communications satellite in 2012, and the China Great Wall Industry Corporation will launch a communications satellite for Thaicom in 2019. China has struggled with garnering commercial business, however, as the United States banned the export of its satellites and its satellite components to China in 2011, and US components are an integral component of most communications satellites today.

Regional and global positioning, navigation and timing (PNT) systems

PNT systems are arguably the most important space services. The US GPS constellation was

the first global provider of PNT and has seen a range of countries look to supplement the capability with their own national, regional or global systems. Today, 100% US precision-guided munitions rely on GPS but as mentioned previously, the civilian/commercial reliance on GPS is arguably just as important. Most, if not all, PNT systems are dual use, i.e., they have a commercially available capability and a second signal designed to be more resistant to interference. Almost all PNT systems are interoperable or designed to be complementary. All smart phones designed after 2015 will use both GPS and Russian GLONASS chips, for example. Having access to greater numbers of satellites is useful in heavily urbanised environments or in mountainous regions that are likely to find it difficult to have direct line of sight to a satellite.

GLONASS was the first competitor to the PNT system. It was first launched in 1982 and operating in 1995, but it was in 2001 that Putin personally prioritised the constellation in 2001; in 2003, the second generation constellation GLONASS-M was launched. They have now started building and launching the third generation GLONASS-K.

The Chinese Beidou system continues to expand beyond its borders, providing a regional service with plans to achieve global coverage by 2020. Whilst the American GPS system is a transmit-only capability, Beidou can also receive and retransmit small amounts of data, which means that it also provides a regional (and eventually global) low-rate communications capability for the People's Liberation Army.

As for India, it completed its indigenous seven-satellite regional navigation system. Japan's four-satellite Quasi-Zenith Satellite System, designed to be interoperable with US GPS and provide regional service in Indonesia and Australia, is slated to be operational in 2018.

Space situational awareness (SSA)

SSA is important, as satellites do not have the ability to 'see' where they are travelling. Objects in LEO around the Earth travel faster than 28,000 kilome-

“There is a pressing need to remove some space debris. However, tests showcasing “debris removal capabilities” are viewed with a healthy dose of suspicion: one man’s debris removal capability is another man’s anti-satellite capability.

tres per hour; a collision with another object is likely to cause significant damage. In addition, nation states are liable for any damage caused by a satellite operated from their territory, whether it is nationally or commercially owned. There is no limit to this liability. Objects are therefore tracked in space to avoid collisions. Although there are only some 1,400 active satellites in orbit around the Earth today, there are also defunct satellites floating around, parts of space launchers and other debris that circles the Earth—including, by the by, a spanner lost by an astronaut during a spacewalk on the International Space Station.

Satellite operators will clearly wish to know not only if their satellites are operating safely, but also if other operators are contesting their ability to operate. Space objects are typically tracked by ground-based sensors (mainly radars, to allow all-weather capability). However, it is also possible to use space-based assets. The United States is looking to upgrade its SSA capabilities through the building of a ‘space fence,’ which will allow it to track objects just a few centimetres across. Russia, too, has sought to upgrade its space surveillance network.³ Ten local sites will receive enhanced radar and laser-optical systems to help spot objects down to two to three centimetres. Russia has also proposed to share its data through the United Nations to all space operators, although its proposal has been shot down. At present, the US Joint Space Operations Centre (JSPOC) is the only organisation providing space situational data.

Curiously, China has been very quiet about its national space surveillance network. Analysts have surmised that China repurposes existing facilities and assets to perform SSA, although this was largely

seen to be for the objective of tracking its own satellites rather than to gauge actions and intentions of other satellites in the skies.⁴

Japan has also announced that it will dedicate part of its National Defense forces to monitoring space debris and protecting its satellites from 2019 onwards.⁵ The military force likely drawn from the Japanese Air Self-Defense Forces will also work with their US counterparts to share data and enhance cooperation in space.

Debris removal capabilities

With so much debris flying around LEO and mega-constellations looking to launch in the next two years, there is a pressing need to start to remove some of the space debris. However, under the UN Outer Space Treaty, a nation state is responsible for the safe operation of its own satellites, which means no other nation state can remove it without the owner’s permission. As a consequence, tests showcasing “debris removal capabilities” are viewed with a healthy dose of suspicion: one man’s debris removal capability is another man’s anti-satellite capability.

Again, Asian regional powers have attempted to find solutions, ranging from China’s Aolong-1 satellite with a robot arm meant to remove space debris, to Russia’s series of mysterious manoeuvres with its Luch satellite, to Japan’s KITE that attracts debris, and will be running a test in 2017. Japan even has commercial offering—the ELSA satellite—that identifies a piece of space debris, sticks to it, then drags it out of orbit with both burning out upon re-entry into the Earth’s atmosphere.

On-orbit refuelling

China tested on-orbit refuelling in the LEO in June 2016 when its first satellite-to-satellite refuelling system was launched. Only the United States has successfully undertaken on-orbit refuelling of satellites. US companies such as ATK Orbital are keen to start offering on-orbit services from 2020 onwards.

The US Defence Advanced Research Projects Agency plans to launch a larger, more sophisticated craft for the US Air Force in 2020. The Phoenix in-orbit servicing programme, currently delayed due to technical and cost concerns, will also be able to carry out jobs such as repairing, upgrading and refuelling ageing satellites. It would even be able to “turn foreign satellites into US spy satellites,” according to the US Air Force.

While this technology offers practical advantages, not least among them that it will extend the life of valuable (and expensive) platforms, very same technology can be used for nefarious purposes. It is difficult to retain international confidence in the adoption of new technologies if these systems are used to damage another state’s platforms. The situation becomes even more complex where commercial satellites are involved. These platforms are often providing services for government agencies or carrying government payloads, in which case they may well be legitimate targets according to the Laws of Armed Conflict. However, given the fragile nature of the space environment, it behoves every state to act responsibly in order to avoid polluting entire orbits.

Space launches

Overall, Asia is proving to be the most active continent in terms of space launches. China successfully launched 21 vehicles of the 83 launched in 2016, just one less than the United States, while Russia launched 18 vehicles successfully out of 19. India added another seven launches to the Asian total in 2016, its PSLV proving a very reliable and cost-effective means of launching large numbers of small satellites into the LEO. With launch costs as little as \$20million per launch—a fifth of Ariane 5 launch

costs and a third of the cost of SpaceX’s Falcon X space launcher—the Indian PSLV looks to be well positioned to take advantage of a lucrative LEO market in the next few years. In fact, PSLV is set to launch a record 83 satellites in January 2017.⁶

In May of last year, as a step towards developing a reusable launch vehicle that can return to the earth’s surface after having launched a spacecraft into orbit, India tested indigenous technology demonstrator of a reusable launch vehicle.⁷ While the flight only lasted around 20 minutes, it proved a number of technologies, such as autonomous navigation, guidance and control, reusable thermal-protection system, and re-entry mission management for this robotic spaceplane.

Elsewhere, Japan conducted four H-IIA launches throughout the year, including 16 satellites on 9 December, as well as the second launch of its Epsilon solid-fuel launcher, designed to launch scientific satellites, into the Medium Earth Orbit. It continues work on its H-III launcher, which should launch in the early 2020s.

Manned, lunar and deep space missions

Although civil in nature, many of the Asian manned, lunar and deep space missions are maturing. These are likely to also have geopolitical ramifications, not least because in China many of these missions are also run by the People’s Liberation Army.

According to a recent “White Paper on China’s Space Activities in 2016,”⁸ China made a successful trip to asteroid Toutatis in December 2012, a soft landing on the moon in 2013 with the Chang’e-3 lunar probe and is planning a return to the moon in 2017 to collect a sample with Chang’e 5. This will be followed up with a mission to the far side of the moon in 2018. It plans to send a mission to Mars by 2020 to carry out orbiting and roving activities. It also states ambitions for asteroid exploration and a Jupiter fly-by.

Japan, too, has conducted lunar missions. In 2007, as part of the SELENE mission, a lunar orbiter Kaguya observed the moon for over a year and crash-landed in 2009 at the end of its mission. Japan is planning a lunar rover mission SELENE-2 in 2017 and a sample-collection mission SELENE-3

in 2020. Looking further afield, Japan has already conducted missions to observe a comet, Mars and Venus in 2015. It plans to return to Mars in 2018 with an orbiter and a rover.

The Indian lunar mission is known as Chandrayaan. Chandrayaan-1 was launched in 2008 with the aim to map the moon. Amongst its many notable successes was the discovery of water on the moon, which will be vital for human life support in the event of the establishment of a lunar base. A follow-up mission will be launched in 2017, and will deliver a lunar rover. India's Mars Orbiter Mission Mangalyaan⁹ is currently celebrating its first year. A follow-up mission is expected some time in the period of 2018 to 2020. Follow-up missions to Venus and an asteroid mission have also been touted.¹⁰

In conclusion

Space underpins much of modern life, so much so that it is now considered a critical national infrastructure in some parts of the world. The sector is undergoing some dramatic changes. In the West, this change is driven by the commercial sector whereas Asian space programmes still remain largely government-driven. However, the sheer range and ambition of Asian space programmes is breath-taking and there is no sign that the pace of activity is slowing—quite the opposite.


China is rapidly closing the gap with the US with a series of ambitious projects and demonstrating extraordinary breadth and depth of expertise in military, commercial and scientific projects. It has developed a number of anti-satellite technologies, predominantly to deter the United States, but will itself become more vulnerable to anti-satellite attacks as its space infrastructure expands.

Russia continues to demonstrate its expertise in space launch, missile systems and electronic warfare. It has not invested heavily in its own satellite infrastructure beyond GLONASS but, despite some problems with reliability, continues to be a signifi-

cant player on the international launch market and therefore crucial to the development of the global space community.

Japan, India and South Korea are keen to exploit the commercial and technological advantages, but are also investing steadily in a range of government programmes in response to increasingly bellicose neighbours. Unlike European counterparts who have opted to develop large-scale space projects through multinational organisations such as the European Space Agency, India and Japan have national ambitions for deep space, although they remain committed to international collaboration. India, in particular, looks well-poised to exploit the commercial space launch market. Its recent proposal to release satellite imagery data to the commercial sector in order to help drive a new market in data services is an inspired innovation.

The next five years will see a number of nations move towards lunar and deep space missions. If geopolitics continue to remain tense here on Earth, space missions are likely to be seen increasingly as expressions of that competition. While competition may well spur nations to speed up their plans for space in the short term, it could be extremely destructive in the long run. Furthermore, deep space missions are likely to be unmanned or robotic in the first instance. This lowers the risk calculus for would-be aggressors. A smashed robot is frustrating but unlikely to be the reason for a state to retaliate. Governments, commercial and scientific organisations will therefore need to be cognisant of the broader geopolitical environment in which they may be operating and take necessary precautions.

As the number of actors in space increases, it will become increasingly important for the international community to agree on space situational awareness, space traffic management and space debris removal in order to allow continued access to this important global common. However, the difficulties in trying to establish international norms in the cyber domain suggest that this will be far from simple. 

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BREAKING RANKS WITH ASIA: THE CASE FOR ENCRYPTING INDIA

Bhairav Acharya

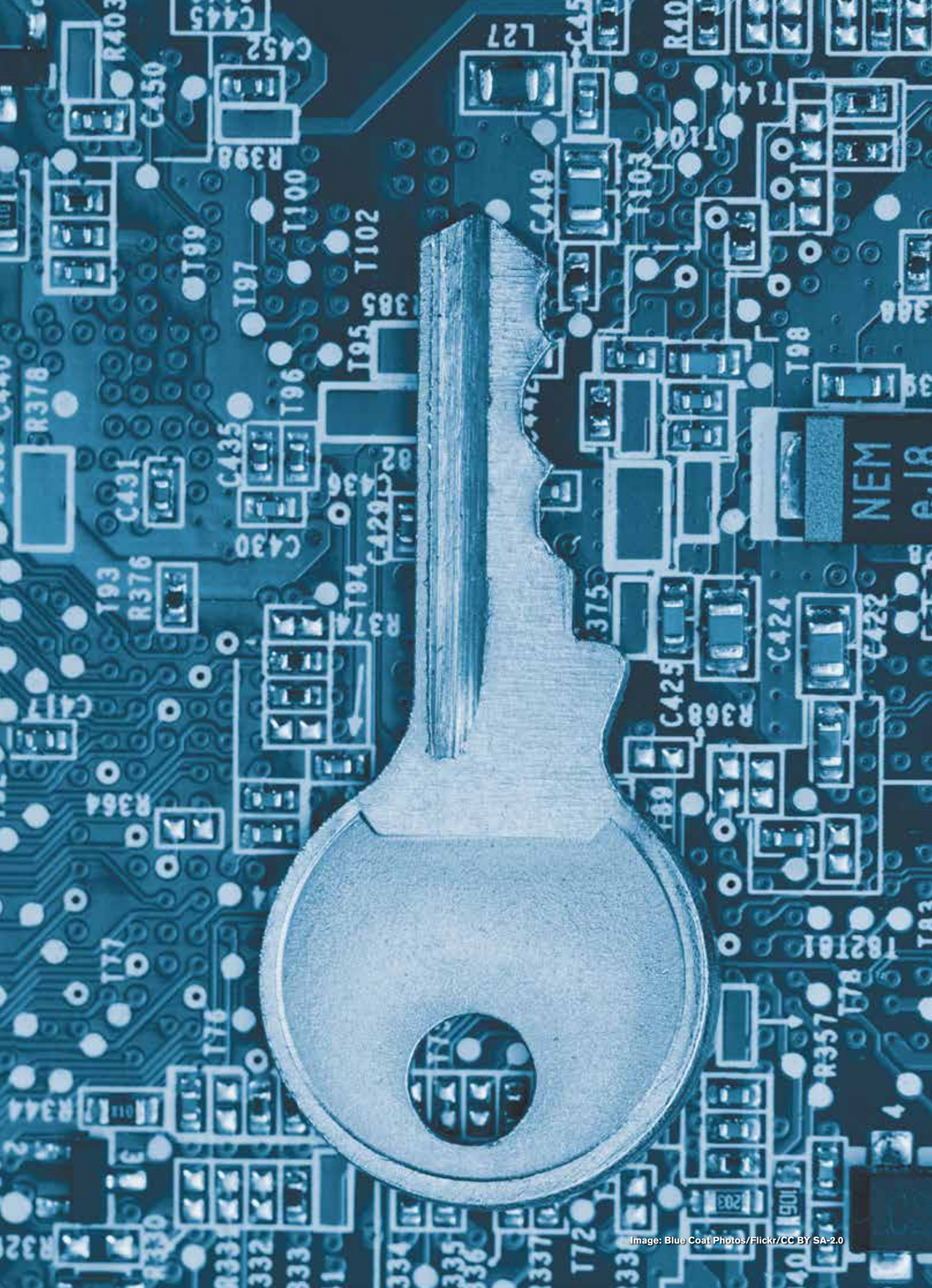
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New America

THERE is no Asian approach to encryption. The Internet transcends conventional borders and so does the encryption that travels with it. But there is a growing Asian security dialogue and an emerging debate on encryption in Asia. That debate has been overshadowed by the disjointed responses of individual countries to specific aspects of encryption. Bahrain, China, Iran, Kazakhstan, Pakistan and Saudi Arabia, amongst others, formally disallow different forms of client-side encryption. A larger list of countries have decryption-on-demand laws. They are not very different from Western liberal democracies where calls for encryption bans and backdoors are commonplace.

In India, the surveillance and encryption debate is marked by contradictions. We are losing out, the claim goes, because the technologies and infrastructure of digital communications are located abroad. We must sacrifice our freedoms, another claim goes, because only high levels of surveillance can protect us. Unfortunately, these reductive arguments,

designed to appeal to nationalism and insecurity, have captured the national discourse. They have helped to shape a statist, blunt and control-oriented approach to encryption. Taking their cue from China, several Asian countries including India want to impose their sovereignty on the Internet, strictly license encryption products, have unfettered access to Internet communications and more. This 'Internet sovereignty' approach to encryption will fail.

This essay explains the basics of how encryption works; provides a high-level account of the American crypto-wars and how they manifest in India; looks at how mass surveillance fears have fuelled a new phase of the crypto-wars; and demonstrates the futility of the Indian government's nationalism-laced approach to encryption, particularly in relation to data localisation, Internet sovereignty and the withdrawn National Encryption Policy of 2015. Looking ahead, this essay argues that encryption cannot be stopped; cybersecurity depends on strong encryption; and India's security and prosperity depend on the



widespread adoption of encryption.

If it stopped pursuing the Internet sovereignty approach and supported strong encryption without backdoors instead, India would break ranks with many Asian countries. But since there is no multilateral cybersecurity cooperation regime in Asia that India participates in, that would not be a loss. On the other hand, India should drive the Asian cybersecurity debate towards unbreakable encryption in the interests of its emerging digital economy, democratic values and national security.

The basics of encryption

Encryption is the conversion of intelligible data (plaintext), such as files or messages, into an unintelligible form (ciphertext) and decryption is the reversion of ciphertext to plaintext. Encryption occurs through the application of a cipher, a cryptographic algorithm that links the plaintext and ciphertext. The algorithm contains at least one variable parameter (key) that changes each time data is encrypted. The key is determined by a random number generating algorithm. For encryption to work, the key must be secret. Encryption does not encompass data conversion using a fixed key with no variable parameter (scrambling).¹

Until the 1970s, both the encrypter and decrypter had to have a pair of identical keys (symmetric-key encryption). The system has two main weaknesses. First, the key has to be shared before the message (key exchange). Second, secrecy is inversely proportional to the number of people in the know—intuitively, not mathematically. Moreover, the sender is not sure that the key reached the intended receiver, and the receiver is not sure that her key was authentic (authentication problem). That is because of the danger of the key exchange being intercepted by a third party who may access the messages as they flow or impersonate either the sender or receiver (man-in-the-middle).

Most key exchange problems were solved by the invention of public key cryptography in the 1970s. Two non-identical but mathematically linked keys are created, one to encrypt a message and the other to decrypt it (asymmetric-key encryption). A receiver makes one of her keys publicly available (public key) but keeps the other one secret (private key).

A sender encrypts her message using the receiver's public key which the latter decrypts with her private key. To solve the authentication problem, the sender, who has also made her public key available, signs her message with her private key which can only be decrypted with her public key to verify her signature (digital signature).

When designed and implemented well, public key cryptography is unbreakable. It obviates backdoors because no man-in-the-middle has the receiver's private key. It can assure message integrity by algorithmically assigning the data a fixed value (hashing) which can be verified for consistency. However, public key cryptography is computationally intensive and slow to operate so it is rarely used for real-time communications which continue to be symmetrically encrypted.

The crypto-wars

The encryption debate is United States-centric because, for better or for worse, American laws have shaped the Internet's architecture and the availability of encryption products. Public key cryptography did not begin to find mass application until the 1990s. The primary cryptosystem in regular use, the Data Encryption Standard (DES), developed by IBM in the 1970s, and approved by the NSA, used a symmetric-key algorithm with a weak key. As Internet use grew, businesses improved the security of their products to encourage consumer confidence.

For individuals who did not want to depend on off-the-shelf encryption, the asymmetric-key Pretty Good Privacy (PGP) cryptosystem, developed in 1991, offered client-side encryption for messages. PGP provides unbreakable encryption for messages even when passing through known backdoors. No one besides the sender and receiver can access the plaintext making strong PGP immune to man-in-the-middle attacks (end-to-end encryption).

In the early 1990s, American telecom carriers were upgrading from analogue to packet-switched digital transmissions. The US government pushed carriers to install the 'Clipper chip,' a chipset that used a symmetric-key algorithm to encrypt voice data with a key developed by the NSA. The Clipper chip was to be installed in phones and a key copy

surrendered to government to be held in escrow.

There are two fundamental problems with government key escrow. First, escrow of any sort only works when the third-party escrow agent is trusted by the other parties to handle the object of their transaction in this case, keys. When a government wiretaps a private communication, it is not a third-party; so in a surveillance situation the government cannot by definition perform escrow functions. Second, the key is vulnerable to attack while stored in escrow. When the Clipper algorithms were declassified by the US government, they were swiftly shown to be vulnerable to high-speed, high-volume key guesses (brute-force attack).

At the same time, the US legislature enacted the Communications Assistance for Law Enforcement Act of 1994 (CALEA). It compelled telecom carriers to technologically enable government wiretaps. There were three significant limitations. First, the government was prevented from banning commercial encryption. Second, the law was restricted to the public switched telecom network (PSTN); it did not cover Internet services such as voice-over-Internet-protocol (VoIP) calls. Third, communications carriers were exempted from the duty to decrypt messages (decryption mandate) if they did not have the means to do so.

In 2005, CALEA was extended to cover VoIP and broadband Internet service providers (ISPs) even though they are not PSTN-based. But it still did not cover non-ISP-provided Internet email or over-the-top (OTT) instant messengers. Consequently, while Skype had to have CALEA-mandated backdoors, Gmail or WhatsApp were free from backdoors and the decryption mandate. That set the stage for the second phase of the crypto-wars.

In India, the Central Monitoring System (CMS) corresponds to CALEA in several ways. Until recently, telecom carriers were restricted to 40-bit encryption which was even weaker than the 64-bit key found in the 1980s-vintage A5/1 cipher used in the 2G GSM standard.² Some carriers simply did not encrypt and voice calls could be lifted off-the-air. The CMS requires carriers to provide the government with a seamless interception interface irrespective of their network encryption. It covers VoIP and ISPs too. Unless an Indian user uses client-side public key encryption or commercial end-to-end encryption, their communications have

permanent backdoors.

The CMS is more than an interception interface. It creates a centralised database which even Britain's recent "snoopers' charter" failed to do. Will Delhi misuse its technological capabilities? We do not know. But we do know that the government has a long history of illegal wiretaps. The issue has been consistently raised in Parliament and covered in the press.³ Interceptions and decryptions are ordered by bureaucrats with little understanding of the law and no independent oversight mechanism. Private carriers have obeyed even procedurally-irregular interception orders instead of pushing back against irregular surveillance.⁴ Nevertheless, the government asks us to trust it to use the CMS in accordance with law. It would not be an unfair assessment to say that businesses and individuals will be more interested in encrypting their communications from now on.

The Blackberry episode

From 2008 the Indian government pressured Blackberry-maker Research in Motion (RIM) to decrypt messages on demand or hand over their key. RIM faced similar measures in Saudi Arabia and the United Arab Emirates. The campaign against RIM was more about enforcing Indian jurisdiction on a foreign company than it was about the national security risks of encryption. There are two kinds of Blackberry services. For companies, RIM installs a local Blackberry Enterprise Server (BES) and employees' emails are routed through the BES with strong encryption. In most cases, RIM does not have the key and cannot decrypt BES messages. In any event, terrorists are not employees, they do not use BES services.

For individuals, RIM has an unencrypted Blackberry Internet Service (BIS) network. This is most likely how terrorists using Blackberrys communicate. BIS emails can be intercepted as plaintext provided the local carrier removes any transport layer encryption it added.⁵ Instant messages via the Blackberry Messenger (BBM) app are transmitted on the basis of unique device-specific numbers (PIN). PIN to PIN messaging, another option for terrorists, are not encrypted, they are only scrambled using a single, global key.⁶ They can be inter-

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cepted and routed to a third Blackberry quite easily, a textbook man-in-the-middle attack.⁷

Essentially, if the government wanted to intercept someone’s BIS communications, it was free to do so under Indian law. There would have to be an interception order under either section 69 of the Information Technology Act, 2000 (IT Act) read with rule 3 of the Information Technology (Procedure and Safeguards for Interception, Monitoring, and Decryption of Information) Rules, 2009 (Interception Rules), or section 5(2) of the Indian Telegraph Act, 1885 read with rule 419A of the Indian Telegraph Rules, 1951. On the other hand, if, hypothetically, the BIS server was located in India, then access to data on it could be ordered under section 91 of the Code of Criminal Procedure, 1973 (CrPC), a significantly lower threshold.

There is legal uncertainty regarding data access procedures because interception law is largely observed in the breach. Sections 69 and 69B of the IT Act, read with their respective rules, grant access to stored information and communications data, but in 2014 the Central Bureau of Investigation was using section 91 of the CrPC to access communications data. It is likely that other law enforcement agencies were doing the same and still are. There is no transparency and no accountability for legal abuse. In any event, the Interception Rules almost certainly suffer from excessive delegation and are ultra vires their parent statute.

So why did the government go after RIM? Perhaps it was anxious to demonstrate a tough line on security and singled out Blackberry because it was an iconic brand. That was how RIM’s chief executive officer viewed the incident in 2011.⁸ It is most likely

that the government wanted RIM to install mirror servers in India to fulfil its grievances regarding data localisation. But by singling out RIM, the government scored an own goal. As long as terrorists used the BIS service to communicate, intercepting their unencrypted communications was possible.⁹ Now they have probably migrated to more secure services. Witless nationalism, which thoroughly pervades the government’s approach to encryption, damages India’s national security.

RIM has stressed that the “solution” it gave the Indian government does not involve its BES platform, only its unencrypted BIS network.¹⁰ Is there a BIS proxy server in India? Probably not, the repercussions for RIM outweigh any Indian market gains. Does RIM reroute all Indian traffic from its foreign BIS server to India? Maybe, but that would be non-targeted mass surveillance, which is illegal. Did RIM simply guarantee that it would positively respond to every government request for targeted BIS data? This is most likely, but it is not a gain because the government had technological access to it anyway.¹¹

The new crypto-war

The race for stronger encryption in America is fuelled by fears of further CALEA extensions to cover Internet services and withdraw the guarantee against the decryption mandate. The push probably began with Edward Snowden’s disclosures of pervasive global Internet surveillance by Western intelligence agencies, which brought privacy to the forefront of public attention. Fears of NSA overreach are not misplaced. In 2013, a random number-gen-

erating algorithm that had been recommended for cryptographers had to be abandoned after claims that it contained an NSA-planted backdoor.

In that context, Internet companies began to adopt unbreakable encryption. For transmission, businesses are gradually implementing end-to-end encryption. KakaoTalk, South Korea's most popular messaging app, introduced optional end-to-end encryption 2014. WhatsApp, the most popular messenger in India, rolled out its end-to-end encryption system in 2016. However, WhatsApp's claim to not have the decryption keys has been challenged and, in any event, it does preserve metadata.¹² For storage, phones manufacturers are introducing strong device encryption paired with measures to thwart brute-force attacks including passcode authentication delays, challenge-response tests, and automatic data erasure (device locking).

In 2014, Apple introduced default device locking based on a key which it did not know, thereby voluntarily shutting itself out of the data access process. Soon after, FBI director James Comey delivered his famous 'going dark' speech: "[E]ncryption threatens to lead all of us to a very dark place."¹³ Apple refused to obey a court order to jailbreak the phone on the ground that the government could not compel it to write code. A central question in the Apple-FBI dispute is whether the government can enforce the decryption mandate against Internet companies. Apple is not in the telecommunications business, it is an information services company and is therefore exempt from CALEA.

In India, the decryption mandate is contained in section 69 of the IT Act read with rules 5 and 17 of the Interception Rules. However, the rules only

apply in respect of a "decryption key holder" and in the case of end-to-end encryption, nobody but the sender and receiver holds the key. Will the Indian government enforce the decryption mandate against individuals and risk violating the fundamental right against self-incrimination under article 20(3) of the Constitution? This issue needs to be authoritatively decided by the constitutional courts. Several Asian countries have versions of the decryption mandate in their laws but, unlike India, many do not have independent judiciaries.

If the 'going dark' campaign reflects the American security establishment's alarm at the modern encryption business, the Indian authorities are still primarily concerned about Internet sovereignty. Both views are misguided but, additionally, the Indian view is detached from reality. In 2014, national security advisor Ajit Doval said: "One of the problems we have is that technologically we have lost out in certain areas where the root servers are all under control of countries [in] the West, mainly the US. [...] They are helpful to us in some areas, but not always helpful, particularly in the corporate world."¹⁴ For Doval, the issue is still about extending Delhi's writ to Internet companies. If that happens, we are told, cybersecurity will bloom at the command of the Indian state.

The Internet sovereignty approach to encryption is stuck in a Cold War time warp. It continues to have currency in Asia because of China's success at firewalling its Internet and strictly controlling encryption protocols. But even China was forced to drop a provision in its 2015 anti-terror law which required official vetting of commercial encryption. For India, such an approach is anathema to free markets and free speech. A state-controlled Internet

with state-sanctioned encryption would be as counterproductive as a return to the centrally-planned command economy. Instead of trying to achieve an Internet license raj, India needs to promote cybersecurity by encouraging the creation of state-of-the-art encryption products and enabling domestic Internet companies to compete in the global marketplace.

For those anticipating forward-thinking cybersecurity and a vibrant high-technology sector, the draft National Encryption Policy of 2015 was a disappointment. The policy was based on the belief that the Internet ecosystem is a pyramid with the government at the top, businesses in the middle and citizens at the bottom. That is far from the truth. Nevertheless, the policy gave the government the exclusive power to sanction cryptographic algorithms and key sizes, demanded the registration of businesses and apps that used encryption, and banned citizens from encrypting or using commercial encryption without the government's permission. Moreover, whenever anything was encrypted, the policy demanded that a copy of the plaintext was to be stored for three months and surrendered on demand. Such a move would have seriously jeopardised national security.

The policy revealed an abysmal lack of awareness amongst cybersecurity regulators which should concern us all. The government has promised to return with a redrafted encryption policy. It might be better worded but it will likely advocate a government monopoly over encryption, compulsory backdoors, mandatory data localisation and other measures to consolidate state control.

Looking ahead

Governments have long attempted to control encryption and prevent it from crossing borders. Those attempts have failed because the Internet is global. The PGP cryptosystem was classified as a munition and banned from export but its creator published its source code as a book—because books are constitutionally protected—and bypassed the control regime. When the Snowden disclosures revealed governmental attempts to compromise encryption, the private sector responded with end-to-end encryption and device locking. Encryption

protects free speech and, like speech, it cannot be perfectly controlled.

Strong cryptography has proliferated well beyond the control of governments. Yet, that has not stopped the Indian government from trying to impose import, use and export controls on encryption products. The withdrawn encryption policy stopped Indians from using cryptography without government approval based on key size. The policy also called for export controls. However, if Indian smartphone makers or Internet companies are bound by a low encryption standard, they will not be able to compete in the global marketplace. Governments cannot stop individuals from using encryption products and should not waste public resources trying to do so. India should do the opposite: encourage domestic cryptographic talent and champion 'Made in India' commercial encryption products.

The debate over backdoors is gathering pace. After the Clipper chip failed, there were proposals for commercial key escrow where the keys would be held by private third-parties. It was opposed because of the inherent risks of key escrow. Eleven leading cryptographers published a seminal paper in 1997 concluding that key escrow would result in "substantial sacrifices in security and greatly increased costs to the end-user."¹⁵ In 2015, the NSA proposed a new split-key escrow system. Create a 'golden key,' the NSA said, split it into several pieces, and distribute the pieces amongst multiple third-parties so that no one alone could use the key. That proposal too has been dismissed by cryptographers.

Last year, a comprehensive group of companies, cryptographers, policy organisations and security experts sent the US president a letter warning him of the dangers of backdoors. The principle is simple if you build a backdoor, everybody will use it, not just the police. It will also be used by hackers, data thieves, hostile governments, terrorists and criminals. Encryption is either breakable or unbreakable, backdoored or end-to-end it is one or the other. When a backdoor is installed, it creates a security vulnerability which will eventually be maliciously exploited. The argument that the backdoor will be well-guarded is baseless. There are numerous reports of protected systems being broken in to through backdoors. For example, in 2010, China ex-


ploited a US government backdoor to hack Gmail.¹⁶

India does not have a data breach law so we simply do not know how often our government has been hacked. Be under no illusions: India's public cybersecurity is in shambles. There are continuous reports of hacks, mostly attributed to China, including breaches of defence servers carrying military secrets.¹⁷ Even the official digital certificates repository has been breached.¹⁸ There have also been a string of unreported incidents including hostile interceptions of communications, numerous brute-force attacks on weak encryption and malware on government servers. The bottom line is that there is no realistic way that the Indian government can secure any backdoors it may be given. The state's cybersecurity capabilities may increase in the future but backdoors will never stop being dangerous.

The quickest path to cybersecurity is for India's private sector to take the lead. The future promises massive network-dependent and data-intensive projects piloted by the private sector. The nascent Aadhaar-based, digital payments system will revolutionise the financial technology sector. Increasing broadband penetration has made India the world's fastest-growing smartphone market that is catalysing the telecommunications and Internet sector. The 'Digital India' programme for Internet delivery of government services will exponentially increase the volume of sensitive traffic. These projects and India's economy as a whole can only be secured

through the pervasive use of unbreakable encryption. That would have a cascading effect on the rest of the Indian Internet.

Setting encryption standards to secure India's future should be a collaborative exercise. The open competition to choose the Advanced Encryption Standard (AES) remains the gold standard in cryptographic adoption. NIST, the US government's cryptographic standards agency, prescribed neutral minimum requirements and called for algorithmic proposals. Fifteen proposals were received, transparently tested, rigorously cryptanalysed, and their findings openly discussed in conferences. The process represented NIST's acceptance that it did not possess the monopoly of cryptographic expertise as well as the view that everybody has a stake in encryption, not just the state.

In India, barring a few civil society organisations, unbreakable encryption has no champions. The argument for India is not that we should sacrifice national security for stronger encryption. The truth is that to protect our national security, we need unbreakable encryption. Since encryption is key to cybersecurity which, in turn, is the foundation of the emerging digital economy, strong encryption will promote prosperity. Ultimately, what is best for Indian citizens and businesses is also best for the Indian government: an Internet with unbreakable encryption. If there is ever an Asian approach to encryption, let it be the same. 

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